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KIAA1609 Rabbit pAb

Catalog # AP99358

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q6P9B6
Other Accession	Q6P9B6
Reactivity	Mouse
Predicted	Rat, Pig, Human, Rabbit, Zebrafish, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50994
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human KIAA1609
Epitope Specificity	261-360/456
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 TLD domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	KIAA1609 is a 456 amino acid protein that contains one TLD domain and is encoded by a gene that maps to human chromosome 16q24.1. Chromosome 16 encodes over 900 genes in approximately 90 million base pairs, makes up nearly 3% of human cellular DNA and is associated with a variety of genetic disorders. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, though through the CREBBP gene which encodes a critical CREB binding protein. Signs of Rubinstein-Taybi include mental retardation and predisposition to tumor growth and white blood cell neoplasias. Crohn's disease is a gastrointestinal inflammatory condition associated with chromosome 16 through the NOD2 gene. An association with systemic lupus erythematosis and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier.

Additional Information

Gene ID	57707
Other Names	EAK7; KIAA1609; TLDC1; mEAK-7; MEAK7_HUMAN; MEAK7; MTOR associated protein, eak-7 homolog; TBC/LysM-associated domain-containing protein 1; TLD domain-containing protein 1; MTOR associated protein MEAK7; TBC/LysM-associated domain containing 1; TLD domain containing 1; mammalian EAK-7

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	MEAK7 (HGNC:29325)
Synonyms	KIAA1609, TLDC1
Function	Activates an alternative mTOR signaling pathway through RPS6KB2 activation and EIF4EBP1 repression to regulate cell proliferation and migration (PubMed:29750193). Recruits MTOR at the lysosome, essential for MTOR signaling at the lysosome (PubMed:29750193). Binds to the vacuolar-type ATPase (V-ATPase) complex, triggering a conformational change and is likely to regulate its activity (PubMed:35672408, PubMed:35994636). No effect on V-ATPase activity was observed in vitro in one study although it was suggested that it may have inhibitory activity in vivo (PubMed:35672408). However, another study showed that it can promote V-ATPase activity (PubMed:38593795). Protects neuronal cells against oxidative stress (By similarity).
Cellular Location	Membrane. Cytoplasm. Lysosome

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