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SARS Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11092a

Product Information

Application	WB, IHC-P, E
Primary Accession	P49591
Other Accession	NP_006504.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14862
Calculated MW	58777
Antigen Region	140-169

Additional Information

Gene ID	6301
Other Names	Serine--tRNA ligase, cytoplasmic, Seryl-tRNA synthetase, SerRS, Seryl-tRNA(Ser/Sec) synthetase, SARS, SERS
Target/Specificity	This SARS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 140-169 amino acids from the N-terminal region of human SARS.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SARS Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SARS1 (HGNC:10537)
Synonyms	SARS, SERS
Function	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) (PubMed:22353712, PubMed:24095058, PubMed:26433229, PubMed:28236339, PubMed:34570399, PubMed:36041817, PubMed:9431993). 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) (PubMed:26433229, PubMed:28236339, PubMed:34570399, PubMed:9431993). In the nucleus, binds to the VEGFA core promoter and prevents MYC binding and transcriptional activation by MYC (PubMed:24940000). 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 (PubMed:19423847, PubMed:19423848, PubMed:24940000).

Cellular Location Cytoplasm. Nucleus Note=Predominantly cytoplasmic, but a minor proportion is also found in the nucleus.

Tissue Location Brain..

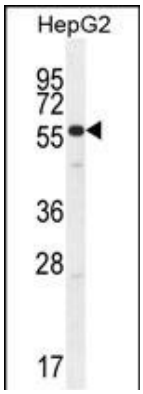
Background

This gene belongs to the class II amino-acyl tRNA family. The encoded enzyme catalyzes the transfer of L-serine to tRNA (Ser) and is related to bacterial and yeast counterparts. Multiple alternatively spliced transcript variants have been described but the biological validity of all variants is unknown. [provided by RefSeq].

References

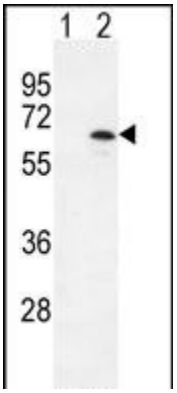
Fontaine-Bisson, B., et al. Diabetologia 53(10):2155-2162(2010)
Herzog, W., et al. Circ. Res. 104(11):1260-1266(2009)
Matsuoka, S., et al. Science 316(5828):1160-1166(2007)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :
Oh, J.H., et al. Mamm. Genome 16(12):942-954(2005)

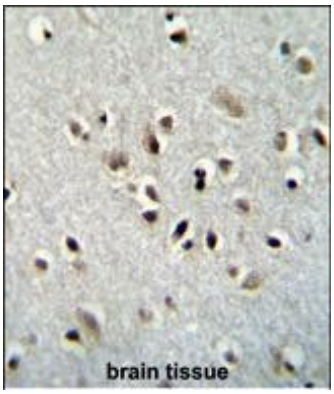
Images



SARS Antibody (N-term) (Cat. #AP11092a) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the SARS antibody detected the SARS protein (arrow).

Western blot analysis of SARS (arrow) using rabbit polyclonal SARS Antibody (N-term) (Cat. #AP11092a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the SARS gene.





SARS Antibody (N-term) (Cat. #AP11092a)immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of SARS Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.