Product Datasheet

Technical Data

Formula	$C_{39}H_{43}N_3O_{11}S$					
Molecular Weight	761.84	**CAS No.**	114899-77-3			
Solubility (25°C)*	In vitro	DMSO	100 mg/mL (131.26 mM)			
	In vivo (Add solvents to the product individually and in order)	Oral Administration	Homogeneous suspension	CMC-NA	≥5mg/ml	Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml.

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Concentration \ Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.3126 mL	6.5631 mL	13.1261 mL
5 mM	0.2625 mL	1.3126 mL	2.6252 mL
10 mM	0.1313 mL	0.6563 mL	1.3126 mL
50 mM	0.0263 mL	0.1313 mL	0.2625 mL

Biological Activity

Description	Trabectedin (Ecteinascidin 743, ET-743) is a marine alkaloid isolated from the Caribbean tunicate Ecteinascidia turbinata with **antitumour** activity. Trabectedin binds to the N2 of guanine in the minor groove, causing DNA damage and affecting transcription regulation in a promoter- and gene-specific manner.
In vitro	This compound can block EWS-FLI1 transcription factor activity, suppress Werner syndrome protein (WRN) expression and selectively sensitize Ewing sarcoma cells to the DNA-damaging effects of SN38. [1][3]
In vivo	In Tumor-Bearing Mice, trabectedin does not have an impact on the functional activity of MDSC but does significantly reduce the number of $Ly6C^{high}$ cells, the most suppressive subset. [4]

Protocol (from reference)

Cell Assay:[3]

- **Cell lines**
  Ewing sarcoma cells
- **Concentrations**
  10 nM
- **Incubation Time**
  18 h
- **Method**
  RNAiMax Lipofectamine (4.5 mL per well in a 6-well dish) was added to siRNA targeting the EWS-FLI1 breakpoint site II, complexed, combined with cells, and incubated for 36 to 48 hours before collection for Western blot analysis.

References

https://pubmed.ncbi.nlm.nih.gov/24195524/ https://pubmed.ncbi.nlm.nih.gov/20647340/ https://pubmed.ncbi.nlm.nih.gov/24277455/

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RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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