

PRODUCT INFORMATION



SB-674042

Item No. 21270

CAS Registry No.: 483313-22-0
Formal Name: [5-(2-fluorophenyl)-2-methyl-4-thiazolyl][(2S)-2-[(5-phenyl-1,3,4-oxadiazol-2-yl)methyl]-1-pyrrolidinyl]-methanone

MF: C₂₄H₂₁FN₄O₂S

FW: 448.5

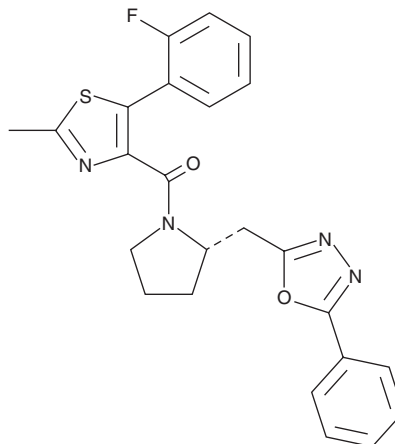
Purity: ≥98%

UV/Vis.: λ_{max}: 252 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-674042 is supplied as a crystalline solid. A stock solution may be made by dissolving the SB-674042 in the solvent of choice, which should be purged with an inert gas. SB-674042 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of SB-674042 in these solvents is approximately 30 mg/ml.

Description

SB-674042 is a potent and selective non-peptide orexin 1 receptor (OX1R) antagonist ($K_d = 5.03$ and 3.76 nM in whole cell binding and membrane-based assays, respectively).¹ In calcium mobilization studies, it was >100-fold selective for OX1 over OX2 and did not show significant affinity for serotonergic, dopaminergic, adrenergic, or purinergic receptors at concentrations up to $10 \mu\text{M}$.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. Ellis, J., Pediani, J.D., Canals, M., *et al.* Orexin-1 receptor-cannabinoid CB₁ receptor heterodimerization results in both ligand-dependent and -independent coordinated alterations of receptor localization and function. *J. Biol. Chem.* **281**(50), 38812-38824 (2006).

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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