

Product Information

Anti-VPS4B

produced in rabbit, affinity isolated antibody

Product Number **SAB4200023**

Product Description

Anti-VPS4B is produced in rabbit using as the immunogen a synthetic peptide corresponding to a fragment of human VPS4B (GeneID: 9525), conjugated to KLH. The corresponding sequence differs by 4 amino acids in mouse and 5 amino acids in rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-VPS4B recognizes human and mouse VPS4B. The antibody does not recognize human VPS4A. The antibody may be used in various immunochemical techniques including immunoblotting (~50 kDa) and immunoprecipitation. Detection of the VPS4B band by immunoblotting is specifically inhibited by the immunizing peptide.

Vps4B is a member of the AAA protein family (ATPases associated with diverse cellular activities) and is the homolog of the yeast Vps4 protein. In humans, two paralogs of the yeast protein have been identified, Vps4A and Vps4B, that share a high degree of amino acid sequence similarity with each other, and also with yeast Vps4 and mouse Skd1 proteins. The mouse Skd1 (suppressor of K⁺ transport defect 1) has been shown to be actually a yeast Vps4 ortholog. Functional studies indicate that both human paralogs associate with the endosomal compartments, and are involved in intracellular protein trafficking, similar to Vps4 protein in yeast. Vps4 mediates endosomal membrane protein sorting, retroviral budding, and cytokinesis by recognizing membrane-associated ESCRT-III assemblies and catalyzing their disassembly. The gene encoding Vps4A has been mapped to chromosome 16 while the gene for Vps4B resides on chromosome 18.¹⁻⁵

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at -20 °C. For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing 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

Immunoblotting: a working antibody concentration of 2-4 µg/mL is recommended using whole extracts of G361 cells.

Immunoprecipitation: a working antibody amount of 10-20 µg is recommended using a lysate of mouse 3T3 cells.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

1. Yoshimori, T. et al., *Mol. Biol. Cell*, **11**, 747-763 (2000).
2. Stuchell-Brereton, M.D. et al., *Nature*, **449**, 740-744 (2007).
3. Lata, S. et al., *Science*, **321**, 1354-1357 (2008).
4. Obita, T. et al., *Nature*, **449**, 735-739 (2007).
5. Wollert, T. et al., *Nature*, **458**, 172-177 (2009).

VS,ST,TD,KAA,PHC,MAM 04/19-1