

# **ENC1 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17107b

# **Specification**

#### ENC1 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	<u>014682</u>
Other Accession	<u>NP_003624.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	66130
Antigen Region	395-423

### ENC1 Antibody (C-term) - 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

This ENC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 395-423 amino acids from the C-terminal region of human ENC1.

Dilution WB~~1:1000

# Format

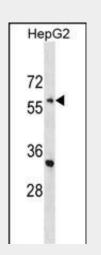
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

## Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

ENC1 Antibody (C-term) is for research use



ENC1 Antibody (C-term) (Cat. #AP17107b) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the ENC1 antibody detected the ENC1 protein (arrow).

# ENC1 Antibody (C-term) - 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.



only and not for use in diagnostic or therapeutic procedures.

#### ENC1 Antibody (C-term) - Protein Information

### Name ENC1

Synonyms KLHL37, NRPB, PIG10

### Function

Actin-binding protein involved in the regulation of neuronal process formation and in differentiation of neural crest cells. Down- regulates transcription factor NF2L2/NRF2 by decreasing the rate of protein synthesis and not via a ubiquitin-mediated proteasomal degradation mechanism.

#### **Cellular Location**

Nucleus matrix. Cytoplasm. Cytoplasm, cytoskeleton

### **Tissue Location**

Detected in fetal brain tissue, moderate expression in fetal heart, lung and kidney. Highly expressed in adult brain, particularly high in the hippocampus and amygdala, and spinal chord Detectable in adult pancreas. May be down-regulated in neuroblastoma tumors

# ENC1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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.

# ENC1 Antibody (C-term) - References

Seng, S., et al. Oncogene 28(3):378-389(2009) Wang, X.J., et al. PLoS ONE 4 (5), E5492 (2009)

Seng, S., et al. Cancer Res. 67(18):8596-8604(2007) Barrios-Rodiles, M., et al. Science 307(5715):1621-1625(2005) Kim, T.A., et al. Gene 255(1):105-116(2000)