

Active Recombinant Full Length Human INS Protein, C-Flag-tagged

Cat. No. INS-191HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Full Length Human INS Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
Description	This gene encodes insulin, a peptide hormone that plays a vital role in the regulation of carbohydrate and lipid metabolism. After removal of the precursor signal peptide, proinsulin is post-translationally cleaved into three peptides: the B chain and A chain peptides, which are covalently linked via two disulfide bonds to form insulin, and C-peptide. Binding of insulin to the insulin receptor (INSR) stimulates glucose uptake. A multitude of mutant alleles with phenotypic effects have been identified, including insulin-dependent diabetes mellitus, permanent neonatal diabetes diabetes mellitus, maturity-onset diabetes of the young type 10 and hyperproinsulinemia. There is a read-through gene, INS-IGF2, which overlaps with this gene at the 5' region and with the IGF2 gene at the 3' region.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Bio-activity	Cell treatment
Molecular Mass	9.3 kDa

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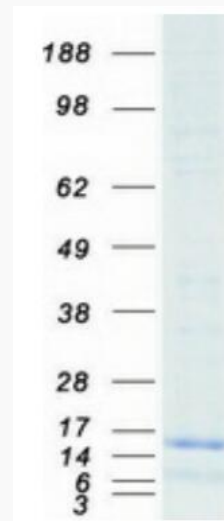
AA Sequence	MALWMRLLPLLALLALWGPDPAAAFVNQHLCGSHLVEALYLVCGERGFFYTPKTRR EAEDLQVGQVELGG GPGAGSLQPLALEGSLQKRGIVEQCCTSICSLYQLENYCNTRTRPLEQKLISEEDLAA NDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining.
Stability	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
Storage	Store at -80 centigrade.
Concentration	>50 ug/mL as determined by microplate BCA method.
Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Protein Families	Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein
Protein Pathways	Insulin signaling pathway, Maturity onset diabetes of the young, mTOR signaling pathway, Oocyte meiosis, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Regulation of autophagy, Type I diabetes mellitus, Type II diabetes mellitus
Full Length	Full L.
GENE INFORMATION	
Gene Name	INS insulin [Homo sapiens (human)]
Official Symbol	INS

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Synonyms	IDDM; ILPR; IRDN; IDDM1; IDDM2; PNDM4; MODY10
Gene ID	3630
mRNA Refseq	NM_000207.3
Protein Refseq	NP_000198.1
MIM	176730
UniProt ID	P01308



Coomassie blue staining of purified INS protein.

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