

Anti-Root-FNR (Ferredoxin-NADP reductase) antibody, rabbit polyclonal

Product code	81-007
Size	100 µg
Storage	-20°C
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from rabbit antiserum.
Immunogen	Purified recombinant maize root-FNR protein (full-size, no-tag attached)
Isotype	Rabbit IgG
Reactivity	Plant root FNR proteins (R-FNR1 and R-FNR2) including Arabidopsis and Maize. The antibody also reacts with leaf FNRs.
Special notes	N/A
Application	1. Western blotting (1/1,000~1/30,000 dilution) 2. ELISA (assay dependent) Other applications have not been tested.
Background	Ferredoxin-NADP reductase (FNR) isoproteins of plant roots play a key role in redox homeostasis of NADPH / NADP ⁺ and donation of reducing equivalence to ferredoxin. R-FNR2 is major form of R-FNR and involved in reduction and detoxication of nitrite in root.
Data Link	UniProtKB: Q41736 (<i>Z. mays</i>), Q9M0V6 (<i>A. thaliana</i>)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 81-007 Anti-Root-FNR (Ferredoxin-NADP reductase) antibody, rabbit polyclonal

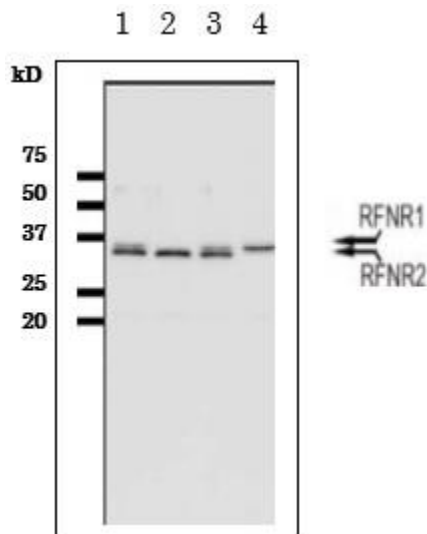


Fig.1 Detection of Arabidopsis R-FNR1 and R-FNR2 isoproteins by western blotting with anti-R-FNR antibody

Extracts from wild type strain Arabidopsis Col (1 and 3), mutant rfer1 (2) and rfr2-2 (4) grown under 0.2 mM nitrate for 7 days were analyzed by western blotting. Anti-R-FNR antibody was used at 1/2,000 dilution. Note that R-FNR2 is dominant form in wild-type roots.

Wild type produces both R-FNR1 and R-FNR2.

Mutant rfr1 produces R-FNR2 and mutant rfr2 produces R-FNR1.

Reference: This product has been used in the following publication.

1. Onda Y, et al. Differential interaction of maize root ferredoxin:NADP(+) oxidoreductase with photosynthetic and non-photosynthetic ferredoxin isoproteins. *Plant Physiol.* 2000, Jul;123(3):1037-45. PMID: [10889253](https://pubmed.ncbi.nlm.nih.gov/10889253/) WB: Maize
2. Hachiya T et al. Arabidopsis Root-Type Ferredoxin:NADP(H) Oxidoreductase 2 is Involved in Detoxification of Nitrite in Roots. *Plant Cell Physiol.* 2016 Nov;57(11):2440-2450. PMID: [27615794](https://pubmed.ncbi.nlm.nih.gov/27615794/) WB: Arabidopsis