

Certificate of Analysis

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Product Name: Niflumic acid

CAS Number: 4394-00-7

IUPAC Name: 2-[3-(Trifluoromethyl)anilino]nicotinic acid

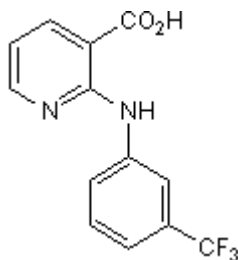
Catalog No.: 4112

Batch No.: 1

EC Number: 224-516-2

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₃H₉F₃N₂O₂
Batch Molecular Weight: 282.22
Physical Appearance: Pale yellow solid
Solubility: DMSO to 100 mM
ethanol to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.9% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	55.33	3.27	9.93
Found	55.52	3.27	9.83

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Nonsteroidal anti-inflammatory drug (NSAID); selectively inhibits COX-2. Also activates human TRPA1 inducibly expressed in HEK293 cells; displays agonist activity at GPR35.

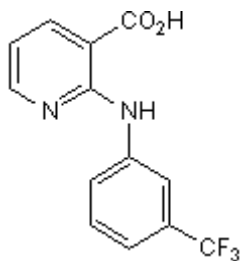
Physical and Chemical Properties:

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Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Ottolia and Toro (1994) Potentiation of large conductance KCa channels by niflumic, flufenamic and mefenamic acids. *Biophys.J.* **67** 2272. PMID: 7535111.

Famaey (1997) In vitro and in vivo pharmacological evidence of selective cyclooxygenase-2 inhibition by nimesulide: an overview. *Inflamm.Res.* **46** 437. PMID: 9427063.

Hu et al (2010) Activation of TRPA1 channels by fenamate nonsteroidal anti-inflammatory drugs. *Pflugers Arch.* **459** 579. PMID: 19888597.

Deng et al (2012) Multiple tyrosine metabolites are GPR35 agonists. *Sci.Rep.* **2** 373. PMID: 22523636.

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