



## PKC $\theta$ (Phospho-Ser676) Antibody

#11297

**Catalog Number:** 11297-1, 11297-2

**Amount:** 50 $\mu$ g/50 $\mu$ l, 100 $\mu$ g/100 $\mu$ l

**Swiss-Prot No. :** Q04759

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Storage/Stability:** Store at -20°C/1 year

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from human PKC $\theta$  around the phosphorylation site of serine 676 (R-L-S<sub>P</sub>-F-A).

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

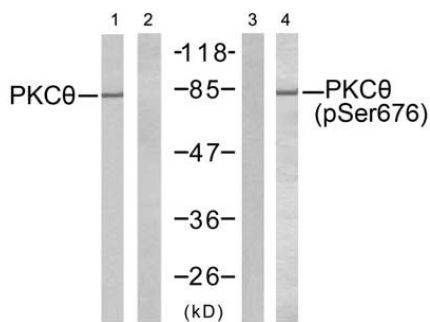
**Specificity/Sensitivity:** PKC $\theta$  (phospho-Ser676) antibody detects endogenous levels of PKC $\theta$  only when phosphorylated at serine 676.

**Reactivity:** Human, Mouse, Rat

**Applications:**

Predicted MW: 80 kd

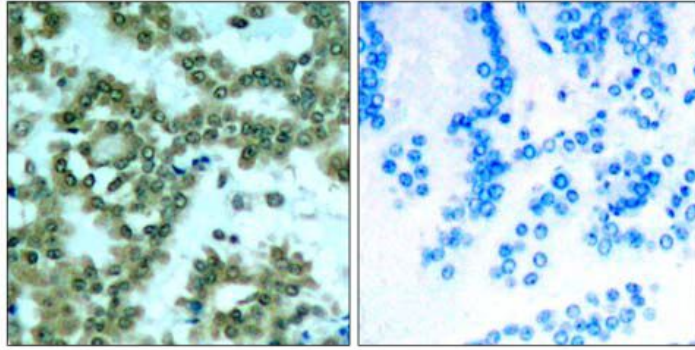
WB: 1:500~1:1000 IHC 1:50~1:200 IF: 1:100~1:200



PMA - - - +

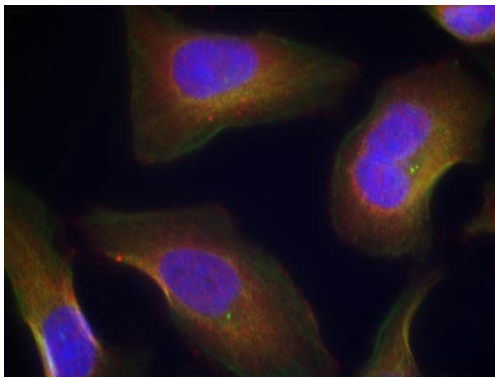
Peptide - + - -

Western blot analysis of extracts from Jurkat cells untreated or treated with PMA (1ng/ml, 5min), using PKC $\theta$  (Ab-676) antibody (#21289, Line 1 and 2) and PKC $\theta$  (phospho-Ser676) antibody (#11297, Line 3 and 4).



P-Peptide - +

Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue, using PKCθ (phospho-Ser676) antibody (#11297).



Immunofluorescence staining of methanol-fixed HeLa cells using PKCθ (phospho-Ser676) antibody (#11297,Red)

### Background :

This is a calcium-independent, phospholipid-dependent, serine- and threonine-specific enzyme. Essential for T-cell receptor (TCR)-mediated T-cell activation, but is dispensable during TCR-dependent thymocyte development. Links the TCR signaling complex to the activation of NF-kappa-B in mature T lymphocytes. Required for interleukin-2 (IL2) production. PKC is activated by diacylglycerol, which in turn phosphorylates a range of cellular proteins. PKC also serves as the receptor for phorbol esters, a class of tumor promoters

### References:

- Kristof Van Kolen, et al. (2006) FEBS J ; 273: 1843 - 1854.
- Martin Villalba, et al. (2002) J. Cell Biol ; 157: 253.
- Jie Zhang, et al. (2004) J. Biol. Chem ; 279: 22118 - 22123.
- Castro AF, et al. (1998) Am J Physiol Cell Physiol; 275: C113 - C119