

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human 5'-Nucleotidase/CD73 in direct ELISAs. Detects human, mouse, and rat 5'-Nucleotidase/CD73 in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 606117
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 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

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

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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