

Insulin (INS) Active Protein | INS active protein

Active Insulin (INS)

CATALOG # AAA148171	HOST E Coli	REACTIVITY Bovine	APPLICATIONS Activity Assay, Cell Culture
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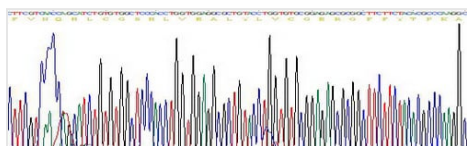
PRODUCT SYNONYMS

Insulin (INS); Active Insulin (INS); INS active protein

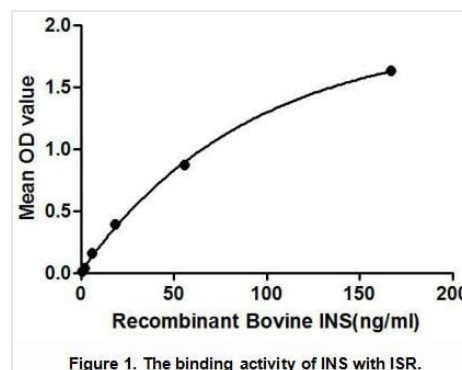
PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Bovine
Purity/Purification	> 90%
Form/Format	Freeze-dried powder
Sequence Length	105
Applicable Applications for INS active protein	Activity Assay, Cell Culture
Tag	N-terminal His and GST Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Phe25~Ala54
Isoelectric Point	6.4

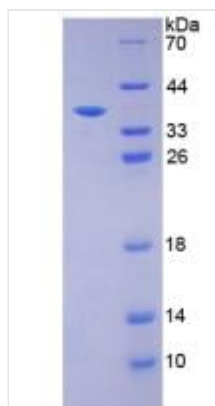
IMAGES



Application Data



Application Data



SDS-PAGE

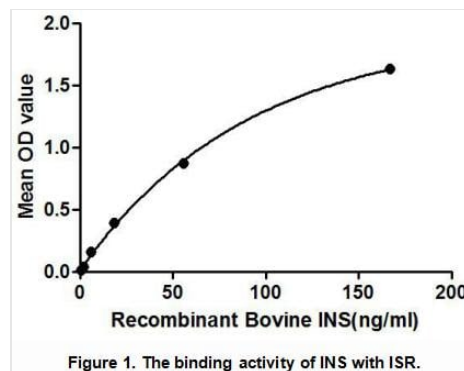


Figure 1. The binding activity of INS with ISR.

Activity

Insulin (INS) is a polypeptide hormone originating in the beta cells of the pancreas and serving as a principal regulator for the storage and production of carbohydrates. Insulin decreases blood glucose concentration. It increases cell permeability to monosaccharides, amino acids and fatty acids. It accelerates glycolysis, the pentose phosphate cycle, and glycogen synthesis in liver. Besides, Insulin Receptor (ISR) has been identified as an interactor of INS, thus a binding ELISA assay was conducted to detect the interaction of recombinant bovine INS and recombinant human ISR. Briefly, INS were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to ISR-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-INS pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of INS and ISR was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for INS active protein

Metabolic pathway; Endocrinology; Hormone metabolism

NCBI AND UNIPROT INFORMATION

NCBI GI #	124564
NCBI GeneID	280829
UniProt Accession #	P01317
Molecular Weight	Predicted Molecular Weight: 33.4kDa Accurate Molecular Weight: 36kDa
NCBI Official Full Name	Insulin
NCBI Official Symbol	INS
NCBI Protein Information	insulin
UniProt Protein Name	Insulin
UniProt Gene Name	INS

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://stage.aaabiotech.com/e-coli-bovine-ovine-active-protein/insulin-ins/148171>