
Product Data Sheet

Product Name: D8-MMAD

Cat. No.: GC35797

Chemical Properties

Cas. No.

SMILES O=C(N[C@H](C1=NC=CS1)CC2=CC=CC=C2)[C@H](C)[C@@H](OC)[C@H]3N(C(C[C@@H](OC)[C@H]([C@@H](C)CC)N(C([C@@](C([2H]))(C([2H]))([2H])[2H])C([2H])([2H])[2H])([2H])NC([C@H](C(C)C)NC)=O)=O)C)=O)CCC3

Formula C₄₁H₅₈D₈N₆O₆S M.Wt 779.11

Solubility DMSO: ≥ 100 mg/mL (128.35 mM) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

D8-MMAD is a deuterated form of MMAD, which is a microtubule disrupting agent. IC₅₀ & Target: Tubulin[1]

MMAD (Monomethyl Dolastatin 10) is coupled through a stable oxime-ligation process to yield several near-homogenous antibody-drug conjugates (ADCs) with a drug-to-antibody ratio of ~2.0. The resulting conjugates demonstrate good pharmacokinetic properties, potent in vitro cytotoxic activity against HER2+ cancer cells. When compared with ADCs prepared by cysteine alkylation following native interchain disulfide reduction, site-specific unnatural-amino-acid-based ADCs are shown to have increased in vitro cytotoxicity[1].

The resulting antibody-drug conjugates (ADCs) demonstrate complete tumour regression in rodents. They also have an improved toxicology profile in rats[1].

[1]. Chudasama V, et al. Recent advances in the construction of antibody-drug

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

conjugates. Nat Chem. 2016 Feb;8(2):114-9.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA