

Insulin Recombinant Protein | INS recombinant protein

Human Insulin recombinant

CATALOG #	HOST
AAA76102	E Coli (Host protein expression may be lot-specific and can be subject to change during production, including bulk orders)

PRODUCT SYNONYMS

Insulin; Human Insulin recombinant; insulin; INS recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli (Host protein expression may be lot-specific and can be subject to change during production, including bulk orders)
Purity/Purification	>97%, as determined by SDS-PAGE and HPLC
Form/Format	Recombinant Insulin was lyophilized from a 0.2 um filtered solution with no additives.
Sequence Length	110
Host Note	Optimized DNA sequence encoding Human Insulin mature chain was expressed in Escherichia Coli.
Endotoxin	Endotoxin content was assayed using a LAL gel clot method. Endotoxin level was found to be less than 0.1 ng/ug (1EU/ug).
Reconstitution	Centrifuge vial to ensure maximal product extraction, recommended 20s , 5K RPM. Follow by reconstitution in distilled water to a concentration not less than 0.1mg/mL. If further dilutions are required it is recommended to dilute product in the formulation buffer as given in the presentation.
Molecular Weight Note	Recombinant Insulin is a protein consisting of 51 amino acid residue subunits, and migrates as an approximateley 6 kDa protein under non-reducing conditions and reducing conditions in SDS-PAGE.
Biological Activity	Activity was determined to be 30 IU/mg.
Preparation and Storage	Store lyophilized product at room temperature for 3 weeks or at -20°C for 12 months . Store reconstituted prouct at 2-8°C for 3 weeks or at -20°C for 12 months. *For long term storage, lab recommends the addition of a carier protein at 0.1%. *Avoid repeated freeze/thaw cycles.

ADDITIONAL INFORMATION

Product Categories/Family for INS recombinant protein	Cytokines
References	• the endosymbiont wolbachia increases Insulin/igf-like signalling in drosophila .<i>Proc R Soc B</i>, Nov 2009; 276: 3799 - 3807. • mutant huntingtin interacts with γ-tubulin and disrupts vesicular transport and Insulin secretion .<i>Hum. Mol. Genet.</i>, Oct 2009; 18: 3942 - 3954. • Insulin is a stronger inducer of Insulin resistance than hyperglycemia in mice with type 1 diabetes mellitus (t1dm) .<i>J. Biol. Chem.</i>, Oct 2009; 284: 27090 - 27100. • food Insulin index: physiologic basis for predicting Insulin demand evoked by composite meals .<i>Am. J. Clinical Nutrition</i>, Oct 2009; 90: 986 - 992. • dietary protein during gestation affects maternal Insulin-like growth factor, Insulin-like growth factor binding protein, leptin concentrations, and fetal growth in heifers .<i>J Anim Sci</i>, Oct 2009; 87: 3304 - 3316.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4557671
NCBI GeneID	3630
NCBI Accession #	NP_000198.1
NCBI GenBank Nucleotide #	NM_000207.2
UniProt Accession #	P01308; Q5EEX2
NCBI Official Full Name	insulin preproprotein
UniProt Protein Name	Insulin
UniProt Gene Name	INS
UniProt Entry Name	INS_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/ins-recombinant-protein-e-coli/76102>