10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CCDC47 Antibody

Catalog # ASC11024

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q96A33
Other Accession	EAW94279, 119614685
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	55874
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CCDC47 antibody can be used for detection of CCDC47 by Western blot at 1 - 2 □g/mL. Antibody can also be used for immunohistochemistry starting at 5 □g/mL. For immunofluorescence start at 20 □g/mL.

Additional Information

Gene ID	57003
Other Names	Coiled-coil domain-containing protein 47, CCDC47
Target/Specificity	CCDC47;
Reconstitution & Storage	CCDC47 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	CCDC47 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CCDC47 {ECO:0000303|PubMed:30401460, ECO:0000312|HGNC:HGNC:24856}
Function	Component of the multi-pass translocon (MPT) complex that mediates insertion of multi-pass membrane proteins into the lipid bilayer of membranes (PubMed:32814900, PubMed:32820719, PubMed:36261522). The MPT complex takes over after the SEC61 complex: following membrane insertion of the first few transmembrane segments of proteins by the SEC61 complex, the MPT complex occludes the lateral gate of the SEC61 complex to promote insertion of subsequent transmembrane regions (PubMed:36261522). Within the MPT complex, the PAT subcomplex sequesters any highly polar regions in the transmembrane domains away

	from the non-polar membrane environment until they can be buried in the interior of the fully assembled protein (By similarity). Within the PAT subcomplex, CCDC47 occludes the lateral gate of the SEC61 complex (By similarity). Involved in the regulation of calcium ion homeostasis in the ER (PubMed:30401460). Required for proper protein degradation via the ERAD (ER-associated degradation) pathway (PubMed:25009997). Has an essential role in the maintenance of ER organization during embryogenesis (By similarity).
Cellular Location	Endoplasmic reticulum membrane; Single-pass type I membrane protein. Rough endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9D024}; Single-pass type I membrane protein

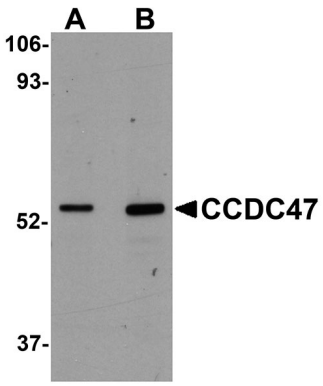
Background

CCDC47 Antibody: The coiled-coil domain is a common protein motif that is often involved in protein oligomerization and is found in proteins such as transcription factors and intermediate filaments. The CCDC47 gene maps to chromosome 17 at 17q23.3. Little is known about this single-pass membrane protein except that the coiled-coil domain is within the cytosolic domain near the carboxy terminus.

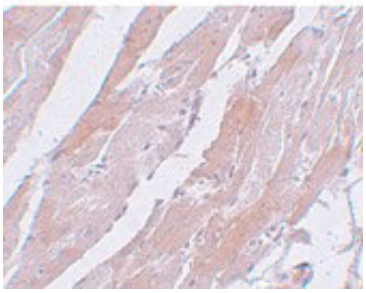
References

Steinmetz MO, Jelesarov I, Matousek WM, et al. Molecular basis of coiled-coil formation. Proc. Natl. Acad. Sci. USA2007; 104:7062-7.

Images

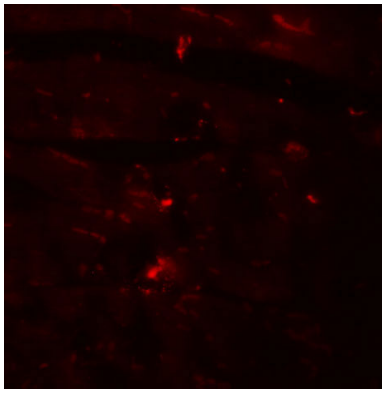


Western blot analysis of CCDC47 in mouse heart tissue lysate with CCDC47 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of CCDC47 in mouse heart tissue with CCDC47 antibody at 5 µg/mL.

Immunofluorescence of CDCC47 in mouse heart tissue with CDCC47 antibody at 20 µg/mL.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.