abcam

ab195587

Anti-CNOT7 antibody [EPR18722]

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR18722
Purification technique	Affinity purification Protein A
Concentration	0.654 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/40
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Expected

Species	Human, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Expected

Species	Human, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information CNOT7

Function	Has 3'-5' poly(A) exoribonuclease activity for synthetic poly(A) RNA substrate (PubMed:19276069, PubMed:20634287, PubMed:31439799). Its function seems to be partially redundant with that of CNOT8 (PubMed:19605561). Catalytic component of the CCR4-NOT complex which is one of the major cellular mRNA deadenylases and is linked to various cellular processes including bulk mRNA degradation, miRNA-mediated repression, translational repression during translational initiation and general transcription regulation (PubMed:19276069, PubMed:20634287, PubMed:31439799). During miRNA-mediated repression the complex also seems to act as translational repressor during translational initiation (PubMed:20065043). Additional complex functions may be a consequence of its influence on mRNA expression (PubMed:19276069, PubMed:23236473). Associates with members of the BTG family such as TOB1 and BTG2 and is required for their anti-proliferative activity (PubMed:19276069, PubMed:23236473).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

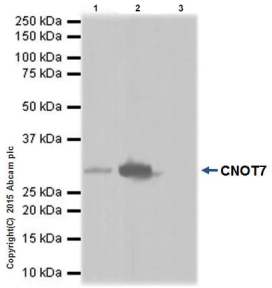
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

10 product images



Immunoprecipitation - Anti-CNOT7 antibody [EPR18722] (ab195587)

CNOT7 was immunoprecipitated from 1mg of HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab195587 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab195587 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.
Lane 1: HeLa whole cell lysate 10µg (Input).

Lane 2: ab195587 IP in HeLa whole cell lysate.

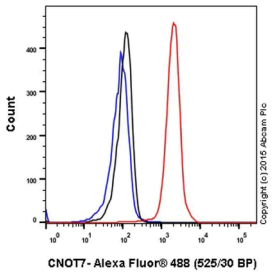
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab195587 in HeLa whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.

All lanes:
Immunoprecipitation - Anti-CNOT7 antibody [EPR18722] (ab195587)

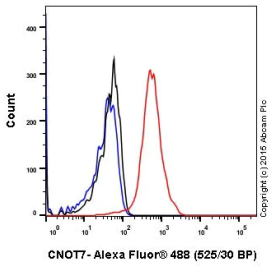
Predicted band size: 33 kDa



Flow Cytometry (Intracellular) - Anti-CNOT7 antibody [EPR18722] (ab195587)

CNOT7 Flow Cytometry (Intracellular) staining using rabbit Anti-CNOT7 antibody

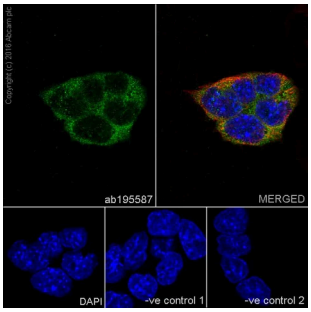
Intracellular Flow Cytometry analysis of 4% paraformaldehyde fixed NIH/3T3 (Mouse embryonic fibroblast cell line) cell linelabelling CNOT7 with ab195587 at 1/1000 dilution (red), isotype control with ab172730 (black) and unlabelled control cells without incubation with primary antibody and secondary antibody (blue).



Flow Cytometry (Intracellular) - Anti-CNOT7 antibody [EPR18722] (ab195587)

CNOT7 Flow Cytometry (Intracellular) staining using rabbit Anti-CNOT7 antibody

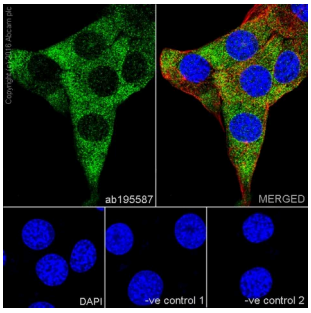
Intracellular Flow Cytometry analysis of 4% paraformaldehyde fixed F9 (Mouse embryonic testicular cancer cell line) cells labeling CNOT7 with ab195587 at 1/1000 dilution (red), isotype control with ab172730 (black) and unlabeled control cells without incubation with primary antibody and secondary antibody (blue).



Immunocytochemistry/ Immunofluorescence - Anti-CNOT7 antibody [EPR18722] (ab195587)

CNOT7 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CNOT7 antibody

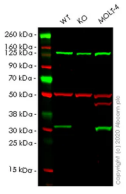
Immunofluorescent analysis of 4% paraformaldehyde-fixed 0.1% Triton X-100 permeabilized F9 (Mouse embryonic testicular cancer cell line) cells labeling CNOT7 with ab195587 at 1/1000 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on NIH/3T3 cell line. The nuclear counter stain is DAPI (blue).
Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution (red).
The negative controls are as follows:
-ve control 1: ab195587at 1/1000 dilution followed by Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary at 1/XXXX dilution.
-ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-CNOT7 antibody [EPR18722] (ab195587)

CNOT7 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CNOT7 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (Mouse embryonic fibroblast cell line) cells labeling CNOT7 with ab195587 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on NIH/3T3 cell line. The nuclear counter stain is DAPI (blue).
Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution (red).
The negative controls are as follows:
-ve control 1: ab195587at 1/1000 dilution, followed by Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary.
-ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary at 1/1000 dilution.



Western blot - Anti-CNOT7 antibody [EPR18722] (ab195587)

CNOT7 Western blot staining using rabbit Anti-CNOT7 antibody

Lanes 1-3: Merged signal (red and green). Green - ab195587 observed at 33 kDa. Red - loading control ab7291 observed at 50 kDa.
ab195587 Anti-CNOT7 antibody [EPR18722] was shown to specifically react with CNOT7 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265811 (knockout cell lysate ab258370) was used. Wild-type and CNOT7 knockout samples were subjected to SDS-PAGE. ab195587 and Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:

Western blot - Anti-CNOT7 antibody [EPR18722] (ab195587) at 1/1000 dilution

Lane 1:
Wild-type HeLa cell lysate at 20 µg

Lane 2:
CNOT7 knockout HeLa cell lysate at 20 µg

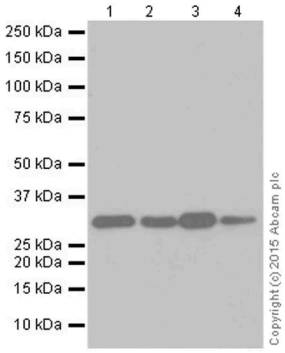
Lane 3:
MOLT-4 cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 33 kDa

Observed band size: 33 kDa



Western blot - Anti-CNOT7 antibody [EPR18722] (ab195587)

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-CNOT7 antibody [EPR18722] (ab195587) at 1/1000 dilution

Lane 1:
Human fetal brain lysate at 10 µg

Lane 2:
Human fetal heart lysate at 10 µg

Lane 3:
Human fetal kidney lysate at 10 µg

Lane 4:
Human fetal spleen lysate at 10 µg

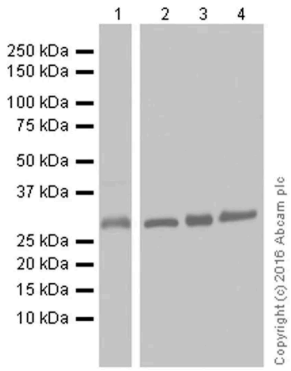
Secondary

All lanes:
Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 33 kDa

Observed band size: 33 kDa

Exposure time: 30s



Western blot - Anti-CNOT7 antibody [EPR18722] (ab195587)

Blocking/Dilution buffer: 5% NFDM/TBST.
Exposure time: Lane 1: 1 seconds; Lane 2-4: 2 seconds.

All lanes:
Western blot - Anti-CNOT7 antibody [EPR18722] (ab195587) at 1/1000 dilution

Lane 1:
HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate at 10 µg

Lane 2:
HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate at 10 µg

Lane 3:
NTERA-2/D1 (Human malignant pluripotent embryonic carcinoma cell line) whole cell lysate at 10 µg

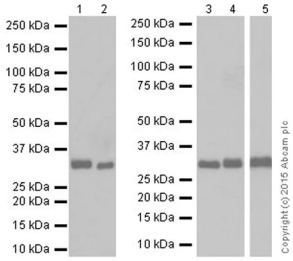
Lane 4:
NCCIT (Human pluripotent embryonic carcinoma cell line) whole cell lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 33 kDa

Observed band size: 33 kDa



Western blot - Anti-CNOT7 antibody [EPR18722] (ab195587)

CNOT7 Western blot staining using rabbit Anti-CNOT7 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
Exposure time: Lane 1/2: 15 seconds; Lane 3/4: 5 seconds; Lane 5: 30 seconds.

All lanes:
Western blot - Anti-CNOT7 antibody [EPR18722] (ab195587) at 1/1000 dilution

Lane 1:
Mouse brain lysate at 10 µg

Lane 2:
Mouse heart lysate at 10 µg

Lane 3:
Rat kidney lysate at 10 µg

Lane 4:
Rat spleen lysate at 10 µg

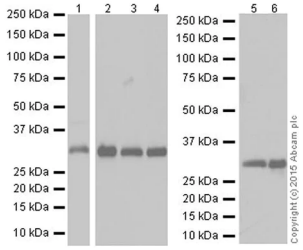
Lane 5:
Rat heart lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 33 kDa

Observed band size: 33 kDa



Western blot - Anti-CNOT7 antibody [EPR18722] (ab195587)

Blocking/Dilution buffer: 5% NFDM/TBST.
Exposure time: Lane 1: 2 seconds; Lane 2-6: 5 seconds.

All lanes:
Western blot - Anti-CNOT7 antibody [EPR18722] (ab195587) at 1/1000 dilution

Lane 1:
Mouse ovary lysate at 10 µg

Lane 2:
Mouse embryo lysate at 10 µg

Lane 3:
F9 (Mouse embryonic testicular cancer cell line) whole cell lysate at 10 µg

Lane 4:
SP2/0 (Mouse spleen cell line) whole cell lysate at 10 µg

Lane 5:
C6 (Rat glial tumor cell line) whole cell lysate at 10 µg

Lane 6:
PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 33 kDa

Observed band size: 33 kDa

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