Certificate of Analysis

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Product Name: TL4-12

Catalog No.: 5910 Batch No.: 1

CAS Number: 1620820-12-3 **IUPAC Name:**

4-Methyl-3-[[6-(methylamino)-4-pyrimidinyl]oxy]-N-[3-(4-methyl-1-piperazinyl)-5-(trifluoromethyl)phenyl]benzamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility:

C25H27F3N6O2.1/2H2O 509.54 White solid DMSO to 20 mM 1eq. HCl to 20 mM Store at -20°C



| 2. | ANALY | TICAL | DATA |
|----|-------|-------|------|
| | | | |

TLC: HPLC: ¹H NMR: Mass Spectrum: **Microanalysis:**

 $R_f = 0.3$ (Dichloromethane:Methanol [4:1]) Shows 99% purity Consistent with structure Consistent with structure Carbon Hydrogen Nitrogen

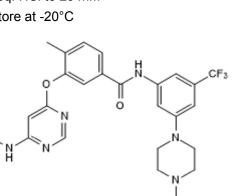
| Theoretical | 58.93 | 5.54 | 16.49 |
|-------------|-------|------|-------|
| Found | 59.06 | 5.42 | 16.47 |

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

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TOCRIS a biotechne brand

Print Date: Jul 20th 2018

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Description:

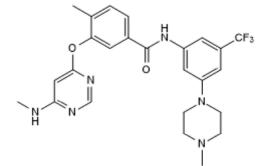
Potent MAP4K2 (GCK) inhibitor (IC₅₀ = 37 nM). Exhibits >70-fold selectivity for MAP4K2 over TAK1 (IC₅₀ = 2.7 μ M for TAK1). Inhibits IL-1 and TGF β -induced p38 MAPK phosphorylation, in vitro.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{25}H_{27}F_3N_6O_2$.¹/₂H₂O Batch Molecular Weight: 509.54 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 20 mM 1eg. HCl to 20 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).

Catalog No.: 5910

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.

Licensing Information:

Sold under license from Dana-Farber Cancer Institute.

References:

Tan *et al* (2015) Discovery of type II inhibitors of TGFβ-activated kinase 1 (TAK1) and mitogen-activated protein kinase kinase kinase kinase 2 (MAP4K2). J.Med.Chem. **58** 183. PMID: 25075558.

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