

DESCRIPTION

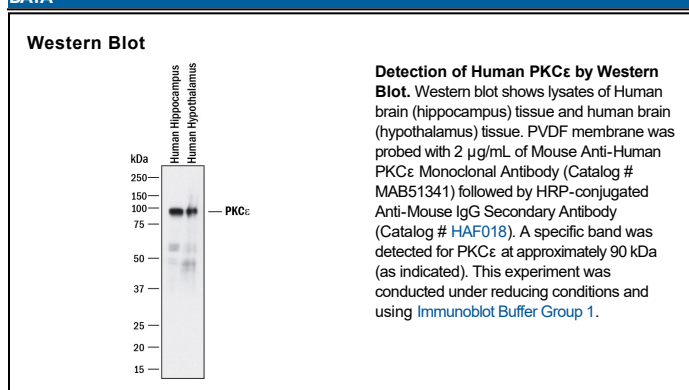
Species Reactivity	Human
Specificity	Detects human PKC ϵ in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 666843
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PKC ϵ Gln580-Pro737 Accession # Q02156
Formulation	Lyophilized from a 0.2 μ 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 μ 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
Western Blot	2 μ g/mL	See Below

DATA



PREPARATION AND STORAGE

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. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

PKC ϵ (protein kinase C-epsilon) is an 87 kDa member of the novel PKC subfamily, AGC Ser/Thr protein kinase family of enzymes. It is a widely-expressed Ca⁺⁺-insensitive, phospholipid-dependent enzyme that catalyzes the phosphorylation of multiple proteins. Human PKC ϵ is 737 amino acids (aa) in length. It contains two general regions: a non-Ca⁺⁺-binding plus lipid binding regulatory region (aa 1-99 and 169-292, respectively), and an ATP-binding catalytic domain (aa 408-668). Phosphorylation of PKC ϵ on Thr566, Ser368 and Ser729 activates the enzyme and increases its molecular weight to 92 kDa. One potential splice form shows a 114 aa substitution for aa 118-737. Over aa 580-737, human PKC ϵ is 98% and 99% aa identical to mouse and canine PKC ϵ , respectively.