

DUT RABBIT PAB

Cat.#: S219749

Product Name: Anti-DUT Rabbit Polyclonal Antibody

Synonyms: dUTPase

UNIPROT ID: P33316 (Gene Accession - NP_001939)

Background: This gene encodes an essential enzyme of nucleotide metabolism. The encoded protein forms a ubiquitous, homotetrameric enzyme that hydrolyzes dUTP to dUMP and pyrophosphate. This reaction serves two cellular purposes: providing a precursor (dUMP) for the synthesis of thymine nucleotides needed for DNA replication, and limiting intracellular pools of dUTP. Elevated levels of dUTP lead to increased incorporation of uracil into DNA, which induces extensive excision repair mediated by uracil glycosylase. This repair process, resulting in the removal and reincorporation of dUTP, is self-defeating and leads to DNA fragmentation and cell death. Alternative splicing of this gene leads to different isoforms that localize to either the mitochondrion or nucleus. A related pseudogene is located on chromosome 19.

Immunogen: Synthetic peptide of human DUT

Applications: ELISA, IHC

Recommended Dilutions: IHC: 25-100; ELISA: 1000-2000

Host Species: Rabbit

Clonality: Rabbit Polyclonal

Isotype: Immunogen-specific rabbit IgG

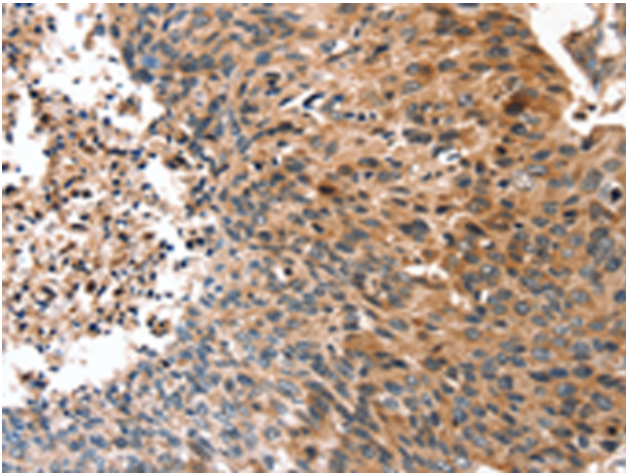
Purification: Antigen affinity purification

Species Reactivity: Human, Rat

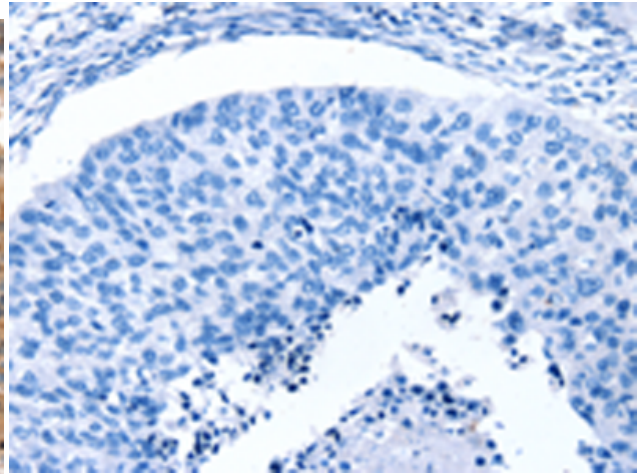
Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

Research Areas: Epigenetics and Nuclear Signaling

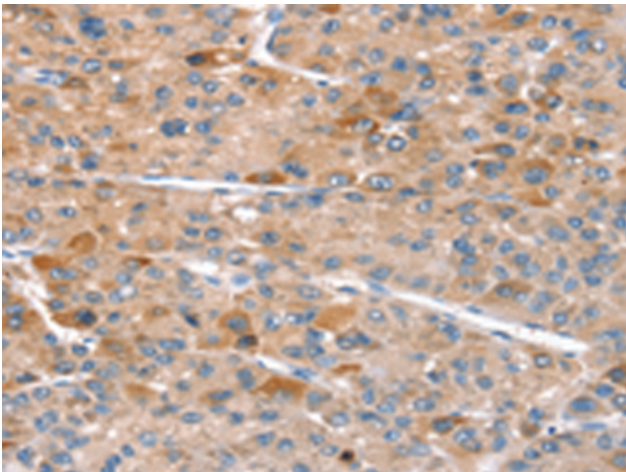
Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



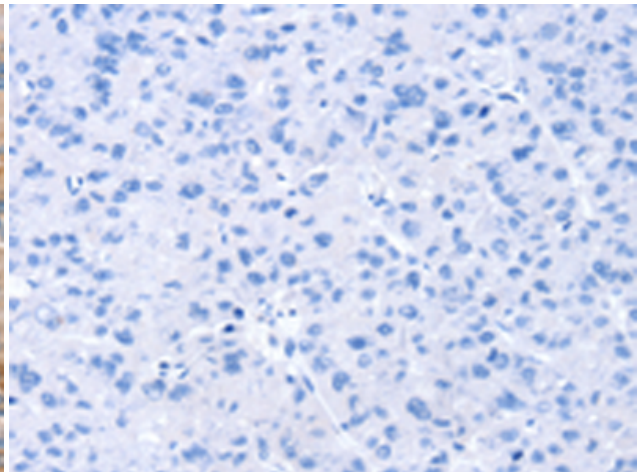
Immunohistochemistry analysis of paraffin embedded Human gastric cancer tissue using 219749 (DUT Antibody) at a dilution of 1/20 (Cytoplasm and Nucleus).



In comparison with the IHC on the left, the same paraffin-embedded Human gastric cancer tissue is first treated with the synthetic peptide and then with 219749 (Anti-DUT Antibody) at dilution 1/20.



The image on the left is immunohistochemistry of paraffin-embedded Human lung cancer tissue using 219749 (Anti-DUT Antibody) at a dilution of 1/20.



In comparison with the IHC on the left, the same paraffin-embedded Human lung cancer tissue is first treated with synthetic peptide and then with D260268 (Anti-DUT Antibody) at dilution 1/20.