

QARS Antibody (monoclonal) (M01)**Mouse monoclonal antibody raised against a partial recombinant QARS.****Catalog # AT3506a****Specification**

QARS Antibody (monoclonal) (M01) - Product Information

Application	IP, WB, IHC, E
Primary Accession	P47897
Other Accession	NM_005051
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2b Kappa
Calculated MW	87799

QARS Antibody (monoclonal) (M01) - Additional Information**Gene ID** 5859**Other Names**

Glutamine--tRNA ligase, GlutaminyI-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

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.

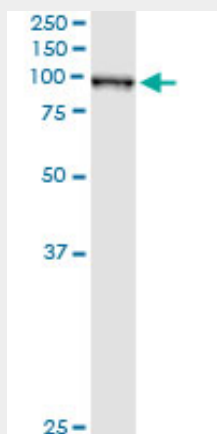
QARS Antibody (monoclonal) (M01) - Protocols

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

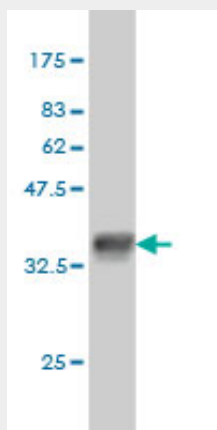
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

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

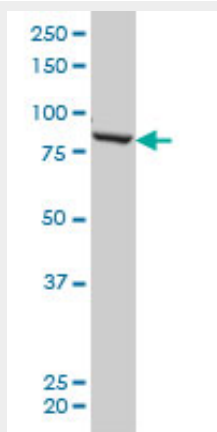
QARS Antibody (monoclonal) (M01) - Images



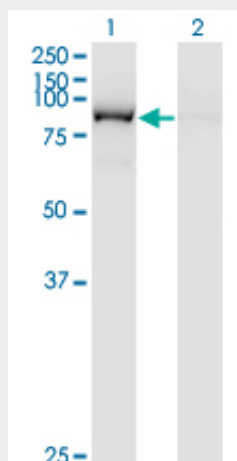
Immunoprecipitation of QARS transfected lysate using anti-QARS monoclonal antibody and Protein A Magnetic Bead ([U0007](#)), and immunoblotted with QARS MaxPab rabbit polyclonal antibody.



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



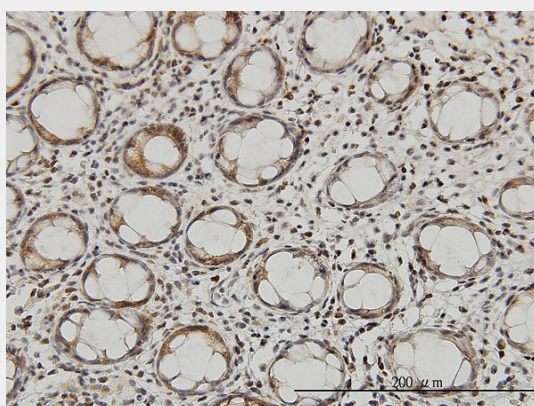
QARS monoclonal antibody (M01), clone 5F5 Western Blot analysis of QARS expression in HeLa (Cat # AT3506a)



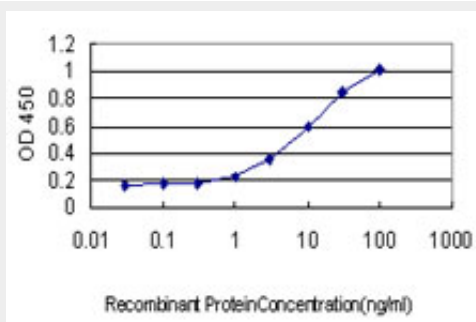
Western Blot analysis of QARS expression in transfected 293T cell line by QARS monoclonal antibody (M01), clone 5F5.

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]



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

QARS Antibody (monoclonal) (M01) - 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, glutamyl-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). Glutamyl-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family.

QARS Antibody (monoclonal) (M01) - 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, Cawthell L. Neoplasia. 2009 Nov;11(11):1194-207.