

**HARS Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP11205c****Specification**

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**HARS Antibody (Center) Blocking peptide - Product Information**Primary Accession [P12081](#)**HARS Antibody (Center) Blocking peptide - Additional Information****Gene ID** 3035**Other Names**

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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**HARS Antibody (Center) Blocking peptide - 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:&lt;a href="http://www.uniprot.org/citations/29235198" target="\_blank"&gt;29235198&lt;/a&gt;). Plays a role in axon guidance (PubMed:&lt;a href="http://www.uniprot.org/citations/26072516" target="\_blank"&gt;26072516&lt;/a&gt;).

**Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:F1Q5D5}.

**Tissue Location**

Brain, heart, liver and kidney.

**HARS Antibody (Center) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

#### **HARS Antibody (Center) Blocking peptide - Images**

#### **HARS Antibody (Center) Blocking peptide - Background**

Aminoacyl-tRNA synthetases are a class of enzymes that charge tRNAs with their cognate amino acids. The protein encoded by this gene is a cytoplasmic enzyme which belongs to the class II family of aminoacyl-tRNA synthetases. The enzyme is responsible for the synthesis of histidyl-transfer RNA, which is essential for the incorporation of histidine into proteins. The gene is located in ahead-to-head orientation with HARSL on chromosome five, where the homologous genes share a bidirectional promoter. The gene product is a frequent target of autoantibodies in the human autoimmune disease polymyositis/dermatomyositis.

#### **HARS Antibody (Center) Blocking peptide - References**

Gomard-Mennesson, E., et al. Ann. N. Y. Acad. Sci. 1109, 414-420 (2007) :Levine, S.M., et al. Arthritis Rheum. 56(8):2729-2739(2007) Lu, Q., et al. Proc. Natl. Acad. Sci. U.S.A. 100(13):7626-7631(2003) Ascherman, D.P., et al. J. Immunol. 169(12):7127-7134(2002) O'Hanlon, T.P., et al. Biochem. Biophys. Res. Commun. 294(3):609-614(2002)