

## DESCRIPTION

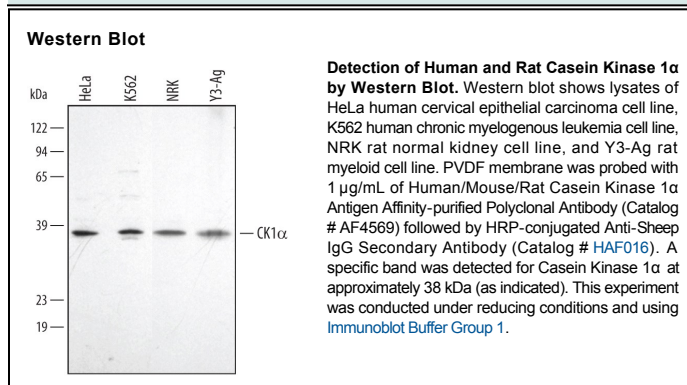
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects endogenous human, mouse, and rat CK1 $\alpha$ in Western blots. In Western blots, this antibody does not cross-react with recombinant human CK1 $\delta$ or CK1 $\gamma$ ; reactivity with CK1 $\epsilon$ is unknown.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human CK1 $\alpha$ Ala255-Phe365 Accession # NP_001020276
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 $\mu$ m filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 $\mu$ g/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Casein Kinase 1 (CK1) represents a group of serine/threonine protein kinases that are present in all eukaryotic organisms. Human CK1 isoforms ( $\alpha$ ,  $\gamma$ 1,  $\gamma$ 2,  $\gamma$ 3,  $\delta$ , and  $\epsilon$ ) act as monomeric constitutively active enzymes that phosphorylate key regulatory proteins involved in the control of cell differentiation, proliferation, chromosome segregation, and circadian rhythms. CK1 family members share a highly conserved kinase domain but differ in their variable N- and C-terminal domains. CK1 $\alpha$  is speculated to play a role in mammalian cell cycle progression, spindle dynamics, and chromosome segregation.