

Product Name: KD-Validated Coenzyme A Synthase Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA01644

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
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: 62.3kDa

Antigen Information

Gene Name	COASY
Alternative Names	COASY; Coenzyme A Synthase; NBP; Bifunctional Coenzyme A Synthase; CoA Synthase; DPCK; PPAT; POV-2; Bifunctional Phosphopantetheine Adenylyl Transferase/Dephospho CoA Kinase; Phosphopantetheine Adenylyltransferase / Dephosphocoenzyme A Kinase; Nucleotide Binding Protein; NBIA6; PCH12; UKR1
Gene ID	80347.0
SwissProt ID	Q13057
Immunogen	A synthesized peptide derived from COASY

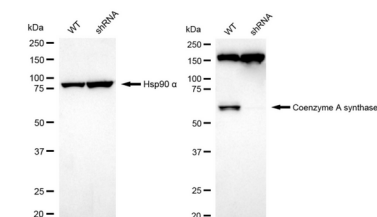
Background

Coenzyme A (CoA) functions as a carrier of acetyl and acyl groups in cells and thus plays an important role in numerous synthetic and degradative metabolic pathways in all organisms. In eukaryotes, CoA and its derivatives are also involved in membrane trafficking and signal transduction. This gene encodes the bifunctional protein coenzyme A synthase (CoAsy) which carries out the last two steps in the biosynthesis of CoA from pantothenic acid (vitamin B5). The phosphopantetheine adenylyltransferase domain of this bifunctional protein catalyzes the conversion of 4'-phosphopantetheine into dephospho-coenzyme A (dpCoA) while its dephospho-CoA kinase domain completes the final step by phosphorylating dpCoA to form CoA. Mutations in this gene are associated with neurodegeneration with brain iron accumulation (NBIA). Alternative splicing results in multiple isoforms. [provided by RefSeq, Apr 2014]

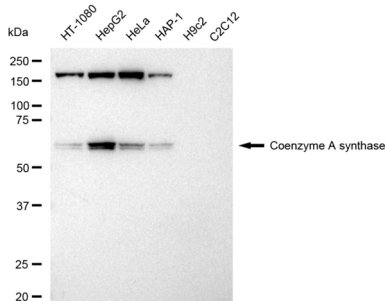
Research Area

Signal Transduction, Metabolism

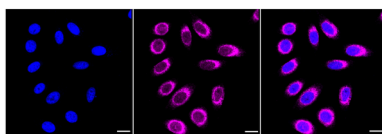
Image Data



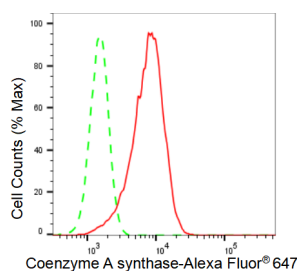
Western blotting analysis using coenzyme A synthase antibody (KVA01644). Coenzyme A synthase expression in wild type (WT) and coenzyme A synthase (COASY) shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with coenzyme A synthase antibody (KVA01644, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using Coenzyme A synthase antibody (KVA01644). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Coenzyme A synthase antibody (KVA01644, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with Coenzyme A synthase antibody (KVA01644, 1:1,000). Nuclei were stained blue with DAPI; Coenzyme A synthase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.



Flow cytometric analysis of Coenzyme A synthase expression in HepG2 cells using Coenzyme A synthase antibody (KVA01644, 1:2,000). Green, isotype control; red, Coenzyme A synthase.