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Rabbit Anti-Acylglycerol Kinase antibody

SL6276R

Product Name:	Acylglycerol Kinase
Chinese Name:	甘油酯激酶Mitochondrion抗体
Alias:	mitochondrial; Acylglycerol kinase; Acylglycerol kinase mitochondrial; agk; AGK_HUMAN; hAGK; HsMuLK; MuLK; Multi substrate lipid kinase; Multi-substrate lipid kinase; Multiple substrate lipid kinase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	47kDa
Cellular localization:	cytoplasmicThe cell membraneMitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Acylglycerol Kinase:335-422/422
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	The protein encoded by this gene is a mitochondrial membrane protein involved in lipid and glycerolipid metabolism. The encoded protein is a lipid kinase that catalyzes the formation of phosphatidic and lysophosphatidic acids. Defects in this gene have been associated with mitochondrial DNA depletion syndrome 10.

Function:
Lipid kinase that can phosphorylate both monoacylglycerol and diacylglycerol to form lysophosphatidic acid (LPA) and phosphatidic acid (PA), respectively. Does not phosphorylate sphingosine. Overexpression increases the formation and secretion of LPA, resulting in transactivation of EGFR and activation of the downstream MAPK signaling pathway, leading to increased cell growth.

Subcellular Location:
Mitochondrion membrane.

Tissue Specificity:
Highly expressed in muscle, heart, kidney and brain.

DISEASE:
Defects in AGK are the cause of mitochondrial DNA depletion syndrome type 10 (MTDPS10) [MIM:212350]. An autosomal recessive mitochondrial disorder characterized by congenital cataracts, hypertrophic cardiomyopathy, skeletal myopathy, exercise intolerance, and lactic acidosis. Mental development is normal, but affected individuals may die early from cardiomyopathy.
Defects in AGK are the cause of cataract, congenital, autosomal recessive type 5 (CATC5) [MIM:614691]. CATC5 consists of an opacification of the crystalline lens of the eye becoming evident at birth. It frequently results in visual impairment or blindness. Opacities vary in morphology, are often confined to a portion of the lens, and may be static or progressive. In general, the more posteriorly located and dense an opacity, the greater the impact on visual function.

Similarity:
Contains 1 DAGKc domain.

SWISS:
Q53H12

Gene ID:
55750

Database links:

Entrez Gene: 55750Human

Entrez Gene: 69923Mouse

Omim: 610345Human

SwissProt: Q53H12Human

SwissProt: Q9ESW4Mouse

	Unigene: 699361Human Unigene: 32840Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.