Datasheet for ABIN7540298

anti-Glutathione Reductase antibody

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Overview

Quantity:	0.5 mg
Target:	Glutathione Reductase (GSR)
Reactivity:	Zea mays, Potato, Pisum sativum, Nicotiana tabacum, Barley, Arabidopsis thaliana
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Glutathione Reductase antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunolocalization (IL)

Product Details

Immunogen:	maltose binding protein (MBP) fusion of Zea mays GR, O64409
Isotype:	IgG
Characteristics:	Expected / apparent Molecular Weight of the Antigene: 54 kDa
Purification:	affinity purified

Target Details

Target:	Glutathione Reductase (GSR)
Alternative Name:	Glutathione reductase (GR) (GSR Products)
Background:	AGI Code: At3g54660 Glutathione reductase (GR, EC 1.6.4.2) is an important enzyme for plant protection against environmental stress. It functions in plant defense reactions in the conversion of glutathione disulphide to reduced glutathione (GSH).

Target Details

Molecular Weight:	54 kDa
UniProt:	O64409
Pathways:	Thyroid Hormone Synthesis, Cell RedoxHomeostasis

Application Details

Application Notes:	Recommended Dilution: 1 : 5000 with standard ECL (WB), needs to be optimised.
Comment:	This antibody will recognize the chloroplastic and cytoplasmic forms of the enzyme.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	For reconstitution add 100 µL of sterile water.
Concentration:	7 µg/ µL
Buffer:	PBS pH 7.4
Handling Advice:	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. Once reconstituted make aliquots to avoid repreated freeze-thaw cycles.
Storage:	-20 °C

Publications

Product cited in:	Sobrino-Plata, Carrasco-Gil, Abadía, Escobar, Álvarez-Fernández, Hernández: "The role of glutathione in mercury tolerance resembles its function under cadmium stress in Arabidopsis." in: **Metallomics : integrated biometal science**, Vol. 6, Issue 2, pp. 356-66, (2014) (PubMed). Sobrino-Plata, Ortega-Villasante, Flores-Cuaceres, Escobar, Del Campo, Hernuandez: " Differential alterations of antioxidant defenses as bioindicators of mercury and cadmium toxicity in alfalfa." in: **Chemosphere**, Vol. 77, Issue 7, pp. 946-54, (2009) (PubMed).

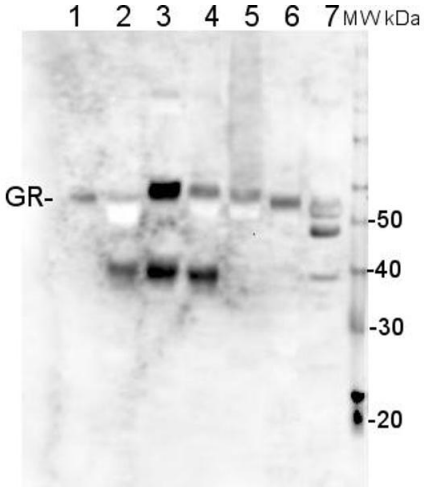

Image 1. 10 ug of total protein from (1) Arabidopsis thaliana leaf extracted with Protein Extration Buffer, PEB, (2) Nicotiana tabaccum leaf extracted with PEB, (3) Zea mays extracted with PEB, (4) Hordeum vulgare leaf extracted with PEB, (5) Physcomitrella patens total cell extracted with PEB, (6) Chlamydomonas 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 WEST PICO reagent according the manufacturers instructions.