Store at -20C

Crizotinib



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2.5 mg

For Research Use Only. Not for Use in Diagnostic Procedures.

Crizotinib, also known as PF-02341066, is a novel, ATP-competitive receptor kinase inhibitor, showing high **Background**

specificity for c-Met and anaplastic lymphoma kinase (ALK) over 120 other diverse kinases (1,2). Researchers have shown that crizotinib inhibits c-Met phosphorylation and c-Met-dependent proliferation, migration, and invasion of human tumor cells in vitro (IC₅₀ values of 5–20 nM) (1). Crizotinib is effective against the constitutively active oncogenic fusion protein nucleophosmin (NPM)-ALK, inhibiting its phosphorylation (mean IC₅₀ of 24 nM), inhibiting cell growth, and inducing G1-S phase cell cycle arrest and apoptosis in the ALK-positive ALCL (anaplastic large-cell lymphoma) cell lines KARPAS-299 and SU-DHL-

1 (2).

Molecular Formula C21H22Cl2FN5O

450.34 g/mol **Molecular Weight**

>99% **Purity**

CAS 877399-52-5

Soluble in DMSO and EtOH at 25mg/ml. Solubility

Store lyophilized or in solution at -20°C, desiccated. In lyophilized form, the chemical is stable for 24 Storage

months. Once in solution, use within 3 months to prevent loss of potency. Aliquot to avoid multiple

freeze/thaw cycles.

Crizotinib is supplied as a lyophilized powder. For a 1 mM stock, reconstitute the 2.5 mg in 5.55 ml DMSO. **Directions for Use:**

> Working concentrations and length of treatments vary depending on the desired effect, but it is typically used at 0.1-1 µM for 2-6 h. Soluble in DMSO at 25 mg/ml with warming; very poorly soluble in water with

maximum solubility ~10-20 μM.

1. Zou, H.Y. et al. (2007) Cancer Res 67, 4408-17. **Background**

2. Christensen, J.G. et al. (2007) Mol Cancer Ther 6, 3314-22. References

Cross-Reactivity Key

H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster

X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse

GP: Guinea Pig Rab: rabbit All: all species expected

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