

Catalog # 10-1589

Batimastat

CAS# 130370-60-4 BB-94

(2R,3S)-N4-Hydroxy-N1-[(1S)-2-(methylamine)-2-oxo-1-(phenylmethyl)ethyl]-2-(2-methylpropyl)-3-[(2-thienylthio)methyl]butanediamide

Lot # X106407

Potent, broad spectrum MMP inhibitor (IC₅₀ =3, 4, 4, 6 and 20 nM for MMPs -1, -2, -9, -7 and -3 respectively). Exhibits antiproliferative, anti-invasive and antimetastatic activity in human colon¹, ovarian² and prostate³ xenografts *in vivo*. Attenuates neuroinflam-mation following focal cerebral ischemia in mice.⁴ Inhibits α -secretase.⁵ Inhibits snake venom (*Bothrops asper*) lethality.⁶

- 1) Wang et al. (1994), Matrix metalloproteinase inhibitor BB-94 (batimastat) inhibits human colon tumor growth and spread in a patient-like orthotopic model in nude mice; Cancer Res., **54** 4726
- 2) Davies et al. (1993), A synthetic matrix metalloproteinase inhibitor decreases tumor burden and prolongs survival of mice bearing human ovarian carcinoma xenografts; Cancer Res., **53** 2087
- 3) Lein et al. (2000), Synthetic inhibitor of matrix metalloproteinase (batimastat) reduces prostate cancer growth in an orthotopic rat model; Prostate, 43 77
- 4) Park et al. (2011), Matrix metalloproteinase inhibitors attenuate neuroinflammation following focal cerebral ischemia in mice; Korean J. Physiol. Pharmacol., **15** 115
- 5) Dubrovskaya et al. (2006), Effects of an inhibitor of alpha-secretase, which metabolizes the amyloid peptide precursor, on memory formation in rats; Neurosci. Behav. Physiol., **36** 911
- 6) Rucavado et al. (2004), Effects of the metalloproteinase inhibitor batimastat in the systemic toxicity induced by Bothrops asper snake venom: understanding the role of metalloproteinases in envenomation; Toxicon, **43** 417

PHYSICAL DATA

Molecular Weight: 477.64

Molecular Formula: $C_{23}H_{31}N_3O_4S_2$ Purity: 98% by HPLC

NMR: (Conforms)

Solubility: DMSO (up to 45 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 1 month.

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