

**DATASHEET**

Version: 2016-08-17

**PKC $\eta$  Antibody, pAb, Rabbit****Cat. No.:** A00906-40**Size:** 40  $\mu$ g**Synonyms:** Rabbit anti PKC eta;**Description:**

Protein kinase C (PKC, EC 2.7.11.13) is a cyclic nucleotide-independent enzyme that phosphorylates serine and threonine residues in many target proteins. The PKC family has been divided into three groups with differing enzymes cofactor requirements. The first is conventional (c) PKC isoforms (comprising  $\alpha$ ,  $\beta$ I (also known as  $\beta$ 1),  $\beta$ II (also known as  $\beta$ 2) and  $\gamma$ ), that require diacylglycerol (DAG),  $\text{Ca}^{2+}$ , and phospholipid for activation. The second is novel (n)PKC isoforms (comprising  $\delta$ ,  $\epsilon$ ,  $\eta$  (also known as PKC-L),  $\theta$  and  $\mu$  (the mouse homolog of human PKC $\mu$ , known as PKD)) that require DAG but not  $\text{Ca}^{2+}$  for activation. The third is atypical (a)PKC isoforms, namely  $\zeta$ ,  $\iota$  and  $\lambda$  (mouse homolog of human PKC  $\iota$ ) that require neither  $\text{Ca}^{2+}$  nor DAG for activation. A new PKC member has recently been discovered and is referred to as PKCv.

PKC family members phosphorylate a wide variety of protein targets and are known to be involved in many 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.

PKC $\eta$  (PKC eta) that is endogenously expressed or overexpressed is found to associate with cyclin E/cdk2/p21 complex in keratinocytes of mice and humans. Defects in PRKCH may be a cause of susceptibility to ischemic stroke, known as cerebrovascular accident or cerebral infarction. A stroke is an acute neurologic event that leads to the death of brain neural tissue causing the loss of motor, sensory and/or cognitive function.

GenScript **Rabbit Anti-PKC $\eta$  Polyclonal Antibody** is developed in rabbit using a KLH-coupled synthetic peptide) derived from human PKC $\eta$ .

**Immunogen:** Synthetic peptide (KLH-coupled) derived from human PKC $\eta$ .**Host:** Rabbit**Antigen Synonyms:** Human**Conjugation:** Unconjugated**Formulation:**

0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02% sodium azide.

**Ig Subclass:** Rabbit IgG**Specificity:** GenScript Rabbit Anti-PKC $\eta$  Polyclonal Antibody detects human PKC $\eta$  protein. No cross-reactivity with other PKC isoforms is detected.**Purification:** Immunoaffinity chromatography**Applications:**

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, detection method sensitivity, temperature, length of incubations, and many other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are starting recommendations for this product.

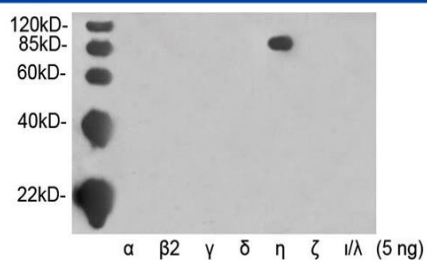
**ELISA:** 0.05-0.2  $\mu$ g/ml**Western blot:** 0.5-2  $\mu$ g/ml**Other applications:** user optimized**Species Reactivity:** Human**Reconstitution:**

Reconstitute the lyophilized powder with deionized water (or equivalent) to an final concentration of 0.5 mg/ml.

**Storage:**

The antibody is stable in lyophilized form if stored at  $-20^{\circ}\text{C}$  or below. The reconstituted antibody can be stored for 2-3 weeks at  $2-8^{\circ}\text{C}$ . For long term storage, aliquot and store at  $-20^{\circ}\text{C}$  or below. Avoid repeated freezing and thawing cycles.

**Example**



Western blot analysis of recombinant protein of PKC isoforms using Rabbit Anti-PKC $\eta$  Polyclonal Antibody (GenScript, A00906), demonstrating the isoform-specificity of this antibody.