

## Anti- Ferredoxin-2 antibody, rabbit polyclonal

81-017 100 µg

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

**Immunogen:** Purified recombinant Arabidopsis Fd2 protein (full-size, no-tag attached)

**Reactivity:** Plant Fd2 isoproteins including those of Arabidopsis and Maize. Reacts also with Cyanobacteria Ferredoxin.

**Validation:** Specificity has been validated by western blotting with recombinant arabidopsis Ferredoxin-2 (Fd2).

### Applications:

1. Western blotting (1/1,000-1/5,000 dilution)
2. ELISA (Assay dependent)

Other Applications have not been tested

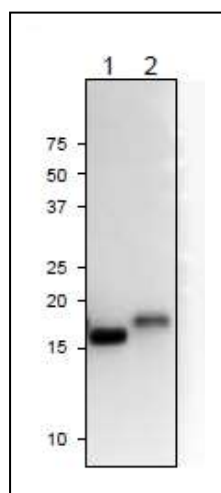
**Purity:** Protein A purified IgG

**Form:** 2 mg/ml in PBS, 50% glycerol. Filter sterilized. No preservative or carrier protein added.

**Background:** Ferredoxins are iron-sulfur proteins that transfer electrons in a wide variety of metabolic reactions. Occupies a key position both for transferring the photoreducing power to Fd-NADP<sup>+</sup> oxidoreductase (FNR), hence the formation of NADPH, and for mediating the cyclic electron flow around photosystem I (PSI). Fd2 is most abundant Fd isoproteins expressed in plant leaves.

**Subcellular location:** Chloroplast, Plastid.

**Data Link:** UniProtKB/Swiss-Prot [P16972](#) (A. thaliana), [O80429](#) (Z. mays), [P08451](#) (Synechococcus)

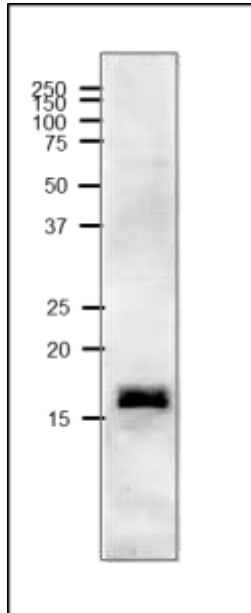


**Fig.1 Western Blot of plant Fd2 proteins with the anti-Ferredoxin-2 antibody.**

Anti-Fdx2 antibody was used at 1/1,000 dilution. Secondary antibody (goat anti-rabbit IgG antibody HRP-conjugated, ab97051) was used at 1/10,000 dilution.

1. Arabidopsis leaf extract, 10 µg
2. Maize leaf extract, 10 µg

Molecular mass of Arabidopsis Fd2 is 16 kDa



**Fig.2 Western blot of Ferredoxin in crude extract of Cyanobacterium, Synechocystis.**

Sample: Crude extract of Synechocystis PCC 6803.

15% SDS-PAGE

First antibody, the anti-Ferredoxin-2 antibody was used at 1/1,000 dilution. As 2<sup>nd</sup> antibody, HRP-conjugated goat anti-rabbit IgG antibody (ab 97051) was used at 1/10,000 dilution.

**Reference:** This product has been used in the following publications.

1. Hanke GT, Kimata-Arigo Y, Taniguchi I, Hase T. A post genomic characterization of Arabidopsis ferredoxins. *Plant Physiol.* 2004 Jan;134(1):255-64. Epub 2003 Dec 18. PMID: [14684843](#) **WB;arabidopsis**
2. Ramirez L. et al. Glutathione and ascorbic acid protect Arabidopsis plants against detrimental effects of iron deficiency. *J Exp Bot.* 2013 Aug;64(11):3169-78. PMID: [23788722](#) **WB; arabidopsis**