

**WARS Antibody (monoclonal) (M02)****Mouse monoclonal antibody raised against a partial recombinant WARS.****Catalog # AT4524a****Specification**

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**WARS Antibody (monoclonal) (M02) - Product Information**

|                   |                           |
|-------------------|---------------------------|
| Application       | IF, IP, WB                |
| Primary Accession | <a href="#">P23381</a>    |
| Other Accession   | <a href="#">NM_004184</a> |
| Reactivity        | Human                     |
| Host              | Mouse                     |
| Clonality         | Monoclonal                |
| Isotype           | IgG2a Kappa               |
| Calculated MW     | 53165                     |

**WARS Antibody (monoclonal) (M02) - Additional Information****Gene ID** 7453**Other Names**

Tryptophan--tRNA ligase, cytoplasmic, Interferon-induced protein 53, IFP53, Tryptophanyl-tRNA synthetase, TrpRS, hWRS, T1-TrpRS, T2-TrpRS, WARS, IFI53, WRS

**Target/Specificity**

WARS (NP\_004175, 50 a.a. ~ 149 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**

WARS Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

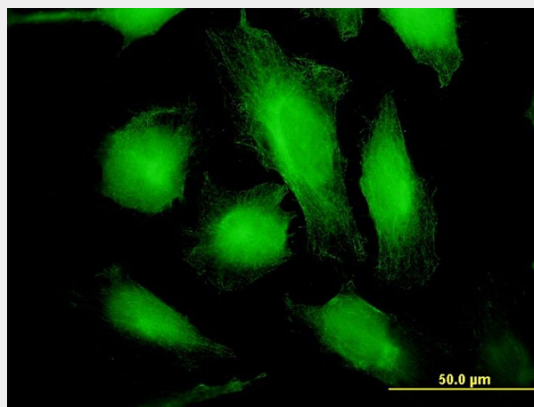
**WARS Antibody (monoclonal) (M02) - Protocols**

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

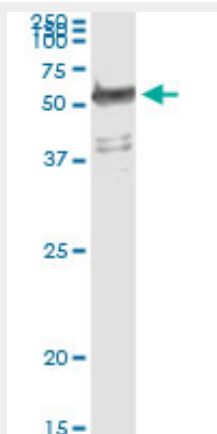
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

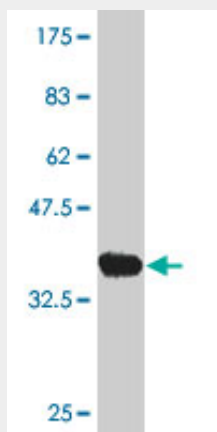
### WARS Antibody (monoclonal) (M02) - Images



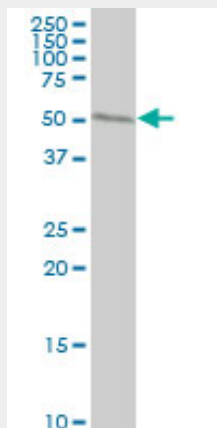
Immunofluorescence of monoclonal antibody to WARS on HeLa cell. [antibody concentration 10 ug/ml]



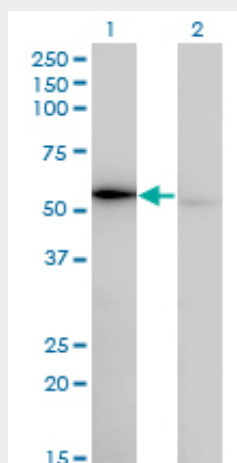
Immunoprecipitation of WARS transfected lysate using anti-WARS monoclonal antibody and Protein A Magnetic Bead ([U0007](#)), and immunoblotted with WARS MaxPab rabbit polyclonal antibody.



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .



WARS monoclonal antibody (M02), clone 3A12 Western Blot analysis of WARS expression in HeLa (Cat # AT4524a)



Western Blot analysis of WARS expression in transfected 293T cell line by WARS monoclonal antibody (M02), clone 3A12.

Lane 1: WARS transfected lysate(53.2 KDa).  
Lane 2: Non-transfected lysate.

### WARS Antibody (monoclonal) (M02) - Background

Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. Two forms of tryptophanyl-tRNA synthetase exist, a cytoplasmic form, named WARS, and a mitochondrial form, named WARS2. Tryptophanyl-tRNA synthetase (WARS) catalyzes the aminoacylation of tRNA(trp) with tryptophan and is induced by interferon. Tryptophanyl-tRNA synthetase belongs to the class I tRNA synthetase family. Four transcript variants encoding two different isoforms have been found for this gene.

### WARS Antibody (monoclonal) (M02) - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey

SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121. The prognostic significance of tryptophanyl-tRNA synthetase in colorectal cancer. Ghanipour A, et al. Cancer Epidemiol Biomarkers Prev, 2009 Nov. PMID 19900940. Allostery and conformational free energy changes in human tryptophanyl-tRNA synthetase from essential dynamics and structure networks. Bhattacharyya M, et al. Proteins, 2010 Feb 15. PMID 19768679. Increased TTS abrogates IDO-mediated CD4(+) T cells suppression in patients with Graves' disease. Wang S, et al. Endocrine, 2009 Aug. PMID 19363598.