

Rabbit CDS2 Polyclonal Antibody | anti-CDS2 antibody

CDS2 Antibody (Center)

CATALOG # AAA288707	HOST Rabbit	REACTIVITY Human (Predicted Reactivity: Bovine, Mouse, Rat)	APPLICATIONS ELISA, Western Blot
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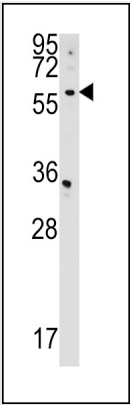
PRODUCT SYNONYMS

CDS2; Polyclonal Antibody; CDS2 Antibody (Center); Phosphatidate cytidyltransferase 2; CDP-DAG synthase 2; CDP-DG synthase 2; CDP-diacylglycerol synthase 2; CDS 2; CDP-diglyceride pyrophosphorylase 2; CDP-diglyceride synthase 2; CTP:phosphatidate cytidyltransferase 2; anti-CDS2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Bovine, Mouse, Rat)
Clonality	Polyclonal
Isotype	IgG
Specificity	This CDS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 138-165 amino acids from the Central region of human CDS2.
Purity/Purification	This antibody is purified through a protein A column, followed by peptide affinity purification.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Sequence Length	445
Applicable Applications for anti-CDS2 antibody	ELISA, WB (Western Blot)
Function	Catalyzes the conversion of phosphatidic acid (PA) to CDP- diacylglycerol (CDP-DAG), an essential intermediate in the synthesis of phosphatidylglycerol, cardiolipin and phosphatidylinositol (PubMed:). Exhibits specificity for the nature of the acyl chains at the sn-1 and sn-2 positions in the substrate, PA and the preferred acyl chain composition is 1-stearoyl-2-arachidonoyl-sn- phosphatidic acid (PubMed:25375833). Plays an important role in regulating the growth and maturation of lipid droplets which are storage organelles at the center of lipid and energy homeostasis (PubMed:26946540, PubMed:31548309).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein.
Tissue Location	Widely expressed. Expressed in heart, brain and retina, and to a lesser extent in placenta, lung, liver, skeletal muscle, kidney and pancreas.
Preparation and 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.

IMAGES



WB (Western Blot)
CDS2 Antibody (Center) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the CDS2 antibody detected the CDS2 protein (arrow).

ADDITIONAL INFORMATION

Related Product Information for anti-CDS2 antibody	Description: Breakdown products of phosphoinositides are ubiquitous second messengers that function downstream of many G protein-coupled receptors and tyrosine kinases regulating cell growth, calcium metabolism, and protein kinase C activity. This gene encodes an enzyme which regulates the amount of phosphatidylinositol available for signaling by catalyzing the conversion of phosphatidic acid to CDP-diacylglycerol. This enzyme is an integral membrane protein localized to two subcellular domains, the matrix side of the inner mitochondrial membrane where it is thought to be involved in the synthesis of phosphatidylglycerol and cardiolipin and the cytoplasmic side of the endoplasmic reticulum where it functions in phosphatidylinositol biosynthesis. Two genes encoding this enzyme have been identified in humans, one mapping to human chromosome 4q21 and a second to 20p13.
Product Categories/Family for anti-CDS2 antibody	Metabolism; Signal Transduction
References	Bailey, S.D., et al. Diabetes Care (2010) In press : Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Olsen, J.V., et al. Cell 127(3):635-648(2006) Olsen, J.V., et al. Cell 127(3):635-648(2006)

NCBI AND UNIPROT INFORMATION

NCBI GI #	20143480
NCBI GeneID	8760
NCBI Accession #	NP_003809.1
NCBI GenBank Nucleotide #	NM_003818.3
UniProt Accession #	O95674; Q5TDY2; Q5TDY3; Q5TDY4; Q5TDY5; Q9BYK5; Q9NTT2; B2RDC6; D3DW04
Molecular Weight	51418
NCBI Official Full Name	phosphatidate cytidylyltransferase 2
NCBI Official Synonym Full Names	CDP-diacylglycerol synthase (phosphatidate cytidylyltransferase) 2
NCBI Official Symbol	CDS2
NCBI Protein Information	phosphatidate cytidylyltransferase 2
UniProt Protein Name	Phosphatidate cytidylyltransferase 2
UniProt Gene Name	CDS2

UniProt Synonym Gene Names	CDS 2
UniProt Entry Name	CDS2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/cds2-antibody-western-blot-elisa/288707>