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Product no AS12 2111

RPS14 | 40S ribosomal protein S14-1

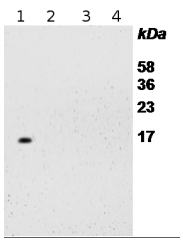
Product information

Immunogen	KLH-conjugated synthetic peptide derived from a N-terminal of *Arabidopsis thaliana* Q9SIH0
Host	Rabbit
Clonality	Polyclonal
Purity	Immunogen affinity purified serum in PBS pH 7.4.
Format	Lyophilized
Quantity	50 µg
Reconstitution	For reconstitution add 50 µl of sterile water
Storage	Store lyophilized/reconstituted at -20°C; 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.

Application information

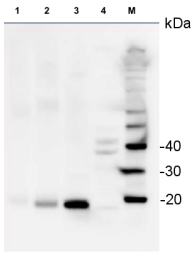
Recommended dilution	1 : 1000 (WB)
Expected | apparent MW	16 | 15 kDa
Confirmed reactivity	*Arabidopsis thaliana, Chlamydomonas reinhardtii, Solanum lycopersicum, Zea mays*
Predicted reactivity	*Brassica napus, Candidia albicans, Fusarium oxysporum, Lupinus luteus, Nannochloropsis gaditana, Nicotiana benthamiana, Ostreococcus tauri, Oryza sativa, Picea sitchensis, Populus trichocarpa, Sorghum bicolor, Ricinus communis,* Chicken, Human, Mouse, Rat, Salmon, *Trypanosoma brucei* Species of your interest not listed? Contact us
Not reactive in	No confirmed exceptions from predicted reactivity are currently known
Additional information	20 µg of total protein is needed for detection of S14 in *Arabidopsis thaliana*
Selected references	Pereira Firmino et al. (2020). Separation and Paired Proteome Profiling of Plant Chloroplast and Cytoplasmic Ribosomes. Plants (Basel) . 2020 Jul 14;9(7):892.doi: 10.3390/plants9070892. Ma et al. (2020). An ortholog of the Vasa intronic gene is required for small RNA-mediated translation repression in Chlamydomonas reinhardtii. Proc Natl Acad Sci U S A. 2020 Jan 7;117(1):761-770. doi: 10.1073/pnas.1908356117. Shinozaki et al. (2020). Autophagy Increases Zinc Bioavailability to Avoid Light-Mediated ROS Production under Zn Deficiency. Plant Physiol. 2020 Jan 15. pii: pp.01522.2019. doi: 10.1104/pp.19.01522. Wegener et al. (2019). Magnetic Tracking of Protein Synthesis in Microfluidic Environments-Challenges and Perspectives. Nanomaterials (Basel). 2019 Apr 9;9(4). pii: E585. doi: 10.3390/nano9040585. Liu et al. (2018). Transcriptomics analyses reveal the molecular roadmap and long noncoding RNA landscape of sperm cell lineage development. Plant J. 2018 Jul 26. doi: 10.1111/tpj.14041.

application example



20 µg of total protein from *Arabidopsis thaliana* extracts from **(1)** total cell, nuclei **(2)**, chloroplasts **(3)**, thylakoids **(4)** were extracted with preparation buffer (330 mM sorbitol, 25mM Tricine pH 7.8, 1mM EDTA, 10mM KCl, 0,15% BSA, 4mM Na ascorbat and 7mM L-cysteine) and separated on 12 % sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE) and blotted 1h 30min to Immobilon™PVDF (Millipore) membrane. Blots were blocked with 10% dry milk in Tris-buffered saline TBS-T (50 mM tris, 150 mM NaCl, pH 7.6 + 1ML 20% TWEEN 20) for 1h at room temperature (RT) with agitation. Blots were incubated in the primary antibody at a dilution of 1: 2 000 (in TBS-T) overnight at 4ºC with agitation. The antibody solution was decanted and the blot was rinsed briefly twice, and then washed once for 15 min and 3 times for 5 min in TBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, from Pierce) diluted to 1:20 000 in TBS-T for 1h at RT with agitation. The blot was washed as above and developed for 5 min with ThermoSuper Signal WestPico

according to the manufacturers instructions. Exposure time was 3 minutes. Courtesy of Dr. Rikard Fristedt, UCLA, USA



5 µg of total protein from *Arabidopsis thaliana* **(1),** *Zea mays* **(2)**, *Chlamydomonas reinhardtii* **(3)**, *Salmo salar* **(4)** extracted with PEB were separated on **4-12 % SDS-PAGE** and blotted 1h to **PVDF**. Blots were blocked for 1h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1: 1 000 for 1h at RT 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 RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, from Agrisera, AS09 602) diluted to 1:25 000 in for 1h at RT with agitation. The blot was washed as above and developed for 5 min with ECL according to the manufacturers instructions. Exposure time was 2 minutes.