INS, 25-110 aa, His-tag, Human Recombinant

CATALOG NO: P1302-5 5 µg
P1302-20 20 µg

ALTERNATE NAMES: Insulin preproprotein, IDDM, IDDM1, IDDM2, ILPR, IRDN, MODY10

SOURCE: E.coli

PURITY: ≥ 95% by SDS-PAGE analyses

MOL. WEIGHT: 11.8 kDa (109 aa), confirmed by MALDI-TOF

FORM: Liquid

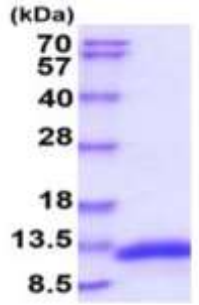
FORMULATION: In Phosphate-Buffered Saline (pH 7.4) containing 10% Glycerol

STORAGE CONDITIONS: Can be stored at 4°C for short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

BIOLOGICAL ACTIVITY: Measured in a cell proliferation assay using MCF7 human breast cancer cells. The ED_{50} for this effect is less or equal to 4 µg/ml

SEQUENCE: MGSSHHHHHH SSGLVPRGSH MGSFVNQHLC GSHLVEALYL VCGERGFFYT PKTRREAEDL QVGQVELGGG PGAGSLQPLA LEGSLQKRGI VEQCCTSICS LYQLENYCN

DESCRIPTION: INS, also known as insulin preproprotein, is a biologically inactive precursor to the biologically active endocrine hormone insulin. Insulin is an essential hormone for maintaining metabolic homeostasis in the body. To make fully bioactive insulin, pancreatic beta cells initiate synthesis of INS. It is converted into proinsulin by signal peptidases, which remove its signal peptide from its N-terminus. Finally, proinsulin is converted into the bioactive hormone insulin by removal of the C-peptide. Recombinant human INS, fused to His-tag at N-terminus, was expressed in E.coli and purified by conventional chromatography techniques.



15% SDS-PAGE (3ug)

His-Tag, Human Recombinant Insulin

RELATED PRODUCTS:

- Anti- His-Tag Rabbit Monoclonal Antibody **(Cat. No. A1138)**
- His-tag Protein ELISA kit **(Cat. No. E4550)**
- Human CellExp™ Biotinylated PD-1 / PDCD1, His Tag & Fc Tag, human recombinant **(Cat. No. 7877)**
- His-Tag Antibody (Clone BV-G020) **(Cat. No. 3646)**
- His-Tag Antibody **(Cat. No. 3998)**
- His-Tag Blocking Peptide **(Cat. No. 3998BP)**
- Phosphogluconate dehydrogenase, human recombinant **(Cat. No. P1051)**
- PCNA, human recombinant **(Cat. No. 4835)**

FOR RESEARCH USE ONLY! Not to be used on humans.