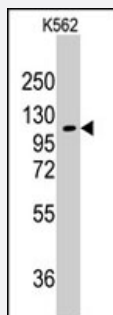


AARS polyclonal antibody

Catalog # PAB2957

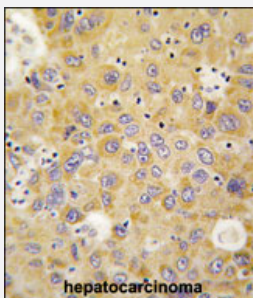
Size 400 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of AARS polyclonal antibody (Cat # PAB2957) in K-562 cell line lysates (35 ug/lane). AARS (arrow) was detected using the purified polyclonal antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma reacted with AARS polyclonal antibody (Cat # PAB2957), 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.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of AARS.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human AARS.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Ammonium sulfate precipitation

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:10-50) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

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Gene Info — AARS

Entrez GeneID	16
Protein Accession#	NP_001596;P49588
Gene Name	AARS
Gene Alias	-
Gene Description	alanyl-tRNA synthetase
Omim ID	601065
Gene Ontology	Hyperlink
Gene Summary	The human alanyl-tRNA synthetase (AARS) belongs to a family of tRNA synthases, of the class II enzymes. Class II tRNA synthases evolved early in evolution and are highly conserved. This is reflected by the fact that 498 of the 968-residue polypeptide human AARS shares 41% identity with the E.coli protein. tRNA synthases are the enzymes that interpret the RNA code and attach specific amino acids to the tRNAs that contain the cognate trinucleotide anticodons. They consist of a catalytic domain which interacts with the amino acid acceptor-T psi C helix of the tRNA, and a second domain which interacts with the rest of the tRNA structure. [provided by RefSeq]

Other Designations

alanine tRNA ligase 1, cytoplasmic

Publication Reference

- [Global, in vivo, and site-specific phosphorylation dynamics in signaling networks.](#)

Olsen JV, Blagoev B, Gnad F, Macek B, Kumar C, Mortensen P, Mann M.

Cell 2006 Nov; 127(3):635.

- [Human alanyl-tRNA synthetase: conservation in evolution of catalytic core and microhelix recognition.](#)

Shiba K, Ripmaster T, Suzuki N, Nichols R, Plotz P, Noda T, Schimmel P.

Biochemistry 1995 Aug; 34(33):10340.

Application: WB-Ce, WB-Tr, Human, Mammalian cells

- [Wide cross-species aminoacyl-tRNA synthetase replacement in vivo: yeast cytoplasmic alanine enzyme replaced by human polymyositis serum antigen.](#)

Ripmaster TL, Shiba K, Schimmel P.

PNAS 1995 May; 92(11):4932.

Application: WB-Ce, WB-Re, Yeast, Yeast cells

Pathway

- [Aminoacyl-tRNA biosynthesis](#)