Product Datasheet

Risvodetinib

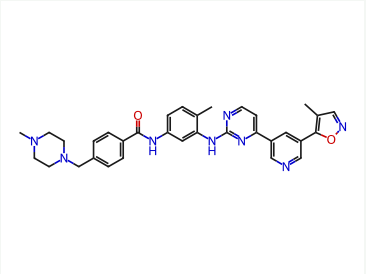
Catalog No. **BP-02289** · CAS **2031185-00-7** · Form **free base** · Physical state **solid** · Color **Light yellow to yellow** · Version **1.0** · Revision **2026-11-04**

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Target	Research area
c-Met/HGFR; Bcr-Abl	**Neurological Disease; Cancer**

Molecular formula	$C_{33}H_{34}N_8O_2$
Molecular weight	**574.6755**

STRUCTURE



DESCRIPTION

Risvodetinib (IkT-148009) is an orally active, selective and brain-penetrant protein tyrosine kinase inhibitor, displaying excellent target efficacy against c-Abl1, c-Abl2/Arg with IC50 values of 33 nM, 14 nM, respectively. Risvodetinib suppresses c-Abl activation and substantially protects dopaminergic neurons from degeneration in mouse models of both inherited and sporadic Parkinson’s disease (PD), which is promising for research in the field of PD .

BIOLOGICAL ACTIVITY

In Vivo
Risvodetinib (100 mg/kg, p.o., daily for 10 days) performs robust functional rescue and significant protection of dopaminergic (DA) neurons in the MPTP acute neurotoxicity mouse model.
Risvodetinib (50 or 100 mg/kg, p.o., daily for 8 or 20 weeks) recovers nigrostriatal neurodegeneration and reduces phosphorylated α-synuclein in the mouse model of inherited PD.
Risvodetinib (100 mg/kg, p.o., once a day, 5 times per week for 6 months) has an effective neuroprotection and reduces α-synuclein pathology in mouse model of sporadic PD.

SOLUBILITY

Soluble in DMSO : 100 mg/mL

REFERENCES

[1].Karuppagounder SS, et al. The c-Abl inhibitor IkT-148009 suppresses neurodegeneration in mouse models of heritable and sporadic Parkinson's disease. Sci Transl Med. 2023 Jan 18;15(679):eabp9352.

[2].Werner MH, et al. Preparation of N-[3-[[4-(2-pyridyl)pyrimidin-2-yl]amino]phenyl]-4-[(piperazin-1-yl)methyl]benzamide derivatives as inhibitors of kinases: World Intellectual Property Organization, WO2016172528.

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[3].WHO Drug Information-World Health Organization (WHO).

[4].Werner MH, Olanow CW. Parkinson's Disease Modification Through Abl Kinase Inhibition: An Opportunity[J]. Mov Disord. 2022 Jan;37(1):6-15.
