

HARS Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7567a

Specification

HARS Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>P12081</u> <u>O61035</u>, <u>O2Kl84</u> Human, Mouse, Rat Bovine Rabbit Polyclonal Rabbit IgG 57411 49-78

HARS Antibody (N-term) - Additional Information

Gene ID 3035

Other Names Histidine--tRNA ligase, cytoplasmic, Histidyl-tRNA synthetase, HisRS, HARS, HRS

Target/Specificity

This HARS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 49-78 amino acids from the N-terminal region of human HARS.

Dilution WB~~1:1000 IHC-P~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

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

HARS Antibody (N-term) - Protein Information

Name HARS1 (HGNC:4816)



Synonyms HARS, HRS

Function Catalyzes the ATP-dependent ligation of histidine to the 3'- end of its cognate tRNA, via the formation of an aminoacyl-adenylate intermediate (His-AMP) (PubMed:<u>29235198</u>). Plays a role in axon guidance (PubMed:<u>26072516</u>).

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:F1Q5D5}.

Tissue Location Brain, heart, liver and kidney.

HARS Antibody (N-term) - Protocols

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

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

HARS Antibody (N-term) - Images



All lanes : Anti-HARS Antibody (N-term) at 1:1000 dilution Lane 1: HepG2 whole cell lysate Lane 2: NIH/3T3 whole cell lysate Lane 3:Mouse brainwhole tissue lysate Lane 4: Rat brain whole tissue lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 53 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Anti-HARS Antibody (N-term) at 1:1000 dilution + Caco2 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 53 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with HARS antibody (N-term) (Cat.#AP7567a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

HARS Antibody (N-term) - Background

Aminoacyl-tRNA synthetases are a class of enzymes that charge tRNAs with their cognate amino acids. HARS is a cytoplasmic enzyme which belongs to the class II family of aminoacyl-tRNA synthetases. This enzyme is responsible for the synthesis of histidyl-transfer RNA, which is essential for the incorporation of histidine into proteins. The protein is a frequent target of autoantibodies in the human autoimmune disease polymyositis/dermatomyositis.

HARS Antibody (N-term) - References

Levine, S.M., Arthritis Rheum. 56 (8), 2729-2739 (2007) Lu, Q., Proc. Natl. Acad. Sci. U.S.A. 100 (13), 7626-7631 (2003)