

For Research Use Only

# DARS2 Polyclonal antibody

Catalog Number: 13807-1-AP

Featured Product

10 Publications



## Basic Information

### Catalog Number:

13807-1-AP

### Size:

600 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG4809

### GenBank Accession Number:

BC045173

### GeneID (NCBI):

55157

### UNIPROT ID:

Q6PI48

### Full Name:

aspartyl-tRNA synthetase 2, mitochondrial

### Calculated MW:

645 aa, 74 kDa

### Observed MW:

66-74 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:4000

IHC 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

### Positive Controls:

WB : K-562 cells, human placenta tissue, U-937 cells

IHC : mouse cerebellum tissue, human brain tissue, human testis tissue, human gliomas tissue

IF/ICC : A431 cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

DARS2 is also named as AspRS (aspartyl-tRNA synthetase) and belongs to the class-II aminoacyl-tRNA synthetase family. The deduced 645-amino acid protein has a 47-amino acid mitochondrial targeting signal, resulting in a mature protein of 598 amino acids. DARS2 contains conserved residues involved in ATP binding, tRNA binding, and aspartic acid recognition, as well as catalytic site motifs characteristic of amino acid tRNA synthetases. It is a dimeric proteins(PMID:19443655). Rat aspartyl-tRNA synthetase has a N-terminal polypeptide extension of about 40 amino acid residues which can be removed without impairing its catalytic activity(PMID:9030747). This protein has different molecular mass(55 kDa, 50 kDa, 66 kDa ) according to the publications(PMID:11306575; 19443655;15299749).

## Notable Publications

Author	Pubmed ID	Journal	Application
Caroline A Hunter	31542429	Int J Biochem Cell Biol	WB
Sebastian Willenborg	34715039	Cell Metab	WB
Dominic Seifertling	27154400	EMBO Rep	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

For technical support and original validation data for this product please contact:

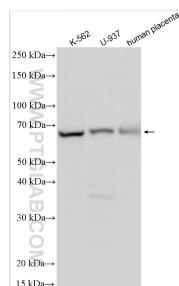
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

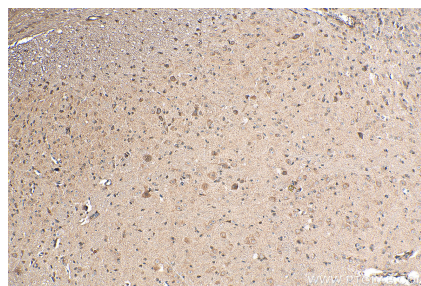
W: [ptgcn.com](http://ptgcn.com)

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

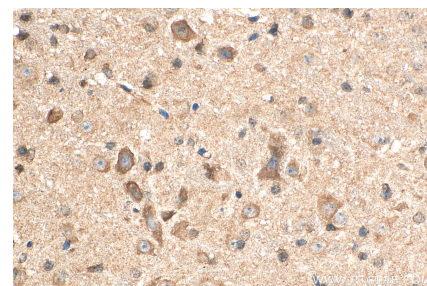
## Selected Validation Data



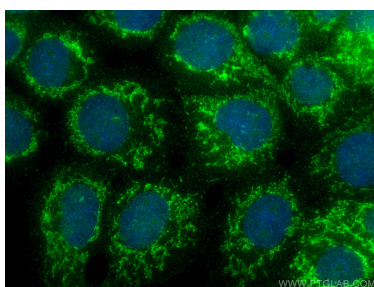
Various lysates were subjected to SDS PAGE followed by western blot with 13807-1-AP (DARS2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 13807-1-AP (DARS2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 13807-1-AP (DARS2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed A431 cells using DARS2 antibody (13807-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L).