

**DESCRIPTION**

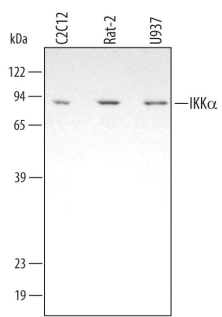
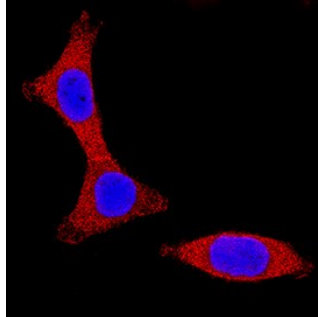
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat IKK $\alpha$ . Does not cross-react with recombinant human (rh) IKK $\beta$ , rhIKK $\gamma$ , or rhIKK $\epsilon$ .
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human IKK $\alpha$ Gly375-Glu745 Accession # O15111
<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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 $\mu$ g/mL	See Below
<b>Immunocytochemistry</b>	5-15 $\mu$ g/mL	See Below

**DATA**

<p><b>Western Blot</b></p>  <p><b>Detection of Human/Mouse/Rat IKK<math>\alpha</math> by Western Blot.</b> Western blot shows lysates of C2C12 mouse myoblast cell line, Rat-2 rat embryonic fibroblast cell line, and U937 human histiocytic lymphoma cell lines. PVDF membrane was probed with 1 <math>\mu</math>g/mL of Sheep Anti-Human/Mouse/Rat IKK<math>\alpha</math> Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3768) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for IKK<math>\alpha</math> at approximately 85 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunocytochemistry</b></p>  <p><b>IKK<math>\alpha</math> in HCT-116 Human Cell Line.</b> IKK<math>\alpha</math> was detected in immersion fixed HCT-116 human colorectal carcinoma cell line using Sheep Anti-Human/Mouse/Rat IKK<math>\alpha</math> Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3768) at 15 <math>\mu</math>g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cytoplasmic. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>
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**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**

I $\kappa$ B kinase alpha (IKK $\alpha$ ) is also known as I $\kappa$ BKA, CHUK, and IKK1. The classical active IKK complex, composed of IKK $\alpha$ , IKK $\beta$ , and two forms of processed IKK $\gamma$ , phosphorylates and inactivates I $\kappa$ B, resulting in the release and nuclear translocation of active NF- $\kappa$ B. IKK $\alpha$  contains kinase, leucine zipper, and helix-loop-helix domains, and heterodimerizes with IKK $\beta$ . NF- $\kappa$ B-inducing kinase (NIK) phosphorylates and activates IKK $\alpha$ .