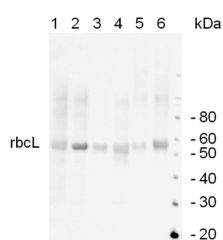


Product no **AS07 218****Rubisco | 557 kDa hexadecamer****Product information**

Immunogen	purified 557 kDa hexadecamer Rubisco protein complex from <i>Spinacia oleracea</i> (SIGMA-ALDRICH <u>R-8000</u>), UniProt: <u>P00875</u> and <u>Q43832</u>
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
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 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 : 10 000-1 : 20 000 on 0,5-10 ug total cellular protein/lane and standard (WB), 1 : 500-1:1000 (IL)
Expected apparent MW	53-55 53-55 kDa
Confirmed reactivity	<i>Anabaena</i> sp. PCC 7120, <i>Arabidopsis thaliana</i> , <i>Aucuba japonica</i> , <i>Fremyella diplosiphon</i> , <i>Glycine max</i> , <i>Hordeum vulgare</i> , <i>Manihot esculenta</i> Crantz, <i>Oryza sativa</i> , <i>Physcomitrium patens</i> , <i>Pisum sativum</i> , <i>Populus sp.</i> , <i>Salsola laricifolia</i> , <i>Solanum tuberosum</i> , <i>Spinacia oleracea</i> , <i>Synechocystis sp. PCC 6803</i> , <i>Synechococcus sp. PCC7942</i> , <i>Zea mays</i>
Predicted reactivity	higher plants, algae, <i>Nannochloropsis</i> sp.
Not reactive in	<i>Chlamydomonas reinhardtii</i> (immunolocalization)
Additional information	RbcS subunit is not detected by this antibody This product can be sold containing proclin if requested
Selected references	<u>Mihara</u> et al. (2019). Thioredoxin targets are regulated in heterocysts of cyanobacterium <i>Anabaena</i> sp. PCC 7120 in a light-independent manner. <i>J Exp Bot.</i> 2019 Dec 21. pii: erz561. doi: 10.1093/jxb/erz561. <u>Sedaghatmehr</u> et al. (2019). A regulatory role of autophagy for resetting the memory of heat stress in plants. <i>Plant Cell Environ.</i> 2019 Mar;42(3):1054-1064. doi: 10.1111/pce.13426. <u>Rohnke</u> et al. (2018). RcaE-Dependent Regulation of Carboxysome Structural Proteins Has a Central Role in Environmental Determination of Carboxysome Morphology and Abundance in <i>Fremyella diplosiphon</i> . <i>Mol Biol and Physiol.</i> Vol. 3, Issue 1. DOI: 10.1128/mSphere.00617-17 <u>Zhang</u> et al. (2017). Composition of photosynthetic pigments and photosynthetic characteristics in green and yellow sectors of the variegated <i>Aucuba japonica</i> 'Variegata' leaves. <i>Flora</i> , Vol 240, March 2018, Pages 25–33. <u>Wang</u> et al. (2017). Re-creation of a Key Step in the Evolutionary Switch from C3 to C4 Leaf Anatomy. <i>Curr Biol.</i> 2017 Nov 6;27(21):3278-3287.e6. doi: 10.1016/j.cub.2017.09.040. <u>Wen and Zhang</u> (2014). <i>Salsola laricifolia</i> , another C 3 –C 4 intermediate species in tribe Salsoleae s.l. (Chenopodiaceae). <i>Photosynth Res.</i> 2014 Sep 17. (immunolocalization) <u>Feifei</u> et al. (2014). Comparison of Leaf Proteomes of Cassava (<i>Manihot esculenta</i> Crantz) Cultivar NZ199 Diploid and Autotetraploid Genotypes. <i>PLoS One.</i> 2014 Apr 11;9(4):e85991. doi: 10.1371/journal.pone.0085991. eCollection 2014.

Application example

0.5 µg of total leaf protein isolated with Agrisera Protein Eextraction Buffer ([AS08 300](#)) from *Arabidopsis thaliana* (1), *Spinacia oleracea* (2), *Zea mays* (3), *Hordeum vulgare* (4), *Solanum tuberosum* (5), *Pisum sativum* (6) were separated on **4-12%** NuPage (Invitrogen) **LDS-PAGE** and blotted 45 min (30V) to **nitrocellulose**. Filters were blocked 1h with 2% low-fat **milk powder** in TBS-T (0.1% TWEEN 20) and probed with AS07 218 (**1:20 000**, 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 using a Fuji LAS-3000 CCD (300s, high sensitivity).