

## Goat Anti-STMN2 / SCG10 Antibody

Peptide-affinity purified goat antibody Catalog # AF2044a

### **Specification**

## Goat Anti-STMN2 / SCG10 Antibody - Product Information

Application WB, E
Primary Accession O93045

Other Accession NP\_008960, 11075, 20257 (mouse)

Reactivity Human

Predicted Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 20828

## Goat Anti-STMN2 / SCG10 Antibody - Additional Information

### **Gene ID 11075**

## **Other Names**

Stathmin-2, Superior cervical ganglion-10 protein, Protein SCG10, STMN2, SCG10, SCGN10

### **Dilution**

WB~~1:1000

 $E \sim N/A$ 

#### **Format**

0.5~mg~lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

## Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Goat Anti-STMN2 / SCG10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-STMN2 / SCG10 Antibody - Protein Information

Name STMN2

Synonyms SCG10, SCGN10

## **Function**



Regulator of microtubule stability. When phosphorylated by MAPK8, stabilizes microtubules and consequently controls neurite length in cortical neurons. In the developing brain, negatively regulates the rate of exit from multipolar stage and retards radial migration from the ventricular zone (By similarity).

### **Cellular Location**

Cytoplasm. Cytoplasm, perinuclear region. Cell projection, growth cone. Membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, axon. Golgi apparatus. Endosome. Cell projection, lamellipodium. Note=Associated with punctate structures in the perinuclear cytoplasm, axons, and growth cones of developing neurons. SCG10 exists in both soluble and membrane-bound forms. Colocalized with CIB1 in neurites of developing hippocampal primary neurons (By similarity). Colocalized with CIB1 in the cell body, neuritis and growth cones of neurons. Colocalized with CIB1 to the leading edge of lamellipodia.

# Tissue Location

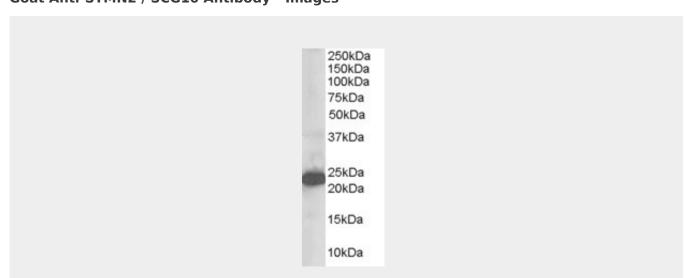
Neuron specific.

## Goat Anti-STMN2 / SCG10 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Goat Anti-STMN2 / SCG10 Antibody - Images



AF2044a staining (1  $\mu$ g/ml) of Human Brain lysate (RIPA buffer, 35  $\mu$ g total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

## Goat Anti-STMN2 / SCG10 Antibody - Background

Superior cervical ganglion-10 is a neuronal growth-associated protein that shares significant amino acid sequence similarity with the phosphoprotein stathmin (MIM 151442).



## Goat Anti-STMN2 / SCG10 Antibody - References

Genetic risk factors for variant Creutzfeldt-Jakob disease: a genome-wide association study. Mead S, et al. Lancet Neurol, 2009 Jan. PMID 19081515.

Rnd1 regulates axon extension by enhancing the microtubule destabilizing activity of SCG10. Li YH, et al. J Biol Chem, 2009 Jan 2. PMID 18996843.

Stathmin-like 2, a developmentally-associated neuronal marker, is expressed and modulated during osteogenesis of human mesenchymal stem cells. Chiellini C, et al. Biochem Biophys Res Commun, 2008 Sep 12. PMID 18611392.

The trans-Golgi proteins SCLIP and SCG10 interact with chromogranin A to regulate neuroendocrine secretion. Mahapatra NR, et al. Biochemistry, 2008 Jul 8. PMID 18549247.

BRI3 associates with SCG10 and attenuates NGF-induced neurite outgrowth in PC12 cells. Gong Y, et al. BMB Rep, 2008 Apr 30. PMID 18452648.