

## DESCRIPTION

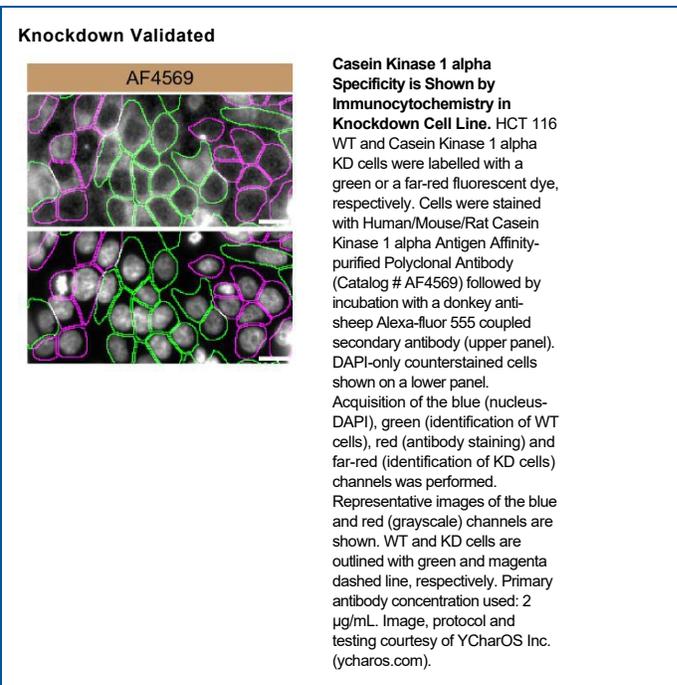
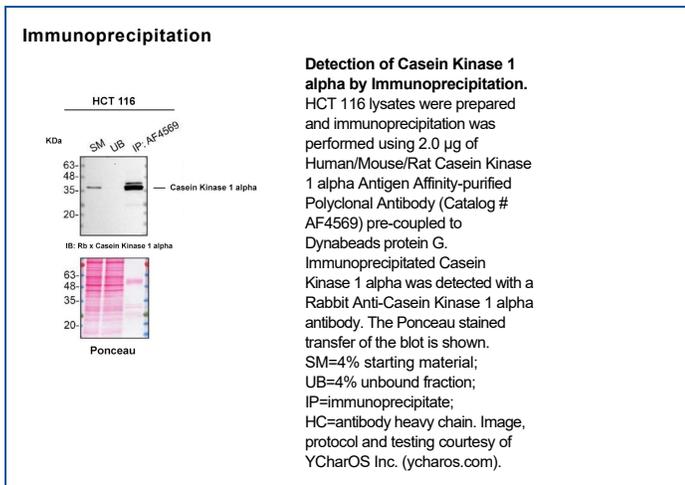
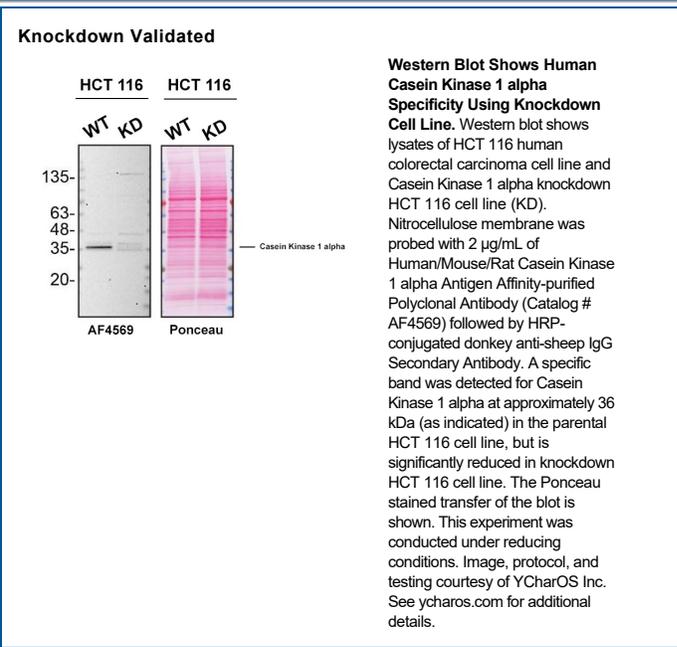
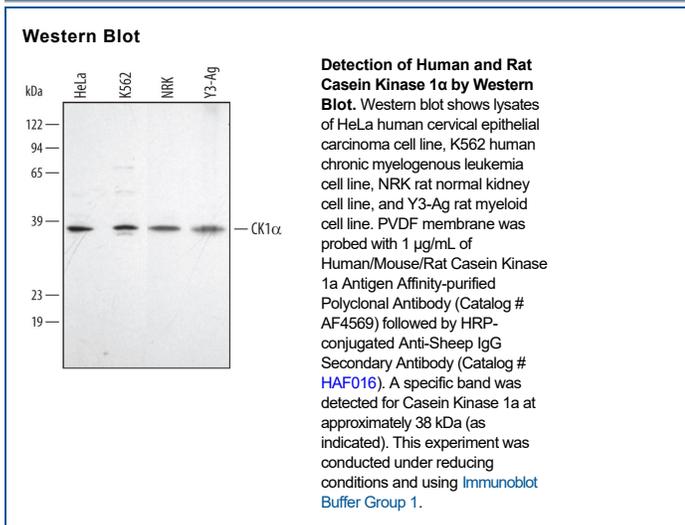
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects endogenous human, mouse, and rat CK1α in Western blots. In Western blots, this antibody does not cross-react with recombinant human CK1δ or CK1γ; reactivity with CK1ε is unknown.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human CK1α Ala255-Phe365 Accession # NP_001020276
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm 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 μg/mL	See Below
<b>Immunocytochemistry</b>	2 μg/mL	HCT 116 human colorectal carcinoma cell line
<b>Immunoprecipitation</b>	2 μg/1 mg cell lysate	Lysates of HCT 116 human colorectal carcinoma cell line

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
<b>Shipping</b>	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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.