

CD37 Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1261a

Product Information

Application	ICC, E
Primary Accession	P11049
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Clone Names	2B8
Isotype	IgG1
Calculated MW	31703
Description	CD37, also known as GP52-40, TSPAN26, MGC120234. Enterz Protein NP_001035120. It is a member of the transmembrane 4 superfamily, also known as the tetraspanin family. Most of these members are cell-surface proteins that are characterized by the presence of four hydrophobic domains. The proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. This encoded protein is a cell surface glycoprotein that is known to complex with integrins and other transmembrane 4 superfamily proteins. It may play a role in T-cell-B-cell interactions. Alternate splicing results in multiple transcript variants encoding different isoforms.
Immunogen	Purified recombinant fragment of CD37 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	951
Other Names	Leukocyte antigen CD37, Tetraspanin-26, Tspan-26, CD37, CD37, TSPAN26
Dilution	ICC~~N/A E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CD37 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CD37
Synonyms	TSPAN26
Function	Structural component of specialized membrane microdomains known as tetraspanin-enriched microdomains (TERMs), which act as platforms for receptor clustering and signaling. Participates thereby in diverse biological functions such as cell signal transduction, adhesion, migration and protein trafficking (PubMed: 22624718). Upon ligand binding, two signaling pathways are activated, one acting through phosphorylation by LYN leading to cell death or a survival pathway with activation of GSK3B (PubMed: 22624718). Plays an essential role essential for clustering of integrin ITGA4/ITGB1 and promotes its mobility in the plasma membrane of B-cells. In turn, participates in ITGA4/ITGB1 integrin-mediated antiapoptotic signaling through AKT (By similarity). Also plays a role in the migration of dendritic cells and neutrophils to draining lymph nodes, as well as in their integrin- mediated adhesion (By similarity). Negatively regulates IL-6 responses through direct interaction with SOCS3 thereby preventing constitutive IL-6 signaling (PubMed: 26784544). Alternatively, inhibition of IL-6 signaling can also occur via interaction and stabilization of DECTIN1/CLEC7A at the cell membrane to inhibit its ability to promote the production of IL-6 (PubMed: 17182550).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	B-lymphocytes (PubMed:26784544). Antigen presenting cells (PubMed:17182550).

References

1. J Immunol. 2004 Mar 1;172(5):2953-61. 2. J Immunol. 2007 Jan 1;178(1):154-62.

Images

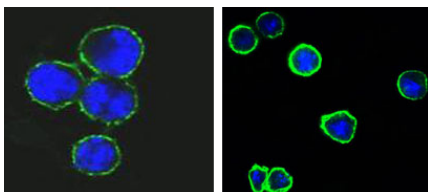


Figure 1: Confocal immunofluorescence analysis of methanol-fixed BCBL-1 (left) and L1210 (right) cells using CD37 mouse mAb(green), showing membrane localization. Blue: DRAQ5 fluorescent DNA dye.

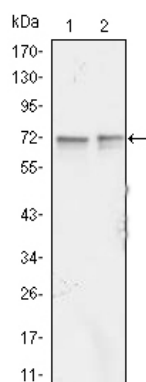
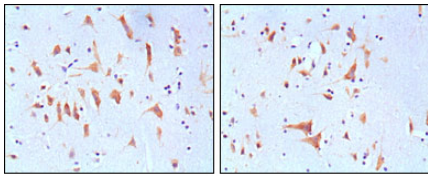


Figure 1: Western blot analysis using FMR1 mouse mAb against Jurkat (1) and K562 (2) cell lysate.

Figure 2: Immunohistochemical analysis of paraffin-embedded human brain tissues, showing cytoplasmic localization with DAB staining using FMR1 mouse mAb.



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