

DESCRIPTION

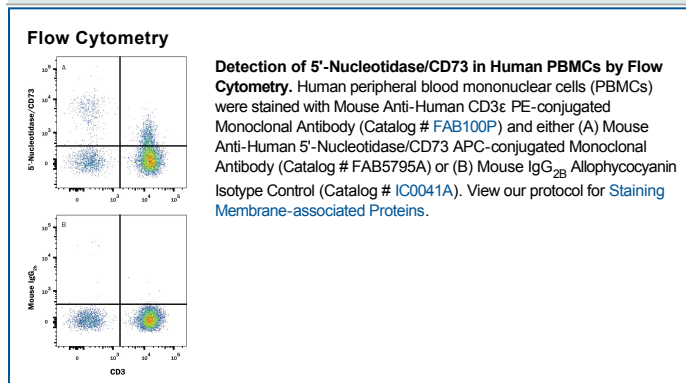
Species Reactivity	Human
Specificity	Detects recombinant human 5'-Nucleotidase in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant mouse 5'-Nucleotidase is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 606112
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human 5'-Nucleotidase/CD73 Trp27-Ile511 Accession # P21589
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 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	10 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

5'-Nucleotidase (also [ecto]-5'-nucleotidase/5'-NT, designated CD73) is a variably glycosylated, 69-73 kDa member of the 5'-Nucleotidase family of enzymes. It is expressed on multiple cell types, including vascular endothelium, transitional and nonkeratinized epithelium, cardiomyocytes, small intestine epithelium, FoxP3⁺ Treg lymphocytes, FDCs and B cells. 5'-Nucleotidase hydrolyzes AMP to adenosine and phosphate. This creates diffusible nucleosides necessary for cell homeostasis, and a ligand for cell membrane adenosine receptors. Mature human 5'-Nucleotidase is a 523 amino acid (aa) GPI-linked protein (aa 27-549). It contains a large Zn-dependent nucleotidase catalytic region (aa 28-532) and a C-terminal substrate binding site (aa 500-506). On the cell surface it exists as a disulfide-linked homodimer. Two splice variants are reported. One shows a deletion of aa 405-454, and a second possesses a 12 aa substitution for aa 253-574. Over aa 1-511, human 5'-Nucleotidase shares 88% aa identity with both mouse and rat 5'-Nucleotidase.