

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

81-003 100 µg

**Shipping and Storage:** Ship at 4°C and store at -20°C. Do not freeze.

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

**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.

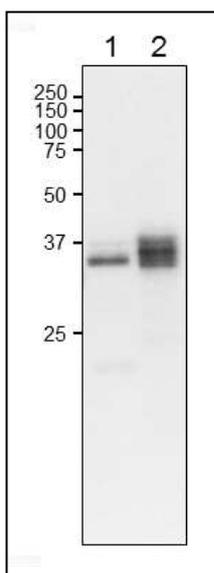
**Purity:** IgG, affinity-purified with protein A agarose.

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

**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**

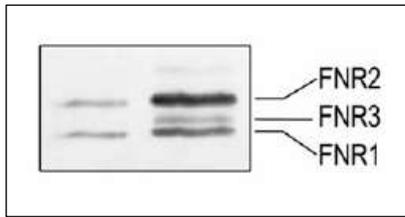
Anti-L-FNR2 antiserum was used at 1/2,000 dilution. Second antibody (goat anti-rabbit IgG antibody HRP-conjugated, ab97051) was used at 1/10,000 dilution.

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  $\mu$ g) extracted from bundle sheath cells.

MC: Proteins (4  $\mu$ 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<sup>+</sup> 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**