

## Proton ATPase 116 kDa subunit

Cat.No. 109-0P; control peptide, 100 µg peptide (lyophilized)

### Data Sheet

|                            |   |
|----------------------------|---|
| Reconstitution/<br>Storage | 100 µg peptide, lyophilized. For reconstitution add 100 µl H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.<br>Control peptides should also be stored at -20°C when still lyophilized!  |
| Immunogen                  | Synthetic peptide corresponding to AA 826 to 838 from rat Proton ATPase (UniProt Id: P25286)  |
| Recommended<br>dilution    | Optimal concentrations should be determined by the end-user.  |
| matching<br>antibodies     | 109 002, 109 003  |
| Remarks                    | This control peptide consists of the synthetic peptide (FSFEHIREGKFDE) 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 peptide 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**

The **Proton ATPase**, also referred to as **vacuolar proton pump**, is involved in the acidification of many intracellular organelles. The pump is composed of more than 10 subunits, of which the 116 kDa subunit is the largest. This subunit has an N-terminal cytoplasmic domain and a C-terminal transmembrane domain with probably 6 transmembrane regions. The 116 kDa subunit is essential for proton pump activity.

### Selected General References

The synaptic vesicle cycle: a cascade of protein-protein interactions.  
Südhof TC  
Nature (1995) 375(6533): 645-53.

Synaptic vesicles and exocytosis.

Jahn R, Südhof TC  
Annual review of neuroscience (1994) 17: 219-46.

Structure of the 116-kDa polypeptide of the clathrin-coated vesicle/synaptic vesicle proton pump.

Perin MS, Fried VA, Stone DK, Xie XS, Südhof TC  
The Journal of biological chemistry (1991) 266(6): 3877-81.