



CaMKII δ 2/3/4/9/11/11a epitope Affinity Purified Antibody

Quality Control Certificate of Analysis

Catalogue No.: A010-56eAP Unit Size: 25 μ l Lot No.: 0513-02

Background: Ca^{2+} /calmodulin-dependent kinase II (CaMKII) is an ubiquitous, multifunctional serine/threonine kinase involved in translating Ca^{2+} signals into cellular responses (Shulman & Braun, 1999). Four separate CaMKII genes are expressed in man (α , β , γ , δ) and these have a conserved core structure comprising a catalytic / autoregulatory domain and a self-assembly / association domain. The CaMKII family consists of around 30 isoforms arising from alternative splicing. CaMKII δ is expressed in 10 alternatively spliced variants. Several CaMKII δ variants contain a C-terminal extension (δ variants 2/3/4/9/11/11a). The primary sequence (epitope) used to make this antibody is shared by all these variants (2/3/4/9/11/11a), and this antibody will recognise each of these CaMKII δ splice variants.

Description: Epitope Peptide affinity purified **Rabbit** polyclonal antibody to CaMKII δ 1/2/3/4/9/11/11a

Immunogen: Synthetic peptide (CKENFSGGTSLWQNI) corresponding to amino acids at the C-terminus of human CaMKII δ isoform 3 or rat/mouse isoform 2 which was conjugated to blue carrier protein.

Antibody Isotype: IgG.

Antibody Purity: Epitope Affinity Purified

Vial Constituents: Lyophilised CaMKII δ 2/3/4/9/11/11a IgG protein A010-56AP (25 μ l) in 20% stabilizer.

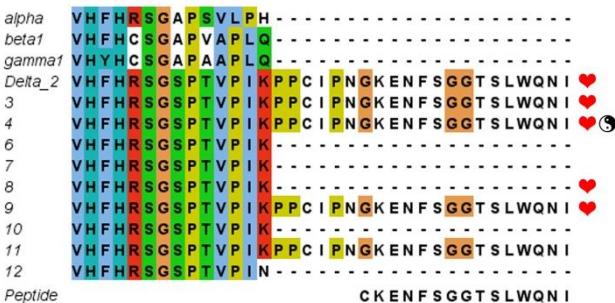
Specificity: The antibody stains for a band at 55kDa on a blot corresponding to delta isoforms of CaMKII that contain the additional C-terminal sequence.

Species Cross Reactivity: A010-56AP recognises CaMKII δ variants (containing C-terminal extension) in all mammalian but has only been tested on rat and canine samples.

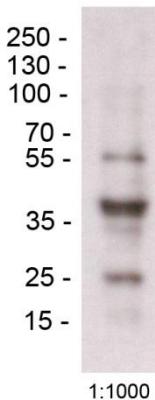
Storage Instructions: Lyophilised antibody is stable at 4°C when stored with desiccant. **Reconstitute lyophilised powder in 25 μ l of 18 MΩ H_2O** , aliquot and store frozen at -80°C for 1 year. Avoid freeze - thaw cycles.

Tested Applications: WB 1:1000

Human CaMKII δ isoform alignment. Uniprot sp|Q13557 1-11



20 μ g Rat
Muscle Extract



WB using 1:1000 20 μ g of Rat Muscle Extract (skeletal).
Exposure time 2 seconds

Related Products: anti-CaMKII Phospho Thr-286 (A010-50AP). CaMKII δ (A010-55AP)

Background References:

- HUDMON, A. & SCHULMAN, H. 2002. Neuronal CA2+/calmodulin-dependent protein kinase II: the role of structure and autoregulation in cellular function. *Annu Rev Biochem*, 71, 473-510.

- TAKEUCHI, M. & FUJISAWA, H. 1998. New alternatively spliced variants of calmodulin-dependent protein kinase II from rabbit liver. *Gene*, 221, 107-15.