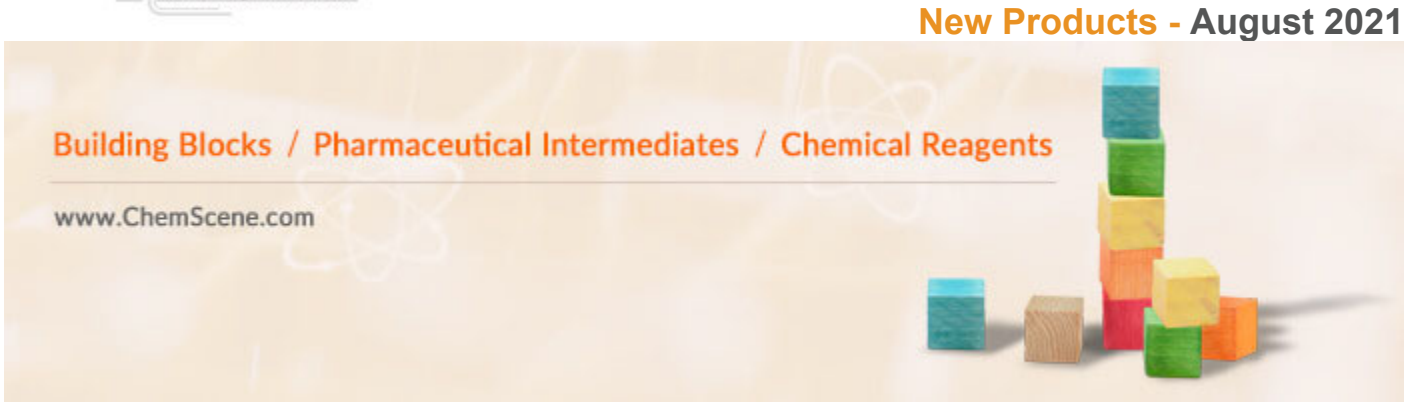
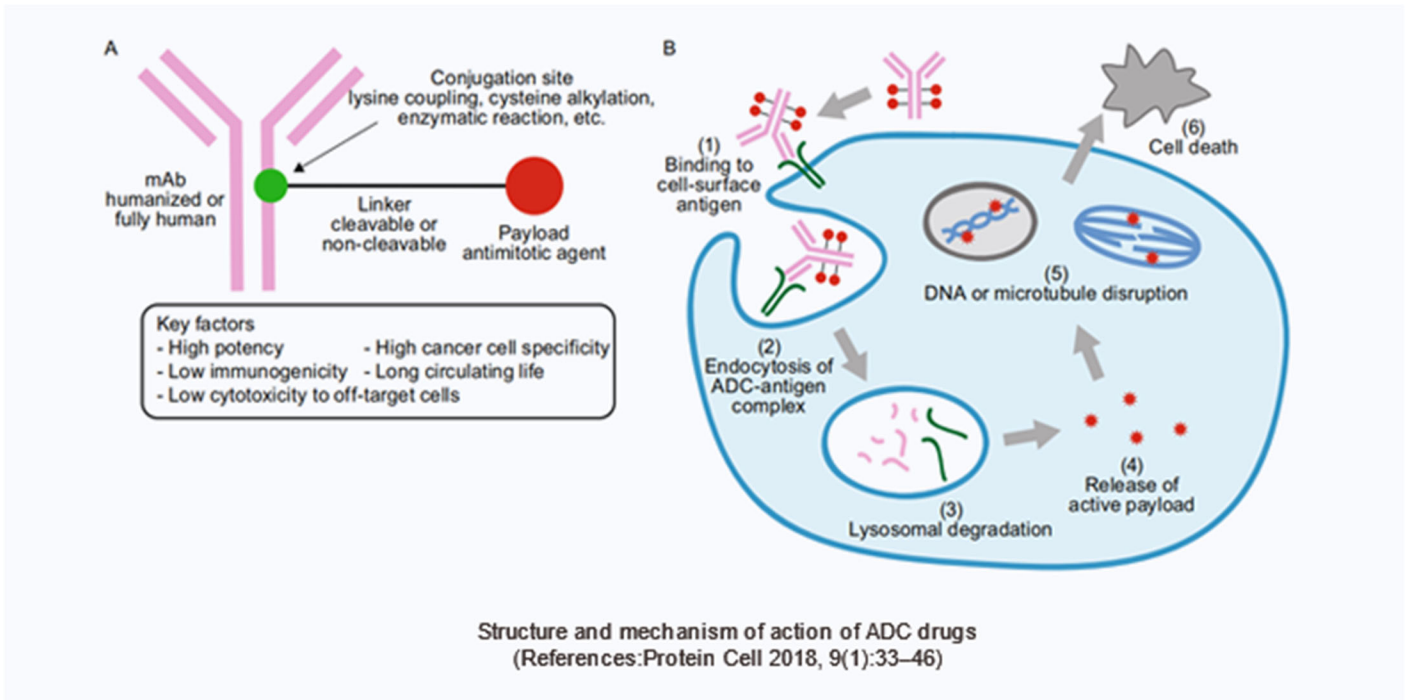
ChemScene
Chemical Reagents For Life Science

**New Products - August 2021**




Antibody-Drug conjugates (ADCs) have become a promising targeted therapy strategy that combines the specificity, favorable pharmacokinetics and biodistributions of antibodies with the destructive potential of highly potent drugs[1].

ADCs consist of a desirable monoclonal antibody, an active cytotoxic drug and an appropriate linker. The monoclonal antibodies lead the drug precursors to the target cancer cells, in which the prodrugs can be chemically or enzymatically converted to drugs in their active forms . Conjugating cytotoxins to monoclonal antibodies that specifically tie to tumor cell surface antigens enables the drugs to be target-delivered to cancer cells and leaves normal cells unaffected. More important, many of the cytotoxic drugs that are too toxic for use in traditional chemotherapy can also be used in the construction of antibody-drug conjugates. The linkers are essential parts of antibody-drug conjugates, which account for stability in circulation,good pharmacokinetics and efficient release of toxic drugs in the tumor cells[2,3,4].



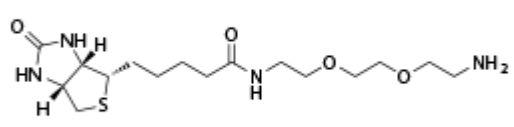

Structure and mechanism of action of ADC drugs
(References:Protein Cell 2018, 9(1):33–46)

[1] Houzong Yao , Feng Jiang, Aiping Lu, and Ge Zhang; Methods to design and synthesize Antibody-Drug Conjugates(ADCs). Int.J.MOL.Sci.2016,17,194;

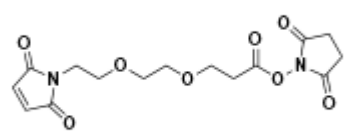
[2] Laurent, D.; Bernhard, S. Antibody-drug conjugates: Linking cytotoxic payloads to monoclonal antibodies.Bioconjug. Chem.2010,21, 5-13.

[3] Perez, H.L.; Cardarelli, P.M.; Deshpande, S.; Gangwar, S.; Schroeder, G.M.; Vite, G.D.; Borzilleri, R.M. Antibody-drug conjugates: Current status and future directions. Drug Discov. Today 2014, 19, 869-881.[CrossRef] [PubMed]

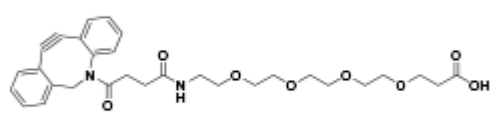
[4] Chari, R.V.J.; Miller, M.L.; Widdison, W.C. Antibody-drug conjugates: An emerging concept in cancer therapy. Angew Chem. Int. Ed. Engl. 2014, 53, 3796-3827. [CrossRef] [PubMed]



Cat. No. : CS-0028293
CAS: 138529-46-1
Category: **Biotin-DADOO**



Cat. No. : CS-0105019
CAS: 1433997-01-3
Category: **PEG NHS ester**



Cat. No. : CS-0107612
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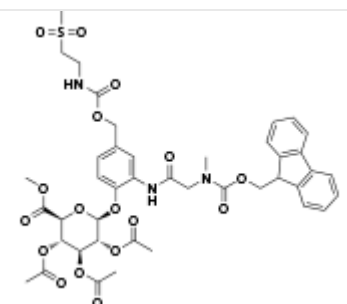
Category: **DBCO PEG**



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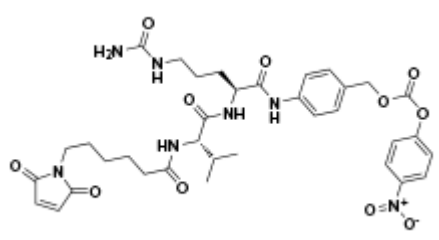
CAS: 2222981-71-5
Category: **Non-PEG linker**



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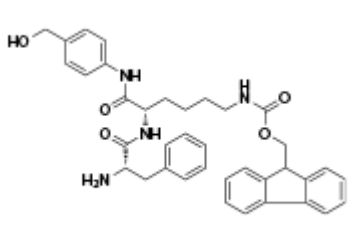
Category: **Peptide Linkers**



Cat. No. : CS-0105009
CAS: 2149584-03-0
Category: **Fmoc PEG**

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