

Certificate of Analysis

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Print Date: Jan 14th 2016

Product Name: TC-P 262 Catalog No.: 4386 Batch No.: 1

CAS Number: 873398-67-5

IUPAC Name: 5-[5-Methyl-2-(1-methylethyl)phenoxy]-2,4-pyrimidinediamine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{14}H_{18}N_4O$ Batch Molecular Weight:258.32Physical Appearance:Yellow solid

Solubility: DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.28$ (Chloroform:Methanol [95:5])

HPLC: Shows >99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 65.09 7.02 21.69 Found 65.05 6.95 21.83



Product Information

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Description:

Selective P2X₃ and P2X_{2/3} receptor antagonist (pIC₅₀ values are 7.39 and 6.68 respectively). Displays no detectable activity at P2X₁, P2X₂, P2X₄ and P2X₇ receptors (pIC₅₀ < 4.7).

Physical and Chemical Properties:

Batch Molecular Formula: C₁₄H₁₈N₄O Batch Molecular Weight: 258.32 Physical Appearance: Yellow solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

DMSO 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:

Ballini *et al* (2011) Characterization of three diaminopyrimidines as potent and selective antagonists of P2X₃ and P2X_{2/3} receptors with in vivo efficacy in a pain model. Br.J.Pharmacol. *163* 1315. PMID: 21410458.