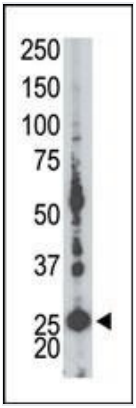
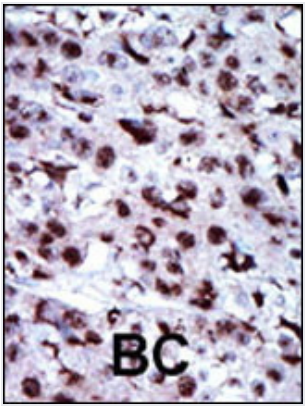
AK5 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

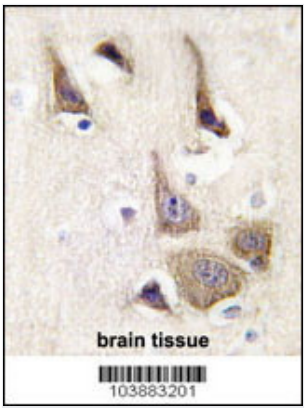
Product Name	AK5, Polyclonal Antibody
Full Product Name	AK5, NT (Adenylate Kinase Isoenzyme 5, AK 5, ATP-AMP Transphosphorylase 5) (APC)
Product Gene Name	anti-AK5 antibody
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Allophycocyanin (APC).
Purity/Purification	Purified by Protein G Affinity Chromatography.
Specificity	Recognizes human AK5. Species Crossreactivity: mouse.
Preparation and Storage	May be stored at 4 degree C for short-term only. Aliquot to avoid repeated freezing and thawing. Do not freeze APC conjugates. Light sensitive. Aliquots are stable for at least 6 months. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
Molecular Weight	60,315 Da
OMIM	608009
3D Structure	ModBase 3D Structure for Q9Y6K8
Immunogen	Synthetic peptide selected from the N-terminal region of human AK5 (KLH).
Conjugate	APC
Note	Preservative Free
Special Handling	Light sensitive
Product Categories/Family for anti-AK5 antibody	Antibodies; Enzymes
Applications Tested/Suitable for anti-AK5 antibody	Immunohistochemistry (IHC), FLISA, Western Blot (WB)
Application Notes for anti-AK5 antibody	IHC: 1:50-1:100 FLISA: 1:1,000 WB: 1:100-1:500 Applications are based on unconjugated antibody.
Related Product Information for anti-AK5 antibody	MBS6461676 is an antibody targeting AK5. Also known as AK5, NT (Adenylate Kinase Isoenzyme 5, AK 5, ATP-AMP Transphosphorylase 5) (APC). Reactive in Human, Mouse. Host: Rabbit.
Product References and Citations for anti-AK5 antibody	1. Strausberg, R.L., et al., Proc. Natl. Acad. Sci. USA 99(26):16899-16903 (2002). 2. Van Rompay, A.R., et al., Eur. J. Biochem. 261(2):509-517 (1999).
Other Notes	Small volumes of anti-AK5 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.



Western Blot (WB) of anti-AK5 antibody
The anti-AK5 Pab is used in Western blot to detect AK5 in mouse liver tissue lysate.



Immunohistochemistry (IHC) of anti-AK5 antibody
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Immunohistochemistry (IHC) of anti-AK5 antibody
Formalin-fixed and paraffin-embedded human brain tissue reacted with AK5 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for AK5. It may not necessarily be applicable to this product.

NCBI GI #	28144899
NCBI GeneID	26289
NCBI Accession #	NP_036225.2
UniProt Primary Accession #	Q9Y6K8
UniProt Secondary Accession #	Q5U622; Q6FH66; Q7Z4T5; Q86YS0; Q8N464; Q96EC9
UniProt Related Accession #	Q9Y6K8
GenBank Nucleotide #	NM_012093.3
NCBI Official Full Name	adenylate kinase isoenzyme 5 isoform 2
NCBI Official Synonym Full Names	adenylate kinase 5
NCBI Official Symbol	AK5
NCBI Official Synonym Symbols	AK6
UniProt Protein Name	Adenylate kinase isoenzyme 5

UniProt Synonym Protein Names	ATP-AMP transphosphorylase 5
Protein Family	Adenylate kinase
UniProt Gene Name	AK5
UniProt Synonym Gene Names	AK 5
UniProt Entry Name	KAD5_HUMAN
NCBI Protein Information	adenylate kinase isoenzyme 5; AK 5; ATP-AMP transphosphorylase 5; adenylate kinase 6
NCBI Summary for AK5	This gene encodes a member of the adenylate kinase family, which is involved in regulating the adenine nucleotide composition within a cell by catalyzing the reversible transfer of phosphate groups among adenine nucleotides. This member is related to the UMP/CMP kinase of several species. It is located in the cytosol and expressed exclusively in brain. Alternatively spliced transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]
UniProt Comments for AK5	AK5: Active on AMP and dAMP with ATP as a donor. When GTP is used as phosphate donor, the enzyme phosphorylates AMP, CMP, and to a small extent dCMP. Belongs to the adenylate kinase family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: EC 2.7.4.6; Nucleotide Metabolism - purine; EC 2.7.4.3; Kinase, other Chromosomal Location of Human Ortholog: 1p31 Cellular Component: cytoplasm; microtubule organizing center; cytosol Molecular Function: nucleoside kinase activity; nucleoside diphosphate kinase activity; adenylate kinase activity; ATP binding Biological Process: ATP metabolic process; nucleobase, nucleoside and nucleotide interconversion; nucleobase, nucleoside and nucleotide metabolic process; nucleoside triphosphate biosynthetic process; pyrimidine ribonucleotide biosynthetic process; ADP biosynthetic process; nucleoside diphosphate phosphorylation; dADP biosynthetic process
Research Articles on AK5	**1.** Clinical trial of gene-disease association and gene-environment interaction. (HuGE Navigator)
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