# PRODUCT INFORMATION

 $NO_2$ 



# **BM 567**

Item No. 10155

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CAS Registry No.: 284464-77-3

Formal Name: 2-(cyclohexylamino)-5-nitro-

N-[(pentylamino)carbonyl]-

benzenesulfonamide

MF:  $C_{18}H_{28}N_4O_5S$ 

412.5 FW: ≥98% **Purity:** 

UV/Vis.:  $\lambda_{\text{max}}$ : 212, 365 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**

BM 567 is supplied as a crystalline solid. A stock solution may be made by dissolving the BM 567 in the solvent of choice, which should be purged with an inert gas. BM 567 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of BM 567 in ethanol is approximately 10 mg/ml and approximately 20 mg/ml in DMSO and DMF.

BM 567 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BM 567 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BM 567 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Thromboxane A2 (TXA2) is a potent thrombogenic and vasoconstrictor eicosanoid, produced in large quantities by activated platelets. TXA2 has been implicated as a causal factor in the onset of stroke and myocardial infarction. BM 567 is a dual acting antithrombogenic agent, acting as an inhibitor of TXA2 synthase and as an antagonist of the TP receptor, the G protein-coupled receptor mediating TXA<sub>2</sub> activity in platelets and vascular smooth muscle. BM 567 antagonizes the vascular smooth muscle TP receptor with an IC<sub>50</sub> value of 1.1 nM. It inhibits platelet TX synthase with an IC<sub>50</sub> value of 12 nM.<sup>1</sup>

## Reference

1. Michaux, C., Rolin, S., Dogné, J.-M., et al. Structure determination and comparison of BM567, a sulfonylurea, with Terbogrel, two compounds with dual action, thromboxane receptor antagonism and thromboxane synthase inhibition. Bioorg. Med. Chem. Lett. 11(8), 1019-1022 (2001).

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

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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