

## Product datasheet for **UM870010**

### CD4 Mouse Monoclonal Antibody [Clone ID: UMAB64]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	UMAB64
Applications:	IF, IHC, WB
Recommended Dilution:	IHC 1:50~100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human CD4 (NP_000607) produced in HEK293T cell.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	0.5~1.0 mg/ml (Lot Dependent)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	48.3 kDa
Gene Name:	CD4 molecule
Database Link:	<a href="#">NP_000607</a> <a href="#">Entrez Gene 920 Human</a> <a href="#">P01730</a>



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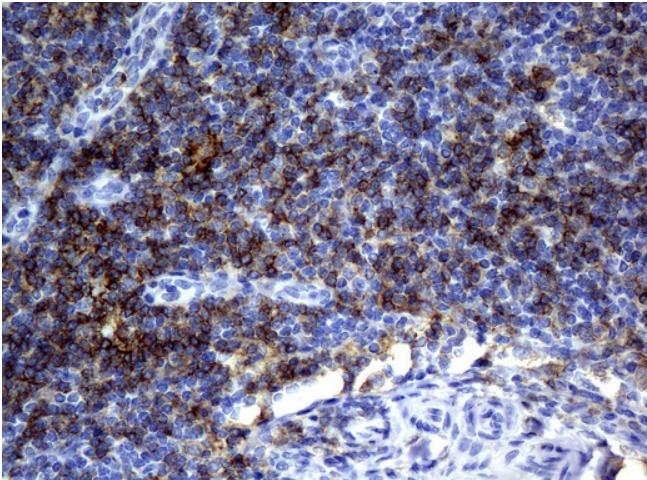
**Background:** This gene encodes a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigens and is also a receptor for the human immunodeficiency virus. This gene is expressed not only in T lymphocytes, but also in B cells, macrophages, and granulocytes. 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]

**Synonyms:** CD4mut; IMD79; OKT4D

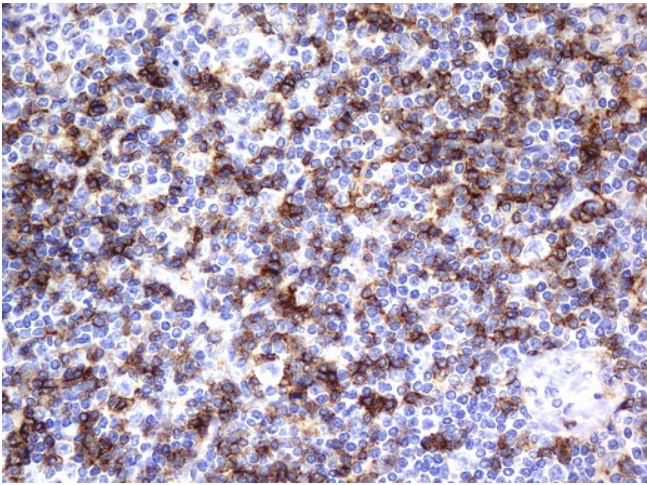
**Protein Families:** Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transmembrane

**Protein Pathways:** Antigen processing and presentation, Cell adhesion molecules (CAMs), Hematopoietic cell lineage, Primary immunodeficiency, T cell receptor signaling pathway

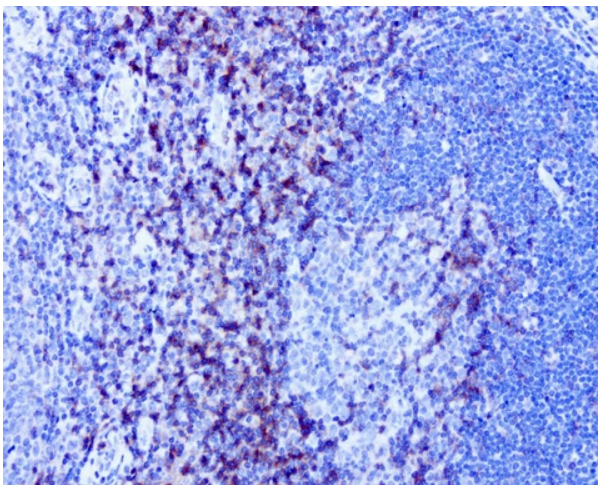
### Product images:



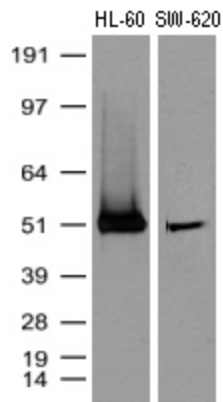
Immunohistochemical staining of paraffin-embedded Human lymph node tissue using anti-CD4 mouse monoclonal antibody. ([UM800010]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



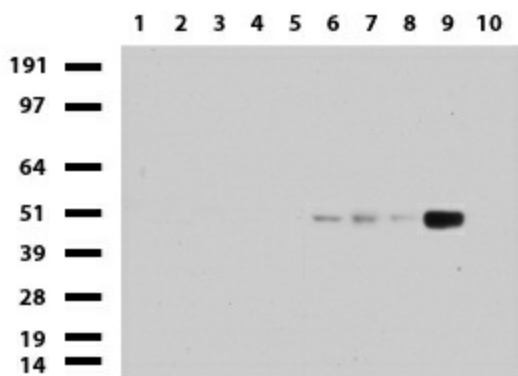
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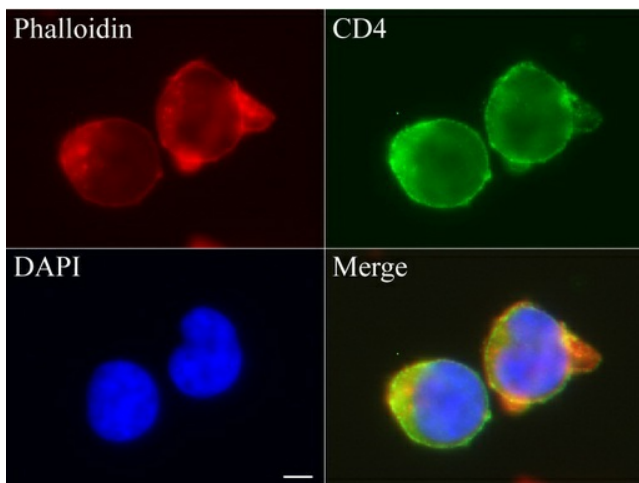
Immunohistochemical staining of paraffin-embedded human tonsil using anti-CD4 clone UMAB64 mouse monoclonal antibody at 1:200 dilution of 1mg/mL and detection with Polink2 Broad HRP DAB. [UM800010] requires heat-induced epitope retrieval with Accel for 3minutes at 110C in pressure chamber. The image shows the germinal and non germinal cells have weak to medium cytoplasmic and membranous staining.



Western Blot analysis of HL-60 and SW-620 cell lysates (35ug) by using anti-CD4 monoclonal antibody (Clone UMAB64)



Western blot of human tissue lysates (15ug) from 10 different tissues (1: Testis, 2: Omentum, 3: Uterus, 4: Breast, 5: Brain, 6: Liver, 7: Ovary, 8: Colon, 9: Spleen, 10: Thyroid). Dilution: 1:500.



Immunofluorescent staining of Jurkat cells using anti-CD4 mouse monoclonal antibody ([UM800010], green, 1:50). Actin filaments were labeled with Alexa Fluor® 594 Phalloidin (red), and nuclear with DAPI (blue). Scale bar, 4µm.