

ENTPD1 (CD39) RABBIT PAB

Cat.#: S221122

Product Name: Anti-ENTPD1 (CD39) Rabbit Polyclonal Antibody

Synonyms: CD39; SPG64; ATPDase; NTPDase-1

Target: CD39/ENTPD1 (ectonucleoside triphosphate diphosphohydrolase 1)

UNIPROT ID: P49961 (Gene Accession - NP_001767)

Background: CD39/ENTPD1 is the major ectonucleotidase expressed in macrophages. It hydrolyzes extracellular ATP and ADP to AMP. This enzyme plays an important immunomodulatory role on macrophages by regulating the extracellular ATP levels and limiting P2-mediated cellular responses, such as apoptosis, NLRP3 inflammasome activation, and IL-1 β release. In neutrophil, impairment of nucleotide catabolism by pharmacologic inhibition or genetic deletion of CD39 increases the activation, chemotaxis, and adhesion of neutrophils to the vascular endothelium. In natural killer (NK) cells, a type of cytotoxic lymphocyte, which are also crucial to the innate immune responses, it is the dominant ectonucleotidase. CD39 activity in NK cells augments the capacity of these cells to secrete IFN γ by modulating P2 receptor activation. Thus, CD39 deletion on NK cells provides end-organ protection decreasing tissue damage mediated by NK cells. Finally, in dendritic cells (DCs) that are cells classically responsible for linking innate to adaptive immunity by capturing, processing, presenting antigens, and migrating to lymphoid tissues for the stimulation of antigen-reactive T cells, CD39 activity can regulate nucleotide levels, consequently, impair DCs' responses.

Immunogen: Synthetic peptide of human ENTDP1

Applications: ELISA, WB, IHC

Recommended Dilutions: IHC: 50-200;WB: 1000-5000;ELISA: 5000-10000

Host Species: Rabbit

Clonality: Rabbit Polyclonal

Isotype: Immunogen-specific rabbit IgG

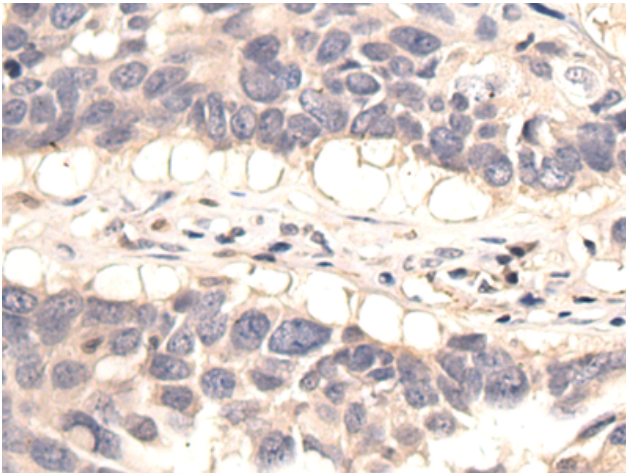
Purification: Antigen affinity purification

Species Reactivity: Human, Mouse, Rat

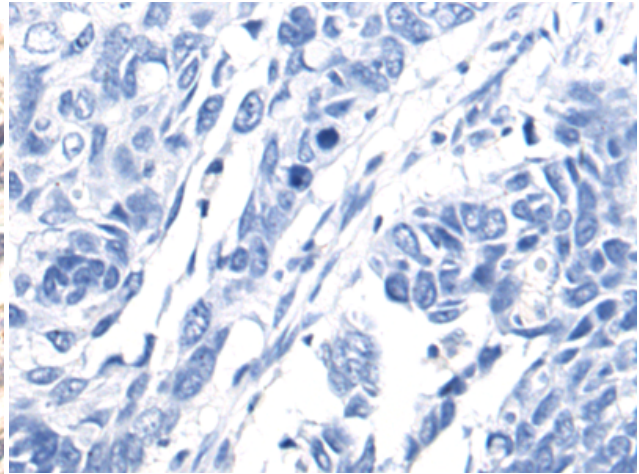
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

Research Areas: Immunology

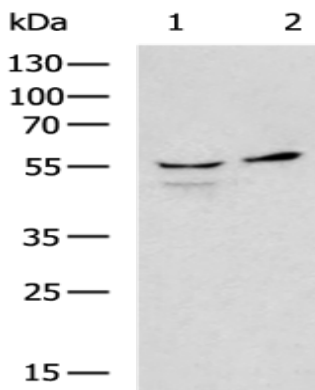
Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



Immunohistochemistry analysis of paraffin embedded Human lung cancer tissue using 221122(ENTPD1 Antibody) at a dilution of 1/50(Cytoplasm).



In comparison with the IHC on the left, the same paraffin-embedded Human lung cancer tissue is first treated with the synthetic peptide and then with 221122(Anti-ENTPD1 Antibody) at dilution 1/50.



Gel: 8%SDS-PAGE, Lysate: 40 µg;
Lane 1-2: HeLa and Jurkat cell lysates;
Primary antibody: 221122(ENTPD1 Antibody) at dilution 1/1200;
Secondary antibody: HRP-conjugated Goat anti rabbit IgG at 1/5000 dilution;
Exposure time: 1 minute