Product Datasheet

Technical Data

Formula	$C_{25}H_{31}N_5O_4$					
Molecular Weight	465.54	**CAS No.**	867164-40-7			
Solubility (25°C)*	In vitro	DMSO	93 mg/mL (199.76 mM)			
		Ethanol	5 mg/mL (10.74 mM)			
		Water	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.
		Injection	Clear solution	2%DMSO [1]→ 20%PEG300 [2]→ 5%Tween80 [3]→ 73%ddH2O Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	0.900mg/ml (1.93mM)	Taking the 1 mL working solution as an example, add 20 μL of 45 mg/ml clarified DMSO stock solution to 200 μL of PEG300, mix evenly to clarify it; add 50 μL of Tween80 to the above system, mix evenly to clarify; then continue to add 730 μL of ddH2O to adjust the volume to 1 mL. The mixed solution should be used immediately for optimal results.

* <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	TRC051384 is an inducer of **heat shock protein 70 (HSP70)** and potent anti-inflammatory agent.
Targets	HSP70 [1]
In vitro	TRC051384 is a compound that induces HSPA1A/B expression and subsequent Hsp70 production via heat shock factor-1 (HSF1) activation[2]. This compound increases HSP70B mRNA expression in both HeLa and primary mixed neuronal cells. Induction of HSP70 by this chemical involves HSF1 activation and results in elevated chaperone and anti-inflammatory activity[1] .
In vivo	Treatment with TRC051384 significantly reduces stroke associated neuronal injury and disability in a rat model of transient ischemic stroke even when administered 8 hours post onset of ischemia. This compound significantly reduces infarct size, brain edema and improves neurological deficit[1]. It delays thrombus formation in WT mice, the tail bleeding time still being unaltered[2].

Protocol (from reference)

Cell Assay:[1]

- **Cell lines**
  HeLa cell line (CCL-2, ATCC)
- **Concentrations**
  6.25 and 12.5 μM
- **Incubation Time**
  4 h
- **Method**
  Induction of HSP70B mRNA is carried out by treatment of cells with TRC051384 (6.25 and 12.5 μM) for 4 hours duration for HeLa cell line and total RNA is isolated. For all RNA samples, cDNAs are synthesized and expression of HSP70B mRNA along with expression of 18S rRNA is monitored by real-time PCR employing ABI 7000 system.

Animal Study:[1]

- **Animal Models**
  Sprague Dawley male rats
- **Dosages**
  4.5 mg/kg and 9 mg/kg
- **Administration**
  i.p.

References

https://pubmed.ncbi.nlm.nih.gov/21167846/ https://pubmed.ncbi.nlm.nih.gov/26976620/

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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