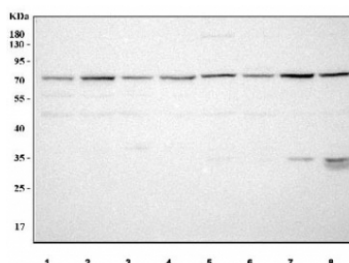


MARS2 Antibody / Methionyl-tRNA synthetase 2 (RQ8412)

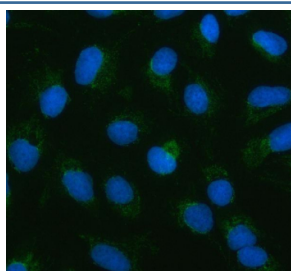
Catalog No.	Formulation	Size
RQ8412	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q96GW9
Localization	Cytoplasm (Mitochondria)
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This MARS2 antibody is available for research use only.



Western blot testing of 1) human HEL, 2) human HepG2, 3) human K562, 4) human Caco-2, 5) rat C6, 6) rat PC-12, 7) mouse Neuro-2a and 8) mouse RAW264.7 cell lysate with MARS2 antibody. Predicted molecular weight ~67 kDa.



Immunofluorescent staining of FFPE human U-2 OS cells with MARS2 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.

Description

MARS2 (Methionyl-tRNA synthetase 2) is a mitochondrial enzyme that plays an essential role in protein synthesis. It catalyzes the attachment of methionine to its corresponding tRNA, a critical step in initiating mitochondrial translation. Using a MARS2 antibody enables the study of this key enzyme and its contributions to mitochondrial gene expression.

MARS2 is vital for mitochondrial function, as disruptions can impair oxidative phosphorylation and energy metabolism. Altered expression or mutations in this protein have been associated with mitochondrial diseases, highlighting its clinical importance. Researchers often employ a MARS2 antibody to investigate these pathogenic mechanisms.

In addition to its central role in translation, MARS2 interacts with other mitochondrial factors that influence protein folding and stability. A MARS2 antibody is valuable for applications such as western blot, immunocytochemistry, and related assays. NSJ Bioreagents provides high-quality antibodies to support MARS2 research across cellular and disease contexts.

Application Notes

Optimal dilution of the MARS2 antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (H143-A590) was used as the immunogen for the MARS2 antibody.

Storage

After reconstitution, the MARS2 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.