

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PKCε in direct ELISAs. In direct ELISAs, less than 20% cross-reactivity with recombinant human (rh) PKCδ and rhPKCι is observed. No cross-reactivity with rhPKCα, β1, β2, γ, η, μ, ν, θ, or ζ is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 666823
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PKCε Gln580-Pro737 Accession # Q02156
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

PKCε (protein kinase C-ε) 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 PKCε 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 PKCε 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 PKCε is 98% and 99% aa identical to mouse and canine PKCε, respectively.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.