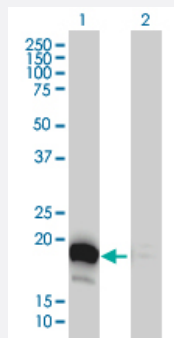


DUT monoclonal antibody (M01), clone 1C9

Catalog # H00001854-M01

Size 100 ug

Applications

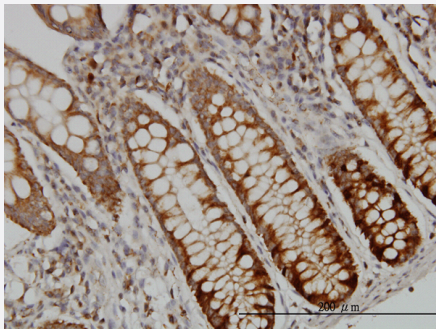


Western Blot (Transfected lysate)

Western Blot analysis of DUT expression in transfected 293T cell line by DUT monoclonal antibody (M01), clone 1C9.

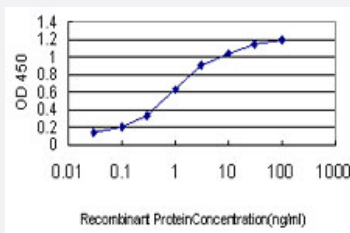
Lane 1: DUT transfected lysate (18 kDa).

Lane 2: Non-transfected lysate.



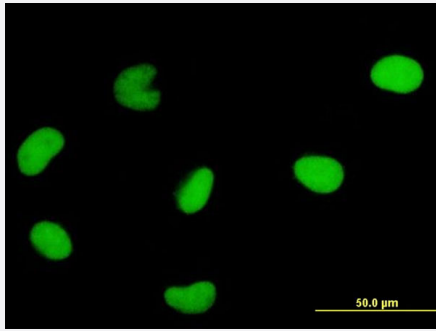
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to DUT on formalin-fixed paraffin-embedded human colon. [antibody concentration 1 ug/ml]



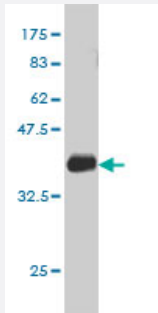
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged DUT is approximately 0.03ng/ml as a capture antibody.



Immunofluorescence

Immunofluorescence of monoclonal antibody to DUT on HeLa cell . [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (36.3 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant DUT.
Immunogen	DUT (AAH33645, 68 a.a. ~ 164 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	TDIQIALPSGCYGRVAPRSGLAAKHFIDVGAGVIDEDYRGNVGVVLFNFGKEKFEVKKGDRIAQLICERIFYPEIEEVQALDDTERGSGGFGSTGKN
Host	Mouse
Reactivity	Human
Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.3 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Transfected lysate)

Western Blot analysis of DUT expression in transfected 293T cell line by DUT monoclonal antibody (M01), clone 1C9.

Lane 1: DUT transfected lysate(18 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to DUT on formalin-fixed paraffin-embedded human colon. [antibody concentration 1 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged DUT is approximately 0.03ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- Immunofluorescence

Immunofluorescence of monoclonal antibody to DUT on HeLa cell . [antibody concentration 10 ug/ml]

Gene Info — DUT

Entrez GeneID [1854](#)

GeneBank Accession# [BC033645](#)

Protein Accession# [AAH33645](#)

Gene Name DUT

Gene Alias FLJ20622, dUTPase

Gene Description deoxyuridine triphosphatase

Omim ID [601266](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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. [provided by RefSeq]

Other Designations

dUTP nucleotidohydrolase|dUTP pyrophosphatase|deoxyuridine 5'-triphosphate nucleotidohydrolase

Publication Reference

- [The 1,2-Diaminocyclohexane Carrier Ligand in Oxaliplatin Induces p53-Dependent Transcriptional Repression of Factors Involved in Thymidylate Biosynthesis.](#)

Kiyonari S, Iimori M, Matsuoka K, Watanabe S, Morikawa-Ichinose T, Miura D, Niimi S, Saeki H, Tokunaga E, Oki E, Morita M, Kadomatsu K, Maehara Y, Kitao H.

Molecular Cancer Therapeutics 2015 Oct; 14(10):2332.

Application: WB-Ce, WB-Tr, Human, HCT116, LoVo, SW480 cells

Pathway

- [Metabolic pathways](#)
- [Pyrimidine metabolism](#)

Disease

- [DNA Damage](#)
- [Genetic Predisposition to Disease](#)