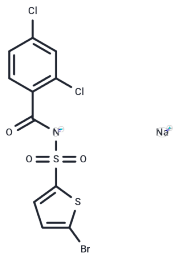
Data Sheet (Cat.No.T40596)

TargetMol

Tasisulam sodium

Chemical Properties



CAS No. : 519055-63-1

Formula: C11H5BrCl2NNaO3S2

Molecular Weight: 437.09

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Tasisulam is an anti-cancer compound that induces apoptosis through the intrinsic pathway, leading to the release of cytochrome c and caspase-dependent cell death. Additionally, tasisulam inhibits mitotic progression and triggers vascular normalization.
Targets(IC50)	Apoptosis,Others
In vitro	Tasisulam sodium, administered at concentrations ranging from 200 nM to 200 μM for a duration of 48 hours, effectively inhibits cell proliferation across various tumor types, demonstrating EC50 values of 10 μM for Calu-6 non-small cell lung carcinoma and 25 μM for A-375 melanoma cell lines. Additionally, exposure to 25 and 50 μM concentrations of Tasisulam sodium for 72 hours results in a dose-dependent increment of 4N DNA content and G2-M phase cell cycle accumulation, indicating disrupted cell cycle progression. The compound also induces apoptosis in a broad spectrum of in vitro cancer cell models when applied within the same concentration and time frame. Furthermore, Tasisulam sodium impedes the formation of endothelial cell cord structures induced by VEGF, epidermal growth factor, and fibroblast growth factor, highlighting its potential anti-angiogenic properties. These findings underscore Tasisulam sodium's multifaceted antitumor activity, encompassing antiproliferative effects, cell cycle arrest, apoptosis induction, and anti-angiogenic actions in cancer cell models[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2879 mL	11.4393 mL	22.8786 mL
5 mM	0.4576 mL	2.2879 mL	4.5757 mL
10 mM	0.2288 mL	1.1439 mL	2.2879 mL
50 mM	0.0458 mL	0.2288 mL	0.4576 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Meier T, et al. Tasisulam sodium, an antitumor agent that inhibits mitotic progression and induces vascular normalization. Mol Cancer Ther. 2011 Nov;10(11):2168-78.