# **Elabscience**®

## **DUT Polyclonal Antibody**

#### catalog number: E-AB-67503

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

Description	
Reactivity	Human;Mouse;Rat
Immunogen	Recombinant fusion protein of human DUT (NP_001020419.1).
Host	Rabbit
Isotype	IgG
Purification	Affinity purification
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol.
Applications	Recommended Dilution
WB	1:500-1:1000
IHC	1:50-1:200
IF	1:100-1:200

#### Data





Western blot analysis of extracts of various cell lines using DUT Polyclonal Antibody at dilution of 1:1000.

### Observed-MW:24 kDa Calculated-MW:17 kDa/26 kDa



Immunohistochemistry of paraffin-embedded Rat spleen using DUT Polyclonal Antibody at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded Human liver cancer using DUT Polyclonal Antibody at dilution of 1:100

(40x lens)





### For Research Use Only

Toll-free: 1-888-852-8623 Web:<u>w w w .elabscience.com</u>

# **Elabscience**®

Immunofluorescence analysis of U-2 OS cells using DUT Polyclonal Antibody at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.

Preparation & Storage	
Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the
	temperature recommended.

#### 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.