

ELP3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1112a

Specification

ELP3 Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q9H9T3

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 9-44

ELP3 Antibody (N-term) - Additional Information

Gene ID 55140

Other Names

Elongator complex protein 3, hELP3, ELP3

Target/Specificity

This ELP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 9-44 amino acids from the N-terminal region of human ELP3.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

ELP3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ELP3 Antibody (N-term) - Protein Information

Name ELP3 {ECO:0000303|PubMed:15902492, ECO:0000312|HGNC:HGNC:20696}

Function Catalytic tRNA acetyltransferase subunit of the elongator complex which is required for multiple tRNA modifications, including mcm5U (5-methoxycarbonylmethyl uridine), mcm5s2U (5-methoxycarbonylmethyl-2-thiouridine), and ncm5U (5-carbamoylmethyl uridine)





(PubMed:<u>29415125</u>). In the elongator complex, acts as a tRNA uridine(34) acetyltransferase by mediating formation of carboxymethyluridine in the wobble base at position 34 in tRNAs (By similarity). May also act as a protein lysine acetyltransferase by mediating acetylation of target proteins; such activity is however unclear in vivo and recent evidences suggest that ELP3 primarily acts as a tRNA acetyltransferase (PubMed:<u>29415125</u>). Involved in neurogenesis: regulates the migration and branching of projection neurons in the developing cerebral cortex, through a process depending on alpha-tubulin acetylation (PubMed:<u>19185337</u>). Required for acetylation of GJA1 in the developing cerebral cortex (By similarity).

Cellular Location

Cytoplasm. Nucleus [Isoform 2]: Cytoplasm. Nucleus

Tissue Location

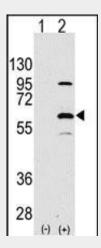
Expressed in the cerebellum and spinal motor neurons.

ELP3 Antibody (N-term) - Protocols

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

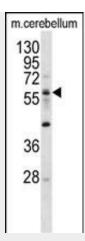
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ELP3 Antibody (N-term) - Images



Western blot analysis of ELP3(arrow) using rabbit polyclonal ELP3 Antibody (N-term) (Cat.#AP1112a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ELP3 gene (Lane 2) (Origene Technologies).





ELP3 Antibody (N-term) (Cat.#AP1112a) western blot analysis in mouse cerebellum tissue lysates (35ug/lane). This demonstrates the ELP3 antibody detected the ELP3 protein (arrow).

ELP3 Antibody (N-term) - Background

Elongator complex protein 3 (ELP3) is a catalytic histone acetyltransferase subunit of the RNA polymerase II elongator complex, which is a component of the RNA polymerase II (Pol II) holoenzyme and is involved in transcriptional elongation. Elongator may play a role in chromatin remodeling and is involved in acetylation of histones H3 and probably H4. It may also have a methyltransferase activity.

ELP3 Antibody (N-term) - References

Han,Q., Acta Biochim. Biophys. Sin. (Shanghai) 39 (6), 453-461 (2007) Kim,J.H., Proc. Natl. Acad. Sci. U.S.A. 99 (3), 1241-1246 (2002) Ninomiya,Y., J. Biochem. 118 (2), 380-389 (1995)

ELP3 Antibody (N-term) - Citations

• ELP3 localises to mitochondria and actin-rich domains at edges of HeLa cells.