

VAMP 4

Cat.No. 136-0P; control protein, 100 µg protein (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg protein, lyophilized. For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in TBS. Then aliquot and store at -20°C until use.
Immunogen	Recombinant protein corresponding to AA 1 to 118 from rat VAMP4
Recommended dilution	Optimal concentrations should be determined by the end-user.
Remarks	This control protein consists of the recombinant protein (aa 1 - 118 of rat VAMP 4) 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 protein 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

VAMP 4 belongs to the family of vesicle-associated membrane proteins and has a size of 16.5 kDa. It is involved in trans-Golgi network trafficking and the maturation of secretory granules. VAMP 4 co-immunoprecipitates with syntaxin 6, syntaxin 16, vti1a and vti1b. The highest expression levels are observed in brain but considerable amounts are also detectable in other tissues like heart, spleen and lung. In liver an additional splice variant of approximately 25 kDa has been described.

Selected General References

Early/recycling endosomes-to-TGN transport involves two SNARE complexes and a Rab6 isoform. Mallard F, Tang BL, Galli T, Tenza D, Saint-Pol A, Yue X, Antony C, Hong W, Goud B, Johannes L. The Journal of cell biology (2002) 156(4): 653-64.

The Di-leucine motif of vesicle-associated membrane protein 4 is required for its localization and AP-1 binding. Peden AA, Park GY, Scheller RH. The Journal of biological chemistry (2001) 276(52): 49183-7.

Vesicle-associated membrane protein 4 is implicated in trans-Golgi network vesicle trafficking. Steegmaier M, Klumperman J, Foletti DL, Yoo JS, Scheller RH. Molecular biology of the cell (1999) 10(6): 1957-72.