

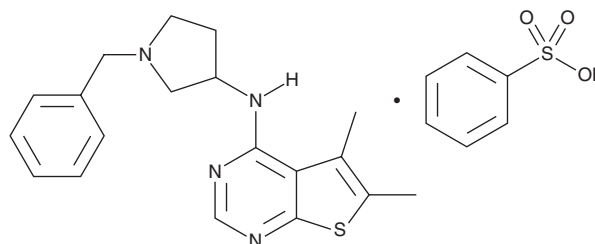
# PRODUCT INFORMATION



## Fasnall (benzenesulfonate)

Item No. 19957

**CAS Registry No.:** 2187367-11-7  
**Formal Name:** 5,6-dimethyl-N-[1-(phenylmethyl)-3-pyrrolidinyl]-thieno[2,3-d]pyrimidin-4-amine, monobenzenesulfonate  
**MF:** C<sub>19</sub>H<sub>22</sub>N<sub>4</sub>S • C<sub>6</sub>H<sub>6</sub>O<sub>3</sub>S  
**FW:** 496.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 212, 279 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

Fasnall (benzenesulfonate) is supplied as a crystalline solid. A stock solution may be made by dissolving the fasnall (benzenesulfonate) in the solvent of choice, which should be purged with an inert gas. Fasnall (benzenesulfonate) is soluble in organic solvents such as DMSO and dimethyl formamide. 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<sub>50</sub> value of 3.71 μM for the human recombinant enzyme.<sup>1</sup> It inhibits tritiated acetate incorporation into lipids (IC<sub>50</sub> = 5.84 μM), increases ceramide accumulation, and induces the formation of lipid droplets in BT474 HER2<sup>+</sup> 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<sup>+</sup> 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

1. Alwarawrah, Y., Hughes, P., Loisel, D., et al. Fasnall, a selective FASN inhibitor, shows potent anti-tumor activity in the MMTV-Neu model of HER2<sup>+</sup> breast cancer. *Cell Chem. Bio.* **23(6)**, 678-688 (2016).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM