

IKAP Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55230**Specification****IKAP Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	O95163
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	150 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human IKAP
Epitope Specificity	1151-1250/1332
Isotype	IgG
Purity affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus.
SIMILARITY	Belongs to the ELP1/IKA1 family.
SUBUNIT	Component of the RNA polymerase II elongator complex (Elongator) made of at least six subunits, ELP1/ELO2, ELP2, ELP3/ELO3, ELP4/ELO1, ELP5, and ELP6.
DISEASE	Defects in IKBKAP are the cause of hereditary sensory and autonomic neuropathy type 3 (HSAN3) [MIM:223900]; also known as Riley-Day syndrome or familial dysautonomia (FD). This autosomal recessive disorder is due to the poor development and survival, and progressive degeneration of the sensory, sympathetic and parasympathetic neurons. HSAN3 individuals are affected with a variety of symptoms such as decreased sensitivity to pain and temperature, cardiovascular instability, recurrent pneumonias, vomiting crises, and gastrointestinal dysfunction. It is primarily confined to individuals of Ashkenazi Jewish descent, with an incidence of 1/3'600 live births.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

The transcription factor NFkB is retained in the cytoplasm in an inactive form by the inhibitory protein Ikb. Activation of NFkB requires that Ikb be phosphorylated on specific serine residues,

which results in the targeted degradation of I κ B (1). I κ B kinase alpha (IKK alpha), previously designated CHUK (2), interacts with I κ B-alpha and specifically phosphorylates I κ B-alpha on the sites that trigger its degradation, serines 32 and 36 (3). IKKalpha appears to be critical for NF κ B activation in response to proinflammatory cytokines (4). Phosphorylation of the I κ B by IKK alpha is stimulated by the NF κ B inducing kinase (NIK), which itself is a central regulator for NF κ B activation in response to TNF and IL-1 (5). The functional IKK complex contains three subunits, IKK alpha, IKK beta and IKK gamma (also designated NEMO), and each appears to make essential contributions to I κ B phosphorylation (6). IKAP (IKK-complex-associated protein) is a protein that acts as a scaffold, interacting with NIK, IKK alpha and IKK beta and assembling them into an active kinase complex (7,8)

IKAP Polyclonal Antibody - Additional Information

Gene ID 8518

Other Names

Elongator complex protein 1, ELP1, IkappaB kinase complex-associated protein, IKK complex-associated protein, p150, ELP1 ([HGNC:5959](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=5959))

Target/Specificity

Expressed in meristematic tissues of in roots, stems, leaves, seedlings, cotyledons, guard cells, floral buds, flowers, siliques, and shoot apices.

Dilution

WB ~ 1:1000
IHC-P ~ N/A
IHC-F ~ N/A
IF ~ 1:50 ~ 200
ICC ~ N/A
E ~ N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

IKAP Polyclonal Antibody - Protein Information

Name ELP1 ([HGNC:5959](http://www.uniprot.org/citations/29332244))

Function

Component 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: [29332244](http://www.uniprot.org/citations/29332244)). The elongator complex catalyzes the formation of carboxymethyluridine in the wobble base at position 34 in tRNAs (PubMed: [29332244](http://www.uniprot.org/citations/29332244)). Regulates the migration and branching of projection neurons in the developing cerebral cortex, through a process depending on alpha-tubulin acetylation (By similarity). ELP1 binds to tRNA, mediating interaction of the elongator complex with tRNA (By

similarity). May act as a scaffold protein that assembles active IKK-MAP3K14 complexes (IKKA, IKKB and MAP3K14/NIK) (PubMed:9751059).

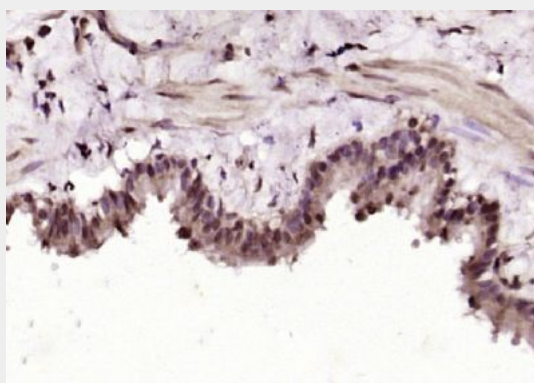
Cellular Location

Cytoplasm. Nucleus

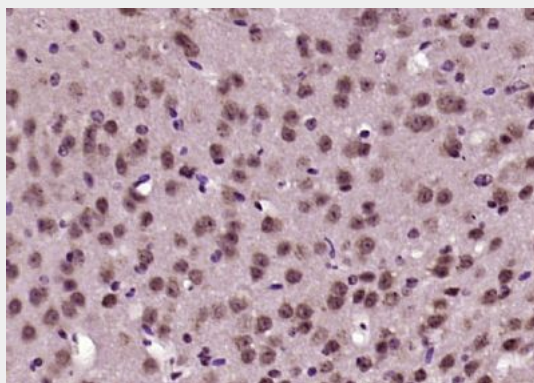
IKAP Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

IKAP Polyclonal Antibody - Images

Paraformaldehyde-fixed, paraffin embedded (rat lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IKAP) Polyclonal Antibody, Unconjugated (bs-13644R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium

citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IKAP) Polyclonal Antibody, Unconjugated (bs-13644R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.