

# CaMKII delta Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse, Rabbit, Rat
Published Species	Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Recombinant protein fragment contain a sequence corresponding to a region within amino acids 249 and 445 (Q13557) of CaMKII delta
Form	Liquid
Concentration	0.62 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS, pH 7, with 20% glycerol
Contains	0.025% ProClin 300
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_11153337

Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:50,000	5 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:1,000	-
Immunocytochemistry (ICC/IF)	1:100-1:1,000	-
Immunoprecipitation (IP)	1:100-1:500	1 Publication

## Product Specific Information

Recommended positive controls: 293T, A431, HeLa, HepG2, A549, H1299, HCT116, mouse brain, rat brain.

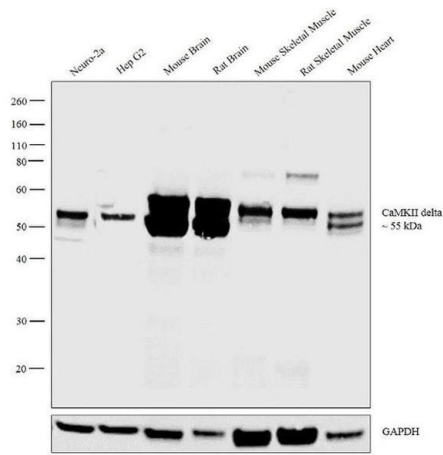
Predicted reactivity: Mouse (100%), Rat (80%), Xenopus laevis (94%), Pig (100%), Rabbit (99%), Chicken (98%), Bovine (92%).

Store product as a concentrated solution. Centrifuge briefly prior to opening the vial.

Product Images For CaMKII delta Polyclonal Antibody

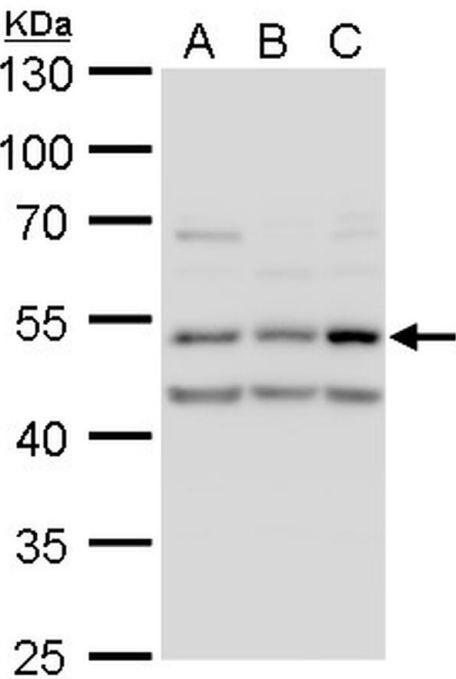
CaMKII delta Antibody (PA5-22168) in WB

Western blot analysis was performed on whole cell extracts (30 µg lysate) of Neuro-2a (Lane 1), Hep G2 (Lane 2), tissue extracts of Mouse Brain (Lane 3), Rat Brain (Lane 4), Mouse Skeletal Muscle (Lane 5), Rat Skeletal Muscle (Lane 6) and Mouse Heart (Lane 7). The blot was probed with Anti-CaMKII delta Polyclonal Antibody (Product # PA5-22168, 1:500 dilution) and detected by chemiluminescence using Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, HRP conjugate (Product # A27036, 0.25 µg/mL, 1:4,000 dilution). A 55 kDa band corresponding to CaMKII delta was observed across the cell lines and tissues tested.



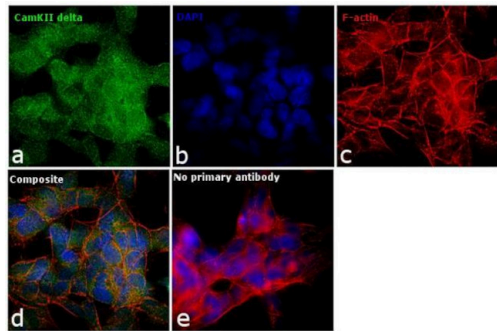
CaMKII delta Antibody (PA5-22168) in WB

CaMK2D antibody detects CaMK2D protein by western blot analysis. A. 30 µg A549 whole cell lysate/extract. B. 30 µg H1299 whole cell lysate/extract. C. 30 µg HCT116 whole cell lysate/extract. 10% SDS-PAGE. CaMK2D antibody CaMKII delta Polyclonal Antibody (Product # PA5-22168) dilution: 1:1,000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



CaMKII delta Antibody (PA5-22168) in ICC/IF

Immunofluorescence analysis of CamKII delta was performed using 70% confluent log phase SH-SY5Y cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with CaMKII delta Polyclonal Antibody (Product # PA5-22168) at 5 µg/mL in 0.1% BSA, incubated at 4 degree Celsius overnight and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1: 300). Panel d represents the merged image showing predominant cytoplasmic localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



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Western Blot (5)

<p>Nature communications</p> <p><b>Detrimental proarrhythmogenic interaction of Ca<sup>2+</sup>/calmodulin-dependent protein kinase II and Na<sub>v</sub>1.8 in heart failure.</b></p> <p>"PA5-22168 was used in Western Blot to elucidate the role of the sodium channel isoform NaV1.8 for CaMKIIc-dependent proarrhythmia."</p> <p>Authors: Bengel P,Dybkova N,Tirilomis P,Ahmad S,Hartmann N,A Mohamed B,Krekeler MC,Maurer W,Pabel S,Trum M, Mustroph J,Gummert J,Milting H,Wagner S,Ljubojevic-Holzer S,Toischer K,Maier LS,Hasenfuss G,Streckfuss-Bömeke K,Sossalla S</p>	<p>Year 2021</p> <p>Species Human Mouse</p>
<p>Journal of molecular medicine (Berlin, Germany)</p> <p><b>Long-term effects of empagliflozin on excitation-contraction-coupling in human induced pluripotent stem cell cardiomyocytes.</b></p> <p>"PA5-22168 was used in Western Blotting to investigate the long-term effects (up to 2 months) of empagliflozin on excitation-contraction (EC)-coupling in human cardiomyocytes derived from induced pluripotent stem cells (iPSC-CM) in a blinded manner."</p> <p>Authors: Pabel S,Reetz F,Dybkova N,Shomroni O,Salinas G,Mustroph J,Hammer KP,Hasenfuss G,Hamdani N,Maier LS,Streckfuss-Bömeke K,Sossalla S</p>	<p>Year 2020</p> <p>Species Human</p> <p>Dilution 1:5000</p>

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Immunoprecipitation (1)

<p>Nature communications</p> <p><b>Detrimental proarrhythmogenic interaction of Ca<sup>2+</sup>/calmodulin-dependent protein kinase II and Na<sub>v</sub>1.8 in heart failure.</b></p> <p>"PA5-22168 was used in Western Blot to elucidate the role of the sodium channel isoform NaV1.8 for CaMKIIc-dependent proarrhythmia."</p> <p>Authors: Bengel P,Dybkova N,Tirilomis P,Ahmad S,Hartmann N,A Mohamed B,Krekeler MC,Maurer W,Pabel S,Trum M, Mustroph J,Gummert J,Milting H,Wagner S,Ljubojevic-Holzer S,Toischer K,Maier LS,Hasenfuss G,Streckfuss-Bömeke K,Sossalla S</p>	<p>Year 2021</p> <p>Species Human Mouse</p>
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