Synaptic Systems

Rudolf-Wissell-Str. 28
37079 Göttingen, Germany
Phone: +49 551-50556-0
Fax: +49 551-50556-384
E-mail: sales@sysy.com
Web: www.sysy.com

Proton ATPase 116 kDa subunit

Cat.No. 109 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	**WB**: 1 : 1000 (AP staining) (see remarks) **IP**: not tested yet **ICC**: 1 : 100 (see remarks) **IHC**: 1 : 100 **IHC-P/FFPE**: not tested yet
Immunogen	Synthetic peptide corresponding to AA 826 to 838 from rat Proton ATPase (UniProt Id: P25286)
Reactivity	Reacts with: rat (P25286), mouse (Q9Z1G4), hamster. Other species not tested yet.
Specificity	Specific for the α1 116kDa subunit. (K.D. verified)
matching control	109-0P
Remarks	**WB**: The proton pump aggregates after boiling, making it necessary to run SDS-PAGE only with non-boiled samples. **ICC**: Methanol fixation is recommended.

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 References SYSY Antibodies

Clathrin coat controls synaptic vesicle acidification by blocking vacuolar ATPase activity.
Farsi Z, Gowrisankaran S, Krunic M, Rammner B, Woehler A, Lafer EM, Mim C, Jahn R, Milosevic I
eLife (2018) 7: . **WB; tested species: mouse**

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.