



# AGK Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-04998
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	AGK MULK
<b>Protein Name</b>	Acylglycerol kinase, mitochondrial (hAGK) (EC 2.7.1.107) (EC 2.7.1.94) (Multiple substrate lipid kinase) (HsMuLK) (MuLK) (Multi-substrate lipid kinase)
<b>Immunogen</b>	Synthesized peptide derived from human protein . at AA range: 330-410
<b>Specificity</b>	AGK Polyclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000 ELISA 1:5000-20000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	46kD
<b>Cell Pathway</b>	Mitochondrion inner membrane ; Peripheral membrane protein . Mitochondrion intermembrane space . Localizes in the mitochondrion intermembrane space, where it associates with the inner membrane (PubMed:28712724). It is unclear whether the N-terminal hydrophobic region forms a transmembrane region or associates with the membrane without crossing it (PubMed:28712724, PubMed:28712726). .
<b>Tissue Specificity</b>	Highly expressed in muscle, heart, kidney and brain.
<b>Function</b>	catalytic activity:ATP + 1,2-diacylglycerol = ADP + 1,2-diacyl-sn-glycerol 3-phosphate.,catalytic activity:ATP + acylglycerol = ADP + acyl-sn-glycerol 3-phosphate.,cofactor:Magnesium.,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.,miscellaneous:Overexpressed in prostate cancer, suggesting that it may play a role in initiation and progression of prostate cancer, processes in which LPA plays key roles.,pathway:Lipid metabolism; glycerolipid metabolism.,similarity:Contains 1 DAGKc domain.,tissue



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#### Background

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. [provided by RefSeq, Feb 2012],

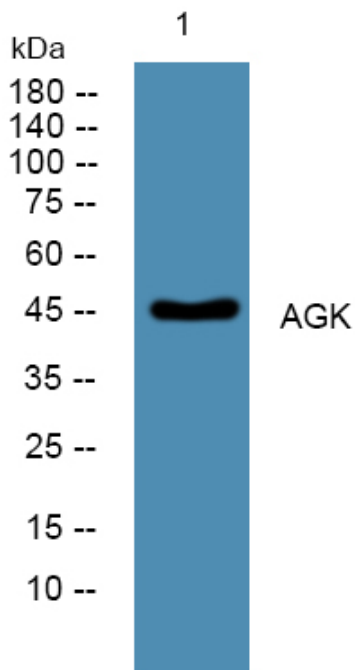
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western blot analysis of lysates from SH-SY5Y cells, primary antibody was diluted at 1:1000, 4° over night