

[KD Validated] Anti-CARS1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

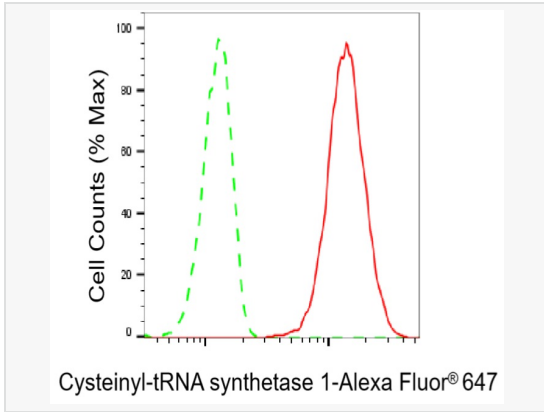
Catalog # R021520

Product Information

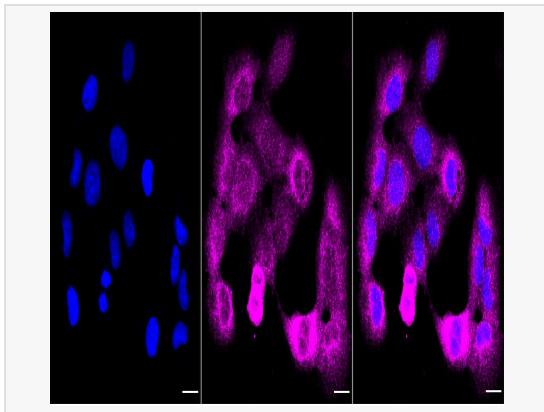
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	45R82N61
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human CARS
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-CARS1 Rabbit mAb [45R82N61] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

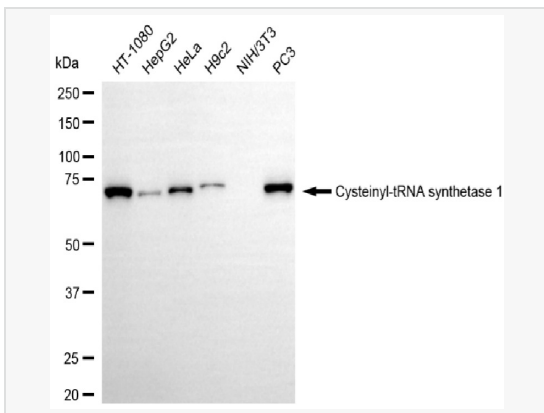
Synonyms	CARS1; CysteinyI-TRNA Synthetase 1; CARS; Cysteine TRNA Ligase1,Cytoplasmic; Cysteine--TRNA Ligase, Cytoplasmic; CysteinyI-TRNA Synthetase; EC 6.1.1.16; Cysteine Translase; MGC:11246; EC 6.1.1; MCDDBH; CYSRS; CysRS; MDBH.
Calculated MW	Calculated MW: 85 kDa, Observed MW: 75 kDa
Uniprot ID	P49589
Gene ID	833
Background	This gene encodes a class I aminoacyl-tRNA synthetase, cysteinyI-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. [provided by RefSeq, Aug 2010]
Cellular Location	Cytoplasm.



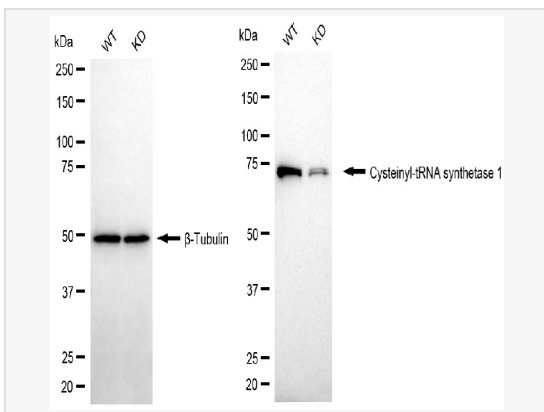
Flow cytometric analysis of CysteinyI-tRNA synthetase 1 expression in HT-1080 cells using CysteinyI-tRNA synthetase 1 antibody (R021520, 1:2,000). Green, isotype control; red, CysteinyI-tRNA synthetase 1.



Immunocytochemical staining of HT-1080 cells with CysteinyI-tRNA synthetase 1 antibody (R021520, 1:1,000). Nuclei were stained blue with DAPI; CysteinyI-tRNA synthetase 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μm.



Western blotting analysis using cysteinyI-tRNA synthetase 1 antibody (R021520). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with cysteinyI-tRNA synthetase 1 antibody (R021520, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using cysteinyI-tRNA synthetase 1 antibody (R021520). CysteinyI-tRNA synthetase 1 expression in wild-type (WT) and cysteinyI-tRNA synthetase 1 (CARS1) knockdown (KD) HSHC cells with 30 μg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with cysteinyI-tRNA synthetase 1 antibody (R021520, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.