

DESCRIPTION

Species Reactivity	Human/Rat
Specificity	Detects endogenous human and rat CaMKK α in Western blots. In Western blots, this antibody does not cross-react with recombinant human CaMKK β .
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CaMKK α Met1-Ser132 Accession # Q8N5S9
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

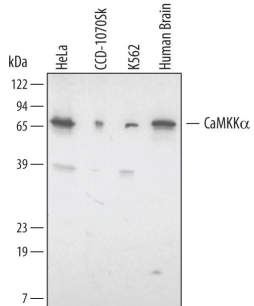
APPLICATIONS

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
Western Blot	1 μ g/mL	See Below
Simple Western	10 μ g/mL	See Below

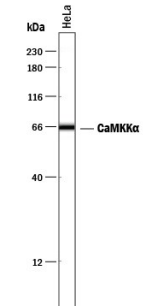
DATA

Western Blot




Detection of Human/Rat CaMKK α by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, CCD-1070Sk human foreskin fibroblast cell line, K562 human chronic myelogenous leukemia cell line, and human brain tissue. PVDF membrane was probed with 1 μ g/mL of Human/Rat CaMKK α Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4536) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for CaMKK alpha at approximately 68 kDa (as indicated). This experiment was conducted using Immunoblot Buffer Group 1.

Simple Western



Detection of Human CaMKK α by Simple Western™. Simple Western lane view shows lysates of HeLa human cervical epithelial carcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for CaMKK α at approximately 68 kDa (as indicated) using 10 μ g/mL of Sheep Anti-Human/Rat CaMKK α Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4536) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The calcium/calmodulin (CaM) kinase signaling cascade includes the upstream kinases CaM kinase kinase α (CaMKK α ; also known as CaMKK1) and CaMKK β (CaMKK2), and their substrates, the output kinases CaMKI and CaMKIV. Largely by activation of the transcription factor CREB, the CaM kinase cascade is implicated in neuronal development and long-term memory formation. In addition, CaMKK α is known to modulate skeletal muscle glucose uptake, and is upregulated during retinoic acid-induced neutrophil maturation.