

Caldesmon (phospho Ser789) rabbit pAb**Cat#: orb764394 (Manual)**

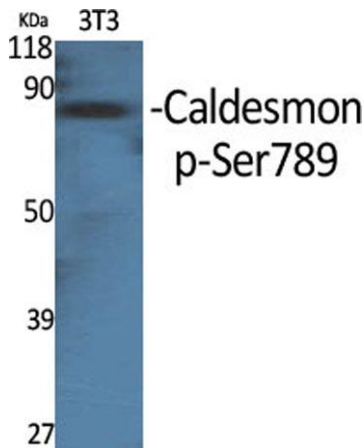
For research use only. Not intended for diagnostic use.

Product Name	Caldesmon (phospho Ser789) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human Caldesmon around the phosphorylation site of Ser789. AA range:744-793
Specificity	Phospho-Caldesmon (S789) Polyclonal Antibody detects endogenous levels of Caldesmon protein only when phosphorylated at S789.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Caldesmon
Gene Name	CALD1
Cellular localization	Cytoplasm, cytoskeleton . Cytoplasm, myofibril . Cytoplasm, cytoskeleton, stress fiber . On thin filaments in smooth muscle and on stress fibers in fibroblasts (nonmuscle). .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

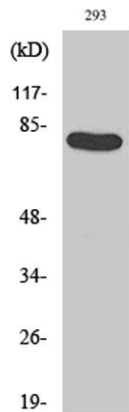
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	80kD
Human Gene ID	800
Human Swiss-Prot Number	Q05682
Alternative Names	CALD1; CAD; CDM; Caldesmon; CDM

Background

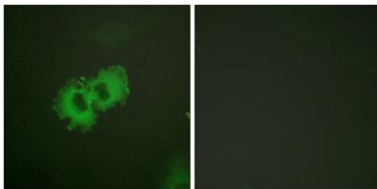
This gene encodes a calmodulin- and actin-binding protein that plays an essential role in the regulation of smooth muscle and nonmuscle contraction. The conserved domain of this protein possesses the binding activities to Ca(2+)-calmodulin, actin, tropomyosin, myosin, and phospholipids. This protein is a potent inhibitor of the actin-tropomyosin activated myosin MgATPase, and serves as a mediating factor for Ca(2+)-dependent inhibition of smooth muscle contraction. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008],



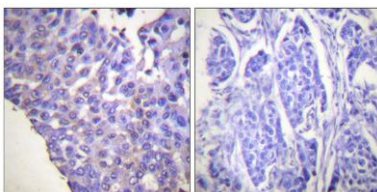
Western Blot analysis of various cells using Phospho-Caldesmon (S789) Polyclonal Antibody



Western Blot analysis of 293 cells using Phospho-Caldesmon (S789) Polyclonal Antibody



Immunofluorescence analysis of HeLa cells, using Caldesmon (Phospho-Ser789) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Caldesmon (Phospho-Ser789) Antibody. The picture on the right is blocked with the phospho peptide.