

# PKA $\alpha/\beta/\gamma$ (Phospho Thr197)

## Rabbit mAb (AR1968)

### Key Features

|               |  |
|---------------|--|
| Host Species: | Rabbit                                 |
| Reactivity:   | Human, Mouse, Rat                      |
| Applications: | WB, IHC, IF, IP, ELISA                 |
| Isotype:      | IgG, Kappa                             |
| MW:           | 41kDa (Calculated)<br>41kDa (Observed) |

### Recommended Dilution Ratios

|        |              |
|--------|--------------|
| IHC:   | 1:200-1000   |
| WB:    | 1:2000-10000 |
| IF:    | 1:200-1000   |
| ELISA: | 1:5000-20000 |
| IP:    | 1:50-200     |

### Storage

-15°C to -25°C/1 year (Do not lower than -25°C)

### Basic Information

|           |            |
|-----------|------------|
| Clonality | Monoclonal |
|-----------|------------|

### Immunogen Information

|             |            |
|-------------|------------|
| Specificity | Endogenous |
|-------------|------------|

### Target Information

|              |  |
|--------------|--|
| Gene name    | PRKACA/PRKACB  |
| Protein Name | cAMP-dependent protein kinase catalytic subunit alpha/beta |

| Organism | Gene ID      | UniProt ID                |
|----------|--------------|---------------------------|
| Human    | 5566; 5567   | P17612; P22694;<br>P22612 |
| Mouse    | 18747; 18749 |                           |
| Rat      | 293508       | P27791; P68182            |

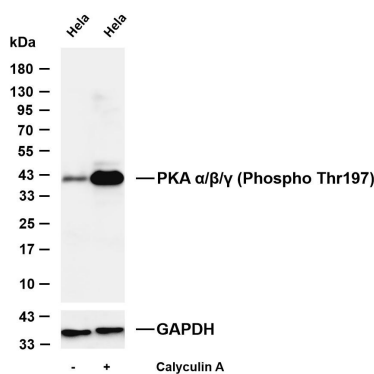
|                       |   |
|-----------------------|---|
| Cellular Localization | Cytoplasm. Cell membrane. Nucleus. Mitochondrion. Membrane; |
|-----------------------|---|

Lipid-anchor. Translocates into the nucleus (monomeric catalytic subunit). The inactive holoenzyme is found in the cytoplasm. Distributed throughout the cytoplasm in meiotically incompetent oocytes. Associated to mitochondrion as meiotic competence is acquired. Aggregates around the germinal vesicles (GV) at the immature GV stage oocytes (By similarity). Colocalizes with HSF1 in nuclear stress bodies (nSBs) upon heat shock (PubMed:21085490); [Isoform 2]: Cell projection, cilium, flagellum. Cytoplasmic vesicle, secretory vesicle, acrosome. Expressed in the midpiece region of the sperm flagellum (PubMed:10906071). Colocalizes with MROH2B and TCP11 on the acrosome and tail regions in round spermatids and spermatozoa regardless of the capacitation status of the sperm (By similarity)

Tissue specificity

Isoform 1 is ubiquitous. Isoform 2 is sperm-specific and is enriched in pachytene spermatocytes but is not detected in round spermatid

## Validation Data



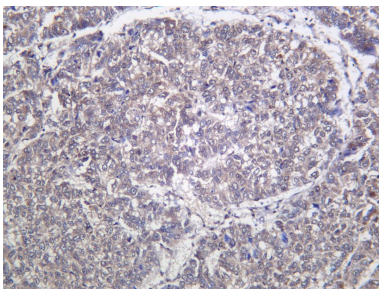
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PKA  $\alpha/\beta/\gamma$  (Phospho Thr197) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody.

Lane 1: HeLa

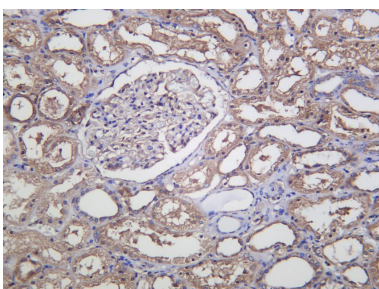
Lane 2: HeLa starved of serum overnight and then treated with 20% fetal bovine serum and Calyculin A (100 nM) for 15 minutes

Predicted band size: 41kDa

Observed band size: 41kDa



Human hepatocellular carcinoma was stained with anti-PKA  $\alpha/\beta/\gamma$  (Phospho Thr197) Rabbit antibody.



Human kidney was stained with anti-PKA  $\alpha/\beta/\gamma$  (Phospho Thr197) Rabbit antibody.

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