

Product datasheet for **UM800017CF**

CD2 Mouse Monoclonal Antibody [Clone ID: UMAB86]

Product data:

Product Type:	Primary Antibodies
Clone Name:	UMAB86
Applications:	10k-ChIP, FC, IF, IHC, WB
Recommended Dilution:	IHC 1:100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human CD2 (NP_001758) produced in HEK293T cell.
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:	39.3 kDa
Gene Name:	Homo sapiens CD2 molecule (CD2), transcript variant 2, mRNA.
Database Link:	NP_001758 Entrez Gene 914 Human P06729



[View online »](#)

Background:

CD2 is a surface antigen of the human T-lymphocyte lineage that is expressed on all peripheral blood T cells (summarized by Sewell et al., 1986 [PubMed 3490670]). It is one of the earliest T-cell markers, being present on more than 95% of thymocytes; it is also found on some natural killer cells but not on B lymphocytes. Monoclonal antibodies directed against CD2 inhibit the formation of rosettes with sheep erythrocytes, indicating that CD2 is the erythrocyte receptor or is closely associated with it. [supplied by OMIM, Jul 2010]

Synonyms:

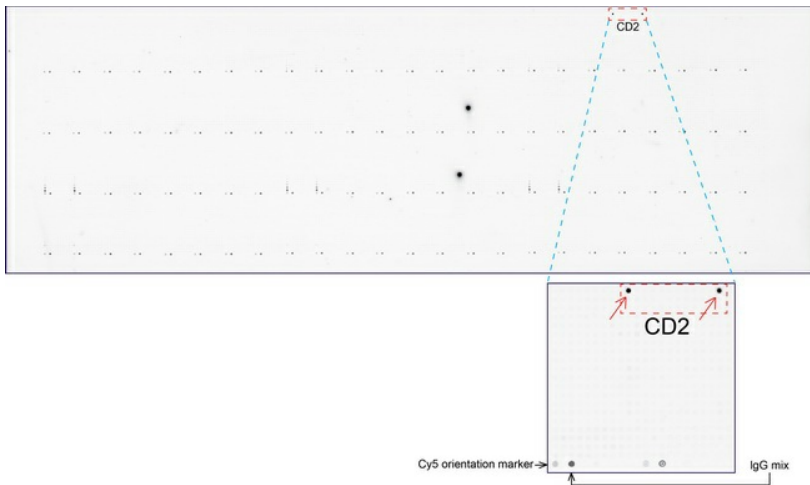
LFA-2; SRBC; T11

Protein Families:

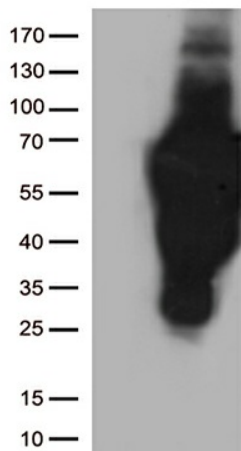
Druggable Genome, Transmembrane

Protein Pathways:

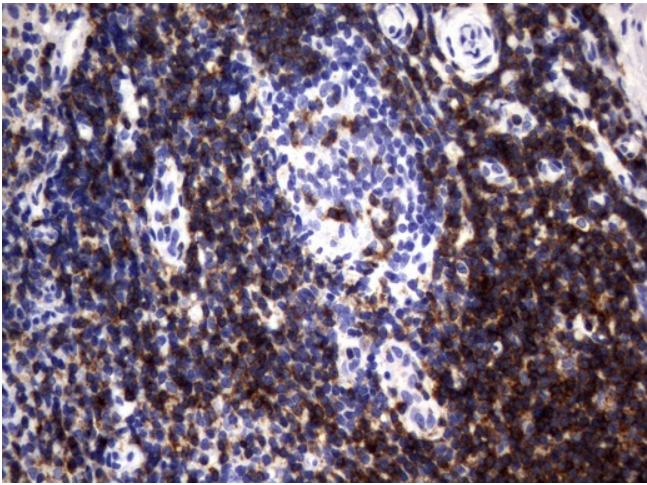
Cell adhesion molecules (CAMs), Hematopoietic cell lineage

Product images:


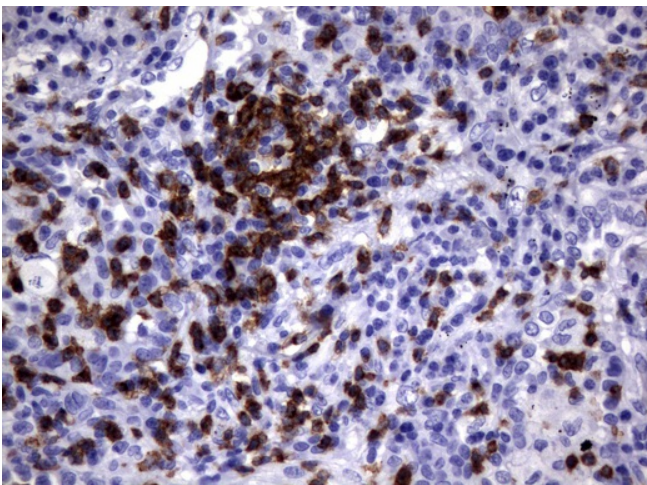
OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-CD2 mouse monoclonal antibody ([UM800017]). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification.



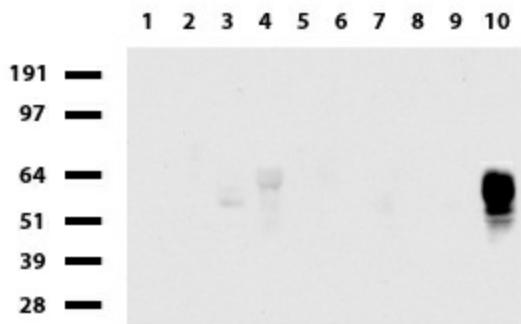
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CD2 ([RC206612], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CD2 (1:500).



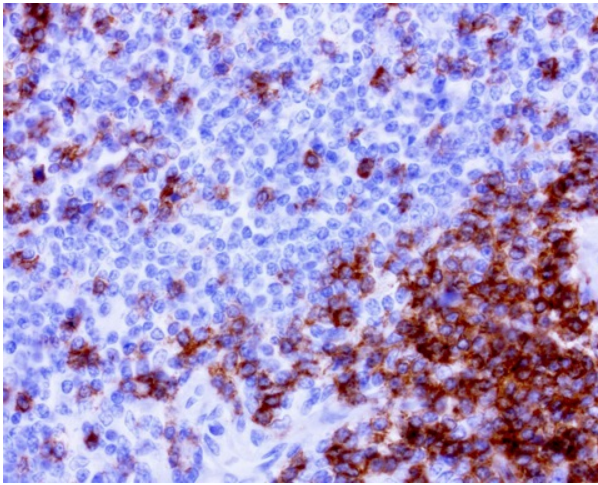
Immunohistochemical staining of paraffin-embedded Human tonsil using anti-CD2 mouse monoclonal antibody. ([UM800017]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100)



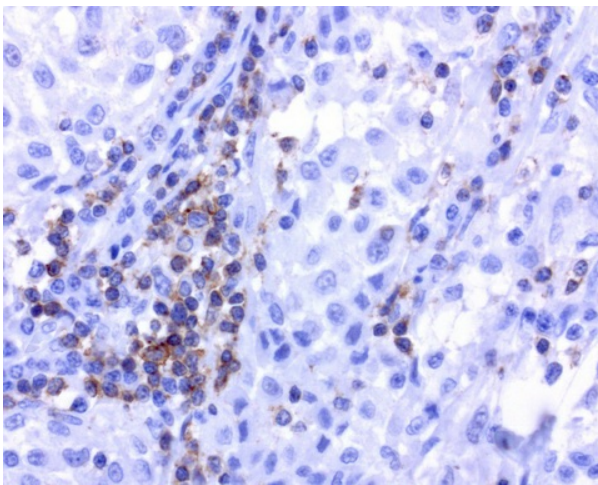
Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-CD2 mouse monoclonal antibody. ([UM800017]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) (1:100)



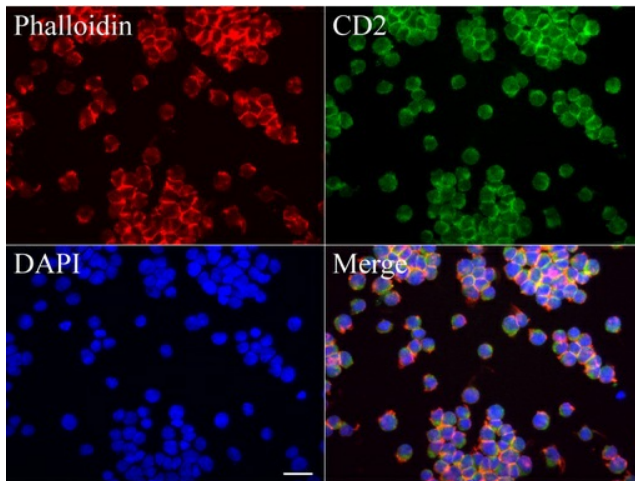
Western blot of human tissue lysates (15ug) from 10 different tissues (1: Testis, 2: Omentum, 3: Uterus, 4: Breast, 5: Brain, 6: Liver, 7: Ovary, 8: Thyroid, 9: Colon, 10: Spleen). Diluation: 1:500.



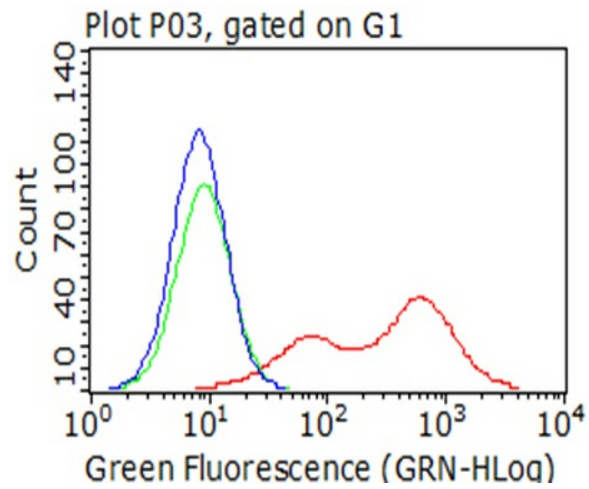
Immunohistochemical staining of paraffin-embedded human spleen using anti-CD2 mouse monoclonal antibody at 1: 200 dilution of 1mg/mL using Polink2 Broad HRP DAB for detection. [UM800017] requires HIER with citrate pH6.0 at 110°C for 3min using pressure chamber/cooker. The image shows strong cytoplasmic and membrane staining.



Immunohistochemical staining of paraffin-embedded human melanoma using anti-CD2 mouse monoclonal antibody at 1: 200 dilution of 1mg/mL using Polink2 Broad HRP DAB for detection. [UM800017] requires HIER with citrate pH6.0 at 110°C for 3min using pressure chamber/cooker. The image shows strong cytoplasmic and membrane staining infiltrating T cells but no staining in the tumor cells.



Immunofluorescent staining of Jurkat cells using anti-CD2 mouse monoclonal antibody ([UM800017], green, 1:100). Actin filaments were labeled with Alexa Fluor® 594 Phalloidin (red), and nuclear with DAPI (blue). Scale bar, 20µm.



Flow cytometric analysis of living 293T cells transfected with CD2 overexpression plasmid ([RC206612], Red)/empty vector ([PS100001], Blue) using anti-CD2 antibody ([UM800017]). Cells incubated with a non-specific antibody (Green) were used as isotype control (1:100).