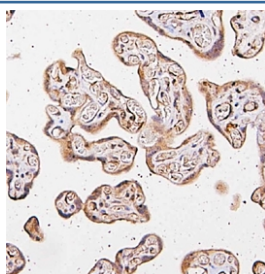


CARS Antibody / CysteinyI-tRNA synthetase (RQ4008)

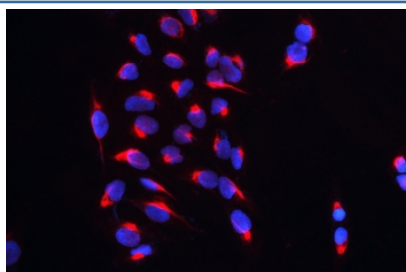
Catalog No.	Formulation	Size
RQ4008	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

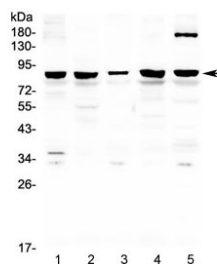
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P49589
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Immunofluorescence : 2ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This CARS antibody is available for research use only.



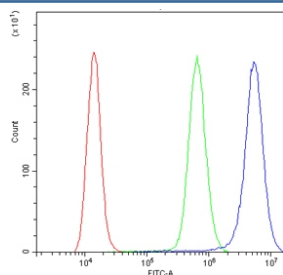
IHC staining of FFPE human placental tissue with CARS antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human U-2 OS cells with CARS antibody (red) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) COLO320, 3) A549, 4) PANC-1 and 5) 22RV1 cell lysate with CARS antibody at 0.5ug/ml. Predicted molecular weight ~85 kDa.



Flow cytometry testing of human A431 cells with CARS antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= CARS antibody.

Description

This CARS gene encodes a class 1 aminoacyl-tRNA synthetase, cysteinyl-tRNA synthetase. Each of the twenty aminoacyl-tRNA synthetases catalyzes the aminoacylation of a specific tRNA or tRNA isoaccepting family with the cognate amino acid. This gene is one of several located near the imprinted gene domain on chromosome 11p15.5, an important tumor-suppressor gene region. Alterations in this region have been associated with Beckwith-Wiedemann syndrome, Wilms tumor, rhabdomyosarcoma, adrenocortical carcinoma, and lung, ovarian and breast cancers. Alternative splicing of this gene results in multiple transcript variants.

Application Notes

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

Immunogen

A recombinant human partial protein corresponding to amino acids D510-Q748 was used as the immunogen for the CARS antibody.

Storage

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