DUT Polyclonal Antibody

Catalog No. E-AB-12372

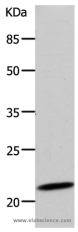
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

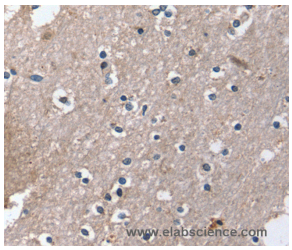
Reactivity	Human,Rat
Immunogen	Synthetic peptide of human DUT
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Conjugation	Unconjugated
Buffer	PBS with 0.05% sodium azide and 50% glycerol, PH7.4

Applications	Recommended Dilution
WB	1:200-1:1000
IHC	1:10-1:50

Data



Western Blot analysis of 293T cell using DUT Polyclonal Antibody at dilution of 1:500
Calculated Mw:27kDa



Immunohistochemistry of paraffin-embedded Human brain using DUT Polyclonal Antibody at dilution of 1:30

Preparation & Storage

Storage Store at -20℃. Avoid freeze / thaw cycles.

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.