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Product no AS20 4439

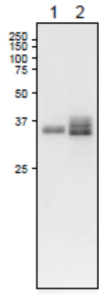
Anti-FNR1 | Ferredoxin NADP Reductase, isoprotein 1 (leaf)

Product information

Immunogen	Purified recombinant maize leaf FNR1 protein UniProt: Q9SLP6, sharing homology with maize FNR2, FNR3 and *Arabidopsis thaliana* FNR1 Q9FKW6
Host	Rabbit
Clonality	Polyclonal
Purity	Total IgG. Protein A purified in PBS, 50% glycerol. Filter sterilized.
Format	Liquid at 1 mg/ml.
Quantity	200 µg
Storage	Store 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.

Application information

Recommended dilution	1: 500 -1 : 2000 (WB)
Expected | apparent MW	39.3 kDa | 34.97 kDa (FNR1, *Zea mays*)
Confirmed reactivity	*Arabidopsis thaliana, Zea mays*
Predicted reactivity	*Hordeum vulgare, Oryza brachyantha, Saccharum sp., Setaria italica, Sorghum bicolor, Spinacia oleracea* Species of your interest not listed? Contact us
Not reactive in	No confirmed exceptions from predicted reactivity are currently known
Additional information	This antibody is also detecting other maize L-FNRs, FNR2, FNR3 (reference image below) and reacts weakly with root FNR
Selected references	Dawane et al. (2024). Polysome-bound mRNAs and translational mechanisms regulate drought tolerance in rice. Plant Physiol Biochem. 2024 Mar:208:108513. doi: 10.1016/j.plaphy.2024.108513. Twachtmann et al. (2012). N-terminal Structure of Maize ferredoxin:NADP+ Reductase Determines Recruitment Into Different Thylakoid Membrane Complexes. Plant Cell . 2012 Jul;24(7):2979-91. doi: 10.1105/tpc.111.094532. Twachtmann et al. (2012). N-terminal Structure of Maize ferredoxin:NADP+ Reductase Determines Recruitment Into Different Thylakoid Membrane Complexes. Plant Cell. 2012 Jul;24(7):2979-91. doi: 10.1105/tpc.111.094532. Onda et al. (2000). Differential Interaction of Maize Root ferredoxin:NADP(+) Oxidoreductase With Photosynthetic and Non-Photosynthetic Ferredoxin Isoproteins. Plant Physiol . 123(3):1037-45. doi: 10.1104/pp.123.3.1037. Onda et al. (2000). Differential Interaction of Maize Root ferredoxin:NADP(+) Oxidoreductase With Photosynthetic and Non-Photosynthetic Ferredoxin Isoproteins. Plant Physiol. 2000 Jul;123(3):1037-45. doi: 10.1104/pp.123.3.1037.



10 µg/well of leaf total protein of *Arabidopsis thaliana* wild type leaf **(1)**, *Zea mays* leaf **(2)** were freshly extracted with 2x SDS-sample buffer (+ 2ME) for SDS-PAGE. For IP, 150mM NaCL, 1% Triton X-100, 50 mM Tris-HCl (pH 8.0) and denatured with 4X SDS buffer at 95°C for 5 min. Samples were separated on 10% SDS-PAGE and blotted 1h to PVDF membrane. Blot was blocked with 3 % skim milk/TBS-T, 1h/RT with agitation. Blot was incubated in the primary antibody at a dilution of 1: 500 in TBS-T for 1-2h/RT. The antibody solution was decanted and the blot was washed 4 times for 10 min in TBS-T at RT with agitation. Blot was incubated in matching secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated) diluted to 1:10 000 in for 1h/RT with agitation. The blot was washed as above and developed with a chemiluminescent detection reagent, following manufacture's recommendation.

Molecular weight of mature forms of maize L-FNRs:

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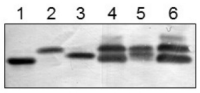
34.97 kDa (FNR1, *Zea mays*), 35.57 kDa (FNR2, *Zea mays*), 34.7 kDa (FNR3, *Zea mays*)



Recombinant *Zea mays* FNR1, 34.97 kDa **(1)**, recombinant *Zea mays* FNR2, 35.57 kDa **(2)**, recombinant *Zea mays* FNR3, 34, 7 kDa **(3)**, *Zea mays* chloroplast fraction **(4)**, *Zea mays* stroma fraction **(5)**, *Zea mays* thylakoid fraction **(6)**

Primary antibody: 1: 500

Antibody cross reacts with other leaf maize FNR isoforms, FNR2 and FNR3.