

PRODUCT INFORMATION

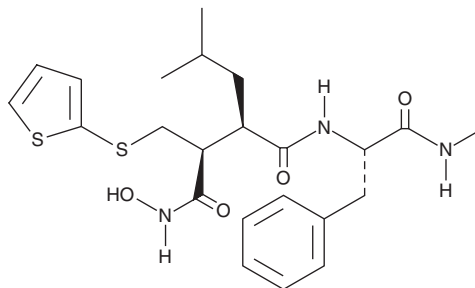


Batimastat

Item No. 14742

CAS Registry No.: 130370-60-4
Formal Name: (2R,3S)-N⁴-hydroxy-N¹-[(1S)-2-(methylamino)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-[(2-thienylthio)methyl]-butanediamide

Synonym: BB-94
MF: C₂₃H₃₁N₃O₄S₂
FW: 477.6
Purity: ≥98%
UV/Vis.: λ_{max}: 269 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

Batimastat is supplied as a crystalline solid. A stock solution may be made by dissolving the batimastat in the solvent of choice, which should be purged with an inert gas. Batimastat is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of batimastat in these solvents is approximately 2 and 10 mg/ml, respectively.

Description

Batimastat is a broad spectrum inhibitor of matrix metalloproteinases (MMP), with IC₅₀ values of 1-5 nM for all MMPs tested, including MMP-1, -2, -3, -7, -9, -13, and -14.¹⁻⁴ It also potently inhibits TNF α -converting enzyme (IC₅₀ = 14.9 nM).² Because of its action on MMPs, batimastat has anti-proliferative, anti-invasive, and anti-metastatic actions that are relevant, in particular, to cancer.⁵ Batimastat less effectively inhibits the processing of the low affinity IgE receptor CD23 (IC₅₀ = 100 nM).⁶

References

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2. Fray, M.J., Dickinson, R.P., Huggins, J.P., et al. A potent, selective inhibitor of matrix metalloproteinase-3 for the topical treatment of chronic dermal ulcers. *J. Med. Chem.* **46(16)**, 3514-3525 (2003).
3. Sheppard, G.S., Florjancic, A.S., Giesler, J.R., et al. Aryl ketones as novel replacements for the C-terminal amide bond of succinyl hydroxamate MMP inhibitors. *Bioorg. Med. Chem. Lett.* **8(22)**, 3251-3256 (1998).
4. Yamamoto, M., Tsujishita, H., Hori, N., et al. Inhibition of membrane-type 1 matrix metalloproteinase by hydroxamate inhibitors: An examination of the subsite pocket. *J. Med. Chem.* **41(8)**, 1209-1217 (1998).
5. Chaudhary, A.K., Pandya, S., Ghosh, K., et al. Matrix metalloproteinase and its drug targets therapy in solid and hematological malignancies: An overview. *Mutat. Res.* **753(1)**, 7-23 (2013).
6. Bailey, S., Bolognese, B., Buckle, D.R., et al. Selective inhibition of low affinity IgE receptor (CD23) processing. *Bioorg. Med. Chem. Lett.* **8(1)**, 29-34 (1998).

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.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM