

## ELP3 Antibody

Rabbit Polyclonal Antibody Catalog # ALS13660

## Specification

# ELP3 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, IF, ICC <u>O9H9T3</u> Human Rabbit Polyclonal 62kDa KDa WB~~1:1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A

# ELP3 Antibody - Additional Information

Gene ID 55140

Other Names Elongator complex protein 3, hELP3, 2.3.1.48, ELP3

**Target/Specificity** 

Human ELP3. Predicted cross-reactivity based on amino acid sequence homology: mouse (96%), bovine (98%), zebrafish (92%).

Reconstitution & Storage Aliquot and store at -20°C. Minimize freezing and thawing.

**Precautions** 

ELP3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **ELP3 Antibody - 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:<a href="http://www.uniprot.org/citations/29415125" target="\_blank">29415125</a>). 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:<a href="http://www.uniprot.org/citations/29415125"">acetyltransferase by mediating 34 in tRNAs</a> (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:<a href="http://www.uniprot.org/citations/29415125">http://www.uniprot.org/citations/29415125</a>



target="\_blank">29415125</a>). 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:<a href="http://www.uniprot.org/citations/19185337" target="\_blank">19185337</a>). 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.

Volume 50 μl

## **ELP3 Antibody - Protocols**

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

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

## ELP3 Antibody - Images



Immunofluorescence of paraformaldehyde-fixed HeLa, using ELP3 antibody at 1:100 dilution.





Sample (30 ug of whole cell lysate).

# **ELP3 Antibody - Background**

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. Involved in acetylation of alpha-tubulin (PubMed:19185337). May also have a methyltransferase activity. Involved in cell migration. Involved in neurogenesis. Regulates the migration and branching of projection neurons in the developing cerebral cortex, through a process depending on alpha- tubulin acetylation (By similarity).

# **ELP3 Antibody - References**

Ota T.,et al.Nat. Genet. 36:40-45(2004). Bechtel S.,et al.BMC Genomics 8:399-399(2007). Nusbaum C.,et al.Nature 439:331-335(2006). Suzuki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases. Hawkes N.A.,et al.J. Biol. Chem. 277:3047-3052(2002).