

D8-MMAF

Catalog No: tcsc6855



Available Sizes

Size: 1mg

Size: 5mg

Size: 10mg



Specifications

Formula:

$C_{39}H_{57}D_8N_5O_8$

Pathway:

Cell Cycle/DNA Damage;Cytoskeleton;Antibody-drug Conjugate/ADC Related

Target:

Microtubule/Tubulin;Microtubule/Tubulin;ADC Cytotoxin

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

Monomethylauristatin F D8

Observed Molecular Weight:

740.01

Product Description

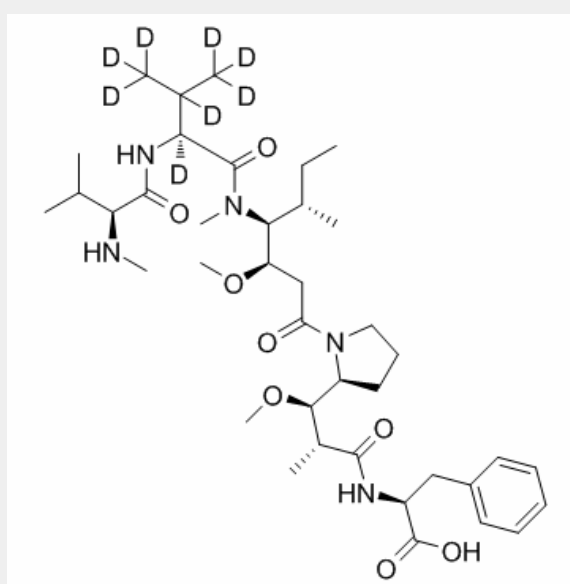
D8-MMAF is a deuterated form of MMAF, which is a **microtubule** disrupting agent.

IC50 & Target: IC50: 119 nM (Cytotoxicity, Karpas 299 cell), 105 nM (Cytotoxicity, H3396 cell), 257 nM (Cytotoxicity, 786-O cell), 200

nM (Cytotoxicity, Caki-1, cell)^[1]

In Vitro: MMAF shows *in vitro* cytotoxicity against a panel of cell lines. The IC₅₀ values for Karpas 299, H3396, 786-O and Caki-1 are 119, 105, 257, and 200 nM, respectively. Targeted MMAF is much more potent than the free drug, and that cAC10 conjugates of MMAF display pronounced activities. On a molar basis, the cAC10-L1-MMAF₄ is an average of over 2200-fold more potent than free MMAF and is active on all the CD30-positive cell lines tested^[1].

In Vivo: The maximum tolerated dose in mice of MMAF (>16 mg/kg) is much higher than MMAE (1 mg/kg). cAC10-L1-MMAF₄ has an MTD of 50 mg/kg in mice and 15 mg/kg in rats. The corresponding cAC10-L4-MMAF₄ ADC was much less toxic, having MTDs in mice and rats of >150 mg/kg and 90 mg/kg in rats, respectively^[1].



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