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ProductInformation

Anti-Secretory Carrier Membrane Protein 5
Developed in Rabbit
Affinity Isolated Antibody

Product Number **S 0943**

Product Description

Anti-Secretory Carrier Membrane Protein 5 (SCAMP 5) is developed in rabbit using a synthetic peptide corresponding to amino acid residues 217-233 of rat SCAMP 5 as immunogen. This sequence is 94% conserved in mouse. The antibody is purified by immunoaffinity chromatography.

Anti-Secretory Carrier Membrane Protein 5 detects SCAMP 5 from rat brain extracts by immunoblotting (~25 kDa).

Secretory carrier membrane proteins (SCAMPs) are components of post-Golgi membranes. These proteins function in membrane trafficking. In fibroblasts, SCAMPs are concentrated in compartments that are involved in the recycling of cell surface receptors and endocytosis. In neurons, SCAMPs are associated with synaptic vesicles, secretion granules, and transporter vesicles. SCAMPs consist of four central transmembrane regions and a cytoplasmic tail. Of the five known SCAMPs, SCAMPs 1-3 have cytoplasmic N-terminal regions with NPF repeats. NPF repeats interact with the EH domain proteins, which function in budding of transport vesicles from the plasma membrane or the Golgi complex. SCAMPs 4 and 5 lack the N-terminal NPF repeats. SCAMPs 1-4 are all ubiquitously co-expressed while SCAMP 5 is only detectable in the brain. Studies have shown that SCAMP 5 is expressed late in development, which is coincident with expansion of mature synapses.

Reagent

Anti-Secretory Carrier Membrane Protein 5 is supplied in phosphate buffered saline (PBS), pH 7.4, containing 1 mg/ml bovine serum albumin (BSA), and 0.05% sodium azide.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) has been sent to the attention of the safety officer at your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. For extended storage, freeze at –20 °C in working aliquots. Repeated freezing and thawing is not recommended. Storage in “frost-free” freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

For immunoblotting, the minimum recommended working antibody concentration is 2 µg/ml using rat brain extract.

Note: In order to obtain the best results in various techniques and preparations, we recommend determining optimal working concentration by titration.

References

1. Windoffer, R., et al., Tissue expression of the vesicle protein pantophysin. Cell Tissue Res., **296**, 499-510 (1999).
2. Singleton, D.R., et al., Three mammalian SCAMPs (secretory carrier membrane proteins) are highly related products of distinct genes having similar subcellular distributions. J. Cell Sci., **110**, 2099-2107 (1997).
3. Wu, T.T., and Castle, J.D., Tyrosine phosphorylation of selected secretory carrier membrane proteins, SCAMP1 and SCAMP3, and association with the EGF receptor. Mol. Biol. Cell, **9**, 1661-1674 (1998).

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