

Lfc (phospho Ser886) Polyclonal Antibody

Catalog No: YP0398

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: Lfc

Fields: >>Tight junction;>>Pathogenic Escherichia coli infection;>>Shigellosis;>>Fluid

shear stress and atherosclerosis

Gene Name: ARHGEF2

Protein Name: Rho guanine nucleotide exchange factor 2

Q92974

Q60875

Human Gene Id: 9181

Human Swiss Prot

No:

Mouse Gene Id: 16800

Mouse Swiss Prot

No:

Rat Gene Id: 310635

Rat Swiss Prot No: Q5FVC2

Immunogen : The antiserum was produced against synthesized peptide derived from human

Rho/Rac Guanine Nucleotide Exchange Factor 2 around the phosphorylation site

of Ser885. AA range:851-900

Specificity: Phospho-Lfc (S885) Polyclonal Antibody detects endogenous levels of Lfc

protein only when phosphorylated at S885.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, lgG



Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 111kD

Cell Pathway: Regulation of Actin Dynamics; AMPK

Background: Rho GTPases play a fundamental role in numerous cellular processes that are

initiated by extracellular stimuli that work through G protein coupled receptors. The encoded protein may form complex with G proteins and stimulate rhodependent signals. Alternatively spliced transcript variants encoding different

isoforms have been identified.[provided by RefSeq, Jun 2009],

Function: domain: The DH (DBL-homology) domain interacts with and promotes loading of

GTP on RhoA.,domain:The PH (pleckstrin-homology) domain is involved in microtubule binding and targeting to tight junctions.,function:Activates Rho-GTPases by promoting the exchange of GDP for GTP. May be involved in epithelial barrier permeability, cell motility and polarization, dendritic spine morphology, antigen presentation, leukemic cell differentiation, cell cycle regulation, and cancer. Binds Rac-GTPases, but does not seem to promote nucleotide exchange activity toward Rac-GTPases, which was uniquely reported in PubMed:9857026. May stimulate instead the cortical activity of Rac. Inactive

toward CDC42, TC10, or Ras-GTPases., online information: ARHGEF2

entry,PTM:Phosphorylation of Ser-886 by PAK1 induces binding to protein 14-3-3 zeta, promoting its relocation to microtubules and the inhibition of its activit

Subcellular Location:

 $\label{eq:cytoplasm} Cytoplasm, cytoskeleton . Cytoplasm . Cell junction, tight junction . Golgi apparatus . Cytoplasm, cytoskeleton, spindle . Cell projection, ruffle membrane .$

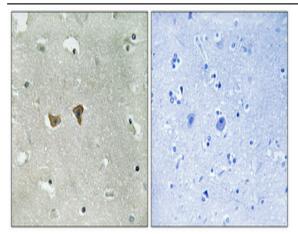
Cytoplasmic vesicle. Localizes to the tips of cortical microtubules of the mitotic spindle during cell division, and is further released upon microtubule

depolymerization (PubMed:15827085). Recruited into membrane ruffles induced by S.flexneri at tight junctions of polarized epithelial cells (PubMed:19043560). Colocalized with NOD2 and RIPK2 in vesicles and with the cytoskeleton

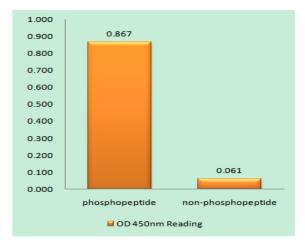
(PubMed:21887730)...

Expression: Brain, Cervix carcinoma, Epithelium, Platelet,

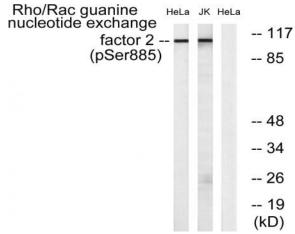
Products Images



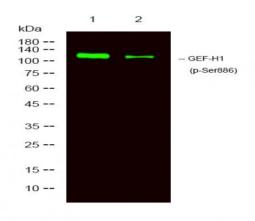
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Rho/Rac Guanine Nucleotide Exchange Factor 2 (Phospho-Ser885) Antibody



Western blot analysis of lysates from HeLa cells treated with TSA 400nM 24H and Jurkat cells treated with forskolin 40nM 30', using Rho/Rac Guanine Nucleotide Exchange Factor 2 (Phospho-Ser885) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of 1 A431 treated with LPS, 2 A431,using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000