

## **DARS Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11088a

## **Specification**

## **DARS Antibody (N-term) - Product Information**

Application IF, WB, IHC-P, FC,E

Primary Accession P14868

Other Accession Q3SYZ4, NP\_001340.2

Reactivity
Predicted
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Bovine
Rabbit
Polyclonal
Rabbit IgG
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## **DARS Antibody (N-term) - Additional Information**

#### **Gene ID 1615**

### **Other Names**

Aspartate--tRNA ligase, cytoplasmic, Aspartyl-tRNA synthetase, AspRS, Cell proliferation-inducing gene 40 protein, DARS

## **Target/Specificity**

This DARS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 154-183 amino acids from the N-terminal region of human DARS.

#### **Dilution**

IF~~1:10~50 WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

## **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

DARS Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **DARS Antibody (N-term) - Protein Information**





## Name DARS1 (HGNC:2678)

## **Synonyms DARS**

**Function** Catalyzes the specific attachment of an amino acid to its cognate tRNA in a 2 step reaction: the amino acid (AA) is first activated by ATP to form AA-AMP and then transferred to the acceptor end of the tRNA.

## Cellular Location Cytoplasm, cytosol.

#### **Tissue Location**

Expression in the developing and adult brain shows similar patterns. Highly expressed in the ventricular and subventricular zones, including hippocampal subfields, the midlateral temporal cortex and the frontal polar cortex. The cerebellum, cerebral cortex, hippocampus, and lateral ventricle show preferential neuronal expression. Expression in the peripheral neurons is evident in the colon.

## **DARS Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

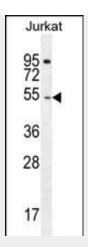
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## DARS Antibody (N-term) - Images

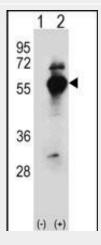


Confocal immunofluorescent analysis of DARS Antibody (N-term)(Cat#AP11088a) with HepG2 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).

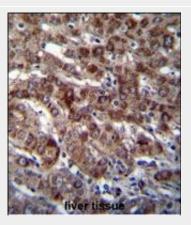




DARS Antibody (N-term) (Cat. #AP11088a) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the DARS antibody detected the DARS protein (arrow).

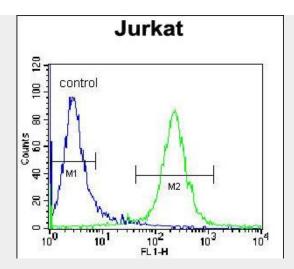


Western blot analysis of DARS (arrow) using rabbit polyclonal DARS Antibody (N-term) (Cat. #AP11088a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the DARS gene.



DARS Antibody (N-term) (Cat. #AP11088a)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of DARS Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.





DARS Antibody (N-term) (Cat. #AP11088a) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

# DARS Antibody (N-term) - Background

Aspartyl-tRNA synthetase (DARS) is part of a multienzyme complex of aminoacyl-tRNA synthetases. Aspartyl-tRNA synthetase charges its cognate tRNA with aspartate during protein biosynthesis.

# **DARS Antibody (N-term) - References**

Wu, C., et al. Proteomics 7(11):1775-1785(2007) Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007) Tu, L.C., et al. Mol. Cell Proteomics 6(4):575-588(2007) Ling, C., et al. J. Biol. Chem. 280(41):34755-34763(2005) Bonnefond, L., et al. Biochemistry 44(12):4805-4816(2005)