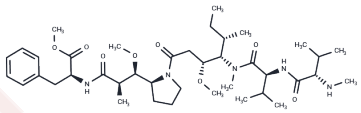
Data Sheet (Cat.No.T12081)

TargetMol

MMAF-OMe

Chemical Properties



CAS No. : 863971-12-4

Formula: C40H67N5O8

Molecular Weight: 745.99

Storage: Keep away from direct sunlight
Powder: -20°C for 3 years
Actual storage temperature shall be subject to the COA.

Biological Description

Description	MMAF-OMe (Monomethyl auristatin F methyl ester) is an antitubulin agent which inhibits several tumor cell lines with IC50s of 0.056 nM, 0.166 nM, 0.183 nM, and 0.449 nM for MDAMB435/5T4, MDAMB361DYT2, MDAMB468, and Raji (5T4-) cell lines, respectively. MMAF-Ome is also an ADC cytotoxin.
Targets(IC50)	ADC Cytotoxin
In vitro	2.5F-Fc and 2.5F-Fc-MMAF exhibit similar IC50 values (6.9±1.1 vs. 8.3±1.3 nM, respectively)[1], indicating that MMAF conjugation has a negligible impact on integrin-binding affinity[1].

Solubility Information

Solubility	DMSO: 99 mg/mL (132.71 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	5% DMSO+95% Saline: 4 mg/mL (5.36 mM),Solution. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.3405 mL	6.7025 mL	13.405 mL
5 mM	0.2681 mL	1.3405 mL	2.681 mL
10 mM	0.1341 mL	0.6703 mL	1.3405 mL
50 mM	0.0268 mL	0.1341 mL	0.2681 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Currier NV, et al. Targeted Drug Delivery with an Integrin-Binding Knottin-Fc-MMAF Conjugate Produced by Cell-Free Protein Synthesis. Mol Cancer Ther. 2016 Jun;15(6):1291-300