

Recombinant human Insulin protein (Active, Yeast)

Catalog Number: bs-48093P

Species: Human

AA Seq: α chain: G-I-V-E-Q-C-C-T-S-I-C-S-L-Y-Q-L-E-N-Y-C-N β chain: F-V-N-Q-H-L-C-G-S-H-L-V-E-A-L-Y-L-V-C-G-E-R-G-F-F-Y-T-P-K-T

Predicted MW: 5.8

Tags: Tag free

Activity: Yes

Endotoxin: ≤ 20 EU/mg

Purity: $\geq 95\%$ as determined by SDS-PAGE.

Purification: AC

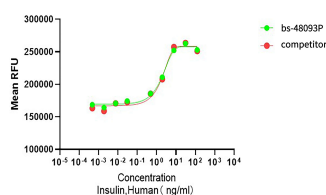
Form: Lyophilized

Storage: Lyophilized from a 0.22 μ m-filtered solution

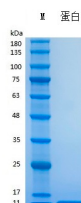
Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 36 months at -20°C to -80°C in lyophilized state. 6 months at -20°C to -80°C under sterile conditions after reconstitution. 7-10 days at 2°C to 8°C under sterile conditions after reconstitution.

Background: Insulin is one of the major regulatory hormones of intermediate metabolism throughout the body. The biological actions of this hormone involve integration of carbohydrate, protein, and lipid metabolism. Insulin enhances membrane transport of glucose, amino acids, and certain ions. It also promotes glycogen storage, formation of triglycerides and synthesis of proteins and nucleic acids. Immunocytochemical investigations have localized insulin in the B cells of pancreatic islets of Langerhans. Deficiency of insulin results in diabetes mellitus, one of the leading causes of morbidity and mortality in the general population. Insulin is also present in tumors of B cell origin such as insulinoma.

VALIDATION IMAGES



Measured in a serum-free cell proliferation assay using MCF-7 human breast cancer cells. The ED50 for this effect is ≤ 60 ng/mL.



The purity of the protein is greater than 95% as determined by reducing SDS-PAGE.