

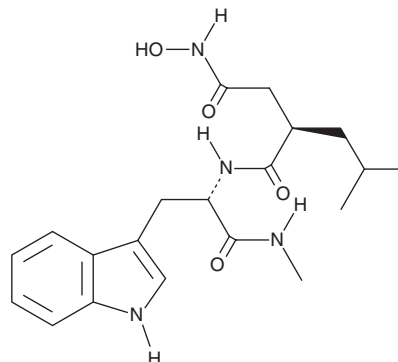
PRODUCT INFORMATION



GM 6001

Item No. 14533

CAS Registry No.: 142880-36-2
Formal Name: (2R)-N⁴-hydroxy-N¹-[(1S)-1-(1H-indol-3-ylmethyl)-2-(methylamino)-2-oxoethyl]-2-(2-methylpropyl)-butanediamide
Synonyms: Galardin, Ilomastat
MF: C₂₀H₂₈N₄O₄
FW: 388.5
Purity: ≥90%
UV/Vis.: λ_{max}: 222, 281 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

GM 6001 is supplied as a crystalline solid. A stock solution may be made by dissolving the GM 6001 in the solvent of choice, which should be purged with an inert gas. GM 6001 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of GM 6001 in ethanol is approximately 0.5 mg/ml and approximately 25 mg/ml in DMSO and DMF.

GM 6001 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GM 6001 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. GM 6001 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

GM 6001 is a potent, reversible broad spectrum inhibitor of zinc-containing proteases, including matrix metalloproteinases (MMPs).¹ It inhibits zinc-containing thermolysin and elastase from *P. aeruginosa*, both with K_i values of 20 nM.² GM 6001 inhibits MMP-1, -2, -7, -8, -9, -12, -13, -14, -16, and -26 with K_i or IC₅₀ values between 0.1 and 10 nM.³⁻⁶ It inhibits disintegrin and metalloproteinase domain-containing (ADAM) proteins ADAM9, ADAM10, ADAM12, and ADAM17 at nanomolar concentrations.⁷⁻⁸ It less potently inhibits lethal factor from *B. anthracis* anthrax lethal toxin (K_i = 2.74 μM).⁹ GM 6001 also impairs the growth of the human pathogen *Chlamydia* by inhibiting peptide deformylase, which contains iron rather than zinc (IC₅₀ = 38 nM).¹⁰

References

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WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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