Product Data Sheet

Larotinib

 Cat. No.:
 HY-153110

 CAS No.:
 1438072-11-7

 Molecular Formula:
 $C_{24}H_{26}CIFN_4O_4$

Molecular Weight: 488.94

Target: EGFR; IRAK; Btk

Pathway: JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Immunology/Inflammation

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

196 nM (IC₅₀)

BIOLOGICAL ACTIVITY

Description

Larotinib is a potent broad-spectrum and orally active tyrosine kinase inhibitor (TKI) with EGFR as the main target with an IC 50 of 0.6 nM^[1].

 IC50 & Target
 EGFRL861Q
 EGFRL858R
 EGFR (WT)
 EGFR T790M

 0.423 nM (IC50)
 0.563 nM (IC50)
 0.611 nM (IC50)
 45.2 nM (IC50)

102 nM (IC₅₀)

HER4 BLK IRAK1 BTK

167 nM (IC₅₀)

HER2 253 nM (IC₅₀)

84 nM (IC₅₀)

After daily administration of Larotinib mesylate, the no observed adverse effect level (NOAEL) is 10 mg/kg in Sprague-Dawley rats and the lowest observed adverse effect level (LOAEL) is 5 mg/kg in beagle dogs. The maximal tolerable doses (MTDs) are

20 and 25 mg/kg in Sprague-Dawley rats and beagle dogs, respectively $^{[1]}$.

Larotinib mesylate shows dose-dependent antitumor results and a tumor-inhibiting rate exceeding 60% at 18 mg/kg in a tumor-bearing mice model (data not published)^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

In Vivo

[1]. Liu J, et al. Phase I Trial to Evaluate the Tolerance, Pharmacokinetics and Efficacy of the Broad-Spectrum ErbB Family Inhibitor Larotinib Mesylate in Patients With Advanced Solid Tumors. Front Pharmacol. 2021 Feb 18;12:636324.

Caution: Product has not been fully validated for medical applications. For research use only.

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