

ENC-1 Antibody

Catalog # ASC11107

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	O14682
Other Accession	O14682 , 12644050
Reactivity	Human, Mouse, Rat
Host	Chicken
Clonality	Polyclonal
Isotype	IgY
Calculated MW	66130
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	ENC-1 antibody can be used for detection of ENC-1 by Western blot at 1 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

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;
Reconstitution & Storage	ENC-1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	ENC-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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 cord Detectable in adult pancreas. May be down-regulated in neuroblastoma tumors

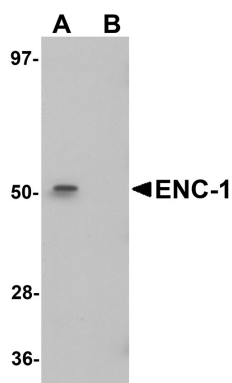
Background

ENC-1 Antibody: The ectoderm-neural cortex-1 (ENC-1) protein is an early and highly specific marker of neural induction in vertebrates. It is a kelch family related protein that functions as an actin-binding protein and has been suggested to be involved in the organization of the actin cytoskeleton during neural fate specification and development of the nervous system. ENC-1 has also been shown to be required for adipocyte differentiation when cytoskeletal reorganization and cell shape change from fibroblastic preadipocytes to spherical adipocytes occur.

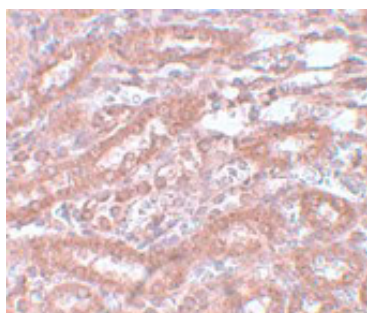
References

Hernandez MC, Andres-Barquin PJ, Martinez S, et al. ENC-1: a novel mammalian kelch-related gene specifically expressed in the nervous system encodes an actin-binding protein. *J. Neurosci.*1997; 17:3038-51.
Zhao L, Gregoire F and Sul HS. Transient induction of ENC-1, a Kelch-related actin-binding protein, is required for adipocyte differentiation. *J. Biol. Chem.*2000; 275:16845-50.

Images

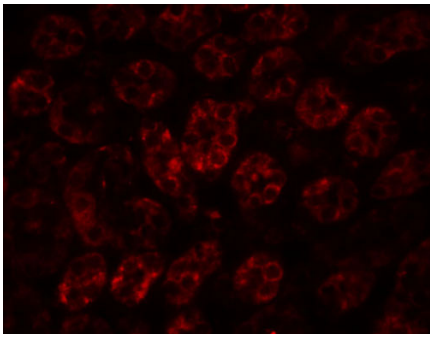


Western blot analysis of ENC-1 in mouse kidney muscle tissue lysate with ENC-1 antibody at 1 $\mu\text{g/mL}$ in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of ENC-1 in rat kidney tissue with ENC-1 antibody at 5 $\mu\text{g/mL}$.

Immunofluorescence of ENC-1 in rat kidney tissue with ENC-1 antibody at 20 $\mu\text{g/mL}$.



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