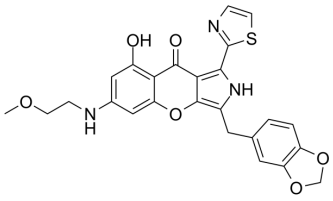
PDE5-IN-2

Cat. No.:	HY-112704
CAS No.:	2244517-61-9
Molecular Formula:	$C_{25}H_{21}N_3O_6S$
Molecular Weight:	491.52
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	PDE5-IN-2 is a potent, highly selective, and orally active PDE5 inhibitor, with an IC_{50} of 0.31 nM, less potently inhibits PDE2A, PDE10A, PDE4D2, and PDE6C, with IC_{50}s of 106, 46, 43, 1.2 nM, respectively. Anti-pulmonary arterial hypertension activity[1].
IC_{50} & Target	PDE5A1 0.31 nM (IC_{50}) PDE6C 1.2 nM (IC_{50}) PDE4D2 43 nM (IC_{50}) PDE10A 46 nM (IC_{50}) PDE2A 106 nM (IC_{50})
In Vitro	PDE5-IN-2 (Compound 3) has at least 1000-fold selectivity over PDE1B, PDE3A, PDE7A1, PDE8A1, and PDE9A2 (IC_{50}s, >32 000 nM)[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	PDE5-IN-2 (1.25 mg/kg, p.o.) shows anti-pulmonary arterial hypertension activity, decreases mean pulmonary artery pressure in rats[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Wu D, et al. Optimization of Chromeno[2,3- c]pyrrol-9(2 H)-ones as Highly Potent, Selective, and Orally Bioavailable PDE5 Inhibitors: Structure-Activity Relationship, X-ray Crystal Structure, and Pharmacodynamic Effect on Pulmonary Arterial Hypertension. J Med Chem. 2018 Sep 27;61(18):8468-8473.

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