

# **Certificate of Analysis**

Print Date: Jan 15<sup>th</sup> 2016

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Product Name: PPNDS Catalog No.: 1309 Batch No.: 1

CAS Number: 1021868-77-8

IUPAC Name: Pyridoxal-5'-phosphate-6-(2'-naphthylazo-6'-nitro-4',8'-disulfonate) tetrasodium salt

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{18}H_{11}N_4Na_4O_{14}PS_2$ 

Batch Molecular Weight: 694.36

Physical Appearance: Dark red solid
Solubility: water to 100 mM
Storage: Desiccate at -20°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.59$  (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

Melting Point: Greater than 300°C

<sup>1</sup>H NMR: Consistent with structure



# **Product Information**

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### **Description:**

Potent and selective P2X<sub>1</sub> receptor antagonist (pK<sub>B</sub> = 7.43 in rat vas deferens). Up to 52-fold selective over P2Y<sub>1</sub> receptors, and selective over ecto-nucleotidase,  $\alpha_{1A}$ -adrenoceptors, A<sub>1</sub>, A<sub>2B</sub>, H<sub>1</sub> and M<sub>3</sub> receptors.

#### **Physical and Chemical Properties:**

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Batch Molecular Weight: 694.36 Physical Appearance: Dark red solid

#### **Batch Molecular Structure:**

Storage: Desiccate at -20°C

#### 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:

Lambrecht et al (2000) The novel pyridoxal-5'-phosphate derivative PPNDS potently antagonizes activation of P2X<sub>1</sub> receptors. Eur.J.Pharmacol. **387** R19. PMID: 10650184.