Product Data Sheet

Insulin(cattle/bovine), purity>95%

Cat. No.: HY-P1156A CAS No.: 11070-73-8

Molecular Formula: $\mathsf{C_{254}H_{377}N_{65}O_{75}S_{6}}$

Molecular Weight: 5733.49

Sequence: Phe-Val-Asn-Gln-His-Leu-Cys-Gly-Ser-His-Leu-Val-Glu-Ala-Leu-Tyr-Leu-Val-Cys-Gly-Gl

> u-Arg-Gly-Phe-Phe-Tyr-Thr-Pro-Lys-Ala. Gly-Ile-Val-Glu-Gln-Cys-Cys-Ala-Ser-Val-Cys-S er-Leu-Tyr-Gln-Leu-Glu-Asn-Tyr-Cys-Asn (Disulfide bridge: Cys7-Cys7', Cys19-Cys20',

Cys6'-Cys11')

Sequence Shortening: FVNQHLCGSHLVEALYLVCGERGFFYTPKA. GIVEQCCASVCSLYQLENYCN (Disulfide bridge

: Cys7-Cys7', Cys19-Cys20', Cys6'-Cys11')

Insulin Receptor Target:

Pathway: Protein Tyrosine Kinase/RTK

Storage: Sealed storage, away from moisture

> Powder -80°C 2 years

-20°C 1 year

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

BIOLOGICAL ACTIVITY

Description	Insulin cattle is a two-chain polypeptide hormone produced in vivo in the pancreatic β cells. Insulin cattle has often been used as growth supplement in culturing cells.
In Vitro	Insulin cattle is the two-chain polypeptide hormone produced by the β -cells of pancreatic islets. The α and β chains are joined by two interchain disulfide bonds. The α chain contains an intrachain disulfide bond. Insulin regulates glucose uptake into muscle and fat cells by recruiting membrane glucose transporter Glut-4 to cell surface. Insulin cattle has often been used as growth supplement in culturing cells at the concentration ranging from 1 to 10 µg/mL of medium ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Genome Biol. 2023 Mar 29;24(1):61.
- Stem Cells Int. 2022 Sep 20;2022:2760899.
- J Proteomics. 2023 Mar 24;104889.
- Adipocyte. 2022 Dec;11(1):562-571.
- SSRN. 2022.

See more customer validations on www.MedChemExpress.com

REFERENCES

1]. Yousefi R, et al. Aspirin-med	liated acetylation induces struc	ctural alteration and aggregation	of bovine pancreaticinsulin. J Biomol Struc	et Dyn. 2016;34(2):362-75.
	Caution: Product has not	heen fully validated for media	cal applications. For research use only	,
	Tel: 609-228-6898 Address: 1 D	Fax: 609-228-5909 eer Park Dr, Suite Q, Monmout	E-mail: tech@MedChemExpress.con h Junction, NJ 08852, USA	1

Page 2 of 2 www.MedChemExpress.com