

Rabbit Anti-Girdin/Cy5 Conjugated antibody

SL5150R-Cy5

Product Name	Anti-Girdin/Cy5
Chinese Name	Cy5 标记的肌动蛋白 Binding proteinGirdin 抗体
Alias	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; GIV.
Research Area	Tumour immunology Neurobiology Cell adhesion molecule Cytoskeleton
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	(predicted:Human,Mouse,Rat,Dog,Horse,Rabbit) ICC/IF=1:50-200,IF=1:100-500
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	206kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human APE/Girdin
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	background: This gene encodes a member of the Girdin family of coiled-coil domain containing proteins. The encoded protein is an actin-binding protein that is activated by the serine/threonine kinase Akt and plays a role in cytoskeleton remodeling and cell migration. The encoded protein also enhances Akt

signaling by mediating phosphoinositide 3-kinase (PI3K)-dependent activation of Akt by growth factor receptor tyrosine kinases and G protein-coupled receptors. Increased expression of this gene and phosphorylation of the encoded protein may play a role in cancer metastasis. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Dec 2011]

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.

Database links:

[Entrez Gene: 55704](#) Human

[Entrez Gene: 108686](#) Mouse

[Entrez Gene: 305605](#) Rat

[Omim: 609736](#) Human

[SwissProt: Q3V6T2](#) Human

[SwissProt: Q5SNZ0](#) Mouse

[Unigene: 292925](#) Human

[Unigene: 338284](#) Mouse

[Unigene: 441367](#) Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Girdin 蛋白是一种新发现的肌动蛋白 Binding protein,能与 Akt 相互作用,在促进细胞的迁移及血管生成等方面具有重要作用,也是 Tumour 发生、发展、Tumour 细胞运动等病理过程中的重要步骤和关键环节.