



Lestaurtinib (CEP701)

Data Sheet

Catalog Number:	MC11057	Product Type:	Small Molecule
Bio-Activity:	JAK2, FLT3, and TrkA tyrosine kinase inhibitor	CAS #:	111358-88-4
Research Categories:	Neuroscience, cancer		
Solubility:	Soluble in DMSO (up to 100 mg/ml) or in Ethanol (up to 20 mg/ml)	Molecular Formula:	C26H21N3O4
Purity:	> 98%	Molecular Weight:	439.46
Format:	Powder	Ship Temp:	Ambient
Storage:	-20°C		

Application Notes

Description/Data:

Potent and selective FLT3 inhibitor (IC₅₀= 2 nM) [1,2]. Inhibits RET and RET phosphorylation in medullary thyroid carcinoma cells [3]. Suppresses JAK2/STAT5 signaling and the proliferation of primary erythroid cells from patients with myeloproliferative disorders4. Potent Trk inhibitor [5]. Cell permeable.

References:

- 1) Levis et al. (2003), Novel FLT3 tyrosine kinase inhibitors; Expert Opin. Investig. Drugs, 12 1951
- 2) Chen et al. (2005), FLT3/ITD Mutation Signaling Includes Supression of SHP-1; J. Biol. Chem., 280 5361
- 3) Strock et al. (2003), CEP-701 and CEP-751 Inhibit Constitutively Activated RET Tyrosine Kinase Activity and Block Medullary Thyroid Carcinoma Cell Growth; Cancer Res., 63 5559
- 4) Hexner et al. (2008), Lestaurtinib (CEP701) is a JAK2 inhibitor that suppresses JAK2/STAT5 signaling and the proliferation of primary erythroid cells from patients with myeloproliferative disorders; Blood, 111 5663
- 5) Ruggeri et al. (1999), Role of neurotrophin-trk interactions in oncology: the anti-tumor efficacy of potent and selective trk tyrosine kinase inhibitors in pre-clinical tumor models; Curr. Med. Chem., 6 845

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