

## **TRAK1 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58294

## **Specification**

## **TRAK1 Polyclonal Antibody - Product Information**

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>Q9UPV9</u>

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 106 KDa
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.

SIMILARITY Contains 1 HAP1 N-terminal domain.

SUBUNIT Interacts with O-GICNAc transferase.
Interacts with RHOT1/Miro-1 and
RHOT2/Miro-2. Interacts with HGS.

RHOT2/Miro-2. Interacts with HGS. Interacts with GABRA1. Interacts with

KIF5C.

Post-translational modifications **O-glycosylated.** 

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.

## TRAK1 Polyclonal Antibody - Additional Information

# **Gene ID 22906**

## **Other Names**

Trafficking kinesin-binding protein 1, 106 kDa O-GlcNAc transferase-interacting protein, Protein Milton, TRAK1, KIAA1042, OIP106

## **Target/Specificity**

High expression in spinal cord and moderate expression in all other tissues and specific brain



regions examined. Expressed in all cell lines examined.

### **Dilution**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution\_IF">IF~~1:50~200</span><br \> <span class = "dilution\_ICC">ICC~~N/A</span><br \> <span class = "dilution\_E">E~~N/A</span>

#### **Format**

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

# **Storage**

Store at -20  $^{\circ}$ 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  $^{\circ}$ C.

## **TRAK1** Polyclonal Antibody - 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:<a

href="http://www.uniprot.org/citations/18675823" target="\_blank">18675823</a>). Involved in mitochondrial motility. When O-glycosylated, abolishes mitochondrial motility. Crucial for recruiting OGT to the mitochondrial surface of neuronal processes (PubMed:<a href="http://www.uniprot.org/citations/24995978" target="\_blank">24995978</a>). 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.

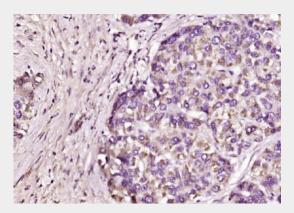
# **TRAK1 Polyclonal Antibody - Protocols**

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

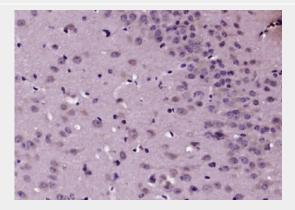
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



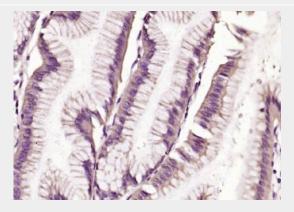
## **TRAK1 Polyclonal Antibody - Images**



Paraformaldehyde-fixed, paraffin embedded (human liver cancer); 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 (bs-5536R) 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 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 (bs-5536R) 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 (human gastric carcinoma); 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 (bs-5536R) at 1:200 overnight at 4°C,





followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.