# PRODUCT INFORMATION

## Tasisulam

*Item No. 21556*

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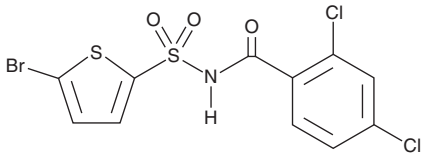
| **CAS Registry No.:** | 519055-62-0 |
| **Formal Name:** | N-[(5-bromo-2-thienyl)sulfonyl]-2,4-dichloro-benzamide |
| **Synonym:** | LY573636 |
| **MF:** | $C_{11}H_6BrCl_2NO_3S_2$ |
| **FW:** | 415.1 |
| **Purity:** | ≥98% |
| **UV/Vis.:** | $\lambda_{max}$: 205, 231, 268 nm |
| **Supplied as:** | A crystalline solid |
| **Storage:** | -20°C |
| **Stability:** | ≥4 years |




*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

### Laboratory Procedures

Tasisulam is supplied as a crystalline solid. A stock solution may be made by dissolving the tasisulam in the solvent of choice, which should be purged with an inert gas. Tasisulam is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of tasisulam in ethanol is approximately 10 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of tasisulam can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of tasisulam in PBS, pH 7.2, is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Tasisulam is an anticancer agent that inhibits the growth of Calu-6 non-small cell lung carcinoma (NSCLC) and A-375 melanoma cell lines ($EC_{50}$s = 10 and 25 µM, respectively).[1] It arrests the cell cycle at the $G_2$/M phase and induces apoptosis of Calu-6 cells in a concentration-dependent manner. Tasisulam induces non-apoptotic growth arrest in human vascular endothelial cells (HUVECs) and inhibits VEGF-, FGF-, and EGF-induced endothelial cord formation *in vitro* ($EC_{50}$s = 47, 103, and 34 nM, respectively). *In vivo*, tasisulam (25 and 50 mg/kg) reduces hemoglobin content and blood vessel density in a Matrigel™ plug model of neoangiogenesis. It also reduces tumor growth in a dose-dependent manner in a Calu-6 mouse xenograft model *via* arrest of the cell cycle at the $G_2$/M phase, induction of apoptosis, and reduction of tumor blood vessel density. Formulations containing tasisulam are under clinical investigation for the treatment of advanced solid tumors.

### Reference


1. Meier, T., Uhlik, M., Chintharlapalli, S., *et al.* Tasisulam sodium, an antitumor agent that inhibits mitotic progression and induces vascular normalization. *Mol. Cancer. Ther.* **10(11)**, 2168-2178 (2011).





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