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Bi-Phospho-LLGL1/2(S653/S649) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2198a

Product Information

Application	WB, E
Primary Accession	Q6P1M3
Other Accession	Q3TJ91, Q8K4K5, Q80Y17, Q15334, Q8MKF0
Reactivity	Human
Predicted	Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	113448

Additional Information

Gene ID	3993
Other Names	Lethal(2) giant larvae protein homolog 2, HGL, LLGL2
Target/Specificity	This LLGL1/2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S645/S649 of human LLGL1/2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	Bi-Phospho-LLGL1/2(S653/S649) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LLGL2
Function	Part of a complex with GPSM2/LGN, PRKCI/aPKC and PARD6B/Par- 6, which may ensure the correct organization and orientation of bipolar spindles for normal cell division. This complex plays roles in the initial phase of the establishment of epithelial cell polarity.

Cellular Location	Cytoplasm. Note=Localized in the perinuclear structure and faintly at the cell-cell contacts sites in the interphase. Localized at the cell periphery during metaphase. Cortical localization in mitotic cells. Found in the lateral region of polarized epithelial cells

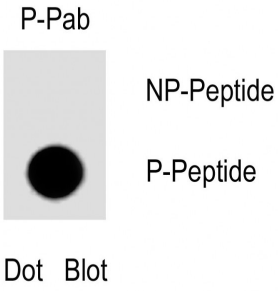
Background

LLGL1 is a protein that is similar to a tumor suppressor in Drosophila. The protein is part of a cytoskeletal network and is associated with nonmuscle myosin II heavy chain and a kinase that specifically phosphorylates this protein at serine residues. The gene for LLGL1 is located within the Smith-Magenis syndrome region on chromosome 17. LLGL2 is a protein similar to lethal (2) giant larvae of Drosophila. In fly, the protein's ability to localize cell fate determinants is regulated by the atypical protein kinase C (aPKC). In human, this protein interacts with aPKC-containing complexes and is cortically localized in mitotic cells.

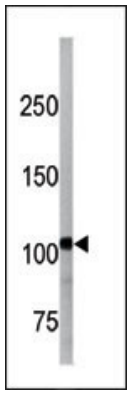
References

Schimanski, C.C., et al., Oncogene 24(19):3100-3109 (2005). Grifoni, D., et al., Oncogene 23(53):8688-8694 (2004). Katoh, M., et al., Int. J. Oncol. 24(3):737-742 (2004). Bi, W., et al., Genome Res. 12(5):713-728 (2002). Ludford-Menting, M.J., et al., J. Biol. Chem. 277(6):4477-4484 (2002). Yasumi, M., et al., J. Biol. Chem. 280(8):6761-6765 (2005).

Images



Dot blot analysis of Phospho-LLGL1/2(S655/659) /(S645/S649) Phospho-specific Pab (Cat. AP2198a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antobodies working concentration was 0. 5ug per ml



The anti-Phospho-LLGL1/2 Pab (Cat. #AP2198a) is used for detection against A2058 cell line lysate. Phospho-LLGL1/2(arrow) was detected using the purified Pab.

Citations

- A polybasic domain in aPKC mediates Par6-dependent control of membrane targeting and kinase activity
- Adherens junction remodelling during mitotic rounding of pseudostratified epithelial cells
- Myosin IIB deficiency in embryonic fibroblasts affects regulators and core members of the par polarity complex.

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