

## Recombinant Human Insulin Protein

**Catalog Number:** PKSH032458

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

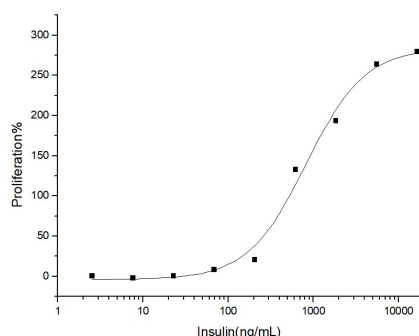
### Description

<b>Species</b>	Human
<b>Source</b>	Yeast-derived Human Insulin protein Phe25-Lys53&Gly90-Asn110
<b>Calculated MW</b>	7.1 kDa
<b>Observed MW</b>	6 kDa
<b>Accession</b>	P01308
<b>Bio-activity</b>	Measured in a serum-free cell proliferation assay using MCF-7 human breast cancer cells. The ED <sub>50</sub> for this effect is typically 0.2-1 µg/mL.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



Measured in a serum-free cell proliferation assay using MCF-7 human breast cancer cells. The ED<sub>50</sub> for this effect is typically 0.2-1 µg/mL.

### Background

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.

### For Research Use Only