

## PKA II $\alpha$ reg (P68) polyclonal antibody

Catalog: BCP01317

Host: Rabbit

Reactivity: Human, Mouse, Rat

### BackGround:

The second messenger cyclic AMP (cAMP) mediates diverse cellular responses to external signals such as proliferation, ion transport, regulation of metabolism and gene transcription by activation of the cAMP-dependent protein kinase (cAPK or PKA). Activation of PKA occurs when cAMP binds to the two regulatory subunits of the tetrameric PKA holoenzyme resulting in release of active catalytic subunits. Three catalytic (C) subunits have been identified, designated C $\alpha$ , C $\beta$  and C $\gamma$ , that each represent specific gene products. C $\alpha$  and C $\beta$  are closely related (93% amino acid sequence similarity), where as C $\gamma$  displays 83% and 79% similarity to C $\alpha$  and C $\beta$ , respectively. Activation of transcription upon elevation of cAMP levels results from translocation of PKA to the nucleus where it phosphorylates the transcription factor cAMP response element binding protein (CREB) on serine 133 which in turn leads to TFIIB binding to TATA-box-binding protein TBP1, thus linking phospho-CREB to the pol II transcription initiation complex.

### Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

### Molecular Weight:

~ 50 kDa

### Swiss-Prot:

P13861

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:500~1:1000

IHC: 1:50~1:200

IF: 1:50~1:200

### Storage&Stability:

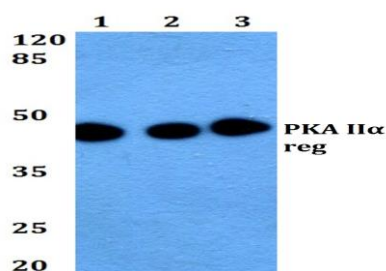
Store at 4 °C short term. Aliquot and store at -20 °C long

term. Avoid freeze-thaw cycles.

### Specificity:

PKA II $\alpha$  reg (P68) polyclonal antibody detects endogenous levels of PKA II $\alpha$  reg protein.

### DATA:



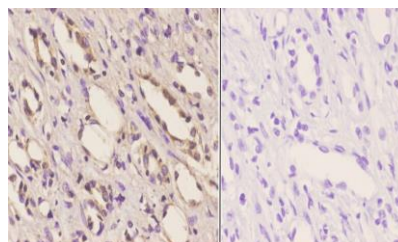
Western blot (WB) analysis of PKA II $\alpha$  reg (P68) pAb at 1:500 dilution

Lane1:PC3 whole cell lysate(10ug)

Lane2:U-87MG whole cell lysate(10ug)

Lane3:The Uterus tissue lysate of Rat(40ug)

Lane4:AML-12 whole cell lysate(40ug)



Immunohistochemistry (IHC) analyzes of PKA II $\alpha$  reg (P68) pAb in paraffin-embedded human kidney carcinoma tissue at 1:50. showing cytoplasmic and nucleus staining. Negative control (the right) Using PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG-biotin followed by avidin-peroxidase.

### Note:

For research use only, not for use in diagnostic procedure.