



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

Cat. # 81-003 Size: 100 µg

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

Specifications:

Storage: Shipped at 4°C and store at -20°C.

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

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

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.

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)

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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

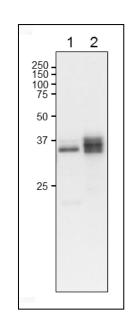




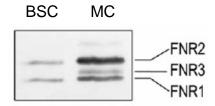


Fig.2 Cellular distribution of maize FNR isoproteins detected by Western blot

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

MC: Proteins (4 µg) extracted from mesophyll cells.

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



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

 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: <u>22805436</u> WB; Maize, Arabidopsis

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