

Datasheet for ABIN3181106

**anti-Actin antibody**[Go to Product page](#)**1** Validation**1** Image**1** Publication

## Overview

Quantity:	100 µL
Target:	Actin
Reactivity:	Plant
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Actin antibody is un-conjugated
Application:	Western Blotting (WB)

## Product Details

Clone:	Q30
Isotype:	IgG1
Specificity:	The antibody detects endogenous plant actin protein.
Characteristics:	Mouse Monoclonal to Plant actin.
Purification:	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.

## Target Details

Target:	Actin
Abstract:	<a href="#">Actin Products</a>

## Application Details

Application Notes:	WB 1:2000-5000
Restrictions:	For Research Use only

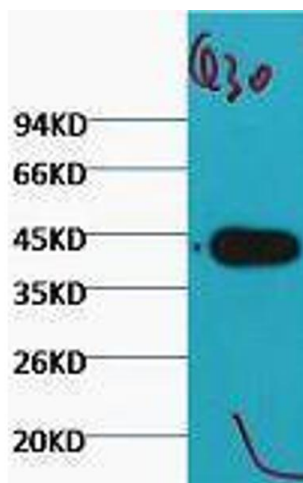
## Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Liquid in PBS containing 50 % glycerol, 0.5 % BSA and 0.02 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	-20 °C
Storage Comment:	Store at -20°C.

## Publications

Product cited in:	Hoffmann, Dietrich, Herrmann, Schacht, Albrecht, Methner: "Dimethyl Fumarate Induces Glutathione Recycling by Upregulation of Glutathione Reductase." in: <b>Oxidative medicine and cellular longevity</b> , Vol. 2017, pp. 6093903, (2017) ( <a href="#">PubMed</a> ).
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## Images



### Western Blotting

Image 1.



## Successfully validated (Western Blotting (WB))

by [Department of Horticultural genetics and Biotechnology, Mediterranean Agronomic Institute of Chania](#)

Report Number: 102343

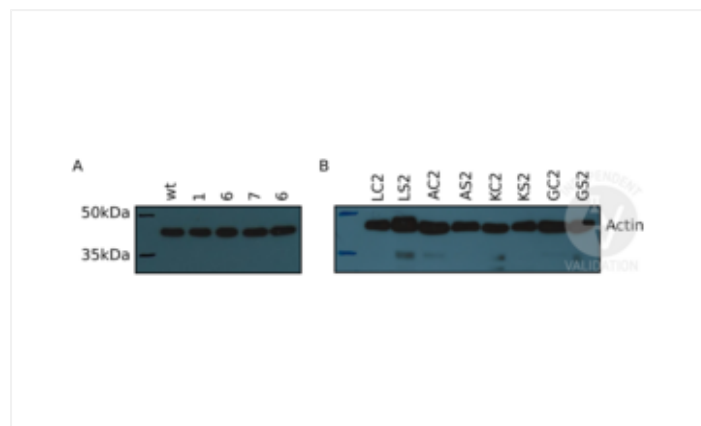
Date: Dec 19 2017

Target:	Actin
Lot Number:	B3401
Method validated:	Western Blotting (WB)
Positive Control:	protein extraction from olive root tissue and tomato flower tissue
Notes:	Passed. ABIN3181106 specifically recognizes the actin in both tomato flower and olive roots samples, providing a clear band at the detection with the secondary one.
Primary Antibody:	ABIN3181106
Secondary Antibody:	HRP conjugated rabbit anti-mouse IgG (Thermo Scientific, PA1-28902, OK1782904)
Protocol:	<ul style="list-style-type: none"> <li>Lyse protein extraction from 500mg olive root tissue and 80mg from tomato flower tissue in 240µl cold lysis buffer (1M Tris-Cl pH6.8, 10% SDS, 14.3M β-Merc, 0.5N EDTA, PMSF 0.5mM and 100µl proteinase inhibitor (Sigma-Aldrich, P9599-1ML)).</li> <li>Determine total protein content of the lysates using protein assay (Bradford curve).</li> <li>Denature 0.7µg/µl of total protein for 5min at 95°C 1:4 (buffer:protein) in Laemmli SDS sample buffer (Tris-Cl pH6.8, 2% SDS, 10% glycerol, 1%β-mercaptoethanol, 12.5mM EDTA, 0.02% bromophenol blue) and subsequently separate them on a freshly cast denaturing SDS-PAGE gel (30% Bis-Acrylamide, 1.5M Tris pH8.8, 10% SDS, 10% APS and TEMED) in an Bio-Rad Mini-PROTEAN 3 cell systemfor 2h at 100V, 200mA.</li> <li>Transfer proteins onto an Immobilon-P membrane (Millipore, IPVPH0010, K5CA2260G) with a Western blotting system for 1h at 100V.</li> <li>Block the membrane with 5% non-fat milk in 1x TBST for 1h at RT.</li> <li>Incubate membrane with anti-Actin antibody (antibodies-online, ABIN3181106, lot B3401) diluted 1:2500 (Flower samples) or 1:1000 (root samples) in 5% non-fat milk in 1x TBST ON at 4°C.</li> <li>Wash membrane 3x for 5min with 1x TBST.</li> <li>Incubate membrane with secondary HRP conjugated rabbit anti-mouse IgG (Thermo Scientific, PA1-28902, OK1782904) diluted 1: 5000 (flower samples) and 1:2000 (root samples) in 5% non-fat milk in 1x TBSTfor 1h at RT.</li> <li>Wash membrane 3x for 5min with 1X TBST.</li> <li>Reveal protein bands using super signal west pico (Thermo-Scientific, 34080, QF218483) on a Super RX Fuji Medical X-RAY (18cm x 24cm) film.</li> </ul>

## Validation report #102343 for Western Blotting (WB)

Experimental Notes: The actin antibody ABIN3181106 reveals the actin protein of the expected molecular weight of antigen in lysates of tomato flower and olive root samples.

Image for Validation report #102343



### Validation image no. 1 for anti-Actin antibody (ABIN3181106)

Detection of Actin in tomato flower from wt plants and different RNAi lines (A) and olive root protein extracts from different cultivars (B) using ABIN3181106 diluted 1:2500 and 1:1000 respectively.