LKT Laboratories, Inc.

# AZD-1480

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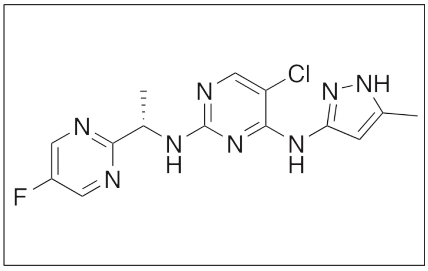
## Product Information

**Product ID** A9812
**CAS No.** 935666-88-9
**Chemical Name**

**Synonym** AZD-1480

**Formula** $C_{14}H_{14}ClFN_8$
**Formula Wt.** 348.77
**Melting Point**
**Purity** ≥99%
**Solubility** DMSO 69 mg/mL warmed (197.83 mM)
Water Insoluble
Ethanol Insoluble
**Store Temp** -20°C
**Ship Temp** Ambient




***Bulk quanitites available upon request***

| Product ID | Size |
|---|---|
| A9812 | 1 mg |
| A9812 | 5 mg |
| A9812 | 10 mg |

**Description** AZD-1480 is an inhibitor of JAK1/2 that exhibits antiviral, immunosuppressive, anti-metastatic, and anticancer chemotherapeutic activities. In vitro, AZD-1480 inhibits replication of hepatitis A virus. In animal models of experimental autoimmune encephalitis (EAE), AZD-1480 decreases disease severity by suppressing expression of inflammatory cytokines and minimizing antigen presentation and T cell expansion. In animal models of various cancers, this compound inhibits tumor growth. AZD-1480 is currently in clinical trials as a potential cancer treatment. In cellular and animal models of prostate cancer, this compound inhibits metastasis.

**References**

Jiang X, Kanda T, Nakamoto S, et al. The JAK2 inhibitor AZD1480 inhibits hepatitis A virus replication in Huh7 cells. Biochem Biophys Res Commun. 2015 Feb 19. [Epub ahead of print]. PMID: 25704089.

Gritsina G, Xiao F, O'Brien SW, et al. Targeted blockade of JAK/STAT3 signaling inhibits ovarian carcinoma growth. Mol Cancer Ther. 2015 Feb 2. [Epub ahead of print]. PMID: 25646015.

Suryani S, Bracken LS, Harvey RC, et al. Evaluation of the In Vitro and In Vivo Efficacy of the JAK Inhibitor AZD1480 against JAK-Mutated Acute Lymphoblastic Leukemia. Mol Cancer Ther. 2015 Feb;14(2):364-74. PMID: 25504635.

Houghton PJ, Kurmasheva RT, Lyalin D, et al. Initial solid tumor testing (stage 1) of AZD1480, an inhibitor of Janus kinases 1 and 2 by the pediatric preclinical testing program. Pediatr Blood Cancer. 2014 Nov;61(11):1972-9. PMID: 25131802.

Gu L, Talati P, Vogiatzi P, et al. Pharmacologic suppression of JAK1/2 by JAK1/2 inhibitor AZD1480 potently inhibits IL-6-induced experimental prostate cancer metastases formation. Mol Cancer Ther. 2014 May;13(5):1246-58. PMID: 24577942.

Liu Y, Holdbrooks AT, De Sarno P, et al. Therapeutic efficacy of suppressing the Jak/STAT pathway in multiple models of experimental autoimmune encephalomyelitis. J Immunol. 2014 Jan 1;192(1):59-72. PMID: 24323580.