

Human CD4 molecule ELISA Kit | CD4 elisa kit

Human cluster of differentiation 4, CD4 ELISA Kit

CATALOG #
AAA80166

REACTIVITY
Human

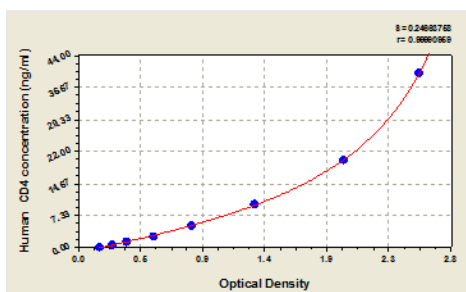
PRODUCT SYNONYMS

CD4 molecule; Human cluster of differentiation 4; CD4 ELISA Kit; CD4mut; CD4 antigen; CD4 antigen (p55) ; CD4 receptor; CD4 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of Human CD4. No significant cross-reactivity or interference between Human CD4 and analogues was observed.
Sequence Length	458
Samples	Serum, plasma
Detection Range	0.625 ng/ml-40 ng/ml
Sensitivity	0.156 ng/ml
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV% is less than 8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV% is less than 10% Three samples of known concentration were tested in twenty assays to assess.
Detection Wavelength	450 nm
Sample Volume	50-100ul
Protein Biological Process 1	Immunity
Protein Biological Process 3	Adaptive immunity
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for CD4 elisa kit	Introduction: CD4 (cluster of differentiation 4) is a glycoprotein expressed on the surface of T helper cells, regulatory T cells, monocytes, macrophages, and dendritic cells. It was discovered in the late 1970s and was originally known as leu-3 and T4 (after the OKT4 monoclonal antibody that reacted with it) before being named CD4 in 1984. In humans, the CD4 protein is encoded by the CD4 gene. CD4 is a co-receptor that assists the T cell receptor (TCR) to activate its T cell following an interaction with an antigen presenting cell. Using its portion that resides inside the T cell, CD4 amplifies the signal generated by the TCR by recruiting an enzyme, known as the tyrosine kinase lck, which is essential for activating many molecules involved in the signaling cascade of an activated T cell. CD4 also interacts directly with MHC class II molecules on the surface of the antigen presenting cell using its extracellular domain. Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to CD4. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific for CD4 and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain CD4, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of CD4 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 #	10835167
NCBI GeneID	920
NCBI Accession #	NP_000607.1
NCBI GenBank Nucleotide #	NM_000616.4
UniProt Accession #	P01730; Q4ZGK2; Q5U066; Q9UDE5; B2R737; D3DUS5
Molecular Weight	51,111 Da
NCBI Official Full Name	T-cell surface glycoprotein CD4 isoform 1
NCBI Official Synonym Full Names	CD4 molecule
NCBI Official Symbol	CD4
NCBI Official Synonym Symbols	CD4mut
NCBI Protein Information	T-cell surface glycoprotein CD4; CD4 receptor; CD4 antigen (p55); T-cell surface antigen T4/Leu-3
UniProt Protein Name	T-cell surface glycoprotein CD4
UniProt Gene Name	CD4
UniProt Entry Name	CD4_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.