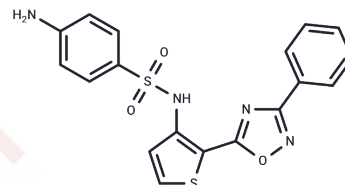


hCAIX-IN-12

Chemical Properties

CAS No. :	2414598-85-7
Formula:	C ₁₈ H ₁₄ N ₄ O ₃ S ₂
Molecular Weight:	398.46
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	hCAIX-IN-12 is an effective hCAIX inhibitor, IC ₅₀ for CAIX and CAII is 0.74 and 10.78 μM, respectively. hCAIX-IN-12 inhibits cell proliferation and induces apoptosis. HCAIX-IN-12 can increase the generation of ROS. HCAIX-IN-12 has research potential in colorectal cancer (CRC).
Targets(IC ₅₀)	Apoptosis,Others,Reactive Oxygen Species,Carbonic Anhydrase
In vitro	hCAIX-IN-12 (compound OX27) demonstrates antiproliferative effects on HCT-116 cells with an IC ₅₀ value of 6.0 μM [1], significantly reducing CAIX expression under hypoxic conditions [1]. It inhibits HCT-116 cell colony formation and migration in a dose- and time-dependent manner [1], triggers apoptosis, and increases reactive oxygen species (ROS) levels at 6.0 μM after 24 and 48 hours [1]. Additionally, hCAIX-IN-12 disrupts the cell cycle, decreasing the G ₀ /G ₁ phase population (65.21%) and accumulating cells in the G ₂ /M phase (18.95%) [1]. It exhibits high binding affinity to CAIX and significant affinity to human serum albumin (HSA) [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5097 mL	12.5483 mL	25.0966 mL
5 mM	0.5019 mL	2.5097 mL	5.0193 mL
10 mM	0.251 mL	1.2548 mL	2.5097 mL
50 mM	0.0502 mL	0.251 mL	0.5019 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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