

Mouse CD96 Antibody

Monoclonal Rat IgG_{2A} Clone # 630612 Catalog Number: MAB5690

DESCRIPTION			
Species Reactivity	Mouse		
Specificity	Detects mouse CD96 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human CD96v2 is observed.		
Source	Monoclonal Rat IgG _{2A} Clone # 630612		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CD96 Val22-Met536 Accession # Q3U0X8		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.		

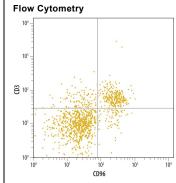
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	2.5 μg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled ι with conjugation.	using established conjugation methods. No BSA or other carrier proteins that could interfere



DATA



Detection of CD96 in Mouse Splenocytes by Flow Cytometry. Mouse splenocytes were labeled with Mouse CD96 Monoclonal Antibody (Catalog # MAB5690) followed by Allophycocyanin-conjugated Anti-Rat IgG F (ab')₂ Secondary Antibody (Catalog # F0113) and Mouse CD3 PE-conjugated Monoclonal Antibody (Catalog # FAB4841P). Quadrant markers were set based on control antibody staining (Catalog # MAB006).

PREPARATION AND STORAGE

Reconstitution Sterile PBS to a final concentration of 0.5 mg/mL

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 6 months, -20 to -70 °C under sterile conditions after reconstitution

BACKGROUND

Mouse CD96, also known as Tactile, is a 170-180 kDa member of the Ig-Superfamily. It is expressed on CD4 $^+$ and CD8 $^+$ T cells, NK and NKT cells, resting monocytes and $\gamma\delta$ T cells. Mouse CD96 binds to CD155 and Nectin-1, and likely participates in cell-to-cell adhesion. Mature mouse CD96 is a 581 amino acid (aa), type I transmembrane glycoprotein. It contains a 515 aa extracellular region (aa 22-536) that contains three Ig-like domains, plus a 45 aa cytoplasmic region. The two N-terminal domains are V-type (aa 24-244), while the distal domain is a C-type structure (aa 250-355). Unlike human, there is no splice variant in the second V-type domain. There is, however, a potential isoform that shows a single Cys substitution for aa 437-602. Over aa 1-536, mouse CD96 shares 55% and 79% aa identity with human and rat CD96, respectively.

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