

Rabbit Calbindin Polyclonal Antibody | anti-CALB1 antibody

Anti-Calbindin Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA11603	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry

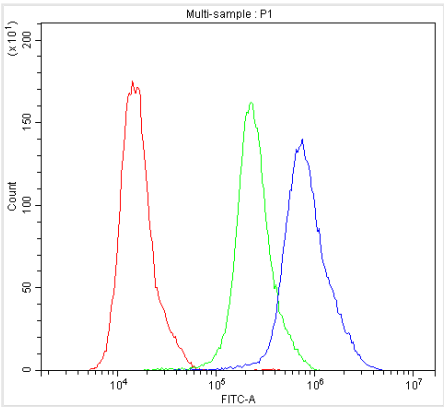
PRODUCT SYNONYMS

Calbindin; Polyclonal Antibody; Anti-Calbindin Antibody; calbindin 1; 28kDa; avian-type antibody; CAB27 antibody; CALB 1 antibody; CALB antibody; CALB1 antibody; CALB1_HUMAN antibody; Calbindin 1 28kDa antibody; Calbindin antibody; Calbindin D28 antibody; D 28K antibody; D-28K antibody; D28K antibody; OTTHUMP00000166027 antibody; OTTHUMP00000225441 antibody; RTVL H protein antibody; Vitamin D dependent calcium binding protein antibody; Vitamin D dependent calcium binding protein avian type antibody; Vitamin D dependent calcium binding protein avian-type antibody; Vitamin D-dependent calcium-binding protein antibody; anti-CALB1 antibody

PRODUCT SPECIFICATIONS

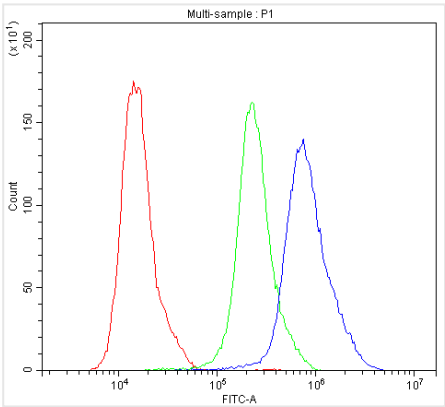
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	No cross reactivity with other proteins.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized
Sequence Length	261
Applicable Applications for anti-CALB1 antibody	WB (Western Blot), IHC (Immunohistochemistry)

Application Notes	Western Blot: Concentration: 0.1-0.5ug/ml Tested Species: Rat Predicted Species: Human Immunohistochemistry (Paraffin-embedded Section): Concentration: 0.5-1 ug/ml Tested Species: Human, Mouse, Rat Antigen Retrieval: By Heat Immunohistochemistry (Frozen Section): Concentration: 0.5-1 ug/ml Tested Species: Human Immunocytochemistry: Concentration: 0.5-1 ug/ml Tested Species: Human Flow Cytometry: 1-3 ug/1x10⁶ cells Tested Species: Human WB: The detection limit for Calbindin is approximately 0.25ng/lane under reducing conditions. Tested Species: in-house tested species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20 mins is required for the staining of formalin/paraffin sections. Other applications have not been tested. Optimal dilutions should be determined by end users.
Immunogen	E Coli-derived human Calbindin recombinant protein (Position: A2-E175). Human Calbindin shares 99% amino acid (aa) sequence identity with mouse and rat Calbindin.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.



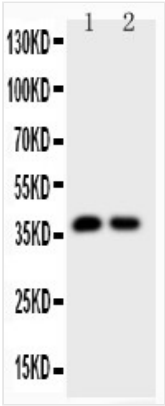
FCM (Flow Cytometry)

Figure 7. Flow Cytometry analysis of Hela cells using anti-Calbindin antibody (AAA11603).Overlay histogram showing Hela cells stained with AAA11603 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Calbindin Antibody (AAA11603,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



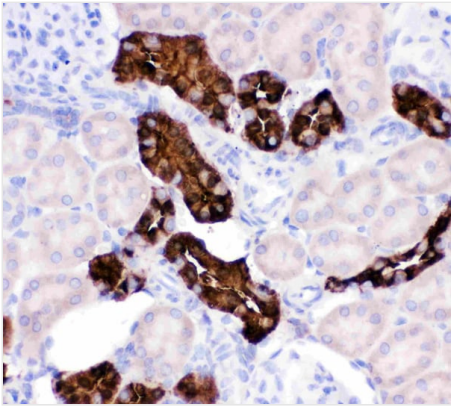
FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of SiHa cells using anti-Calbindin antibody (AAA11603).Overlay histogram showing SiHa cells stained with AAA11603 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Calbindin Antibody (AAA11603,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



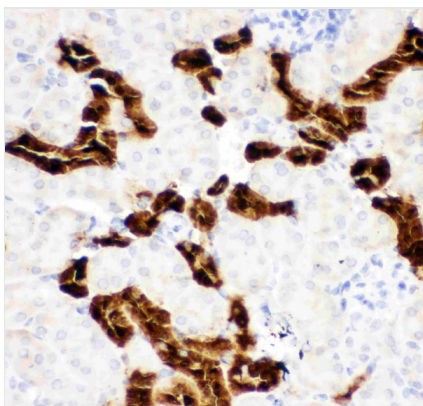
WB (Western Blot)

Figure 5. Western blot analysis of Calbindin using anti-Calbindin antibody (AAA11603). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Rat Brain Tissue Lysate Lane 2: Rat Kidney Tissue Lysate After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Calbindin antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Calbindin at approximately 37KD. The expected band size for Calbindin is at 30KD.



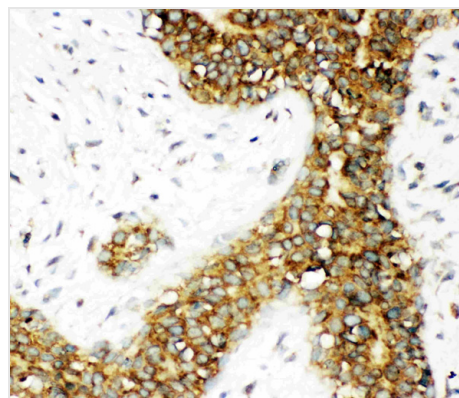
IHC (Immunohistochemistry)

Figure 4. IHC analysis of Calbindin using anti-Calbindin antibody (AAA11603). Calbindin was detected in paraffin-embedded section of Rat Kidney Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Calbindin Antibody (AAA11603) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of Calbindin using anti-Calbindin antibody (AAA11603). Calbindin was detected in paraffin-embedded section of Mouse Kidney Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Calbindin Antibody (AAA11603) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Calbindin using anti-Calbindin antibody (AAA11603). Calbindin was detected in paraffin-embedded section of Human Mammary Cancer Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Calbindin Antibody (AAA11603) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-CALB1 antibody

Description: Rabbit IgG polyclonal antibody for Calbindin(CALB1) detection. Tested with WB, IHC-P in Human, Mouse, Rat.

Background: Calbindin is a calcium-binding protein belonging to the troponin C superfamily. Calretinin is expressed in central and peripheral nervous system and in many normal and pathological tissues. The rat and human calretinin exhibit 98% sequence homology and 91% homology to many other species. Two calcium binding proteins, calbindin and calretinin, have been reported to be expressed in abundance in Purkinje cells and other cell types in the cerebellum.

NCBI AND UNIPROT INFORMATION

NCBI GI #	115394
NCBI GeneID	793
UniProt Accession #	P05937; B2R696; B7Z9J4
NCBI Official Full Name	Calbindin
NCBI Official Synonym Full Names	calbindin 1, 28kDa
NCBI Official Symbol	CALB1
NCBI Official Synonym Symbols	CALB
NCBI Protein Information	calbindin; D-28K; calbindin D28; RTVL-H protein; calbindin 1, (28kD); vitamin D-dependent calcium-binding protein, avian-type
UniProt Protein Name	Calbindin
UniProt Gene Name	CALB1
UniProt Synonym Gene Names	CAB27
UniProt Entry Name	CALB1_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.