Phospho-CaMKII (Thr305,Thr306) Recombinant Rabbit Monoclonal Antibody (9H2L7)

Product Details	
Size	100 µg
Species Reactivity	Human
Published Species	Rat
Host/Isotype	Rabbit / IgG
Expression system	Expi293
Class	Recombinant Monoclonal
Type	Antibody
Clone	9H2L7
Conjugate	Unconjugated
Immunogen	Peptide corresponding to Human CMK2A (aa 300-309)
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2632984

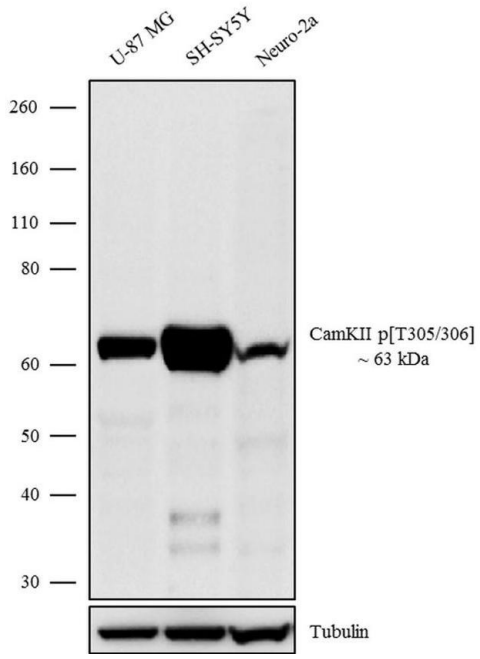
Applications	Tested Dilution	Publications
Western Blot (WB)	1-2 µg/mL	-
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	2 µg/mL	-

Product Specific Information

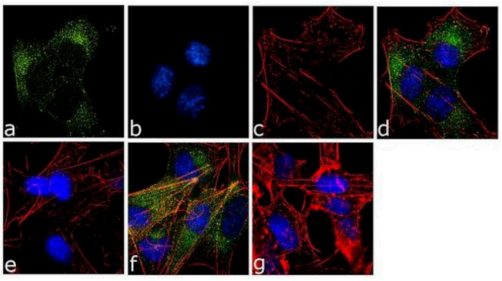
This antibody is predicted to react with Monkey, Mouse, Dog, Sheep and Bovine

Recombinant rabbit monoclonal antibodies are produced using in vitro expression systems. The expression systems are developed by cloning in the specific antibody DNA sequences from immunoreactive rabbits. Then, individual clones are screened to select the best candidates for production. The advantages of using recombinant rabbit monoclonal antibodies include: better specificity and sensitivity, lot-to-lot consistency, animal origin-free formulations, and broader immunoreactivity to diverse targets due to larger rabbit immune repertoire.

Product Images For Phospho-CaMKII (Thr305,Thr306) Recombinant Rabbit Monoclonal Antibody (9H2L7)



Phospho-CaMKII (Thr305,Thr306) Antibody (702357) in WB
Western blot analysis was performed on whole cell extracts (30 µg lysate) of U-87 MG (Lane 1), SH-SY5Y (Lane 2) and Neuro-2a (Lane 3). The blots were probed with Anti-CamKII p (T305/306) Recombinant Rabbit Monoclonal Antibody (Product # 702357, 1-2 µg/mL) and detected by chemiluminescence using Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, HRP conjugate (Product # A27036, 0.4 µg/mL, 1:2500 dilution). A 63 kDa band corresponding to CamKII p (T305/306) was observed across cell lines tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 4-12% Bis-Tris gel (Product # NP0321BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5% skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western blotting Substrate (Product # 32106).



Phospho-CaMKII (Thr305,Thr306) Antibody (702357) in ICC/IF
For immunofluorescence analysis, SH-SY5Y cells were fixed and permeabilized for detection of endogenous CamKIIpT305/306 using Anti- CamKIIpT305/306 Recombinant Rabbit Monoclonal Antibody (Product # 702357, 2 µg/mL) and labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034, 1:2000). Panel a) shows representative cells that were stained for detection and localization of CamKIIpT305/306 protein (green), Panel b) is stained for nuclei (blue) using SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). Panel c) represents cytoskeletal F-actin staining using Alexa Fluor® 555 Rhodamine Phalloidin (Product # R415, 1:300). Panel d) is a composite image of Panels a, b and c clearly demonstrating cytoplasmic localization of CamKIIpT305/306. Panel e) shows loss of signal by competition with the CamKIIpT305/306 peptide, demonstrating antibody specificity. Panel f) demonstrates no competition with the non-phosphorylated peptide. Panel g) represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

1 Reference

Immunohistochemistry (1)

The European journal of neuroscience

Mitotic activity, modulation of DNA processing, and purinergic signalling in the adult rat auditory brainstem following sensory deafferentation.

"702357 was used in Immunohistochemistry to investigate whether mitosis involves in a complex scenario of cellular network reorganization, caused by unilateral sensory deafferentation (USD) in the adult rat central auditory system."

Authors: Illing RB,Buschky H,Tadic A

Year
2019

Species
Rat