

ENC1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP17107b**Specification**

ENC1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [O14682](#)**ENC1 Antibody (C-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ENC1 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ENC1 Antibody (C-term) Blocking Peptide - Images

ENC1 Antibody (C-term) Blocking Peptide - 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.

ENC1 Antibody (C-term) Blocking Peptide - 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)