

This product is for research use only (not for diagnostic or therapeutic use)

contact: support@agrisera.com

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

Product no AS06 185

SPS | Sucrose phosphate synthase (maize)

Product information

Immunogen Synthetic peptide derived from *Zea mays* SPS protein sequence (<u>P31927</u>).

Host Rabbit

Clonality Polyclonal

Purity Total IgG. Protein G purified in PBS pH 7.4.

Format Lyophilized

Quantity 50 μl

Reconstitution For reconstitution add 50 μl of sterile water

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 Total IgG concentration is 3 μg/μl

Application information

Recommended dilution 1:1500 (IL), 1:2000 (WB)

Expected | apparent

120 | ~130 for Zea mays

Confirmed reactivity Alfalfa, Solanum lycopersicum, Zea mays

Predicted reactivity Oryza sativa, Saccharum officinarum, Triticum aestivum

Species of your interest not listed? Contact us

Not reactive in Hordeum vulgare

Selected references Padhi et al. (2019). Distinct nodule and leaf functions of two different sucrose phosphate synthases in alfalfa. Planta

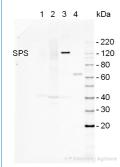
(2019). https://doi.org/10.1007/s00425-019-03261-9.

Kaur et al. (2019). Comparison of alfalfa plants overexpressing glutamine synthetase with those overexpressing sucrose phosphate synthase demonstrates a signaling mechanism integrating carbon and nitrogen metabolism between the leaves and nodules. Plant Direct, Volume3, Issue1, Jan 2019, e00115.

Seger et al. (2014). Impact of concurrent overexpression of cytosolic glutamine synthetase (GS 1) and sucrose phosphate synthase (SPS) on growth and development in transgenic tobacco. Planta. 2014 Sep 12.

Rounis et al. (2014). Seeded and Parthenocarpic Cherry Tomato Fruits Exhibit Similar Sucrose, Glucose, and Fructose Levels, Despite Dissimilarities in UGPase and SPS Gene Expression and Enzyme Activity. J Plant Growth Regul. DOI 10.1007/s00344-014-9441-1. (immunolocalization)

Application example



10 µg of total leaf protein from Arabidopsis thaliana (1,2), Zea mays (3) and Hordeum vulgare (4), extracted with Agrisera Protein Extraction Buffer, PEB (AS08 300) as well as 10 μg cytosolic protein from Arabidopsis thaliana (2) were separated on 4-12% NuPage (Invitrogen) LDS-PAGE and blotted 1.5h (30V) to nitrocellulose. Filters were blocked 1h with 2% low-fat milk powder in TBS-T (0.1% TWEEN 20) and probed with anti-SPS (AS06 185, 1:2000, 1h) and secondary anti-rabbit (1:20000, 1 h) antibody (HRP conjugated) in TBS-T containing 2% low fat milk powder. Antibody incubations where followed by washings in TBS-T (15, +5, +5 min). All steps were performed at RT with agitation. Signal was detected with chemiluminescence detection reagent, using a Fuji LAS-3000 CCD (90s, high sensitivity).