

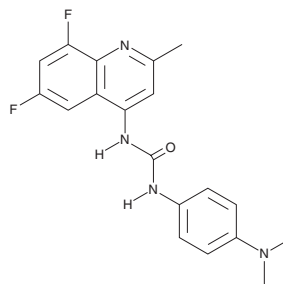
PRODUCT INFORMATION



SB-408124

Item No. 22961

CAS Registry No.: 288150-92-5
Formal Name: N-(6,8-difluoro-2-methyl-4-quinolinyl)-
N'-[4-(dimethylamino)phenyl]-urea
MF: C₁₉H₁₈F₂N₄O
FW: 356.4
Purity: ≥98%
UV/Vis.: λ_{max}: 227, 265, 315 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-408124 is supplied as a crystalline solid. A stock solution may be made by dissolving the SB-408124 in the solvent of choice, which should be purged with an inert gas. SB-408124 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SB-408124 in these solvents is approximately 0.5, 20, and 30 mg/ml, respectively.

SB-408124 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SB-408124 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. SB-408124 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SB-408124 is a potent antagonist of orexin 1 receptors (OX1Rs) with a K_i value of 26.9 nM in a calcium mobilization assay using CHO cells that stably express human OX1R.¹ It is selective for OX1R over OX2R, with K_d values of 21.7 and 1,704 nM, respectively, in a radioligand binding assay. *In vivo* co-perfusion of SB-408124 with human OX1R in the rat ventral tegmental area inhibits OX1R-induced glutamate and dopamine elevations and reduces cocaine-seeking behavior in rats.²

References

1. Langmead, C.J., Jerman, J.C., Brough, S.J., *et al.* Characterisation of the binding of 3H-SB-674042, a novel nonpeptide antagonist, to the human orexin-1 receptor. *Br. J. Pharmacol.* **141**(2), 340-346 (2004).
2. Wang, B., You, Z.B., and Wise, R.A. Reinstatement of cocaine seeking by hypocretin (orexin) in the ventral tegmental area: Independence from the local corticotropin-releasing factor network. *Biol. Psychiatry* **65**(10), 857-862 (2009).

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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