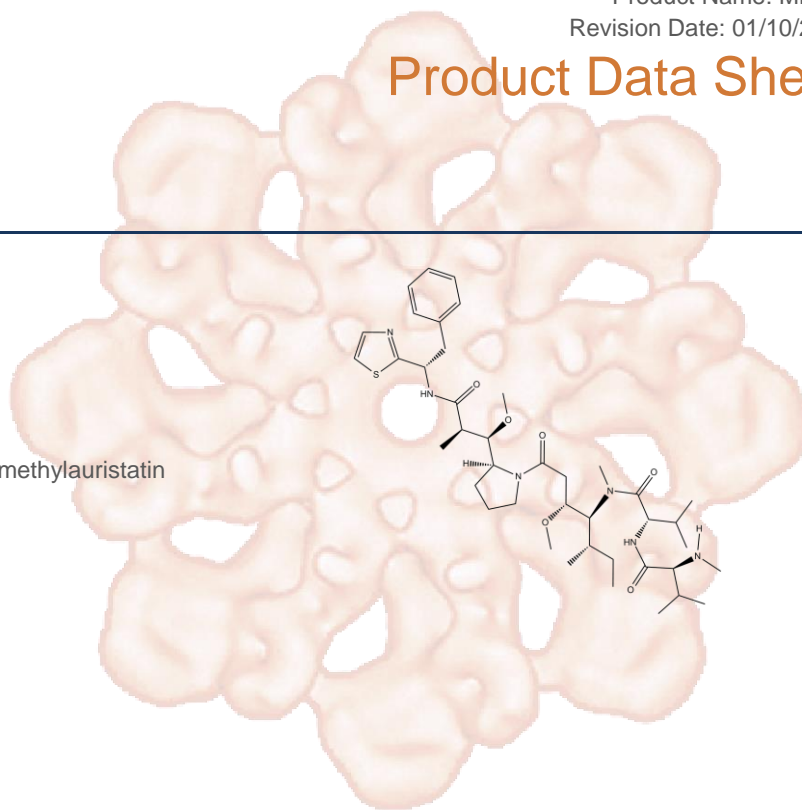


Product Data Sheet

MMAD

Cat. No.:	A3630
CAS No.:	203849-91-6
Formula:	C ₄₁ H ₆₆ N ₆ O ₆ S
M.Wt:	771.06
Synonyms:	Demethylolastatin 10; Monomethylauristatin D; Monomethyl Dolastatin 10
Target:	Cell Cycle/Checkpoint
Pathway:	Microtubule/Tubulin
Storage:	Store at -20°C



Solvent & Solubility

Soluble in DMSO

In Vitro

Preparing Stock Solutions	Solvent Concentration	Mass		
		1mg	5mg	10mg
	1 mM	1.2969 mL	6.4846 mL	12.9692 mL
	5 mM	0.2594 mL	1.2969 mL	2.5938 mL
	10 mM	0.1297 mL	0.6485 mL	1.2969 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Tubulin inhibitor, highly potent

 IC₅₀ & Target

In Vitro

Cell Viability Assay

Preparation method:

Animal experiment

In Vivo

Applications:

MMAD is a highly potent inhibitor of tubulin [1]. MMAD is one of the auristatins, which are used as the drugs of antibody drug conjugates (ADCs). In ADCs, the therapeutic compounds and the high selectivity of antibodies are combined by the linkers. By taking advantage of antigen-selectivity of MAbs, it can deliver

these cytotoxic drugs to antigen-expressing tumor cells, thus increasing both the efficacy and safety of therapy. As a payload of ADCs, MMAD is used to target the tubulin of the tumor cells. It can interfere with tubulin polymerization and induce rapid cell death at low picomolar concentrations [1]. Additionally, MMAD is reported to be used in the production of site-specific antibody drug conjugates (NDCs). In the NDCs, MMAD is combined with anti-5T4 antibody or anti-Her2 antibody. It is shown that the NDCs demonstrate better efficacy and pharmacokinetics [2].

Preparation method:

The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Product Citations

See more customer validations on www.apexbt.com.

References

[1] Puja Sapra, Andrea T Hooper, Christopher J, O’Donnell & Hans-Peter Gerber. Investigational antibody drug conjugates for solid tumors. Expert Opin. Investig. Drugs. 2011, 20(8):1131-1149.

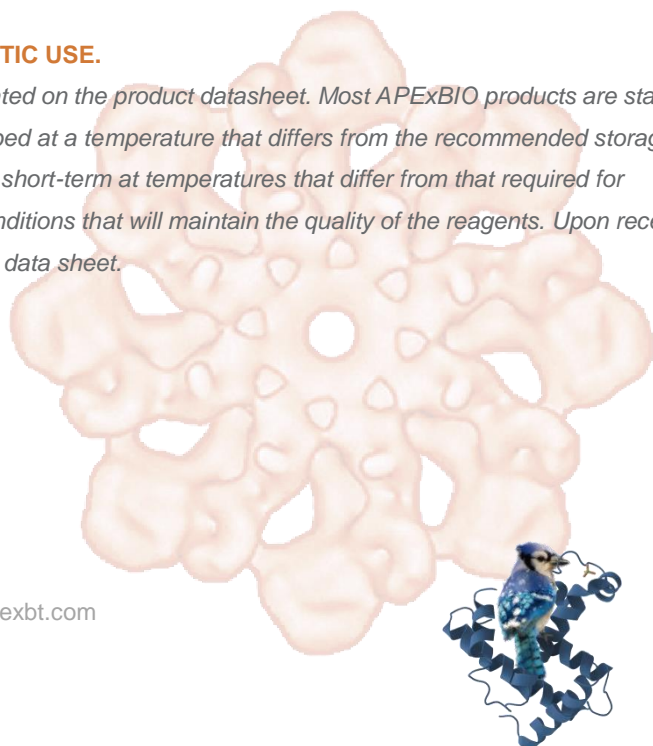
[2] Feng Tiana, Yingchun Lu, Anthony Manibusan, Aaron Sellers et al. A general approach to site-specific antibody drug conjugates. PNAS. 2014, February, 111(5): 1766-1771.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



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