

## **Product datasheet for UM800010**

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OriGene Technologies, Inc.

## **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:HumanHost:MouseIsotype: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: NP 000607

Entrez Gene 920 Human

P01730



**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]

Synonyms: CD4mut; IMD79; OKT4D

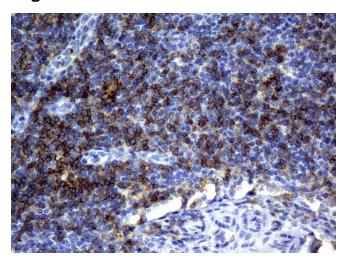
**Protein Families:** Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Induced pluripotent stem

cells, Transmembrane

Protein Pathways: Antigen processing and presentation, Cell adhesion molecules (CAMs), Hematopoietic cell

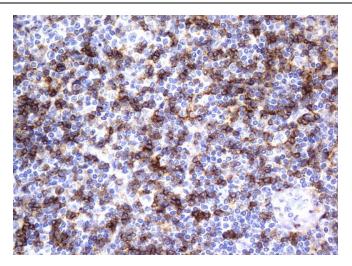
lineage, Primary immunodeficiency, T cell receptor signaling pathway

## **Product images:**

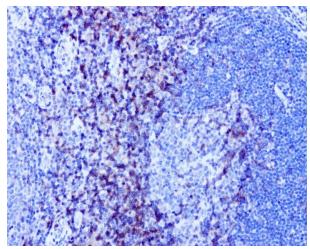


Immunohistochemical staining of paraffinembedded Human lymph node tissue using anti-CD4 mouse monoclonal antibody. (UM800010; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

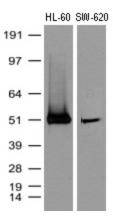




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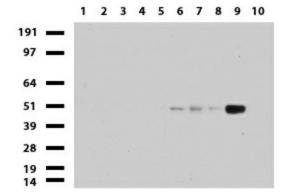


Immunohistochemical staining of paraffinembedded human tonsil using anti-CD4 clone UMAB64 mouse monoclonal antibody at 1:200 dilution of 1mg/mL and detection with Polink2 Broad HRP DAB. UM800010 requires heatinduced epitope retrieval with Accel for 3minutes at110C in pressure chamber. The image shows the germinal and non germinal cells have weak to medium cytoplasmic and memeranous staining.

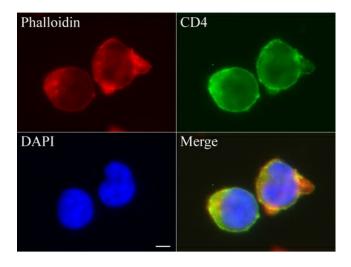


Western Blot analysis of HL-60 and SW-620 cell lysates (35ug) by using anti-CD4 monoclonal antibody (Clone UMAB64)





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). Diluation: 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.