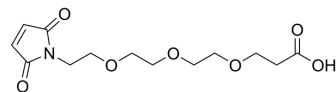


Maleimido-tri(ethylene glycol)-propionic acid

Cat. No.:	HY-130426												
CAS No.:	518044-40-1												
Molecular Formula:	C ₁₃ H ₁₉ NO ₇												
Molecular Weight:	301.29												
Target:	ADC Linker; PROTAC Linkers												
Pathway:	Antibody-drug Conjugate/ADC Related; PROTAC												
Storage:	<table border="0"> <tr> <td>Pure form</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Pure form	-20°C	3 years		4°C	2 years	In solvent	-80°C	6 months		-20°C	1 month
Pure form	-20°C	3 years											
	4°C	2 years											
In solvent	-80°C	6 months											
	-20°C	1 month											



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (331.91 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	3.3191 mL	16.5953 mL	33.1906 mL
	5 mM	0.6638 mL	3.3191 mL	6.6381 mL
	10 mM	0.3319 mL	1.6595 mL	3.3191 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (8.30 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (8.30 mM); Suspended solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (8.30 mM); Clear solution 			

BIOLOGICAL ACTIVITY

Description	Maleimido-tri(ethylene glycol)-propionic acid is a cleavable ADC linker used in the synthesis of antibody-drug conjugates (ADCs). Maleimido-tri(ethylene glycol)-propionic acid is used for the preparation of neolymphostin-based ADC precursors for site-specific cysteine mutant trastuzumab-A114C conjugation ^[1] . Maleimido-tri(ethylene glycol)-propionic acid also can be used as a PEG-based PROTAC linker that can be used in the synthesis of PROTACs.	
IC₅₀ & Target	Cleavable	PEGs

In Vitro

Mal-PEG3-C2-acid can be used to synthesis linker-payload 16 (compound 15) and 20 (compound 18). linker-payload 16 and 20 is conjugated to DAR1.9 and DAR1.7^[1].

ADC 23 and 24 are Neolymphostin ADCs that composes of DAG 1.9 and DAG1.7 linked to PIKK inhibitors with linker-payload 16 and 20, respectively^[1].

ADC24 demonstrates cytotoxic activity against BT474 and N87 cell lines with IC₅₀ of 195 and 202 nM, respectively^[1].

ADC23 demonstrates cytotoxic activity against BT474 and N87 cell lines with IC₅₀ of 286 and 274 nM, respectively^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Zhou D,et al. Novel PIKK inhibitor antibody-drug conjugates: Synthesis and anti-tumor activity.Bioorg Med Chem Lett. 2019 Apr 1;29(7):943-947.

Caution: Product has not been fully validated for medical applications. For research use only.

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