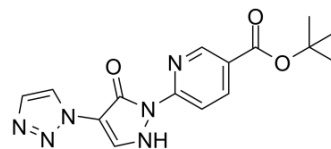


## IOX4

Cat. No.:	HY-120110		
CAS No.:	1154097-71-8		
Molecular Formula:	C <sub>15</sub> H <sub>16</sub> N <sub>6</sub> O <sub>3</sub>		
Molecular Weight:	328.33		
Target:	HIF/HIF Prolyl-Hydroxylase		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 83.33 mg/mL (253.80 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.0457 mL	15.2286 mL	30.4572 mL
		5 mM	0.6091 mL	3.0457 mL	6.0914 mL
10 mM		0.3046 mL	1.5229 mL	3.0457 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.08 mg/mL (6.34 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (6.34 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.08 mg/mL (6.34 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

Description	IOX4 is a selective HIF prolyl-hydroxylase 2 (PHD2) inhibitor with an IC <sub>50</sub> value of 1.6 nM, induces HIFα in cells and in wildtype mice with marked induction in the brain tissue. IOX4 competes with and displaces 2-oxoglutarate (2OG) at the active site of PHD2 <sup>[1]</sup> .
IC <sub>50</sub> & Target	IC <sub>50</sub> : 1.6 nM (PHD2) <sup>[1]</sup>
In Vitro	IOX4 (1-100 μM; 5 hours) determines the EC <sub>50</sub> s for HIF1α induction are 114 μM, 86 μM and 49.5 μM in MCF-7, Hep3B and

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U2OS, respectively<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Chan MC, et al. Potent and Selective Triazole-Based Inhibitors of the Hypoxia-Inducible Factor Prolyl-Hydroxylases with Activity in the Murine Brain. PLoS One. 2015 Jul 6;10(7):e0132004.

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

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