

PRODUCT INFORMATION

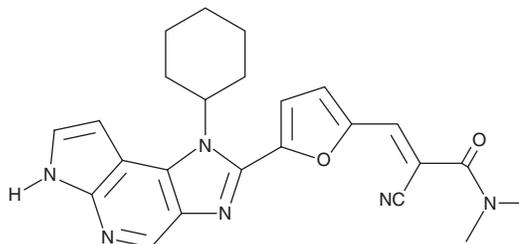


FM-381

Item No. 23204

CAS Registry No.: 2226521-65-7
Formal Name: 2-cyano-3-[5-(1-cyclohexyl-1,6-dihydroimidazo[4,5-d]pyrrolo[2,3-b]pyridin-2-yl)-2-furanyl]-N,N-dimethyl-2-propenamide

MF: C₂₄H₂₄N₆O₂
FW: 428.5
Purity: ≥98%
UV/Vis.: λ_{max}: 240, 370 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

FM-381 is supplied as a crystalline solid. A stock solution may be made by dissolving the FM-381 in the solvent of choice, which should be purged with an inert gas. FM-381 is soluble in the organic solvent DMSO at a concentration of approximately 2 mg/ml.

Description

FM-381 is a potent inhibitor of JAK3 (IC₅₀ = 127 pM).¹ It is 400-, 2,700-, and 3,600-fold selective for JAK3 over JAK1, JAK2, and TYK3 and only inhibits 11 kinases by less than 50 percent in a panel of 410 kinases when used at a concentration of 500 nM. FM-381 (1 μM) blocks JAK3-dependent STAT5 phosphorylation but not JAK3-independent STAT3 signaling in IL-2- and IL-6-stimulated T cells, respectively.

Reference

1. Forster, M., Chaikauad, A., Bauer, S.M., *et al.* Selective JAK3 inhibitors with covalent reversible binding mode targeting new induced fit binding pocket. *Cell Chem. Biol.* **23(11)**, 1335-1340 (2016).

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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