

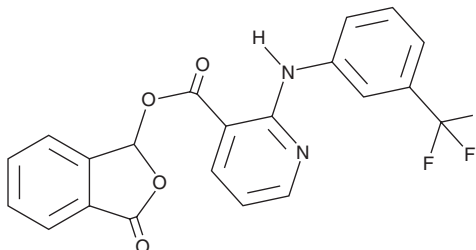
# PRODUCT INFORMATION



## Talniflumate

Item No. 29623

**CAS Registry No.:** 66898-62-2  
**Formal Name:** 2-[[3-(trifluoromethyl)phenyl]amino]-3-pyridinecarboxylic acid, 1,3-dihydro-3-oxo-1-isobenzofuranyl ester  
**Synonym:** BA 7602-06  
**MF:** C<sub>21</sub>H<sub>13</sub>F<sub>3</sub>N<sub>2</sub>O<sub>4</sub>  
**FW:** 414.3  
**Purity:** ≥95%  
**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

Talniflumate is supplied as a crystalline solid. A stock solution may be made by dissolving the talniflumate in the solvent of choice, which should be purged with an inert gas. Talniflumate is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of talniflumate in these solvents is approximately 2 and 10 mg/ml, respectively. Talniflumate is also slightly soluble in ethanol.

Talniflumate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, talniflumate should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Talniflumate has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Talniflumate is a prodrug form of the COX-2 inhibitor niflumic acid (Item No. 70650).<sup>1</sup> It decreases the rate of chloride/bicarbonate exchange by 55% in isolated mouse intestinal villous epithelial cells when used at a concentration of 100 μM.<sup>2</sup> Dietary administration of talniflumate (88 mg/kg per day) increases survival but has no effect on the number of crypt goblet cells in the jejunum or cecum in a cystic fibrosis mouse model of distal intestinal obstructive syndrome.

### References

1. Jang, D.-J., Park, J.-S., Ko, H.-R., *et al.* Simultaneous determination of niflumic acid and its prodrug, talniflumate in human plasma by high performance liquid chromatography. *Biomed. Chromatogr.* **19**(1), 32-35 (2005).
2. Walker, N.M., Simpson, J.E., Levitt, R.C., *et al.* Talniflumate increases survival in a cystic fibrosis mouse model of distal intestinal obstructive syndrome. *J. Pharmacol. Exp. Ther.* **317**(1), 275-283 (2006).

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