10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Trak2 Antibody
TRAK2 Antibody, Clone S390-43
Catalog # ASM10315

Specification

Trak2 Antibody - Product Information

Application	**WB**
Primary Accession	O60296
Other Accession	NP_055864.2
Host	**Mouse**
Isotype	**IgG2A**
Reactivity	**Human, Rat**
Clonality	**Monoclonal**

Description
Mouse Anti-Human Trak2 Monoclonal IgG2A

Target/Specificity
Detects ~100kDa. Does not cross-react with TRAK1.

Other Names
Trafficking kinesin-binding protein 2 Antibody, Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 3 protein Antibody, GABA-A receptor-interacting factor 1 Antibody, O-GlcNAc transferase-interacting protein of 98 kDa Antibody, EMBL AAH60681.1 Antibody, Ensembl ENSMUSP00000027186 MGI 1918077 Antibody, Als2cr3 Antibody, Grif1 Antibody, Oip98 Antibody, KIAA0549 Antibody, TRAK2_Human Antibody

Immunogen
Fusion protein amino acids 757-914 (C-terminus) of human TRAK2

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
A 1:100 dilution of SMC-483 was sufficient for detection of Trak2 in 20 µg of mouse brain lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Cytoplasm | Mitochondrion | Early Endosome

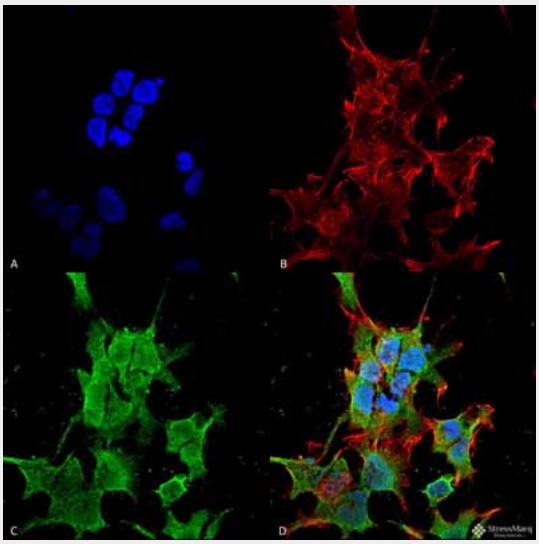
Trak2 Antibody - Protocols

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

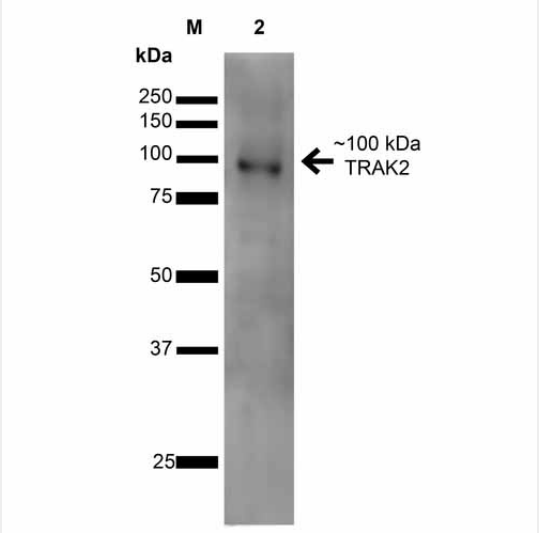
- Western Blot

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

Trak2 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Trak2 Monoclonal Antibody, Clone S390-43 (ASM10315). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Trak2 Monoclonal Antibody (ASM10315) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000; 1:5000 for 60 min RT, 5 min RT. Localization: Cytoplasm. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Trak2 Antibody (D) Composite.



Western Blot analysis of Rat Brain-Membrane showing detection of ~ 100 kDa TRAK2 protein using Mouse Anti-TRAK2 Monoclonal Antibody, Clone S390-43 (ASM10315). Lane 1: MW Ladder. Lane 2: Rat Brain Membrane. Load: 15 µg. Block: 2% GE Healthcare Blocker for 1 hour at RT.

Primary Antibody: Mouse Anti-TRAK2 Monoclonal Antibody (ASM10315) at 1:1000 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: ECL solution for 6 min at RT. Predicted/Observed Size: ~ 100 kDa.

Trak2 Antibody - Background

TRAK2, a member of the TRAK family of adaptor proteins, links mitochondria to microtubule based motors. Localized in dendrites, it is specifically required for dendritic development as it reacts with dynein and dynactin. TRAK2 interferes with kinesin-1 binding and axonal transport (1). It has been shown to interact with Kir2.1 and GABA-R Beta2 (2, 3).

Trak2 Antibody - References

1. van Spronsen M. et al. (2013) Neuron. 77(3): 48-502.
2. Grishin A., Li H., Levitan E.S., Zaks E. (2006) J Biol Chem. 281(4): 30104-30111.
3. Beck M., et al. (2002) J Biol Chem. 277(33): 30079-30090.