PRODUCT INFORMATION

Fasnall (benzenesulfonate)
Item No. 19957

Formal Name: 5,6-dimethyl-N-[1-(phenylmethyl)-3-pyrrolidinyl]-thieno[2,3-d]pyrimidin-4-amine, monobenzenesulfonate

MF: C₁₉H₂₂N₄S • C₆H₅O₃S
FW: 496.6
Purity: ≥98%
UV/Vis.: λ_max: 212, 279 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

Fasnall (benzenesulfonate) is supplied as a crystalline solid. A stock solution may be made by dissolving the fasnall (benzenesulfonate) in the solvent of choice. Fasnall (benzenesulfonate) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of fasnall (benzenesulfonate) in these solvents is approximately 30 mg/ml.

Description

Fasnall is an inhibitor of fatty acid synthase (FASN) with an IC_{50} value of 3.71 μM for the human recombinant enzyme.¹ It inhibits tritiated acetate incorporation into lipids (IC_{50} = 5.84 μM), increases ceramide accumulation, and induces the formation of lipid droplets in BT474 HER2⁺ breast cancer cells. Fasnall has antiproliferative activity against non-tumorigenic MCF-10A and tumorigenic MCF-7, MDA-MB-468, BT474, and SK-BR-3 breast cancer cells that directly correlates to the level of FASN expression in vitro. It reduces tumor volume and increases survival in the murine MMTV-Neu model of HER2⁺ breast cancer. Fasnall also potentiates carboplatin (Item No. 13112) response in vivo, increasing the objective response rate of stable disease from 25% for carboplatin alone to 88% for carboplatin with fasnall.

Reference