

KD-Validated Anti-PAFAH1B1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1262

Product Information

Application	WB, FC, ICC
Primary Accession	P43034
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB 2825
Calculated MW	46638
Gene Name	PAFAH1B1
Aliases	PAFAH1B1; Platelet Activating Factor Acetylhydrolase 1b Regulatory Subunit 1; LIS1; PAFAH; MDCR; MDS; Platelet-Activating Factor Acetylhydrolase 1b, Regulatory Subunit 1 (45kDa); Platelet-Activating Factor Acetylhydrolase IB Subunit Beta; NudF; Platelet-Activating Factor Acetylhydrolase, Isoform Ib, Alpha Subunit (45kD); Platelet-Activating Factor Acetylhydrolase, Isoform Ib, Alpha Subunit 45kDa; Platelet-Activating Factor Acetylhydrolase, Isoform Ib, Subunit 1 (45kDa); Miller-Dieker Syndrome Chromosome Region; PAF Acetylhydrolase 45 KDa Subunit; Lissencephaly 1 Protein; Lissencephaly-1 Protein; PAF-AH 45 KDa Subunit; Lissencephaly-1; PAF-AH Alpha; PAFAH Alpha; PAFAHA; LIS-1; LIS2; NUDF
Immunogen	A synthesized peptide derived from human LIS1

Additional Information

Gene ID	5048
Other Names	Platelet-activating factor acetylhydrolase IB subunit beta {ECO:0000255 HAMAP-Rule:MF_03141, ECO:0000305}, Lissencephaly-1 protein {ECO:0000255 HAMAP-Rule:MF_03141}, LIS-1 {ECO:0000255 HAMAP-Rule:MF_03141}, PAF acetylhydrolase 45 kDa subunit {ECO:0000255 HAMAP-Rule:MF_03141}, PAF-AH 45 kDa subunit {ECO:0000255 HAMAP-Rule:MF_03141}, PAF-AH alpha {ECO:0000255 HAMAP-Rule:MF_03141}, PAFAH alpha {ECO:0000255 HAMAP-Rule:MF_03141}, LIS1

Protein Information

Name	LIS1
Function	Regulatory subunit (beta subunit) of the cytosolic type I platelet-activating factor (PAF) acetylhydrolase (PAF-AH (I)), an enzyme that catalyzes the hydrolyze of the acetyl group at the sn-2 position of PAF and its analogs and

participates in PAF inactivation. Regulates the PAF-AH (I) activity in a catalytic dimer composition- dependent manner (By similarity). Required for proper activation of Rho GTPases and actin polymerization at the leading edge of locomoting cerebellar neurons and postmigratory hippocampal neurons in response to calcium influx triggered via NMDA receptors (By similarity). Positively regulates the activity of the minus-end directed microtubule motor protein dynein. May enhance dynein-mediated microtubule sliding by targeting dynein to the microtubule plus end. Required for several dynein- and microtubule-dependent processes such as the maintenance of Golgi integrity, the peripheral transport of microtubule fragments and the coupling of the nucleus and centrosome. Required during brain development for the proliferation of neuronal precursors and the migration of newly formed neurons from the ventricular/subventricular zone toward the cortical plate. Neuronal migration involves a process called nucleokinesis, whereby migrating cells extend an anterior process into which the nucleus subsequently translocates. During nucleokinesis dynein at the nuclear surface may translocate the nucleus towards the centrosome by exerting force on centrosomal microtubules. May also play a role in other forms of cell locomotion including the migration of fibroblasts during wound healing. Required for dynein recruitment to microtubule plus ends and BICD2-bound cargos (PubMed:[22956769](#)). May modulate the Reelin pathway through interaction of the PAF-AH (I) catalytic dimer with VLDLR (By similarity).

Cellular Location

Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle {ECO:0000255|HAMAP-Rule:MF_03141}. Nucleus membrane {ECO:0000255|HAMAP- Rule:MF_03141}. Note=Redistributes to axons during neuronal development. Also localizes to the microtubules of the manchette in elongating spermatids and to the meiotic spindle in spermatocytes (By similarity). Localizes to the plus end of microtubules and to the centrosome. May localize to the nuclear membrane.

Tissue Location

Fairly ubiquitous expression in both the frontal and occipital areas of the brain

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