9F, No. 108, Jhouzih St.,Taipei, Taiwan
Tel: + 886-2-8751-1888 Fax: + 886-2-6602-1218
E-mail: sales@abnova.com

Datasheet

DUT monoclonal antibody (M01), clone 1C9

Catalog Number: H00001854-M01

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against a partial recombinant DUT.

Clone Name: 1C9

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:
TDIQIALPSGCYGRVAPRSGLAAKHFIDVGAGVIDEDY
RGNVGVVLFNFGKEKFEVKKGDRIAQLICERIFYPEIEE
VQALDDTERGSGGFGSTGKN

Host: Mouse

Reactivity: Human

Applications: ELISA, IF, IHC-P, S-ELISA, WB-Re, WB-Tr
(See our web site product page for detailed applications information)

Protocols: See our web site at http://www.abnova.com/support/protocols.asp or product page for detailed protocols

Isotype: IgG1 Kappa

Storage Buffer: In 1x PBS, pH 7.4

Storage Instruction: Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 1854

Gene Symbol: DUT

Gene Alias: FLJ20622, dUTPase

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]

References:

1. 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. Mol Cancer Ther. 2015 Oct;14(10):2332-42.