





Building Blocks for Synthesis of Proteolysis Targeting Compounds

In recent years, research in medicinal chemistry has increasingly investigated the use of the ubiquitin-proteasome system (UPS) to combat diseases. As a result, a variety of chimera compounds have been synthesized consisting of a tag that can bind to ubiquitin ligase, a linker and another ligand that can bind to disease related proteins. This enables us to bring the disease related protein in proximity to an activated UPS to eliminate the protein.

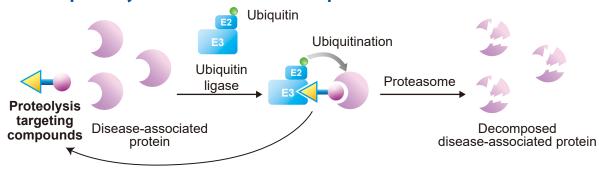


Ubiquitin ligase ligand

Linker

Ligand of target protein

Mechanism of proteolysis of disease-associated proteins



Reference I. Collins, H. Wang, J. J. Caldwell, R. Chopra, *Biochem. J.* **2017**, *474*, 1127. DOI: https://doi.org/10.1042/BCJ20160762

Ubiquitin Ligase Ligands

CH₂−C−OH

[P2074]

[A0736]

New (S,R,S)-AHPC Hydrochloride
Pomalidomide
1-Adamantaneacetic Acid

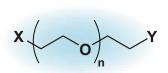
10mg / 50mg [A3412] 25mg / 100mg [P2074] 5g / 25g [A0736]

Building Blocks for Synthesis of Proteolysis Targeting Compounds

Bifunctional Linkers

Measuring the activity of these compounds has shown that the length of the linker is an important factor in triggering ubiquitination. TCI now offers hetero-bifunctional linkers with a variety of lengths. We are also open to inquiries regarding scale up and custom synthesis of linkers and ligands. To learn more, get in touch with your local TCI representative or use the contact information at the bottom of this page.

> Reference A. Zorba, et al., Proc. Natl. Acad. Sci. USA 2018, 115, E7285. DOI: https://doi.org/10.1073/pnas.1803662115



X	Υ	n			
		1	2	3	4
H ₂ N	COO <i>t</i> Bu	B6249	A3325	B5586	B5900
BocHN	СООН	B6257	D5825	B6093	B5665
BocHN	NH_2	B5683	B5141	B6080	B6256

New Amino-PEG₁-acid tert-Butyl Ester Amino-PEG₂-acid tert-Butyl Ester

New Amino-PEG₃-acid tert-Butyl Ester Amino-PEG₄-acid tert-Butyl Ester

New (Boc-amino)-PEG₁-carboxylic Acid

New (Boc-amino)-PEG₂-carboxylic Acid (Boc-amino)-PEG₃-carboxylic Acid (Boc-amino)-PEG₄-carboxylic Acid

> Boc-Amino-PEG₁-Amine Boc-Amino-PEG₂-Amine **Boc-Amino-PEG₃-Amine**

New Boc-Amino-PEG₄-Amine

250mg [B6249]

1g / 5g [A3325]

1q [**B5586**]

250mg / 1g [B5900]

250mg [**B6257**]

250mg [**D5825**]

250mg [B6093]

250mg / 1g [B5665]

200mg / 1g [B5683]

200mg / 1g [B5141]

250mg / 1g [B6080]

200mg / 1g [B6256]

For further information please refer to our website at www.TClchemicals.com. cross-linker or ubiquitin ligase



Tel



Ordering and **Customer Service**

TCI AMERICA

:800-423-8616 / 503-283-1681 Tel :888-520-1075 / 503-283-1987 E-mail: Sales-US@TCIchemicals.com

TCI EUROPE N.V.

: +32 (0)3 735 07 00 : +32 (0)3 735 07 01 E-mail: Sales-EU@TCIchemicals.com

TCI Deutschland GmbH

: +49 (0)6196 64053-00 Fax : +49 (0)6196 64053-01 $\hbox{E-mail:} Sales-DE@TCI chemicals.com$

Tokyo Chemical Industry UK Ltd.

: +44 (0)1865 784560 Fax : +44 (0)1865 784561 E-mail: Sales-UK@TCIchemicals.com

TCI Chemicals (India) Pvt. Ltd.

Tel

: 1800 425 7889 / 044-2262 0909 Tel Fax : 044-2262 8902

E-mail: Sales-IN@TCIchemicals.com

:800-988-0390 / 021-67121386 : 021-6712-1385

梯希爱(上海)化成工业发展有限公司

E-mail: Sales-CN@TCIchemicals.com

TOKYO CHEMICAL INDUSTRY CO., LTD.

: +81 (0)3-5640-8878 : +81 (0)3-5640-8902 Fax

 $E\hbox{-mail:} global business @TCI chemicals.com\\$

Availability, price or specification of the listed products are subject to change without prior notice. Reproduction forbidden without the prior written consent of Tokyo Chemical Industry Co., Ltd.