For Research Use Only

DARS2 Polyclonal antibody

Catalog Number: 13807-1-AP

Featured Product

12 Publications



Basic Information

Catalog Number: GenBank Accession Number:

13807-1-AP BC045173 GeneID (NCBI): Size:

150ul , Concentration: 600 ug/ml by 55157

UNIPROT ID: Q6PI48 Rabbit Full Name:

Isotype: aspartyl-tRNA synthetase 2,

mitochondrial IgG Immunogen Catalog Number: Calculated MW: 645 aa, 74 kDa AG4809

> 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, IF

Nanodrop:

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

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

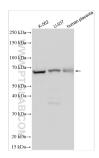
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

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

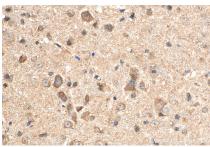
Selected Validation Data



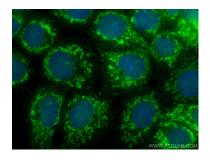
Various lysates were subjected to SDS PAGE followed by western blot with 13807-1-AP (DARS2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded 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 paraffinembedded 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).