Product Datasheet

Technical Data

Formula	$C_9H_{11}BrN_2O_5$					
Molecular Weight	307.1	**CAS No.**	59-14-3			
Solubility (25°C)*	In vitro	DMSO	61 mg/mL (198.63 mM)			
		Ethanol	5 mg/mL (16.28 mM)			
		Water	Insoluble			
	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	3.2563 mL	16.2813 mL	32.5627 mL
5 mM	0.6513 mL	3.2563 mL	6.5125 mL
10 mM	0.3256 mL	1.6281 mL	3.2563 mL
50 mM	0.0651 mL	0.3256 mL	0.6513 mL

Biological Activity

Description	BrdU (Bromodeoxyuridine) is a nucleoside analog that competes with thymidine for incorporation into DNA, and used in the detection of proliferating cells.
In vitro	Bromodeoxyuridine (BrdU) induces a progressive, dose-responsive suppression of cancer cell line and cancer stem cell population expansion in RG2 rat glioma cells, and alters the cell cycle profile in H9 cells and BJ fibroblasts. [1] This compound is stably integrated into the DNA, and thus can be used in assessment of cell proliferation and other cell procession. [2]
In vivo	In rat glioma RG2 tumor model, BrdU (300 mg/kg, i.p. or 0.8 mg/ml, p.o.) significantly slows tumor progression. [1]

Protocol (from reference)

Cell Assay:[1]

- **Cell lines**
  RG2 rat glioma cells
- **Concentrations**
  ~ 50 μM
- **Incubation Time**
  24 hours
- **Method**
  Cultures are initially plated at 2000 cells/cm^2 and are quantified with a Z2 Coulter Counter. RG2 rat glioma cells are treated once with 0, 1, 10, or 50 μM BrdU (Bromodeoxyuridine) for 24 hours, and cumulative growth curves were obtained over 18 days. Control and treated cells are quantified and replated at equal densities on days 5, 12, and 18 after treatment with this compound.

References

https://pubmed.ncbi.nlm.nih.gov/18680882/ https://pubmed.ncbi.nlm.nih.gov/18770853/

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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