Product Name: KD-Validated Cysteinyl-TRNA Synthetase 1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01446
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 85.5kDa

Antigen Information

Gene Name	CARS1
Alternative Names	CARS1; Cysteinyl-TRNA Synthetase 1; CARS; Cysteine TRNA Ligase1,Cytoplasmic; Cysteine--TRNA Ligase, Cytoplasmic; Cysteinyl-TRNA Synthetase; EC 6.1.1.16; Cysteine Translase; MGC:11246; EC 6.1.1; MCDDBH; CYSRS; CysRS; MDBH
Gene ID	833.0
SwissProt ID	P49589
Immunogen	A synthesized peptide derived from human CARS

Background

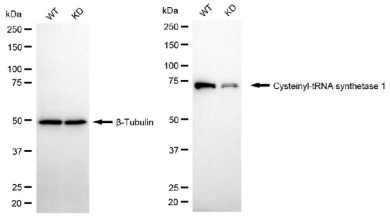
This gene encodes a class 1 aminoacyl-tRNA synthetase, cysteinyl-tRNA synthetase. Each of the twenty aminoacyl-tRNA

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. [provided by RefSeq, Aug 2010]

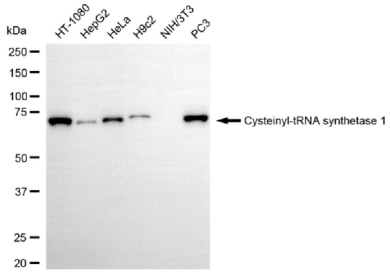
Research Area

Cell Biology,Epigenetics and Nuclear Signaling,Signal Transduction,Cancer,Metabolism

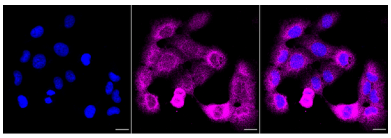
Image Data



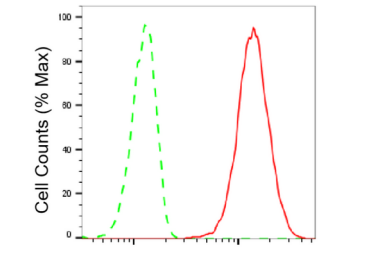
Western blotting analysis using cysteinyl-tRNA synthetase 1 antibody (KVAb01446). Cysteinyl-tRNA synthetase 1 expression in wild-type (WT) and cysteinyl-tRNA synthetase 1 (CARS1) knockdown (KD) HSHC cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with cysteinyl-tRNA synthetase 1 antibody (KVAb01446, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using cysteinyl-tRNA synthetase 1 antibody (KVAb01446). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with cysteinyl-tRNA synthetase 1 antibody (KVAb01446, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells with Cysteinyl-tRNA synthetase 1 antibody (KVAb01446, 1:1,000). Nuclei were stained blue with DAPI; Cysteinyl-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.



Cysteinyl-tRNA synthetase 1-Alexa Fluor® 647

Flow cytometric analysis of Cysteinyl-tRNA synthetase 1 expression in HT-1080 cells using Cysteinyl-tRNA synthetase 1 antibody (KVAb01446, 1:2,000). Green, isotype control; red, Cysteinyl-tRNA synthetase 1.