For Research Use Only

DARS2 Polyclonal antibody

Catalog Number:13807-1-AP Featured Product 10 Publications

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Basic Information

Catalog Number:
13807-1-AP

Size:
150ul , Concentration: 300 ug/ml by Nanodrop and 167 ug/ml by Bradford method using BSA as the standard;

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

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

IF/ICC : A431 cells,

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

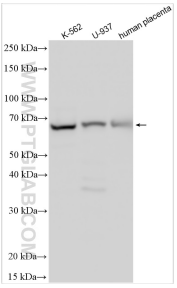
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

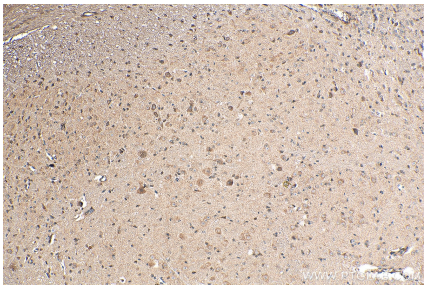
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

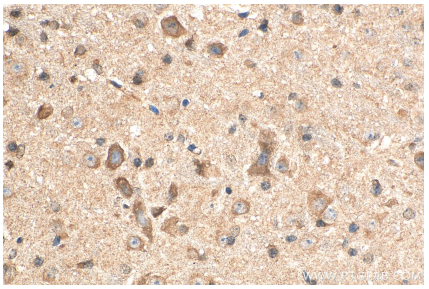
Selected Validation Data



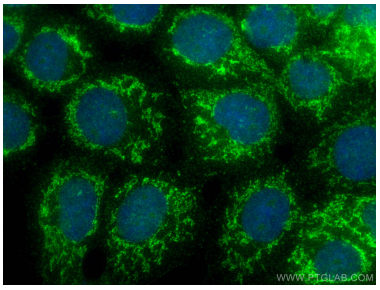
Various lysates were subjected to SDS PAGE followed by western blot with 13807-1-AP (DARS2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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).