# SCAMP1 (G-8): sc-393236



The Power to Question

#### **BACKGROUND**

Secretory carrier membrane proteins (SCAMPs) are components of the post Golgi membranes and are invovled in endocytosis, vesicle recycling and membrane trafficking. The structural features of SCAMPs include multiple N-terminal NPF repeats and four highly conserved transmembrane regions. These NPF repeats frequently interact with EH domain proteins and aid in the budding of transport vesicles from the plasma membrane or the Golgi complex. Endocytic budding at the plasma membrane and vesicle budding at the *trans*-Golgi complex facilitates binding of SCAMP proteins to EH domain proteins. SCAMPs exist as distinct but related proteins that include SCAMP1, SCAMP2, and SCAMP3. Tyrosine-phosphorylation by the epidermal growth factor-receptor of SCAMP1 and SCAMP3 suggests that SCAMPs are regulated by phosphorylation. Although SCAMPs are ubiquitously expressed throughout all tissue, in neural tissue the synaptic vesicles express a particularly high concentration of SCAMP1.

# REFERENCES

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#### **CHROMOSOMAL LOCATION**

Genetic locus: SCAMP1 (human) mapping to 5q14.1; Scamp1 (mouse) mapping to 13 D1.

## **SOURCE**

SCAMP1 (G-8) is a mouse monoclonal antibody raised against amino acids 23-93 mapping near the N-terminus of SCAMP1 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g \ lg G_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

SCAMP1 (G-8) is recommended for detection of SCAMP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SCAMP1 siRNA (h): sc-41290, SCAMP1 siRNA (m): sc-41291, SCAMP1 shRNA Plasmid (h): sc-41290-SH, SCAMP1 shRNA Plasmid (m): sc-41291-SH, SCAMP1 shRNA (h) Lentiviral Particles: sc-41290-V and SCAMP1 shRNA (m) Lentiviral Particles: sc-41291-V.

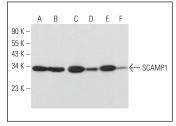
Molecular Weight of SCAMP1: 37 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, IMR-32 cell lysate: sc-2409 or Neuro-2A whole cell lysate: sc-364185.

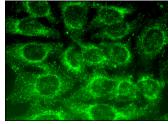
#### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz\* Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz\* Mounting Medium: sc-24941 or UltraCruz\* Hard-set Mounting Medium: sc-359850.

#### DATA



SCAMP1 (G-8): sc-393236. Western blot analysis of SCAMP1 expression in HeLa (A), JAR (B), IMR-32 (C), EOC 20 (D), Neuro-2A (E) and C6 (F) whole cell lysates



SCAMP1 (G-8): sc-393236. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.