RPU55145 100µg
Native Insulin (INS)
Organism Species: Homo sapiens (Human)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

9th Edition (Revised in Jul, 2013)

[PROPERTIES]

Source: Human Pancreas

Subcellular Location: Secreted.

Purity: >90%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Formulation: Supplied as lyophilized form in PBS, pH7.4, containing 5% sucrose, 0.01% sarcosyl.

Applications: SDS-PAGE; WB; ELISA; IP.

(May be suitable for use in other assays to be determined by the end user.)

[USAGE]

Reconstitute in sterile PBS, pH7.2-pH7.4.

[RELEVANCE]

Insulin is a peptide hormone, produced by beta cells of the pancreas, and is central to regulating carbohydrate and fat metabolism in the body. Insulin causes cells in the liver, skeletal muscles, and fat tissue to absorb glucose from the blood. In the liver and skeletal muscles, glucose is stored as glycogen, and in fat cells it is stored as triglycerides. The human insulin protein is composed of 51 amino acids, and has a molecular weight of 5808Da. It is a dimer of an A-chain and a B-chain, which are linked together by disulfide bonds.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

[REFERENCES]

1. Vinther T.N., *et al.* (2012) PLoS ONE 7:e30882-e30882.
2. Borowicz P., *et al.* (2012) J. Biomol. NMR 52:365-370.
3. Bulek A.M., *et al.* (2012) Nat. Immunol. 13:283-289.
4. Antolikova E., *et al.* (2011) J. Biol. Chem. 286:36968-36977.