

CD37 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1261a

Specification

CD37 Antibody - Product Information

Application ICC, E
Primary Accession P11049

Reactivity Human, Mouse

Host Mouse
Clonality Monoclonal
Isotype IgG1

Calculated MW 31.7kDa KDa

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.

CD37 Antibody - 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.

CD37 Antibody - 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).

CD37 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CD37 Antibody - Images

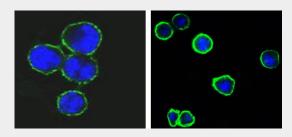


Figure 1: Confocal immunofluorescence analysis of methanol-fixed BCBL-1 (left) and L1210 (right)



cells using CD37 mouse mAb(green), showing membrane localization. Blue: DRAQ5 fluorescent DNA dye.

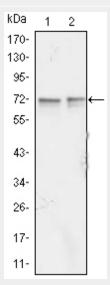


Figure 1: Western blot analysis using FMR1 mouse mAb against Jurkat (1) and K562 (2) cell lysate.

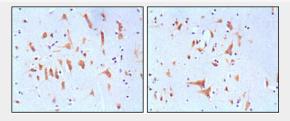


Figure 2: Immunohistochemical analysis of paraffin-embedded human brain tissues, showing cytoplasmic localization with DAB staining using FMR1 mouse mAb.

CD37 Antibody - References

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