CD4 recombinant antibody

Recombinant Anti-CD4 Antibody, Rabbit Monoclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA259408	**Rabbit**	**Human**	**Immunohistochemistry, ELISA**

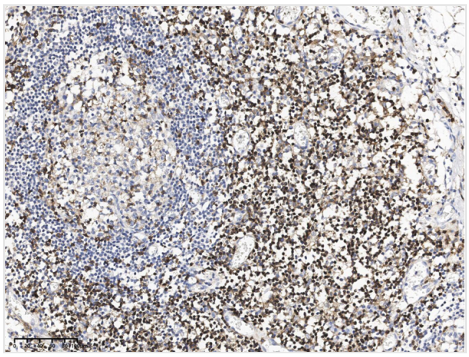
PRODUCT SYNONYMS

CD4; Monoclonal Recombinant Antibody; Recombinant Anti-CD4 Antibody; Rabbit Monoclonal; CD4 Antibody; Rabbit MAb; CD4 molecule; Anti-CD4mut Antibody; Anti-IMD79 Antibody; Anti-Leu-3 Antibody; Anti-OKT4D Antibody; Anti-T4 Antibody; CD4 recombinant antibody

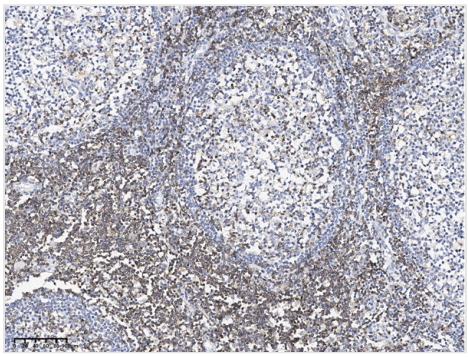
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	750
Specificity	Human CD4
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for CD4 recombinant antibody	IHC (Immunohistochemistry), ELISA
Immunogen	Recombinant Human CD4 Protein (NP_000607.1; Met1-Trp390).
Preparation and Storage	This antibody can be stored at 2 degree C-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. This antibody is shipped as liquid solution at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

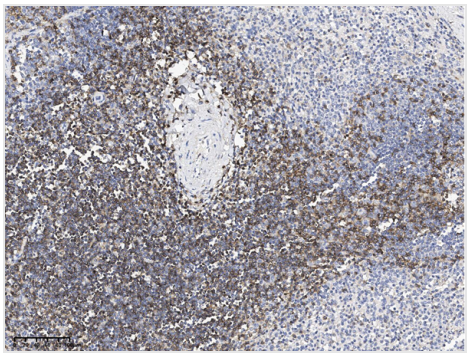
IMAGES



IHC (Immunohistochemisry)
Immunochemical staining of human CD4 in human lymph node with rabbit monoclonal antibody at 1:500 dilution, formalin-fixed paraffin embedded sections.



IHC (Immunohiostchemistry)
Immunochemical staining of human CD4 in human tonsil with rabbit monoclonal antibody at 1:500 dilution, formalin-fixed paraffin embedded sections.



IHC (Immunohistochemistry)
Immunochemical staining of human CD4 in human spleen with rabbit monoclonal antibody at 1:500 dilution, formalin-fixed paraffin embedded sections.

ADDITIONAL INFORMATION

Related Product Information for CD4 recombinant antibody	T-cell surface glycoprotein CD4, is a single-pass type I membrane protein. CD4 contains three Ig-like C2-type (immunoglobulin-like) domains and one Ig-like V-type (immunoglobulin-like) domain. CD4 is a glycoprotein expressed on the surface of T helper cells, regulatory T cells, monocytes, macrophages, and dendritic cells. The CD4 surface determinant, previously associated as a phenotypic marker for helper/inducer subsets of T lymphocytes, has now been critically identified as the binding/entry protein for human immunodeficiency viruses (HIV). The human CD4 molecule is readily detectable on monocytes, T lymphocytes, and brain tissues. All human tissue sources of CD4 bind radiolabeled gp120 to the same relative degree; however, the murine homologous protein, L3T4, does not bind the HIV envelope protein. 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. CD4 interacts directly with MHC class II molecules on the surface of the antigen-presenting cell via its extracellular domain. The CD4 molecule is currently the object of intense interest and investigation both because of its role in normal T-cell function, and because of its role in HIV infection. CD4 is a primary receptor used by HIV-1 to gain entry into host T cells. HIV infection leads to a progressive reduction of the number of T cells possessing CD4 receptors. Viral protein U (VpU) of HIV-1 plays an important role in downregulation of the main HIV-1 receptor CD4 from the surface of infected cells. Physical binding of VpU to newly synthesized CD4 in the endoplasmic reticulum is an early step in a pathway leading to proteasomal degradation of CD4. Amino acids in both helices found in the cytoplasmic region of VpU in membrane-mimicking detergent micelles experience chemical shift perturbations upon binding to CD4, whereas amino acids between the two helices and at the C-terminus of VpU show no or only small changes, respectively. Paramagnetic spin labels were attached at three sequence positions of a CD4 peptide comprising the transmembrane and cytosolic domains of the receptor. VpU binds to a membrane-proximal region in the cytoplasmic domain of CD4.
Product Categories/Family for CD4 recombinant antibody	NF-kappaB (NFkB) Pathway
References	Farra. WL. e. al. (1988. Characterizatio. o. CD. glycoprotei. determinant-HI. envelop. protei. interactions. perspective. fo. analo. an. vaccin. development. Cri. Re. Immunol. 8(4). 315-39.Biddiso. WE. e. al. (1989. CD. expressio. an. functio. i. HL. clas. II-specifi. . cells. Immuno. Rev. 109. 5-15.Sing. SK. e. al. (2012. Mappin. th. interactio. betwee. th. cytoplasmi. domain. o. HIV-. vira. protei. . an. huma. CD. wit. NM. spectroscopy. FEB. J. 279(19):3705-14.

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.

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Online datasheet: https://www.aaabiotech.com/monoclonal/cd4-recombinant-antibody-clone-750-immunohistochemistry-elisa/259408