



# Recombinant Guinea pig Insulin (INS)

<b>Product Code</b>	CSB-EP011742GU
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P01329
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Cavia porcellus (Guinea pig)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	FVSRHL CGSNLVETLY SVCQDDGFFY IPKD
<b>Source</b>	E.coli
<b>Target Names</b>	INS
<b>Protein Names</b>	Recommended name: Insulin Cleaved into the following 2 chains: 1. Insulin B chain 2. Insulin A chain
<b>Expression Region</b>	25-54
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Cytoplasmic domain
<b>Target Details</b>	After removal of the precursor signal peptide, proinsulin is post-translationally cleaved into two chains (peptide A and peptide B) that are covalently linked via two disulfide bonds. Binding of this mature form of insulin to the insulin receptor (INSR) stimulates glucose uptake. A variety of mutant alleles with changes in the coding region have been identified. 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.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
<b>Shelf Life</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.