

Myobrevin

Cat.No. 176-0P; 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 PBS. Then aliquot and store at -20°C until use.
Immunogen	Recombinant protein corresponding to AA 1 to 70 from mouse Myobrevin (UniProt Id: Q9Z2P8)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	176 003, 176 011
Remarks	This control protein consists of the recombinant protein (aa 1 - 70 of mouse myobrevin) 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

Myobrevin, also known as **VAMP 5** belongs to the family of vesicle-associated membrane proteins and has a theoretical molecular weight of 11.4 kDa. Like other VAMP isoforms it is composed of an N-terminal cytoplasmic region and a C-terminal transmembrane domain. Vamp 5 is preferentially expressed in skeletal muscle and heart tissue and is upregulated during the differentiation of C2C12 cells into myotubes.

Selected General References

VAMP5 and VAMP8 are most likely not involved in primary open-angle glaucoma.
Brinkman JF, Ottenheim CP, de Jong LA, Zegers RH, de Smet MD, de Jong PT, Bergen AA
Molecular vision (2005) 11: 582-6.

The cytoplasmic domain of Vamp4 and Vamp5 is responsible for their correct subcellular targeting: the N-terminal extension of VAMP4 contains a dominant autonomous targeting signal for the trans-Golgi network.

Zeng Q, Tran TT, Tan HX, Hong W

The Journal of biological chemistry (2003) 278(25): 23046-54.

A novel synaptobrevin/VAMP homologous protein (VAMP5) is increased during in vitro myogenesis and present in the plasma membrane.

Zeng Q, Subramaniam VN, Wong SH, Tang BL, Parton RG, Rea S, James DE, Hong W

Molecular biology of the cell (1998) 9(9): 2423-37.