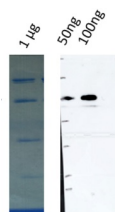


Product no **AS16 3211****Anti-cpCK2 | Casein kinase II subunit alpha (chloroplastic)****Product information**

<b>Immunogen</b>	KLH-conjugated synthetic peptide derived from <i>Arabidopsis thaliana</i> CPCK2 protein UniProt: <a href="#">O64816</a> , TAIR: <a href="#">AT2G23070</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Immunogen affinity purified serum in PBS pH 7.4.
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µg
<b>Storage</b>	Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please remember to spin the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.

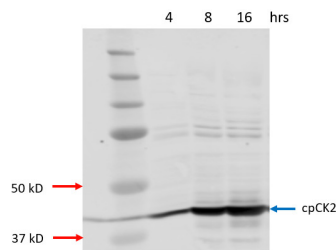
**Application information**

<b>Recommended dilution</b>	1: 1000 (WB)
<b>Expected   apparent MW</b>	50.2 kDa (apoprotein)
<b>Confirmed reactivity</b>	<i>Arabidopsis thaliana</i> recombinant cpCK2
<b>Predicted reactivity</b>	<i>Camelina sativa</i> , <i>Glycine max</i> , <i>Cicer arietinum</i> , <i>Brassica napus</i> , <i>Capsella rubella</i> , <i>Brassica rapa</i> , <i>Arabis alpina</i> , <i>Eutrema salsigeneum</i> , <i>Nicotiana sylvestris</i> , <i>cucumis sativus</i> , <i>Solanum tuberosum</i> , <i>Solanum penelli</i> , <i>Solanum lycopersicum</i> , <i>Theobroma cacao</i> , <i>Jatropha curcas</i> , <i>Populus trichocarpa</i> , <i>Populus euphratica</i> , <i>Ricinus communis</i> , <i>Citrus sinensis</i> , <i>Sesamum indicum</i> , <i>Cucumis melo</i> , <i>Morus notabilis</i> , <i>Gyssopium arboreum</i> , <i>Vitis vinifera</i> , <i>Medicago truncatula</i>
	Species of your interest not listed? <a href="#">Contact us</a>
<b>Additional information</b>	Antibody is detecting recombinant cpCK2 in fusion with N-terminal His and GST.
	Reactivity on endogenous material remains to be determined.

**Application example**

Purified CKII protein was prepared in 1xSDS gel running buffer and denatured for 5 mins at 75°C for 5 min. 50 and 90 ng were separated on 12% SDS-PAGE and blotted 2h to PVDF using tank transfer. Blots were blocked with 5%TBS for O/N at 4°C with agitation. Blot was incubated in the primary antibody (CPCK2; AS16 3211) at a dilution of 1: 1 000 for 1.5 h at RT with agitation in TBS. The antibody solution was decanted and the blot was rinsed briefly twice, then washed once for 15 min and 3 times for 5 min in TBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, from [AS09 602](#)) diluted to 1:40 000 in 5%TBS-T for 1h at RT with agitation. The blot was washed as above and developed for 1 min with Western Lightning Plus-ECL, PerkinElmer, Inc. Exposure time was 60 seconds. Detected band has MW of 54 kDa.

Courtesy Dr. Amr Kataya, Visiting Associate at University of Calgary/Canada Young Talent PI at University of Stavanger/Norway



Recombinant cpCK2 proteins with transit peptide were expressed in DH5a cell line by adding IPTG. Lysates were extracted at 4, 8 and 16hrs induction. Cells were cultured at RT for 4, 8 and 16hours after IPTG input and were spin-down as indicated time. Cells were washed with cell wash buffer (50mM MOPS pH7.5, 150mM NaCl) and spin-down again. Pellets were resuspended with 5mL of cell wash buffer and sonicated for 10sec, 5times. After centrifugation, supernatants were considered lysates and used for immunoblot assay. 5uL of lysate were combined with 10uL of SDS loading buffer and denatured at 90°C for 5min. Proteins were loaded and separated on 10% SDS PAGE gel and blotted 1hr to PVDF membrane using tank transfer. Blots were blocked with 2% of gelatin (Sigma) for 1hr at RT with agitation. Blot was incubated in the primary antibody at a dilution of 1:1000 for overnight with agitation in PBST. Blots were washed with PBST for 10 min, 3 times at RT with agitation. Blot was incubated in secondary antibody (Alexa Fluor 680 goat anti-rabbit IgG) diluted to 1:10,000 for 1hr at RT with agitation. The blot was washed as above and scanned using Li-COR (Odyssey CLX).

Courtesy of Dr Sang Yeol Kim, University of Illinois, USA