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contact: support@agrisera.com

Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33 000 | www.agrisera.com

Product no AS13 2664

S6K1-2 | Ribosomal-protein S6 kinase homolog 1,2 - phosphorylated

Product information

Background

Ribosomal S6 kinase 1/2 (S6K1/2) involved in TOR signaling pathway, in osmotic stress response. Activated by PDK1 and repressed during osmotic stress. Expressed in all tissues, especially during high metabolic activity in growing buds, root tips, leaf margins and germinating seeds. Alternative names: AtPK1/AtPK6 S6K1), AtPK2/AtPK19 (S6K2).

Immunogen

<u>KLH</u>-conjugated peptide containing phospho-Thr, derived from *Arabidopsis thaliana* S6K1: UniProt: <u>P42818</u>, TAIR: <u>AT3G08730</u> and S6K2: UniProt: <u>Q39030</u>, TAIR: <u>AT3G08720</u>. Due to high amino acid homology, chosen peptide is conserved in both proteins: S6K1 and S6K2.

Host Rabbit

Clonality Polyclonal

Purity Affinity purified serum in PBS, pH 7.4

Format Lyophilized in PBS pH 7.4

Quantity 50 μg

Reconstitution For reconstitution add 50 μl of sterile water.

Storage Store lyophilized/reconstituted at -20 °C; on

Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from lyophilized

material adhering to the cap or sides of the tubes. Never Store this antibody in $4\,^{\circ}\text{C}.$

Tested applications Western blot (WB)

Related products AS12 1855 | anti-S6K1/2 | Ribosomal S6 kinase 1/2, rabbit antibody

AS12 2608 | anti-TOR | Target of rapamycin, rabbit antibody

Plant protein extraction buffer

Secondary antibodies

Application information

Recommended dilution 1:500 (WB)

Expected | apparent

/I\A/

52.6 kDa (S6K1) and 53 kDa (S6K2) | 60 kDa

Confirmed reactivity Arabidopsis thaliana

Predicted reactivity Thelungiella halophila

Species of your interest not listed? Contact us

Not reactive in No confirmed exceptions from predicted reactivity are currently known.

Selected references Kazibwe et al. (2020). TOR mediates the autophagy response to altered nucleotide homeostasis in a ribonuclease mutant. J Exp Bot. 2020 Sep 9;eraa410.doi: 10.1093/jxb/eraa410.

<u>Dealy</u> et al. (2019). CEP3 levels affect starvation-related growth responses of the primary root. J Exp Bot. 2019 Jun 6. pii: erz270. doi: 10.1093/jxb/erz270.

Wang et al. (2017). The inhibition of protein translation mediated by AtGCN1 is essential for cold tolerance in Arabidopsis thaliana. Plant Cell Environ. 2017 Jan;40(1):56-68. doi: 10.1111/pce.12826.

Wang et al. (2017). Reciprocal Regulation of the TOR Kinase and ABA Receptor Balances Plant Growth and Stress Response. Mol Cell. 2017 Dec 27. pii: S1097-2765(17)30930-9. doi: 10.1016/j.molcel.2017.12.002.

For high resolution images, please visit the specific product page at www.agrisera.com

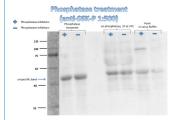
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Application example



30 µg of total protein of *Arabidopsis thaliana* 10 days old seedlings extracted with Lacus buffer with or without phosphatase inhibitors and kept at 4°C prior to denaturation for 5 min. at 95°C. Samples were separated on 6.5 % SDS-PAGE and blotted 2h to PVDF. Phosphatase treatment was done with CIAP ("+" phosphatase inhibitors added, "-" phosphatase inhibitors not included). Blots were blocked with 5% milk in TBST for 1h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1:500 for overnight at 4C with agitation. The antibody solution was decanted and the blot was washed three times for 15 min in TBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated from Agrisera, <u>AS09 602</u>) diluted to 1:10 000 in 2.5% milk in TBST for 1h at RT with agitation. The blot was washed as above and developed for 5 min with ECL according to the manufacturer's instructions. Exposure time was few minutes.

Courtesy of Dr. Rossana Henriques, CRAG, Spain