



Certificate of Analysis

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Product Name: NF 546 Catalog No.: 3892 Batch No.: 3

CAS Number: 1006028-37-0

IUPAC Name: 4,4'-(Carbonylbis(imino-3,1-phenylene-carbonylimino-3,1-(4-methyl-phenylene)carbonylimino))-bis(1,3-xylene-

alpha,alpha'-diphosphonic acid tetrasodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{47}H_{44}N_6Na_4O_{17}P_4.13.5H_2O$

Batch Molecular Weight: 1424.01

Physical Appearance: Off White solid

Solubility: water to 10 mM with gentle warming

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 96.6% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 39.64 5.03 5.9 Found 39.65 4.79 6.01

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

Product Information

Print Date: Apr 24th 2025

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Description:

NF 546 is a P2Y₁₁ agonist (pEC₅₀ = 6.27). Exhibits selectivity for P2Y₁₁ over a range of P2Y and P2X receptors. Also inhibits DNA-binding activity of HMGA2 (IC₅₀ = 5.49 μ M).

Physical and Chemical Properties:

Batch Molecular Formula: C₄₇H₄₄N₆Na₄O₁₇P₄.13.5H₂O

Batch Molecular Weight: 1424.01 Physical Appearance: Off White solid

Minimum Purity: ≥95%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

water to 10 mM with gentle warming

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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.

Meis *et al* (2010) NF546 [4,4'-(carbonylbis(imino-3,1-phenylene-carbonylimino-3,1-(4-methyl-phenylene)-carbonylimino))-bis (1,3-xylene-γ,γ'-diphosphonic acid) tetrasodium salt] is a non-nucleotide P2Y11 agonist and stimulates release of interleuk J.Pharmacol.Exp.Ther. *332* 238. PMID: 19815812.

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