



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:	C ₂₆ H ₂₁ N ₃ O ₄
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 disorders. 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 Suppression 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

FOR RESEARCH USE ONLY

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.-V2/08/2012