Synaptic Systems

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Vti1a

Cat.No. 165-0P; control protein, 100 µg protein (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg protein, lyophilized. For reconstitution add 100 µl H_2O to get a 1mg/ml solution in TBS. Then aliquot and store at -20°C until use.
Immunogen	Recombinant protein corresponding to AA 2 to 185 from mouse Vti1a (UniProt Id: O89116)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	165 002, 165 003, 165 005
Remarks	This control protein consists of the recombinant protein (aa 2 - 185) 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

Vti1a and Vti1b are mammalian SNARE proteins which have been identified as homologs of the yeast Vtip protein which is part of several SNARE complexes involved in transport.
Vti1a interacts with the cis-Golgi t-SNARE syntaxin 5 and the trans-Golgi network SNAREs syntaxin 6, syntaxin 16 and vamp 4.
Recently a brain-specific splice variant of Vti1a has been described. This Vti1a-β protein is associated with small synaptic vesicles, clathrin coated vesicles and endosomes. It is part of a SNARE complex different from the synaptic exocytotic compex since it does not co-immunoprecipitate with syntaxin 1 or SNAP 25. It is composed of syntaxin 6, syntaxin 16, vamp 4 and Vti1a-β which may play a role in biogenesis and/or recycling of synaptic vesicles. Nevertheless it behaves like a typical SNARE complex and can bind NSF and α/β-SNAP.

Selected General References

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