

## Product Specification Sheet

**Product Name:** LY2784544

**Catalog Number:** C5178

### Technical information:

Chemical Formula:  $C_{23}H_{25}ClFN_7O$

CAS #: 1229236-86-5

Molecular Weight: 469.94

Purity: > 98%

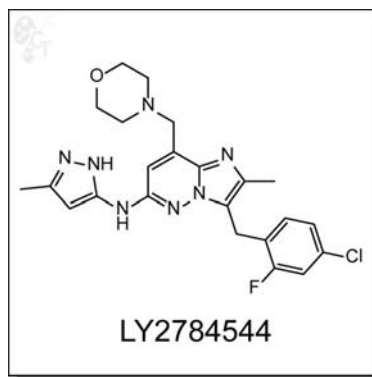
Appearance: White solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: 3-(4-chloro-2-fluorobenzyl)-2-methyl-N-(3-methyl-1H-pyrazol-5-yl)-8-(morpholinomethyl)imidazo[1,2-b]pyridazin-6-amine

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.213mL of DMSO for each mg of LY2784544
  - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** LY-2784544 is an orally-available, imidazopyridazine-based inhibitor of the JAK2-V617F mutation, the most common abnormality in Bcr-Abl-negative myeloid proliferative neoplasms. [1] Inhibition in Ba/F3 cells was found to be 55 nM. [2] Inhibition of wild-type JAK2 was minimal (IC<sub>50</sub> = 2.3 μM), such that normal marrow function is not impeded. [2, 3]

Antiproliferation activity of LY-2784544 in JAK2-V617F-driven cells was shown to be 68 nM. [2]. In Ba/F3 xenografts, LY-2784544 inhibits STAT5 phosphorylation at an threshold effective dose (TED50) of 12.7 mg/kg. [2]

- Reference:**
1. Mitchell et al., Development and a Practical Synthesis of the JAK2 Inhibitor LY2784544. *Org. Process Res. Dev.* 2012, 15, 70-81.
  2. Ma et al., 4087 Efficacy of LY2784544, a Small Molecule Inhibitor Selective for Mutant JAK2 Kinase, In JAK2 V617F-Induced Hematologic Malignancy Models. 53rd ASH Annual Meeting and Exposition, 2011, Abstract 4087.
  3. "Lilly oncology reveals findings from study of JAK2 inhibitor for blood cancers at ASH meeting" Eli Lilly ASH review, Dec. 11, 2012.

To reorder: <http://www.cellagentech.com/LY2784544/>

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*