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## Calmodulin 1/2/3 Rabbit pAb

Catalog Number: bs-3666R

Target Protein: Calmodulin 1/2/3

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), Flow-Cyt (1ug/Test)

Reactivity: Human, Mouse, Rat (predicted:Cow, Chicken, Dog, Horse)

Predicted MW: 16-20 kDa

Entrez Gene: 801

Swiss Prot: P0DP23

Source: KLH conjugated synthetic peptide derived from human Calmodulin: 81-152/152.

Purification: affinity purified by Protein A

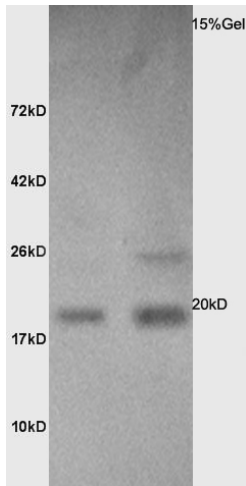
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

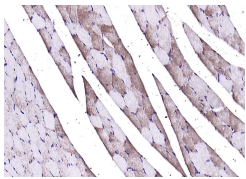
**Background:** Calmodulin consists of two glycoproteins, 34 and 39 kDa, sometimes designated epithelial antigen, epithelial specific antigen, and epithelial glycoprotein. The glycoproteins are located on the cell membrane surface and in the cytoplasm of virtually all epithelial cells with the exception of most squamous epithelia, hepatocytes, renal proximal tubular cells, gastric parietal cells and myoepithelial cells. Epithelial Calmodulin is found in the large majority of adenocarcinomas of most sites (50-100% in various studies; as well as neuroendocrine tumours, including small cell carcinoma. Renal cell carcinoma and hepatocellular carcinoma stain in about 30% of the cases. 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. Calmodulin has four functional calcium binding sites.

### VALIDATION IMAGES

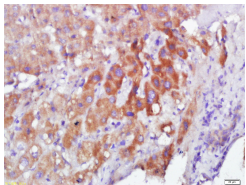
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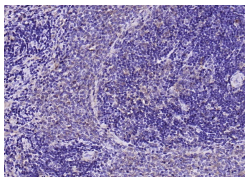
Sample: Lane1: Brain(Rat) Lysate at 30 ug Lane2: Liver(Rat) Lysate at 30 ug Primary: Anti-Calmodulin (bs-3666R) at 1:200 dilution; Secondary: HRP conjugated Goat Anti-Rabbit IgG(bs-0295G-HRP) at 1: 3000 dilution; Predicted band size : 16kD Observed band size : 20kD



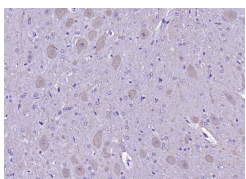
Paraformaldehyde-fixed, paraffin embedded (rat skeletal muscle); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Calmodulin 1/2/3) Polyclonal Antibody, Unconjugated (bs-3666R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



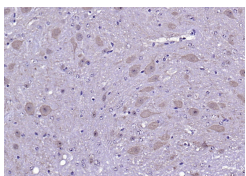
Tissue/cell: Human hepatocellular carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Incubation: Anti-Calmodulin Polyclonal Antibody, Unconjugated(bs-3666R) 1:400, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (rat spleen); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Calmodulin 1/2/3) Polyclonal Antibody, Unconjugated (bs-3666R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Calmodulin 1/2/3) Polyclonal Antibody, Unconjugated (bs-3666R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Calmodulin 1/2/3) Polyclonal Antibody, Unconjugated (bs-3666R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=7.5] HaiShan Li. et al. Corylifol A suppresses osteoclastogenesis and alleviates ovariectomy-induced bone loss via attenuating ROS production and impairing mitochondrial function. BIOMED PHARMACOTHER. 2024 Feb;171:116166 WB ; Mouse . 38244329

[IF=5.561] Lei Wu. et al. Ethanol Extract of Mao Jian Green Tea Attenuates Gastrointestinal Symptoms in a Rat Model of Irritable Bowel Syndrome with Constipation via the 5-hydroxytryptamine Signaling Pathway. FOODS. 2023 Jan;12(5):1101 WB ; Rat . 36900618

[IF=5.201] Hua Y et al. Enterohemorrhagic Escherichia coli Effector Protein EspF Interacts With Host Protein ANXA6 and Triggers Myosin Light Chain Kinase (MLCK)-Dependent Tight Junction DysregulationFront Cell Dev Biol.2020 Dec 23;8:613061. WB ; Human . 33425920

[IF=3.448] Xu B et al. Excessive mechanical stress induces chondrocyte apoptosis through TRPV4 in an anteriorcruciate ligament-transected rat osteoarthritis model. Life Sci. 2019 Jul 1;228:158-166. IHC,WB ; Rat . 31055086

[IF=2.824] Hai-Jun Gao. et al. Anti-echinococcal effect of verapamil involving the regulation of the calcium/calmodulin-dependent protein kinase II response in vitro and in a murine infection model. Parasite Vector. 2021 Dec;14(1):1-10 IHC ; Mouse . 33588933