bsm-52469R **[Primary Antibody]**

CD4 Recombinant Rabbit mAb

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DATASHEET

Host: Rabbit
Isotype: IgG
Clonality: Recombinant
CloneNo.: 65H6
GeneID: 920
SWISS: P01730
Target: CD4

Immunogen: A synthesized peptide derived from human CD4: 200-400.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: This gene encodes a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigenes 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. The protein functions to initiate or augment the early phase of T-cell activation, and may function as an important mediator of indirect neuronal damage in infectious and immune-mediated diseases of the central nervous system. Multiple alternatively spliced transcript variants encoding different isoforms have been identified in this gene. [provided by RefSeq, Aug 2010].
The CD4 antigen is involved in the recognition of MHC class II molecules and is a co-receptor for HIV. CD4 is primarily expressed in a subset of T-lymphocytes, also referred to as T helper cells, but may also be expressed by other cells in the immune system, such as monocytes, macrophages, and dendritic cells. At the tissue level, CD4 expression may be detected in thymus, lymph nodes, tonsils, and spleen, and also in specific regions of the brain, gut, and other non-lymphoid tissues. CD4 functions to initiate or augment the early phase of T-cell activation through its association with the T-cell receptor complex and protein tyrosine kinase, Lck. It may also function as an important mediator of direct neuronal damage in infectious and immune-mediated diseases of the central nervous system. Multiple alternatively spliced transcripts have been identified in this gene [RefSeq, July 2017].

Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1ug/Test)

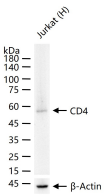
Reactivity: Human

Predicted MW.: 48 kDa

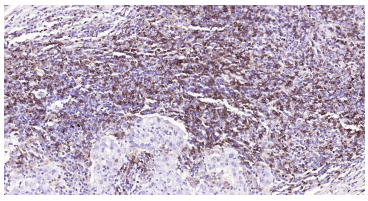
Observed MW.: 55 kDa

Subcellular Location: Cell membrane

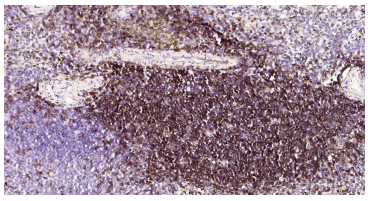
VALIDATION IMAGES



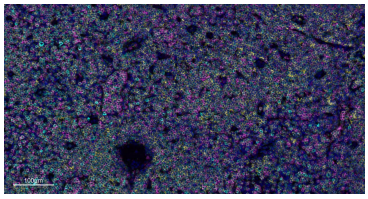
25 ug total protein per lane of various lysates (see on figure) probed with CD4 monoclonal antibody, unconjugated (bsm-52469R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



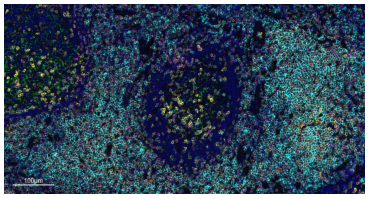
Paraformaldehyde-fixed, paraffin embedded Human Gastric Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with CD4 Monoclonal Antibody, Unconjugated(bsm-52469R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



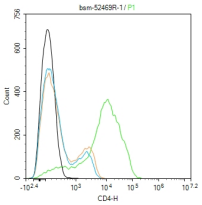
Paraformaldehyde-fixed, paraffin embedded Human Spleen; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with CD4 Monoclonal Antibody, Unconjugated(bsm-52469R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human lymph nodes. Merged staining of anti-CD8A (bsm-34251M; 1:200; pink) anti-CD4 (bsm-52469R; 1:200; yellow) and anti-CD3E (bsm-60002R; 1:200; light blue) DAPI (dark blue) was used as a nuclear counter stain.



Paraformaldehyde-fixed, paraffin embedded Human Tonsil. Merged staining of anti-CD8A (bsm-34251M; 1:200; pink) anti-CD4 (bsm-52469R; 1:200; light blue) anti-CD3E (bsm-60002R; 1:200; green) anti-CD68 (bsm-60634R; 1:200; white) anti-CD11c (bsm-61135R; 1:200; orange) and anti-CD20 (bsm-63327R; 1:200; yellow) DAPI (dark blue) was used as a nuclear counter stain.



Blank control:Jurkat. Primary Antibody (green line): Rabbit Anti-CD4 antibody (bsm-52469R) Dilution: 1ug/Test; Secondary Antibody (white blue line) : Goat anti-rabbit IgG-AF488 Dilution: 0.5ug/Test. Isotype control（orange line）： Normal Rabbit IgG Protocol The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=18.027]** Zhu Li. et al. Immunogenic Cell Death Augmented by Manganese Zinc Sulfide Nanoparticles for Metastatic Melanoma Immunotherapy. ACS NANO. 2022;XXXX(XXX):XXX-XXX IHC ;Mouse. 35981098
- **[IF=14.9]** Kanishka Fernando. et al. Extended human lymph node explants for evaluation of adaptive immunity. TRENDS BIOTECHNOL. 2025 Aug mIHC ;Human. 40885665
- **[IF=7.59]** Guoyun Wan. et al. Endoplasmic reticulum-targeted NIR-II phototherapy combined with inflammatory vascular suppression elicits a synergistic effect against TNBC. BIOMATER SCI-UK. 2023 Jan;: IF ;Mouse. 36692120
- **[IF=7.3]** Liquan Jin. et al. High expression ITGA2 affects the expression of MET, PD-L1, CD4 and CD8 with the immune microenvironment in pancreatic cancer patients. FRONT IMMUNOL. 2023; 14: 1209367 IHC ;Human. 37881431
- **[IF=7.1]** Shuangjie Zhu. et al.Dihydroartemisinin inhibits the development of autoimmune thyroiditis by modulating oxidative stress and immune imbalance.free radical biology and medicine.2025 Feb 21:231:57-67. IF ;Mouse. 39988064