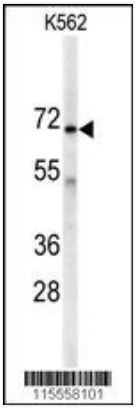
AK7 Antibody – Rabbit Polyclonal

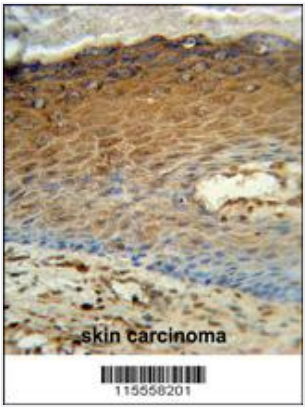
PRODUCT OVERVIEW

Product Name	AK7, Polyclonal Antibody
Full Product Name	AK7 Antibody (C-term)
Product Gene Name	anti-AK7 antibody
Product Synonym Names	Adenylate kinase 7; AK 7; ATP-AMP transphosphorylase 7; AK7
Clonality	Polyclonal
Isotype	Rabbit Ig
Host	Rabbit
Species Reactivity	Human (Predicted Reactivity: Monkey)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Concentration	Vial Concentration: 2 (lot specific)
Specificity	This AK7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 629-656 amino acids from the C-terminal region of human AK7.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.
Antibody/Peptide Pairs	AK7 peptide (MBS9226560) is used for blocking the activity of AK7 antibody (MBS9207148)
Molecular Weight	82658
Immunogen Sequence Positions	629-656
OMIM	615364
3D Structure	ModBase 3D Structure for Q96M32
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Product Categories/Family for anti-AK7 antibody	Signal Transduction
Applications Tested/Suitable for anti-AK7 antibody	Western Blot (WB), ELISA (EIA), Immunohistochemistry (IHC)
Application Notes for anti-AK7 antibody	WB~~1:1000
Related Product Information for anti-AK7 antibody	The adenylate kinases (AK) are a family of structurally and functionally related enzymes that catalyze a similar reaction, MgNTP + AMP = MgNDP + ADP (N = A or G). The AK enzymes are important for maintenance of homeostasis of the adenine and guanine nucleotide pools. AK1 is a cytosolic enzyme for which ATP is the substrate. AK2 catalyzes the same reaction as AK1, but it is localized in the mitochondrial intermembrane space. AK3 is present in the mitochondrial matrix and prefers GTP over ATP as the substrate.
Product References and Citations for anti-AK7 antibody	Ota, T., et al., Nat. Genet. 36(1):40-45 (2004).

Other Notes	Small volumes of anti-AK7 antibody 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 AK7 purchase	MBS9207148 is an antibody targeting AK7. Also known as AK7 Antibody (C-term). Reactive in Human (Predicted Reactivity: Monkey). Host: Rabbit.



Western Blot (WB) of anti-AK7 antibody
Western blot analysis of anti-AK7 Antibody (C-term) in K562 cell line lysates (35ug/lane).AK7(arrow) was detected using the purified Pab.



Immunohistochemistry (IHC) of anti-AK7 antibody
AK7 Antibody (C-term) immunohistochemistry analysis in formalin fixed and paraffin embedded human skin carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the AK7 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for AK7. It may not necessarily be applicable to this product.

NCBI GI #	148727333
NCBI GeneID	122481
NCBI Accession #	NP_689540.2
UniProt Primary Accession #	Q96M32
UniProt Secondary Accession #	Q8IYP6
UniProt Related Accession #	Q96M32
GenBank Nucleotide #	NM_152327.3
NCBI Official Full Name	adenylate kinase 7
NCBI Official Synonym Full Names	adenylate kinase 7
NCBI Official Symbol	AK7
NCBI Official Synonym Symbols	AK 7
UniProt Protein Name	Adenylate kinase 7
UniProt Synonym Protein Names	ATP-AMP transphosphorylase 7
Protein Family	Adenylate kinase
UniProt Gene Name	AK7
UniProt Synonym Gene Names	AK 7
UniProt Entry Name	KAD7_HUMAN
NCBI Protein Information	adenylate kinase 7

UniProt Comments for AK7	AK7: Adenylate kinase involved in maintaining ciliary structure and function. Has highest activity toward AMP, and weaker activity toward dAMP, CMP and dCMP. Protein type: Kinase, other; EC 2.7.4.3; EC 2.7.4.6; Nucleotide Metabolism - purine Chromosomal Location of Human Ortholog: 14q32.2 Cellular Component: cytoplasm; cytosol; nucleus Molecular Function: nucleoside diphosphate kinase activity; adenylate kinase activity; cytidylate kinase activity; ATP binding Biological Process: inflammatory response to antigenic stimulus; nucleoside triphosphate biosynthetic process; nucleoside diphosphate phosphorylation; spermatogenesis; brain development; axoneme biogenesis
Research Articles on AK7	**1.** AK7 may be involved in the development of Primary ciliary dyskinesia (PCD).
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