

Rabbit Anti-phospho-APE (Ser1417) antibody

SL6465R

Product Name:	phospho-APE (Ser1417)
Chinese Name:	磷酸化肌动蛋白Binding proteinGirdin抗体
Alias:	Girdin (phospho S1417); p-APE(Ser1417); Akt phosphorylation enhancer; APE; Coiled coil domain containing protein 88A; G alpha interacting vesicle associated protein; Girders of actin filament; GIV; HkRP1; Hook related protein 1; AKT iphosphorylation enhancer; Akt phosphorylation enhancer; Ccdc88a; GIV; GRDN; GRDN_HUMAN; HkRP1; Hook related protein 1; Hook-related protein 1; KIAA1212.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000Flow-Cyt=1ug/test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	206kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human APE around the phosphorylation site of Ser1417:QK(p-S)LT
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Plays a role as a key modulator of the AKT-mTOR signaling pathway controlling the tempo of the process of newborn neurons integration during adult neurogenesis,

including correct neuron positioning, dendritic development and synapse formation. Enhances phosphoinositide 3-kinase (PI3K)-dependent phosphorylation and kinase activity of AKT1/PKB, but does not possess kinase activity itself. Phosphorylation of AKT1/PKB thereby induces the phosphorylation of downstream effectors GSK3 and FOXO1/FKHR, and regulates DNA replication and cell proliferation (By similarity). Essential for the integrity of the actin cytoskeleton and for cell migration. Required for formation of actin stress fibers and lamellipodia. May be involved in membrane sorting in the early endosome.

Function:

Plays a role as a key modulator of the AKT-mTOR signaling pathway controlling the tempo of the process of newborn neurons integration during adult neurogenesis, including correct neuron positioning, dendritic development and synapse formation. Enhances phosphoinositide 3-kinase (PI3K)-dependent phosphorylation and kinase activity of AKT1/PKB, but does not possess kinase activity itself. Phosphorylation of AKT1/PKB thereby induces the phosphorylation of downstream effectors GSK3 and FOXO1/FKHR, and regulates DNA replication and cell proliferation. Essential for the integrity of the actin cytoskeleton and for cell migration. Required for formation of actin stress fibers and lamellipodia. May be involved in membrane sorting in the early endosome.

Subunit:

Interacts (via C-terminus) with DISC1; the interaction is direct. Interacts with AKT proteins; the interaction is inhibited in presence of DISC1. Homodimer. The non-phosphorylated form interacts with phosphatidylinositol 4-phosphate [PI(4)P] and weakly with phosphatidylinositol 3-phosphate [PI(3)P]. Interacts with microtubules. Interacts with actin through its C-terminal domain. Interacts with the C-terminus of AKT1/PKB.

Subcellular Location:

Membrane. Cell membrane. Cytoplasm, cytosol. Cytoplasmic vesicle. Cell projection, lamellipodium. Note=Localizes to the cell membrane through interaction with phosphoinositides.

Tissue Specificity:

Expressed ubiquitously.

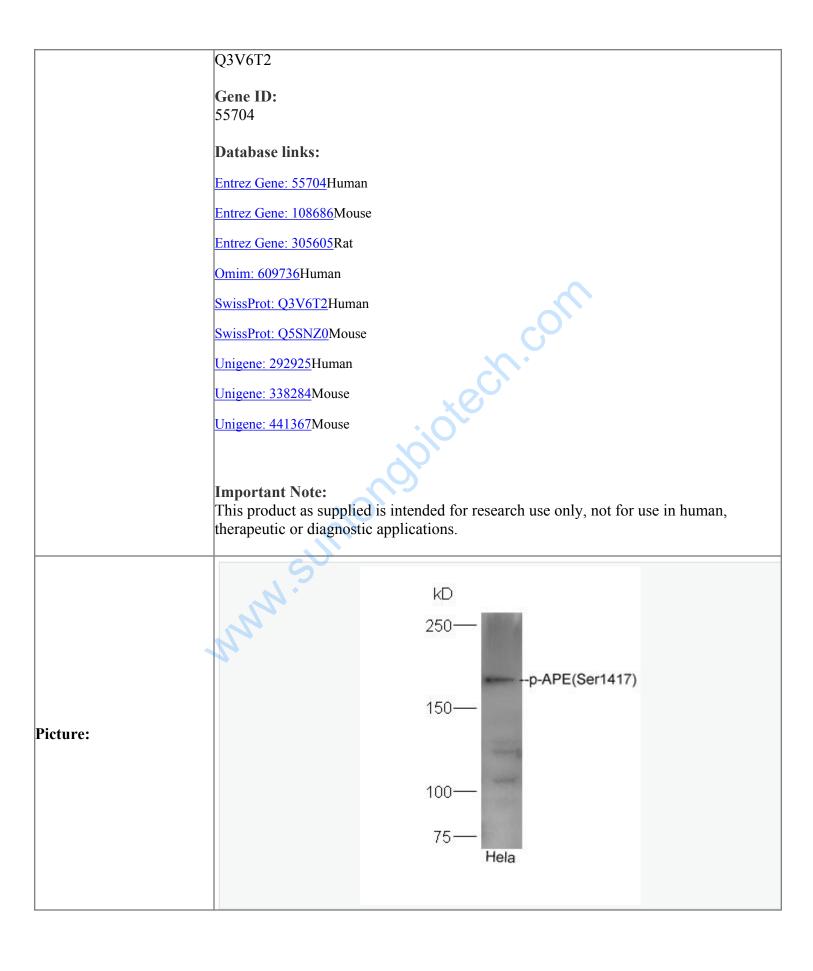
Post-translational modifications:

Phosphorylation is induced by epidermal growth factor (EGF) in a phosphoinositide 3-kinase (PI3K)-dependent manner. Phosphorylation by AKT1/PKB is necessary for the delocalization from the cell membrane and for cell migration.

Similarity:

Belongs to the CCDC88 family.

SWISS:



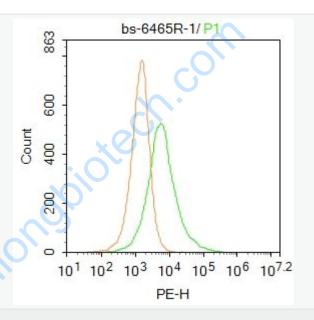
Sample: Hela Cell (Human) Lysate at 40 ug

Primary: Anti-phospho-APE(Ser1417) (SL6465R) at 1/300 dilution

Secondary: HRP conjugated Goat-Anti-rabbit IgG (SL6465R) at 1/5000 dilution

Predicted band size: 206 kD

Observed band size: 206 kD



Blank control: Hela.

Primary Antibody (green line): Rabbit Anti-phospho-APE(Ser1417) antibody

(SL6465R)

Dilution: 1µg/10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody: Goat anti-rabbit IgG-PE

Dilution: 1µg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then

permeabilized with 20% PBST for 20 min atroom temperature. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

