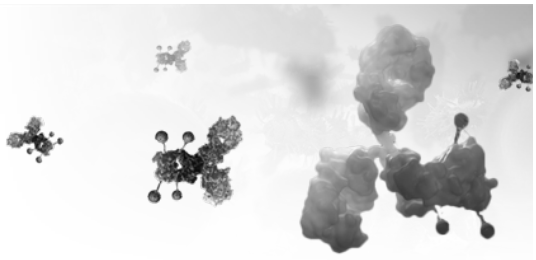

# Mouse anti-Human QARS monoclonal antibody, clone 6G6 (CABT-B11117)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

| | |
|---|---|
| **Immunogen** | QARS (NP_005042, 677 a.a. ~ 775 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. |
| **Isotype** | IgG2b |
| **Source/Host** | Mouse |
| **Species Reactivity** | Human |
| **Clone** | 6G6 |
| **Conjugate** | Unconjugated |
| **Applications** | WB, IHC, IP, sELISA, ELISA |
| **Sequence Similarities** | FIHWVSQPLMCEVRLYERLFQHKNPEDPTEVPGGFLSDLNLASLHVVDAALVDCSVALAK PFDKFQFERLGYFSVDPDSHQGKLVFNRTVTLKEDPGKV |
| **Format** | Liquid |
| **Buffer** | In 1x PBS, pH 7.2 |
| **Storage** | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing. |

## BACKGROUND

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|---|---|
| **Introduction** | 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 |

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|---|---|
| | 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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2013] |
| **Keywords** | QARS; glutaminyl-tRNA synthetase; GLNRS; MSCCA; PRO2195; glutamine--tRNA ligase; glutamine-tRNA synthetase; |

# GENE INFORMATION

| | |
|---|---|
| **Entrez Gene ID** | 5859 |
| **UniProt ID** | P47897 |
| **Pathway** | Aminoacyl-tRNA biosynthesis, organism-specific biosystem; Aminoacyl-tRNA biosynthesis, conserved biosystem; Aminoacyl-tRNA biosynthesis, eukaryotes, organism-specific biosystem; Aminoacyl-tRNA biosynthesis, eukaryotes, conserved biosystem; Cytosolic tRNA aminoacylation, organism-specific biosystem; Gene Expression, organism-specific biosystem; Metabolic pathways, organism-specific biosystem; |
| **Function** | ATP binding; glutamine-tRNA ligase activity; ligase activity; nucleotide binding; |

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