

# Product datasheet for UM500006CF

## CD2 Mouse Monoclonal Antibody [Clone ID: UMAB6]

### **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	Primary Antibodies
Clone Name:	UMAB6
Applications:	10k-ChIP, FC, IF, IHC, WB
Recommended Dilution:	WB 1:2000
Reactivity:	Human
Host:	Mouse
lsotype:	lgG1
Clonality:	Monoclonal
Immunogen:	Protein expressed in 293T cell transfected with human CD2 expression vector
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
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:	39.45 kDa
Gene Name:	CD2 molecule
Database Link:	<u>NP_001758</u> <u>Entrez Gene 914 Human</u> <u>P06729</u>
Background:	CD2 interacts with lymphocyte function-associated antigen (LFA-3) and CD48/BCM1 to mediate adhesion between T-cells and other cell types. CD2 is implicated in the triggering of T-cells, the cytoplasmic domain is implicated in the signaling function



## **CD2** Mouse Monoclonal Antibody [Clone ID: UMAB6] – UM500006CF

Druggable Genome, Transmembrane

Synonyms:

**Protein Families:** 

**Protein Pathways:** Cell adhesion molecules (CAMs), Hematopoietic cell lineage

LFA-2; SRBC; T11

## **Product images:**



Immunohistochemical staining of paraffinembedded Adenocarcinoma of colon tissue using anti-CD2 mouse monoclonal antibody. (Clone UMAB6, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-CD2 mouse monoclonal antibody. (Clone UMAB6, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



IHC staining of paraffin-embedded human tonsil using anti-CD2 clone UMAB6 mouse monoclonal antibody at 1:200 of 0.6mg/mL and detection with Polink2 Broad HRP DAB. [UM500006] requires heat-induced epitope retrieval with Accel pH8.7 at 95-100C 30 minutes [do not let boil] or 10 min in pressure cooker. The image shows strong membranous and cytoplasmic staining in >50 % of non germinal center cells of tonsil and <20% of the germinal center cells. No staining was seen in the squamous epithelia cells.

IHC staining of FFPE human spleen using anti-CD2 clone UMAB6 mouse monoclonal antibody at 1:200 and detection with Polink2 Broad HRP DAB. [UM500006] requires heat-induced epitope retrieval with Citrate pH6.0. The image shows strong membranous and cytoplasmic staining.

Immunohistochemical staining of paraffinembedded mouse ascending colon tissue anti-CD2 clone UMAB6 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [UM500006]) (1:500).



Immunohistochemical staining of paraffinembedded mouse colon tissue within the normal limits using anti-CD2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [UM500006]) (1:500)

Immunohistochemical staining of paraffinembedded mouse spleen tissue using anti-CD2 clone UMAB6 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [UM500006]) (1:500).



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CD2 ([RC206612], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CD2 (1:500).



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-CD2 monoclonal antibody (Clone UMAB6) (1:1000).



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: Thyroid 9: Colon, 10: Spleen). Diluation: 1:500.



Immunofluorescent staining of Jurkat cells using anti-CD2 mouse monoclonal antibody ([UM500006], green, 1:100). Actin filaments were labeled with Alexa Fluor® 594 Phalloidin (red), and nuclear with DAPI (blue). Scale bar, 8µm.

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Flow cytometric analysis of living 293T cells transfected with CD2 overexpression plasmid ([RC206612], Red)/empty vector ([PS100001], Blue) using anti-CD2 antibody ([UM500006]). Cells incubated with a non-specific antibody (Green) were used as isotype control (1:100).

Flow cytometric analysis of living Jurkat cells, using anti-CD2 antibody ([UM500006], Red), compared to an isotype control (green), and a PBS control (blue) (1:100).

Flow cytometric analysis of living CCRF-CEM cells, using anti-CD2 antibody ([UM500006], Red), compared to an isotype control (green), and a PBS control (blue) (1:100).



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-CD2 mouse monoclonal antibody (Clone UMAB6). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification. These data show that UltraMAB anti-CD2 (Clone UMAB6) very specifically recognizes Cd2 antigen on OriGene protein microarray chip.