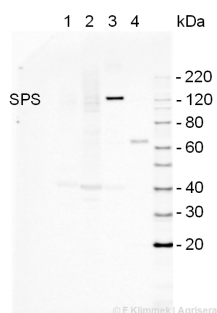


Product no **AS06 185****SPS | Sucrose phosphate synthase (maize)****Product information**

<b>Immunogen</b>	Synthetic peptide derived from <i>Zea mays</i> SPS protein sequence ( <b>P31927</b> ).
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Total IgG. Protein G purified in PBS pH 7.4.
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µl
<b>Reconstitution</b>	For reconstitution add 50 µl of sterile water
<b>Storage</b>	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.
<b>Additional information</b>	Total IgG concentration is 3 µg/µl

**Application information**

<b>Recommended dilution</b>	1 : 1500 (IL), 1 : 2000 (WB)
<b>Expected   apparent MW</b>	120   ~130 for <i>Zea mays</i>
<b>Confirmed reactivity</b>	<i>Alfalfa</i> , <i>Solanum lycopersicum</i> , <i>Zea mays</i>
<b>Predicted reactivity</b>	<i>Oryza sativa</i> , <i>Saccharum officinarum</i> , <i>Triticum aestivum</i> Species of your interest not listed? <a href="#">Contact us</a>
<b>Not reactive in</b>	<i>Hordeum vulgare</i>
<b>Selected references</b>	<a href="#">Padhi et al. (2019)</a> . Distinct nodule and leaf functions of two different sucrose phosphate synthases in alfalfa. <i>Planta</i> (2019). <a href="https://doi.org/10.1007/s00425-019-03261-9">https://doi.org/10.1007/s00425-019-03261-9</a> . <a href="#">Kaur et al. (2019)</a> . 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. <i>Plant Direct</i> , Volume3, Issue1, Jan 2019, e00115. <a href="#">Seger et al. (2014)</a> . Impact of concurrent overexpression of cytosolic glutamine synthetase (GS 1 ) and sucrose phosphate synthase (SPS) on growth and development in transgenic tobacco. <i>Planta</i> . 2014 Sep 12. <a href="#">Rounis et al. (2014)</a> . Seeded and Parthenocarpic Cherry Tomato Fruits Exhibit Similar Sucrose, Glucose, and Fructose Levels, Despite Dissimilarities in UGPase and SPS Gene Expression and Enzyme Activity. <i>J Plant Growth Regul.</i> 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 were followed by washings in TBS-T (15, +5, +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).