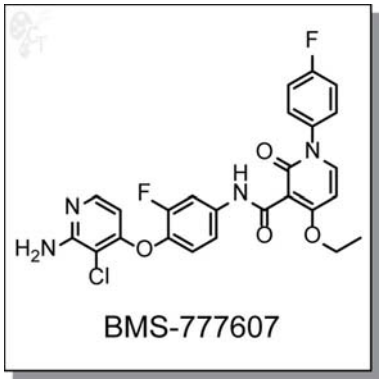
Product Specification Sheet

Product Name: BMS-777607

Catalog Number: C2777



Technical information:

Chemical Formula:	$C_{25}H_{19}ClF_2N_4O_4$
CAS #:	1196681-44-3
Molecular Weight:	512.89
Purity:	> 98%
Appearance:	White solid
Solubility:	Soluble in DMSO up to 75 mM
Chemical Name:	N-(4-(2-amino-3-chloropyridin-4-yloxy)-3-fluorophenyl)-4-ethoxy-1-(4-fluorophenyl)-2-oxo-1,2-dihydropyridine-3-carboxamide
Storage:	Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.
Shelf Life:	In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

Handling:

- To make 10 mM stock solution, add 0.195mL of DMSO for each mg of BMS-777607
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity:

BMS-777607 is an orally available, ATP-competitive Met kinase inhibitor with IC50 of 3.9 nM with additional activity against related kinases such as Axl and Ron at 1.1 nM, and 1.8 nM, respectively [1] BMS-777607 blocks autophosphorylation of c-Met at and IC50 of 20 nM and also blocks downstream activation of Akt and extracellular signal-regulated kinases. [2]

Because of its added ability to suppress HGF-stimulated cell migration and invasion in a dose-dependent fashion (IC50 < 100 nM), BMS-777607 is being considered as a potential for the treatment of advanced prostate cancer. [2]

Additional studies have shown that BMS-777607 suppressed c-Met-associated cellular funcdtions in PC-3 cells expressing constitutively activated c-Met; these findings suggest the possibility that in cancers where hyperactive c-Met is independent of HGF-mediated autocrine stimulation, targeting Met may be more effective than targeting the HGF ligand to impede cancer progression and metastasis. [3]

Reference:

1. Schroeder GM, et al. Discovery of N-(4-(2-amino-3-chloropyridin-4-yloxy)-3-fluorophenyl)-4-ethoxy-1-(4-fluorophenyl)-2-oxo-1,2-dihydropyridine-3-carboxamide (BMS-777607), a selective and orally efficacious inhibitor of the Met kinase superfamily. J Med Chem, 2009, 52(5), 1251-1254 Pubmed ID: 19260711
2. Dai et al., BMS-777607, a small-molecule met kinase inhibitor, suppresses hepatocyte growth factor-stimulated prostate cancer metastatic phenotype in vitro. Mol. Cancer Ther. 2010, 9, 1554-1561. Pubmed ID: 20515943
3. Dai et al., Constitutively active c-Met kinase in PC-3 cells is autocrine-independent and can be blocked by the Met kinase inhibitor BMS-777607. BMC Cancer 2012, 12, 198-206. Pubmed ID: 22639908

To reorder: http://www.cellagentech.com/BMS-777607/

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.