COSMO BIO CO., LTD.
Inspiration for Life Science

POLYCLONAL ANTIBODY

For research use only. Not for clinical diagnosis.

Catalog No. COP-080038

vacuolar H+-ATPase, subunit a (V-ATPase, A)

Product type	Primary antibodies
Host	Rabbit
Source	Serum
Form	Liquid
	0.1% NaN_3 as a preservative.
Volume	100 µl
Concentration	
Specificity	
Antigen	Purified enzyme: amino acids -
Isotype	IgG

Application notes ELISA, WB

Recommended use

Recommended dilutions

ELISA: 1/8,000

Western blotting*: 1/2,000 Predicted molecular weight: 68 kDa

***General information:** Each antibody was raised in rabbits against the corresponding synthetic peptide or the purified enzyme. Therefore, Protein A or anti-(rabbit IgG) antibodies can be used as the second antibodies for immunoblotting.

Sample treatment: Please do not boil the protein or membrane samples for immunoblotting. We recommend the treatment at 70°C for 10 min.

Sample amount: For the major component of membranes, such as vacuolar and plasma membrane aquaporins (TIPs and PIPs) and H+-pyrophosphatase, a small amount of the crude membrane fraction (a few micrograms) is enough to detect the antigen protein. When you use the purified preparation of vacuolar and plasma membranes, the antibodies can detect the antigen protein in one microgram membrane preparation.

Antibody dilution: Please dilute the antibody solution to 1:2000 or more with TBS (Tris-buffered saline) or PBS (phosphate-buffered saline), if you use the ECL detection system. For example, 5 uL of the original antibody solution can be diluted with 10 mL of TBS. The diluted antibody solutions can be used twice or three times within a month. In this case, please add sodium azide into the antibody solution at 0.05% before the first experiment and store at 20°C or 80°C.

Second antibodies: We recommend HRP-linkd Protein A and HRP-linked anti-(rabbit IgG) antibodies. Please dilute the second antibody to 1:3000 with TBS or PBS.

Antigen detection: We recommend the ECL detection system for immunoblotting, because its sensitivity is high and you can select the best expose period for detection of the antigen.

Optimal dilutions/concentrations should be determined by the end user.

Staining Pattern

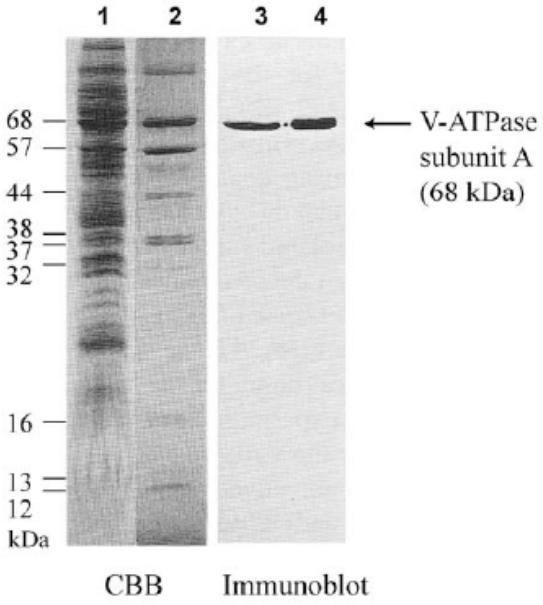
Cross reactivity

Storage

Store below -20°C (below -80°C for prolonged storage).
Aliquot to avoid cycles of freeze/thaw.

References

1) Chie M E., et al., Mechanism of the Decline in Vacuolar H^+ -ATPase Activity in Mung Bean Hypocotyls during Chilling. Plant Physiol. 100, 718-722 (1992)



Protein sample: Mung bean (*Vigna radiata L.*) Vacuolar membrane

The purified vacuolar membranes (lanes 1 and 3, 65 mg) and the purified V-ATPase (lanes 2 and 4, 7.4 mg) were subjected to SDS-PAGE.

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Manufactured by Operon Biotechnologies, K.K

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