

Anti-L-FNR2 (Leaf Ferredoxin NADP Reductase, isoprotein2) antibody, rabbit polyclonal

81-003 100 µg

Shipping and Storage: Shipped at 4°C or -20°C and store at -20°C. Do not freeze.

Immunogen: Purified recombinant maize leaf-FNR2 protein (full-size, no-tag attached)

Form: 1 mg/ml in PBS- with 50% glycerol. Filter sterilized. No preservative or carrier protein added.

Purity: IgG, affinity-purified with protein A agarose.

Reactivity: Plant L-FNR2 proteins including that of maize and arabidopsis.

Reacts also with other FNR isoforms, Maize L-FNR1 and L-FNR3, and Arabidopsis L-FNR1

Applications:

1. Western blotting (1/2,000-1/50,000 dilution)
2. ELISA (assay dependent)

Other applications have not been tested.

Background: Ferredoxin-NADP reductase, leaf isozyme 2 (L-FNR2) plays a key role in regulating the relative amounts of cyclic and non-cyclic electron flow to meet the demands of the plant for ATP and reducing power.

Subcellular location: Chloroplast

Data Link: Swiss-Prot [Q8W493](#) (*A. thaliana*), [Q9SLP5](#) (*Z. mays*)

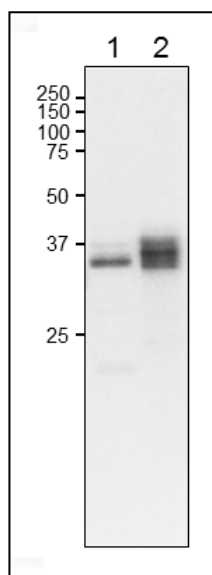


Fig.1 Western Blot of L-FNR2 in plant leaf extract

Anti-L-FNR2 antiserum was used at 1/2,000 dilution. Second antibody (goat anti-rabbit IgG antibody HRP-conjugated, ab97051) was used at 1/10,000 dilution.

1. *A. thaliana* leaf extract (10 µg)

2. *Z. mays* leaf extract (10 µg)

As shown, this antibody cross-reacts with other L-FRN isoproteins. The molecular masses of mature forms of maize FNR1, FNR2 and FNR3 are 34.97, 35.57 and 34.7 kD, respectively

BSC MC

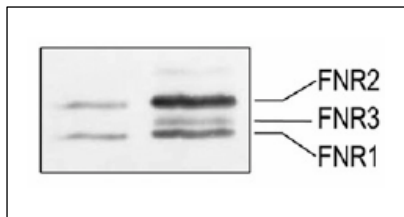


Fig.2 Cellular distribution of maize FNR isoproteins detected by western blotting

BSC: Proteins (4 μ g) extracted from bundle sheath cells.

MC: Proteins (4 μ g) extracted from mesophyll cells.

Anti-FNR2 antibody was used at 1/50,000 dilution

References: This product has been used in the following publications.

1. Twachtmann M, Altmann B, Muraki N, Voss I, Okutani S, Kurisu G, Hase T, Hanke GT. "N-terminal structure of maize ferredoxin:NADP⁺ reductase determines recruitment into different thylakoid membrane complexes. *Plant Cell*. 2012, Jul;24(7):2979-91. PMID: [22805436](https://pubmed.ncbi.nlm.nih.gov/22805436/) **WB; Maize, Arabidopsis**