

## Recombinant CD4 (T-Helper/Inducer Cell Marker) Antibody

Rabbit Monoclonal Antibody [Clone CD4/3619R]

Catalog No	Format	Size
920-RBM9-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
920-RBM9-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
920-RBM9-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

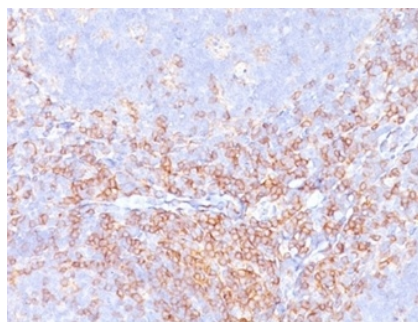
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

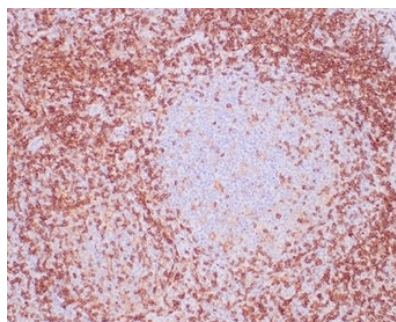
<b>Clone</b>	CD4/3619R
<b>Gene Name</b>	CD4
<b>Immunogen</b>	Recombinant fragment (around aa 216-396) of human CD4 protein (exact sequence is proprietary)
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG / Kappa
<b>Mol. Weight of Antigen</b>	55kDa
<b>Cellular Localization</b>	Cell membrane
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	CCRF-CEM or HL-60. Human lymph node or tonsil., Human peripheral blood mononuclear cells (PBMCs). Human spleen.

\*Optimal dilution for a specific application should be determined.

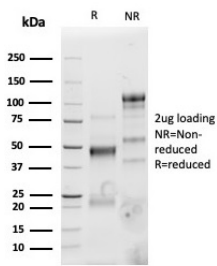
### Product Images for Recombinant CD4 (T-Helper/Inducer Cell Marker) Antibody



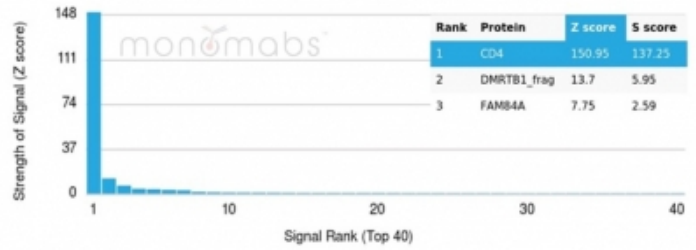
Formalin-fixed, paraffin-embedded human tonsil stained with CD4 Recombinant Rabbit Monoclonal Antibody (CD4/3619R) at 2ug/ml. HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



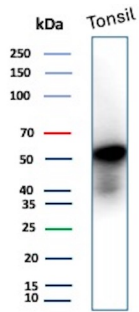
Formalin-fixed, paraffin-embedded human lymph node stained with CD4 Recombinant Rabbit Monoclonal Antibody (CD4/3619R) at 2ug/ml. HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



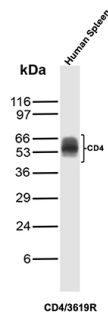
SDS-PAGE Analysis of Purified CD4 Recombinant Rabbit Monoclonal Antibody (CD4/3619R). Confirmation of Purity and Integrity of Antibody.



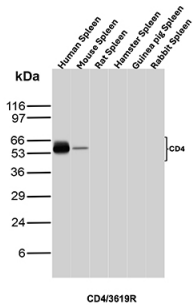
Analysis of Protein Array containing more than 19,000 full-length human proteins using CD4-Monospecific Recombinant Rabbit Monoclonal Antibody (CD4/3619R). Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



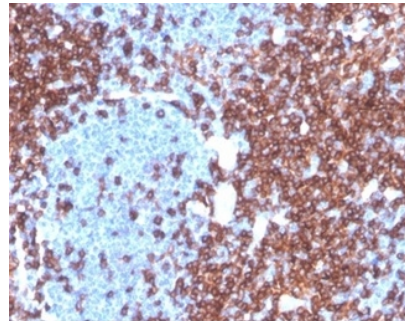
Western Blot Analysis of human Tonsil tissue lysate using CD4 Recombinant Rabbit Monoclonal Antibody (CD4/3619R).



Western Blot Analysis of Human Spleen tissue lysate using CD4 Recombinant Rabbit Monoclonal Antibody (CD4/3619R).



Western Blot Analysis of Spleen tissue lysates of different species using CD4 Recombinant Rabbit Monoclonal Antibody (CD4/3619R).



Formalin-fixed, paraffin-embedded human lymph node stained with CD4 Recombinant Rabbit Monoclonal Antibody (CD4/3619R) at 2µg/ml. HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

### **Specificity & Comments**

Recognizes a protein of 55kDa, identified as CD4. It 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 protein 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. The majority of peripheral T-cell lymphomas are derived from the T-helper/regulatory cell subset so that most mature T-cell neoplasms are CD4+/CD8-. Anti-CD4 is used in the immunohistochemical staining of lymphoproliferative disorders to evaluate tumors with CD4 aberrant expression.

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### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

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### **Supplied As**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

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### **Storage and Stability**

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

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### **Research Areas**

AKT Signaling, Cardiovascular, Cytokine Signaling, Hematopoietic Stem Cells, Immunology, Infectious Disease

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