Print Date: May 13th 2022

Certificate of Analysis

www.tocris.com

Product Name: **NF 449** **Catalog No.: 1391** **Batch No.: 10**

CAS Number: 627034-85-9

IUPAC Name: 4,4',4",4"'-[Carbonylbis(imino-5,1,3-benzenetriyl-*bis*(carbonylimino))]*tetrakis*-1,3-benzenedisulfonic acid, octasodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{41}H_{24}N_6Na_8O_{29}S_8$

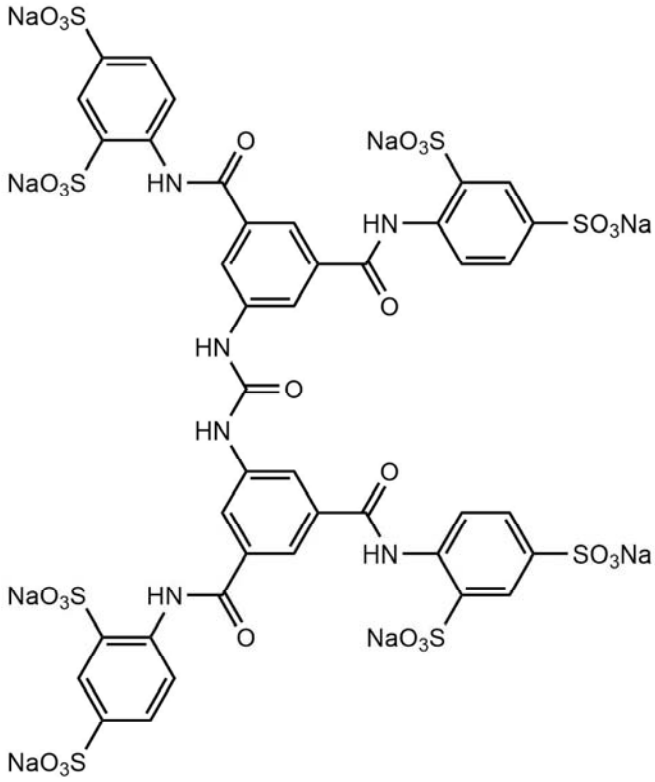
Batch Molecular Weight: 1505.06

Physical Appearance: Off White solid

Solubility: water to 25 mg/ml

Storage: Store at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 90.6% purity

^{1}H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Net Product Content: 75%

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

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Description:

NF 449 is a potent purinergic receptor antagonist that displays high selectivity for $P2X_1$ (IC_{50} values are 0.28, 0.69, 120, 1820, 47000 and > 300000 nM for $rP2X_1$, $rP2X_{1+5}$, $rP2X_{2+3}$, $rP2X_3$, $rP2X_2$ and $P2X_4$ receptors respectively). Provides antithrombotic protection in vivo. Also acts as a G_{sq}-selective antagonist. Also inhibits DNA-binding activity of HMGA2 (IC_{50} = 0.43 µM). This product is supplied with a high degree of hydration and some residual NaCl, the amount of which are batch dependent. Please refer to the Certificate of Analysis to obtain the batch specific Net Product Content and the maximum solubility threshold to use i... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

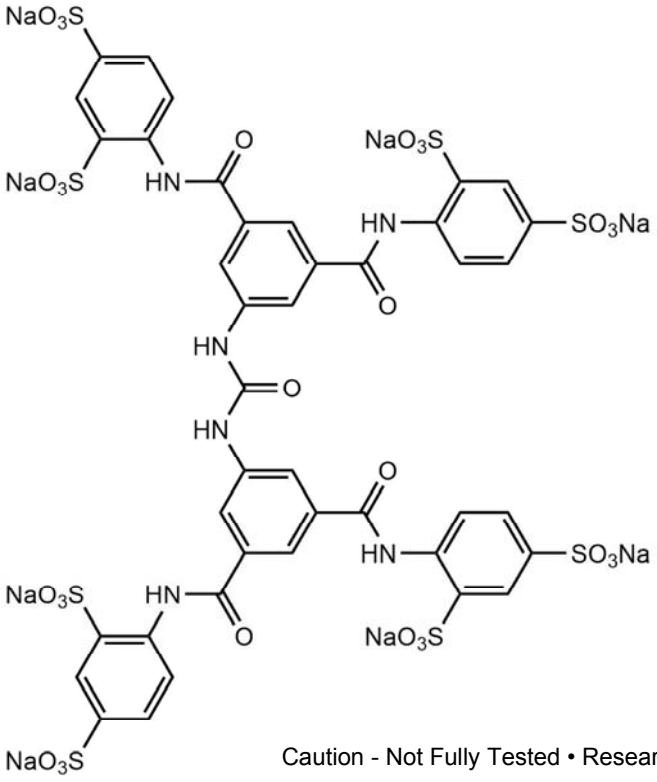
Batch Molecular Formula: $C_{41}H_{24}N_6Na_8O_{29}S_8$

Batch Molecular Weight: 1505.06

Physical Appearance: Off White solid

Minimum Purity: ≥90%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

water to 25 mg/ml

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.

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References:

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

Fleming *et al* (2011) Chemical modulators of autophagy as biological probes and potential therapeutics. Nat.Chem.Biol. ***7*** 9. PMID: 21164513.

Hechler *et al* (2005) Inhibition of platelet functions and thrombosis through selective or non-selective inhibition of the platelet P2