

## DESCRIPTION

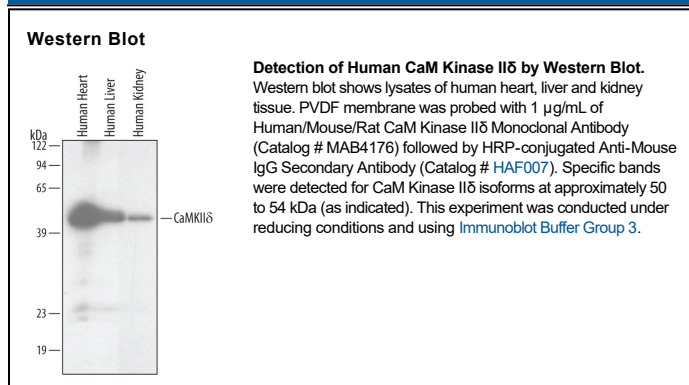
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects endogenous human CaM Kinase II $\delta$ isoforms in Western blots. In Western blots, this antibody does not cross-react with recombinant human CaMKII $\alpha$ , CaMKII $\beta$ , or CaMKII $\gamma$ .
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 438422
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human CaM Kinase II $\delta$ Ala402-Lys478 Accession # Q13557
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m 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 $\mu$ m filtered solution in PBS.

## APPLICATIONS

**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
<b>Western Blot</b>	1 $\mu$ g/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

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,  $\alpha$ ,  $\beta$ ,  $\gamma$ , and  $\delta$ , and each can yield several isoforms through alternative splicing. CaMKII isoforms assemble into homo- or heteromultimeric holoenzymes composed of 8 to 12 subunits. CaMKII $\delta$  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.