

For Research Use Only

# KARS Polyclonal antibody

Catalog Number:14951-1-AP

Featured Product

11 Publications



## Basic Information

<b>Catalog Number:</b> 14951-1-AP	<b>GenBank Accession Number:</b> BC004132	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 500 ug/ml by Nanodrop and 313 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 3735	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IHC 1:200-1:800 IF/ICC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q15046	
<b>Isotype:</b> IgG	<b>Full Name:</b> lysyl-tRNA synthetase	
<b>Immunogen Catalog Number:</b> AG6778	<b>Calculated MW:</b> 68 kDa	
	<b>Observed MW:</b> 68 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b> WB : HEK-293T cells, Jurkat cells, human colon tissue, HeLa cells, HepG2 cells IHC : human brown disease, IF/ICC : A431 cells,
<b>Cited Applications:</b> WB, IF	
<b>Species Specificity:</b> human	
<b>Cited Species:</b> human, mouse, zebrafish	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

KARS (lysyl-tRNA synthetase) is a gene that encodes an enzyme critical for protein synthesis, specifically responsible for attaching the amino acid lysine to its corresponding transfer RNA (tRNA) in both the cytoplasm and mitochondria. This enzyme plays a crucial role in the process of aminoacylation, which is essential for accurate protein translation from mRNA sequences. Mutations in the KARS gene have been associated with a variety of neurological and systemic disorders, reflecting the enzyme's importance in cellular function.

## Notable Publications

Author	Pubmed ID	Journal	Application
Benedetta Ruzzenente	30252186	Hum Mutat	WB
Krishnendu Khan	36037331	Proc Natl Acad Sci U S A	WB,IF
Daniela Verrigni	27891585	Clin Genet	WB

## Storage

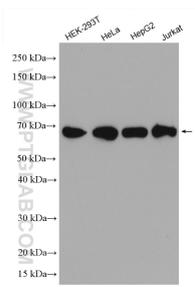
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

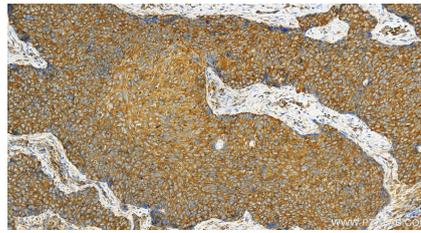
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

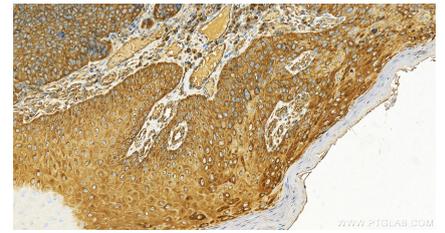
## Selected Validation Data



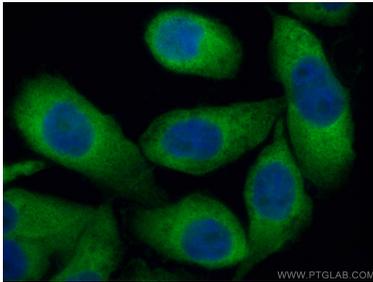
Various lysates were subjected to SDS PAGE followed by western blot with 14951-1-AP (KARS antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human brown disease slide using 14951-1-AP (KARS antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human brown disease slide using 14951-1-AP (KARS antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed A431 cells using KARS antibody (14951-1-AP) at dilution of 1:200 and CoralLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).