Lfc (Phospho Ser886) Rabbit pAb

CatalogNo: YP0398 Orthogonal Validated

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,ELISA

MW
- 111kD (Observed)

Isotype
- IgG

Recommended Dilution Ratios

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

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality	Polyclonal

Immunogen Information

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.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):RRsLP

Target Information

Gene name ARHGEF2

Protein Name Rho guanine nucleotide exchange factor 2

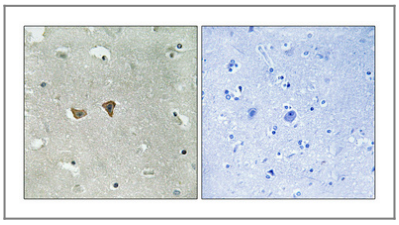
Organism	Gene ID	UniProt ID
Human	9181;	Q92974;
Mouse	16800;	Q60875;
Rat	310635;	Q5FVC2;

Cellular Localization 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). .

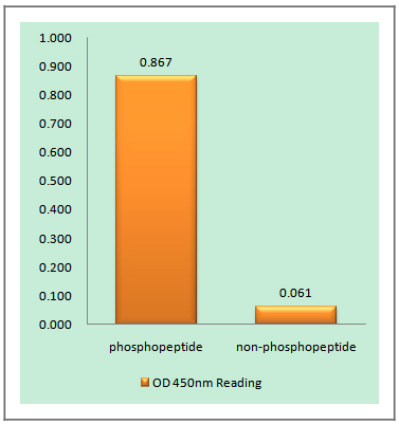
Tissue specificity Brain,Cervix carcinoma,Epithelium,Platelet,

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 activity. Phosphorylated by STK6 and CDK1 during mitosis, which negatively regulates its activity. Phosphorylation by MAPK1 or MAPK3 increases nucleotide exchange activity. Phosphorylation by PAK4 releases GEF-H1 from the microtubules.,sequence Caution:Sequence differs at a large extent from the sequence shown in the paper.,similarity:Contains 1 DH (DBL-homology) domain.,similarity:Contains 1 PH domain.,similarity:Contains 1 phorbol-ester/DAG-type zinc finger.,subcellular location:Localizes to the tips of cortical microtubules of the mitotic spindle during cell division, and is further released upon microtubule depolymerization.,subunit:Interacts with 14-3-3 zeta; when phosphorylated at Ser-886. Interacts with the kinases PAK4, AURKA/STK6 and MAPK1. Interacts with RHOA and RAC1.,

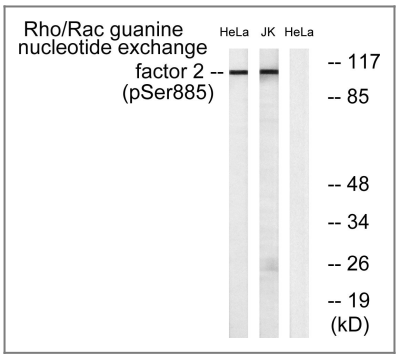
Validation Data



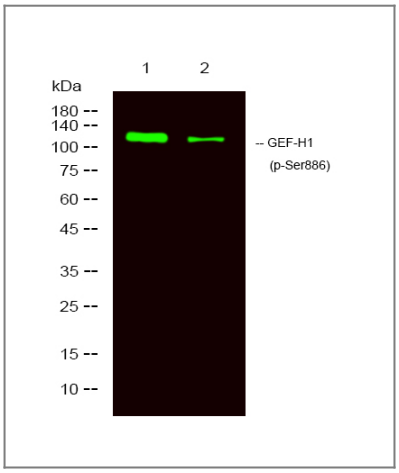
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



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

Contact information

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Please scan the QR code to access additional product information:
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