Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

MMAF

Catalog No: tcsc2515

Available Sizes

Size: 2mg

Size: 5mg

Size: 10mg

Specifications

CAS No:
745017-94-1

Formula:
$C_{39}H_{65}N_5O_8$

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

Observed Molecular Weight:
731.96

Product Description

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MMAF (Monomethylauristatin F) is an antitubulin agent that inhibit cell division; inhibits H3397 cell growth with an **IC_{50}** of 105 nM.

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 (Monomethylauristatin F) shows *in vitro* cytotoxicity against a panel of cell lines. The IC_{50} values for Karpas 299, H3396, 786-O and Caki-1 are 119, 105, 257, and 200 nM, respectively. Targeted MMAF (Monomethylauristatin F) is much more potent than the free drug, and that cAC10 conjugates of MMAF (Monomethylauristatin F) display pronounced activities. On a molar basis, the cAC10-L1-$MMAF_4$ is an average of over 2200-fold more potent than free MMAF (Monomethylauristatin F) and is active on all the CD30-positive cell lines tested[1].

In Vivo: The maximum tolerated dose in mice of MMAF (Monomethylauristatin F) (>16 mg/kg) is much higher than MMAF (Monomethylauristatin F) (1 mg/kg). cAC10-L1-$MMAF_4$ has an MTD of 50 mg/kg in mice and 15 mg/kg in rats. The corresponding cAC10-L4-$MMAF_4$ ADC was much less toxic, having MTDs in mice and rats of >150 mg/ kg and 90 mg/kg in rats, respectively[1].