# Human Insulin (INS), Recombinant Protein

Catalogue number: 153804 Sub-type: Cytokine Images:

## Contributor

Inventor: Natasa Skoko Institute: International Centre For Genetic Engineering And Biotechnology (ICGEB) Images:

## **Tool details**

### **\*FOR RESEARCH USE ONLY**

ancer Tools.org Name: Human Insulin (INS), Recombinant Protein

Alternate name: Insulin, INS

#### Class:

#### Conjugate:

Description: Two-chain polypeptide hormone produced by the ß-cells of pancreatic islets. The a and ß chains are joined by two interchain disulfide bonds. The a chain contains an intrachain disulfide bond. Insulin regulates the cellular uptake, utilization, and storage of glucose, amino acids, and fatty acids and inhibits the breakdown of glycogen, protein, and fat. Serum-free medium supplements such as insulin are essential for long-term growth of commonly used mammalian cell lines. When insulin is absent from media, cell may exhibit disturbances in morphology and growth rate.

Purpose:
Parental cell:
Organism:
Tissue:
Model:
Gender:
lsotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence: B chain: FVNQHLCGSHLVEALYLVCGERGFFYTPKT A chain:
GIVEQCCTSICSLYQLENYCN
Growth properties:
Production details:

Formulation: **Recommended controls: Bacterial resistance:** Selectable markers:

Additional notes: Human recombinant insulin is identical in function and structure to the native human sequence. A hormone consisting of two polypeptide chains, Insulin's A-chain (21 amino acids) and Bchain (30 amino acids) are covalently linked by disulfide bonds between cysteine residues. Molecular Weight: ~5.8 kDa UniProt number P01308

# **Target details**

Target:

Target alternate names:

Target background:

Molecular weight:

Ic50:

# **Applications**

#### **Application:**

mer Tools.org Application notes: Human recombinant insulin is identical in function and structure to the native human sequence. A hormone consisting of two polypeptide chains, Insulinâ??s A-chain (21 amino acids) and B-chain (30 amino acids) are covalently linked by disulfide bonds between cysteine residues. Molecular Weight: ~5.8 kDa UniProt number P01308

# Handling

Format: **Concentration:** Passage number: Growth medium: **Temperature:** Atmosphere: Volume: Storage medium: Storage buffer: Storage conditions: -20° C Shipping conditions: Dry Ice

## **Related tools**

**Related tools:** 

### References

**References:** Erythropoietin (EPO) is a glycoprotein growth factor that is produced primarily in the kidney in response to hypoxia or anemia. It is the principal physiological regulator of erythropoiesis. EPO promotes erythropoiesis by binding to a homodimeric cell surface receptor that activates JAK2/STAT5, PI3K/AKT, and MAPK pathways, and stimulates the proliferation and differentiation of erythroid progenitor cells.

Cancer Tools.org