Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden |+46 (0)935 33000 | www.agrisera.com

## Product no AS06 181

## GR | Glutathione reductase

## Product information

| Immunogen \|| Maltose binding protein (MBP) fusion of Zea mays GR, $\underline{\underline{064409}}$ |  |
| :---: | :---: |
| 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 $100 \mu$ of sterile water |
| Storage | Store lyophilized/reconstituted at $-20^{\circ} \mathrm{C}$; 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 lgG concentration is $7 \mu \mathrm{~g} / \mu \mathrm{l}$

## Application information

| Recommended dilution | $2 \mu \mathrm{~g}$ (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, 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. <br> 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. <br> 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. <br> 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. <br> 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


$10 \mu \mathrm{~g}$ of total protein from (1) Arabidopsis thaliana leaf extracted with Protein Extration Buffer, 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 1 h to nitrocellulose. Blots were blocked in $2 \%$ low fat dry milk in TBS-T ( $0.1 \%$ Tween 20) for 1 h at room temperature with agitation. Blots were incubated in the primary antibody at a dilution of 1:2000 for 1 h 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

This product is for research use only (not for diagnostic or therapeutic use)
contact: support@agrisera.com
Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33000 | www.agrisera.com
times for 5 min in TBS-T at room temperature with agitation. Blots were incubated in secondary antibody (anti-rabbit lgG horse radish peroxidase conjugated) diluted to 1:30 000 for 1 h 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.

