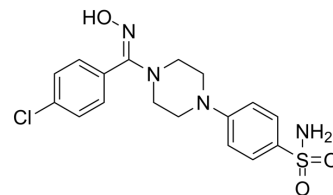


## hCAIX-IN-18

Cat. No.:	HY-149301		
CAS No.:	2925261-76-1		
Molecular Formula:	C <sub>17</sub> H <sub>19</sub> ClN <sub>4</sub> O <sub>3</sub> S		
Molecular Weight:	394.88		
Target:	Carbonic Anhydrase		
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 : 50 mg/mL (126.62 mM; ultrasonic and warming and heat to 80°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.5324 mL	12.6621 mL	25.3242 mL
		5 mM	0.5065 mL	2.5324 mL	5.0648 mL
10 mM		0.2532 mL	1.2662 mL	2.5324 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 5 mg/mL (12.66 mM); Clear solution; Need ultrasonic				
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 5 mg/mL (12.66 mM); Clear solution; Need ultrasonic				

### BIOLOGICAL ACTIVITY

Description	hCAIX-IN-18 (compound 30) is an inhibitor of carbonic anhydrase (CA), with K <sub>i</sub> s of 3.5 nM, 9.4 nM, 43.0 nM and 8.2 nM for hCA I, hCAII, hCAIX, hCAXII, respectively. hCAIX-IN-18 can be used for cancer research <sup>[1]</sup> .			
IC <sub>50</sub> & Target	hCA I 3.5 nM (IC <sub>50</sub> )	hCA II 9.4 nM (IC <sub>50</sub> )	hCA IX 43 nM (IC <sub>50</sub> )	hCA XII 8.2 nM (IC <sub>50</sub> )

### REFERENCES

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[1]. 1. Peerzada MN, et al. Discovery of Novel Hydroxyimine-Tethered Benzenesulfonamides as Potential Human Carbonic Anhydrase IX/XII Inhibitors. ACS Med Chem Lett. 2023 May 8;14(6):810-819.

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

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