

## PIK3R4 polyclonal antibody

Catalog: AP1011

Host: Rabbit

Reactivity: Human, Mouse, Rat

### BackGround:

The serine/threonine PI3 kinase regulatory subunit 4 (PIK3R4, Vps15) is the mammalian homologue of the yeast vacuolar protein sorting 15. PIK3R4 regulates the kinase activity of PI3K class III and anchors the kinase to cellular membranes through myristoylation. Recruitment of PI3K class III to the site of early endosome fusion and docking is directly mediated by PIK3R4 binding to the small GTPase Rab5 through its HEAT and WD-40 domains. The PIK3R4/PI3K class III plays a role in late endosome function through PIK3R4 binding to the Rab7 GTPase. In addition to its role in trafficking, the PIK3R4/PI3K class III complex interacts with beclin-1 to play a role during several stages of autophagy. Autophagosome formation is stimulated when Atg14 complexes with PIK3R4, PI3K class III, and beclin-1. The UVRAG protein competes with Atg14 for beclin-1 binding, forming a mutually exclusive complex with PIK3R4, PI3K class III, and beclin-1 that regulates autophagosome maturation. Autophagosome maturation is impaired in the presence of the beclin-1-binding protein Rubicon. Co-expression of PIK3R4 is required for PI3K class III activation and regulation by both beclin-1/UVRAG and by nutrients. Overexpression of PIK3R4 protein has been associated with decreased survival in patients with ovarian tumors, while mutations of the corresponding PIK3R4 gene are associated with metastatic melanoma, suggesting that PIK3R4 functions in cancer.

### Product:

1 mg/ml in Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.3.

### Molecular Weight:

~ 153 kDa

### Swiss-Prot:

Q99570

### 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

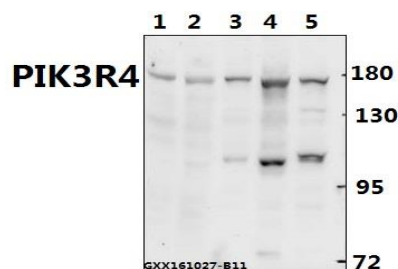
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

PIK3R4 polyclonal antibody detects endogenous levels of PIK3R4 protein.

### DATA:



Western blot (WB) analysis of PIK3R4 polyclonal antibody at 1:500 dilution

Lane1: The Testis tissue lysate of Mouse(40ug)

Lane2: The Testis tissue lysate of Rat(40ug)

Lane3: HCC827 whole cell lysate(40ug)

Lane4: L02 whole cell lysate(40ug)

Lane5: SK-OVCAR3 whole cell lysate(40ug)

### Note:

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

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