

# **Product datasheet for CF502417**

#### OriGene Technologies, Inc.

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### PKC epsilon (PRKCE) Mouse Monoclonal Antibody [Clone ID: OTI1B4]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI1B4

**Applications:** FC, IF, IHC, WB

**Recommended Dilution:** WB 1:500~2000, IHC 1:150, IF 1:100, FLOW 1:100

Reactivity: Human, Dog, Monkey, Mouse, Rat

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human PRKCE (NP\_005391) produced in HEK293T

cell

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 83.5 kDa

**Gene Name:** protein kinase C epsilon

Database Link: NP 005391

Entrez Gene 18754 MouseEntrez Gene 29340 RatEntrez Gene 609934 DogEntrez Gene 714533

MonkeyEntrez Gene 5581 Human

Q02156





Background:

Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and the second messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play a distinct role in cells. The protein encoded by this gene is one of the PKC family members. This kinase has been shown to be involved in many different cellular functions, such as neuron channel activation, apoptosis, cardioprotection from ischemia, heat shock response, as well as insulin exocytosis. Knockout studies in mice suggest that this kinase is important for lipopolysaccharide (LPS)-mediated signaling in activated macrophages and may also play a role in controlling anxiety-like behavior. [provided by RefSeq]

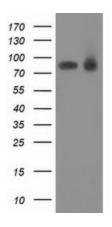
**Synonyms:** nPKC-epsilon; PKCE

**Protein Families:** Druggable Genome, Protein Kinase

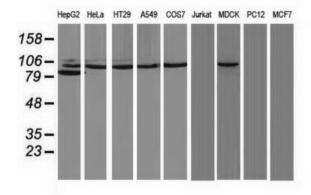
Protein Pathways: Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Tight junction, Type II

diabetes mellitus, Vascular smooth muscle contraction

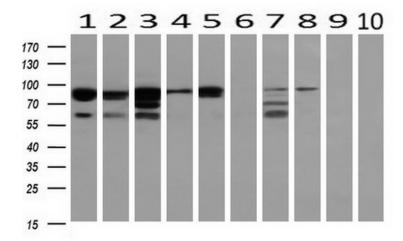
## **Product images:**



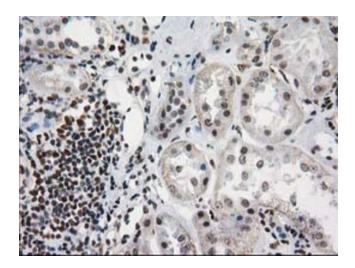
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PRKCE ([RC217702], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PRKCE. Positive lysates [LY401658] (100ug) and [LC401658] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (35ug) from 9 different cell lines by usin g anti-PRKCE monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

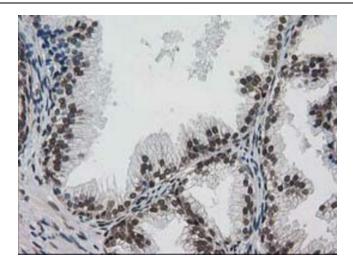


Western blot analysis of extracts (10ug) from 10 Human tissue by using anti-PRKCE monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon;10: spleen).

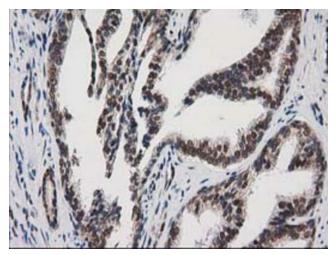


Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-PRKCE mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

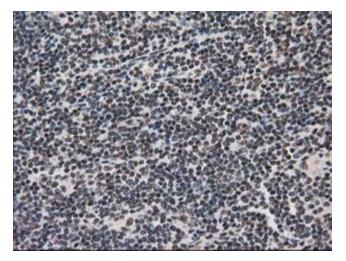




Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-PRKCE mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

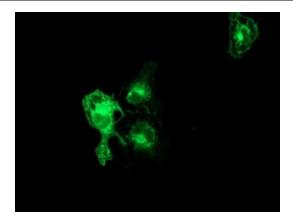


Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-PRKCE mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

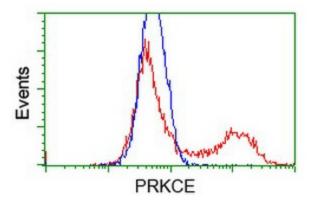


Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-PRKCE mouse monoclonal antibody. Heatinduced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

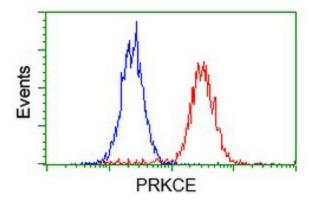




Anti-PRKCE mouse monoclonal antibody ([TA502417]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PRKCE ([RC217702]).

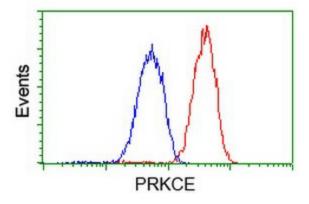


HEK293T cells transfected with either [RC217702] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-PRKCE antibody ([TA502417]), and then analyzed by flow cytometry.



Flow cytometric Analysis of Hela cells, using anti-PRKCE antibody ([TA502417]), (Red), compared to a nonspecific negative control antibody, (Blue).





Flow cytometric Analysis of Jurkat cells, using anti-PRKCE antibody ([TA502417]), (Red), compared to a nonspecific negative control antibody, (Blue).