

DESCRIPTION

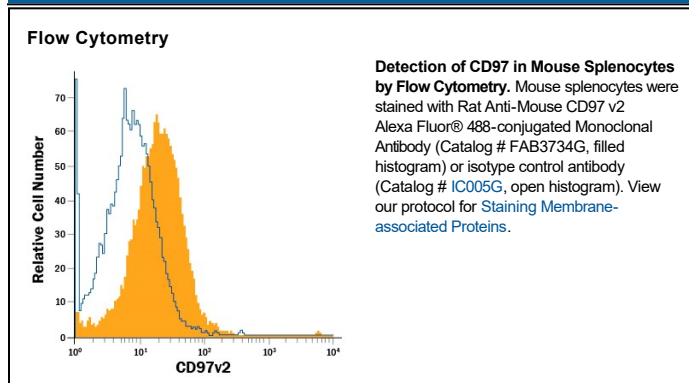
Species Reactivity	Mouse
Specificity	In direct ELISAs, approximately 20% cross-reactivity with recombinant mouse (rm) CD97 and no cross-reactivity with recombinant human (rh) CD96v2, rhCD97, or rmCD96 is observed.
Source	Monoclonal Rat IgG ₁ Clone # 587702
Purification	Protein A or G purified from hybridoma 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 µL/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. ● 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 αVβ3 Integrin plus α5β1 Integrin. Interaction with these molecules may vary between splice forms of CD97. On the cell surface, the αβ 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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