

Human/Equine 5'-Nucleotidase/CD73 Alexa Fluor® 647-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 606112

Catalog Number: FAB5795R

100 µg

DESCRIPTION

Species Reactivity	Human/Equine
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	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL 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	0.25-1 µg/10 ⁶ cells	Human peripheral blood lymphocytes and equine peripheral blood mononuclear cells (PBMCs)

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.

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