

## Calmodulin-1 (phospho Thr80/S82) Polyclonal Antibody

Catalog No: YP0912

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Calmodulin-1

Gene Name: CALM1

Protein Name: Calmodulin-1

**Human Gene Id:** 801/805/808

**Human Swiss Prot** 

No:

Mouse Gene ld: 12313

**Mouse Swiss Prot** 

No:

Rat Gene ld: 24242

Rat Swiss Prot No: P0DP29

Immunogen: The antiserum was produced against synthesized peptide derived from human

Calmodulin-1 around the phosphorylation site of Thr79 and Ser81. AA

range:46-95

P0DP23

P0DP26

**Specificity:** Phospho-Calmodulin (T80/S82) Polyclonal Antibody detects endogenous levels

of Calmodulin protein only when phosphorylated at T80/S82.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, lgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not

yet tested in other applications.



**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Concentration:** 1 mg/ml

-15°C to -25°C/1 year(Do not lower than -25°C) **Storage Stability:** 

**Molecularweight:** 17kD

Calcium; Phosphatidylinositol signaling system; Oocyte meiosis; Vascular smooth **Cell Pathway:** 

> muscle contraction;Long-term potentiation;Neurotrophin;Olfactory transduction;Insulin Receptor;GnRH;Melanogenesis;Alzheimer

This gene encodes a member of the EF-hand calcium-binding protein family. It is **Background:** 

> one of three genes which encode an identical calcium binding protein which is one of the four subunits of phosphorylase kinase. Two pseudogenes have been identified on chromosome 7 and X. Multiple transcript variants encoding different

isoforms have been found for this gene. [provided by RefSeq, Oct 2009],

**Function:** function: Calmodulin mediates the control of a large number of enzymes and

> other proteins by Ca(2+). Among the enzymes to be stimulated by the calmodulin-Ca(2+) complex are a number of protein kinases and phosphatases. Together with CEP110 and centrin, is involved in a genetic pathway that regulates the centrosome cycle and progression through cytokinesis., miscellaneous: This protein has four functional calcium-binding sites., PTM: Phosphorylation results in

a decreased activity., PTM: Ubiquitination results in a strongly decreased

activity..similarity:Belongs to the calmodulin family..similarity:Contains 4 EF-hand domains., subcellular location: Distributed throughout the cell during interphase, but during mitosis becomes dramatically localized to the spindle poles and the spindle microtubules., subunit: Interacts with MYO1C (By similarity). Interacts with

CEP97, CEP110, TTN/titin and SRY.,

Subcellular spindle pole, extracellular

region,nucleus,nucleoplasm,cytoplasm,centrosome,cytosol,spindle Location:

microtubule, plasma membrane, voltage-gated potassium channel

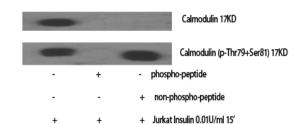
complex,sarcomere,growth cone,vesicle,calcium channel complex,G

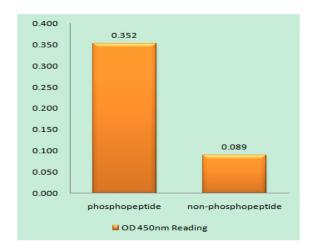
**Expression:** Blood, Brain, Cajal-Retzius cell, Fetal brain

cortex,Lung,Lymph,Lymphoma,Muscle,Osteosarcoma,P

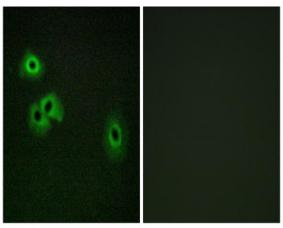
## **Products Images**

Western Blot analysis of various cells using Phospho-Calmodulin (T80/S82) Polyclonal Antibody

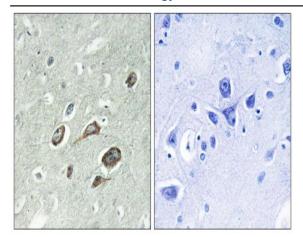




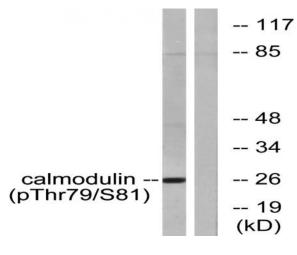
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Calmodulin (Phospho-Thr79+Ser81) Antibody



Immunofluorescence analysis of HepG2 cells, using Calmodulin (Phospho-Thr79+Ser81) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using Calmodulin (Phospho-Thr79+Ser81) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with Insulin 0.01U/ml 15', using Calmodulin (Phospho-Thr79+Ser81) Antibody. The lane on the right is blocked with the phospho peptide.