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LARG Rabbit pAb

Catalog # AP99693

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9NZN5
Other Accession	Q9NZN5
Predicted	Rat, Pig, Human, Mouse, Rabbit, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	173232
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human LARG
Epitope Specificity	515-615/1544
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 DH (DBL-homology) domain.Contains 1 PDZ (DHR) domain.Contains 1 PH domain.Contains 1 RGSL (RGS-like) domain.
SUBUNIT	Interacts with GNA12 and GNA13, probably through the RGS-like domain, with RHOA, PLXNB1 and PLXNB2, and through its PDZ domain with IGF1R beta subunit.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
DISEASE	Note=A chromosomal aberration involving ARHGEF12 may be a cause of acute leukemia. Translocation t(11;11)(q23;23) with MLL.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 a complex with G proteins and stimulate Rho-dependent signals. This protein is observed to form myeloid/lymphoid fusion partner in acute myeloid leukemia (from EntrezGene). LARG has also been implicated in linking heterotrimeric G proteins to microtubule organisation in regulation of cell polarity.

Additional Information

Gene ID	23365
Other Names	ARHGC_HUMAN; ARHGEF12; Leukemia-associated RhoGEF; KIAA0382; LARG; ARHGC_MOUSE; Rho guanine nucleotide exchange factor 12; Rho guanine nucleotide exchange factor (GEF) 12
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ARHGEF12 (HGNC:14193)
Function	Acts as guanine nucleotide exchange factor (GEF) for RhoA GTPase and may act as GTPase-activating protein (GAP) for GNA12 and GNA13 (PubMed:11094164). May play a role in the regulation of RhoA GTPase by guanine nucleotide-binding alpha-12 (GNA12) and alpha-13 (GNA13) (PubMed:11094164). Promotes endothelial cell and actin stress fiber reorientation in response to mechanotransduction (By similarity).
Cellular Location	Cytoplasm. Membrane. Note=Translocated to the membrane upon stimulation.
Tissue Location	Ubiquitously expressed. Isoform 2 is found in jejunum and testis

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.