

Product Name: VX 745

Catalog No.: 3915

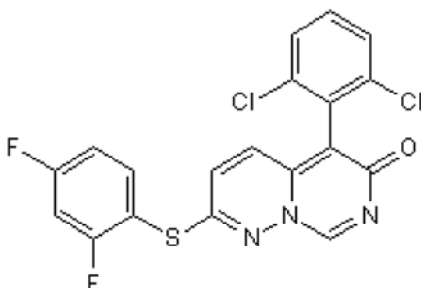
Batch No.: 1

CAS Number: 209410-46-8

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₁₉ H ₉ Cl ₂ F ₂ N ₃ OS
Batch Molecular Weight:	436.26
Physical Appearance:	Yellow solid
Solubility:	DMSO to 100 mM ethanol to 5 mM
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 98.7% purity
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure

Microanalysis:	Carbon Hydrogen Nitrogen		
Theoretical	52.31	2.08	9.63
Found	52.78	2.01	9.55

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

VX 745 is a highly potent and selective p38 α /MAPK14 inhibitor, also inhibits p38 β (IC₅₀ values are 10 nM and 220 nM respectively). VX 745 blocks TNF α production in LPS-stimulated HWB in vitro (IC₅₀ = 51-180 nM). Also reduces phosphorylation of p38MAPK α and the downstream target Hsp27, leading to vasodilation, reduces IL-1 β levels and amyloid plaques in cortex and hippocampus and lowers CSF tau levels in vivo.

Physical and Chemical Properties:

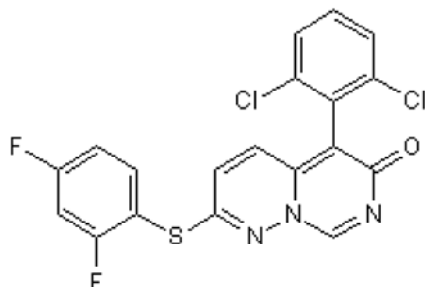
Batch Molecular Formula: C₁₉H₉Cl₂F₂N₃OS

Batch Molecular Weight: 436.26

Physical Appearance: Yellow solid

Minimum Purity: \geq 98%

Batch Molecular Structure:



References:

Pandey *et al* (2022) Neflamapimod induces vasodilation in resistance mesenteric arteries by inhibiting p38 MAPK α and downstream Hsp27 phosphorylation. *Sci.Rep.* **12** 4905. PMID: 35318382.

Petrova *et al* (2020) p38 MAPK signalling regulates cytokine production in IL-33 stimulated type 2 innate lymphoid cells. *Sci.Rep.* **10** 3479. PMID: 32103032.

Alam (2015) Selective brain-targeted antagonism of p38 MAPK α reduces hippocampal IL-1 levels and improves Morris Water Maze performance in aged rats. *J.Alzheimers Dis.* **48** 219. PMID: 26401942.

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 5 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Other Information:

The HPLC purity for this product is measured at 288nm.

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