

Product Datasheet

OPB-171775

Catalog No. **BP-00882** · CAS **2131210-15-4** · Form **free base** · Physical state **other** · Color **White to off-white** · Version **1.0** · Revision **2026-09-04**

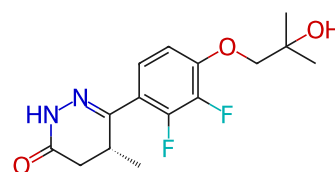
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Target Molecular Glues; Phosphodiesterase (PDE)	Research area Cancer
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Molecular formula **C₁₅H₁₈F₂N₂O₃**

Molecular weight **312.3118**

STRUCTURE



DESCRIPTION

OPB-171775 is a novel anticancer agent and demonstrated its potent efficacy against GISTs. OPB-171775 acts as a molecular glue between PDE3A and SLFN12 and exerts anticancer activity through the RNase activity of SLFN12.

BIOLOGICAL ACTIVITY

In Vitro

OPB-171775 (0.01-100 nM) shows a delayed onset of cytotoxicity compared to Imatinib (HY-15463) and induces significant cell death in SLFN12-expressing GIST-T1 cells.

In Vivo

OPB-171775 (0.1 mg/kg; p.o.; once daily; 21 days) reduces tumor volume and shows significant efficacy regardless of KIT mutation status in female NOD.CB17-Prkdcscid/J mice bearing patient-derived xenograft (PDX) models of gastrointestinal stromal tumors (GIST).

OPB-171775 (0.03 mg/kg; p.o.; once daily; 21 days) combined Imatinib can lead to complete tumor regression in all mice bearing GS11353 PDX tumors.

SOLUBILITY

Soluble in DMSO

REFERENCES

[1]. Takaki, Emiri O et al. "A PDE3A-SLFN12 Molecular Glue Exhibits Significant Antitumor Activity in TKI-Resistant Gastrointestinal Stromal Tumors." Clinical cancer research : an official journal of the American Association for Cancer Research vol. 30,16 (2024): 3603-3621. doi:10.1158/1078-0432.CCR-24-0096

Lot CoA and SDS are separate documents.