

Product Name: NF 023

Catalog No.: 1240

Batch No.: 3

CAS Number: 104869-31-0

IUPAC Name: 8,8'-[carbonylbis(imino-3,1-phenylenecarbonylimino)]bis-1,3,5-naphthalene-trisulphonic acid, hexasodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₅H₂₀N₄Na₆O₂₁S₆

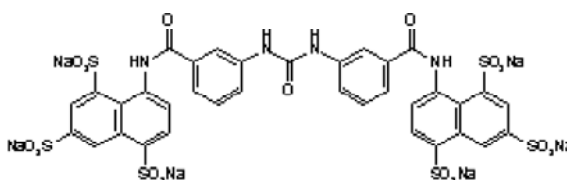
Batch Molecular Weight: 1162.86

Physical Appearance: White solid

Solubility: water to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.34 (Dichloromethane:Methanol [10:1])

Melting Point: Between 331 - 334°C

HPLC: Shows 99.6% purity

¹H NMR: Consistent with structure

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

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Description:

A subtype-selective, competitive and reversible P2X₁ receptor antagonist. Displays IC₅₀ values of 0.21, 28.9, > 50 and > 100 μM for human P2X₁, P2X₃, P2X₂, and P2X₄-mediated responses respectively. Selective over adrenoceptors, histamine and P2Y receptors. Also selectively inhibits the α-subunit of G_{o/i} (EC₅₀ ~300 nM). Also inhibits DNA-binding activity of HMGA2 (IC₅₀ = 10.63 μM).

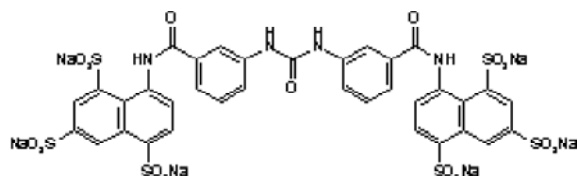
Physical and Chemical Properties:

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Storage: Desiccate at RT

Solubility & Usage Info:

water 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:

Su et al (2020) Identification of HMGA2 inhibitors by AlphaScreen-based ultra-high-throughput screening assays. *Sci.Rep.* **10** 18850. PMID: 33139812.

Sneddon et al (2000) The effect of P2 receptor antagonists and ATPase inhibition on sympathetic purinergic neurotransmission in the guinea-pig isolated vas deferens. *Br.J.Pharmacol.* **129** 1089. PMID: 10725256.

Soto et al (1999) Antagonistic properties of the suramin analogue NF023 at heterologously expressed P2X receptors. *Neuropharmacology* **38** 141. PMID: 10193905.

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