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ENC1 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant ENC1.
Catalog # AT1906a

Product Information

Application	WB
Primary Accession	O14682
Other Accession	NM_003633
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	3C10
Calculated MW	66130

Additional Information

Gene ID	8507
Other Names	Ectoderm-neural cortex protein 1, ENC-1, Kelch-like protein 37, Nuclear matrix protein NRP/B, p53-induced gene 10 protein, ENC1, KLHL37, NRPB, PIG10
Target/Specificity	ENC1 (NP_003624, 17 a.a. ~ 98 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ENC1 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

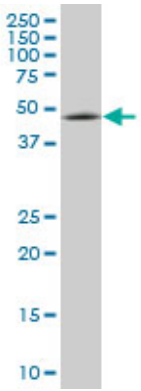
Background

DNA damage and/or hyperproliferative signals activate wildtype p53 tumor suppressor protein (TP53; MIM 191170), inducing cell cycle arrest or apoptosis. Mutations that inactivate p53 occur in 50% of all tumors. Polyak et al. (1997) [PubMed 9305847] used serial analysis of gene expression (SAGE) to evaluate cellular mRNA levels in a colorectal cancer cell line transfected with p53. Of 7,202 transcripts identified, only 14 were expressed at levels more than 10-fold higher in p53-expressing cells than in control cells. Polyak et al. (1997) [PubMed 9305847] termed these genes 'p53-induced genes,' or PIGs, several of which were predicted to encode redox-controlling proteins. They noted that reactive oxygen species (ROS) are potent inducers of apoptosis. Flow cytometric analysis showed that p53 expression induces ROS production, which increases as apoptosis progresses under some conditions. The authors stated that the PIG10 gene, also called ENC1, encodes an actin-binding protein.

References

Ectodermal-neural cortex 1 down-regulates Nrf2 at the translational level. Wang XJ, et al. PLoS One, 2009. PMID 19424503.NRP/B mutations impair Nrf2-dependent NQO1 induction in human primary brain tumors. Seng S, et al. Oncogene, 2009 Jan 22. PMID 18981988.The nuclear matrix protein, NRP/B, enhances Nrf2-mediated oxidative stress responses in breast cancer cells. Seng S, et al. Cancer Res, 2007 Sep 15. PMID 17875699.Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560.High-throughput mapping of a dynamic signaling network in mammalian cells. Barrios-Rodiles M, et al. Science, 2005 Mar 11. PMID 15761153.

Images



ENC1 monoclonal antibody (M03), clone 3C10. Western Blot analysis of ENC1 expression in IMR-32 (Cat # L008V1).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.