abcam

ab2792

Anti-P4HB antibody [RL90]

Anti-P4HB antibody [RL90] (ab2792) is a mouse monoclonal antibody detecting P4HB in **Western Blot, Flow Cytometry, IP, IHC-P, IHC-Fr, ICC/IF, ELISA, EM**. Suitable for **African green monkey, Dog, Hamster, Human, Monkey, Mouse, Pig, Rat**.

- Over 220 publications
- Trusted since 2003

Key facts

Isotype	IgG2a
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Native Full Length Protein corresponding to Rat P4hb. Database link P04785
Clone number	RL90
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Expected

Species	Mouse

Dilution info	-
Notes	This antibody has been shown to inhibit the activity of PDI in vitro. It has also been found to inhibit disulfide bond reduction of the HIV protein, gp120, at the cell surface of CHO cells and human lymphoid cells.

Species	Rat
Dilution info	-
Notes	This antibody has been shown to inhibit the activity of PDI in vitro. It has also been found to inhibit disulfide bond reduction of the HIV protein, gp120, at the cell surface of CHO cells and human lymphoid cells.

Species	Pig
Dilution info	-
Notes	This antibody has been shown to inhibit the activity of PDI in vitro. It has also been found to inhibit disulfide bond reduction of the HIV protein, gp120, at the cell surface of CHO cells and human lymphoid cells.

Species	Hamster
Dilution info	-
Notes	This antibody has been shown to inhibit the activity of PDI in vitro. It has also been found to inhibit disulfide bond reduction of the HIV protein, gp120, at the cell surface of CHO cells and human lymphoid cells.

Species	African green monkey
Dilution info	-
Notes	This antibody has been shown to inhibit the activity of PDI in vitro. It has also been found to inhibit disulfide bond reduction of the HIV protein, gp120, at the cell surface of CHO cells and human lymphoid cells.

Species	Monkey
Dilution info	-
Notes	This antibody has been shown to inhibit the activity of PDI in vitro. It has also been found to inhibit disulfide bond reduction of the HIV protein, gp120, at the cell surface of CHO cells and human lymphoid cells.

Species	Human
Dilution info	-
Notes	This antibody has been shown to inhibit the activity of PDI in vitro. It has also been found to inhibit disulfide bond reduction of the HIV protein, gp120, at the cell surface of CHO cells and human lymphoid cells.

Species	Dog
Dilution info	-
Notes	This antibody has been shown to inhibit the activity of PDI in vitro. It has also been found to inhibit disulfide bond reduction of the HIV protein, gp120, at the cell surface of CHO cells and human lymphoid cells.

Predicted

Species	Drosophila melanogaster
Dilution info	-
Notes	-

EM

Expected

Species	Mouse, Rat, Pig, Hamster, African green monkey, Monkey, Human, Dog
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Drosophila melanogaster
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Mouse
Dilution info	0.5 µg for 10^6 Cells
Notes	ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Species	Human
Dilution info	0.5 µg for 10^6 Cells

Notes	ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Expected

Species	Rat, Dog, African green monkey, Hamster, Monkey, Pig
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Drosophila melanogaster
Dilution info	-
Notes	-

ELISA

Expected

Species	Mouse, Rat, Pig, Hamster, African green monkey, Monkey, Human, Dog
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Drosophila melanogaster
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000

Notes	If there is no signal or signal is weak, more concentrated antibody could be used in addition to using less stringent blocking conditions (e.g., BSA instead of milk, incubating the antibody in PBST or TBST only, lower milk percentage).

Species	Rat
Dilution info	1/1000
Notes	If there is no signal or signal is weak, more concentrated antibody could be used in addition to using less stringent blocking conditions (e.g., BSA instead of milk, incubating the antibody in PBST or TBST only, lower milk percentage).

Species	Human
Dilution info	1/1000
Notes	If there is no signal or signal is weak, more concentrated antibody could be used in addition to using less stringent blocking conditions (e.g., BSA instead of milk, incubating the antibody in PBST or TBST only, lower milk percentage).

Expected

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

Predicted

Species	Drosophila melanogaster, Monkey, Hamster, African green monkey, Pig
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse, Human, Dog
Dilution info	-
Notes	-

Expected

Species	Rat, African green monkey, Hamster, Monkey, Pig
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Drosophila melanogaster
Dilution info	-
Notes	-

FuncS (Neut/Block)

Expected

Species	Mouse, Rat, Pig, Hamster, African green monkey, Monkey, Human, Dog
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Drosophila melanogaster
Dilution info	-
Notes	-

IHC-Fr

Expected

Species	Mouse, Rat, Pig, Hamster, African green monkey, Monkey, Human, Dog
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Drosophila melanogaster
Dilution info	-

Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval via the microwave method before commencing with IHC staining protocol.

Expected

Species	Mouse, Rat, Dog, African green monkey, Hamster, Monkey, Pig
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Drosophila melanogaster
Dilution info	-
Notes	-

Target data

See full target information P4HB

Function	This multifunctional protein catalyzes the formation, breakage and rearrangement of disulfide bonds. At the cell surface, seems to act as a reductase that cleaves disulfide bonds of proteins attached to the cell. May therefore cause structural modifications of exofacial proteins. Inside the cell, seems to form/rearrange disulfide bonds of nascent proteins. At high concentrations and following phosphorylation by FAM20C, functions as a chaperone that inhibits aggregation of misfolded proteins (PubMed:32149426). At low concentrations, facilitates aggregation (anti-chaperone activity). May be involved with other chaperones in the structural modification of the TG precursor in hormone biogenesis. Also acts as a structural subunit of various enzymes such as prolyl 4-hydroxylase and microsomal triacylglycerol transfer protein MTTP. Receptor for LGALS9; the interaction retains P4HB at the cell surface of Th2 T helper cells, increasing disulfide reductase activity at the plasma membrane, altering the plasma membrane redox state and enhancing cell migration (PubMed:21670307).

Storage

Shipped at conditions	Blue Ice
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

What is this antibody validated in?
Anti-P4HB antibody [RL90] (ab2792) is a mouse monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Flow Cyt), Immunoprecipitation (IP), Immunohistochemistry (IHC-P), Immunohistochemistry (IHC-Fr), Immunocytochemistry/immunofluorescence (ICC/IF), ELISA, Electron microscopy (EM) in African green monkey, Dog, Hamster, Human, Monkey, Mouse, Pig, Rat samples.

What is the molecular weight of P4HB?
Anti-P4HB [RL90] (ab2792) specifically detects a band for P4HB (UniProt: P04785) at a molecular weight of 58kDa.

Trusted by the scientific community
Anti-P4HB [RL90] (ab2792) was first used in a scientific publication in 2003 and has been cited over 220 times in peer-reviewed journals.

Reviewed by scientists
Anti-P4HB [RL90] (ab2792) has over 45 independent reviews from customers.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	P4HB is a protein known as Protein Disulfide Isomerase (PDI). It plays a significant role in catalyzing the formation of disulfide bonds. This protein helps to fold newly synthesized proteins by shuffling disulfide bonds. It has a molecular mass of around 57 kDa. P4HB is mainly expressed in the endoplasmic reticulum of cells. While its alternative name is ERp59 P4HB is integral to the protein folding machinery inside cells.

Biological function summary	P4HB functions in protein folding and assembly. By acting as a chaperone it protects proteins from misfolding and aggregation. P4HB operates as part of a larger multi-protein complex that assists in maintaining protein structure under stress conditions in the cell. Its activity ensures protein stability and proper cellular function important for cell viability and health.
Pathways	P4HB plays a central role in the unfolded protein response (UPR) and oxidative protein folding pathway. It interacts with proteins such as calnexin and calreticulin through its involvement in these pathways. During oxidative protein folding P4HB introduces disulfide bonds into nascent proteins while removing incorrect ones ensuring efficient protein quality control.
Associated diseases and disorders	P4HB alteration has connections to diseases like cancer and neurodegenerative disorders. Its overexpression and activity can promote tumor growth by aiding cancerous cell survival through protein homeostasis. Moreover P4HB's association with amyloid precursor protein impacts the progression of Alzheimer's disease. These connections make P4HB a relevant target for research into therapeutic interventions.

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

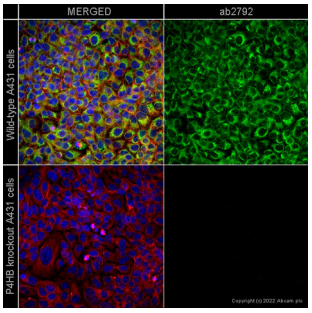
We do not recommend this combination. It is not covered by our product promise.

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.

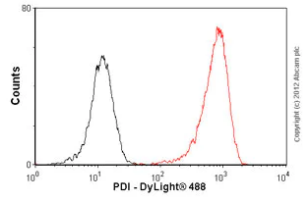
17 product images



Immunocytochemistry/ Immunofluorescence - Anti-P4HB antibody [RL90] (ab2792)

P4HB Immunocytochemistry/ Immunofluorescence staining using mouse Anti-P4HB antibody

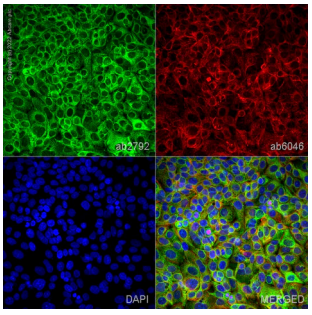
ab2792 staining P4HB in wild-type A431 cells (top panel) and P4HB knockout A431 cells (bottom panel). The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab2792 at 1µg/ml and ab6046, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with ab150117, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and ab150084, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue). Also suitable in cells fixed with 4% paraformaldehyde (10 min). Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Flow Cytometry - Anti-P4HB antibody [RL90] (ab2792)

P4HB Flow Cytometry staining using mouse Anti-P4HB antibody

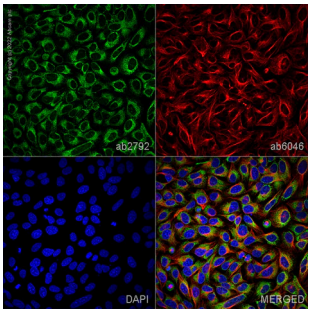
Overlay histogram showing HeLa cells stained with ab2792 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab2792, 0.5µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (ab91361, 1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunocytochemistry/ Immunofluorescence - Anti-P4HB antibody [RL90] (ab2792)

P4HB Immunocytochemistry/ Immunofluorescence staining of MCF7 cells using mouse Anti-P4HB antibody

ab2792 staining P4HB in MCF7 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab2792 at 1µg/ml and ab6046, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with ab150117, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and ab150084, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue). Also suitable in cells fixed with 4% paraformaldehyde (10 min). Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

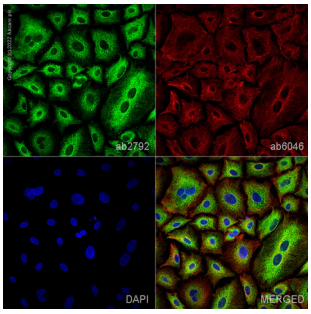


Immunocytochemistry/ Immunofluorescence - Anti-P4HB antibody [RL90] (ab2792)

P4HB Immunocytochemistry/ Immunofluorescence staining of U2OS cells using mouse Anti-P4HB antibody

ab2792 staining P4HB in U2OS cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10%

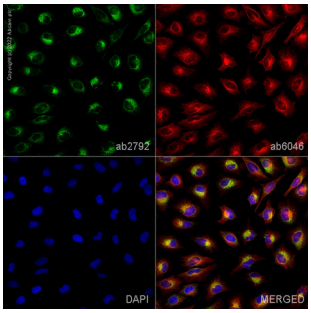
normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab2792 at 0.2µg/ml and ab6046, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with ab150117, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and ab150084, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue). Also suitable in cells fixed with 4% paraformaldehyde (10 min). Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Immunocytochemistry/ Immunofluorescence - Anti-P4HB antibody [RL90] (ab2792)

P4HB Immunocytochemistry/ Immunofluorescence staining of A549 cells using mouse Anti-P4HB antibody

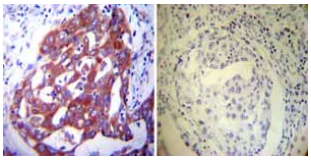
ab2792 staining P4HB in A549 cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab2792 at 0.2µg/ml and ab6046, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with ab150117, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and ab150084, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue). Also suitable in cells fixed with 100% methanol (5 min). Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Immunocytochemistry/ Immunofluorescence - Anti-P4HB antibody [RL90] (ab2792)

P4HB Immunocytochemistry/ Immunofluorescence staining of HeLa cells using mouse Anti-P4HB antibody

ab2792 staining P4HB in HeLa cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab2792 at 0.2µg/ml and ab6046, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with ab150117, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and ab150084, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue). Also suitable in cells fixed with 100% methanol (5 min). Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

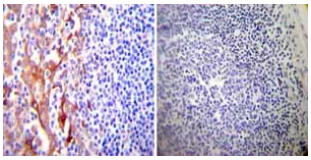


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-P4HB antibody [RL90] (ab2792)

P4HB Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-P4HB antibody

Immunohistochemistry was performed on both normal and cancer biopsies of deparaffinized Human lung adenocarcinoma tissues. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:200 with a mouse monoclonal antibody recognizing P4HB

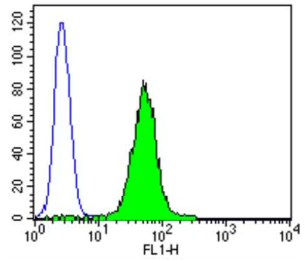
(PDIA1) ab2792 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-P4HB antibody [RL90] (ab2792)

P4HB Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-P4HB antibody

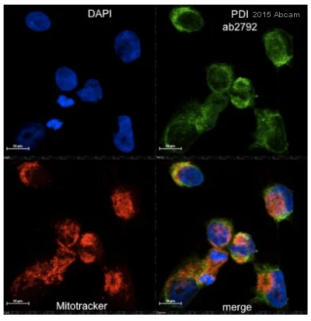
Immunohistochemistry was performed on both normal and cancer biopsies of deparaffinized Human tonsil tissue tissues. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:200 with a mouse monoclonal antibody recognizing P4HB (PDIA1) ab2792 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Flow Cytometry - Anti-P4HB antibody [RL90] (ab2792)

P4HB Flow Cytometry staining using mouse Anti-P4HB antibody

Flow cytometry analysis of P4HB (PDIA1) showing positive staining in the membrane and cytoplasm of K562 cells compared to an isotype control (blue). Cells were harvested and adjusted to a concentration of 1-5x10^6 cells/ml. Cells were then fixed with 2% paraformaldehyde and washed with PBS. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with ab2792 at 1 ug/test for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated goat anti-mouse IgG (H+L) secondary antibody and re-suspended in PBS for FACS analysis.

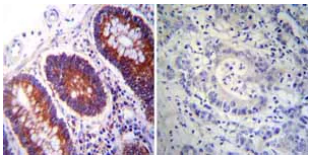


This image is courtesy of an anonymous customer review

Immunocytochemistry/ Immunofluorescence - Anti-P4HB antibody [RL90] (ab2792)

P4HB Immunocytochemistry/ Immunofluorescence staining using mouse Anti-P4HB antibody

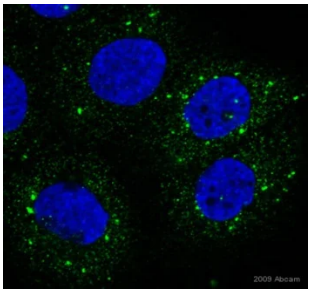
ab2792 staining P4HB (PDIA1) in MDA MB 231 cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with formaldehyde, permeabilized with 1% Triton X-100 and blocked with 10% BSA for 1 hour at 21°C. Samples were incubated with primary antibody (1/100 in BSA + 0.02% Tween 20) for 1 hour at 16°C. A DyLight® 550-conjugated goat anti-mouse IgG polyclonal (1/500) was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-P4HB antibody [RL90] (ab2792)

P4HB Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-P4HB antibody

Immunohistochemistry was performed on both normal and cancer biopsies of deparaffinized Human colon tissue tissues. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:200 with a mouse monoclonal antibody recognizing P4HB (PDIA1) ab2792 or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.

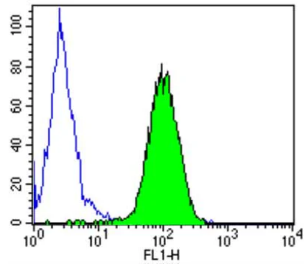


This image is a courtesy of Anonymous customer review

Immunocytochemistry/ Immunofluorescence - Anti-P4HB antibody [RL90] (ab2792)

P4HB Immunocytochemistry/ Immunofluorescence staining using mouse Anti-P4HB antibody

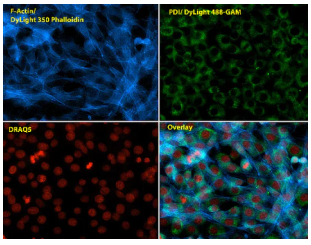
ab2792 staining P4HB (PDIA1) from human HaCaT keratinocyte cells by Immunocytochemistry/ Immunofluorescence. Cells were fixed with paraformaldehyde, permeabilized with 0.25 % Triton ×100 and blocking with 2.5% BSA plus 1% goat serum for 1 hour at 4°C was performed. Samples were incubated with primary antibody, diluted 1/100, for 1 hour at 240C. An Alexa Fluor® 488-conjugated goat polyclonal to mouse IgG was used at dilution at 1/1000 as secondary antibody.



Flow Cytometry - Anti-P4HB antibody [RL90] (ab2792)

P4HB Flow Cytometry staining using mouse Anti-P4HB antibody

Flow cytometry analysis of P4HB (PDIA1) showing positive staining in the membrane and cytoplasm of Hela cells compared to an isotype control (blue). Cells were harvested and adjusted to a concentration of 1-5x10^6 cells/ml. Cells were then fixed with 2% paraformaldehyde and washed with PBS. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with ab2792 at 1 ug/test for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated goat anti-mouse IgG (H+L) secondary antibody and re-suspended in PBS for FACS analysis.

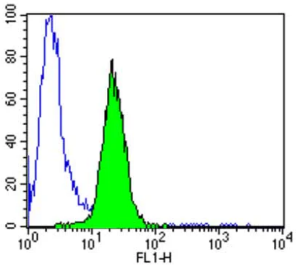


Immunocytochemistry/ Immunofluorescence - Anti-P4HB antibody [RL90] (ab2792)

P4HB Immunocytochemistry/ Immunofluorescence staining using mouse Anti-P4HB antibody

Immunocytochemistry/Immunofluorescence analysis of P4HB (PDIA1) (green) in NIH 3T3 cells. Formalin fixed cells were permeabilized with 0.1% Triton X-100 in PBS for 10 minutes at room temperature and blocked with 2% BSA in PBS + 0.1% Triton X-100 for 30 minutes at room temperature. Cells were probed with ab2792 (1:75) for at least 1 hour at room temperature and incubated with Dylight 488 goat anti-mouse IgG secondary antibody (1:250) for 30 minutes at room temperature. Actin was stained with Dylight 350 Phalloidin at a dilution of 1:120 (2.5units/ml

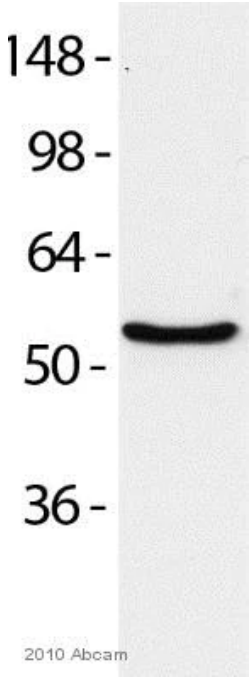
final concentration) and nuclei (red) were stained with DRAQ5 at a concentration of 1ug/ml for 30 minutes. Images were taken at 20X magnification.



Flow Cytometry - Anti-P4HB antibody [RL90] (ab2792)

P4HB Flow Cytometry staining using mouse Anti-P4HB antibody

Flow cytometry analysis of P4HB (PDIA1) showing positive staining in the membrane and cytoplasm of NIH/3T3 cells compared to an isotype control (blue). Cells were harvested and adjusted to a concentration of 1-5x10^6 cells/ml. Cells were then fixed with 2% paraformaldehyde and washed with PBS. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with ab2792 at 0.5 ug/test for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated goat anti-mouse IgG (H+L) secondary antibody and re-suspended in PBS for FACS analysis.



Western blot - Anti-P4HB antibody [RL90] (ab2792)

P4HB Western blot staining of HT1080 whole cell lysate using mouse Anti-P4HB antibody

10% SDS-PAGE.
Blocked with 5% milk for 1 hour at 22°C.

Incubated with the primary for 16 hours at 4°C in PBS + 2.5% milk + 0.05% Tween20.

All lanes:
Western blot - Anti-P4HB antibody [RL90] (ab2792) at 1/1000 dilution

All lanes:
HT1080 whole cell lysate at 20000 Cells

Secondary

All lanes:
HRP-conjugated sheep anti-mouse IgG at 1/5000 dilution

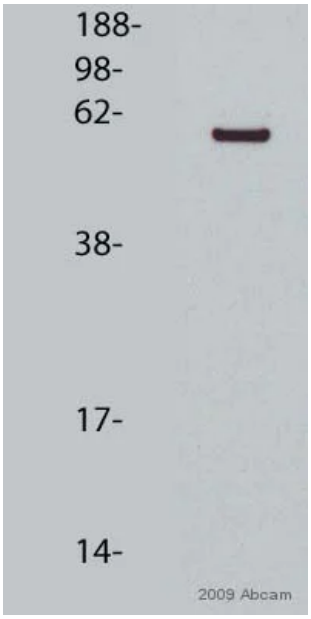
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 57 kDa

Observed band size: 57 kDa

Exposure time: 20s



This image is courtesy of an anonymous customer review

Western blot - Anti-P4HB antibody [RL90] (ab2792)

All lanes:
Western blot - Anti-P4HB antibody [RL90] (ab2792) at 1/2000 dilution

Secondary

All lanes:
Donkey anti mouse IgG2a at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 57 kDa

Observed band size: 57 kDa

Exposure time: 20s

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