

PRODUCT INFORMATION



VX-745

Item No. 18075

CAS Registry No.: 209410-46-8

Formal Name: 5-(2,6-dichlorophenyl)-2-
[(2,4-difluorophenyl)thio]-6H-
pyrimido[1,6-b]pyridazin-6-one

Synonym: Neflamapimod

MF: C₁₉H₉Cl₂F₂N₃OS

FW: 436.3

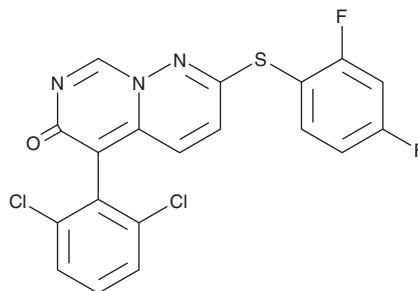
Purity: ≥95%

UV/Vis.: λ_{max}: 287, 383 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

VX-745 is supplied as a crystalline solid. A stock solution may be made by dissolving the VX-745 in the solvent of choice, which should be purged with an inert gas. VX-745 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of VX-745 in these solvents is approximately 0.1, 20, and 30 mg/ml, respectively.

VX-745 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, VX-745 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. VX-745 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

VX-745 is an inhibitor of p38α MAPK (IC₅₀ = 9 nM).¹ It is selective for p38α over p38β MAPK (K_i = 220 nM) as well as ERK, JNK, and a panel of 50 kinases when used at a concentration of 2 μM. VX-745 inhibits LPS-induced production of IL-1β and TNF-α in isolated human peripheral blood mononuclear cells (PBMCs; IC₅₀s = 45 and 51 nM, respectively). It reduces disease severity in a type II collagen-induced mouse model of arthritis when administered at a dose of 10 mg/kg.

Reference

1. Duffy, J.P., Harrington, E.M., Salituro, F.G., *et al.* The discovery of VX-745: A novel and selective p38α kinase inhibitor. *ACS Med. Chem. Lett.* **2**(10), 758-763 (2011).

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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