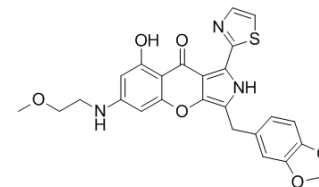


## PDE5-IN-2

Cat. No.:	HY-112704
CAS No.:	2244517-61-9
Molecular Formula:	C <sub>25</sub> H <sub>21</sub> N <sub>3</sub> O <sub>6</sub> S
Molecular Weight:	491.52
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the COA.



### BIOLOGICAL ACTIVITY

<b>Description</b>	PDE5-IN-2 is a potent, highly selective, and orally active PDE5 inhibitor, with an IC <sub>50</sub> of 0.31 nM, less potently inhibits PDE2A, PDE10A, PDE4D2, and PDE6C, with IC <sub>50</sub> s of 106, 46, 43, 1.2 nM, respectively. Anti-pulmonary arterial hypertension activity <sup>[1]</sup> .			
<b>IC<sub>50</sub> &amp; Target</b>	PDE5A1 0.31 nM (IC <sub>50</sub> )	PDE6C 1.2 nM (IC <sub>50</sub> )	PDE4D2 43 nM (IC <sub>50</sub> )	PDE10A 46 nM (IC <sub>50</sub> )
	PDE2A 106 nM (IC <sub>50</sub> )			
<b>In Vitro</b>	PDE5-IN-2 (Compound 3) has at least 1000-fold selectivity over PDE1B, PDE3A, PDE7A1, PDE8A1, and PDE9A2 (IC <sub>50</sub> s, >32 000 nM) <sup>[1]</sup> .			
<b>In Vivo</b>	PDE5-IN-2 (1.25 mg/kg, p.o.) shows anti-pulmonary arterial hypertension activity, decreases mean pulmonary artery pressure in rats <sup>[1]</sup> .			

### 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.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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