

## 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

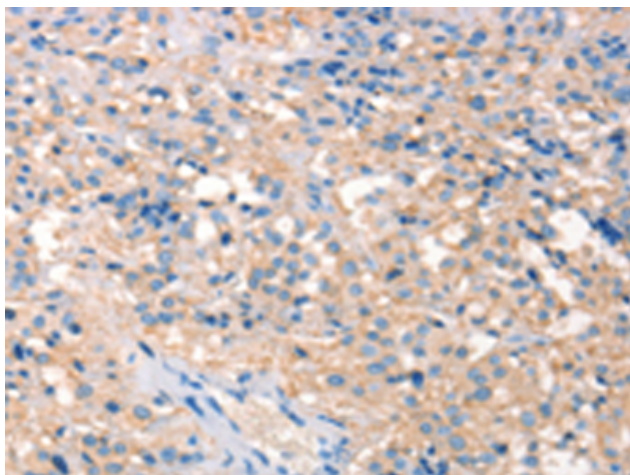
**Purification:** Antigen affinity purification

**Species Reactivity:** Human, Mouse

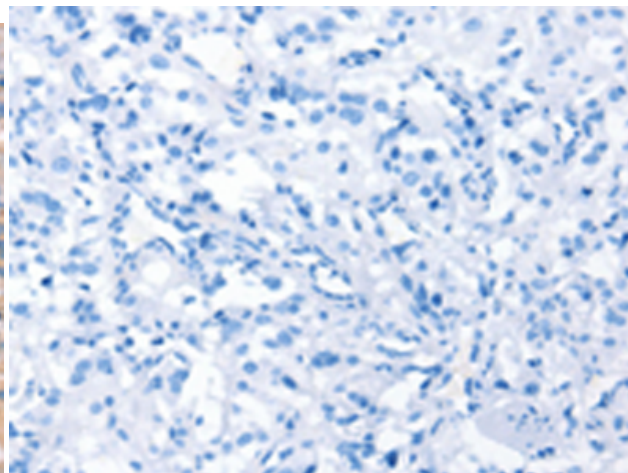
**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

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

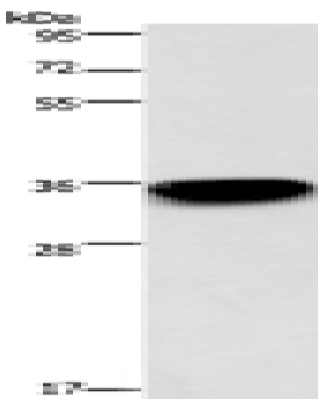
**Storage & Shipping:** Store at -20°C. Avoid repeated freezing and thawing



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