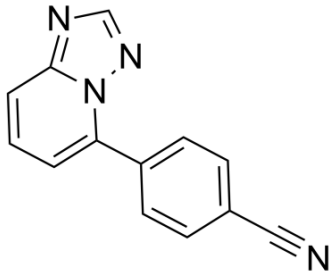
PHD-1-IN-1

Cat. No.:	HY-136300
CAS No.:	2009343-14-8
Molecular Formula:	$C_{13}H_8N_4$
Molecular Weight:	220.23
Target:	HIF/HIF Prolyl-Hydroxylase
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	PHD-1-IN-1 is an orally active and potent HIF prolylhydroxylase domain-1 (PHD-1) inhibitor with an IC_{50} of 0.034 μM. PHD-1-IN-1 has a unique monodentate binding interaction with the active site Fe^{2+} ion and induces the formation of an "Arg367-out" pocket[1].
IC_{50} & Target	IC50: 0.034 μM (PHD-1)[1]
In Vivo	PHD-1-IN-1 (compound 17; 3 mg/kg of p.o. or 0.5 mg/kg of i.v.) has a C_{max} of 0.8 μM, a AUC of 176 ng•h/mL, $K_{p,uu}$ of 1.11 and B/P of 0.95[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male C57BL6 mice[1]
Dosage:	3 mg/kg (p.o.) or 0.5 mg/kg (i.v.) (Pharmacokinetic Analysis)
Administration:	PO or IV
Result:	Had a C_{max} of 0.8 μM, a AUC of 176 ng•h/mL, $K_{p,uu}$ of 1.11 and B/P of 0.95.

REFERENCES

[1]. Ahmed S, et al. 1,2,4-Triazolo-[1,5-a]pyridine HIF Prolylhydroxylase Domain-1 (PHD-1) Inhibitors With a Novel Monodentate Binding Interaction. J Med Chem. 2017 Jul 13;60(13):5663-5672.

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