

Phospho-ARHGAP35(Y1105) antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3903a

Product Information

Application	WB, E
Primary Accession	<u>Q9NRY4</u>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB46920
Calculated MW	170514

Additional Information

Gene ID	2909
Other Names	Rho GTPase-activating protein 35, Glucocorticoid receptor DNA-binding factor 1, Glucocorticoid receptor repression factor 1, GRF-1, Rho GAP p190A, p190-A, ARHGAP35, GRF1, GRLF1, KIAA1722
Target/Specificity	This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1090-1135 amino acids from human.
Dilution	WB~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Phospho-ARHGAP35(Y1105) antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ARHGAP35 (<u>HGNC:4591</u>)
Function	Rho GTPase-activating protein (GAP) (PubMed: <u>19673492</u> , PubMed: <u>28894085</u>). Binds several acidic phospholipids which inhibits the Rho GAP activity to promote the Rac GAP activity (PubMed: <u>19673492</u>). This binding is inhibited by phosphorylation by PRKCA (PubMed: <u>19673492</u>). Involved in cell differentiation as well as cell adhesion and migration, plays an important role

	in retinal tissue morphogenesis, neural tube fusion, midline fusion of the cerebral hemispheres and mammary gland branching morphogenesis (By similarity). Transduces signals from p21-ras to the nucleus, acting via the ras GTPase-activating protein (GAP) (By similarity). Transduces SRC- dependent signals from cell-surface adhesion molecules, such as laminin, to promote neurite outgrowth. Regulates axon outgrowth, guidance and fasciculation (By similarity). Modulates Rho GTPase- dependent F-actin polymerization, organization and assembly, is involved in polarized cell migration and in the positive regulation of ciliogenesis and cilia elongation (By similarity). During mammary gland development, is required in both the epithelial and stromal compartments for ductal outgrowth (By similarity). Represses transcription of the glucocorticoid receptor by binding to the cis- acting regulatory sequence 5'-GAGAAAAGAAACTGGAGAAACTC-3'; this function is however unclear and would need additional experimental evidences (PubMed: <u>1894621</u>).
Cellular Location	Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250 UniProtKB:Q91YM2}. Cytoplasm {ECO:0000250 UniProtKB:Q91YM2}. Nucleus Cell membrane {ECO:0000250 UniProtKB:Q91YM2}. Note=In response to integrins and SDC4 and upon phosphorylation by PKC, relocalizes from the cytoplasm to regions of plasma membrane ruffling where it colocalizes with polymerized actin. {ECO:0000250 UniProtKB:Q91YM2}
Tissue Location	Detected in neutrophils (at protein level).

Background

Represses transcription of the glucocorticoid receptor by binding to the cis-acting regulatory sequence 5'-GAGAAAAGAAACTGGAGAAACTC-3'. May participate in the regulation of retinal development and degeneration. May transduce signals from p21-ras to the nucleus, acting via the ras GTPase-activating protein (GAP). May also act as a tumor suppressor.

References

Nagase T.,et al.DNA Res. 7:347-355(2000). Nakajima D.,et al.DNA Res. 9:99-106(2002). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Tikoo A.,et al.Gene 257:23-31(2000). LeClerc S.,et al.J. Biol. Chem. 266:17333-17340(1991).

Images



Western blot analysis of lysates from A431 cell line, untreated or treated with EGF, 100ng/ml, using Phospho-HUMAN-ARHGAP35(Y1105)(Cat. #AP3903a)(upper) or Beta-actin (lower). Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.