

Certificate of Analysis

Print Date: Feb 25th 2022

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Product Name: GM 6001 Catalog No.: 2983 Batch No.: 6

CAS Number: 142880-36-2

IUPAC Name: $(2R)-N^4$ -Hydroxy- N^1 -[(1S)-1-(1*H*-indol-3-ylmethyl)-2-(methylamino)-2-oxoethyl]-2-(2-methylpropyl)butanediamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{20}H_{28}N_4O_4.\frac{1}{2}H_2O$

Batch Molecular Weight: 397.47

Physical Appearance: White solid

Solubility: DMSO to 100 mM Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 97.2% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 60.44 7.35 14.1 Found 60.13 7.3 13.78

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



Product Information

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Description:

GM 6001 is a broad spectrum MMP inhibitor. Reduces infarct volume following middle cerebral artery occlusion in an ischemic mouse model. Also inhibits human skin fibroblast collagenase ($K_i = 0.4 \text{ nM}$).

Physical and Chemical Properties:

Batch Molecular Formula: C₂₀H₂₈N₄O₄.½H₂O

Batch Molecular Weight: 397.47 Physical Appearance: White solid

Minimum Purity: ≥95%

Batch Molecular Structure:

Storage: Store at -20°C

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:

Shichi et al (2011) Involvement of matrix metalloproteinase-mediated proteolysis of neural cell adhesion molecule in the development of cerebral ischemic neuronal damage. J.Pharmacol.Exp.Ther. **338** 701. PMID: 21602423.

Chao *et al* (2007) Leptin stimulates endothelin-1 expression *via* extracellular signal-regulated kinase by epidermal growth factor receptor transactivation in rat aortic smooth muscle cells. Eur.J.Pharmacol. *573* 49. PMID: 17678888.

Grobelny et al (1992) Inhibition of skin fibroblast Col., thermolysin, and *Pseudomonas aeruginosa* elastase by peptide hydroxamic acids. Biochemistry **31** 7152. PMID: 1322694.

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