

# PRODUCT INFORMATION



**NS 398**

Item No. 70590

**CAS Registry No.:** 123653-11-2

**Formal Name:** N-[2-(cyclohexyloxy)-4-nitrophenyl]-methanesulfonamide

**MF:** C<sub>13</sub>H<sub>18</sub>N<sub>2</sub>O<sub>5</sub>S

**FW:** 314.4

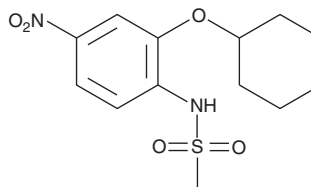
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 214, 238, 296, 337 nm

**Supplied as:** A crystalline solid

**Storage:** Room temperature

**Stability:** ≥4 years



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

## Laboratory Procedures

NS 398 is supplied as a crystalline solid. A stock solution may be made by dissolving the NS 398 in the solvent of choice. NS 398 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of NS 398 in these solvents is approximately 0.5, 25, and 30 mg/ml, respectively.

NS 398 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, NS 398 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. NS 398 has a solubility of approximately 0.4 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

NS 398 is a selective inhibitor of cyclooxygenase-2 (COX-2). The IC<sub>50</sub> values for human recombinant COX-1 and -2 are 75 and 1.77 μM, respectively.<sup>1</sup> The IC<sub>50</sub> values for ovine COX-1 and -2 are 220 and 0.15 μM, respectively.<sup>2</sup>

## References

1. Barnett, J., Chow, J., Ives, D., *et al.* Purification, characterization and selective inhibition of human prostaglandin G/H synthase 1 and 2 expressed in the baculovirus system. *Biochim. Biophys. Acta* **1209**, 130-139 (1994).
2. Johnson, J.L., Wimsatt, J., Buckel, S.D., *et al.* Purification and characterization of prostaglandin H synthase-2 from sheep placental cotyledons. *Arch. Biochem. Biophys.* **324**, 26-34 (1995).

### 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.

### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/10/2023

## 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](http://WWW.CAYMANCHEM.COM)