Insulin (human)

Cat. No.: HY-P0035

CAS No.: 11061-68-0

Molecular Formula: $C_{257}H_{383}N_{65}O_{77}S_6$

Molecular Weight: 5807.57

Target: Insulin Receptor

Pathway: Protein Tyrosine Kinase/RTK

Storage: Sealed storage, away from moisture and light

Powder -80°C 2 years

-20°C 1 year

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)

Insulin (human)

SOLVENT & SOLUBILITY

In Vitro

H_2O : 7.69 mg/mL (1.32 mM; ultrasonic and adjust pH to 2 with HCl)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	0.1722 mL	0.8609 mL	1.7219 mL
	5 mM	---	---	---
	10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Insulin(human)solution in dilute hydrochloric acid(pH:2~3)is diluted with PBS.(clear)

BIOLOGICAL ACTIVITY

Description

Insulin (human) is a polypeptide hormone that regulates the level of glucose.

In Vitro

The human insulin gene contains two intervening sequences, one is within the region transcribed into the 5'-untranslated segment of the mRNA and the other interrupts the C-peptide encoding region[1]. Human insulin is commonly used to treat type 2 diabetes[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cancer Commun (Lond). 2021 Jul;41(7):576-595.

- Theranostics. 2022 Nov 7;12(18):7699-7716.
- Theranostics. 2020 Mar 26;10(10):4705-4719.
- Cardiovasc Res. 2019 Aug 1;115(10):1533-1545.
- Clin Transl Med. 2022 Jul;12(7):e989.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Bell GI, et al. Sequence of the human insulin gene. Nature. 1980 Mar 6;284(5751):26-32.

[2]. Tseng CH, et al. Prolonged use of human insulin increases breast cancer risk in Taiwanese women with type 2 diabetes. BMC Cancer. 2015 Nov 4;15:846.

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