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WARS Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant WARS.
Catalog # AT4524a

Product Information

Application	WB, IF, IP
Primary Accession	P23381
Other Accession	NM_004184
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3A12
Calculated MW	53165

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 IF~~1:50~200 IP~~N/A
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.

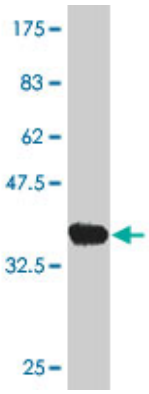
Background

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.

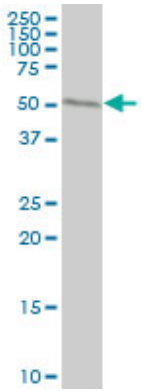
References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-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.

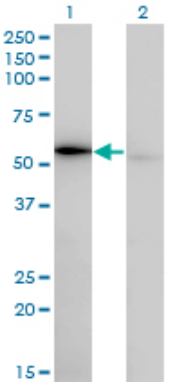
Images



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



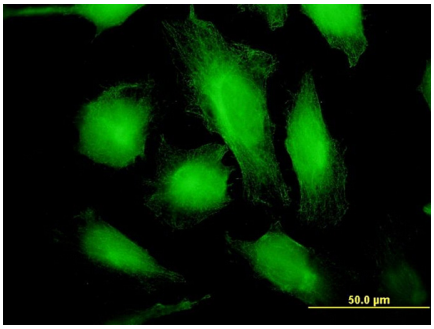
WARS monoclonal antibody (M02), clone 3A12 Western Blot analysis of WARS expression in HeLa ((Cat # AT4524a)

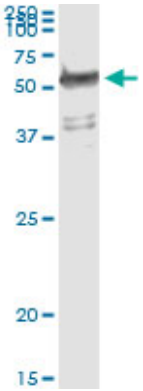


Western Blot analysis of WARS expression in transfected 293T cell line by WARS monoclonal antibody (M02), clone 3A12.

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

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.