10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

WARS Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18122b

Product Information

Application	WB, E
Primary Accession	P23381
Other Accession	P17248, NP_004175.2
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21178
Calculated MW	53165
Antigen Region	429-458

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	This WARS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 429-458 amino acids from the C-terminal region of human WARS.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	WARS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	WARS1 (HGNC:12729)
Synonyms	IFI53, WARS, WRS

Function	Catalyzes the attachment of tryptophan to tRNA(Trp) in a two- step reaction: tryptophan is first activated by ATP to form Trp-AMP and then transferred to the acceptor end of the tRNA(Trp).
Cellular Location	Cytoplasm.

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

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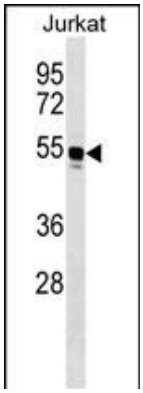
Bhattacharyya, M., et al. Proteins 78(3):506-517(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Ghanipour, A., et al. Cancer Epidemiol. Biomarkers Prev. 18(11):2949-2956(2009)
Wang, S., et al. Endocrine 36(1):119-125(2009)

Images



WARS Antibody (C-term) (Cat. #AP18122b) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the WARS antibody detected the WARS protein (arrow).