

**Product Name**

Monoclonal Human anti-seryl-tRNA synthetase  
Immunoglobulin

**CAT No.**

MQR 2.3901

**LOT No.**

19047

**Quantity**

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.<sup>1</sup>

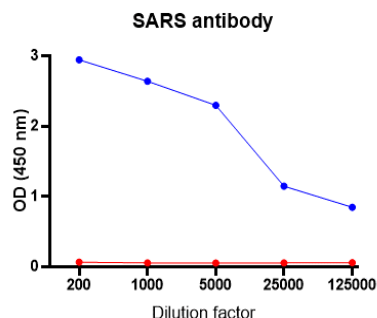


Figure 1: Specificity of anti-SARS (MQR2.3901), determined by ELISA. Antibody stock 1.38 mg/ml) diluted in PBS containing 0.05% tween-20 and 1% BSA was tested on human Seryl-tRNA-synthetase (in blue) and non-target protein (in red)..

**References**

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