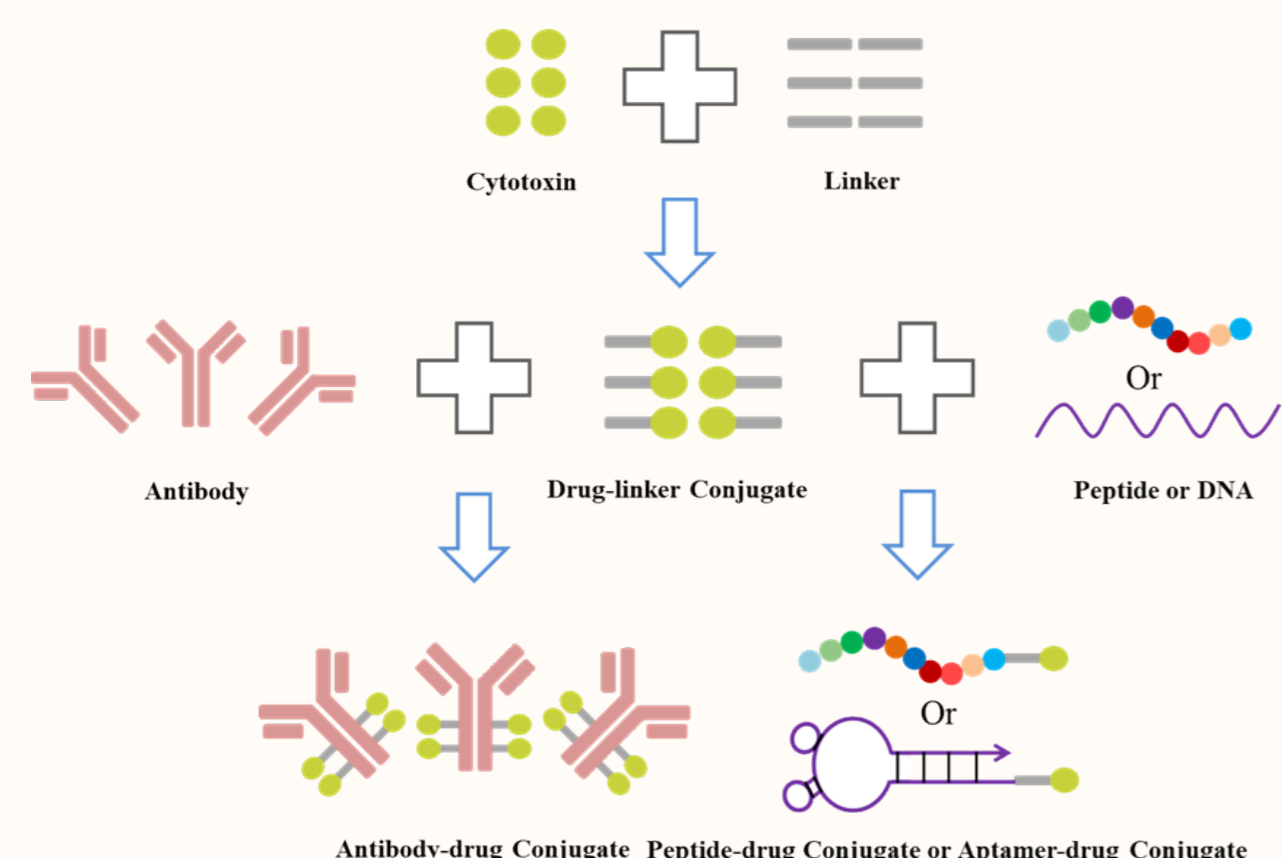




MedChemExpress Antibody–drug Conjugates (ADCs) and Applications

MedChemExpress (MCE) has a strong technical team and offers state-of-the-art facilities. For ADC products, we have rich experience in research development and production. We continue to make breakthroughs and innovations offering custom synthesis of ADC products, according to customer requirements, whilst providing a high-quality and efficient service. MCE can provide one-stop services for the design, synthesis, analysis, purification, optimization, detection and evaluation of ADC-related products (antibodies, payloads, linkers, drug-linker conjugates and ADC drugs).



Advantages to purchasing from MCE

- Convenient delivery
- Price concessions
- Product reports
- Strictly confidential
- Free consultation

Custom Service scope

MCE can provide a one-stop service system for the determination of ADC products. The service content is divided into two parts, including technical services and analytical items. At the same time, MCE can also provide customized services for ADC related products.

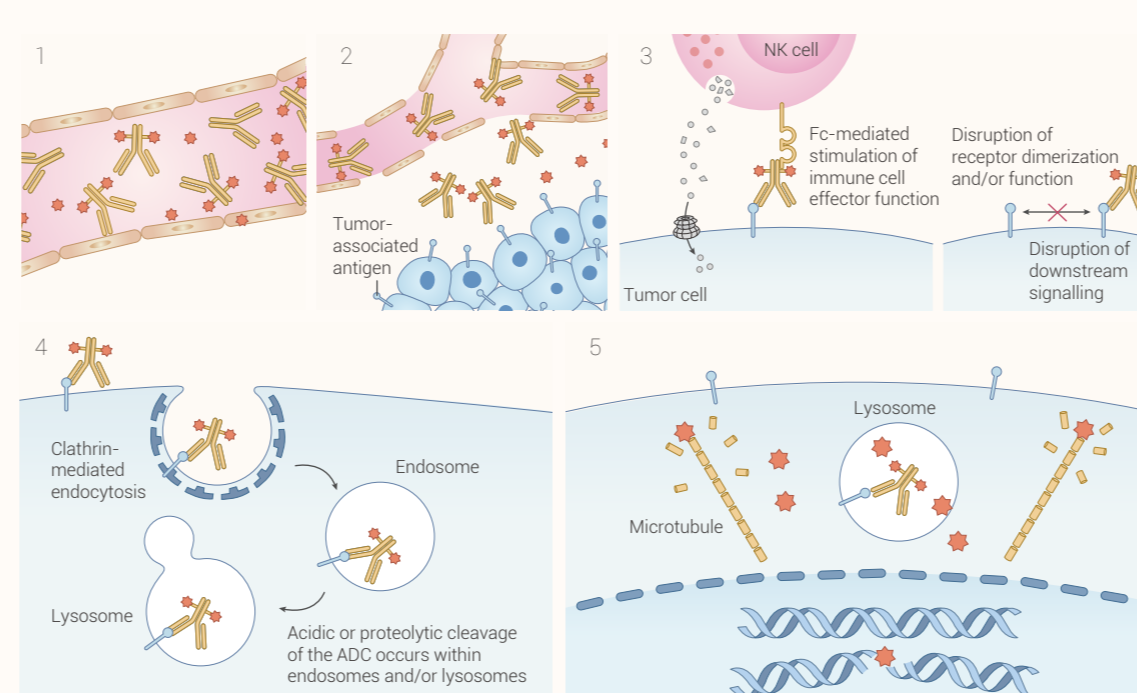
Applications	Cat. No.	Names
Microtubule inhibitors	HY-19792	Mertansine
	HY-100503	Maytansinoid DM4
	HY-15584	Taltobulin
	HY-15739	Ansamitocin P-3
	HY-15581	MMAD
	HY-15162	Monomethyl auristatin E
	HY-15162A	D8-MMAE
	HY-15579	MMAF
DNA-damaging drugs	HY-15579A	MMAF hydrochloride
	HY-15583	Auristatin F
	HY-19609	Calicheamicin
	HY-13704	SN-38
Traditional cytotoxic agents	HY-16560	Camptothecin
	HY-107769	Duocarmycin TM
	HY-16261	Aldoxorubicin
	HY-16700	PNU-159682
	HY-B0015	Paclitaxel
Cleavable linkers (Protease sensitive)	HY-14519	Methotrexate
	HY-12362	Val-Cit-PAB-OH
	HY-20336	Mc-Val-Cit-PABC-PNP
	HY-78921	Fmoc-3VVD-OH
	HY-78931	Boc-Dap-NE
	HY-41189	Fmoc-Val-Cit-PAB-PNP
Cleavable linkers (GSH sensitive)	HY-130936	DBCO-Val-Cit-PABC-OH
	HY-130944	Mal-PEG1-Val-Cit-PABC-OH
	HY-100216	SPDP
	HY-140120	Mal-NH-ethyl-SS-propionic acid
Cleavable linkers (Acid sensitive)	HY-136133	NHS-PEG2-SS-PEG2-NHS
	HY-135966	Azido-PEG3-SS-NHS
	HY-133413	DBCO-CONH-S-S-NHS ester
	HY-136131	NH2-PEG4-hydrazide-DBCO
Non-cleavable linkers	HY-136079	Methyltetrazine-PEG4-hydrazide-DBCO
	HY-D0975	Sulfo-SMCC sodium
	HY-126503	trans-Sulfo-SMCC
	HY-126508	Mal-amido-PEG5-C2-NHS ester
	HY-126509	Mal-amido-PEG10-C2-NHS ester
	HY-126976	Propargyl-PEG5-amine
	HY-W051634	Propargyl-PEG2-amine
	HY-126526	N3-PEG2-C2-NHS ester
	HY-130109	N3-PEG4-C2-NHS ester
	HY-W008005	Amino-PEG4-alcohol
Drug-Linker Conjugates for ADC	HY-130537	Azido-PEG6-alcohol
	HY-126491	SPP-DM1
	HY-101070	SMCC-DM1
	HY-100374	Val-Cit-PAB-MMAE
	HY-15575	VcMMAE
	HY-15741	McMMAE
	HY-111012	DBCO-(PEG)3-VC-PAB-MMAE
	HY-15578	McMMAF
	HY-112786	MC-Val-Cit-PAB-MMAF
	HY-13631E	Deruxtecan
	HY-128946	CL2A-SN-38
	HY-131057	Mc-VC-PAB-SN38
	HY-128904	MC-Val-Cit-PAB-duocarmycin
	HY-16261A	MC-DOXHZN
	HY-128870	Mal-PEG2-VCP-Eribulin
HY-136290	Mc-Dexamethasone	
HY-128902	MC-Val-Cit-PAB-vinblastine	
HY-128893	MC-Sq-Cit-PAB-Gefitinib	

- ADC Cytotoxin:**
 - Custom synthesis—we can help synthesize ADC cytotoxins.
 - Cytotoxin modification—we can perform the modifications of existing cytotoxins
- ADC Linker:**
 - Custom synthesis—we can help synthesize ADC linkers.
 - Linker modification—we can perform the modifications of existing linkers.
- Drug-Linker Conjugates for ADC:**
 - Custom synthesis—we can help design and synthesize drug-linker conjugates for ADC.
 - Structural modification—we can perform the modifications of existing drug-linker conjugates.
- Conjugation Technologies:**
 - Conventional conjugation—we can provide amine-based lysine conjugation and thiol-based cysteine conjugation.
 - Site-specific conjugation—we can also provide engineered cysteine residues, unnatural amino acids or enzymatic conjugation.
- Antibody-drug Conjugate:**
 - Custom synthesis—we can help design and synthesize antibody-drug conjugates (ADCs).
 - ADC characterization—we can also perform the detection of drug-to-antibody ratio (DAR), free drug, endotoxin and so on.
- Peptide-drug Conjugate:**
 - Custom synthesis—we can help design and synthesize peptide-drug conjugates (PDCs).
 - PDC characterization—we can also provide purity, stability, structure and other relevant information about PDCs.
- Aptamer-drug Conjugate:**
 - Custom synthesis—we can help design and synthesize aptamer-drug conjugates (ApDCs).
 - ApDC characterization—we can also provide purity, stability, structure and other relevant information about ApDCs.

Publications Citing Use of MCE ADCs

Drug Deliv. 2022 Dec;29(1):1335-1344.
 Onco Targets Ther. 2022 Mar 16;15:267-275.
 Breast Cancer Res Treat. 2022 Jan;191(1):51-61.
 Toxicol Lett. 2020 May 15;324:30-37.
 Clin Cancer Res. 2021 Jan 1;27(1):43-51.
 Gastric Cancer. 2021 Jul;24(4):913-925.
 Cancer Commun (Lond). 2021 Nov;41(11):1173-1182.
 Eur Rev Med Pharmacol Sci. 2020 Dec;24(24):12929-12937.
 Front Pharmacol. 2022 Jan 5;12:757994.
 Toxicol In Vitro. 2022 Mar;79:105292.
 N Engl J Med. 2020 Jun 18;382(25):2419-2430
 Lancet Oncol. 2021 Jun;22(6):779-789.
 Clin Cancer Res. 2021 Aug 15;27(16):4478-4485.
 N Engl J Med. 2020 Feb 13;382(7):610-621.
 J Clin Oncol. 2020 Jun 10;38(17):1887-1896
 Lancet Oncol. 2017 Nov;18(11):1512-1522.
 N Engl J Med. 2022 Mar 24;386(12):1143-1154.
 Cancer Discov. 2020 May;10(5):688-701.
 Lancet Oncol. 2019 Jun;20(6):816-826.
 N Engl J Med. 2022 Jan 20;386(3):241-251.

Mechanism of Action



1. The ADC enters the circulatory system. In this process, the linker must have sufficient stability to reduce the release of the payload and the subsequent off-target toxicity.
2. ADC is distributed to the tumour tissues. In the tumour microenvironment, some payloads are released to kill the tumour cells.
3. ADC binds to the tumour associated antigen to form an ADC-antigen complex. The antibody can also exert anti-tumour effects.
4. The complex is internalized into the cancer cell, A few ADCs can bind to FcRn receptors and are sent to the outside of cells.
5. The complex undergoes lysosomal degradation inside the cell. The payload is released and then binds to its target, leading to cell death.

MedChemExpress USA

Tel: 609-228-6898 E-mail: sales@MedChemExpress.com
 Fax: 609-228-5909 Tech Support: tech@MedChemExpress.com
 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

MedChemExpress China

Tel: 021-58955995 E-mail: sales@MedChemExpress.cn
 Fax: 021-53700325 Tech Support: tech@MedChemExpress.cn
 Address: No.1999, Zhangheng Road, Shanghai, P.R., 201203, China.



Master of Bioactive Molecules

www.MedChemExpress.com

306, Agarwal City Mall, opposite M2K Pitampura, Delhi-110034 (India)