# GW806742X hydrochloride

**Cat. No.:** HY-112292A

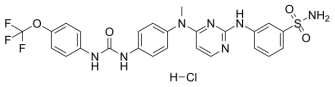
**Molecular Formula:** $C_{25}H_{23}ClF_3N_7O_4S$

**Molecular Weight:** 610.01

**Target:** Mixed Lineage Kinase; VEGFR

**Pathway:** MAPK/ERK Pathway; Protein Tyrosine Kinase/RTK

**Storage:** 4°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 100 mg/mL (163.93 mM; Need ultrasonic)
$H_2O$ : < 0.1 mg/mL (ultrasonic) (insoluble)

**Preparing Stock Solutions**

| Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 1.6393 mL | 8.1966 mL | 16.3932 mL |
| 5 mM | 0.3279 mL | 1.6393 mL | 3.2786 mL |
| 10 mM | 0.1639 mL | 0.8197 mL | 1.6393 mL |

Please refer to the solubility information to select the appropriate solvent.

**In Vivo**

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (4.10 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (4.10 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

GW806742X hydrochloride, an ATP mimetic and a potent MLKL (Mixed Lineage Kinase Domain-Like protein) inhibitor, binds the MLKL pseudokinase domain with a $K_d$ of 9.3 μM. GW806742X hydrochloride has activity against VEGFR2 ($IC_{50}$=2 nM). GW806742X hydrochloride retards MLKL membrane translocation and inhibits necroptosis[1][2].

**$IC_{50}$ & Target**

| MLKL | VEGFR2 |
|---|---|
| 9.3 μM (Kd) | 2 nM ($IC_{50}$) |

**In Vitro**

GW806742X (0.1-10000 nM) inhibits necroptotic death of wild-type mouse dermal fibroblasts (MDFs) stimulated with TSQ (1 ng/mL TNF, 500 nM compound A (Smac mimetic), 10 μM Q-VD-OPh) in a dose-dependent manner[1].
GW806742X shows inhibition of VEGF induced proliferation of HUVECs with an IC50 of 5 nM[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## CUSTOMER VALIDATION

- Nature. 2023 Mar;615(7950):158-167.
- Autophagy. 2021 Jul 20;1-19.
- Acta Pharmacol Sin. 2021 Aug 10.
- Int J Mol Sci. 2023 May 11, 24(10), 8609.
- Microbiol Spectr. 2022 Jun 16;e0104522.

See more customer validations on www.MedChemExpress.com

## REFERENCES

[1]. Hildebrand JM, et al. Activation of the pseudokinase MLKL unleashes the four-helix bundle domain to induce membrane localization and necroptotic cell death. Proc Natl Acad Sci U S A. 2014;111(42):15072-15077.

[2]. Sammond DM, et al. Discovery of a novel and potent series of dianilinopyrimidineurea and urea isostere inhibitors of VEGFR2 tyrosine kinase. Bioorg Med Chem Lett. 2005;15(15):3519-3523.



Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA