Insulin (human)

Catalog No.C12342 Batch:C1234203

Product Datasheet

Technical Data

Formula	$C_{257}H_{383}N_{65}O_{77}S_6$		
Molecular Weight	5807.57	**CAS No.**	11061-68-0
Solubility (25°C)*	In vitro	DMSO	100 mg/mL (17.21 mM)
		Water	Insoluble
		Ethanol	Insoluble

* <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	0.1722 mL	0.8609 mL	1.7219 mL
5 mM	0.0344 mL	0.1722 mL	0.3444 mL
10 mM	0.0172 mL	0.0861 mL	0.1722 mL
50 mM	-	-	-

Biological Activity

Description	Insulin (human) (Insulin regular) is a polypeptide hormone that regulates the level of glucose. Insulin is commonly used to treat hyperglycemia in patients with diabetes. Potency: 29 units/mg.
In vitro	Insulin (human), an inducer of AKT phosphorylation, reduces the levels of LC3-II, VP1 by the AKT-AMPKMAPK-MTOR pathway in SVV-infected cells.[2]

Protocol (from reference)

Cell Assay:[2]

- **Cell lines**
  BHK-21 cells and PK-15 cells
- **Concentrations**
  200 ng/ml
- **Incubation Time**
  1 h
- **Method**
  BHK-21 cells and PK-15 cells are grown to 80% confluence in well plates and pretreated with insulin (human) (200 ng/ml) for 1 h. The pretreated cells are then infected with SVV for 1 h. The cells are then washed with phosphate-buffered saline (PBS) and incubated with new medium containing the same chemical reagents. Cell viability in the presence of this compound is tested.

References

https://pubmed.ncbi.nlm.nih.gov/26537234/

https://pubmed.ncbi.nlm.nih.gov/34757844/

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