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HARS Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7567a

Product Information

Application	WB, IHC-P, E
Primary Accession	P12081
Other Accession	Q61035, Q2KI84
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Mouse, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14816
Calculated MW	57411
Antigen Region	49-78

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~~1:100~500 E~~Use at an assay dependent concentration.
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	HARS Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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:29235198). Plays a role in axon guidance (PubMed:26072516).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:F1Q5D5}.
Tissue Location	Brain, heart, liver and kidney.

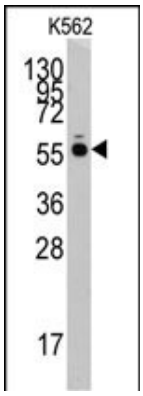
Background

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.

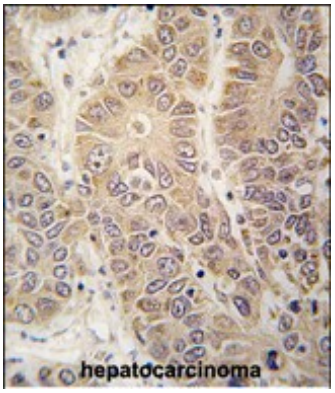
References

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

Images



Western blot analysis of anti-HARS Pab (Cat.#AP7567a) in K562 cell line lysates (35ug/lane).HARS (arrow) was detected using the purified Pab.



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.