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KD-Validated Anti-APPL1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1375

Product Information

Application	WB, FC, ICC
Primary Accession	Q9UKG1
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB1570
Calculated MW	79663
Gene Name	APPL1
Aliases	APPL1; Adaptor Protein, Phosphotyrosine Interacting With PH Domain And Leucine Zipper 1; APPL; DCC-Interacting Protein 13-Alpha; Adaptor Protein, Phosphotyrosine Interaction, PH Domain And Leucine Zipper Containing 1; Adapter Protein Containing PH Domain, PTB Domain And Leucine Zipper Motif 1; Dip13-Alpha; Adaptor Protein Containing PH Domain, PTB Domain And Leucine Zipper Motif 13; Signaling Adaptor Protein DIP13alpha; AKT2 Interactor; DIP13alpha; KIAA1428; MODY14; DIP13A
Immunogen	A synthesized peptide derived from human APPL

Additional Information

Gene ID	26060
Other Names	DCC-interacting protein 13-alpha, Dip13-alpha, Adapter protein containing PH domain, PTB domain and leucine zipper motif 1, APPL1 (HGNC:24035)

Protein Information

Name	APPL1 (HGNC:24035)
Function	Multifunctional adapter protein that binds to various membrane receptors, nuclear factors and signaling proteins to regulate many processes, such as cell proliferation, immune response, endosomal trafficking and cell metabolism (PubMed:10490823, PubMed:15016378, PubMed:19661063, PubMed:26073777, PubMed:26583432). Regulates signaling pathway leading to cell proliferation through interaction with RAB5A and subunits of the NuRD/MeCP1 complex (PubMed:15016378). Functions as a positive regulator of innate immune response via activation of AKT1 signaling pathway by forming a complex with APPL1 and PIK3R1 (By similarity). Inhibits Fc-gamma receptor-mediated phagocytosis through PI3K/Akt signaling in macrophages (By similarity). Regulates TLR4 signaling in activated macrophages (By similarity). Involved in trafficking of the TGFBR1 from the endosomes to the nucleus via microtubules in a TRAF6-dependent manner (PubMed:26583432). Plays a role in cell metabolism by regulating adiponecting and insulin

	signaling pathways (PubMed:19661063, PubMed:24879834, PubMed:26073777). Required for fibroblast migration through HGF cell signaling (By similarity). Positive regulator of beta-catenin/TCF-dependent transcription through direct interaction with RUVBL2/reptin resulting in the relief of RUVBL2-mediated repression of beta-catenin/TCF target genes by modulating the interactions within the beta-catenin-reptin- HDAC complex (PubMed:19433865).
Cellular Location	Early endosome membrane; Peripheral membrane protein. Nucleus. Cytoplasm. Endosome. Cell projection, ruffle {ECO:0000250|UniProtKB:Q8K3H0}. Cytoplasmic vesicle, phagosome {ECO:0000250|UniProtKB:Q8K3H0}. Note=Early endosomal membrane-bound and nuclear. Translocated into the nucleus upon release from endosomal membranes following internalization of EGF
Tissue Location	High levels in heart, ovary, pancreas and skeletal muscle.

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