

PRODUCT INFORMATION

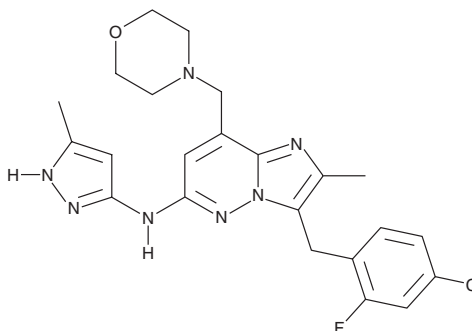


LY2784544

Item No. 16705

CAS Registry No.: 1229236-86-5
Formal Name: 3-[(4-chloro-2-fluorophenyl)methyl]-2-methyl-N-(5-methyl-1H-pyrazol-3-yl)-8-(4-morpholinylmethyl)-imidazo[1,2-b]pyridazin-6-amine

MF: C₂₃H₂₅ClFN₇O
FW: 470.0
Purity: ≥98%
UV/Vis.: λ_{max}: 225, 255, 345 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

LY2784544 is supplied as a crystalline solid. A stock solution may be made by dissolving the LY2784544 in the solvent of choice, which should be purged with an inert gas. LY2784544 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of LY2784544 in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

LY2784544 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, LY2784544 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. LY2784544 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

LY2784544 is a potent, ATP-competitive inhibitor of janus kinase 2 (JAK2) that less effectively inhibits JAK3 (IC₅₀s = 3 and 48 nM, respectively).¹ It also inhibits JAK2 containing the V617F mutation (IC₅₀ = 20 nM), blocking STAT5 phosphorylation and proliferation of Ba/F3 pro-B-cells expressing this constitutively active JAK2 mutant form.¹ When given by oral gavage, LY2784544 significantly reduces the growth of Ba/F3 pro-B-cells in SCID mice without affecting erythroid progenitors, reticulocytes, or platelets.¹ JAK inhibitors, including LY2784544, may be useful in hematological malignancies.²

References

1. Ma, L., Clayton, J.R., Walgren, R.A., *et al.* Discovery and characterization of LY2784544, a small-molecule tyrosine kinase inhibitor of JAK2V617F. *Blood Cancer J.* **3(4)**, e109 (2013).
2. Furqan, M., Mukhi, N., Lee, B., *et al.* Dysregulation of JAK-STAT pathway in hematological malignancies and JAK inhibitors for clinical application. *Biomark. Res.* **1(1)**, 5 (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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