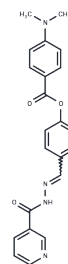


hCAI/II-IN-8

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 3036136-18-9 |
| Formula: | C ₂₂ H ₂₀ N ₄ O ₃ |
| Molecular Weight: | 388.42 |
| 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 | hCAI/II-IN-8 (Compound 8) is a hydrazone derivative originating from 4-hydroxybenzaldehyde. It primarily inhibits human carbonic anhydrase isoenzymes I (hCA I) and II (hCA II) with IC ₅₀ values of 21.35 ± 0.39 nM for hCA I and 7.12 ± 0.12 nM for hCA II. It also exhibits inhibitory effects on AChE and BChE, with IC ₅₀ values of 46.27 ± 0.75 nM and 43.38 ± 0.83 nM, respectively. |
| Targets(IC ₅₀) | Carbonic Anhydrase, Cholinesterase (ChE) |
| In vitro | hCAI/II-IN-8 effectively inhibits activity by forming multiple hydrogen bonds and hydrophobic interactions with key residues in hCA I and hCA II. Its binding with the enzymes is highly stable. |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 2.5745 mL | 12.8727 mL | 25.7453 mL |
| 5 mM | 0.5149 mL | 2.5745 mL | 5.1491 mL |
| 10 mM | 0.2575 mL | 1.2873 mL | 2.5745 mL |
| 50 mM | 0.0515 mL | 0.2575 mL | 0.5149 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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