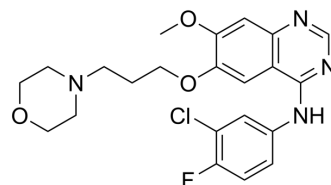


## Gefitinib (GMP)

<b>Cat. No.:</b>	HY-50895G
<b>CAS No.:</b>	184475-35-2
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>24</sub> ClFN <sub>4</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	446.9
<b>Target:</b>	EGFR; Autophagy; Apoptosis
<b>Pathway:</b>	JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Autophagy; Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Gefitinib (ZD1839) (GMP) is <a href="#">Gefitinib</a> (HY-50895) produced by using GMP guidelines. GMP small molecules work appropriately as an auxiliary reagent for cell therapy manufacture. Gefitinib is a potent, selective and orally active EGFR tyrosine kinase inhibitor <sup>[1][2]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	IC50: 37 nM (Tyr1173 site, in NR6wtEGFR cells), 37 nM (Tyr992 site, in NR6wtEGFR cells) <sup>[1]</sup> .
<b>In Vitro</b>	Gefitinib (GMP) abolishes the effect of EGF-induced dedifferentiation of astrocytes into astrocyte precursor cells (APCs) <sup>[2]</sup> . Gefitinib (3 μM) can produce a subgroup of EGFR-mutant NSCLC cell lines (Gefitinib-resistant cells) that undergo cellular reprogramming, such as HCC827 cells <sup>[3]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### 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]. Liu X, Li C, et al. EGF signaling promotes the lineage conversion of astrocytes into oligodendrocytes. *Mol Med.* 2022 May 4;28(1):50.
- [3]. Ware KE, et al. A mechanism of resistance to gefitinib mediated by cellular reprogramming and the acquisition of an FGF2-FGFR1 autocrine growth loop. *Oncogenesis.* 2013 Mar 25;2(3):e39.

**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](mailto:tech@MedChemExpress.com)

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