## For Research Use Only

# Caldesmon Polyclonal antibody

Catalog Number: 20887-1-AP

Featured Product

9 Publications



**Basic Information** 

Catalog Number: 20887-1-AP

GenBank Accession Number:

BC040354

GeneID (NCBI): Size:

550 ug/ml 800

**UNIPROT ID:** Source: Rabbit Q05682 Full Name:

caldesmon 1

Calculated MW: Immunogen Catalog Number: AG13676 538 aa, 63 kDa

Observed MW:

70-80 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, IF-P, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF

Isotype:

Species Specificity:

human, mouse

**Cited Species:** human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions:

WB 1:5000-1:50000 IHC 1:1000-1:4000 IF-P 1:50-1:500 IF/ICC 1:200-1:800

**Positive Controls:** 

WB: A2780 cells, HeLa cells, HT-1080 cells, MDA-MB-

231 cells, PC-3 cells, SKOV-3 cells

IHC: human colon tissue, mouse heart tissue, human

normal colon

IF-P: mouse heart tissue,

IF/ICC: HeLa cells,

## **Background Information**

Caldesmon (CALD1), a protein found in the cytoskeleton, plays an important role in proliferation, apoptosis, cell motility, adhesion, receptor function, and second messenger pathways. Caldesmon is a substrate of cdc2 kinase and Erk1/2 MAPK, and phosphorylation by either of these kinases reverses the inhibitory effects of caldesmon. Caldesmon(CALD1) is a prognostic biomarker and correlated with bladder cancer(PMID: 34733993) and immune infiltrates in gastric cancers (PMID: 34189308).

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Jiakang Zhang	36230524	Cancers (Basel)	WB
Dongli Liang	28252009	Sci Rep	WB
Iddrisu B Yabasin	30108509	Front Physiol	WB,IF

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

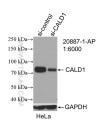
#### Selected Validation Data



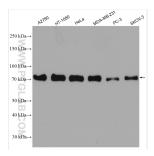
Immunohistochemical analysis of paraffinembedded human colon tissue slide using 20887-1-AP (Caldesmon antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



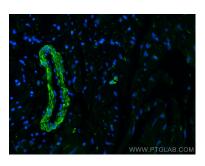
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 20887-1-AP (Caldesmon antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



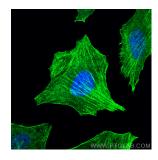
WB result of Caldesmon antibody (20887-1-AP; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Caldesmon transfected Hela cells.



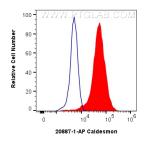
Various lysates were subjected to SDS PAGE followed by western blot with 20887-1-AP (Caldesmon antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Caldesmon antibody (20887-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Caldesmon antibody (20887-1-AP) at dilution of 1:400 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L).



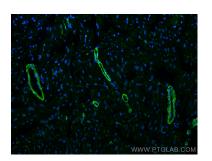
1x10^6 HeLa cells were intracellularly stained with 0.25 ug Caldesmon Polyclonal antibody (20887-1-AP) and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffinembedded human colon tissue slide using 20887-1-AP (Caldesmon antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human colon tissue slide using 20887-1-AP (Caldesmon antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using Caldesmon antibody (20887-1-AP) at dilution of 1:200 and Coralite® 488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L).