

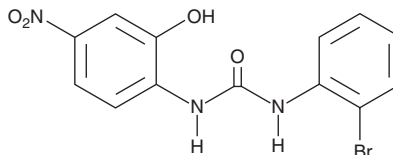
PRODUCT INFORMATION



SB 225002

Item No. 13336

CAS Registry No.: 182498-32-4
Formal Name: N-(2-bromophenyl)-N'-(2-hydroxy-4-nitrophenyl)-urea
MF: C₁₃H₁₀BrN₃O₄
FW: 352.1
Purity: ≥95%
UV/Vis.: λ_{max}: 244, 358 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

SB 225002 is supplied as a crystalline solid. A stock solution may be made by dissolving the SB 225002 in the solvent of choice, which should be purged with an inert gas. SB 225002 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SB 225002 in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

CXCR2 (IL-8RB) is a seven-transmembrane G protein-coupled receptor whose physiological ligands include IL-8 (CXCL8) and growth related oncogene α (Gro-α; CXCL1). IL-8 and Gro-α are pro-inflammatory CXC chemokines that act as chemoattractants, especially for neutrophils, and promote angiogenesis. SB 225002 is a selective non-peptide inhibitor of CXCR2, inhibiting IL-8 binding to CXCR2 with an IC₅₀ value of 22 nM.¹ SB 225002 inhibits neutrophil chemotaxis in response to IL-8 *in vitro* (IC₅₀ = 20 nM) and blocks neutrophil margination induced by IL-8 *in vivo* (IC₅₀ = 30 nM).¹ Similarly, SB 225002 reduces neutrophil influx, the production of inflammatory mediators, and tissue damage in TNBS-induced colitis in mice.²

References

1. White, J.R., Lee, J.M., Young, P.R., *et al.* Identification of a potent, selective non-peptide CXCR2 antagonist that inhibits interleukin-8-induced neutrophil migration. *J. Biol. Chem.* **273**(17), 10095-10098 (1998).
2. Bento, A.F., Leite, D.F.P., Claudino, R.F., *et al.* The selective nonpeptide CXCR2 antagonist SB225002 ameliorates acute experimental colitis in mice. *J. Leukocyte Biol.* **84**(4), 1213-1221 (2008).

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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