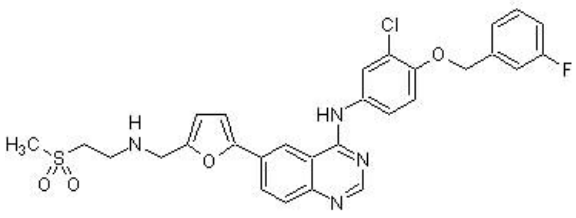
abcam

Product datasheet

Lapatinib, EGFR and HER2 tyrosine kinase inhibitor ab219408

Overview

Product name	Lapatinib, EGFR and HER2 tyrosine kinase inhibitor
Description	Cell-permeable, potent EGFR and HER2 tyrosine kinase inhibitor
Biological description	Cell-permeable, potent dual tyrosine kinase inhibitor of EGFR and HER2 (ERBB2) (IC_{50} values are 3 nM and 13 nM respectively). Also inhibits HER4 (IC_{50} = 347 nM). Reduces tyrosine phosphorylation of EGFR and HER2, and inhibits activation of Erk1/2 and AKT, downstream effectors of proliferation and cell survival, respectively. Inhibits tumor cell growth *in vitro* and in xenograft models for a variety of human tumors. Effective *in vivo* and is used in combination therapy to prevent or suppress cancers where these kinases are over-expressed, including breast cancer.
Purity	> 98%
CAS Number	231277-92-2
Chemical structure	

Properties

Chemical name	*N*-[3-Chloro-4-[(3-fluorophenyl)methoxy]phenyl]-6-[5-[(2-methylsulfonylethylamino)methyl]-2-furyl]quinazolin-4-amine
Molecular weight	581.06
Molecular formula	$C_{29}H_{26}ClFN_4O_4S$
PubChem identifier	208908
Storage instructions	Shipped at Room Temperature. Store at -20°C long term. Store under desiccating conditions.
Solubility overview	Soluble in DMSO to 100 mM
Handling	Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and

	prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour. Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.
SMILES	CS(=O)(=O)CCNCC1=CC=C(O1)C2=CC3=C(C=C2)N=CN=C3NC4=CC(=C(C=C4)OCC5=CC(=CC=C5)F)Cl
Source	Synthetic

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors
- Abcam biochemicals are novel compounds and we have not tested their biological activity in house. Please use the literature to identify how to use these products effectively. If you require further assistance please contact the scientific support team