

# Bovine Insulin protein, His and GST tag

## Cat. No. GTX00075-pro

Application	Functional Assay	<mark>Package</mark> 10 μg
Species	Bovine	. 13

#### APPLICATION

#### **Application Note**

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 100 µl were then transferred to ISR-coated microtiter wells and incubated for 2h at 37°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°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of of INS and ISR was in a dose dependent manner.

**Observed MW** 36 kDa.

PROPERTIES		
Form	Lyophilized powder	
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.	
Preservative	ProClin 300	
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.	
Region/Sequence	N-terminal His and GST-Tag; Phe25~Ala54	
Expression System	E. coli	
Purity	> 90%	
Endotoxin	< 1 EU/μg	
Conjugation	Unconjugated	
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.	

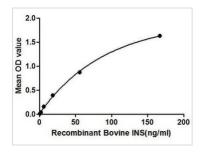


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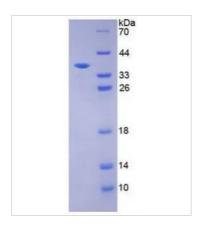


## DATA IMAGES



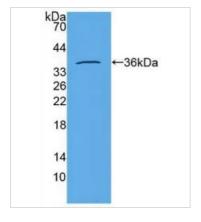
#### **GTX00075-pro Functional Assay Image**

Functional ELISA analysis of GTX00075-pro Bovine Insulin protein which can bind immobilized ISR protein.



## GTX00075-pro Image

SDS-PAGE analysis of GTX00075-pro Bovine Insulin protein.



## GTX00075-pro Image

WB analysis of GTX00075-pro Bovine Insulin protein.



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