

Product Name

Monoclonal Human anti-seryl-tRNA synthetase
Immunoglobulin

CAT No.

MQR2.3901

LOT No.

19047

Size

100 µg

Edition: September 11, 2019

Intended use

This product is for research use only. NOT for use in diagnostic or therapeutic procedures.

This product is tested for use in enzyme-linked immunosorbent assay (ELISA) and immunoprecipitation (IP).

Reagent provided

The antibody is supplied in PBS.

Isotype

Human IgG1κ

Immunogen

Seryl-tRNA-synthetase. Domain: V2-A514 of 514.

Specificity

Specificity has been tested in ELISA (figure 1) and IP-MS.

Purity

Protein A purified.

Disclaimer

The antibody is for R&D use only. NOT for use in diagnostic or therapeutic procedures.

Precautions

1. For professional users.
2. As with any product derived from biological sources, proper handling procedures should be used.
3. The product may be used in different techniques and in combination with different sample types and materials, therefore each individual laboratory should validate the applied test system.

Preparation of the antibody

Use antibody as supplied.

Storage/Stability

Store at -20°C. After first time use, store at 4°C. Avoid repeated freeze-thaw cycles.

Application guidelines

ELISA: 1:1000 – 1:5000

IP: 2 µg/ml

Other applications: since applications vary, optimum working dilution of the product should be determined in the appropriate assay.

Unless the stability in the actual test system has been established, it is recommended to dilute the product immediately before use.

Relevance

Catalyzes the attachment of serine to tRNA(Ser) in a two-step reaction: serine is first activated by ATP to form Ser-AMP and then transferred to the acceptor end of tRNA(Ser). Is probably also able to aminoacylate tRNA(Sec) with serine, to form the misacylated tRNA L-seryl-tRNA(Sec), which will be further converted into selenocysteinyl-tRNA(Sec). In the nucleus, binds to the VEGFA core promoter and prevents MYC binding and transcriptional activation by MYC. Recruits SIRT2 to the VEGFA promoter, promoting deacetylation of histone H4 at 'Lys-16' (H4K16). Thereby, inhibits the production of VEGFA and sprouting angiogenesis mediated by VEGFA.¹

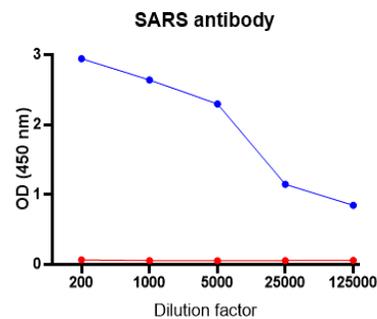


Figure 1: Specificity of anti-SARS (MQR2.3901), determined by ELISA. Antibody stock 1.38 mg/ml diluted in PBS containing 0.05% tween-20 and 1% BSA was tested on human Seryl-tRNA-synthetase (in blue) and non-target protein (in red).

References

- 1) <https://www.uniprot.org/uniprot/P49591>

