

product **AS10 723**
GDP-L-Galactose Phosphorylase

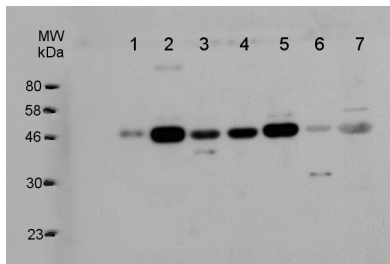
product information

background	GDP-L-Galactose Phosphorylase is a histidine triad (HIT) enzyme of the Smirnov-Wheeler pathway of ascorbic acid synthesis in plants. Encoded by VTC2 gene. The enzyme catalyzes the conversion of GDP-L-galactose to L-galactose 1-phosphate in a reaction that consumes inorganic phosphate and produces GDP.
immunogen	<u>KLH</u> -conjugated synthetic peptide derived from known GDP-L-Galactose Phosphorylase sequences, including <i>Arabidopsis thaliana</i> <u>Q8LKQ7</u> and <i>Chlamydomonas reinhardtii</i>
antibody format	rabbit polyclonal serum lyophilized
quantity	200 µl for reconstitution add 200 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	western blot (WB)
additional information	to be added when available

application information

recommended dilution	1 : 1200 with alkaline phosphatase, 1: 3000 with regular ECL (WB)
expected apparent MW	51 50 kDa
confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Brassica oleracea</i> var. <i>italica</i> , <i>Brassica rapa</i> var. <i>komatsuna</i> , <i>Citrus limon</i> , <i>Nicotiana tabacum</i> , <i>Spinacia oleracea</i> , <i>Zea mays</i> , <i>Chlamydomonas reinhardtii</i>
predicted reactivity	dictos: <i>Sorghum bicolor</i> , monocots: <i>Oryza sativa</i> , moss: <i>Physcomitrella patens</i>
not reactive in	no confirmed exceptions from predicted reactivity known in the moment
additional information	to be added when available
selected references	to be added when available, antibody available in July 2010

application example



9 μ l of total soluble protein from *Arabidopsis thaliana* (1), *Zea mays* (2), *Nicotiana tabacum* (3), *Citrus lemon* (4), *Spinacia oleracea* (5), *Brassica rapa* var. komatsuna (6), *Brassica oleracea* var. italica (7) was separated on 12% SDS-PAGE and blotted 1.5h to PVDF at 1.5 mA/cm² constant current. Blots were blocked immediately following transfer in TBS-0.3% Tween 20 + 5% dried milk overnight at room temperature (RT) with agitation. Blots were incubated in the primary antibody AS10 723 at a dilution of 1: 1500 for 4 h at RT with agitation. The antibody solution was decanted and the blot was rinsed briefly once with TBS-T+5% milk, followed by washing 3 times for 5 min in the same at RT with agitation. Blots were incubated in secondary antibodies (goat anti-rabbit IgG HRP conjugated from Biorad) diluted in TBS-T+5% milk to 1:25 000 for 1 h at RT with agitation. The blots were washed 2 x 5 mins with TBS-T+5% milk as above, then rinsed with TBS and followed by ECL detection (approx 5 minutes).

Courtesy Dr. Eugen Urzica, UCLA