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TRAK1 Rabbit pAb

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Catalog # AP58294

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9UPV9
Reactivity	Human, Mouse
Predicted	Rat, Pig, Dog, Chicken, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	106040
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TRAK1
Epitope Specificity	171-270/953
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. Mitochondrion. Early endosome. Endosome.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The specific function of TRAK1 remains unknown. It interacts with O-GlcNAc transferase, RHOT1/Miro-1 and RHOT2/Miro-2. It shows high expression in spinal cord and moderate expression in all other tissues and specific brain regions examined.

Additional Information

Gene ID	22906
Other Names	Trafficking kinesin-binding protein 1, 106 kDa O-GlcNAc transferase-interacting protein, Protein Milton, TRAK1, KIAA1042, OIP106
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
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.

Protein Information

Name	TRAK1
Synonyms	KIAA1042, OIP106

Function	Involved in the regulation of endosome-to-lysosome trafficking, including endocytic trafficking of EGF-EGFR complexes and GABA-A receptors (PubMed:18675823). Involved in mitochondrial motility. When O-glycosylated, abolishes mitochondrial motility. Crucial for recruiting OGT to the mitochondrial surface of neuronal processes (PubMed:24995978). TRAK1 and RHOT form an essential protein complex that links KIF5 to mitochondria for light chain-independent, anterograde transport of mitochondria (By similarity).
Cellular Location	Cytoplasm. Nucleus. Mitochondrion. Early endosome. Endosome. Mitochondrion membrane. Cytoplasm, cell cortex {ECO:0000250|UniProtKB:Q6PD31}. Note=Predominantly associated with early endosome. The localization to early endosomes depends on its interaction with HGS/HRS (PubMed:18675823). Colocalizes with MGARP at the mitochondria (PubMed:19528298).
Tissue Location	High expression in spinal cord and moderate expression in all other tissues and specific brain regions examined Expressed in all cell lines examined.

Background

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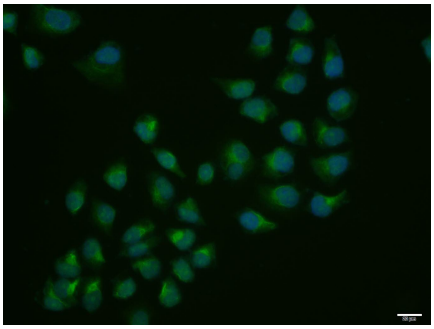
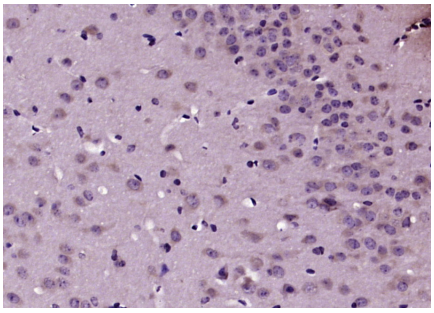
Images



Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (TRAK1) polyclonal Antibody, Unconjugated (AP58294) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); 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 (TRAK1) Polyclonal Antibody, Unconjugated (AP58294) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.