Product Datasheet

Technical Data

Formula	$C_{17}H_{15}BrN_4O_2S$					
Molecular Weight	419.30	**CAS No.**	694522-87-7			
Solubility (25°C)*	In vitro	DMSO	21 mg/mL (50.08 mM)			
		Water	Insoluble			
		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.
		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.	0.500mg/ml (1.19mM)	Taking the 1 mL working solution as an example, add 50 μL of 10 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.	1.050mg/ml (2.50mM)	Taking the 1 mL working solution as an example, add 50 μL of 21 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	2.3849 mL	11.9246 mL	23.8493 mL
5 mM	0.4770 mL	2.3849 mL	4.7699 mL
10 mM	0.2385 mL	1.1925 mL	2.3849 mL
50 mM	0.0477 mL	0.2385 mL	0.4770 mL

Biological Activity

Description	(E/Z)-GO289 potently and selectively inhibits **casein kinase 2 (CK2)** at an IC50 of 7 nM in vitro kinase assay.
Targets	CK2 [1] (in vitro kinase assay) 7 nM
In vitro	(E/Z)-GO289 has an effectively and selectively inhibition of casein kinase-2 (CK2), especially on CK2α and CK2α′, thus regulate the phosphorylation of clock protein. .^{[1]}

Protocol (from reference)

Cell Assay:
^{[1]}

- **Cell lines**
  Bmal1-dLuc U2OS cells
- **Concentrations**
  50 μM
- **Incubation Time**
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- **Method**
  Agarose-conjugated GO457 was incubated with a U2OS cell lysate in the presence of 0 and 50 μM GO289. Affinity-purified proteins were analyzed by LC-MS/MS. The affinity-purified proteins from a U2OS cell lysate or recombinant CK2 were analyzed by immunoblotting with specific antibodies.

References

https://pubmed.ncbi.nlm.nih.gov/30746467/

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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