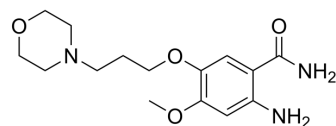


Gefitinib impurity 2

Cat. No.:	HY-100663		
CAS No.:	246512-44-7		
Molecular Formula:	C ₁₅ H ₂₃ N ₃ O ₄		
Molecular Weight:	309.36		
Target:	EGFR		
Pathway:	JAK/STAT Signaling; Protein Tyrosine Kinase/RTK		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (323.25 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.2325 mL	16.1624 mL	32.3248 mL
	5 mM	0.6465 mL	3.2325 mL	6.4650 mL
	10 mM	0.3232 mL	1.6162 mL	3.2325 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (8.08 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (8.08 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (8.08 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Gefitinib impurity 2 is the impurity of Gefitinib. Gefitinib (ZD1839; HY-50895) is a potent, selective and orally active EGFR tyrosine kinase inhibitor with an IC₅₀ of 33 nM. Gefitinib selectively inhibits EGF-stimulated tumor cell growth (IC₅₀ of 54 nM) and that blocks EGF-stimulated EGFR autophosphorylation in tumor cells. Gefitinib also induces autophagy. Gefitinib has antitumour activity^{[1][2]}.

REFERENCES

[1]. Wakeling AE, et al. ZD1839: an orally active inhibitor of epidermal growth factor signaling with potential for cancer therapy. *Cancer Res.* 2002 Oct 15;62(20):5749-54.

[2]. Pedersen MW, et al. Differential response to gefitinib of cells expressing normal EGFR and the mutant EGFRVIII. *Br J Cancer.* 2005 Oct 17;93(8):915-23.

Caution: Product has not been fully validated for medical applications. For research use only.

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