

Rabbit anti-Human AK3L1 Polyclonal Antibody | anti-AK4 antibody

Anti-AK3L1 Antibody, Rabbit Polyclonal

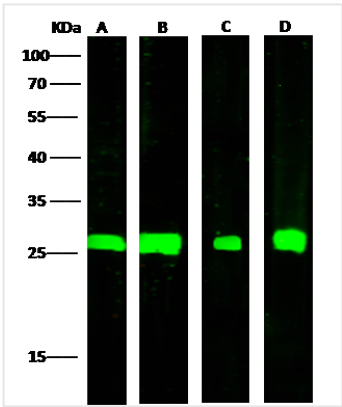
CATALOG # AAA255567	HOST Rabbit	REACTIVITY Human	APPLICATIONS Immunoprecipitation, ELISA, Western Blot
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PRODUCT SYNONYMS

AK3L1; Polyclonal Antibody; Anti-AK3L1 Antibody; Rabbit Polyclonal; AK4/Adenylate Kinase 4/AK3L1 Antibody; Rabbit PAb; Antigen Affinity Purified; adenylate kinase 4; Anti-AK3 Antibody; Anti-AK3L2 Antibody; Anti-AK4 Antibody; anti-AK4 antibody

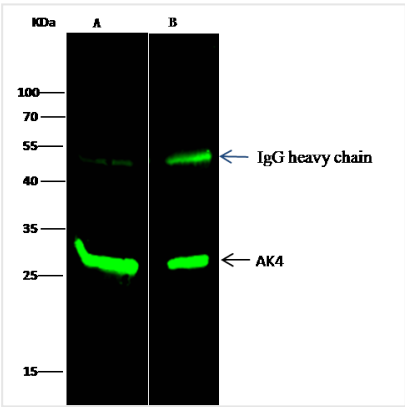
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human AK4/AK3L1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-AK4 antibody	IP (Immunoprecipitation), ELISA, WB (Western Blot)
Immunogen	Recombinant Human AK4/AK3L1 protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Human AK4/AK3L1 (rh AK4/AK3L1). AK4/AK3L1 specific IgG was purified by Human AK4/AK3L1 affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.



WB (Western Blot)

Anti-AK4 rabbit polyclonal antibody at 1:500 dilution
Lane A: HepG2 Whole Cell Lysate
Lane B: Raji Whole Cell Lysate
Lane C: A549 Whole Cell Lysate
Lane D: MCF7 Whole Cell Lysate
Lysates/proteins at 30 ug per lane.
Secondary: Goat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution.
Developed using the Odyssey technique.
Performed under reducing conditions.
Predicted band size: 25 kDa
Observed band size: 26 kDa



IP (Immunoprecipitation)

AK4 was immunoprecipitated using:
Lane A: 0.5 mg HepG2 Whole Cell Lysate
Lane B: 0.5 mg MCF-7 Whole Cell Lysate
2 uL anti-AK4 rabbit polyclonal antibody and 15 ul of 50 % Protein G agarose.
Primary antibody: Anti-AK4 rabbit polyclonal antibody, at 1:200 dilution
Secondary antibody: Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution
Developed using the odyssey technique.
Performed under reducing conditions.
Predicted band size: 26 kDa
Observed band size: 26 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-AK4 antibody	Adenylate kinase isoenzyme 4, mitochondrial, also known as ATP-AMP transphosphorylase, Adenylate kinase 3-like, AK4 and AK3L1, is a member the adenylate kinase family. AK4/AK3L1 is localized to the mitochondrial matrix. Adenylate kinases regulate the adenine and guanine nucleotide compositions within a cell by catalyzing the reversible transfer of phosphate group among these nucleotides. Five isozymes of adenylate kinase have been identified in vertebrates. Expression of these isozymes is tissue-specific and developmentally regulated. AK4/AK3L1 catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. It may also be active with GTP. Adenylate kinase 4 (AK4/AK3L1) is a unique member with no enzymatic activity in the adenylate kinase (AK) family although it shares high sequence homology with other AKs. It remains unclear what physiological function AK4 might play or why it is enzymatically inactive. AK4/AK3L1 retains the capability of binding nucleotides. It has a glutamine residue instead of a key arginine residue in the active site well conserved in other AKs. The enzymatically inactive AK4 is a stress responsive protein critical to cell survival and proliferation. AK4/AK3L1 is likely that the interaction with the mitochondrial inner membrane protein ANT is important for AK4 to exert the protective benefits to cells under stress. AK4/AK3L1 also acts on the specific mechanism of energy metabolism rather than control of the homeostasis of the ADP pool ubiquitously.
References	Xu G., et al., (1992), Characterization of human adenylate kinase 3 (AK3) cDNA and mapping of the AK3 pseudogene to an intron of the NF1 gene. Genomics 13:537-542. Gregory S.G., et al., (2006), The DNA sequence and biological annotation of human chromosome 1. Nature 441:315-321. Ota T., et al., (2004), Complete sequencing and characterization of 21, 243 full-length human cDNAs. Nat. Genet. 36:40-45.

NCBI AND UNIPROT INFORMATION

NCBI GI #	125157
NCBI GeneID	205
UniProt Accession #	P27144; Q6IBH4; Q6NXQ5; Q8IUU9; B2R927; D3DQ62
Molecular Weight	223
NCBI Official Full Name	Adenylate kinase 4, mitochondrial
NCBI Official Synonym Full Names	adenylate kinase 4
NCBI Official Symbol	AK4
NCBI Official Synonym Symbols	AK3; AK 4; AK3L1; AK3L2

NCBI Protein Information	adenylate kinase 4, mitochondrial; AK4; AK 4; adenylate kinase 3-like 1; ATP-AMP transphosphorylase; mitochondrial adenylate kinase-3; nucleoside-triphosphate-adenylate kinase; adenylate kinase isoenzyme 4, mitochondrial; GTP:AMP phosphotransferase AK4, m
UniProt Protein Name	Adenylate kinase 4, mitochondrial
UniProt Gene Name	AK4
UniProt Entry Name	KAD4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ak3l1-antibody-immunoprecipitation-western-blot-elisa/255567>