

## CaMK1 $\alpha$ Polyclonal Antibody

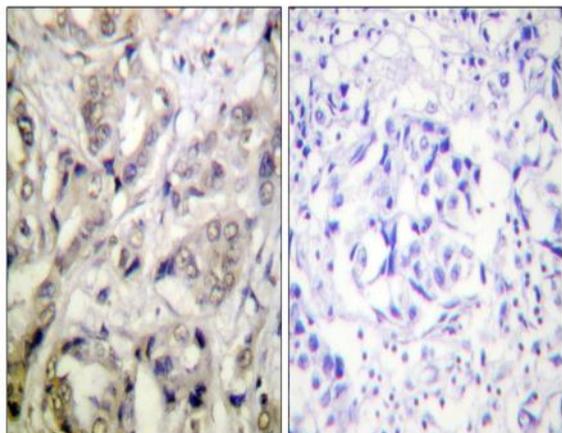
<b>Catalog No :</b>	YT0628
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	CaMK1 $\alpha$
<b>Fields :</b>	>>Calcium signaling pathway;>>Oxytocin signaling pathway;>>Aldosterone synthesis and secretion;>>Glioma
<b>Gene Name :</b>	CAMK1
<b>Protein Name :</b>	Calcium/calmodulin-dependent protein kinase type 1
<b>Human Gene Id :</b>	8536
<b>Human Swiss Prot No :</b>	Q14012
<b>Mouse Gene Id :</b>	52163
<b>Mouse Swiss Prot No :</b>	Q91YS8
<b>Rat Gene Id :</b>	171503
<b>Rat Swiss Prot No :</b>	Q63450
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human CaMK1- $\alpha$ . AA range:143-192
<b>Specificity :</b>	CaMK1 $\alpha$ Polyclonal Antibody detects endogenous levels of CaMK1 $\alpha$ protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

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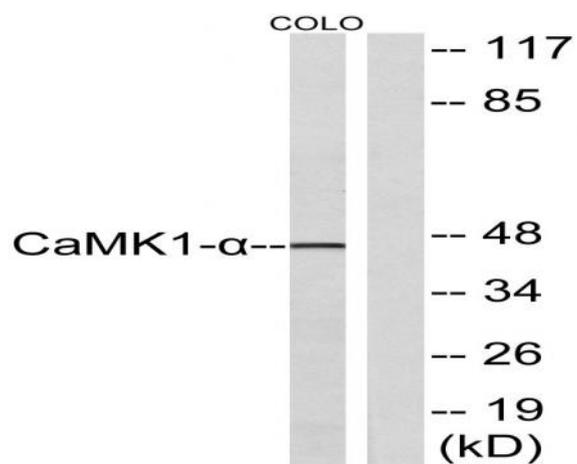
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	45kD
<b>Background :</b>	Calcium/calmodulin-dependent protein kinase I is expressed in many tissues and is a component of a calmodulin-dependent protein kinase cascade. Calcium/calmodulin directly activates calcium/calmodulin-dependent protein kinase I by binding to the enzyme and indirectly promotes the phosphorylation and synergistic activation of the enzyme by calcium/calmodulin-dependent protein kinase I kinase. [provided by RefSeq, Jul 2008],
<b>Function :</b>	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,domain:The autoinhibitory domain overlaps with the calmodulin binding region and interacts in the inactive folded state with the catalytic domain as a pseudosubstrate.,enzyme regulation:Activated by Ca(2+)/calmodulin. Binding of calmodulin results in a conformational change that generates functional binding sites for both, substrate and ATP, and thus releases intrasteric autoinhibition. Must be phosphorylated to be maximally active. Phosphorylated by CAMKK1 or CAMKK2.,function:Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade involved in a number of cellular processes like transcriptional regulation, hormone production, translational regulation, regulation of actin filament organization and neurite outgrowth. Involved in calcium-dependent activation of the ERK pathway (By si
<b>Subcellular Location :</b>	Cytoplasm . Nucleus . Predominantly cytoplasmic. .
<b>Expression :</b>	Widely expressed. Expressed in cells of the zona glomerulosa of the adrenal cortex.

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## Products Images



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using CaMK1-alpha Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COLO cells, using CaMK1-alpha Antibody. The lane on the right is blocked with the synthesized peptide.