

Anti-KAT9/ELP3 Antibody Picoband™ (monoclonal, 8B4)

Catalog # ABO15047

Product Information

Application	WB
Primary Accession	Q9H9T3
Host	Mouse
Isotype	Mouse IgG2a
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-KAT9/ELP3 Antibody Picoband™ (monoclonal, 8B4) . Tested in WB applications. This antibody reacts with Human, Mouse, Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	55140
Other Names	Elongator complex protein 3, hELP3, 2.3.1.311, ELP3 {ECO:0000303 PubMed:15902492, ECO:0000312 HGNC:HGNC:20696}
Calculated MW	62259
Application Details	Western blot, 0.1-0.25 µg/ml, Human, Mouse, Rat
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Clone Names	Clone: 8B4
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human KAT9/ELP3, identical to the related mouse sequence.
Purification	Immunogen affinity purified.
Storage	Store at -20° C for one year from date of receipt. After reconstitution, at 4° C for one month. It can also be aliquotted and stored frozen at -20° C for six months. Avoid repeated freeze-thaw cycles.

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:[29415125](#)). 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:[29415125](#)). Not a major acetyltransferase of tubulin (PubMed:[22153374](#)). 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:[19185337](#)). Required for acetylation of GJA1 in the developing cerebral cortex (By similarity).

Cellular Location

Cytoplasm. Nucleus [Isoform 2]: Cytoplasm. Nucleus

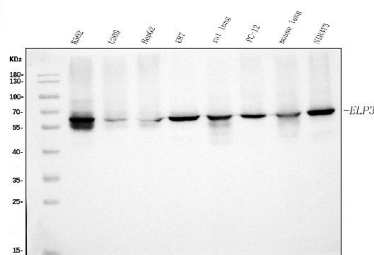
Tissue Location

Expressed in the cerebellum and spinal motor neurons.

Background

Elongator complex protein 3, also named KAT9, is a protein that in humans is encoded by the ELP3 gene. It is mapped to 8p21.1. ELP3 is the 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. ELP3 supports the migration and branching of projection neurons through acetylation of alpha-tubulin in the developing cerebral cortex. In mammals, ELP3 is important for paternal DNA demethylation after fertilization. ELP3 is potentially involved in cellular redox homeostasis by mediating the acetylation of glucose-6-phosphate dehydrogenase. Besides, ELP3 may play a role in chromatin remodeling and is involved in acetylation of histones H3 and probably H4.

Images



with Tanon 5200 system. A specific band was detected for KAT9/ELP3 at approximately 62KD. The expected band size for KAT9/ELP3 is at 62KD.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.