

Rat Retinol Binding Protein 1, Cellular (RBP1) ELISA Kit | RBP1 elisa kit

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CATALOG #
AAA161498

REACTIVITY
Rat

PRODUCT SYNONYMS

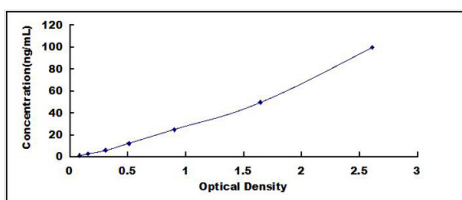
Retinol Binding Protein 1; Cellular (RBP1); Rat Retinol Binding Protein 1; Cellular (RBP1) ELISA Kit; RBP1 ELISA kit (Rat); RBP-1; CRABP-I; CRBP; CRBP1; RBPC; Cellular retinol-binding protein I; RBP1 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay has high sensitivity and excellent specificity for detection of Retinol Binding Protein 1, Cellular (RBP1). No significant cross-reactivity or interference between Retinol Binding Protein 1, Cellular (RBP1) and analogues was observed. Reactive with Rat RBP1/Retinol Binding Protein 1, Cellular
Assay Type	Double-antibody Sandwich
Samples	Tissue homogenates, Cell lysates, Cell culture supernates and other biological fluids
Detection Method	Colormetric
Featured Series	SE kit
Detection Range	1.56-100ng/mL
Sensitivity	0.57ng/mL
Sample Size	100uL
Assay Time	3h
Function	Detects protein (regular version)
Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level Retinol Binding Protein 1, Cellular (RBP1) were tested 20 times on one plate, respectively. Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Retinol Binding Protein 1, Cellular (RBP1) 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 10-20 minutes at 37 degree C 8. Add 50ul Stop Solution. Read at 450nm immediately.

Test Principle	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 Retinol Binding Protein 1, Cellular (RBP1). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Retinol Binding Protein 1, Cellular (RBP1). 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 Retinol Binding Protein 1, Cellular (RBP1), 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 Retinol Binding Protein 1, Cellular (RBP1) in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Research Area	Signal transduction
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 RBP1 ELISA (Sandwich)

NCBI AND UNIPROT INFORMATION

NCBI GI #	6981464
NCBI GeneID	25056
NCBI Accession #	NP_036865.1
NCBI GenBank Nucleotide #	NM_012733.4
UniProt Accession #	P02696
Molecular Weight	15,834 Da
NCBI Official Full Name	retinol-binding protein 1
NCBI Official Synonym Full Names	retinol binding protein 1, cellular
NCBI Official Symbol	Rbp1
NCBI Protein Information	retinol-binding protein 1; CRBP; CRBP-I; cellular retinol-binding protein I
UniProt Protein Name	Retinol-binding protein 1
UniProt Gene Name	Rbp1
UniProt Synonym Gene Names	Rbp-1; CRBP; CRBP-I
UniProt Entry Name	RET1_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.