

Human Proinsulin (PI) ELISA Kit | PI elisa kit

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CATALOG #
AAA136666

REACTIVITY
Human

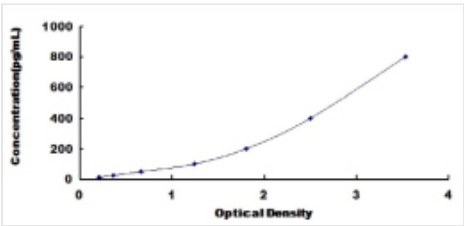
PRODUCT SYNONYMS

Proinsulin (PI); Human Proinsulin (PI) ELISA Kit; INS; Pro-Insulin; Preproinsulin; PI elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of Proinsulin (PI). No significant cross-reactivity or interference between Proinsulin (PI) and analogues was observed.
Sequence Length	110
Samples	Serum, plasma, tissue homogenates, Cell lysates, cell culture supernates and other biological fluids
Assay Type	Sandwich
Detection Range	12.5-800pg/mL
Sensitivity	Typically less than 4.7pg/mL.
Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level Proinsulin (PI) were tested 20 times on one plate, respectively. Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Proinsulin (PI) 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 100uL standard or sample to each well. Incubate 2 hours at 37 degree C; 3. Aspirate and add 100uL prepared Detection Reagent A. Incubate 1 hour at 37 degree C; 4. Aspirate and wash 3 times; 5. Add 100uL prepared Detection Reagent B. Incubate 30 minutes at 37 degree C; 6. Aspirate and wash 5 times; 7. Add 90uL Substrate Solution. Incubate 15-25 minutes at 37 degree C; 8. Add 50uL Stop Solution. Read at 450nm immediately.
Preparation and Storage	For unopened kit: All the reagents should be kept according to the labels on vials. The Standard, Detection Reagent A, Detection Reagent B and the 96-well strip plate should be stored at -20 degree C upon receipt while the others should be at 4 degree C. For opened kit: When the kit is opened, the remaining reagents still need to be stored according to the above storage condition. Besides, please return the unused wells to the foil pouch containing the desiccant pack, and reseal along entire edge of zip-seal. 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)

ADDITIONAL INFORMATION

Related Product Information for PI elisa kit	Principle of the Assay: The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Proinsulin (PI). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Proinsulin (PI). Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain Proinsulin (PI), biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of Proinsulin (PI) in the samples is then determined by comparing the O.D. of the samples to the standard curve.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	59036749
NCBI GeneID	3630
UniProt Accession #	P01308; Q5EEX2
Molecular Weight	21,537 Da
NCBI Official Full Name	proinsulin
NCBI Official Synonym Full Names	insulin
NCBI Official Symbol	INS
NCBI Official Synonym Symbols	IDDM; ILPR; IRDN; IDDM1; IDDM2; MODY10
NCBI Protein Information	insulin
UniProt Protein Name	Insulin
UniProt Gene Name	INS
UniProt Entry Name	INS_HUMAN

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/proinsulin-pi/136666>