GYY4137

Catalog No.C14547 Batch:C1454703

Product Datasheet

Technical Data

Formula	$C_{11}H_{16}NO_2PS_2.C_4H_9NO$					
Molecular Weight	376.47	**CAS No.**	106740-09-4			
Solubility (25°C)*	In vitro	DMSO	75 mg/mL (199.21 mM)			
		Water	25 mg/mL (66.4 mM)			
		Ethanol	Insoluble			
	In vivo (Add solvents to the product individually and in order)	Oral Administration	Homogeneous suspension	CMC-NA	≥5mg/ml	Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml.

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Biological Activity

Description	GYY4137 is a novel, water-soluble **hydrogen sulfide (H2S)**–releasing molecule with vasodilator and antihypertensive activity. GYY4137 shows potent anti-hepatocellular carcinoma activity through blocking the STAT3 pathway. GYY4137 also shows anti-inflammatory activity.**Stock solutions should be stored under nitrogen, sealed.**
Targets	STAT3 [2]
In vitro	GYY4137 (400-800 μM) causes concentration-dependent killing of seven different human cancer cell lines (HeLa, HCT-116, Hep G2, HL-60, MCF-7, MV4-11 and U2OS) but does not affect survival of normal human lung fibroblasts (IMR90, WI-38).[4]
In vivo	In the complete Freund's adjuvant (CFA)-treated mouse, GYY4137 injected 1 hr prior to CFA increased knee joint swelling while an anti-inflammatory effect, as demonstrated by reduced synovial fluid myeloperoxidase (MPO) and N-acetyl-β-D-glucosaminidase (NAG) activity and decreased TNF-α, IL-1β, IL-6 and IL-8 concentration, is apparent when this compound was injected 6 hrs after CFA.[3]

Protocol (from reference)

Cell Assay:[4]

- **Cell lines**
  HeLa, HCT-116, Hep G2, HL-60, MCF-7, MV4-11 and U2OS
- **Concentrations**
  400 μM, 800 μM
- **Incubation Time**
  5 days, 8 days
- **Method**
  Live cell incubated with GYY4137(400 or 800 μM) are collected after 5 days and counted in triplicate after staining with trypan blue using a haemocytometer for cell viability assay. The generation of H2S from this compound is determined in aliquots (100 μl) withdrawn at timed intervals (up to 7 days) from cultured MCF-7 cells maintained in Dulbecco's modified Eagle's medium.

Animal Study:[3]

- **Animal Models**
  Complete Freund
- **Dosages**
  50 mg/kg
- **Administration**
  i.p.

References

https://pubmed.ncbi.nlm.nih.gov/18443240/ https://pubmed.ncbi.nlm.nih.gov/24535538/ https://pubmed.ncbi.nlm.nih.gov/23356870/

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RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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