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HARS Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant HARS.
Catalog # AT2317a

Specification

HARS Antibody (monoclonal) (M01) - Product Information

Application	**IF, WB, E**
Primary Accession	P12081
Other Accession	NM_002109
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG2a Kappa**
Calculated MW	**57411**

HARS Antibody (monoclonal) (M01) - Additional Information

Gene ID 3035

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

Target/Specificity
HARS (NP_002100, 1 a.a. ~ 96 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution
WB~~1:500~1000

Format
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions
HARS Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

HARS Antibody (monoclonal) (M01) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

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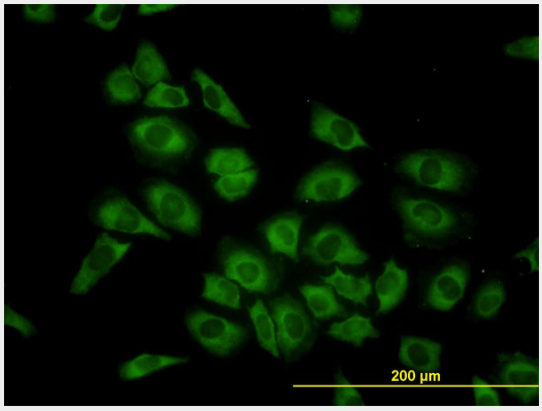
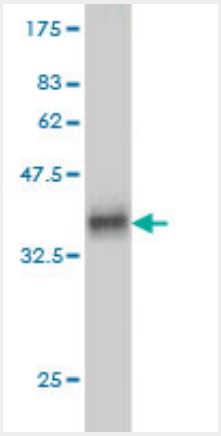
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

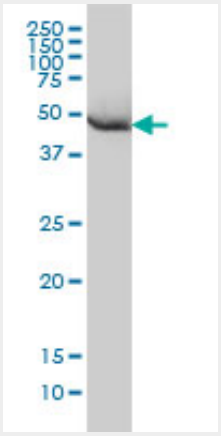
HARS Antibody (monoclonal) (M01) - Images



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



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)

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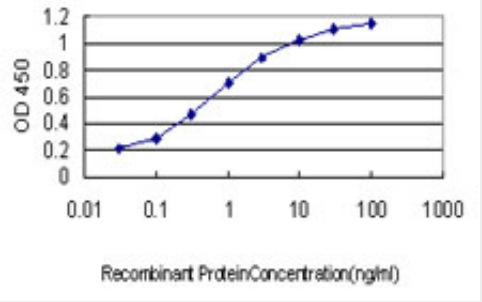

Detection limit for recombinant GST tagged HARS is approximately 0.03ng/ml as a capture antibody.

HARS Antibody (monoclonal) (M01) - 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 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.

HARS Antibody (monoclonal) (M01) - References

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.