

#### KD-Validated Anti-HARS1 Mouse Monoclonal Antibody Mouse monoclonal antibody Catalog # AGI1970

### Specification

## **KD-Validated Anti-HARS1 Mouse Monoclonal Antibody - Product Information**

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases WB, FC, ICC <u>P12081</u> Human Monoclonal Mouse IgG1 Predicted, 57 kDa, observed, 50 kDa KDa HARS1 HARS1; Histidyl-TRNA Synthetase 1; HisRS; HARS; Histidine--TRNA Ligase, Cytoplasmic; Histidyl-TRNA Synthetase; EC 6.1.1.21; USH3B; HRS; Histidine TRNA Ligase 1, Cytoplasmic; Histidine Translase; Usher Syndrome 3B; Jo-1 Antigen; Jo-1 Antigen; CMT2W Recombinant protein of human HARS

Immunogen

### **KD-Validated Anti-HARS1 Mouse Monoclonal Antibody - Additional Information**

Gene ID3035Other NamesHistidine--tRNA ligase, cytoplasmic, 6.1.1.21, Histidyl-tRNA synthetase, HisRS, HARS1 (<a</td>href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=4816"target="\_blank">HGNC:4816</a>), HARS, HRS

### **KD-Validated Anti-HARS1 Mouse Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/29235198" target="\_blank">29235198</a>). Plays a role in axon guidance (PubMed:<a href="http://www.uniprot.org/citations/26072516" target="\_blank">26072516" target="\_blank">26072516</a>).

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

**Tissue Location** Brain, heart, liver and kidney.

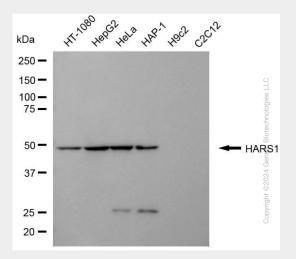


# **KD-Validated Anti-HARS1 Mouse Monoclonal Antibody - Protocols**

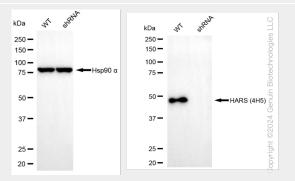
Provided below are standard protocols that you may find useful for product applications.

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

### **KD-Validated Anti-HARS1 Mouse Monoclonal Antibody - Images**

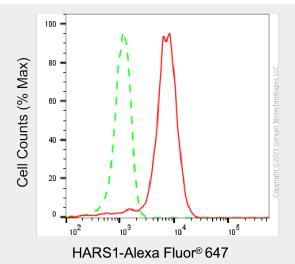


Western blotting analysis using anti-HARS1 antibody (Cat#63655). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-HARS1 antibody (Cat#63655, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using NaQ<sup>™</sup> ECL Substrate Kit (Cat#716).

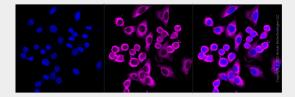


Western blotting analysis using anti-HARS1 antibody (Cat#63655). HARS1 expression in wild-type (WT) and HARS1 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-HARS1 antibody (Cat#63655, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using NaQ<sup>™</sup> ECL Substrate Kit (Cat#716).





Flow cytometric analysis of HARS1 expression in HepG2 cells using anti-HARS1 antibody (Cat#63655, 1:2,000). Green, isotype control; red, HARS1.



Immunocytochemical staining of HepG2 cells with anti-HARS1 antibody (Cat#63655, 1:1,000). Nuclei were stained blue with DAPI; HARS1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20  $\mu$ m.