

bs-0647R**[Primary Antibody]****Bioss**
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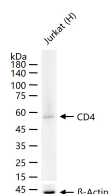
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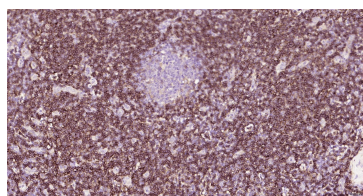
400-901-9800

CD4 Rabbit pAb**— DATASHEET —****Host:** Rabbit**Isotype:** IgG**Clonality:** Polyclonal**GeneID:** 920**SWISS:** P01730**Target:** CD4**Immunogen:** KLH conjugated synthetic peptide derived from human CD4: 385-457/457. < Cytoplasmic >**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 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. 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].

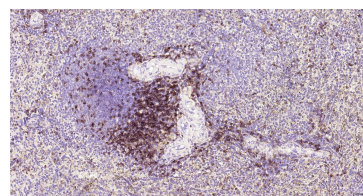
The CD4 antigen is involved in the recognition of MHC class II molecules and is a co-receptor for HIV. CD4 is primarily expressed in a subset of T-lymphocytes, also referred to as T helper cells, but may also be expressed by other cells in the immune system, such as monocytes, macrophages, and dendritic 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** (1µg/Test)**Reactivity:** Human**Predicted MW.:** 48 kDa**Observed MW.:** 55 kDa**Subcellular Location:** Cell membrane**— VALIDATION IMAGES —**

25 µg total protein per lane of various lysates (see on figure) probed with CD4 polyclonal antibody, unconjugated (bs-0647R) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.

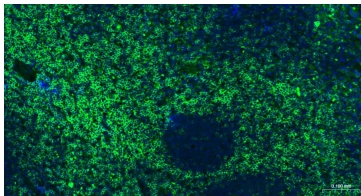


Paraformaldehyde-fixed, paraffin embedded Human Tonsil; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with CD4 Polyclonal Antibody, Unconjugated (bs-0647R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.

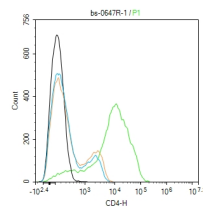


Paraformaldehyde-fixed, paraffin embedded Human Spleen; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with CD4 Polyclonal Antibody, Unconjugated (bs-0647R) at 1:200 overnight at 4°C, followed by conjugation to the bs-0295G-HRP and DAB (C-0010) staining.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Paraformaldehyde-fixed, paraffin embedded Human Tonsil; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with CD4 Polyclonal Antibody, Unconjugated (bs-0647R) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Rabbit IgG antibody (Green, bs-0295G-BF488), DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control: Jurkat. Primary Antibody (green line): Rabbit Anti-CD4 antibody (bs-0647R) 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=27.7]** Yang Liu. et al. Generation of tolerogenic antigen-presenting cells in vivo via the delivery of mRNA encoding PDL1 within lipid nanoparticles..Nature Biomedical Engineering.2025 Mar 28. IHC ;Mouse. 40155762
- **[IF=20.3]** Guoyun Wan. et al. Light-cured millineedle platform delivers “nano-pomegranate” for combinatorial electrodynamic therapy and cuproptosis against oral carcinoma. BIOACT MATER. 2025 Nov;53:718 FC ;Mouse. 40801019
- **[IF=16]** Chufan Wang. et al. Enhanced Nano-Vaccine Utilizing Biomineralized Virus-like Particles for Efficient Glioblastoma Immunotherapy via the Nose-To-Brain Delivery Pathway. ACS NANO. 2025;19(22):21154–21168 IF ;Mouse. 40442950
- **[IF=13.3]** Qing Liao. et al. Gut microbial metabolite 4-hydroxybenzeneacetic acid drives colorectal cancer progression via accumulation of immunosuppressive PMN-MDSCs. J CLIN INVEST. 2025 Apr;: IHC ;Human. 40179015
- **[IF=13.081]** Xu Jun Yan. et al. Interleukin-5-induced eosinophil population improves cardiac function after myocardial infarction. CARDIOVASC RES. 2022 Jul;118(9):2165-2178 IF ;Mouse. 34259869