

DESCRIPTION

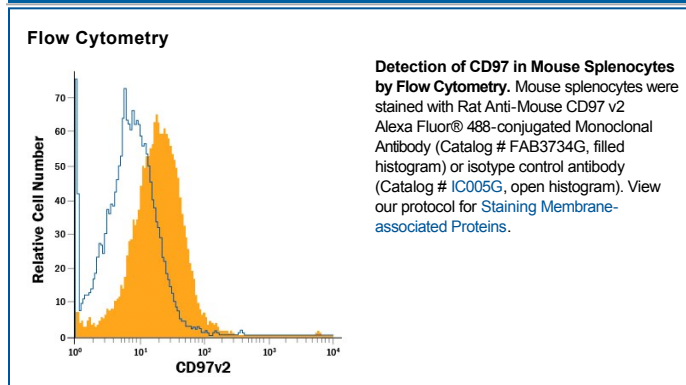
Species Reactivity	Mouse
Specificity	In direct ELISAs, approximately 20% cross-reactivity with recombinant mouse (rm) CD97 and no cross-reactivity with recombinant human (rh) CD96v2, rhCD97, or rmCD96 is observed.
Source	Monoclonal Rat IgG ₁ Clone # 587702
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse CD97v2 Gln24-His384 Accession # AAH06676
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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	5 μ L/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

CD97 is an approximately 90-100 kDa, 818 amino acid (aa) N-glycosylated member of the LNB-TM7 family of G protein-coupled proteins. Mouse CD97 contains a 510 aa N-terminal extracellular region with four EGF-like domains and a short 45 aa cytoplasmic tail. It undergoes proteolytic processing between Thr513-Ser514 to generate a 68-80 kDa N-terminal α -chain, and a 26-28 kDa membrane-bound β -chain. The two chains remain non-covalently linked on the cell membrane with dissociation and solubilization of the α -chain under select conditions. CD97 in mouse has an alternately spliced variant 2 (V2) that exhibits a 94 aa deletion, resulting in the loss of the third EGF-like repeat (aa 69-119). CD97 is expressed on monocytes, macrophages, neutrophils, T cells, B cell subsets, dendritic cells, mesenchymal stem cells, and smooth muscle cells. It binds CD55/DAF, chondroitin sulfate, CD90, and α V β 3 Integrin plus α 5 β 1 Integrin. Interaction with these molecules may vary between splice forms of CD97. On the cell surface, the α β heterodimer may "homodimerize", and form a true heterodimer with the 7-transmembrane LPAR1. CD97 participates in neutrophil migration, host defense, and angiogenesis. It also facilitates chemokine binding to PMNs, and inhibits select cell migration by downregulating MMP activity. Within aa 24-384, mouse CD97 variant 2 shares 51% aa and 76% aa sequence identity with corresponding regions of human and rat CD97, respectively.

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