

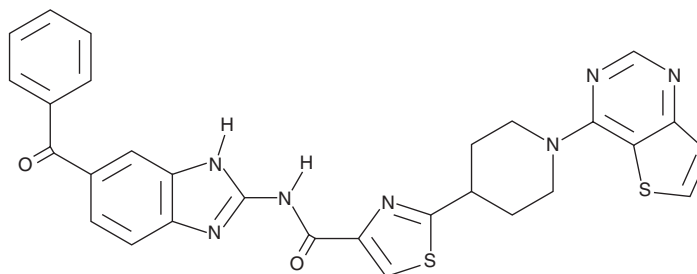
PRODUCT INFORMATION



SC-75741

Item No. 21818

CAS Registry No.: 913822-46-5
Formal Name: N-(6-benzoyl-1H-benzimidazol-2-yl)-2-(1-thieno[3,2-d]pyrimidin-4-yl-4-piperidinyl)-4-thiazolecarboxamide
MF: C₂₉H₂₃N₇O₂S₂
FW: 565.7
Purity: ≥98%
UV/Vis.: λ_{max}: 206, 256, 313 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

SC-75741 is supplied as a crystalline solid. A stock solution may be made by dissolving the SC-75741 in the solvent of choice. SC-75741 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of SC-75741 in these solvents is approximately 0.5 and 0.2 mg/ml, respectively.

SC-75741 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SC-75741 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. SC-75741 has a solubility of approximately 0.04 mg/ml in a 1:20 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SC-75741 is an inhibitor of NF-κB (EC₅₀ = 0.2 μM in an NF-κB reporter gene assay).¹ It inhibits replication of human, avian, and swine influenza virus strains in MDCK cells in a concentration-dependent manner.² It also reversibly inhibits replication of H5N1 and H7N7 avian influenza virus strains in human A549 cells. *In vivo*, SC-75741 (15 mg/kg, i.p.) reduces viral mRNA and production of IL-6 and CXCL10/IP-10 in the lungs of H5N1 infected mice. SC-75741 is also protective against H5N1 and H7N7 infection in mice when administered for 7 days prior to or up to 4 days post infection.³

References

1. Leban, J., Baierl, M., Mies, J., *et al.* A novel class of potent NF-κB signaling inhibitors. *Bioorg. Med. Chem. Lett.* **17(21)**, 5858-5862 (2007).
2. Ehrhardt, C., Rückle, A., Hrinčius, E.R., *et al.* The NF-κB inhibitor SC75741 efficiently blocks influenza virus propagation and confers a high barrier for development of viral resistance. *Cell. Microbiol.* **15(7)**, 1198-1211 (2013).
3. Haasbach, E., Reiling, S.J., Ehrhardt, C., *et al.* The NF-κB inhibitor SC75741 protects mice against highly pathogenic avian influenza A virus. *Antiviral Res.* **99(3)**, 336-344 (2013).

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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