

CD4 Monoclonal Antibody | anti-CD4 antibody

Anti-CD4 Antibody (clone 5D9) IHC-plus

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA52592	CD4 antibody was produced in Mouse.	Human, Monkey	Western Blot, Immunohistochemistry, Immunohistochemistry

PRODUCT SYNONYMS

CD4; Monoclonal Antibody; Anti-CD4 Antibody (clone 5D9) IHC-plus; Mouse Monoclonal [clone 5D9] (IgG2a) to Human CD4; Human CD4; CD4 antigen; CD4 receptor; CD4mut; CD4 antigen (p55); CD4 molecule; anti-CD4 antibody

PRODUCT SPECIFICATIONS

Host	CD4 antibody was produced in Mouse.
Reactivity	Human, Monkey
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	5D9
Specificity	Human CD4
Purity/Purification	Protein A/G purified
Form/Format	PBS, pH 7.3 ,0.02% sodium azide; 50% glycerol, 1% BSA
Concentration	1 mg/ml (varies by lot)
Sequence Length	458
Applicable Applications for anti-CD4 antibody	WB (Western Blot), IHC (Immunohistochemistry), IHC (Immunohistochemistry)
Immunogen Species	CD4 antibody was raised against Human
Immunogen	CD4 antibody was raised against full length human recombinant protein of human CD4 (NP_000607) produced in HEK293T cell.
Immunogen Description	Full length human recombinant protein of human CD4 (NP_000607) produced in HEK293T cell.
Immunogen Type	Recombinant protein
Target	CD4
Target Species	Human
Disclaimer	Due to the highly specific nature of antibodies and antigens, we cannot predict or be held responsible with respect to how this antibody will behave in your systems. Researchers using this antibody should conduct optimization studies to achieve the most optimal result possible for their intended application.

Recommended Immunohistochemistry Protocol	The following protocol is a recommendation only, and AAA Biotech makes no guarantee of the results: Tissue Preparation: Formalin fixation and embedding in paraffin wax. Tissue Sectioning: Make 4-um sections and place on pre-cleaned and charged microscope slides. Heat in a tissue-dryingoven for 45 minutes at 60°C. Deparaffinization: Wash dry slides in 3 changes of xylene - 5 minutes each @ RT Rehydration: Wash slides in 3 changes of 100% alcohol - 3 minutes each @ RT Wash slides in 2 changes of 95% alcohol - 3 minutes each @ RT Wash slides in 1 change of 80% alcohol - 3 minutes @ RT Rinse slides in gentle running distilled water - 5 minutes @ RT Antigen retrieval: Steam slides in 0.01 M sodium citrate buffer, pH 6.0 at 99-100°C - 20 minutes Remove from heat and let stand at room temperature in buffer - 20 minutes Rinse in 1X TBS with Tween (TBST) -1 minute @ RT Immunostaining: (Do not allow tissues to dry at any time during the staining procedure) Apply a universal protein block - 20 minutes @ RT Drain protein block from slides, apply diluted primary antibody - 45 minutes @ RT Rinse slides in 1 X TBST - 1 minute @ RT Apply a biotinylated secondary antibody appropriate for the primary antibody - 30 minutes @ RT Rinse slides in 1X TBST -1 minute @ RT Apply alkaline phosphatase streptavidin - 30 minutes @ RT Rinse slides in 1X TBST -1 minute @ RT Apply alkaline phosphatase chromogen substrate - 30 minutes @ RT Wash slides in distilled water - 1 minute @ RT Dehydrate: (This method should only be used if the chromogen substrate is alcohol insoluble (e.g. Vector Red, DAB) Wash slides in 2 changes of 80% alcohol - 1 minute each @ RT Wash slides in 2 changes of 95% alcohol - 1 minute each @ RT Wash slides in 3 changes of 100% alcohol - 1 minute each @ RT Wash slides in 3 changes of xylene - 1 minute each @ RT Apply coverslip
Note	During shipment,small volumes of product will ocassionally become entrapped in the seal of the product vial. We recommend briefly centrifuging the vial to dislodge any liquid in the container's cap prior to opening.
Warning	This reagent may contain sodium azide. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated.Standard Laboratory Practices should be followed. Avoid skin and eye contact,inhalation, and ingestion. Sodium azide forms hydrazoic acid under acidic conditions and may react with lead or copper plubing to form highly explosive metal azides. On disposal, flush with large volumes of water to prevent accumulation.
Preparation and Storage	Store at -20°C for up to one year. Avoid freeze-thaw cycles.

IMAGES



WB (Western Blot)

Western blot of extracts (35 ug) from 9 different cell lines by using anti-CD4 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



WB (Western Blot)

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CD4 (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CD4.



IHC (Immunohistochemistry)

Anti-CD4 antibody IHC staining of human spleen. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval. Antibody concentration 10 ug/ml.

ADDITIONAL INFORMATION

Related Product Information for anti-CD4 antibody

CD4 Antibody, CD4 antigen Antibody, CD4 receptor Antibody, CD4mut Antibody, CD4 antigen (p55) Antibody, CD4 molecule Antibody Description: CD4 is a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigens and is also a receptor for the human immunodeficiency virus. This gene is expressed not only in T lymphocytes, but also in B cells, macrophages, and granulocytes. It is also expressed in specific regions of the brain.

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
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.