

Mouse anti-Human Calmodulin Monoclonal Antibody | anti-CALM1 antibody

Mouse Monoclonal [clone J4D8] (IgG2a,k) to Human Calmodulin

CATALOG # AAA51819	HOST Mouse	REACTIVITY Human	APPLICATIONS Western Blot, Immunohistochemistry
------------------------------	----------------------	----------------------------	---

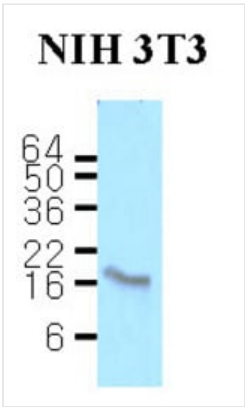
PRODUCT SYNONYMS

Calmodulin; Monoclonal Antibody; Mouse Monoclonal [clone J4D8] (IgG2a; k) to Human Calmodulin; Anti-Calmodulin Antibody (aa1-149; clone J4D8) IHC-plus; Human Calmodulin; anti-CALM1 antibody

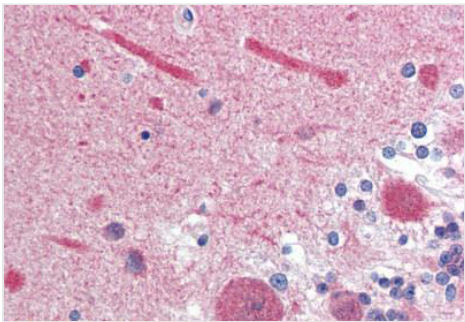
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2a,k
Clone Number	J4D8
Purity/Purification	Protein G Purified
Form/Format	PBS, pH 7.4, 0.1% Sodium Azide
Concentration	1 mg/ml (varies by lot)
Sequence Length	149
Applicable Applications for anti-CALM1 antibody	WB (Western Blot), IHC (Immunohistochemistry)
Target Species	Calmodulin
Immunogen Description	Recombinant human Calmodulin (1-149aa) purified from E Coli.
Immunogen Type	Recombinant protein
Immunogen	Calmodulin antibody was raised against recombinant human Calmodulin (1-149aa) purified from E Coli.
Epitope	aa1-149
Usage	Immunohistochemistry: It was validated for use in immunohistochemistry on a panel of 21 formalin-fixed, paraffin-embedded (FFPE) human tissues after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with the primary antibody, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen. The stained slides were evaluated by a pathologist to confirm staining specificity. The optimal working concentration was determined to be 10 ug/ml.
Disclaimer	Due to the highly specific nature of antibodies and antigens, we cannot predict or be held responsible with respect to how this antibody will behave in your systems. Researchers using this antibody should conduct optimization studies to achieve the most optimal result possible for their intended application.

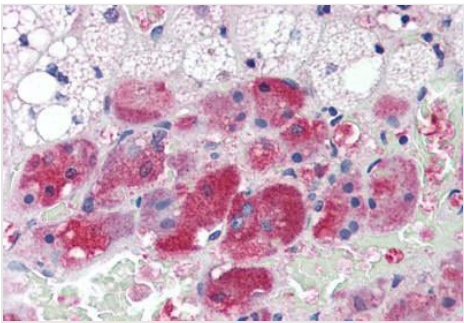
Recommended Immunohistochemistry Protocol	The following protocol is a recommendation only, and AAA Biotech makes no guarantee of the results: Tissue Preparation: Formalin fixation and embedding in paraffin wax. Tissue Sectioning: Make 4-um sections and place on pre-cleaned and charged microscope slides. Heat in a tissue-dryingoven for 45 minutes at 60°C. Deparaffinization: Wash dry slides in 3 changes of xylene - 5 minutes each @ RT Rehydration: Wash slides in 3 changes of 100% alcohol - 3 minutes each @ RT Wash slides in 2 changes of 95% alcohol - 3 minutes each @ RT Wash slides in 1 change of 80% alcohol - 3 minutes @ RT Rinse slides in gentle running distilled water - 5 minutes @ RT Antigen retrieval: Steam slides in 0.01 M sodium citrate buffer, pH 6.0 at 99-100°C - 20 minutes Remove from heat and let stand at room temperature in buffer - 20 minutes Rinse in 1X TBS with Tween (TBST) -1 minute @ RT Immunostaining: (Do not allow tissues to dry at any time during the staining procedure) Apply a universal protein block - 20 minutes @ RT Drain protein block from slides, apply diluted primary antibody - 45 minutes @ RT Rinse slides in 1 X TBST - 1 minute @ RT Apply a biotinylated secondary antibody appropriate for the primary antibody - 30 minutes @ RT Rinse slides in 1X TBST -1 minute @ RT Apply alkaline phosphatase streptavidin - 30 minutes @ RT Rinse slides in 1X TBST -1 minute @ RT Apply alkaline phosphatase chromogen substrate - 30 minutes @ RT Wash slides in distilled water - 1 minute @ RT Dehydrate: (This method should only be used if the chromogen substrate is alcohol insoluble (e.g. Vector Red, DAB) Wash slides in 2 changes of 80% alcohol - 1 minute each @ RT Wash slides in 2 changes of 95% alcohol - 1 minute each @ RT Wash slides in 3 changes of 100% alcohol - 1 minute each @ RT Wash slides in 3 changes of xylene - 1 minute each @ RT Apply coverslip
Preparation and Storage	Short term: store at 4°C. Long term: store at -20°C. Avoid freeze-thaw cycles.



WB (Western Blot)
Cell lysates of NIH3T3 (50 ug) were resolved by SDS-PAGE, transferred to NC membrane and probed with anti-human Calmodulin (1:500). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.



IHC (Immunohistochemistry)
Anti-Calmodulin antibody IHC of human brain, cerebellum. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval. Antibody concentration 10 ug/ml.



IHC (Immunohistochemistry)
Anti-Calmodulin antibody IHC of human adrenal. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval. Antibody concentration 10 ug/ml.

NCBI AND UNIPROT INFORMATION

NCBI GI #	5542035
NCBI GeneID	801
Molecular Weight	16,838 Da
NCBI Official Full Name	calmodulin
NCBI Official Synonym Full Names	calmodulin 1 (phosphorylase kinase, delta)
NCBI Official Symbol	CALM1
NCBI Official Synonym Symbols	caM; CAMI; PHKD; CPVT4; DD132; CALML2
NCBI Protein Information	calmodulin; prepro-calmodulin 1; phosphorylase kinase, delta subunit
UniProt Protein Name	Calmodulin
UniProt Gene Name	CALM1
UniProt Synonym Gene Names	CALM; CAM; CAM1; CaM
UniProt Entry Name	CALM_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

