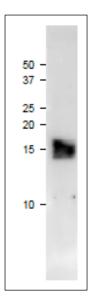


Anti-Ferredoxin-3 (Maize) antibody, rabbit polyclonal

Product code	81-013
Size	100 μg
Storage	-20℃
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from rabbit antiserum.
Immunogen	Purified recombinant maize Fd3 protein (full-size, no-tag attached)
Isotype	Rabbit IgG
Reactivity	Plant Fd3 proteins including those of Maize and Arabidopsis.
Special notes	Validation: Specificity has been validated by WB with recombinant full-size maize Ferredoxin-3 (Fd3) protein.
Application	1. Western blotting (1/2,000-1/10,000 dilution)
	2. ELISA (Asssay dependent)
	Other applications have not been tested
Background	Ferredoxins are iron-sulfur proteins that transfer electrons in a wide variety of metabolic reactions. Fd3 is non-photosynthetic Fd expressed more in root than in leaf. Sucellular location: Chloroplast and Plastid
Data Link	UniProtKB <u>P27788</u> (Z. mays), <u>Q9ZQG8</u> (A. thaliana)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC	
PROCEDURES. NOT FOR MILITARY USE.	



Data Images: 81-013 Anti-Ferredoxin-3 (Maize) antibody, rabbit polyclonal



 ${\bf Fig. 1} \quad {\bf Western \ blot \ of \ purified \ maize \ Ferredoxin-3}$

The primary antibody was used at 1/2,000 dilution

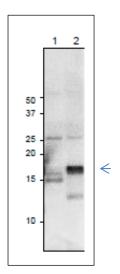


Fig.2 Western Blot of root ferredoxins expressed in plant leaves as detected with anti-Ferredoxin-3 antibody

Anti-Fd3 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

The antibody detects root-type ferredoxins expressed in leaves..



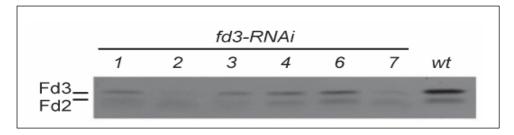


Fig.3 Reduction of Fd3 protein expression by various *fd3*-RNAi in Arabidopsis as detected by western blotting with anti-Ferredoxin 3 antibody

The anti-Fd3 antibody was used at 1/5,000 dilution.

Different levels of reduction in Fd3 expression were observed with different RNAi (lane 1-7) expressed in T1 plants. Samples were extracts from ground tissue. Wt is without RNAi expression

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

- Matsumura T, Sakakibara H, Nakano R, Kimata Y, Sugiyama T, Hase T. A nitrate-inducible ferredoxin in maize roots. Genomic organization and differential expression of two nonphotosynthetic ferredoxin isoproteins. Plant Physiol. 1997 Jun;114(2):653-60. PMID: 9193097
 WB; Maize
- 2. Hanke GT et al,. A post genomic characterization of Arabidopsis ferredoxins. Plant Physiol. 2004 Jan;134(1):255-64. PMID: 14684843 WB; Arabidopsis
- 3. Hanke GT, Hase T. Variable photosynthetic roles of two leaf-type ferredoxins in arabidopsis, as as a srevealed by RNA interference. Photochem Photobiol. 2008 Nov-Dec;84(6):1302-9. PMID:18673322 WB; Arabidopsis