

# Trametinib

**Catalog No: tcsc0060**



## Available Sizes

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**Size:** 10mg

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg

**Size:** 500mg

**Size:** 1g

**Size:** 2g

**Size:** 5g



## Specifications

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**CAS No:**

871700-17-3

**Formula:**

$C_{26}H_{23}F_5N_5O_4$

**Pathway:**

MAPK/ERK Pathway

**Target:**

MEK

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 33.33 mg/mL (54.16 mM; Need ultrasonic)

**Alternative Names:**

GSK1120212;JTP-74057

**Observed Molecular Weight:**

615.39

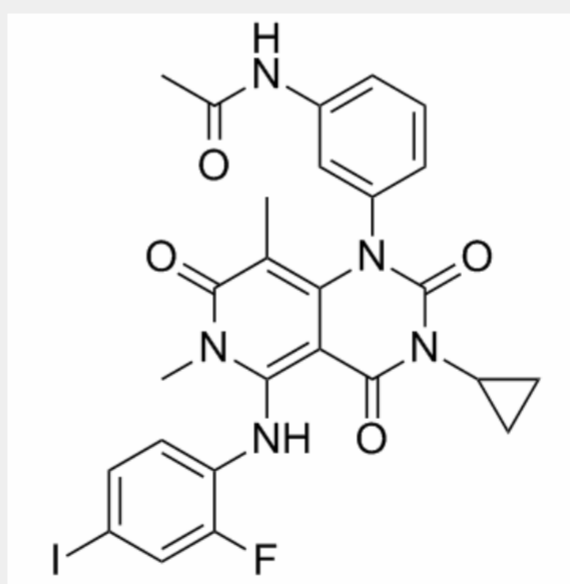
**Product Description**

Trametinib is a potent **MEK** inhibitor that specifically inhibits MEK1/2, with an **IC<sub>50</sub>** value of about 2 nM. Due to the poor solubility of Trametinib, **Trametinib DMSO solvate (Cat. No.: HY-10999A)** is the more commonly used form.

IC50 & Target: IC50: 2 nM (MEK1/2)<sup>[1]</sup>

**In Vitro:** Trametinib (0.1-100 nM) blocks tumor necrosis factor- $\alpha$  and interleukin-6 production from peripheral blood mononuclear cells (PBMCs). Trametinib (JTP-74057) inhibits the growth of 9 out of 10 human colorectal cancer cell lines, and they shows cell-cycle arrest at the G1 phase after drug treatment<sup>[1]</sup>. The combination of GSK2118436 and Trametinib (GSK1120212) effectively inhibits cell growth, decreases ERK phosphorylation, decreases cyclin D1 protein, and increases p27(kip1) protein in the resistant clones<sup>[2]</sup>.

**In Vivo:** Adjuvant-induced arthritis (AIA) and type II collageninduced arthritis (CIA) development are suppressed almost completely by 0.1 mg/kg of Trametinib (JTP-74057) or 10 mg/kg of Leflunomide<sup>[1]</sup>. Trametinib (0.3 mg/kg, 1 mg/kg, p.o.) is effective in inhibiting the HT-29 xenograft growth in a nude mouse xenograft model<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!