

Datasheet for ABIN872760
anti-CCDC42 antibody (AA 221-312)[Go to Product page](#)

2 Validations

1 Image

Overview

Quantity:	100 µL
Target:	CCDC42
Binding Specificity:	AA 221-312
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CCDC42 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human CCDC42
Isotype:	IgG
Cross-Reactivity:	Mouse, Rat
Predicted Reactivity:	Human,Dog,Cow,Sheep,Pig,Horse,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	CCDC42
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Target Details

Alternative Name:	CCDC42 (CCDC42 Products)
Background:	<p>Synonyms: CCDC42A, Coiled coil domain containing 42, Coiled coil domain containing protein 42A, FLJ32734, OTTMUSP00000006142, RGD1565925, RP23-40005.1, CCD42_HUMAN.</p> <p>Background: The coiled-coil domain is a structural motif found in proteins that are involved in a diverse array of biological functions such as the regulation of gene expression, cell division, membrane fusion and drug extrusion and delivery. CCDC42 (coiled-coil domain containing 42) is a 316 amino acid protein encoded by a gene that maps to human chromosome 17p13.1. Encoding over 1,200 genes, chromosome 17 comprises over 2.5 % of the human genome. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome.</p>
Gene ID:	146849

Application Details

Application Notes:	WB 1:300-5000 ELISA 1:500-1000 IHC-P 1:200-400 IHC-F 1:100-500 IF(IHC-P) 1:50-200 IF(IHC-F) 1:50-200 IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

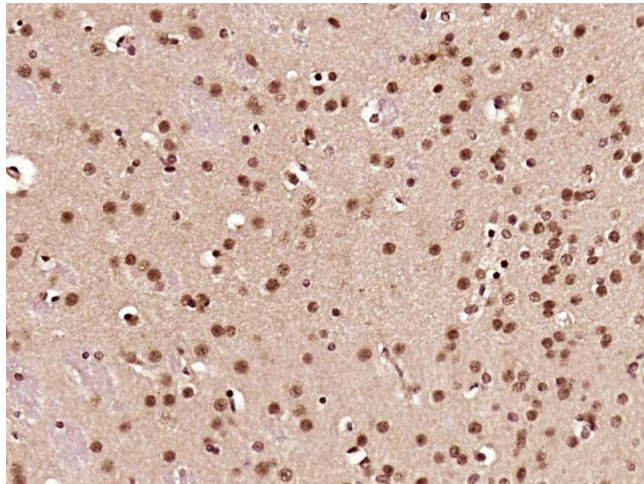
Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C

Handling

Storage Comment: Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Expiry Date: 12 months

Validation report #103397 for Western Blotting (WB)



Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Paraformaldehyde-fixed, paraffin embedded rat brain; Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (normal goat serum) at 37°C for 20min; Antibody incubation with CCDC42 Polyclonal Antibody, Unconjugated (bs-8131R) at 1:200 overnight at 4°C, followed by a conjugated secondary and DAB staining.



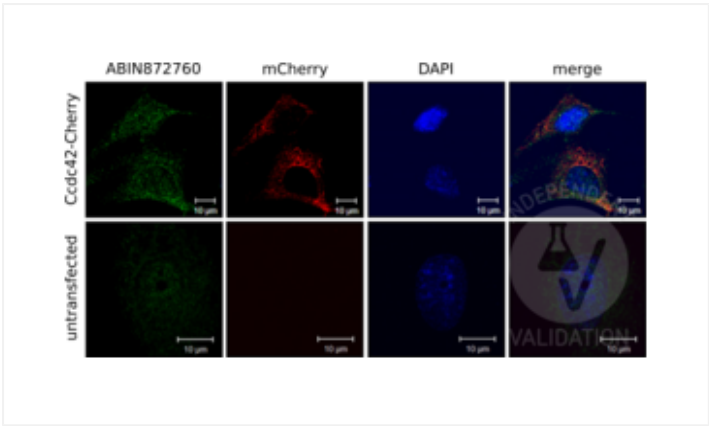
Successfully validated (Immunocytochemistry (ICC))

by [Developmental Biology, Johann-Friedrich-Blumenbach-Institute for Zoology and Anthropology, Georg-August-University of Göttingen](#)

Report Number: 103396

Date: Oct 12 2018

Target:	CCDC42
Lot Number:	AH09037940
Method validated:	Immunocytochemistry (ICC)
Positive Control:	NIH/3T3 cells transfected with Ccdc42-mCherry expression vector
Negative Control:	NIH/3T3 cell lysates
Notes:	ABIN872760 specifically detects exogenously expressed Ccdc42-Cherry but shows also unspecific background staining.
Primary Antibody:	ABIN872760
Secondary Antibody:	goat anti-rabbit 488 (MoBiotec MFP-A1008, lot 2806F058)
Protocol:	<ul style="list-style-type: none">• Grow NIH/3T3 cells (ATCC, CRL-1658) in DMEM+GlutaMAX (Gibco, 10567-014, lot 1922818) supplemented with fetal bovine serum (Gibco, 10500-064, lot 08FO477K) and Pen/Strep (Gibco 15140-122, lot 1924797), at 37°C and 5% CO₂ to 70% confluency.• Transfect cells with mCherry-tagged Ccdc42 (Ccdc42-Cherry) expression vector using EndofectinMax (GeneCopoeia) following the manufacturer's instructions.• Grow cells for 24h.• Fix cells in methanol for 10min at -20°C followed by incubation in 0.3% Triton X-100 for 10min at 4°C.• Block cells in PBS containing 1% bovine serum albumin and 0.5% Tween-20 (PBT) for 1h at RT.• Incubate cells with primary rabbit anti-CCDC42 antibody (antibodies-online, ABIN872760, lot AH09037940) diluted 1:100 in PBS for 1h at 37°C.• Wash cells 3x 5min with 1x PBS.• Incubate cells with secondary goat anti-rabbit 488 antibody (MoBiotec MFP-A1008, lot 2806F058) diluted 1:300 in PBS for 1h at 37°C.• DNA counterstained with DAPI (4',6-Diamidino-2-phenylindole; Sigma D-9542).• Image acquisition on Zeiss LSM 510 confocal microscope and processing using Adobe Photoshop 5.0.



**Validation image no. 1 for anti-Coiled-Coil Domain
Containing 42 (CCDC42) (AA 221-312) antibody
(ABIN872760)**

Immunocytochemistry detection of NIH/3T3 cells expressing mCherry-labeled Ccdc42 (Ccdc42-Cherry) using ABIN872760 (green) or an mCherry antibody (red). Untransfected NIH/3T3 cells served as negative control. The pictures on the right show the red and green channels merged with DAPI counterstain (blue).



Successfully validated (Western Blotting (WB))

by [Developmental Biology, Johann-Friedrich-Blumenbach-Institute for Zoology and Anthropology, Georg-August-University of Göttingen](#)

Report Number: 103397

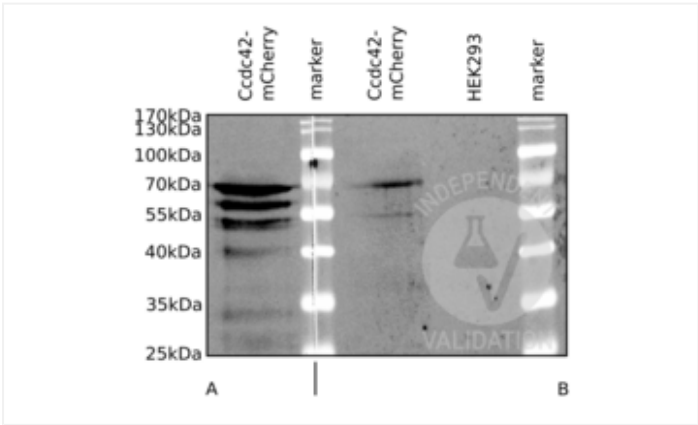
Date: Oct 12 2018

Target:	CCDC42
Lot Number:	AH09037940
Method validated:	Western Blotting (WB)
Positive Control:	Lysate from HEK293 cells transfected with mCherry tagged Ccdc42 expression vector
Negative Control:	Lysate from untransfected HEK293 cells
Notes:	Passed. ABIN872760 specifically detects Ccdc42 by immunoblotting.
Primary Antibody:	ABIN872760
Secondary Antibody:	goat anti-rabbit IgG (H+L), HRP-conjugated (Jackson Immuno Research, 111-035-003, lot 123450)
Protocol:	<ul style="list-style-type: none"> • Grow HEK293 (ATCC) cells in DMEM+GlutaMAX (Gibco, 10567-014, lot 1922818) supplemented with fetal bovine serum (Gibco, 10500-064, lot 08FO477K) and Pen/Strep (Gibco, 15140-122, lot 1924797), at 37°C and 5% CO₂ to 70% confluency. • Transfect cells with mCherry tagged Ccdc42 (Ccdc42-Cherry) expression vector using EndofectinMax (GeneCopoeia) following the manufacturer's instructions. • Grow cells for 24h. • Lyse cells in SDS-sample buffer and denature total cellular lysates for 5min at 95°C. • Separate up to 40µl of protein lysate on a denaturing 10% SDS polyacrylamide gel (Laemmli (1970)). • Transfer proteins onto 0.2µm Protran membrane (GE Healthcare, 10600004, A10043108) with a Western blotting system for 1h at 400A (Towbin et al. (1979)). • Block the membrane in TBST (50mM Tris-HCl pH7.4, 150mM NaCl, 0.2% Tween 20) containing 5% dry milk (blocking solution) for 1h at RT. • Incubate membrane with primary <ul style="list-style-type: none"> ◦ rabbit anti-Ccdc42 antibody (antibodies-online, ABIN872760, lot AH09037940) diluted 1:500 in blocking solution ON at 4°C or ◦ rat anti-RFP antibody (antibodies-online, ABIN334653, lot 090428) diluted 1:500 in blocking solution ON at 4°C. • Wash membrane for 6x 5min with TBST at RT. • Incubate membrane with secondary <ul style="list-style-type: none"> ◦ goat anti-rabbit IgG (H+L), HRP-conjugated antibody (Jackson Immuno Research, 111-

- 035-003, lot 123450) diluted 1:2000 in blocking solution for 45min at RT or
 - rabbit anti-rat IgG-HRPconjugated antibody (Jackson ImmunoResearch Lab. Inc., 312-035-003, lot 34336) diluted 1:2000 in blocking solution for 45min at RT.
- Wash membranes for 45 min at RT with TBST.
- Reveal protein bands using Clarity Max Western ECL substrate (Bio-Rad, 1705062) and capture images via Chemidoc Imaging System (Bio-Rad).

Experimental Notes: Expected molecular mass of Ccdc42-tagged Cherry is approximately 68kDa. ABIN872760 detects a protein in the expected molecular mass range. The anti-RedFP antibody detects a protein with a similar mass in addition to proteins with lower molecular masses, which are most probably degradation products.

Image for Validation report #103397



Validation image no. 1 for anti-Coiled-Coil Domain Containing 42 (CCDC42) (AA 221-312) antibody (ABIN872760)

Western blot analysis of lysates from HEK293 cells expressing mCherry tagged Ccdc42 (Ccdc42-mCherry) or untransfected HEK293 cells (HEK293). The membrane was incubated with a primary RFP antibody (A) or ABIN872760 (B).