

**CK2a1, Active recombinant protein****Ck2a1****Catalog # PBV11313r****Specification**

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**CK2a1, Active recombinant protein - Product info**

Primary Accession	<a href="#">P68400</a>
Concentration	<b>0.1</b>
Calculated MW	<b>70.0 kDa KDa</b>

**CK2a1, Active recombinant protein - Additional Info**

Gene ID	<b>1457</b>
Gene Symbol	<b>CK2A1</b>
<b>Other Names</b>	
Ck2a1	

Source	<b>Baculovirus (Sf9 insect cells)</b>
Assay&Purity	<b>SDS-PAGE; ≥90%</b>
Assay2&Purity2	<b>HPLC;</b>
Recombinant	<b>Yes</b>
<b>Format</b>	
Liquid	

**Storage**

-80°C; Recombinant protein in storage buffer (50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM EGTA, 0.1 mM EDTA, 0.1 mM PMSF, 25% glycerol).

**CK2a1, Active recombinant protein - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**CK2a1, Active recombinant protein - Images****CK2a1, Active recombinant protein - Background**

CK2  $\alpha$  (also termed casein kinase II  $\alpha$ ) is a serine-threonine protein kinase whose targets include many critical regulators of cellular growth. It is highly expressed in a lympho pro-liferative disease of cattle and in many human cancers. Overexpression of the CK2  $\alpha$  catalytic subunit in lymphocytes of transgenic mice leads to T cell lymphoma (1). The highest CK2 activity is found in mouse testicles

and brain, followed by spleen, liver, lung, kidney and heart (2). The activity values were directly correlated with the protein expression level of the CK2 $\alpha$  (catalytic subunit). The  $\alpha$  subunit is only detected in brain and testicles. By contrast, Northern blot analyses of the CK2  $\alpha$  mRNA shows the strongest signals to be present in brain, liver, heart and lung. In kidney, spleen and testicles mRNAs is only weakly detectable. ICBP90, a transcription factor exhibiting antiapoptotic property, has several putative CK2 phosphorylation sites. ICBP90 is more efficiently phosphorylated by the free CK2  $\alpha$  subunit than by the heterotetrameric CK2 ( $\alpha$ ,  $\beta$ ) (3). Thus, CK2  $\alpha$  is an important regulator of the transcriptional activity of ICBP90 and therefore of the antiapoptotic properties of ICBP90.