

product **AS09 647**
GSNOR | S-nitrosogluthathione reductase

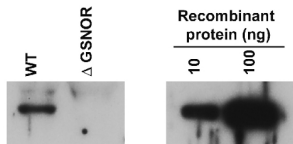
product information

Background	S-nitrosogluthathione reductase (GSNOR) is a cytoplasm localized enzyme which plays a key role in formaldehyde detoxification and is down regulated by wounding and activated by salicylic acid (SA). Alternative protein names: Alcohol dehydrogenase class-3, Alcohol dehydrogenase class-III, FALDH, FDH formaldehyde dehydrogenase, alcohol dehydrogenase III, HOT5, S-(hydroxymethyl)glutathione dehydrogenase, Glutathione-dependent formaldehyde dehydrogenase, GSH-FDH
Immunogen	Overexpressed, full length GSNOR derived from <i>Arabidopsis thaliana</i> Q96533 , At5g43940
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	50 µl
Reconstitution	For reconstitution add 50 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)
Related products	Collection of antibodies to other proteins involved in stress response
Additional information	Antibody is easily detecting GSNOR in a load per well of 5 µg of total <i>Arabidopsis</i> cell extract

Application information

Recommended dilution	1 : 1000 (WB)
Expected apparent MW	40.7 40.7 kDa
Confirmed reactivity	<i>Arabidopsis thaliana</i>
Predicted reactivity	<i>Brassica napus</i> , <i>Oryza sativa</i> , <i>Pisum sativum</i> , <i>Populus balsamifera</i> , <i>Ricinus communis</i> , <i>Solanum tuberosum</i> , <i>Zea mays</i>
Not reactive in	No confirmed exceptions from predicted reactivity are currently known.
Additional information	
Selected references	Kovacs et al. (2016). ROS-Mediated Inhibition of S-nitrosogluthathione Reductase Contributes to the Activation of Anti-oxidative Mechanisms. <i>Front. Plant Sci.</i> , 10 November 2016 Zhou et al. (2016). Arabidopsis CaM1 and CaM4 Promote Nitric Oxide Production and Salt Resistance by Inhibiting S-Nitrosogluthathione Reductase via Direct Binding. <i>PLoS Genet.</i> 2016 Sep 29;12(9):e1006255. doi: 10.1371/journal.pgen.1006255. eCollection 2016. Lee et al. (2008). Modulation of nitrosative stress by S-nitrosogluthathione reductase is critical for thermotolerance and plant growth in Arabidopsis. <i>The Plant Cell</i> 20: 786-802.

Application example



2 µg of total protein from (1) *Arabidopsis thaliana* WT and GSNOR null mutant were separated on 7.5%SDS-**PAGE** and blotted 1h to **nitrocellulose** (Biorad). Blots were incubated anti-GSNOR antibodies at a dilution of 1: 1 000 for 1h at room temperature with agitation and secondary HRP-conjugated antibody (1: 10 000).