

## SCAMP 1

Cat.No. 121-0P; control peptide, 100 µg peptide (lyophilized)

### Data Sheet

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|----------------------------|--|
| Reconstitution/<br>Storage | 100 µg peptide, lyophilized. For reconstitution add 100 µl H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.<br>Control peptides should also be stored at -20°C when still lyophilized!   |
| Immunogen                  | Synthetic peptide corresponding to AA 2 to 15 from rat SCAMP1 (UniProt Id: P56603)   |
| Recommended<br>dilution    | Optimal concentrations should be determined by the end-user.   |
| matching<br>antibodies     | 121 002, 121 003   |
| Remarks                    | This control peptide consists of the synthetic peptide (SDFDSNPFADPDLN) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of peptide needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen. |

### TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

**SCAMPs** (secretory carrier membrane proteins) are general markers of membranes that function in cell surface recycling such as secretory vesicles, pancreatic granules, etc. They have four conserved transmembrane regions (TMRs) suggesting a "core" function in membrane traffic. Five isoforms (SCAMP 1-5) have been described. SCAMP 1-3 contain NPF repeats that interact with EH-domain proteins which are involved in the budding of transport vesicles from the plasma membrane or the Golgi complex. SCAMP 4 and SCAMP 5 lack the NPF repeats. SCAMP 1-4 are ubiquitously expressed whereas SCAMP 5 is expressed exclusively in brain during late development.

### Selected General References

Novel SCAMPs lacking NPF repeats: ubiquitous and synaptic vesicle-specific forms implicate SCAMPs in multiple membrane-trafficking functions.

Fernández-Chacón R, Südhof TC

The Journal of neuroscience : the official journal of the Society for Neuroscience (2000) 20(21): 7941-50.

SCAMP1 function in endocytosis.

Fernández-Chacón R, Achiriloaie M, Janz R, Albanesi JP, Südhof TC

The Journal of biological chemistry (2000) 275(17): 12752-6.

Genetics of synaptic vesicle function: toward the complete functional anatomy of an organelle.

Fernández-Chacón R, Südhof TC

Annual review of physiology (1999) 61: 753-76.

Three mammalian SCAMPs (secretory carrier membrane proteins) are highly related products of distinct genes having similar subcellular distributions.

Singleton DR, Wu TT, Castle JD

Journal of cell science (1997) 110 ( Pt 17): 2099-107.

The synaptic vesicle cycle: a cascade of protein-protein interactions.

Südhof TC

Nature (1995) 375(6533): 645-53.

Synaptic vesicles and exocytosis.

Jahn R, Südhof TC

Annual review of neuroscience (1994) 17: 219-46.

SCAMP 37, a new marker within the general cell surface recycling system.

Brand SH, Castle JD

The EMBO journal (1993) 12(10): 3753-61.