

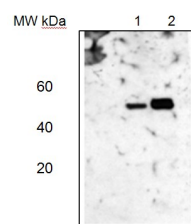
Product no **AS08 304****Anti-AtpA | Alpha subunit of ATP synthase, chloroplastic (plant)****Product information**

Immunogen	Recombinant maize chloroplast AtpA P05022
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	50 µl
Reconstitution	For reconstitution add 50 µl of sterile water
Storage	Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.

Additional information | Sequence of the protein used for eliciting this antibody is also conserved in *Arabidopsis thaliana* AtpA [P56757](#)

Application information

Recommended dilution	1: 200 (IG), 1 : 5 000 (WB)
Expected apparent MW	55 kDa
Confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Begonia</i> sp., <i>Capsicum annuum</i> , <i>Heliobacterium modesticaldum</i> , <i>Oryza sativa</i> , <i>Zea mays</i>
Predicted reactivity	Dicots and (including <i>Lilium superbium</i>) chloroplast AtpA; may cross-react with mitochondrial AtpA; Algae, <i>Nannochloropsis gaditana</i> , Cyanobacteria Species of your interest not listed? Contact us
Not reactive in	<i>Nicotiana benthamiana</i>
Selected references	Uflewski et al. (2024). The thylakoid proton antiporter KEA3 regulates photosynthesis in response to the chloroplast energy status. Nat Commun. 2024 Mar 30;15(1):2792. doi: 10.1038/s41467-024-47151-5. Pao et al. (2018). Lamelloplasts and minichloroplasts in Begoniaceae: iridescence and photosynthetic functioning. J Plant Res. 2018 Mar 2. doi: 10.1007/s10265-018-1020-2. (ImmunoGold) Zhang et al. (2017). Nitric oxide induces monosaccharide accumulation through enzyme S-nitrosylation. Plant Cell Environ. 2017 Sep;40(9):1834-1848. doi: 10.1111/pce.12989. Jeon et al. (2017). Functional characterization of chloroplast-targeted RbgA GTPase in higher plants. Plant Mol Biol. 2017 Nov;95(4-5):463-479. doi: 10.1007/s11103-017-0664-y. Murcha et al. (2016). Plant specific Preprotein and Amino Acid Transporter proteins are required for tRNA import into mitochondria. Plant Physiol. 2016 Oct 27. pii: pp.01519.2016. Camejo et al. (2015). Proteomic identification of mitochondrial carbonylated proteins in two maturation stages of pepper fruits. Proteomics. 2015 Aug;15(15):2634-42. doi: 10.1002/pmic.201400370. Yang et al. (2015). Purification and biochemical characterization of the ATP synthase from Heliobacterium modesticaldum. Protein Expr Purif. 2015 May 12. pii: S1046-5928(15)00111-4. doi: 10.1016/j.pep.2015.05.006.



Western blot

Lane 1: *Arabidopsis thaliana* total leaf protein extract;Lane 2: *Zea mays* total leaf protein extract

5 µg of total protein were loaded per each lane.

Experimental conditions:

Proteins were separated in a 12% or 5-15% gradient gel following by a transfer to nitrocellulose membrane. Membrane was blocked with TBST + 4% non-fat dried milk, 20 min following by three washes in TBST. Incubation time with primary and secondary antibodies was 1 hr primary, 30 min

for secondary antibodies followed by reaction development using chemiluminescence.