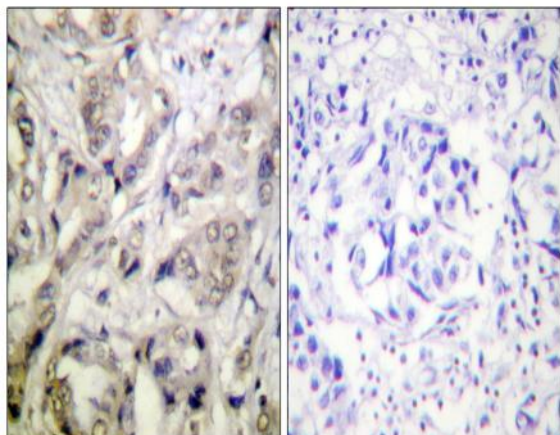


CaMK1 α Polyclonal Antibody

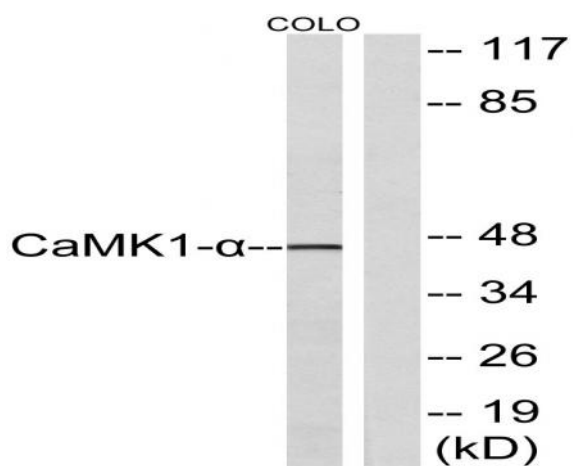
Catalog No :	YT0628
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	CaMK1 α
Fields :	>>Calcium signaling pathway;>>Oxytocin signaling pathway;>>Aldosterone synthesis and secretion;>>Glioma
Gene Name :	CAMK1
Protein Name :	Calcium/calmodulin-dependent protein kinase type 1
Human Gene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

Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	45kD
Background :	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],
Function :	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
Subcellular Location :	Cytoplasm . Nucleus . Predominantly cytoplasmic. .
Expression :	Widely expressed. Expressed in cells of the zona glomerulosa of the adrenal cortex.

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.