Product Data Sheet

Product Name: Compound 56
Cat. No.: GC12837

Chemical Properties

Cas. No.	171745-13-4		
Chemical Name	N-(3-bromophenyl)-6,7-diethoxyquinazolin-4-amine		
SMILES	CCOC1=C(C=C2C(=C1)C(=NC=N2)NC3=CC(=CC=C3)Br)OCC		
Formula	$C_{18}H_{18}BrN_3O_2$	M.Wt	388.3
Solubility	≥ 16.95mg/mL in DMSO, ≥ 47.6 mg/mL in EtOH with ultrasonic	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Compound 56		

Background

Compound 56, 4-[(3-Bromophenyl)amino]-6,7-diethoxyquinazoline, is a potent and specific inhibitor of the tyrosine kinase of the epidermal growth factor receptor (EGFR) showing an IC_{50} of 0.006 nM. It competitively binds at the adenosine-triphosphate (ATP) site of EGFR. Compound 56 is capable of inhibiting the phosphorylation of EGF-dependent EGFR, suppressing the proliferation and clonogenicity of a wide panel of EGFR-overexpressing human cancer lines, and blocking EGF-mediated mitogenesis and oncogenic transformation in fibroblasts overexpressing EGFR. Besides inhibiting EGFR tyrosine kinase, It also inhibits the tyrosine kinase of human epidermal growth factor receptor 2 (HER2/*neu*) but with a less potency.

Reference

[1].Bridges AJ, Zhou H, Cody DR, Rewcastle GW, McMichael A, Showalter HD, Fry DW, Kraker AJ, and Denny WA. Tyrosine kinase inhibitors. 8. An unusually steep structure-

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

activity relationship for analogues of 4-(3-bromoanilino)-6,7-dimethoxyquinazoline (PD 153035), a potent inhibitor of the epidermal growth factor receptor.J Med Chem 1966; 39 (1): 267-276

[2].Monique Bos, Jhn Mendelsohn, Young-Mee Kim, Joan Albanell, David W. Fry, and Jose Baelga. PD153035, a tyrosine kinase inhibitor, prevents epidermal growth factor receptor activation and inhibits growth of cancer cells in a receptor number-dependent manner. Clin Cancer Res 1997;3:2099-2106