

## Product datasheet for **SM1137P**

### CD53 Mouse Monoclonal Antibody [Clone ID: MEM-53]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	MEM-53
Applications:	FC, IHC, IP, WB
Recommended Dilution:	<b>Flow Cytometry:</b> Use 10 µl of 1/10-1/25 diluted antibody to label 10e6 cells in 100 µl. <b>Western blotting</b> (non-reducing conditions). <b>Immunoprecipitation.</b> <b>Immunohistochemistry on Frozen Sections.</b> <b>Immunohistochemistry on Paraffin Sections:</b> 10 µg/ml.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Specificity:	This antibody recognises the CD53 cell surface antigen, a glycoprotein of 32-42kD. CD53 is expressed by all leucocytes, but is absent from erythrocytes and platelets.
Formulation:	PBS, pH 7.4 containing 0.09% Sodium Azide State: Purified State: Liquid purified IgG fraction
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	CD53 molecule
Database Link:	<a href="#">Entrez Gene 963 Human P19397</a>



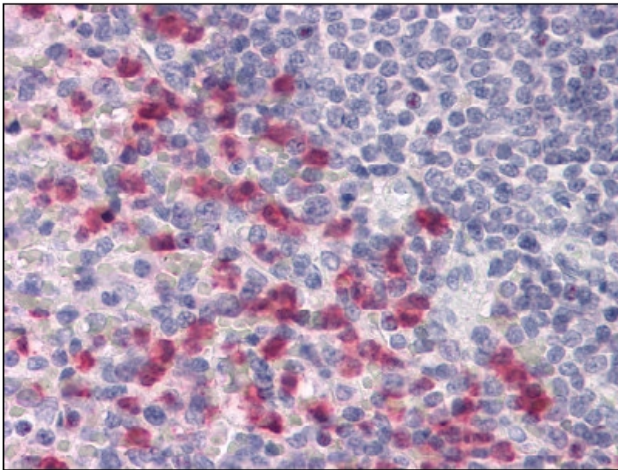
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**Background:**

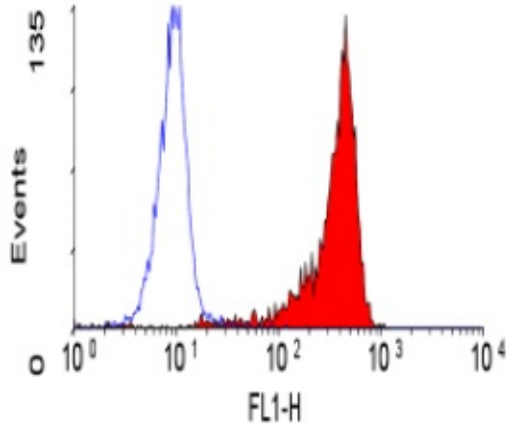
CD53 is a member of the tetraspan family of molecules, and is expressed by all leucocytes, but is absent from red cells and platelets. Most of the tetraspan family of molecules are cell surface proteins that are characterized by the presence of four hydrophobic domains. The proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. CD53 is a cell surface glycoprotein that is known to complex with integrins. It contributes to the transduction of CD2 generated signals in T cells and natural killer cells and has been suggested to play a role in growth regulation. Familial deficiency of this gene has been linked to an immunodeficiency associated with recurrent infectious diseases caused by bacteria, fungi and viruses. CD53 is a glycoprotein of 32-40 kDa belonging to the tetraspans family (TM4SF). CD53 antigen is exclusively expressed on leucocytes (not present on platelets, red blood cells and non-hematopoietic cells). CD53 is important for signal transduction. CD53 cross-linking promotes activation of human B cells and rat macrophages.

**Synonyms:**

Cell surface glycoprotein CD53, Tetraspanin-25, MOX44, TSPAN25

**Product images:**

Spleen, Human: Formalin-Fixed, Paraffin-Embedded (FFPE)



SM1137P staining of human peripheral blood granulocytes.