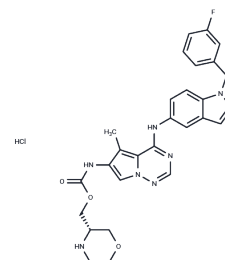


## BMS-599626 Hydrochloride

### Chemical Properties

CAS No. :	873837-23-1
Formula:	C <sub>27</sub> H <sub>28</sub> ClFN <sub>8</sub> O <sub>3</sub>
Molecular Weight:	567.01
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



### Biological Description

Description	BMS-599626 Hydrochloride (AC480 Hydrochloride) is an orally bioavailable inhibitor of the HER1, HER2, and HER4 tyrosine kinases (IC <sub>50</sub> = 22, 32, and 190 nM, respectively) with potential antineoplastic activity, inhibiting the proliferation of tumor cells that overexpress these receptors.
Targets(IC <sub>50</sub> )	EGFR,HER
In vitro	BMS-599626 Hydrochloride abrogates HER1 and HER2 signaling and inhibited the proliferation of tumor cell lines that are dependent on these receptors, with IC <sub>50</sub> s in the range of 0.24 to 1 μM. In GEO cells, HER1 phosphorylation is stimulated by treatment with EGF and is inhibited by BMS-599626 Hydrochloride (IC <sub>50</sub> =0.75 μM). There is also nearly complete inhibition of EGF-dependent MAPK (0.8 μM) but only partial inhibition of AKT signaling. The latter likely reflects the activation of AKT by multiple upstream signals. Treatment of N87 cells with BMS-599626 Hydrochloride leads to the inhibition of HER2 (0.38 μM), which is expressed to a high level because of gene amplification, as well as MAPK and AKT phosphorylation (0.35 μM for both) [1].
In vivo	BMS-599626 Hydrochloride given before and during irradiation improved the radioresponse of HN5 tumors in vivo [2].

### Solubility Information

Solubility	DMSO: 90 mg/mL (158.73 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (5.82 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	1.7636 mL	8.8182 mL	17.6364 mL
5 mM	0.3527 mL	1.7636 mL	3.5273 mL
10 mM	0.1764 mL	0.8818 mL	1.7636 mL
50 mM	0.0353 mL	0.1764 mL	0.3527 mL

---

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Wong TW, et al. Preclinical antitumor activity of BMS-599626, a pan-HER kinase inhibitor that inhibits HER1/HER2 homodimer and heterodimer signaling. *Clin Cancer Res.* 2006 Oct 15;12(20 Pt 1):6186-93.

Torres MA, et al. AC480, formerly BMS-599626, a pan Her inhibitor, enhances radiosensitivity and radioresponse of head and neck squamous cell carcinoma cells in vitro and in vivo. *Invest New Drugs.* 2011 Aug;29(4):554-61.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481