

Human CaM Kinase IIo Antibody

Monoclonal Mouse IgG_{2B} Clone # 438422 Catalog Number: MAB4176

DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects endogenous human CaM Kinase IIδ isoforms in Western blots. In Western blots, this antibody does not cross-react with recombination human CaMKIIα, CaMKIIβ, or CaMKIIγ.	
Source	Monoclonal Mouse IgG _{2B} Clone # 438422	
Purification	Protein A or G purified from hybridoma culture supernatant	
Immunogen	E. coli-derived recombinant human CaM Kinase IIδ Ala402-Lys478 Accession # Q13557	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

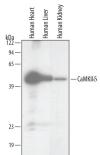
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

DATA



Western Blot



Detection of Human CaM Kinase IIo by Western Blot. Western blot shows lysates of human heart, liver and kidney tissue. PVDF membrane was probed with 1 µg/mL of Human/Mouse/Rat CaM Kinase IIo Monoclonal Antibody (Catalog # MAB4176) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Specific bands were detected for CaM Kinase Il δ isoforms at approximately 50 to 54 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 3.

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Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.		
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C		
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. ■ 12 months from date of receipt, -20 to -70 °C as supplied.		
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- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

Calcium/calmodulin-dependent protein kinase type II delta (CaMKII\delta) belongs to a family of multifunctional serine/threonine kinases activated in response to increases in intracellular calcium. There are 4 CaMKII isozymes, α, β, γ, and δ, and each can yield several isoforms through alternative splicing. CaMKII isoforms assemble into homo- or heteromultimeric holoenzymes composed of 8 to 12 subunits. CaMKIIδ expression is ubiquitous and has been identified as the predominant CaMKII isozyme in the heart, where it is implicated in the development of cardiac hypertrophy and heart failure.

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