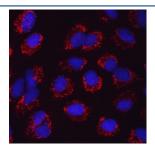


# SerRS Antibody / Seryl-tRNA synthetase / SARS2 (RQ7470)

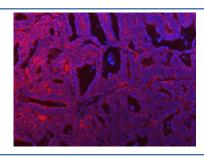
Catalog No.	Formulation	Size
RQ7470	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

## **Bulk quote request**

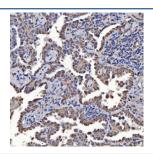
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q9NP81
Localization	Cytoplasmic (mitochondria)
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This SerRS antibody is available for research use only.



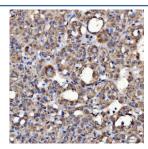
Immunofluorescent staining of FFPE human A549 cells with SerRS antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



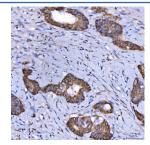
Immunofluorescent staining of FFPE human ovarian cancer tissue with SerRS antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



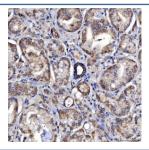
IHC staining of FFPE human lung cancer tissue with SerRS antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



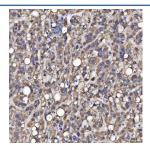
IHC staining of FFPE human thyroid cancer tissue with SerRS antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



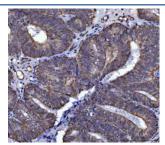
IHC staining of FFPE human colon cancer tissue with SerRS antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



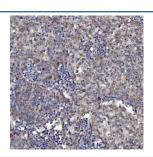
IHC staining of FFPE human prostate adenocarcinoma tissue with SerRS antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



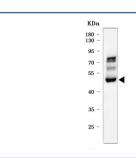
IHC staining of FFPE human liver cancer tissue with SerRS antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human endometrial cancer tissue with SerRS antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human cervical cancer tissue with SerRS antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human HepG2 cell lysate with SerRS antibody. Predicted molecular weight ~58 kDa, commonly observed at 50-60 kDa.

### **Description**

Seryl-tRNA synthetase, mitochondrial is an enzyme that in humans is encoded by the SARS2 gene. This gene encodes the mitochondrial seryl-tRNA synthethase precursor, a member of the class II tRNA synthetase family. The mature enzyme catalyzes the ligation of Serine to tRNA(Ser) and participates in the biosynthesis of selenocysteinyl-tRNA(sec) in mitochondria. The enzyme contains an N-terminal tRNA binding domain and a core catalytic domain. It functions in a homodimeric form, which is stabilized by tRNA binding. This gene is regulated by a bidirectional promoter that also controls the expression of mitochondrial ribosomal protein S12. Both genes are within the critical interval for the autosomal dominant deafness locus DFNA4 and might be linked to this disease. Multiple transcript variants encoding different isoforms have been identified for this gene.

#### **Application Notes**

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

#### Immunogen

E. coli-derived recombinant human protein (amino acids E46-S518) was used as the immunogen for the SerRS antibody.

#### **Storage**

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