

# HARS Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant HARS.

Catalog # AT2317a

## Product Information

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<b>Application</b>	WB, IF, E
<b>Primary Accession</b>	<a href="#">P12081</a>
<b>Other Accession</b>	<a href="#">NM_002109</a>
<b>Reactivity</b>	Human
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG2a Kappa
<b>Clone Names</b>	1C8
<b>Calculated MW</b>	57411

## Additional Information

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<b>Gene ID</b>	3035
<b>Other Names</b>	Histidine--tRNA ligase, cytoplasmic, Histidyl-tRNA synthetase, HisRS, HARS, HRS
<b>Target/Specificity</b>	HARS (NP_002100, 1 a.a. ~ 96 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 IF~~1:50~200 E~~N/A
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	HARS Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

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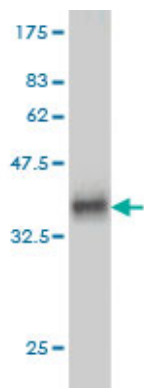
Aminoacyl-tRNA synthetases are a class of enzymes that charge tRNAs with their cognate amino acids. The protein encoded by this gene is a cytoplasmic enzyme which belongs to the class II family of aminoacyl-tRNA synthetases. The enzyme is responsible for the synthesis of histidyl-transfer RNA, which is essential for the incorporation of histidine into proteins. The gene is located in a head-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.

## References

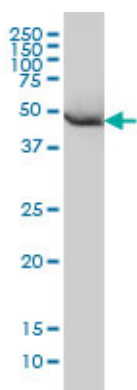
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Clinical significance of anti-histidyl-tRNA synthetase (Jo1) autoantibodies. Gomard-Mennesson E, et al. Ann N Y Acad Sci, 2007 Aug. PMID 17785330. Novel conformation of histidyl-transfer RNA synthetase in the lung: the target tissue in Jo-1 autoantibody-associated myositis. Levine SM, et al. Arthritis Rheum, 2007 Aug. PMID 17665459. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334. Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039. TSG101 interaction with HRS mediates endosomal trafficking and receptor down-regulation. Lu Q, et al. Proc Natl Acad Sci U S A, 2003 Jun 24. PMID 12802020.

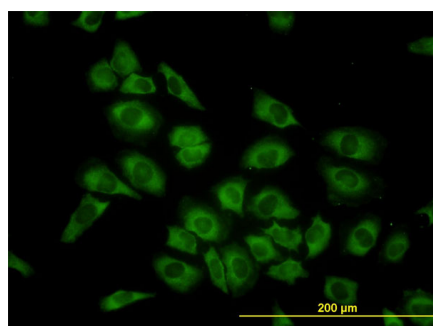
## Images



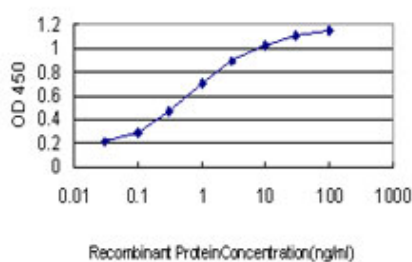
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.3 KDa) .



HARS monoclonal antibody (M01), clone 1C8 Western Blot analysis of HARS expression in HeLa (Cat # AT2317a)



Immunofluorescence of monoclonal antibody to HARS on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged HARS is approximately 0.03ng/ml as a capture antibody.

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