Datasheet

Product overview

Name
Lestaurtinib
Cat No
HB1429
Short description
Potent, non-selective tyrosine kinase inhibitor
Biological description
Potent and non-selective tyrosine kinase inhibitor. Inhibits JAK2 and JAK3 (IC\textsubscript{50} values are 0.9 and 3 nM respectively). Also inhibits TrkA, TrkB, TrkC and FLT3 and prevents phosphorylation of STAT5. Shows anti-proliferative and anti-tumor actions.

Alternative names
CEP-701; KT-5555

Biological action
Inhibitor
Purity
>99%

Properties

Chemical name
\((9S,10S,12R)-2,3,9,10,11,12\text{-Hexahydr o-10-hydroxy-10-(hydroxymethyl)-9-methyl-9,12-epoxy-1H-diindolo[1,2,3-fg:3',2',1'-kl]pyrrolo[3,4-][1, 6]benzodia zocin-1-one}\)
Molecular Weight
439.46
Chemical structure

![Chemical structure of Lestaurtinib]

Molecular Formula
C\textsubscript{26}H\textsubscript{21}N\textsubscript{3}O\textsubscript{4}
CAS Number
111358-88-4
PubChem identifier
126565
SMILES
O=C(NC3)C1=C3C(C4=CC=CC=N2[C@@](O7)[C@](CO)8O)N2[C@](O7)[C@](CO)8O)[H]
InChiKey
UIARLYUEJFELEN-LROUJFHJSA-N

Storing and Using Your Product

Storage instructions
-20°C (desiccated)
Solubility overview
Soluble in DMSO (100mM) or ethanol (25mM)
Important
This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

References for Lestaurtinib
Lestaurtinib (CEP701) is a JAK2 inhibitor that suppresses JAK2/STAT5 signaling and the proliferation of primary erythroid cells from patients with myeloproliferative disorders.


PubMedID: 17984313

Effect of FLT3 inhibition on normal hematopoietic progenitor cells.


PubMedID: 17442779

The novel Trk receptor tyrosine kinase inhibitor CEP-701 (KT-5555) exhibits antitumor efficacy against human pancreatic carcinoma (Panc1) xenograft growth and in vivo invasiveness.


PubMedID: 10415871

Lestaurtinib enhances the antitumor efficacy of chemotherapy in murine xenograft models of neuroblastoma.


PubMedID: 20179224