Catalog # 10-4174

Idasanutlin

CAS# 1229705-06-9

4-[[(2*R*,3*S*,4*R*,5*S*)-3-(3-Chloro-2-fluorophenyl)-4-(4-chloro-2-fluorophenyl)-4-cyano-5-(2,2-dimethylpropyl)pyrrolidine-2-carbonyl]amino]-3-methoxybenzoic acid; RG7388

Lot # FBS4056

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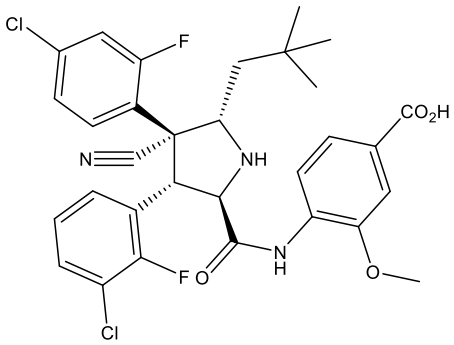

Idasanutlin is a potent (IC_{50} = 6 nM) and selective inhibitor of MDM2, the primary negative regulator of p53.[1] It blocks the p53-MDM2 interaction activating the p53 pathway leading to cell cycle arrest and apoptosis. Idasanutlin has displayed efficacy in the treatment of multiple cancers alone and in combination with other chemotherapeutics.[2-6]

1) Ding *et al*. (2013), *Discovery of RG7388, a potent and selective p53-MDM2 inhibitor in clinical development*; J. Med. Chem. **56** 5979
2) Cui *et al*. (2020), *Combination of metformin and RG7388 enhances inhibition of growth and induction of apoptosis of ovarian cancer cells through the PI3K/AKT/mTOR pathway*; Biochem. Biophys. Res. Commun. **533** 665
3) Vernooij *et al*. (2021), *High-Throughput Screening Identifies Idasanutlin as a Resinsitizing Drug for Venetoclax-Resistant Neuroblastoma Cells*; Mol. Cancer Ther. **20** 1161
4) Wang *et al*. (2022), *Genome-wide CROSPR/Cas9 screening for therapeutic targets in NSCLC carrying wild-type TP53 and receptor tyrosine kinase genes*; Clin. Transl. Med. **12** e882
5) Johansson *et al*. (2023), *Idasanutlin and navitoclax induce synergistic apoptotic cell death in T-cell acute Lymphoblastic leukemia*; Leukemia **37** 2356
6) Neubauer *et al*. (2025), *Pharmacological Inhibition of MDM2 Induces Apoptosis in p53-Mutated Triple-Negative Breast Cancer*; Int. J. Mol. Sci. **26** 1078

PHYSICAL DATA

Molecular Weight:	616.49
Molecular Formula:	$C_{31}H_{29}Cl_2F_2N_3O_4$
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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