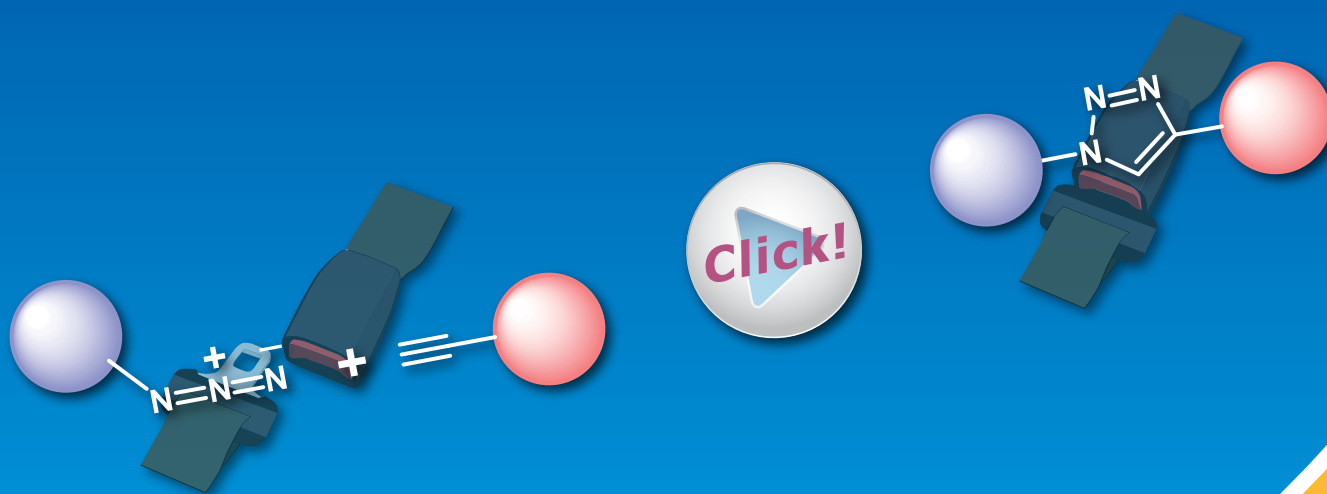


# Click Chemistry

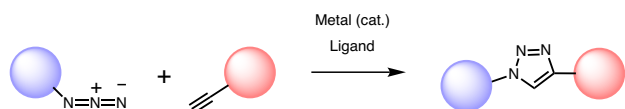


# Click Chemistry

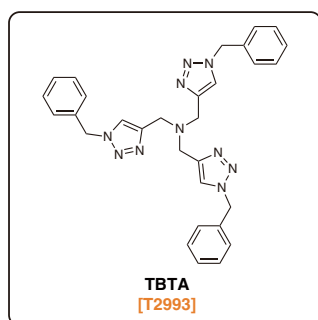
"Click Chemistry" is a term which was first described by K. B. Sharpless in 2001 to describe reactions that afford products in high yields and in excellent selectivities by carbon-hetero bond formation reactions. The term "Click" means joining molecular pieces as easily as clicking together the two pieces of a seat belt buckle. In general, the definition of click chemistry is described as follows:

1. give very high chemical yields of desired products
2. combination of readily available simple building blocks
3. generate almost no byproducts
4. simple product isolation by non-chromatographic methods
5. reaction proceeds in water, as well as in organic solvents

While there are a number of reactions that fulfill this criteria, the Huisgen 1,3-dipolar [3 + 2] cycloaddition<sup>1)</sup> of azides and alkynes has emerged as the frontrunner. In general, the 1,2,3-triazole ring is not almost oxidized or reduced, which makes it possible to strongly connect two substrates.



In the Huisgen reaction, metal catalysts, such as copper sulfate, are generally required for reaction acceleration. In especial, it has been reported that the combination of tris[(1-benzyl-1*H*-1,2,3-triazol-4-yl)methyl]amine (TBTA) [T2993] and catalysts shows excellent reactivity.<sup>2)</sup>

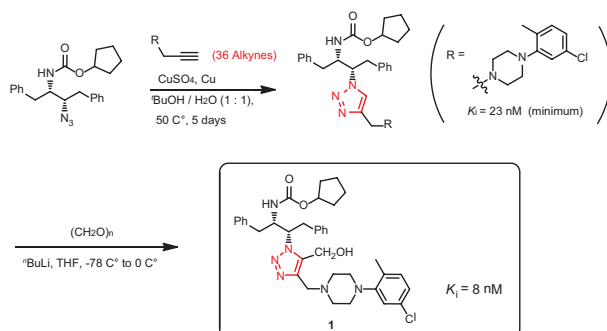


This reaction system affords desired products in almost 100% yield with no need of repurification, such as recrystallization or column chromatography. Thus, this methodology is an eco-friendly reaction. Moreover, the combination of various alkynes and azides allows it to rapidly construct large compound libraries, and 1,2,3-triazole itself exhibits various kinds of biological activities, such as anti-allergenic or anti-bacterial activities. In addition, the reaction proceeds even in water, and thus, click chemistry has been widely used in many research fields as below.

## ● Research of Various Pharmaceutical Lead Candidates

### a) Application of Anti-HIV Agent Discovery<sup>3)</sup>

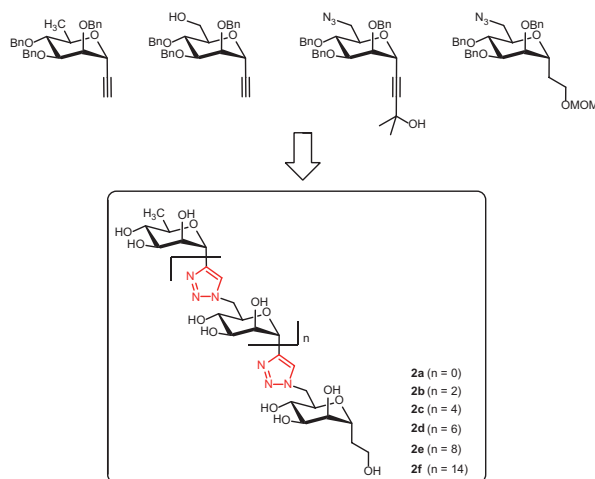
Whiting and Sharpless *et al.* have reported the synthesis of a series of 1,4-disubstituted-1,2,3-triazoles as potential candidates for HIV protease inhibitors in a combination of azide-containing fragments with a diverse array of functionalized alkyne-containing building blocks by using click chemistry. After further optimization, it was revealed that **1** has the highest activity, exhibiting 8 nM of  $K_i$  value.



### b) Research of Mycobacterium Tuberculosis

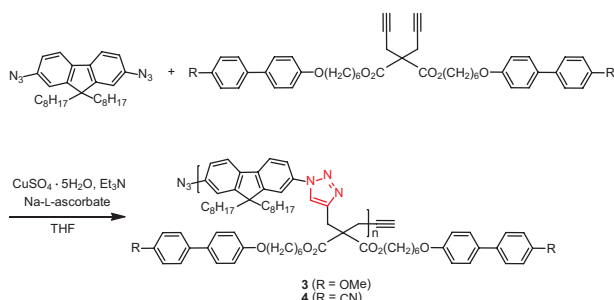
#### Cell Wall Synthetase<sup>4)</sup>

Dondoni *et al.* have reported the synthesis of a set of C-oligomannosides (**2a-f**) through click chemistry using a 1,2,3-triazole ring as the interglycosidic linker. The compounds **2a-f** inhibit mannosyltransferases, which are involved in the biosynthesis of the cell envelope of *Mycobacterium tuberculosis* cell wall synthase. Among them, the hexamer ( $n = 4$ ) **2c** and octamer ( $n = 6$ ) **2f** show the highest activities  $IC_{50} = 0.14$  and 0.22 mM, respectively.



## Synthesis of Functional Materials

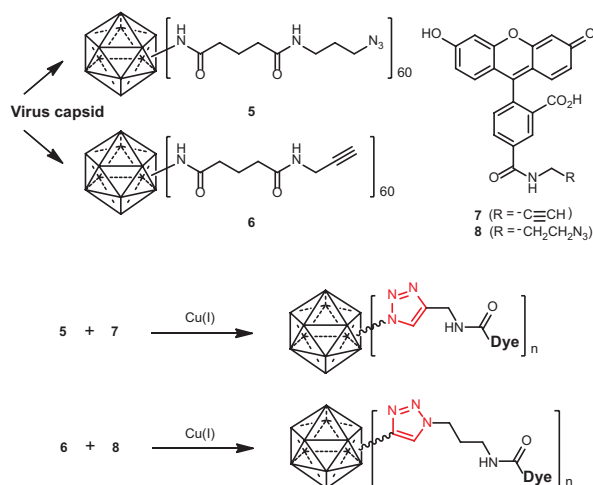
Click chemistry has been also successfully applied into polymer synthesis or material science. For example, Kang and Jin *et al.* have reported the synthesis of side-chain liquid-crystal polymers **3** and **4** by using click chemistry. According to their results, the dye-sensitized solar-cell fabricated from **3** gives a power-conversion efficiency of 4.11%.<sup>5)</sup>



## Bioscience

### Bioconjugation (example: surface modification of virus)<sup>6)</sup>

In general, viruses are made up of a number of protein subunits, and capsids, which enclose DNA or RNA, are formed as protein shells. In particular, in the case of spherical viruses, the capsids have an icosahedral symmetry form with sixty protein subunits. Finn and Sharpless *et al.* have reported the modification of the exterior surface of a spherical virus, *cowpea mosaic virus* by azides or alkynes, followed by the labeling of these species using fluorescein dye-azide or alkyne by click chemistry.

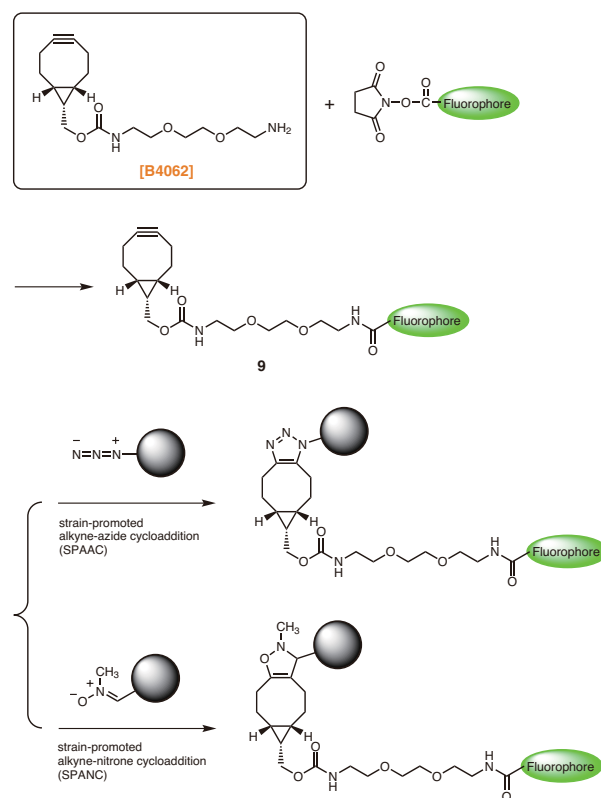


Thus, click chemistry has been widely used as a methodology of synthesizing novel molecules in a number of research fields. Other than these applications, click chemistry also has been applied in various fields, such as the synthesis of dendrimers,<sup>7)</sup> dendrons,<sup>8)</sup> calyxarenes,<sup>9)</sup> rotaxanes,<sup>10)</sup> catenanes,<sup>11)</sup> the development of chemical sensors,<sup>12)</sup> and the labeling of DNA.<sup>13)</sup>

## Copper-free Click Reaction

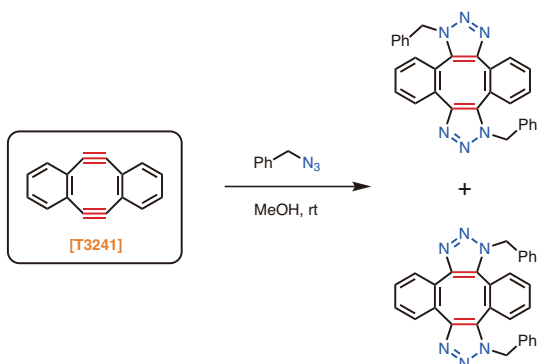
As described above, click chemistry also has been used for imaging labeling and tracking labeling of biomolecules. However, the reaction is not suitable for labeling of living systems because it needs a highly-concentrated copper(I) species, thus, bioorthogonal reactions such as metal-free click chemistry also have been developed.

*N*-(1*R*,8*S*,9*s*)-bicyclo[6.1.0]non-4-yn-9-ylmethyloxycarbonyl-1,8-diamino-3,6-dioxaoctane (BCN-amine) [**B4062**] is a linker having a strained structure with cyclooctyne, and it is used for the copper-free click reaction to azides. For example, **B4062** bonded to a fluorophore (**9**) has resulted in labeling of an azidohomoalanine-containing virus capsid protein without copper(I) species.<sup>14)</sup> In addition, **B4062** can be applied to not only strain-promoted alkyne-azide cycloaddition (SPAAC)<sup>15)</sup> but also strain-promoted alkyne-nitrone cycloaddition (SPANC).<sup>16)</sup>



Additionally, Hosoya *et al.* have reported the “double-click reaction” applying 5,6,11,12-tetradehydrobenzo[*a,e*]cyclooctene [**T3241**]<sup>17)</sup> in click chemistry. The high reactivity of the two alkyne moieties allows the reaction to proceed smoothly without using metal catalysts, such as a copper salt.<sup>18)</sup>

## Metal-Free Double-click Reaction



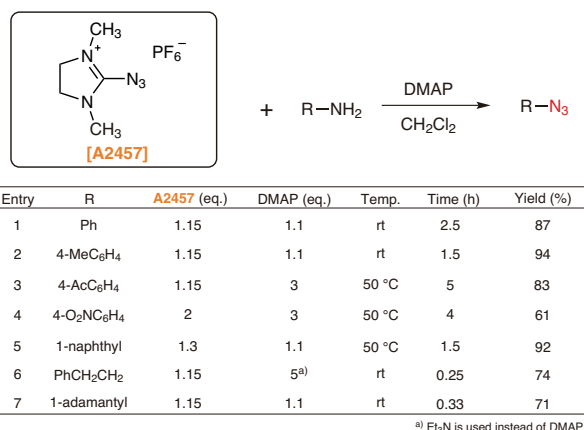
Chiba *et al.* have reported a new click reaction using *N*-succinimidyl 4-(azidosulfonyl)benzoate [S0973] and *N*-(1-Thioxyethyl)glycine [T3312].<sup>24)</sup> This reaction needs no metal ion species, and the sulfonyl azide group of S0973 and thioamide group of T3312 reacts to form the sulfoamidine moiety. Furthermore, the reaction proceeds at room temperature in water and is applicable to the biorthogonal click reaction.

TCI offers a variety of azide and terminal acetylene compounds readily available in the field of click chemistry as below. In addition, azidation and ethynylation reagents are also listed in this brochure.

## ● Azidation Reagent

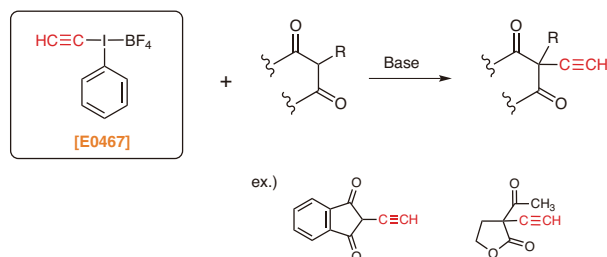
Organic azide compounds can be synthesized in a simple manner by the reaction of sodium azide with halogenated alkyl compounds, or the reaction with trifluoromethanesulfonyl azide and primary amines, however, these azide sources potentially have highly explosive character, which makes it difficult to handle. 2-Azido-1,3-dimethylimidazolinium hexafluorophosphate [A2457], which was developed by Kitamura *et al.*, is a crystalline diazo transfer reagent having high thermal stability and low explosibility. The differential scanning calorimetry (DSC) experiment of A2457 has revealed that the exothermic decomposition temperature was approximately 200 °C. Moreover, A2457 has tested negative for the impact and friction-sensitivity tests.<sup>19)</sup>

Under basic conditions, A2457 reacts with several kinds of primary amines in a short time to afford the corresponding diazo compounds in high yields.<sup>20)</sup> In these reactions, the by-products can be removed by conventional extraction procedures due to their high solubility in water.

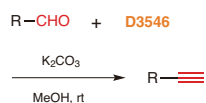
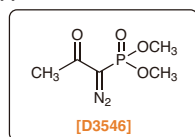


## ● Ethynylation Reagents

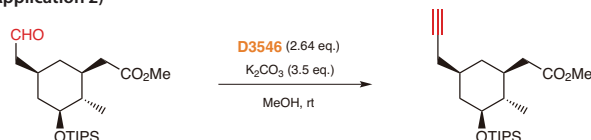
A number of ethynylation reagents have been developed for the synthesis of terminal acetylenes. For example, ethynyl(phenyl) iodonium tetrafluoroborate [E0467] is an electrophilic ethynylation reagent developed by Ochiai *et al.*, which reacts with active methylene compounds to afford the corresponding α-ethynylated products in high yields under mild conditions. As for other existing electrophilic ethynylation reagents, ethyl lead triacetate has been exploited, which is prepared from ethynyl(trimethyl)stannane and lead tetraacetate. However, preparation of this reagent requires the use of heavy metal compounds, which make it an unattractive procedure. The ethynylation procedure using this reagent requires careful control of the reaction conditions. The ethynylation method using E0467 has been at the center of attention in many fields, as this method does not use highly toxic heavy metal compounds, and the reaction proceeds under mild conditions.



Additionally, dimethyl (1-diazo-2-oxopropyl)phosphonate [D3546] is a reagent for the synthesis of terminal alkynes, which was developed by Ohira and Bestmann *et al.*<sup>21,22)</sup> D3546 reacts with aldehydes in the presence of potassium carbonate and methanol to give the one homologated terminal alkynes in high yields. D3546 is widely known as the "Ohira-Bestmann reagent" after its discoverers and the reaction proceeds in mild conditions without using strong bases.

(Application 1)<sup>22)</sup>

R-CHO	Product	Yield (%)
		97
		74
		80

(Application 2)<sup>23)</sup>

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# The list of products

We introduce our products according to their application.

<b>Metal Catalysts, Ligands</b>	<b>7</b>
<b>Azides</b>	<b>7</b>
Organic Azides	7
PEG Azides	8
Sugar Azides	9
<b>Terminal Alkynes</b>	<b>10</b>
Aliphatic Hydrocarbons	10
Aromatic Hydrocarbons	10
Alcohols	12
Carboxylic Acids & Esters	13
Amines	13
Heterocyclic Compounds	14
Polyethylene Glycols (PEG)	14
Others	15
<b>Cu-free Click Reaction Reagents</b>	<b>15</b>
<b>Azidation Reagents</b>	<b>16</b>
<b>Ethynylation Reagents</b>	<b>16</b>

## Metal Catalysts, Ligands

<p><b>T2665</b> 5g</p> <p><math>(\text{CH}_3\text{CN})_4\text{Cu}^+ \text{PF}_6^-</math></p> <p>Tetrakis(acetonitrile)copper(I) Hexafluorophosphate CAS RN: 64443-05-6</p>	<p><b>T2666</b> 1g 5g 25g</p> <p><math>(\text{CH}_3\text{CN})_4\text{Cu}^+ \text{BF}_4^-</math></p> <p>Tetrakis(acetonitrile)copper(I) Tetrafluoroborate CAS RN: 15418-29-8</p>	<p><b>A1540</b> 5g 25g</p> <p></p> <p>Copper(I) Acetate CAS RN: 598-54-9</p>	<p><b>C2346</b> 25g 500g</p> <p><math>[\text{CH}_3\text{C}(=\text{O})\text{O}]_2 \text{Cu}^{2+} \cdot \text{H}_2\text{O}</math></p> <p>Copper(II) Acetate Monohydrate CAS RN: 6046-93-1</p>	<p><b>T1442</b> 1g 5g</p> <p><math>[\text{CF}_3\text{SO}_2\text{OCu}]_2 \cdot \text{C}_6\text{H}_6</math></p> <p>Copper(I) Trifluoromethanesulfonate Benzene Complex CAS RN: 42152-46-5</p>
<p><b>C3042</b> 200mg</p> <p></p> <p>Chloro(pentamethylcyclopentadienyl)ruthenium(II) Tetramer CAS RN: 113860-07-4</p>	<p><b>T2993</b> 1g 5g</p> <p></p> <p>Tris[(1-benzyl-1H-1,2,3-triazol-4-yl)methyl]amine (TBTA) CAS RN: 510758-28-8</p>	<p><b>C2312</b> 1g 5g</p> <p></p> <p>Copper(I) 2-Thiophenecarboxylate CAS RN: 68986-76-5</p>	<p><b>C1952</b> 25g 300g</p> <p><math>\text{CuCN}</math></p> <p>Copper(I) Cyanide CAS RN: 544-92-3</p>	<p><b>R0074</b> 1g 5g</p> <p><math>\text{RuCl}_3 \cdot x\text{H}_2\text{O}</math></p> <p>Ruthenium(III) Chloride Hydrate CAS RN: 14898-67-0</p>
<p><b>B0989</b> 1g</p> <p></p> <p>Bathophenanthroline disulfonic Acid Disodium Salt Hydrate CAS RN: 53744-42-6</p>	<p><b>T3170</b> 200mg 1g</p> <p></p> <p>Tris(2-benzimidazolylmethyl)amine CAS RN: 64019-57-4</p>	<p><b>T3171</b> 200mg</p> <p></p> <p>THPTA CAS RN: 760952-88-3</p>	<p><b>H0149</b> 25g 250g</p> <p></p> <p>L-Histidine CAS RN: 71-00-1</p>	

## Azides

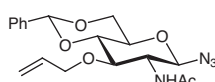
## Organic Azides

<p><b>D5873</b> 100mg 500mg</p> <p></p> <p>Succinimidyl 4-Azidobutyrate CAS RN: 943858-70-6</p>	<p><b>E1255</b> 5g 25g</p> <p></p> <p>Ethyl Azidoacetate CAS RN: 637-81-0</p>	<p><b>A2738</b> 100mg</p> <p></p> <p>3-Azidopropylamine CAS RN: 88192-19-2</p>	<p><b>A3079</b> 1g</p> <p></p> <p>Azidoacetic Acid CAS RN: 18523-48-3</p>	<p><b>A2729</b> 200mg</p> <p></p> <p>5-Azidovaleric Acid CAS RN: 79583-98-5</p>
<p><b>A0930</b> 5g 25g</p> <p></p> <p>4-Azidobenzoic Acid CAS RN: 6427-66-3</p>	<p><b>A2290</b> 100mg 1g</p> <p></p> <p>4-Azidosalicylic Acid CAS RN: 66761-27-1</p>	<p><b>A2674</b> 1g</p> <p></p> <p>4-Azido-2,3,5,6-tetrafluorobenzoic Acid CAS RN: 122590-77-6</p>	<p><b>A3365</b> 250mg</p> <p></p> <p>6-Azidohexan-1-ol CAS RN: 146292-90-2</p>	<p><b>H1760</b> 25mg 100mg</p> <p></p> <p>N-Succinimidyl 4-Azidobenzoate CAS RN: 53053-08-0</p>
<p><b>A2791</b> 200mg 1g</p> <p></p> <p>1-(Azidomethyl)pyrene CAS RN: 1006061-57-9</p>	<p><b>B3790</b> 10mg</p> <p></p> <p>Bis[2-(4-azidosalicylamido)ethyl] Disulfide CAS RN: 199804-21-2</p>	<p><b>D1606</b> 25g</p> <p></p> <p>Disodium 4,4'-Diazidostilbene-2,2'-disulfonate Tetrahydrate CAS RN: 2718-90-3</p>	<p><b>S0860</b> 10mg</p> <p></p> <p>N-Succinimidyl 5-Azido-2-nitrobenzoate CAS RN: 60117-35-3</p>	<p><b>S0952</b> 200mg 1g</p> <p></p> <p>N-Succinimidyl 4-Azido-2,3,5,6-tetrafluorobenzoate CAS RN: 126695-58-7</p>
<p><b>A2942</b> 25mg 100mg</p> <p></p> <p>N<sub>3</sub>-dU CAS RN: 26929-65-7</p>	<p><b>A2052</b> 1g 5g</p> <p></p> <p>3'-Azido-3'-deoxythymidine CAS RN: 30516-87-1</p>			

<b>A3020</b> 250mg  4-Azido-N-Fmoc-L-homoalanine CAS RN: 942518-20-9	<b>A3023</b> 250mg  6-Azido-N-Fmoc-L-norleucine CAS RN: 159610-89-6	<b>A3129</b> 50mg 200mg  cis-4-Azido-N-Boc-L-proline CAS RN: 132622-65-2	<b>A2524</b> 100mg  N-(3-Azidopropyl)biotinamide CAS RN: 908007-17-0	<b>A2474</b> 100mg  2-Azido-1,3-bis[(2,2-dimethyl-1,3-dioxan-5-yl)oxy]propane CAS RN: 1392500-07-0
<b>T1184</b> 1g 5g  Trimethylsilylmethyl Azide CAS RN: 87576-94-1	<b>A2783</b> 100mg  (11-Azidoundecyl)-trimethoxysilane CAS RN: 334521-23-2	<b>B3694</b> 100mg  (2S,3S,5R,6R)-5,6-Bis(azidomethyl)-2,3-dimethoxy-2,3-dimethyl-1,4-dioxane CAS RN: 1585236-34-5	<b>A2457</b> 5g 25g 250g  2-Azido-1,3-dimethylimidazolium Hexafluorophosphate CAS RN: 1266134-54-6	<b>A2523</b> 100mg  Biotin-PEG <sub>3</sub> -Azide CAS RN: 875770-34-6
<b>B6265</b> 1set  Biotin-PEG <sub>3</sub> -Azide (2mgx5) CAS RN: 875770-34-6	<b>A2914</b> 200mg  N-[4-(Azidosulfonyl)-benzoyl]ethylenediamine Trifluoroacetate CAS RN: 334521-23-2	<b>A3306</b> 50mg 250mg 1g  3-Azido-7-hydroxycoumarin CAS RN: 817638-68-9	<b>A3432</b> 1g  4-Azido-2,3,5,6-tetrafluoro-N-(2-methacrylamidoethyl)-benzamide CAS RN: 2361935-10-4	<b>B1110</b> 5g 25g  2,6-Di(4-azidobenzal)-cyclohexanone (wetted with ca. 30% Water) CAS RN: 20237-98-3
<div>PEG Azides</div>				
	<b>A2728</b> 25mg 100mg  Methyl-PEG <sub>4</sub> -Azide CAS RN: 606130-90-9	<b>A2727</b> 25mg 100mg  Methyl-PEG <sub>8</sub> -Azide CAS RN: 869718-80-9	<b>M3049</b> 25mg  Methyl-PEG <sub>12</sub> -Azide CAS RN: 2170098-29-8	<b>M3050</b> 25mg 100mg  Methyl-PEG <sub>24</sub> -Azide
<b>A2294</b> 100mg  PEG <sub>4</sub> -Azide CAS RN: 86770-67-4	<b>A2500</b> 100mg  PEG <sub>5</sub> -Azide CAS RN: 86770-68-5	<b>A3130</b> 250mg 1g  Azido-PEG <sub>2</sub> -Amine-Tos-OH CAS RN: 2173092-98-1	<b>A2363</b> 200mg 1g 5g  Amino-PEG <sub>3</sub> -Azide CAS RN: 134179-38-7	<b>A3004</b> 50mg 250mg  Amino-PEG <sub>3</sub> -Azide CAS RN: 951671-92-4
<b>A3007</b> 50mg 250mg  Amino-PEG <sub>11</sub> -Azide CAS RN: 1800414-71-4	<b>A3224</b> 100mg  Azido-PEG <sub>3</sub> -acetic Acid CHA Salt CAS RN: 2098500-94-6	<b>A2293</b> 1g  Azido-PEG <sub>3</sub> -acetic Acid CAS RN: 172531-37-2	<b>A2388</b> 25mg  Azido-PEG <sub>4</sub> -NHS Ester CAS RN: 944251-24-5	<b>B5546</b> 100mg  Biotin-PEG <sub>4</sub> -Azide CAS RN: 1309649-57-7
<b>A2523</b> 100mg  Biotin-PEG <sub>3</sub> -Azide CAS RN: 875770-34-6	<b>A3006</b> 100mg  H(OCH <sub>2</sub> CH <sub>2</sub> ) <sub>8</sub> N <sub>3</sub> PEG <sub>8</sub> -Azide CAS RN: 352439-36-2	<b>A3202</b> 10mg  Azide-PEG <sub>3</sub> -Desthiobiotin CAS RN: 1426828-06-9	<b>A3260</b> 100mg  Azido-PEG <sub>4</sub> -C <sub>2</sub> -carboxylic Acid CAS RN: 1257063-35-6	<b>B6081</b> 250mg  Bromo-PEG <sub>3</sub> -Azide CAS RN: 1446282-43-4
<b>B6265</b> 1set  Biotin-PEG <sub>3</sub> -Azide (2mgx5) CAS RN: 875770-34-6	<b>B6266</b> 1set  Biotin-PEG <sub>4</sub> -Azide (2mgx5) CAS RN: 1309649-57-7	<b>G0257</b> 1g 5g  2-[2-(2-Azidoethoxy)ethoxy]-ethyl 2,3,4,6-Tetra-O-acetyl-D-galactopyranoside CAS RN: 381716-33-2	<b>C3904</b> 10mg 100mg  CPO-PEG <sub>3</sub> -Alkyne	<b>C3948</b> 0.5mL  CPO-PEG <sub>3</sub> -azide (ca. 0.2 mol/L in Dimethyl Sulfoxide)

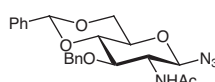
## Sugar Azides

A1812 1g



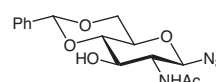
2-Acetamido-3-O-allyl-4,6-O-benzylidene-2-deoxy- $\beta$ -D-glucopyranosyl Azide  
CAS RN: 80887-27-0

A1813 1g



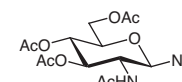
2-Acetamido-3-O-benzyl-4,6-O-benzylidene-2-deoxy- $\beta$ -D-glucopyranosyl Azide  
CAS RN: 80887-27-0

A1811 1g 5g



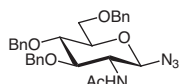
2-Acetamido-4,6-O-benzylidene-2-deoxy- $\beta$ -D-glucopyranosyl Azide  
CAS RN: 168397-51-1

A1616 1g 5g



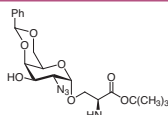
2-Acetamido-3,4,6-tri-O-acetyl-2-deoxy- $\beta$ -D-glucopyranosyl Azide  
CAS RN: 6205-69-2

A1678 1g 5g



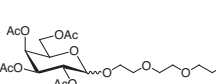
2-Acetamido-3,4,6-tri-O-benzyl-2-deoxy- $\beta$ -D-glucopyranosyl Azide  
CAS RN: 214467-60-4

A1833 100mg



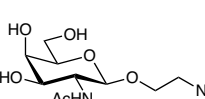
O-(2-Azido-4,6-O-benzylidene-2-deoxy- $\alpha$ -D-galactopyranosyl)-N-[(9H-fluoren-9-ylmethoxy)-carbonyl]-L-serine *tert*-Butyl Ester  
CAS RN: 878483-02-4

G0257 1g 5g



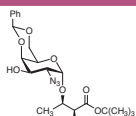
2-[2-(2-Azidoethoxy)ethoxy]-ethyl 2,3,4,6-Tetra-O-acetyl-D-galactopyranoside  
CAS RN: 381716-33-2

A2627 Please contact us.



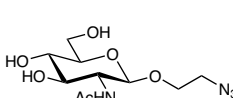
2-Azidoethyl 2-Acetamido-2-deoxy- $\beta$ -D-galactopyranoside  
CAS RN: 142072-15-9

A1832 100mg



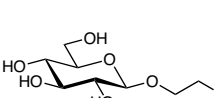
O-(2-Azido-4,6-O-benzylidene-2-deoxy- $\alpha$ -D-galactopyranosyl)-N-[(9H-fluoren-9-ylmethoxy)-carbonyl]-L-threonine *tert*-Butyl Ester  
CAS RN: 195976-07-9

A2172 500mg



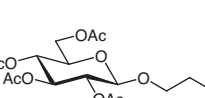
2-Azidoethyl 2-Acetamido-2-deoxy- $\beta$ -D-glucopyranoside  
CAS RN: 142072-12-6

A2267 1g



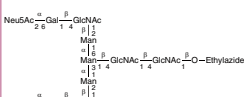
2-Azidoethyl  $\beta$ -D-Glucopyranoside  
CAS RN: 165331-08-8

A2377 1g 5g



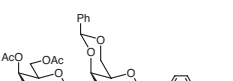
2-Azidoethyl 2,3,4,6-Tetra-O-acetyl- $\beta$ -D-glucopyranoside  
CAS RN: 140428-81-5

D4217 1mg



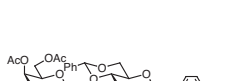
Disialylnonasaccharide  $\beta$ -Ethylazide  
CAS RN: 1621001-68-0

G0330 1g 5g



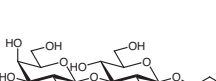
Gal[2346Ac] $\beta$ (1-3)GalN<sub>3</sub>[46Bzd]- $\beta$ -MP

G0309 1g 5g



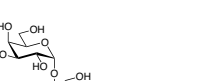
Gal[2346Ac] $\beta$ (1-3)GlcN<sub>3</sub>[46Bzd]- $\beta$ -MP

G0373 1mg



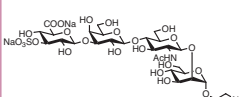
GalNAc  $\beta$ (1-3)GlcNAc  $\beta$ -Ethylazide

G0403 Please contact us.



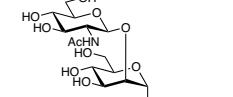
Gb<sub>3</sub>- $\beta$ -ethylazide  
CAS RN: 2220267-41-2

G0372 Please contact us.



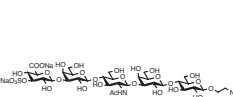
GlcA[35] $\beta$ (1-3)Gal  $\beta$ (1-4)GlcNAc  $\beta$ (1-2)Man  $\alpha$ -Ethylazide

G0337 100mg



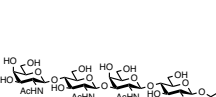
GlcNAc  $\beta$ (1-2)Man  $\alpha$ -1-Ethylazide  
CAS RN: 1858224-15-3

H1333 Please contact us.



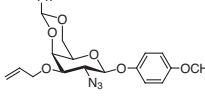
HNK-1 Ethylazide

L0237 Please contact us.



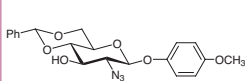
LacDiNAc Dimer Ethylazide

M1643 1g



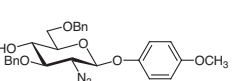
4-Methoxyphenyl 3-O-Allyl-2-azido-4,6-O-benzylidene-2-deoxy- $\beta$ -D-galactopyranoside  
CAS RN: 889453-83-2

M1637 1g 5g



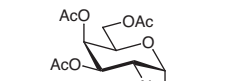
4-Methoxyphenyl 2-Azido-4,6-O-benzylidene-2-deoxy- $\beta$ -D-glucopyranoside  
CAS RN: 1430068-18-0

M1617 1g



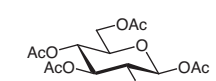
4-Methoxyphenyl 2-Azido-3,6-di-O-benzyl-2-deoxy- $\beta$ -D-glucopyranoside  
CAS RN: 1272755-25-5

T1731 100mg



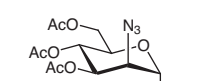
1,3,4,6-Tetra-O-acetyl-2-azido-2-deoxy- $\alpha$ -D-galactopyranose  
CAS RN: 67817-30-5

T2196 200mg 1g



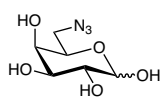
1,3,4,6-Tetra-O-acetyl-2-azido-2-deoxy- $\beta$ -D-glucopyranose  
CAS RN: 80321-89-7

T1733 100mg



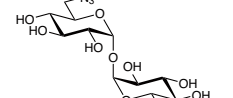
1,3,4,6-Tetra-O-acetyl-2-azido-2-deoxy- $\alpha$ -D-mannopyranose  
CAS RN: 68733-20-0

A3167 Please contact us.



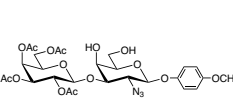
6-Azido-6-deoxy-D-galactopyranose  
CAS RN: 66927-03-5

D5372 50mg



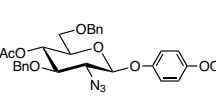
6,6'-Diazido-6,6'-dideoxytrehalose  
CAS RN: 18933-88-5

G0329 Please contact us.



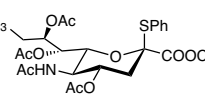
Gal[2346Ac] $\beta$ (1-3)GalN<sub>3</sub>- $\beta$ -MP

M2051 Please contact us.



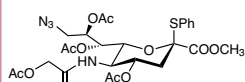
4-Methoxyphenyl 4-O-Acetyl-2-azido-3,6-di-O-benzyl-2-deoxy- $\beta$ -D-glucopyranoside

M2695 100mg



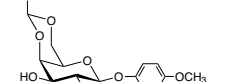
Neu5Gc[1Me,478Ac,9N<sub>3</sub>]- $\beta$ -SPh  
CAS RN: 219814-65-0

M2696 100mg



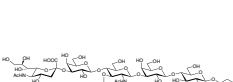
Neu5GcAc[1Me,478Ac,9N<sub>3</sub>]- $\beta$ -SPh  
CAS RN: 1195053-25-8

M2737 Please contact us.



4-Methoxyphenyl 2-Azido-4,6-O-benzylidene-2-deoxy- $\beta$ -D-galactopyranoside  
CAS RN: 1340541-47-0


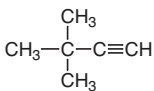
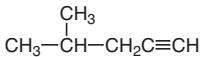
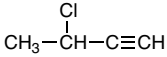
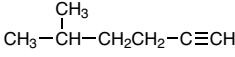

S0922 Please contact us.


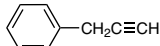
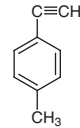
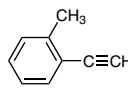
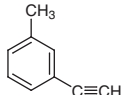
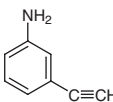

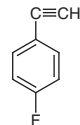
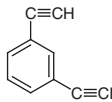
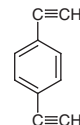
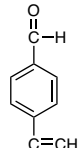
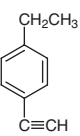
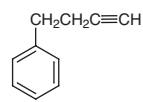
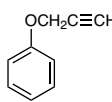
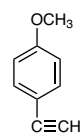
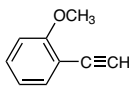
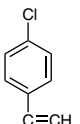
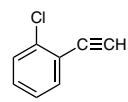
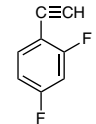
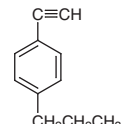
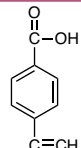
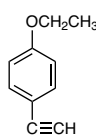
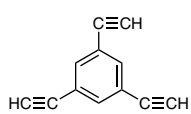
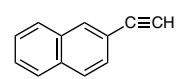
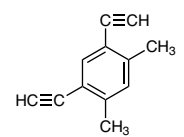
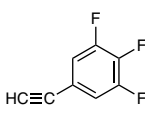
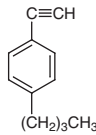
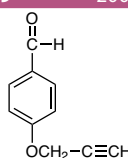
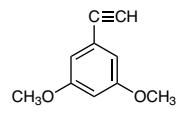
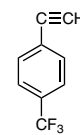
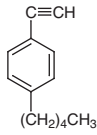
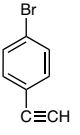
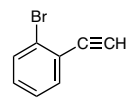
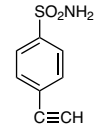
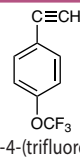
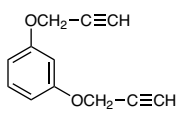
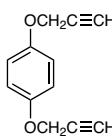
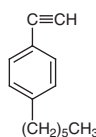
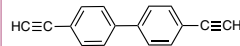
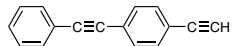


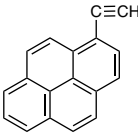
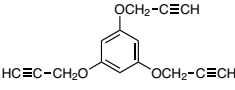
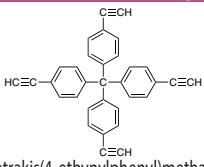
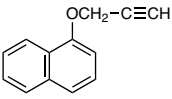
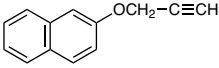
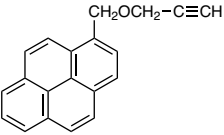
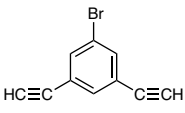
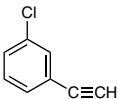
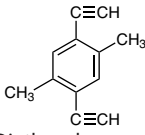
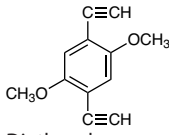
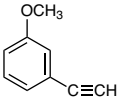
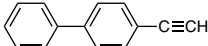
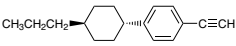
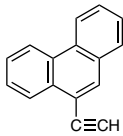
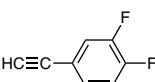
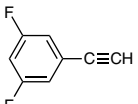
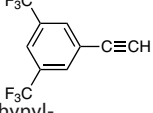
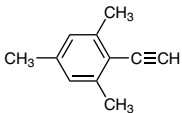
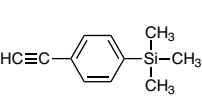
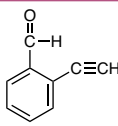
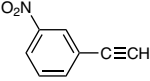
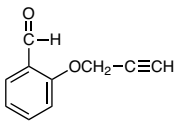
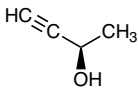
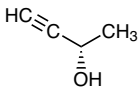
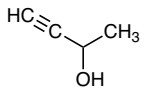
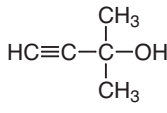
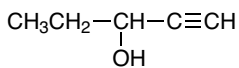
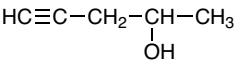
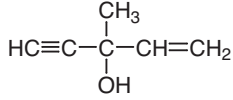
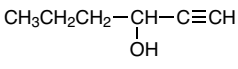
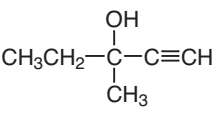
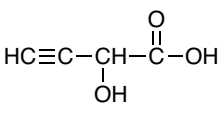
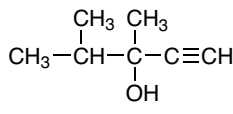
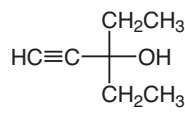
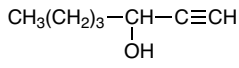
Sialyl Lewis X-Lactose Ethylazide

## Terminal Alkynes

## Aliphatic Hydrocarbons

<b>P1881</b> 200g	<b>P2152</b> 100mL 500mL
$\text{CH}_3\text{—C}\equiv\text{CH}$ Propyne (ca. 3% in Heptane) CAS RN: 74-99-7	$\text{CH}_3\text{—C}\equiv\text{CH}$ Propyne (ca. 4% in <i>N,N</i> -Dimethylformamide, ca. 1.0mol/L) CAS RN: 74-99-7
<b>P2295</b> 100mL 500mL	<b>C1984</b> 5g 25g
$\text{CH}_3\text{—C}\equiv\text{CH}$ Propyne (ca. 5% in Tetrahydrofuran, ca. 1mol/L) CAS RN: 74-99-7	 Cyclopropylacetylene CAS RN: 6746-94-7
<b>P0068</b> 5mL 25mL	<b>P1273</b> 25g 250g
$\text{CH}_3\text{CH}_2\text{CH}_2\text{C}\equiv\text{CH}$ 1-Pentyne CAS RN: 627-19-0	$\text{HC}\equiv\text{CCH}_2\text{Cl}$ Propargyl Chloride (70% in Toluene, ca. 9.2mol/L) CAS RN: 624-65-7
<b>P0810</b> 5mL 25mL	<b>H0485</b> 1g 5g
$\text{HC}\equiv\text{CCH}_2\text{Cl}$ Propargyl Chloride CAS RN: 624-65-7	$\text{HC}\equiv\text{C—CH}_2\text{CH}_2\text{—C}\equiv\text{CH}$ 1,5-Hexadiyne (stabilized with BHT) CAS RN: 628-16-0
<b>H1541</b> 1g 5g	<b>H1114</b> 10mL 100mL
$\text{HC}\equiv\text{C—CH}_2\text{CH}_2\text{—CH=CH}_2$ 1-Hexen-5-yne CAS RN: 14548-31-3	 3,3-Dimethyl-1-butyne CAS RN: 917-92-0
<b>B0140</b> 25mL 250mL	<b>M0269</b> 1mL 5mL
$\text{CH}_3(\text{CH}_2)_3\text{C}\equiv\text{CH}$ 1-Hexyne CAS RN: 693-02-7	 4-Methyl-1-pentyne CAS RN: 7154-75-8
<b>C1195</b> 1g 5g	<b>H0483</b> 1mL 5mL
 3-Chloro-1-butyne CAS RN: 21020-24-6	$\text{HC}\equiv\text{C}(\text{CH}_2)_3\text{C}\equiv\text{CH}$ 1,6-Heptadiyne CAS RN: 2396-63-6
<b>H0048</b> 25mL	<b>M0271</b> 5mL
$\text{CH}_3(\text{CH}_2)_4\text{C}\equiv\text{CH}$ 1-Heptyne CAS RN: 628-71-7	 5-Methyl-1-hexyne CAS RN: 2203-80-7
<b>C1522</b> 5mL 25mL	<b>C1993</b> 5mL 25mL
$\text{HC}\equiv\text{C—CH}_2\text{CH}_2\text{CH}_2\text{Cl}$ 5-Chloro-1-pentyne CAS RN: 14267-92-6	$\text{HC}\equiv\text{C—}(\text{CH}_2)_4\text{Cl}$ 6-Chloro-1-hexyne CAS RN: 10297-06-0
<b>O0147</b> 5mL 25mL	<b>P1272</b> 25g 100g 500g
$\text{HC}\equiv\text{C—}(\text{CH}_2)_4\text{—C}\equiv\text{CH}$ 1,7-Octadiyne CAS RN: 871-84-1	$\text{HC}\equiv\text{CCH}_2\text{Br}$ Propargyl Bromide (80% in Toluene, ca. 9.2mol/L) CAS RN: 106-96-7
<b>O0050</b> 25mL 100mL	<b>P0484</b> 25g 100g 500g
$\text{CH}_3(\text{CH}_2)_5\text{—C}\equiv\text{CH}$ 1-Octyne CAS RN: 629-05-0	$\text{HC}\equiv\text{CCH}_2\text{Br}$ Propargyl Bromide (stabilized with MgO) CAS RN: 106-96-7
<b>N0406</b> 5mL	<b>B3242</b> 5g
$\text{HC}\equiv\text{C—}(\text{CH}_2)_5\text{—C}\equiv\text{CH}$ 1,8-Nonadiyne CAS RN: 2396-65-8	$\text{HC}\equiv\text{CCH}_2\text{CH}_2\text{Br}$ 4-Bromo-1-butyne CAS RN: 38771-21-0
<b>N0301</b> 5mL	<b>D1724</b> 1mL 5mL
$\text{CH}_3(\text{CH}_2)_6\text{—C}\equiv\text{CH}$ 1-Nonyne CAS RN: 3452-09-3	$\text{CH}_3(\text{CH}_2)_3\text{—C}\equiv\text{C—CH}_2\text{CH}_2\text{—C}\equiv\text{CH}$ 1,5-Decadiyne CAS RN: 53963-03-4
<b>D0037</b> 5mL 25mL	<b>D1326</b> 5mL
$\text{CH}_3(\text{CH}_2)_7\text{—C}\equiv\text{CH}$ 1-Decyne CAS RN: 764-93-2	$\text{HC}\equiv\text{C—}(\text{CH}_2)_6\text{—C}\equiv\text{CH}$ 1,9-Decadiyne CAS RN: 1720-38-3
<b>U0033</b> 5mL	<b>T0761</b> 5mL 25mL
$\text{CH}_3(\text{CH}_2)_8\text{—C}\equiv\text{CH}$ 1-Undecyne CAS RN: 2243-98-3	$\text{CH}_3(\text{CH}_2)_{11}\text{—C}\equiv\text{CH}$ 1-Tetradecyne CAS RN: 765-10-6
<b>D0997</b> 5mL 25mL	<b>P0356</b> 5mL
$\text{CH}_3(\text{CH}_2)_9\text{—C}\equiv\text{CH}$ 1-Dodecyne CAS RN: 765-03-7	$\text{CH}_3(\text{CH}_2)_{12}\text{C}\equiv\text{CH}$ 1-Pentadecyne CAS RN: 765-13-9
<b>H0433</b> 5mL	<b>E1178</b> 5mL
$\text{CH}_3(\text{CH}_2)_{13}\text{C}\equiv\text{CH}$ 1-Hexadecyne CAS RN: 629-74-3	 1-Ethynyl-1-cyclohexene CAS RN: 931-49-7
<b>H0440</b> 1g	<b>O0128</b> 1mL 5mL
$\text{CH}_3(\text{CH}_2)_{14}\text{C}\equiv\text{CH}$ 1-Heptadecyne CAS RN: 26186-00-5	$\text{CH}_3(\text{CH}_2)_{15}\text{C}\equiv\text{CH}$ 1-Octadecyne CAS RN: 629-89-0
<b>Aromatic Hydrocarbons</b>	

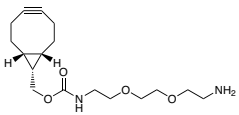
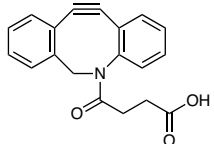
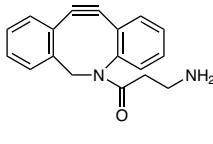
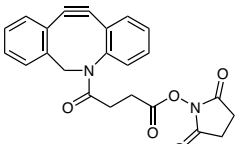
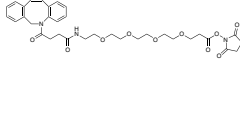
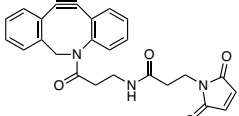
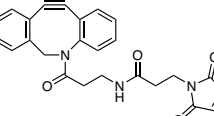
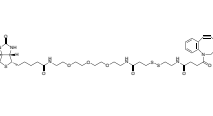
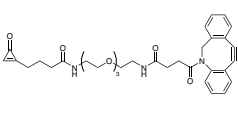
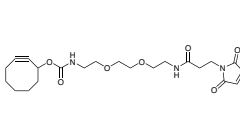
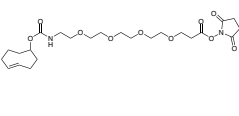
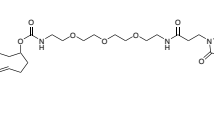
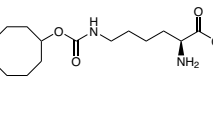
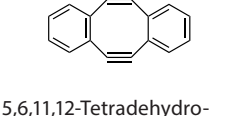
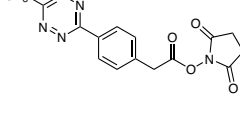
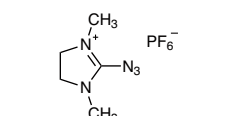
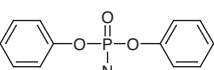
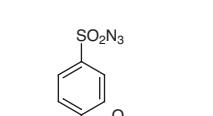
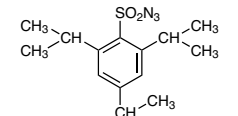

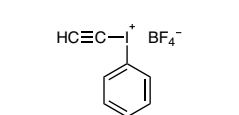
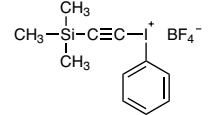
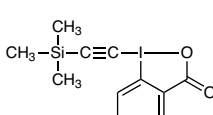
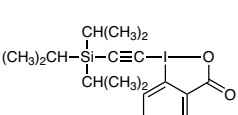
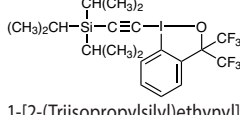
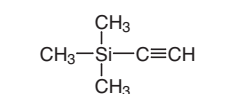
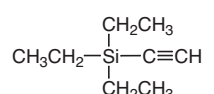
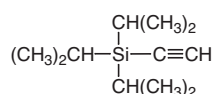
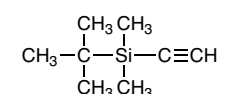
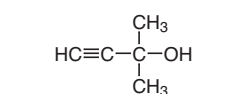
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<b>A1122</b> 5g 25g  3-Ethynylaniline CAS RN: 54060-30-9	<b>E0654</b> 5g  1-Ethynyl-2-fluorobenzene CAS RN: 766-49-4	<b>F0470</b> 1g 5g  1-Ethynyl-4-fluorobenzene CAS RN: 766-98-3	<b>D2496</b> 1g 5g  1,3-Diethynylbenzene CAS RN: 1785-61-1	<b>D2151</b> 1g 5g  1,4-Diethynylbenzene CAS RN: 935-14-8
<b>E0987</b> 1g  4-Ethynylbenzaldehyde CAS RN: 63697-96-1	<b>E0749</b> 5g 25g  1-Ethyl-4-ethynylbenzene CAS RN: 40307-11-7	<b>P0358</b> 5mL  4-Phenyl-1-butyne CAS RN: 16520-62-0	<b>P2222</b> 5g 25g  Phenyl Propargyl Ether CAS RN: 13610-02-1	<b>E0603</b> 1g 5g 25g  4-Ethynylanisole CAS RN: 768-60-5
<b>E1172</b> 1g 5g  1-Ethynyl-2-methoxybenzene CAS RN: 767-91-9	<b>C2670</b> 1g 5g  1-Chloro-4-ethynylbenzene CAS RN: 873-73-4	<b>C2750</b> 1g 5g  2-Chlorophenylacetylene CAS RN: 873-31-4	<b>E1169</b> 1g 5g  1-Ethynyl-2,4-difluorobenzene CAS RN: 302912-34-1	<b>E0750</b> 5g 25g  1-Ethynyl-4-propylbenzene CAS RN: 62452-73-7
<b>E1041</b> 1g  4-Ethynylbenzoic Acid CAS RN: 10602-00-3	<b>E1029</b> 1g 5g  4-Ethoxyphenylacetylene CAS RN: 79887-14-2	<b>T2760</b> 1g 5g  1,3,5-Triethynylbenzene CAS RN: 7567-63-7	<b>E0933</b> 100mg  2-Ethynynaphthalene CAS RN: 2949-26-0	<b>D4878</b> 1g 5g  1,5-Diethynyl-2,4-dimethylbenzene CAS RN: 1379822-09-9
<b>E1078</b> 1g  5-Ethynyl-1,2,3-trifluorobenzene CAS RN: 158816-55-8	<b>B2301</b> 5g 25g  1-Butyl-4-ethynylbenzene CAS RN: 79887-09-5	<b>P2339</b> 200mg 1g  4-(Propargyloxy)benzaldehyde CAS RN: 5651-86-5	<b>E1175</b> 200mg 1g  1-Ethynyl-3,5-dimethoxybenzene CAS RN: 171290-52-1	<b>E0626</b> 1g 5g  1-Ethynyl-4-(phenylethynyl)benzene CAS RN: 705-31-7
<b>E0563</b> 5g 25g  1-Ethynyl-4-pentylbenzene CAS RN: 79887-10-8	<b>B3701</b> 1g 5g  1-Bromo-4-ethynylbenzene CAS RN: 766-96-1	<b>B4608</b> 1g 5g  2-Bromophenylacetylene CAS RN: 766-46-1	<b>E1130</b> 200mg 1g  4-Ethynylbenzenesulfonamide CAS RN: 1788-08-5	<b>E1170</b> 1g 5g  1-Ethynyl-4-(trifluoromethoxy)benzene CAS RN: 160542-02-9
<b>B4521</b> 200mg 1g  1,3-Bis(2-propynyloxy)benzene CAS RN: 26627-36-1	<b>B4607</b> 1g 5g  1,4-Bis(2-propynyloxy)benzene CAS RN: 34596-36-6	<b>E0564</b> 5g 25g  1-Ethynyl-4-hexylbenzene CAS RN: 79887-11-9	<b>D4233</b> 200mg 1g  4,4'-Diethynylbiphenyl CAS RN: 38215-38-2	<b>E0967</b> 200mg 1g  1-Ethynyl-4-(phenylethynyl)benzene CAS RN: 92866-00-7

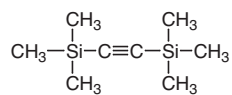
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<b>P2226</b> 200mg 1g  1-[(2-Propynyloxy)methyl]pyrene CAS RN: 1115084-83-7	<b>B5444</b> 200mg 1g  1-Bromo-3,5-diethynylbenzene CAS RN: 144001-08-1	<b>C3099</b> 1g 5g  1-Chloro-3-ethynylbenzene CAS RN: 766-83-6	<b>D5314</b> 200mg 1g  1,4-Diethynyl-2,5-dimethylbenzene CAS RN: 75867-45-7	<b>D5315</b> 200mg 1g  1,4-Diethynyl-2,5-dimethoxybenzene CAS RN: 74029-40-6
<b>E0627</b> 1g 5g  3-Ethynylanisole CAS RN: 768-70-7	<b>E1141</b> 1g 5g  4-Ethynylbiphenyl CAS RN: 29079-00-3	<b>E1232</b> 1g  1-Ethynyl-4-(trans-4-propylcyclohexyl)-benzene CAS RN: 88074-73-1	<b>E1301</b> 1g 5g  9-Ethynylphenanthrene CAS RN: 32870-98-7	<b>E1349</b> 1g  4-Ethynyl-1,2-difluorobenzene CAS RN: 143874-13-9
<b>E1352</b> 1g 5g  1-Ethynyl-3,5-difluorobenzene CAS RN: 151361-87-4	<b>E1353</b> 1g 5g  1-Ethynyl-3,5-bis(trifluoromethyl)-benzene CAS RN: 88444-81-9	<b>E1361</b> 1g 5g  2-Ethynyl-1,3,5-trimethylbenzene CAS RN: 769-26-6	<b>E1362</b> 1g 5g  (4-Ethynylphenyl)-trimethylsilane CAS RN: 16116-92-0	<b>E1420</b> 1g  2-Ethynylbenzaldehyde CAS RN: 38846-64-9
<b>N1148</b> 200mg 1g  3-Nitrophenylacetylene CAS RN: 3034-94-4	<b>P2338</b> 200mg 1g  2-(Propargyloxy)-benzaldehyde CAS RN: 29978-83-4	<b>Alcohols</b>		
<b>P0536</b> 25mL 100mL 500mL $\text{HC}\equiv\text{C}-\text{CH}_2\text{OH}$ 2-Propyn-1-ol CAS RN: 107-19-7	<b>B0799</b> 5mL 25mL $\text{HC}\equiv\text{C}-\text{CH}_2\text{CH}_2\text{OH}$ 3-Butyn-1-ol CAS RN: 927-74-2			
<b>B2909</b> 1g 5g  (R)-(+)-3-Butyn-2-ol CAS RN: 42969-65-3	<b>B2910</b> 1g 5g  (S)-(-)-3-Butyn-2-ol CAS RN: 2914-69-4	<b>B1001</b> 5mL 25mL  3-Butyn-2-ol CAS RN: 2028-63-9	<b>M0180</b> 25mL 500mL  2-Methyl-3-butyn-2-ol CAS RN: 115-19-5	<b>P0069</b> 10g  1-Pentyn-3-ol CAS RN: 4187-86-4
<b>P0817</b> 5mL 25mL $\text{HC}\equiv\text{C}-\text{CH}_2\text{CH}_2\text{CH}_2\text{OH}$ 4-Pentyn-1-ol CAS RN: 5390-04-5	<b>P0818</b> 5mL  4-Pentyn-2-ol CAS RN: 2117-11-5	<b>M1312</b> 5mL 25mL  3-Methyl-1-penten-4-yn-3-ol CAS RN: 3230-69-1	<b>H0141</b> 5mL 25mL  1-Hexyn-3-ol CAS RN: 105-31-7	<b>H0687</b> 5mL 25mL $\text{HC}\equiv\text{C}-(\text{CH}_2)_4\text{OH}$ 5-Hexyn-1-ol CAS RN: 928-90-5
<b>M0396</b> 25mL 100mL 500mL  3-Methyl-1-pentyn-3-ol CAS RN: 77-75-8	<b>H0905</b> 100mg 1g  2-Hydroxy-3-butynoic Acid CAS RN: 38628-65-8	<b>D1276</b> 10mL  3,4-Dimethyl-1-pentyn-3-ol CAS RN: 1482-15-1	<b>E0273</b> 25mL  3-Ethyl-1-pentyn-3-ol CAS RN: 6285-06-9	<b>H0455</b> 1mL 5mL  1-Heptyn-3-ol CAS RN: 7383-19-9

<b>H1474</b> 5mL <div><chem>HC#C(CH2)5OH</chem></div> <div>6-Heptyn-1-ol CAS RN: 63478-76-2</div>	<b>M0961</b> 5mL <div><chem>CC(C)C(C)C#C</chem></div> <div>5-Methyl-1-hexyn-3-ol CAS RN: 61996-79-0</div>	<b>E0297</b> 25g 500g <div><chem>OC1(C#C)CCCC1</chem></div> <div>1-Ethynyl-1-cyclohexanol CAS RN: 78-27-3</div>	<b>D0737</b> 25mL 100mL 500mL <div><chem>CC(C)CC(C)(O)C#C</chem></div> <div>3,5-Dimethyl-1-hexyn-3-ol CAS RN: 107-54-0</div>	<b>O0235</b> 1g 5g <div><chem>CCCCC[C@H](O)C#C</chem></div> <div>(S)-1-Octyn-3-ol CAS RN: 32556-71-1</div>	
<b>O0196</b> 25mL 250mL <div><chem>CCCCC[C@H](O)C#C</chem></div> <div>1-Octyn-3-ol CAS RN: 818-72-4</div>	<b>O0445</b> 1mL 5mL <div><chem>HC#C(CH2)6OH</chem></div> <div>7-Octyn-1-ol CAS RN: 871-91-0</div>	<b>H0823</b> 1g <div><chem>CCOC(=O)C(O)C#C</chem></div> <div>Ethyl 2-Hydroxy-3-butynoate CAS RN: 18418-08-1</div>	<b>P0220</b> 1g 5g 25g <div><chem>OC(C#C)c1ccccc1</chem></div> <div>1-Phenyl-2-propyn-1-ol CAS RN: 4187-87-5</div>	<b>D3710</b> 5g 25g <div><chem>HC#C(CH2)8OH</chem></div> <div>9-Decyn-1-ol CAS RN: 17643-36-6</div>	
<b>E0270</b> 25mL 500mL <div><chem>CCC(CC)C(O)C#C</chem></div> <div>4-Ethyl-1-octyn-3-ol CAS RN: 5877-42-9</div>	<b>U0055</b> 5g <div><chem>HC#C(CH2)9OH</chem></div> <div>10-Undecyn-1-ol CAS RN: 2774-84-7</div>	<b>E0548</b> 5g <div><chem>OC1(C#C)c2ccccc2C3=CC=CC=C13</chem></div> <div>9-Ethynyl-9-fluorenone CAS RN: 13461-74-0</div>	<b>D2495</b> 5g 25g <div><chem>OC(C#C)(c1ccccc1)c2ccccc2</chem></div> <div>1,1-Diphenyl-2-propyn-1-ol CAS RN: 3923-52-2</div>	<div>Carboxylic Acids &amp; Esters</div>	
<b>P0497</b> 5g 25g <div><chem>OC(=O)C#C</chem></div> <div>Propiolic Acid CAS RN: 471-25-0</div>	<b>B4969</b> 200mg <div><chem>OC(=O)CC#C</chem></div> <div>3-Butynoic Acid CAS RN: 2345-51-9</div>	<b>H0905</b> 100mg 1g <div><chem>OC(=O)C(O)C#C</chem></div> <div>2-Hydroxy-3-butynoic Acid CAS RN: 38628-65-8</div>	<b>H0882</b> 5g 25g <div><chem>OC(=O)CCCC#C</chem></div> <div>5-Hexynoic Acid CAS RN: 53293-00-8</div>		<b>U0054</b> 1g 5g <div><chem>OC(=O)CCCCC#C</chem></div> <div>10-Undecynoic Acid CAS RN: 2777-65-3</div>
<b>H0964</b> 5g 25g <div><chem>OC(=O)C(C#C)CCCC</chem></div> <div>2-Hexyl-4-pentynoic Acid CAS RN: 96017-59-3</div>	<b>P0528</b> 5mL 25mL <div><chem>COCC(=O)C#C</chem></div> <div>Methyl Propiolate CAS RN: 922-67-8</div>	<b>P0529</b> 5mL 25mL <div><chem>CCOC(=O)C#C</chem></div> <div>Ethyl Propiolate CAS RN: 623-47-2</div>	<b>P1038</b> 5g 25g <div><chem>CC(C)(C)OC(=O)C#C</chem></div> <div>tert-Butyl Propiolate CAS RN: 13831-03-3</div>		<b>H0823</b> 1g <div><chem>CCOC(=O)C(O)C#C</chem></div> <div>Ethyl 2-Hydroxy-3-butynoate CAS RN: 18418-08-1</div>
<b>D6072</b> 1g 5g <div><chem>COC(=O)C(C#C)C(=O)OC</chem></div> <div>Dimethyl 2-Propyn-1-ylmalonate CAS RN: 95124-07-5</div>	<b>D4616</b> 1g 5g <div><chem>CCOC(=O)C(C#C)C(=O)OCC</chem></div> <div>Diethyl 2-Propynylmalonate CAS RN: 17920-23-9</div>	<b>B4007</b> 1g <div><chem>OC(=O)C[C@H](N)C#C</chem></div> <div>Boc-propargyl-Gly-OH CAS RN: 63039-48-5</div>	<b>F0926</b> 1g <div><chem>OC(=O)C[C@H](N)C#C</chem></div> <div>Fmoc-propargyl-Gly-OH CAS RN: 198561-07-8</div>		<b>P2341</b> 1g 5g <div><chem>OC(=O)CCCC#C</chem></div> <div>4-Pentynoic Acid CAS RN: 6089-09-4</div>
<b>P2878</b> 5g 25g <div><chem>C#CCOC(=O)C=C</chem></div> <div>Propargyl Acrylate (stabilized with BHT) CAS RN: 10477-47-1</div>	<div>Amines</div>	<b>P0911</b> 5mL 25mL <div><chem>NC#CC</chem></div> <div>Propargylamine CAS RN: 2450-71-7</div>	<b>P0990</b> 5g 25g <div><chem>NC#CC</chem></div> <div>Propargylamine Hydrochloride CAS RN: 15430-52-1</div>	<b>P2166</b> 1g 5g <div><chem>NCCCOCC#C</chem></div> <div>2-(2-Propynyloxy)ethylamine CAS RN: 122116-12-5</div>	
<b>D4685</b> 1mL 5mL <div><chem>C#CCNC#C</chem></div> <div>Dipropargylamine CAS RN: 6921-28-4</div>		<b>D2794</b> 5mL 25mL <div><chem>CN(C)CC#C</chem></div> <div>N,N-Dimethylpropargylamine CAS RN: 7223-38-3</div>	<b>D2817</b> 5mL <div><chem>CCCCN(CCC)C#C</chem></div> <div>3-Dibutylamino-1-propyne CAS RN: 6336-58-9</div>	<b>D4964</b> 1g 5g <div><chem>C#CCN(CCC)S(=O)(=O)c1ccc(C)cc1</chem></div> <div>N,N-Dipropargyl-p-toluenesulfonamide CAS RN: 18773-54-1</div>	<b>B5925</b> 200mg 1g <div><chem>NC#CC</chem></div> <div>3-Butyn-1-amine Hydrochloride CAS RN: 88211-50-1</div>

<b>D5393</b> 5mL 25mL  3-Diethylamino-1-propyne CAS RN: 4079-68-9	<b>E0505</b> 10g 25g  4-Ethynylaniline CAS RN: 14235-81-5	<b>E0894</b> 1g  4-Ethynyltriphenylamine CAS RN: 205877-26-5	<b>E1021</b> 1g 5g  4-Ethynyl-N,N-dimethylaniline CAS RN: 17573-94-3	<b>P2224</b> 1g 5g  4-(2-Propynyloxy)aniline CAS RN: 26557-78-8
<b>R0213</b> 250mg 1g 5g  Rasagiline Mesylate CAS RN: 161735-79-1	<b>T2992</b> 1g 5g  Tripropargylamine CAS RN: 6921-29-5	<b>T3094</b> 1g  Tris(4-ethynylphenyl)-amine CAS RN: 189178-09-4	<b>Heterocyclic Compounds</b>	
<b>P1624</b> 25g  2-(2-Propynyloxy)-tetrahydropyran CAS RN: 6089-04-9	<b>P2191</b> 200mg 1g  N-(2-Propynyl)succinimide CAS RN: 10478-33-8	<b>P2228</b> 200mg 1g  1-Propargylpiperazine CAS RN: 52070-67-4	<b>P2170</b> 200mg 1g  4-Propargylmorpholine CAS RN: 5799-76-8	<b>P1469</b> 5g 25g  4-Propargylthiomorpholine 1,1-Dioxide CAS RN: 10442-03-2
<b>P2329</b> 5g 25g  N-Propargylphthalimide CAS RN: 7223-50-9	<b>P2342</b> 1g 5g  N-(Propargyloxy)phthalimide CAS RN: 4616-63-1	<b>E0579</b> 1g 5g  4-Ethynylphthalic Anhydride CAS RN: 73819-76-8	<b>E0915</b> 1g 5g  2-Ethynylthiophene CAS RN: 4298-52-6	<b>E0892</b> 1g 5g  3-Ethynylthiophene CAS RN: 67237-53-0
<b>E0340</b> 1mL 5mL  2-Ethynylpyridine CAS RN: 1945-84-2	<b>E0560</b> 1g 5g  3-Ethynylpyridine CAS RN: 2510-23-8	<b>E0561</b> 100mg 500mg  4-Ethynylpyridine CAS RN: 2510-22-7	<b>E1043</b> 1g 5g  4-Ethynylpyridine Hydrochloride CAS RN: 352530-29-1	<b>D5097</b> 200mg 1g  2,6-Diethynylpyridine CAS RN: 75867-46-8
<b>E1096</b> 200mg 1g  5-Ethynyluracil CAS RN: 59989-18-3	<b>E1057</b> 50mg 200mg  EdU CAS RN: 61135-33-9	<b>E1093</b> 50mg 200mg  5-Ethynyl-2'-deoxycytidine CAS RN: 69075-47-4	<b>E1055</b> 1g 5g  9-(4-Ethynylphenyl)carbazole CAS RN: 262861-81-4	<b>B4921</b> 200mg 1g  4-Bromo-2,6-diethynylpyridine CAS RN: 1374038-64-8
<b>B5179</b> 200mg 1g  5-Bromo-2-ethynylpyridine CAS RN: 111770-86-6	<b>D4613</b> 1g 5g  3,5-Diethynylpyridine CAS RN: 67227-90-1	<b>D4664</b> 250mg 1g  2,5-Diethynylpyridine CAS RN: 137000-75-0	<b>E1091</b> 200mg  2-Ethynylbenzothiazole CAS RN: 40176-80-5	<b>E1092</b> 200mg 1g  7-Ethynylcoumarin CAS RN: 270088-04-5
<b>F1222</b> 25mg  5-FAM-Alkyne CAS RN: 510758-19-7	<b>M3184</b> 1g 5g  1-(4-Morpholinophenyl)-1-phenylprop-2-yn-1-ol CAS RN: 194940-93-7	<b>P2139</b> 25mg 100mg  N-Propargylmaleimide CAS RN: 209395-32-4	<b>Polyethylene Glycols (PEG)</b>	
			<b>P2249</b> 25mg 100mg  mPEG <sub>4</sub> -Alkyne CAS RN: 1101668-39-6	

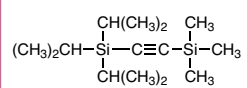
<b>D4580</b> 1g  2-[2-(2-Propyn-1-yloxy)-ethoxy]ethanol CAS RN: 7218-43-1	<b>T3114</b> 1g 5g  Triethylene Glycol Monopropargyl Ether CAS RN: 208827-90-1	<b>P2283</b> 25mg  Alkyne-PEG <sub>5</sub> -NHS Ester CAS RN: 1393330-40-9	<b>P2225</b> 1g 5g  2-[2-(2-Propynyloxy)-ethoxy]ethylamine CAS RN: 944561-44-8	<b>E1054</b> 5g 25g  Ethylene Glycol 1,2-Bis(2-propynyl) Ether CAS RN: 40842-04-4
<b>D4581</b> 5g 25g  Diethylene Glycol Bis(2-propynyl) Ether CAS RN: 126422-57-9	<b>Others</b>	<b>B2393</b> 1g 5g  3-Butyn-2-one CAS RN: 1423-60-5	<b>P1173</b> 5mL 25mL  Propargylaldehyde Diethyl Acetal CAS RN: 10160-87-9	<b>M0860</b> 5mL 25mL  Methyl Propargyl Ether CAS RN: 627-41-8
<b>G0445</b> 1g 5g  Glycidyl Propargyl Ether CAS RN: 18180-30-8	<b>T1455</b> 5g  Propargyl <i>p</i> -Toluenesulfonate CAS RN: 6165-76-0	<b>B5163</b> 5mL 25mL  <i>tert</i> -Butyldimethyl-(2-propynyloxy)silane CAS RN: 76782-82-6	<b>P2258</b> 1g 5g  2-Propynyl [3-(Triethoxysilyl)-propyl]carbamate CAS RN: 870987-68-1	<b>T2046</b> 5g  3-Butynyl <i>p</i> -Toluenesulfonate CAS RN: 23418-85-1
<b>B5042</b> 1mL  4-( <i>tert</i> -Butyldimethylsilyloxy)-1-butyne CAS RN: 78592-82-2	<b>T1224</b> 5g  1-Butyn-3-yl <i>p</i> -Toluenesulfonate CAS RN: 53487-52-8	<b>P2171</b> 200mg 1g  2-Propynylurea CAS RN: 5221-62-5	<b>B4472</b> 1g 5g  <i>N</i> -( <i>tert</i> -Butoxycarbonyl)-propargylamine CAS RN: 92136-39-5	<b>M2618</b> 1g  <i>N</i> -Methyl- <i>N</i> -propargylbenzylamine CAS RN: 555-57-7
<b>E1074</b> 200mg 1g  Ethynylboronic Acid Pinacol Ester CAS RN: 347389-74-6	<b>E0466</b> 1g 5g  Ethynyl <i>p</i> -Tolyl Sulfone CAS RN: 13894-21-8	<b>H1214</b> 5g 25g  6-Heptynenitrile CAS RN: 15295-69-9	<b>P1438</b> 5g 25g  Triphenylpropargyl-phosphonium Bromide CAS RN: 2091-46-5	<b>P2335</b> 1g 5g  Propargyl Ether CAS RN: 6921-27-3
<b>P2336</b> 1g 5g  Propargyl Sulfide CAS RN: 13702-09-5	<b>B5958</b> 1g  <i>N</i> -Carbobenzoxypargylamine CAS RN: 120539-91-5	<b>D4963</b> 1g 5g  Dimethyl Dipropargylmalonate CAS RN: 63104-44-9	<b>M2768</b> 1g 5g  Methyl 4-Ethynylbenzoate CAS RN: 3034-86-4	<b>P2374</b> 1g 5g  Propyzamide CAS RN: 23950-58-5
<b>P2603</b> 1g  <i>N</i> -Propargyltrifluoroacetamide CAS RN: 14719-21-2	<b>T1239</b> 5mL 25mL 250mL  Trimethylsilylacetylene CAS RN: 1066-54-2	<b>T1683</b> 5mL 25mL  Triisopropylsilylacetylene CAS RN: 89343-06-6	<b>T2387</b> 1g 5g  Triethylsilylacetylene CAS RN: 1777-03-3	
<b>Cu-free Click Reaction Reagents</b>				
<b>B5467</b> 100mg  BCN-OH CAS RN: 1263166-90-0	<b>B6275</b> 10mg 100mg  BCN-CO-NHS CAS RN: 1426827-79-3	<b>B6215</b> 1set  BCN-CO-NHS (2mgx5) CAS RN: 1426827-79-3		

<b>B4062</b> 25mg 100mg  BDN-amine CAS RN: 1263166-93-3	<b>D5677</b> 250mg  DBCO-Acid CAS RN: 1353016-70-2	<b>A2763</b> 25mg 100mg  DBCO-amine CAS RN: 1255942-06-3	<b>D5999</b> 25mg  DBCO-NHS CAS RN: 1353016-71-3	<b>D5922</b> 25mg  DBCO-PEG4-NHS Ester CAS RN: 1427004-19-0
<b>D4739</b> 25mg  DBCO-maleimide CAS RN: 1395786-30-7	<b>D5849</b> 1set  DBCO-maleimide (2mgx5) CAS RN: 1395786-30-7	<b>D5552</b> 25mg  DBCO-S-S-PEG3-Biotin CAS RN: 1430408-09-5	<b>C3916</b> 25mg  CPO-PEG3-DBCO (contains 5% Acetonitrile at maximum)	<b>C3700</b> 5mg 25mg  SCO-PEG2-Maleimide CAS RN: 2141976-23-8
<b>T3949</b> 5mg 25mg  TCO-PEG4-NHS CAS RN: 1621096-79-4	<b>T3948</b> 5mg 25mg  TCO-PEG3-Maleimide CAS RN: 1914971-04-2	<b>T4126</b> 25mg  N-(4E)-TCO-L-lysine CAS RN: 1380349-88-1	<b>T3241</b> 100mg 500mg  5,6,11,12-Tetradehydro-dibenzo[a,e]cyclooctene CAS RN: 53397-65-2	<b>M3494</b> 25mg  Methyltetrazine-NHS Ester CAS RN: 1644644-96-1
<h2>Azidation Reagents</h2>				
<b>A2457</b> 5g 25g 250g  2-Azido-1,3-dimethylimidazolium Hexafluorophosphate CAS RN: 1266134-54-6	<b>D1672</b> 5g 25g 250g  Diphenylphosphoryl Azide CAS RN: 26386-88-9	<b>A1786</b> 5g 25g 100g  4-Acetamidobenzenesulfonyl Azide CAS RN: 2158-14-7	<b>T3434</b> 1g 5g  2,4,6-Triisopropylbenzenesulfonyl Azide (wetted with ca. 10% Water) CAS RN: 36982-84-0	<b>D2580</b> 25g  Dodecylbenzenesulfonyl Azide (soft type) (mixture) CAS RN: 79791-38-1
<h2>Ethynylation Reagents</h2>				
<b>E0467</b> 1g  Ethynyl(phenyl)iodonium Tetrafluoroborate CAS RN: 127783-34-0	<b>P1239</b> 1g  Trimethylsilylethynyl(phenyl)iodonium Tetrafluoroborate CAS RN: 127783-36-2	<b>T3272</b> 1g 5g  TMS-EBX CAS RN: 181934-29-2	<b>T3039</b> 200mg 1g  TIPS-EBX CAS RN: 181934-30-5	<b>T3590</b> 200mg  1-[2-(Triisopropylsilyl)ethynyl]-3,3-bis(trifluoromethyl)-1,2-benziodoxole CAS RN: 181934-34-9
<b>T1239</b> 5mL 25mL 250mL  Trimethylsilylacetylene CAS RN: 1066-54-2	<b>T2387</b> 1g 5g  Triethylsilylacetylene CAS RN: 1777-03-3	<b>T1683</b> 5mL 25mL  Triisopropylsilylacetylene CAS RN: 89343-06-6	<b>B4365</b> 5g 25g  (tert-Butyldimethylsilyl)acetylene CAS RN: 86318-61-8	<b>M0180</b> 25mL 500mL  2-Methyl-3-buten-2-ol CAS RN: 115-19-5

**B1090** 5g 25g

BTMSA

CAS RN: 14630-40-1

**T3271** 1mL 5mLTriisopropyl[(trimethylsilyl)-  
ethynyl]silane

CAS RN: 107474-02-2





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