

For Research Use Only

DARS2 Polyclonal antibody

Catalog Number: 13807-1-AP

Featured Product

7 Publications



Basic Information

Catalog Number: 13807-1-AP	GenBank Accession Number: BC045173	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 300 µg/ml by Nanodrop and 133 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 55157	Recommended Dilutions: WB 1:1000-1:4000 IHC 1:50-1:500
Source: Rabbit	Full Name: aspartyl-tRNA synthetase 2, mitochondrial	
Isotype: IgG	Calculated MW: 645 aa, 74 kDa	
Immunogen Catalog Number: AG4809	Observed MW: 66-74 kDa	

Applications

Tested Applications:

IHC, WB, ELISA

Cited Applications:

IHC, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse

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

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

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 Seiferling	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

*** 20ul sizes contain 0.1% BSA

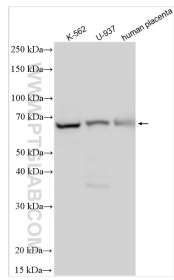
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

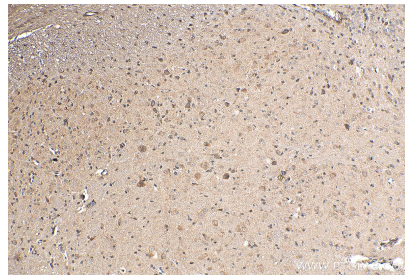
E: proteintech@ptglab.com
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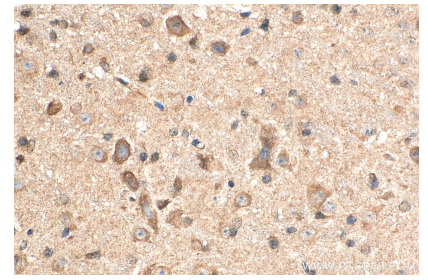
Selected Validation Data



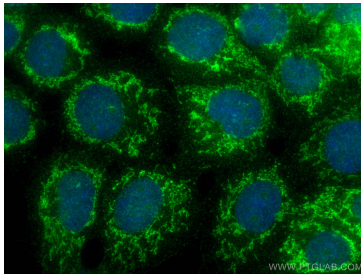
Various lysates were subjected to SDS PAGE followed by western blot with 13807-1-AP (DARS2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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 AffiniPure Goat Anti-Rabbit IgG(H+L).