

Rat Insulin (INS) ELISA Kit | INS elisa kit

Rat Insulin (INS) High Sensitivity ELISA Kit

CATALOG #
AAA161466

REACTIVITY
Rat

PRODUCT SYNONYMS

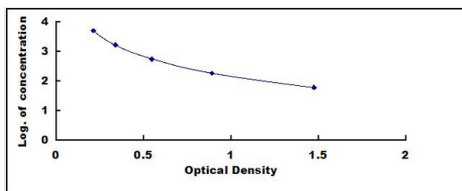
Insulin (INS); Rat Insulin (INS) High Sensitivity ELISA Kit; INS High-sensitive ELISA kit (Rat); INS elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay has high sensitivity and excellent specificity for detection of High Sensitive Insulin (INS). No significant cross-reactivity or interference between High Sensitive Insulin (INS) and analogues was observed. Reactive with Rat INS/Insulin
Assay Type	Competitive Inhibition
Samples	Serum, Plasma, Tissue homogenates, Cell lysates, Cell culture supernates and other biological fluids
Detection Method	Colormetric
Featured Series	HE kit
Detection Range	61.7-5,000pg/mL
Sensitivity	22.5pg/mL
Sample Size	50uL
Assay Time	3h
Function	Detects protein (low-target protein, high-sensitivity)
Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level High Sensitive Insulin (INS) were tested 20 times on one plate, respectively. Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level High Sensitive Insulin (INS) were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100 Intra-Assay: CV<10%, Inter-Assay: CV<12%
Assay Procedure Summary	1. Prepare all reagents, samples and standards 2. Add 50ul standard or sample to each well. And then add 50ul prepared Detection Reagent A immediately. Shake and mix. Incubate 1 hour at 37 degree C 3. Aspirate and wash 3 times 4. Add 100ul prepared Detection Reagent B. Incubate 30 minutes at 37 degree C 5. Aspirate and wash 5 times 6. Add 90ul Substrate Solution. Incubate 10-20 minutes at 37 degree C 7. Add 50ul Stop Solution. Read at 450 nm immediately.
Test Principle	This assay employs the competitive inhibition enzyme immunoassay technique. A monoclonal antibody specific to High Sensitive Insulin (INS) has been pre-coated onto a microplate. A competitive inhibition reaction is launched between biotin labeled High Sensitive Insulin (INS) and unlabeled High Sensitive Insulin (INS)(Standards or samples) with the pre-coated antibody specific to High Sensitive Insulin (INS). After incubation the unbound conjugate is washed off. Next, avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. The amount of bound HRP conjugate is reverse proportional to the concentration of High Sensitive Insulin (INS) in the sample. After addition of the substrate solution, the intensity of color developed is reverse proportional to the concentration of High Sensitive Insulin (INS) in the sample.

Research Area	Metabolic pathway, Endocrinology, Hormone metabolism
Preparation and Storage	Store at 4 degree C for 1 month/-20 degree C for long-term (One year within shelf life) The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.

IMAGES



Standard Curve (Sample)

Typical Standard Curve for INS ELISA (Competitive)

NCBI AND UNIPROT INFORMATION

NCBI GI #	9506815
NCBI GeneID	24505
NCBI Accession #	NP_062002.1
NCBI GenBank Nucleotide #	NM_019129.3
UniProt Accession #	P01322
Molecular Weight	12,421 Da
NCBI Official Full Name	insulin-1 preproprotein
NCBI Official Synonym Full Names	insulin 1
NCBI Official Symbol	Ins1
NCBI Protein Information	insulin-1
UniProt Protein Name	Insulin-1
UniProt Gene Name	Ins1
UniProt Synonym Gene Names	Ins-1
UniProt Entry Name	INS1_RAT

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://www.aaabiotech.com/rat-elisa-kits/insulin-ins/161466>