

PRPS1/2/1L1 RABBIT PAB

Cat.#: S220077

Product Name: Anti-PRPS1/2/1L1 Rabbit Polyclonal Antibody

Synonyms: ARTS; DFN2; PRS1; CMTX5; DFNX1; PRS-I; PPRibP/PRSII/PRPS1; PRPS3; PRPSL; PRS-III

UNIPROT ID: P60891/P11908/P21108 (Gene Accession - NP_002755 NP_787082 NP_002756)

Background: PRPS (phosphoribosyl pyrophosphate synthetase) proteins catalyze the synthesis of phosphoribosyl pyrophosphate (PRPP). Three human PRPS isoforms exist and are encoded by three different genes. PRPS1 and PRPS2 (also known as PRS1 and PRS2, respectively) are ubiquitously expressed, while PRPS3 (also known as PRPS1L1) is specific to the testis. PRPP is an important substrate synthesized from MgATP and ribose-5-phosphate in a reaction that requires inorganic phosphate and magnesium as a cofactor. PRPP is essential in the synthesis of nearly all nucleotides, implying that PRPS1/2 play an important role in nucleotide biosynthesis and purine metabolism. A mutation in the gene encoding PRPS1 may result in PRPS superactivity, a disease characterized by gout and the overproduction of purine nucleotides, uric acid and PRPP. PRPS1 mutations can also lead to a reduction in PRPS1 activity resulting in ARTS syndrome or CMTX5 (Charcot-Marie-Tooth disease X-linked recessive type 5).

Immunogen: Synthetic peptide of human PRPS1/2/1L1

Applications: ELISA, WB, IHC

Recommended Dilutions: IHC: 25-100;WB: 500-2000;ELISA: 2000-5000

Host Species: Rabbit

Clonality: Rabbit Polyclonal

Isotype: Immunogen-specific rabbit IgG

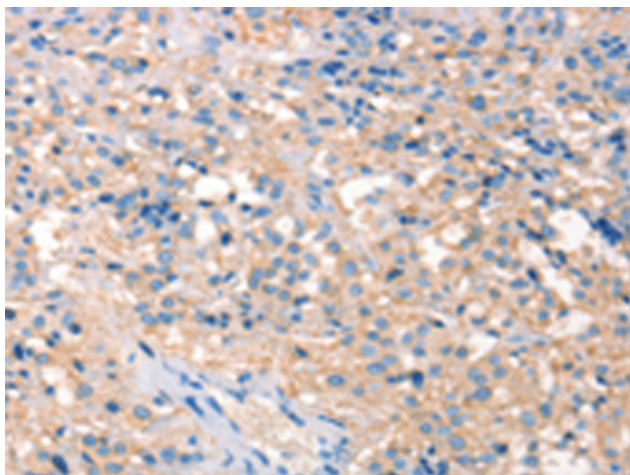
Purification: Antigen affinity purification

Species Reactivity: Human, Mouse

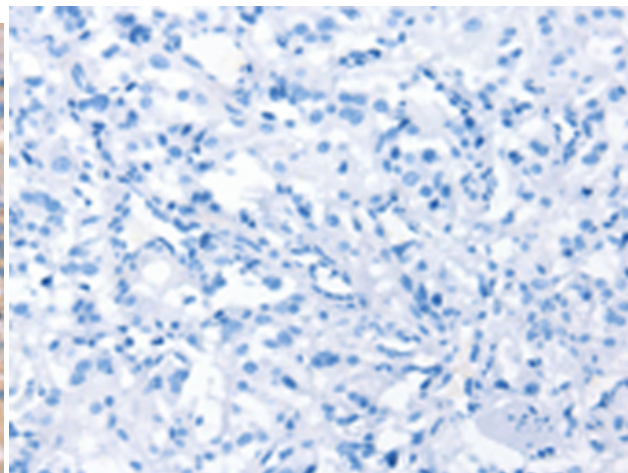
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

Research Areas: Epigenetics and Nuclear Signaling, Cancer, Metabolism, Cell Biology

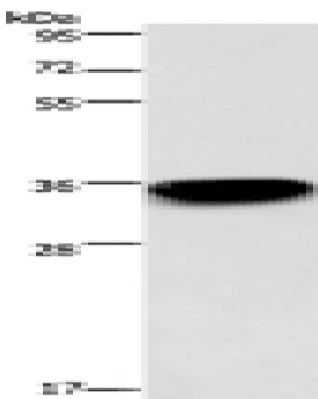
Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



Immunohistochemistry analysis of paraffin embedded Human thyroid cancer tissue using 220077 (PRPS1/2/1L1 Antibody) at a dilution of 1/30 (Cytoplasm).



In comparison with the IHC on the left, the same paraffin-embedded Human thyroid cancer tissue is first treated with the synthetic peptide and then with 220077 (Anti-PRPS1/2/1L1 Antibody) at dilution 1/30.



Gel: 8%SDS-PAGE, Lysate: 40 µg;
Lane: 293T cells;
Primary antibody: 220077 (PRPS1/2/1L1 Antibody) at dilution 1/400;
Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution;
Exposure time: 1 minute