Agrisera
Part of Olink® Group

This product is **for research use only** (not for diagnostic or therapeutic use) **contact: support@agrisera.com**

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Product no AS09 602

Goat anti-Rabbit IgG (H&L), HRP conjugated

Product information

Immunogen	Purified Rabbit IgG, whole molecule,
Host	Goat
Clonality	Polyclonal
Purity	Immunogen affinity purified using solid phase rabbit IgG.
Format	Lyophilized
Quantity	1 mg
Reconstitution	For reconstitution add 1.1 ml of sterile water. Let it stand 30 minutes at room temperature to dissolve. Spin centrifuge shortly to remove any particles. Prepare fresh working dilutions daily
Storage	Store lyophilized material at 2-8°C. For long time storage after reconstitution, dilute the antibody solution with glycerol to a final concentration of 50% glycerol and store as liquid at -20°C, to prevent loss of enzymatic activity. For example, if you have reconstituted 1 mg of antibody in 1.1 ml of sterile water, add 1.1 ml of glycerol. Such solution will not freeze in -20°C. If you are using a 1:5000 dilution prior to diluting with glycerol, then you would need to use a 1:2500 dilution after adding glycerol. Prepare working dilution prior to use and then discard, Be sure to mix well but without foaming.
Additional information	Concentration: 1.0 mg/ml. Antibody is provided in: 10 mM Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 1% BSA (w/v), Protease IgG free, 0.1 % (v/v) ProClin 150. Affinity purified antibody is >95% pure, according to SDS-PAGE. This antibody can used on a very wide range of samples from various species including many model plants, algae, diatoms and bacteria.

Application information

Recommended dilution	1 : 50 000 -1 : 90 000 (ELISA), 1 : 500 -1 : 5000 (IHC), 1: 10 000 -1 : 50 000 (WB)
Confirmed reactivity	Based on IEP, this antibody reacts with: rabbit IgG heavy chains and light chains on all rabbit immunoglobulins
Not reactive in	Non-immunoglobulin rabbit serum proteins
Selected references	Miloro et al. (2024). Barley AGO4 proteins show overlapping functionality with distinct small RNA-binding properties in heterologous complementation. Plant Cell Rep. 2024 Mar 13;43(4):96. doi: 10.1007/s00299-024-03177-z. Liu et al. (2023). RBPome identification in egg-cell like callus of Arabidopsis. Biol Chem. 2023 Sep 29;404(11-12):1137-1149.doi: 10.1515/hsz-2023-0195. Chung et al. (2023). An RNA thermometer in the chloroplast genome of Chlamydomonas facilitates temperature-controlled gene expression. Nucleic Acids Res. 2023 Nov 10;51(20):11386-11400. doi: 10.1093/nar/gkad816. Shi et al. (2023). Protocol to identify protein-protein interaction networks in Solanum tuberosum using transient TurboID-based proximity labeling. STAR Protoc. 2023 Sep 20;4(4):102577.doi: 10.1016/j.xpro.2023.102577. Lim et al (2022). Arabidopsis guard cell chloroplasts import cytosolic ATP for starch turnover and stomatal opening. Nat Commun. 2022 Feb 3;13(1):652. doi: 10.1038/s41467-022-28263-2. PMID: 35115512; PMCID: PMC8814037. Miklankova et al. (2022) HYPK promotes the activity of the Nalfa-acetyltransferase A complex to determine proteostasis of nonAc-X2/N-degron-containing proteins. Sci Adv. 2022 Jun 17;8(24):eabn6153. doi: 10.1126/sciadv.abn6153. Epub 2022 Jun 15. PMID: 35704578; PMCID: PMC9200280. Hofmann, Wienkoop & Luthje (2022) Hypoxia-Induced Aquaporins and Regulation of Redox Homeostasis by a Trans-Plasma Membrane Electron Transport System in Maize Roots. Antioxidants (Basel). 2022 Apr 25;11(5):836. doi: 10.3390/antiox11050836. PMID: 35624700; PMCID: PMC9137787. Bychkov et al. (2022) The role of PAP4/FSD3 and PAP9/FSD2 in heat stress responses of chloroplast genes. Plant Sci. 2022 Sep;322:111359. doi: 10.1016/j.plantsci.2022.111359. Epub 2022 Jun 20. PMID: 35738478. Vitale et al. (2021) Light Spectral Composition Influences Structural and Eco-Physiological Traits of Solanum lycopersicum L. cv. 'Microtom' in Response to High-LET Ionizing Radiation. Plants (Basel). 2021 Aug 23;10(8):1752. doi: 10.3390/plants10081752. PMID: 34451797; PMCID: PMC8399554.

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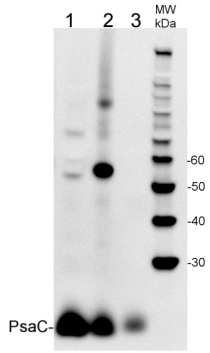
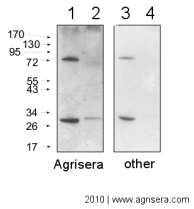
Application example



5 µg of total extract from (**1**) *Hordeum vulgare*total leaf, (**2**) *Zea mays* (**3**) *Spinacia oleracea* extracted with PEB (**AS08 300**) were separated on 4-12% NuPage (Invitrogen) **LDS-PAGE** and blotted 1h to **PVDF**. Blots were blocked immediately following transfer in 2% ECL Advance blocking reagent (GE Healthcare) in 20 mM Tris, 137 mM sodium chloride pH 7.6 with 0.1% (v/v) Tween-20 (TBS-T) for 1h at room temperature with agitation. Blots were incubated in the primary anti-PsaC antibody (AS04 042) at a dilution of 1: 10 000 for 1h at room temperature with agitation. The antibody solution was decanted and the blot was rinsed briefly twice, then washed once for 15 min and 3 times for 5 min in TBS-T at room temperature with agitation. Blots were incubated in secondary antibody (goat anti-rabbit IgG horse radish peroxidase conjugated, AS09 602, Agrisera) diluted to 1:50 000 in 2% ECL Advance blocking solution for 1h at room temperature with agitation. The blots were washed as above and developed for 5 min with chemiluminescent detection reagent according to the manufacturers instructions. Images of the blots were obtained using a CCD imager (FluorSMax, Bio-Rad) and Quantity One software (Bio-Rad). Exposure time was 30 seconds.

Comparison of Agrisera secondary antibody sensitivity



10 µg of mitochondrial fraction from *Arabidopsis thaliana* **(1,3)** and *Arabidopsis thaliana* leaf extract **(2,4)** were separated on 10% gel and blotted on nitrocellulose membrane using wet transfer (0.22% CAPS, pH 11). Filters where blocked (1.5h) in 5% milk in TBST (1X TBS, 0,1% Tween 20), incubated with 1: 1000 anti-COXII antibodies (2h in TBST) followed by incubation with 1: 10 000 secondary anti-rabbit (1h) HRP-coupled antibodies from **Agrisera (left panel)** and **other manufacture (right panel)** and visualized with chemiluminescent detection reagent, on Kodak autoradiography film for 5 s. Antibody in left panel detects target protein also in total cell extract **(2)** and can be used in higher dilution than applied 1: 10 000.

Agrisera goat anti-rabbit HRP conjugated antibody (AS09 602) can be used at following dilutions: 1: 50 000 -1: 90 000 (ELISA), 1 : 75 000 with chemiluminescence detection range of extreme low picogram and 1: 25 000 with chemiluminescence detection reagent of mid femtogram (WB), 1: 500 -1: 5000 (IHC).