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Product no AS16 3966

Anti-FUM1 + FUM2 | Fumarase 1+2 (mitochondrial+cytosolic)

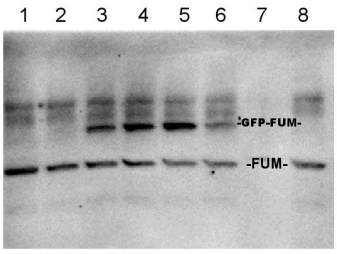
Product information

Immunogen	KLH-conjugated peptide chosen from *Arabidopsis thaliana* FUM protein sequence, mitochondrial (FUM1): P93033, TAIR: At2g47510, cytosolic (FUM2): UniProt Q9FI53, TAIR: At5g50950
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	50 µl
Reconstitution	For reconstitution add 50 µl of sterile water.
Storage	The antibody may be stored at -20°C for one year in its original formulation. Additionally, antibody may be stored at 2°C to 8°C for up to 1 month without detectable loss of activity. Avoid repeated freeze-thaw cycles of the diluted antibody.

Application information

Recommended dilution	1:1000 (WB)
Expected | apparent MW	49.9 | 55 kDa
Confirmed reactivity	*Arabidopsis thaliana*
Predicted reactivity	*Ananas comosus, Capsicum chinense, Cynara cardunculus* var. *scolymus, Diplotaxis tenuifolia, Eruca versicaria, Genlisea aurea, Glycine soja, Gossypium hirsutum, Helianthus annuus, Hordeum vulgare, Nicotiana sylvestris, Nicotiana tabacum, Oryza sativa, Rhizophora mucronata, Ricinus communis, Solanum lycopersicum, Trifolium pratense, Zea mays, Vigna radiata, Quercus suber* Species of your interest not listed? Contact us
Selected references	Shao et al. (2024). Nuclear pyruvate dehydrogenase complex regulates histone acetylation and transcriptional regulation in the ethylene response. Sci Adv . 2024 Jul 26;10(30):eado2825. doi: 10.1126/sciadv.ado2825.

Application example



Total protein extracted freshly from *Arabidopsis thaliana* 14-old-day seedlings grown on ½ MS without sugar in extraction buffer [100 mM NaCl; 50 mM Tris–HCl pH 7.5; 0.5% (v/v) Triton X-100; 1 mM DTT; 1× Complete Protease Inhibitor Cocktail Tablet (Roche, Bassel, Switzerland)] and denatured in Laemeli buffer at 55°C for 5 min. 50 µg of protein extraccts: *Arabidopsis thaliana* wt **(1)**, *fum2-1* mutant **(2)**, *fum2-1* + GFP-FUM2 N1 **(3)**, *fum2-1* + GFP-FUM2 N2 **(4)**, *fum2-1* + GFP-FUM2 N3 **(5)**, *fum2-1* + GFP-FUM2 N3 **(6)**, no protein **-GFP**, *fum2-2* **(8)** were loaded and separated on 12% SDS-PAGE and blotted 1h to PVDF membranes in a semi-dry transfer system. The membrane was blocked with 3% milk for 1h at RT with agitation and then incubated in the primary antibody (anti-FUM) at a dilution of 1: 2 000 for 1h at RT with agitation in TBS-T and milk 3%. The antibody solution was decanted and the blot was rinsed briefly three times in TBS-T for 5 min. Blot was incubated in Agrisera matching secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated AS09 602) diluted to 1:5 000 in for 1h at RT with agitation. The blot was washed as above and developed for 10 min using chemiluminescnce detection reagent in a Gel Doc XR+ System (Bio-rad; Hercules; USA).

fum1 mutant is lethal therefore a band of ca. 60 kda is still present in fum2-1 and fum2-2 background.

Courtesy of Dr. Antoni Garcia Molina, Ludwig-Maximilians-Universität München (LMU), Germany