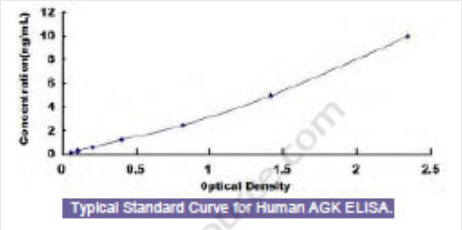
Acylglycerol Kinase (AGK) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Acylglycerol Kinase (AGK), ELISA Kit
Full Product Name	Human Acylglycerol Kinase (AGK) ELISA Kit
Product Gene Name	AGK elisa kit
Product Synonym Names	MULK; Multiple Substrate Lipid Kinase
Species Reactivity	Human
Assay Type	Sandwich
Samples	Tissue homogenates and other biological fluids.
Detection Range	0.156-10ng/mL
Sensitivity	0.081ng/mL
Specificity	This assay has high sensitivity and excellent specificity for detection of AGK. No significant cross-reactivity or interference between AGK and analogues was observed.
Preparation and Storage	For unopened kit, all reagents should be kept according to the labels on vials. The TMB Substrate, Wash Buffer, Stop Solution should be stored at 4 degree C. All others should be stored at -20 degree C.
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level AGK were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<12%
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level AGK were tested 20 times on one plate, respectively. Intra-Assay: CV<10%
Molecular Weight	7,634 Da
OMIM	AJ278150 mRNA
3D Structure	ModBase 3D Structure for Q53H12
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for AGK elisa kit	Intended Uses: The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of AGK in human tissue homogenates and other biological fluids. Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to AGK. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific to AGK. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain AGK, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm +/- 10nm. The concentration of AGK in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of AGK elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

Searchable Terms for AGK purchase	MBS450120 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Acylglycerol Kinase (AGK) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing AGK. The ELISA analytical biochemical technique of the MBS450120 kit is based on AGK antibody-AGK antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect AGK antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, AGK. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of AGK elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for AGK. It may not necessarily be applicable to this product.

NCBI GI #	8922701
NCBI GeneID	55750
NCBI Accession #	NP_060708.1
UniProt Primary Accession #	Q53H12
UniProt Secondary Accession #	Q75KN1; Q96GC3; Q9NP48
UniProt Related Accession #	Q53H12
GenBank Nucleotide #	NM_018238.3
NCBI Official Full Name	acylglycerol kinase, mitochondrial
NCBI Official Synonym Full Names	acylglycerol kinase
NCBI Official Symbol	AGK
NCBI Official Synonym Symbols	MULK; CATC5; CTRCT38; MTDPS10
UniProt Protein Name	Acylglycerol kinase, mitochondrial
UniProt Synonym Protein Names	Multiple substrate lipid kinase; HsMuLK; MuLK; Multi-substrate lipid kinase
Protein Family	Acylglycerol kinase
UniProt Gene Name	AGK
UniProt Synonym Gene Names	MULK; hAGK; HsMuLK; MuLK; Multi-substrate lipid kinase
NCBI Protein Information	acylglycerol kinase, mitochondrial
NCBI Summary for AGK	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]
UniProt Comments for AGK	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.
Research Articles on AGK	**1.** AGK promotes the proliferation and cell cycle progression of oral squamous cell carcinoma.

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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