

Datasheet for ABIN6254847

anti-APEX1 antibody[Go to Product page](#)**1** Image**4** Publications

Overview

Quantity:	50 µL
Target:	APEX1
Reactivity:	Spinach, Arabidopsis thaliana
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This APEX1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	synthetic peptide derived from Arabidopsis thaliana tAPX (acession At1g77490) and sAPX (At1g08390) protein sequences, coupled to BSA. Five out of twelve amino acids are also identical with cAPX1 (At1g07890), cPX2 (At1g09640) and pAPX (At1g35000)
Characteristics:	Expected / apparent Molecular Weight of the Antigene: 25-38 kDa for A. thaliana Antibody detection limit is 7 pg, 20 fmol, linear range of logit/logplot is 0.023-15pmol, midrange (B/Bo=50%) is 120 pg, 342 fmol .
Purification:	serum

Target Details

Target:	APEX1
Alternative Name:	APX (APEX1 Products)
Background:	AGI Code: At1g77490

Target Details

APX plays a key role in plant antioxidant system by reducing hydrogen peroxide to water. Cellular localization includes chloroplast (tAPX and sAPX), cytosol (cAPX) and peroxisome (pAPX).

Molecular Weight: 25-38 kDa for *A. thaliana*

UniProt: [Q42564](#), [Q05431](#), [Q1PER6](#), [Q42592](#), [Q42593](#)

Pathways: [DNA Damage Repair](#), [Chromatin Binding](#), [Cell Redox Homeostasis](#), [Smooth Muscle Cell Migration](#), [Positive Regulation of Response to DNA Damage Stimulus](#)

Application Details

Application Notes: Recommended Dilution: 1 : 2000 with standard ECL (WB).

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: For reconstitution add 200 µL of sterile water

Handling Advice: Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.
Once reconstituted make aliquots to avoid repeated freeze-thaw cycles.

Storage: -20 °C

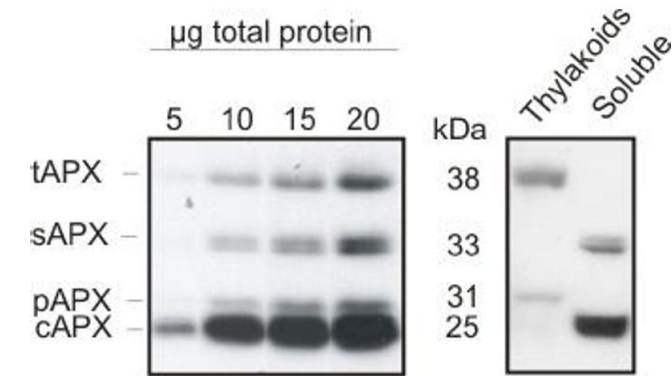
Publications

Product cited in: Sobrino-Plata, Carrasco-Gil, Abadía, Escobar, Álvarez-Fernández, Hernández: "The role of glutathione in mercury tolerance resembles its function under cadmium stress in Arabidopsis." in: **Metallomics : integrated biometal science**, Vol. 6, Issue 2, pp. 356-66, (2014) ([PubMed](#)).

Lehtima: "Nodularin uptake and induction of oxidative stress in spinach (*Spinachia oleracea*)."
in: **Journal of plant physiology**, (2010) ([PubMed](#)).

Hideg, Kuos, Schreiber: "Imaging of NPQ and ROS formation in tobacco leaves: heat inactivation of the water-water cycle prevents down-regulation of PSII." in: **Plant & cell physiology**, Vol. 49, Issue 12, pp. 1879-86, (2008) ([PubMed](#)).

Kangasjaervi, Lepistoe, Haennikaeinen, Piippo, Luomala, Aro, Rintamaeki: "Diverse roles for chloroplast stromal and thylakoid-bound ascorbate peroxidases in plant stress responses." in: **The Biochemical journal**, Vol. 412, Issue 2, pp. 275-85, (2008) ([PubMed](#)).



Western Blotting

Image 1. 5 to 20 µg of total leaf protein from *Arabidopsis thaliana* (left panel) and chloroplast fractions (thylakoids and soluble, right panel) was separated on 15% polyacrylamide gel with 6M urea and blotted on PVDF. Filters were blocked 1h with 5% BSA, incubated with anti-APX antibody (1: 2000, 1h) followed by incubation with secondary HRP-coupled anti rabbit antibody (1: 10 000, 1h). Signal was detected with standard ECL. ABIN334581 is reactive to thylakoid (tAPX, 38 kDa), stromal (sAPX, 33 kDa), peroxisomal (pAPX, 31 kDa) and cytoplasmic (cAPX1 + cAPX2, 25 kDa) forms of ascorbate peroxidases.