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product **AS13 2747**

PP2A | Serine/threonine protein phosphatase 2A 59 kDa regulatory subunit B' gamma isoform

product information

Background	<p>PP2A (Serine/threonine protein phosphatase 2A 59 kDa regulatory subunit B' gamma isoform) is required for the formation of the PP2A holoenzyme that negatively regulates brassinosteroid signaling by dephosphorylating and inactivating BRI1 in the cytoplasm and is involved in growth regulation and stress signaling.</p> <p>Alternative names: AtB' gamma, PP2A, B' subunit, gamma isoform</p>
Immunogen	<p>KLH-conjugated peptide, derived from Arabidopsis thaliana PP2A, UniProt: Q8RW96-1 , TAIR: AT4G15415</p>
Host	<p>Rabbit</p>
Clonality	<p>Polyclonal</p>
Purity	<p>Affinity purified serum in PBS, pH 7.4</p>
Format	<p>Lyophilized in PBS pH 7.4</p>
Quantity	<p>50 µg</p>
Reconstitution	<p>For reconstitution add 50 µl of sterile water.</p>
Storage	<p>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.</p>
Tested applications	<p>Immunolocalization (IL), Western blot (WB)</p>
Related products	<p>antibodies to proteins involved in response to pathogen attack antibodies to proteins involved in senescence antibodies to proteins involved in signal transduction</p> <p>Plant protein extraction buffer</p> <p>Secondary antibodies</p>

Application information

Recommended dilution	<p>1 : 500 (IL), 1 : 1000 (WB)</p>
Expected apparent MW	<p>59.1 kD</p>
Confirmed reactivity	<p><i>Arabidopsis thaliana</i>, <i>Oryza sativa</i></p>
Predicted reactivity	<p><i>Brassica oleracea</i>, <i>Pisum sativum</i></p>
Not reactive in	<p>No confirmed exceptions from predicted reactivity are currently known.</p>

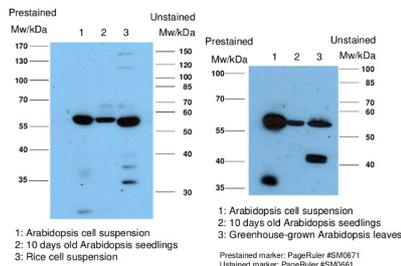
Application example

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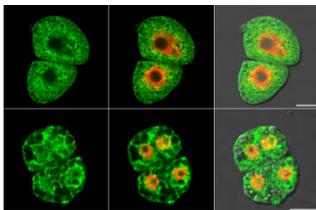
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Total proteins were extracted from the indicated plant samples as previously described. 20 µg total proteins from: *Arabidopsis thaliana* cell suspension (1), 10 days old *Arabidopsis thaliana* seedlings (2), *Oryza sativa* cell suspension (3) (left panel) and *Arabidopsis thaliana* cell suspension (1), 10 days old *Arabidopsis thaliana* seedlings (2), *Arabidopsis thaliana* leaves (3) (right panel) were separated on 10 % SDS-PA gels, blotted onto PVDF membranes. Blots were blocked with 5 % milk powder in TBS-T for 2h at room temperature (RT) with agitation. Blot was incubated in the primary antibody 0.25 µg/ml for 2h at RT with agitation. The antibody solution was decanted and the blot was rinsed briefly twice, then washed once for 15 min and 3 times for 5 min in TBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, from Agrisera, [AS09 602](#)) diluted to 1:50 000 in 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 seconds.

Courtesy of Dr. Gábor Horváth, University of Szeged, Hungary



Immunolocalization of PP2A on *Arabidopsis thaliana*, MM1 (upper panel) and *Oryza sativa* ssp. japonica cv 'Unggi 9' (lower panel) plant suspension cultures. DyLight488 (Agrisera AS10 831) anti-rabbit antibody is used as fluorescent conjugated secondary antibody (green). DAPI is used as nuclear marker (red). Merged transmission images (differential interference contrast) are shown at the last column. Scalebars are 10 µm.

Labeling and detection protocol

Fixation (30mins) 4% paraformaldehyde in PBS (pH 7.4) with 0.05% TritonX-100. 3x5min PBS wash. Cell wall digestion (30mins): 1% Cellulase, 0.5% Pectinase in 0.5% (w/v) MES buffer (pH 5.6). 2x5min PBS wash.
Immobilization of cells (10mins): Cells in PBS were settled on poly-L-Lysine coated coverslips, excess PBS removed without air drying the cells.
Membrane permeabilization (10mins): 0.5% TritonX-100 in PBS. 3x5min PBS wash. Blocking (10mins): 5% Fish gelatin in PBS. Primary antibody incubation (16 h at 4 °C or 1h at 37 °C): Agrisera (AS13 2747) rabbit anti PP2A antibody diluted 1:500 in blocking buffer. 4x5min blocking buffer wash. Secondary antibody incubation (1h at 37 °C): Agrisera ([AS10 831](#)) chicken anti-rabbit DyLight 488 antibody diluted 1:200 in blocking buffer. 3x5min PBS wash. Nuclear counterstaining (5mins): 200ng/µl DAPI in PBS. Brief PBS wash. Mounting: Fluoromount G mounting medium was used to mount coverslips onto glass slides. Imaging: Olympus FV1000 confocal microscope with 40x (NA1.3) oil immersion objective.

Courtesy of Dr. Ferhan Ayaydin, Cellular Imaging Laboratory, Biological Research Center, Szeged, Hungary