

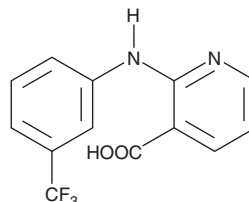
# PRODUCT INFORMATION



## Niflumic Acid

Item No. 70650

**CAS Registry No.:** 4394-00-7  
**Formal Name:** 2-[[3-(trifluoromethyl)phenyl]amino]-3-pyridinecarboxylic acid  
**Synonyms:** Donalgin, Nifluril, UP83  
**MF:** C<sub>13</sub>H<sub>9</sub>F<sub>3</sub>N<sub>2</sub>O<sub>2</sub>  
**FW:** 282.2  
**Purity:** ≥99%  
**UV/Vis.:** λ<sub>max</sub>: 289, 340 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

Niflumic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the niflumic acid in the solvent of choice, which should be purged with an inert gas. Niflumic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of niflumic acid in these solvents is approximately 39, 44, and 65 mg/ml, respectively.

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 niflumic acid can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of niflumic acid in PBS (pH 7.2) is approximately 600 µg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Niflumic acid is a selective inhibitor of COX-2. The IC<sub>50</sub> values are 16 and 0.1 µM for human recombinant COX-1 and -2, respectively.<sup>1</sup> The K<sub>i</sub> values are 2 and 0.02 µM for ovine COX-1 and -2, 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**(1), 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**(1), 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.

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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