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Product no AS06 181

Anti-GR | Glutathione reductase

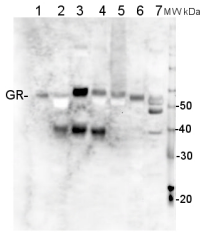
Product information

Immunogen	Maltose binding protein (MBP) fusion of *Zea mays* GR, O64409
Host	Rabbit
Clonality	Polyclonal
Purity	Total IgG. Protein G purified in PBS pH 7.4.
Format	Lyophilized
Quantity	0.5 mg
Reconstitution	For reconstitution add 100 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.
Additional information	Total IgG concentration is 7 µg/ µl

Application information

Recommended dilution	2 µg (IP), 1 : 1000 (IL), 1 : 5000 (WB)
Expected | apparent MW	54 kDa
Confirmed reactivity	*Arabidopsis thaliana, Catharanthus roseus, Glycine max, Hordeum vulgare, Medicago sativa, Nicotiana tabacum, Oryza sativa, Pisum sativum, Salicornia* sp.*, Silene vulgaris, Scenedesmus quadricauda (algae), Solanum tuberosum, Triticum aestivum, Zea mays*
Predicted reactivity	*Brassica rapa, Marchantia polymorpha, Oryza sativa, Populus balsamifera* Species of your interest not listed? Contact us
Not reactive in	No confirmed exceptions from predicted reactivity are currently known
Additional information	This antibody will recognize the chloroplastic and cytoplasmic forms of the enzyme
Selected references	Bekturova et al. (2021) APS reductase and sulfite oxidase regulate sulfite-induced water loss in Arabidopsis. J Exp Bot. 2021 Jun 9:erab249. doi: 10.1093/jxb/erab249. Epub ahead of print. PMID: 34107028. Zhong et al. (2020). Proteomic Analysis of Irradiation with Millimeter Waves on Soybean Growth under Flooding Conditions. Int J Mol Sci. 2020 Jan 12;21(2). pii: E486. doi: 10.3390/ijms21020486. Ameri et al. (2020). Aluminium triggers oxidative stress and antioxidant response in the microalgae Scenedesmus sp. J Plant Physiol. 2020 Jan 15;246-247:153114. doi: 10.1016/j.jplph.2020.153114. Zhong et al. (2019). Phosphoproteomics Reveals the Biosynthesis of Secondary Metabolites in Catharanthus roseus under Ultraviolet-B Radiation. J Proteome Res. 2019 Aug 7. doi: 10.1021/acs.jproteome.9b00267. Balážová et al. (2018). Zinc oxide nanoparticles phytotoxicity on halophyte from genus Salicornia. Plant Physiol Biochem. 2018 Sep;130:30-42. doi: 10.1016/j.plaphy.2018.06.013.

Application example



10 µg of total protein from (**1**) *Arabidopsis thaliana* leaf extracted with **P**rotein **E**xtration **B**uffer, PEB (**AS08 300**), (**2**) *Nicotiana tabaccum* leaf extracted with PEB, (**3**) *Zea mays* extracted with PEB, (**4**) *Hordeum vulgare* leaf extracted with PEB, (**5**) *Physcomitrella patens* total cell extracted with PEB, (**6**) *Chlamydomonas reinhardtii* total cell extracted with PEB, (**7**) *Synochocystis elongatus* total cell extracted with PEB, extracted with PEB, were separated on **4-12%** NuPage (Invitrogen) **LDS-PAGE** and blotted 1h to **nitrocellulose**. Blots were blocked in 2 % low fat dry milk in TBS-T (0.1 % Tween 20) for 1h at room temperature with agitation. Blots were incubated in the primary antibody at a dilution of 1: 2000 for 1h at room temperature 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 room temperature with agitation. Blots were incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated) diluted to 1:30 000 for 1h at room temperature with agitation. The blots were washed as above and developed for 30 seconds with chemiluminescent detection reagent according the manufacturers instructions.

The nature of 40 kDa cross reaction in this experiment is not known.