abcam

ab317693

Anti-CLUH antibody [EPR28732-85]

Recombinant | RabMAb | KO Validated | 20ul selling size

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	EPR28732-85
Purification technique	Affinity purification Protein A
Concentration	0.515 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Species	Mouse

Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Species	Mouse
Dilution info	1/50
Notes	-

Expected

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Species	Mouse
Dilution info	1/50
Notes	-

Expected

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

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IHC-Fr

Not recommended

Species	Mouse, Rat, Human

Dilution info	-
Notes	-

Target data

See full target information CLUH

Function	mRNA-binding protein involved in proper cytoplasmic distribution of mitochondria. Specifically binds mRNAs of nuclear-encoded mitochondrial proteins in the cytoplasm and regulates transport or translation of these transcripts close to mitochondria, playing a role in mitochondrial biogenesis.

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.

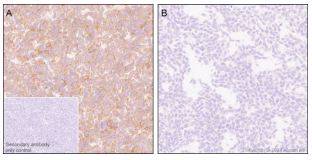
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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13 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLUH antibody [EPR28732-85] (ab317693)

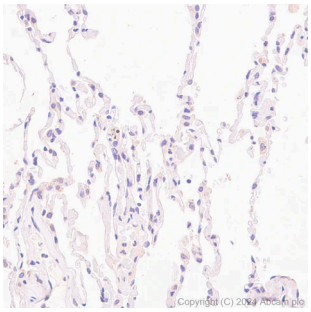
Immunohistochemical analysis of paraffin-embedded A Wild-type HEK-293 (human embryonic kidney epithelial cell) cell pellet B CLUH knockout HEK-293 whole cell pellet tissue labeling CLUH with ab317693 at 1/100 (5.15 ug/ml) dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Positive staining on (A) Wild-type HEK-293 cell pellet, no staining on (B) CLUH knockout HEK-293 whole cell pellet. The section was incubated with ab317693 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLUH antibody [EPR28732-85] (ab317693)

CLUH Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human lung using rabbit Anti-CLUH antibody

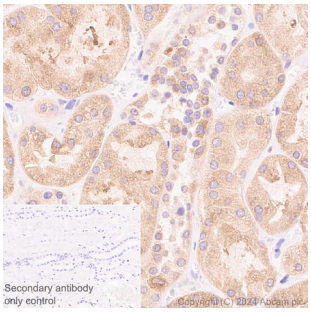
Immunohistochemical analysis of paraffin-embedded Human lung tissue labeling CLUH with ab317693 at 1/100 (5.15 ug/ml) dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Low expression: almost no staining on human lung. The section was incubated with ab317693 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLUH antibody [EPR28732-85] (ab317693)

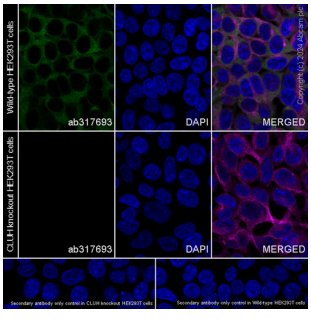
Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling CLUH with ab317693 at 1/100 (5.15 ug/ml) dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Positive staining on human kidney. The section was incubated with ab317693 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-CLUH antibody [EPR28732-85] (ab317693)

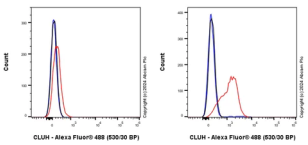
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HEK293T (human embryonic kidney epithelial cell) cells labelling CLUH with ab317693 at 1/50 (10.3 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green).

Confocal image showing cytoplasmic staining in HEK293T cell line (shown in green) and no staining in CLUH KO HEK293T cell line. The counterstain was observed in magenta. Nuclear DNA was labeled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Magenta). The Nuclear counterstain

was DAPI (Blue).

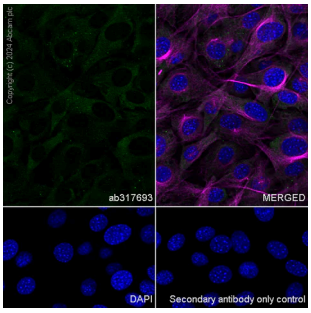
Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Flow Cytometry (Intracellular) - Anti-CLUH antibody [EPR28732-85] (ab317693)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized CLUH KO HEK293T (human embryonic kidney epithelial cell, Left) / Parental HEK293T (Right) cells labelling CLUH with ab317693 at 1/500 dilution (0.1 ug)/Red (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



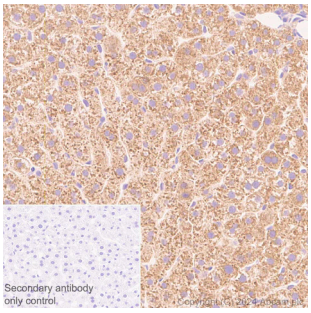
Immunocytochemistry/ Immunofluorescence - Anti-CLUH antibody [EPR28732-85] (ab317693)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized NIH/3T3 (mouse embryonic fibroblast) cells labelling CLUH with ab317693 at 1/50 (10.3 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green).

Confocal image showing cytoplasmic staining in NIH/3T3 cell line (shown in green). The counterstain was observed in magenta. Nuclear DNA was labeled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Magenta). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLUH antibody [EPR28732-85] (ab317693)

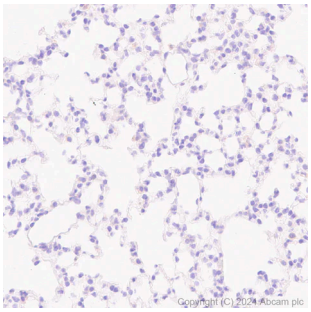
Immunohistochemical analysis of paraffin-embedded Rat liver tissue labeling CLUH with ab317693 at 1/1000 (0.515 ug/ml) dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Positive staining on rat liver. The section was incubated with ab317693 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLUH antibody [EPR28732-85] (ab317693)

CLUH Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse lung using rabbit Anti-CLUH antibody

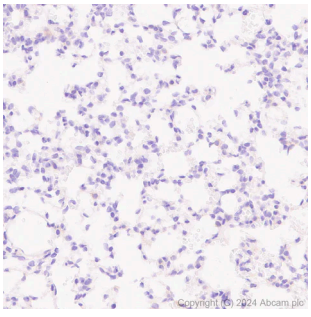
Immunohistochemical analysis of paraffin-embedded Mouse lung tissue labeling CLUH with ab317693 at 1/1000 (0.515 ug/ml) dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Low expression: no staining on mouse lung (PMID: 28188211). The section was incubated with ab317693 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLUH antibody [EPR28732-85] (ab317693)

CLUH Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Rat lung using rabbit Anti-CLUH antibody

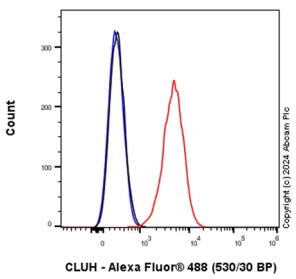
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Low expression: no staining on rat lung. The section was incubated with ab317693 for 30 mins at room temperature.
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Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

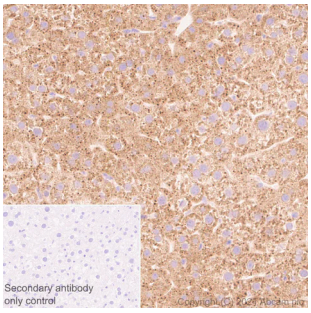
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Flow Cytometry (Intracellular) - Anti-CLUH antibody [EPR28732-85] (ab317693)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized NIH/3T3 (mouse embryonic fibroblast) cells labelling CLUH with ab317693 at 1/50 dilution (1 ug)/Red (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CLUH antibody [EPR28732-85] (ab317693)

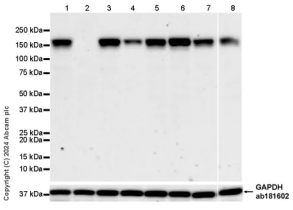
Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling CLUH with ab317693 at 1/1000 (0.515 ug/ml) dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Positive staining on mouse liver (PMID: 32149416). The section was incubated with ab317693 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Western blot - Anti-CLUH antibody [EPR28732-85] (ab317693)

CLUH Western blot staining using rabbit Anti-CLUH antibody

In Western blot, ab317693 was shown to bind specifically to CLUH. Target of interest was observed at 160 kDa in wild-type HEK-293 cell lysates (lane 1) with no signal observed at this size in CLUH knockout cell line (lane 2) (knockout cell line ab266407 / knockout cell lysate ab258367).

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

All lanes:
Western blot - Anti-CLUH antibody [EPR28732-85] (ab317693) at 1/1000 dilution

Lane 1:
Wild-type HEK-293 (human embryonic kidney epithelial cell) whole cell lysate at 20 µg

Lane 2:

CLUH knockout HEK-293 whole cell lysate at 20 µg

Lane 3:
HCT 116 (human colorectal carcinoma epithelial cell) whole cell lysate at 20 µg

Lane 4:
U-87 MG (human glioblastoma-astrocytoma epithelial cell) whole cell lysate at 20 µg

Lane 5:
HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 6:
K-562 (human chronic myelogenous leukemia lymphoblast) whole cell lysate at 20 µg

Lane 7:
NIH/3T3 (mouse embryonic fibroblast) whole cell lysate at 20 µg

Lane 8:
PC-12 (rat adrenal gland pheochromocytoma cell) whole cell lysate at 20 µg

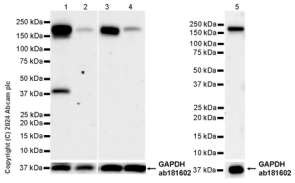
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Performed under reducing conditions.

Observed band size: 160 kDa, 36 kDa

Exposure time: 103s



Western blot - Anti-CLUH antibody [EPR28732-85] (ab317693)

CLUH Western blot staining using rabbit Anti-CLUH antibody

Low expression: lung (PMID: 28188211).

The identity of the lower MW band at approximately 37 kDa (in lane 1) is unknown.

Lanes 1-4 are applied with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1/20000 and lane 5 is applied with Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

Exposure time: Lanes 1-4: 103 seconds; Lane 5: 158 seconds.

All lanes:
Western blot - Anti-CLUH antibody [EPR28732-85] (ab317693) at 1/1000 dilution

Lane 1:
Mouse liver tissue lysate at 20 µg

Lane 2:
Mouse lung tissue lysate at 20 µg

Lane 3:
Rat liver tissue lysate at 20 µg

Lane 4:
Rat lung tissue lysate at 20 µg

Lane 5:
Human kidney tissue lysate at 20 µg

Secondary

Lanes 1 - 4:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Lane 5:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Observed band size: 160 kDa, 36 kDa

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