

product **AS08 343**

Cyt c | cytochrome c

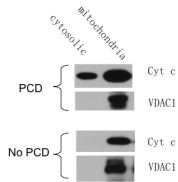
product information

background	Cytochrome c is located in inner mitochondrial membrane. It is a small heme protein which, unlike other cytochromes, is highly soluble. This protein is an essential component of the electron transport chain, where it undergoes oxidation and reduction without binding oxygen.
immunogen	synthetic peptide derived from <i>Arabidopsis thaliana</i> cytochrome c protein sequence, accession At1g22840 (Cyt1) and At4g10040 (Cyt2) coupled to KLH
antibody format	rabbit; polyclonal; serum; lyophilized
quantity	200 µl - for reconstitution add 200 µl of sterile water
storage	store lyophilized at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles and store at -80°C. 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.
tested applications	Western blot (WB)
additional information	RECONSTITUTED ANTIBODY NEEDS TO BE STORED AT -80°C.

application information

recommended dilution	1: 1000 with standard ECL (WB)
expected apparent MW	12,5 14 kDa for <i>A. thaliana</i>
confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Lupinus luteus</i>
predicted reactivity	cytc1 and cytc2 from following species: <i>A. theoprasii</i> , <i>B. napus</i> , <i>B. oleracea</i> , <i>C. maxima</i> , <i>Ch. reinhardtii</i> (peptide target partially conserved), <i>L. esculentum</i> , <i>M. truncatula</i> , <i>O. sativa</i> , <i>Ostreococcus</i> (peptide target partially conserved), <i>P. aurea</i> , <i>Physcomitrella patens</i> , <i>R. communis</i> , <i>S. nigra</i> , <i>V. vinifera</i>
not reactive in	<i>Arabidopsis thaliana</i> CytC6
additional information	The presence of cytochrome c in the cytosol is a marker of PCD (programmed cell death).
selected references	to be added when available

application example



The presence of cytochrome C (Cyt c) in the cytosol is a marker of plant Programmed Cell Death (PCD). During PCD, cytochrome C may be released from the mitochondrial intermembrane space and the VDAC1 protein stays associated with mitochondria. After PCD induction, *Arabidopsis* protoplasts were gently disrupted using a 100 µm mesh to keep mitochondria intact and the total extract was fractionated at 15 000 g into a cytosolic fraction and a pellet containing mitochondria. Proteins of each fraction was blotted onto a PVDF membrane for 2 hours at 50 v/cm. The membrane was blocked with 3% BSA in PBS-T for 1 hour and then incubated with Agrisera cytochrome C antibody (1:1500) for 1 h at RT, followed by 3 PBST washes and incubation with Agrisera goat-anti-rabbit IgG HRP ([AS09_602](#)) at 1:50 000 for one h at RT. After 3 PBST wash and addition of the ECL substrate (Pierce pico: fento 4;1), the blot was exposed one minute. After stripping, the blot was reprobed using Agrisera [VDAC1 antibody](#) (1:3000) in TBST.

Courtesy Dr. Patrick Gallois, University of Manchester, UK