
Product Data Sheet

Product Name: Tubulysin H

Cat. No.: GC37842

Chemical Properties

Cas. No. 799822-09-6

SMILES O=C(N[C@@H]([C@@H](C)CC)C(N(COC(C)=O)[C@@H](C(C)C)C[C@@H](OC(C)=O)C1=NC(C(N[C@@H](CC2=CC=CC=C2)C[C@H](C)C(O)=O)=O)=CS1)=O)[C@@H]3N(C)CCCC3

Formula C₄₀H₅₉N₅O₉S M.Wt 785.99

Solubility Soluble in DMSO 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**

Tubulysin H is a highly cytotoxic peptide isolated from the myxobacterial species *Archangium geophyra* and *Angiococcus disciformis*[1]. Tubulysin displays extremely potent cytotoxic activity in mammalian cells, including multidrug-resistant cell lines, with IC₅₀ values in the lower nanomolar range[2]. Tubulysin H is a cytotoxic activity tubulysin which inhibits tubulin polymerization and leads to cell cycle arrest and apoptosis[3].

[1]. Steinmetz H, et al. Isolation, crystal and solution structure determination, and biosynthesis of tubulysins--powerful inhibitors of tubulin polymerization from myxobacteria. *Angew Chem Int Ed Engl.* 2004 Sep 20;43(37):4888-92. [2]. Kubicek K, et al. The tubulin-bound structure of the antimitotic drug tubulysin. *Angew Chem Int Ed Engl.* 2010 Jun 28;49(28):4809-12. [3]. Vlahov IR, et al. Acid mediated formation of an N-acyliminium ion from tubulysins: a new methodology for the synthesis of natural tubulysins and their analogs. *Bioorg Med Chem Lett.* 2011 Nov 15;21(22):6778-81.

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

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