

DESCRIPTION

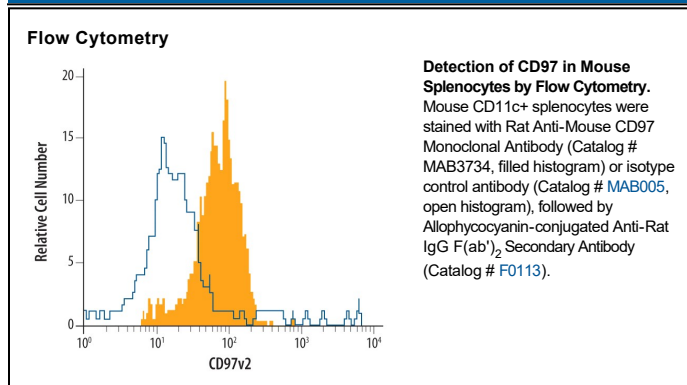
Species Reactivity	Mouse
Specificity	In direct ELISAs, approximately 20% cross-reactivity with recombinant mouse (rm) CD97 and no cross-reactivity with recombinant human (rh) CD96v2, rhCD97, or rmCD96 is observed.
Source	Monoclonal Rat IgG ₁ Clone # 587702
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse CD97v2 Gln24-His384 Accession # AAH06676
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
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 using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
Blockade of Receptor-ligand Interaction	In a functional ELISA, 0.5-2.5 µg/mL of this antibody will block 50% of the binding of 1 µg/mL of Recombinant Mouse CD97 Variant 2 (Catalog # 5494-CD) to immobilized Recombinant Mouse CD55/DAF (Catalog # 5490-CD) coated at 0.5 µg/mL (100 µL/well). At 5 µg/mL, this antibody will block >90% of the binding.	

DATA



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. <ul style="list-style-type: none"> • 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

CD97 is an approximately 100 kDa N-glycosylated member of the LNB-TM7 family of G protein-coupled proteins. It contains a 510 amino acid (aa) N-terminal extracellular region with four EGF-like domains and a juxtamembrane GPS motif which enables proteolytic shedding of the N-terminal extracellular domain. The alternately spliced variant 2 of CD97 exhibits a 94 aa deletion that results in loss of the third EGF-like repeat. CD97 is expressed on monocytes, macrophages, T cells, B cell subsets, dendritic cells, hematopoietic progenitor cells, and smooth muscle cells. It binds CD55/DAF, chondroitin sulfate, and Integrin although interaction with these molecules can vary between splice forms of CD97. CD97 participates in neutrophil migration, host defense, and angiogenesis. 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.