

Catalog #10-2850 SB-225002

CAS# 182498-32-4 N-(2-Bromophenyl)-N'-(2-hydroxy-4-nitrophenyl)urea Lot # X106801

Potent and selective CXCR2 receptor antagonist ($IC_{50} = 22 \text{ nM}$). Displays >150-fold selectivity over CXCR1 receptors.¹ Induces apoptosis in both wild-type and p53-deficient ovarian cancer cells (OVCA) via p53 activation and by inducing mitotic catastrophe.² Blocks IL-8-mediated cellular effects such as oxidative stress-induced cellular senescence³ and neutrophil chemotaxis¹. Inhibits HIV replication in lymphocytes and macrophages.⁴ Inhibits endothelial activation and leukocyte recruitment to cerebral microvessels during neuroinflammation.⁵

- 1) White et al. (1998), Identification of a potent, selective non-peptide CXCR2 antagonist that inhibits interleukin-8-induced neutrophil migration; J.Biol.Chem. **273** 10095
- 2) Du et al. (2013) SB225002 Promotes Mitotic Catastrophe in Chemo-Sensitive and -Resistant Ovarian Cancer Cells Independent of p53 Status In Vitro; PLoS One. 8 e54572
- 3) Shen et al. (2013), Interleukin-8 prevents oxidative stress-induced human endothelial cell senescence via telomerase activation; Int.Immunopharmacol. 16 261
- 4) Lane et al. (2001), Interleukin-8 Stimulates Human Immunodeficiency Virus Type 1 Replication and Is a Potential New target for Antiretroviral Therapy; J.Virol. **75** 8195
- 5) Wu et al. (2015), CXCR2 is essential for cerebral endothelial activation and leukocyte recruitment during neuroinflammation; J.Neuroinflammation 12 98

PHYSICAL DATA

Molecular Weight: 352.14

Solubility:

Molecular Formula: C₁₃H₁₀BrN₃O₄
Purity: >98% (HPLC)
NMR: (Conforms)

DMSO (35 mg/mL) and ethanol (15 mg/mL)

Physical Description: Yellow solid

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

DMSO or ethanol may be stored at -20°C for up to 3 months.