

QARS Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant QARS.

Catalog # AT3506a

Product Information

Application	WB, IHC, IP, E
Primary Accession	P47897
Other Accession	NM_005051
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	5F5
Calculated MW	87799

Additional Information

Gene ID	5859
Other Names	Glutamine--tRNA ligase, Glutaminyl-tRNA synthetase, GlnRS, QARS
Target/Specificity	QARS (NP_005042, 677 a.a. ~ 775 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IP~~N/A E~~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	QARS Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

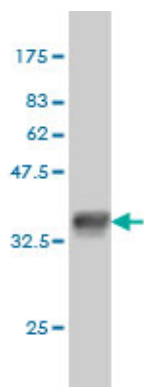
Background

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. In metazoans, 9 aminoacyl-tRNA synthetases specific for glutamine (gln), glutamic acid (glu), and 7 other amino acids are associated within a multienzyme complex. Although present in eukaryotes, glutaminyl-tRNA synthetase (QARS) is absent from many prokaryotes, mitochondria, and chloroplasts, in which Gln-tRNA(Gln) is formed by transamidation of the misacylated Glu-tRNA(Gln). Glutaminyl-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family.

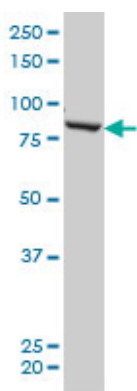
References

1. Proteomic identification of putative biomarkers of radiotherapy resistance: a possible role for the 26S proteasome? Smith L, Qutob O, Watson MB, Beavis AW, Potts D, Welham KJ, Garimella V, Lind MJ, Drew PJ, Cawkwell L. *Neoplasia*. 2009 Nov;11(11):1194-207.

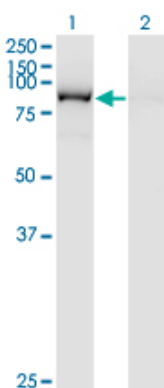
Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .

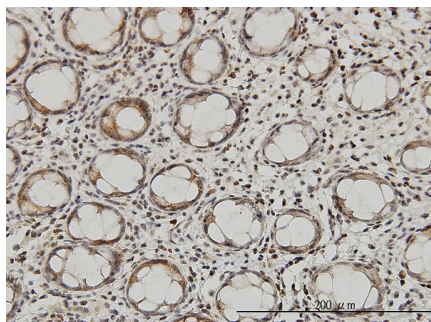


QARS monoclonal antibody (M01), clone 5F5 Western Blot analysis of QARS expression in HeLa ((Cat # AT3506a)



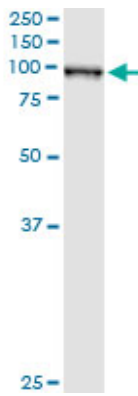
Western Blot analysis of QARS expression in transfected 293T cell line by QARS monoclonal antibody (M01), clone 5F5.

Lane 1: QARS transfected lysate(87.8 KDa).
Lane 2: Non-transfected lysate.

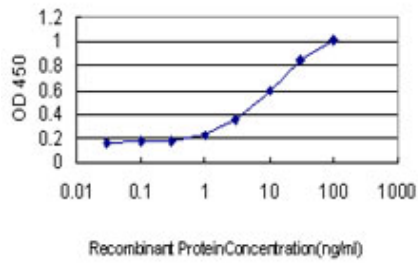


Immunoperoxidase of monoclonal antibody to QARS on formalin-fixed paraffin-embedded human colon.
[antibody concentration 3 ug/ml]

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



rabbit polyclonal antibody.



Detection limit for recombinant GST tagged QARS is approximately 1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.