BAY 41-2272

Catalog No.C13202 Batch:C1320203

Product Datasheet

Technical Data

Formula	$C_{20}H_{17}FN_6$					
Molecular Weight	360.39	**CAS No.**	256376-24-6			
Solubility (25°C)*	In vitro	DMSO	35 mg/mL (97.11 mM)			
		Ethanol	4 mg/mL (11.09 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	5%DMSO [1] → 40%PEG300 [2] → 5%Tween80 [3] → 50%ddH2O Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	0.875mg/ml (2.43mM)	Taking the 1 mL working solution as an example, add 50 μL of 17.5 mg/ml clarified DMSO stock solution to 400 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 500 μL of ddH2O to adjust the volume to 1 mL. The mixed solution should be used immediately for optimal results.
			Clear solution	5% DMSO [1] → 95% Corn oil Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing.	0.580mg/ml (1.61mM)	Taking the 1 mL working solution as an example, add 50 μL of 11.6 mg/ml clear DMSO stock solution to 950 μL of corn oil and mix evenly. 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

Concentration \ Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.7748 mL	13.8739 mL	27.7477 mL
5 mM	0.5550 mL	2.7748 mL	5.5495 mL
10 mM	0.2775 mL	1.3874 mL	2.7748 mL
50 mM	0.0555 mL	0.2775 mL	0.5550 mL

Biological Activity

Description	BAY 41-2272 is a direct and NO-independent soluble **guanylate cyclase** (sGC) stimulator.
Targets	Guanylate cyclase [1]
In vitro	In vitro, BAY 41-2272 results in concentration dependent relaxation of human and rabbit cavernosum with EC50 of 489.1 nM and 406.3 nM, respectively. [3]
In vivo	In female spontaneously hypertensive rats, BAY 41-2272 (10 mg/kg, p.o.) shows antiplatelet effect, strongly decreases blood pressure and increases survival. [2] In C. albicans-infected mice, this compound (10 mg/kg, i.p.) markedly increases macrophage-dependent cell influx to the peritoneum in addition to macrophage functions, and reduces the death rate. [4] In db/db-/- type II diabetic and obese mice, this chemical improves impaired corpus cavernosum (CC) relaxation. [5]

Protocol (from reference)

Animal Study:[2]

- **Animal Models**
  Female spontaneously hypertensive rats
- **Dosages**
  1 mg/kg
- **Administration**
  p.o.

References

https://pubmed.ncbi.nlm.nih.gov/11801189/ https://pubmed.ncbi.nlm.nih.gov/11242081/ https://pubmed.ncbi.nlm.nih.gov/12544359/

+ Expand

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.

EU Headquarters
Gajeva ulica 28, HR-10000 Zagreb, Croatia

US Headquarters
12222 Merit Dr STE 130 Dallas, Texas, 75251

UK Headquarters
121 ABILITY HOUSE, BROOKER ROAD, EN9 1JH, ESSEX

Orders: Sales@capsidbio.com
Enquiries: info@capsidbio.com
www.capsidbio.com