**product information**

**Background**
SPS (sucrose phosphate synthase, EC 2.4.1.14) is the key enzyme of carbon flux into sucrose fixation in plants. It catalyzes the synthesis of sucrose-phosphate from UDP-glucose and fructose-6-phosphate predominantly in the cytosol of sucrose-source leaf tissue.

**Immunogen**
Synthetic peptide derived from *Zea mays* SPS protein sequence (P31927).

**Host**
Rabbit

**Clonality**
Polyclonal

**Purity**
Total IgG

**Format**
Lyophilized in PBS pH 7.4

**Quantity**
50 µl

**Reconstitution**
For reconstitution add 50 µl of sterile water

**Storage**
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.

**Tested applications**
Immunolocalization (IL), Western blot (WB)

**Related products**
- AS03 035A | Anti-SPS | Sucrose phosphate synthase, global, rabbit antibodies
- AS03 035-HRP | Anti-SPS | Sucrose phosphate synthase, global (40 µg, HRP-conjugated), rabbit antibodies
- AS03 035-ALP | Anti-SPS | Sucrose phosphate synthase, global (40 µg, ALP-conjugated), rabbit antibodies
- AS15 2995 | Anti-SPSA1 | Sucrose phosphate synthase isoform A1, rabbit antibodies
- AS15 2996 | Anti-SPSA2 | Sucrose phosphate synthase isoform A1, rabbit antibodies
- AS15 2997 | Anti-SPSC | Sucrose phosphate synthase isoform C, rabbit antibodies
- Plant and algal protein extraction buffer
- Secondary antibodies

**Application information**

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

**Expected | apparent MW**
120 | ~130 for *Zea mays*

**Confirmed reactivity**
Alfalfa, *Solanum lycopersicum*, *Zea mays*

**Predicted reactivity**
*Oryza sativa*, *Saccharum officinarum*, *Triticum aestivum*

**Not reactive in**
*Hordeum vulgare*

**Selected references**
**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, +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).