

Product datasheet for **TA321411**

DUT Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 200-1000 WB positive control: 293T cells IHC: 10-50 Positive control: Human brain Predicted cell location: Cytoplasm
Reactivity:	Human, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to a region derived from 132-244 amino acids of Human Deoxyuridine triphosphatase
Formulation:	PBS pH7.3, 0.05% NaN ₃ , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	27 kDa
Gene Name:	deoxyuridine triphosphatase
Database Link:	NP_001939 Entrez Gene 497778 Rat Entrez Gene 1854 Human P33316



[View online »](#)

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.

Synonyms:

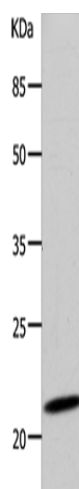
dUTPase

Protein Families:

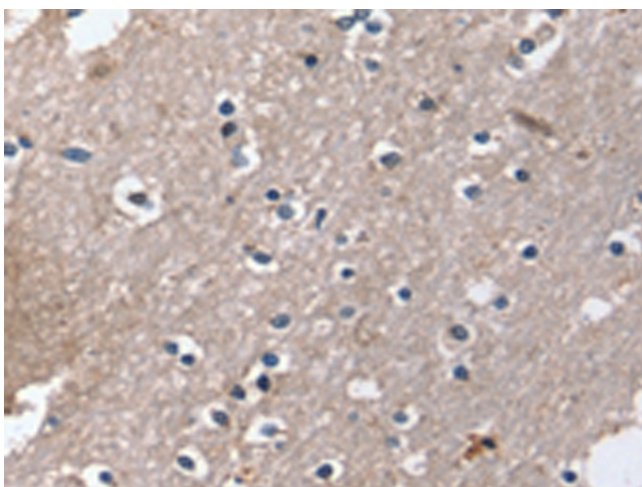
Druggable Genome

Protein Pathways:

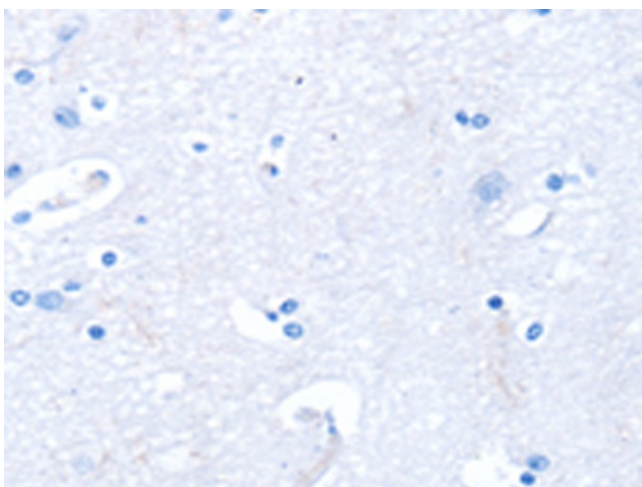
Metabolic pathways, Pyrimidine metabolism

Product images:

Gel: 10%SDS-PAGE
Lysate: 40 μ g
Lane: 293T cells
Primary antibody: TA321411 (DUT Antibody) at dilution 1/500
Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution
Exposure time: 5 minutes



Immunohistochemistry of paraffin-embedded Human brain tissue using TA321411 (DUT Antibody) at dilution 1/30 (Original magnification: $\times 200$)



Immunohistochemistry of paraffin-embedded Human brain tissue using TA321411 (DUT Antibody) at dilution 1/30, treated with synthetic peptide. (Original magnification: $\times 200$)