abcam

Product datasheet

Anti-PELP1 antibody [EPR22864-62] ab256488

Recombinant RabMAb

9 Images

Overview

Product name Anti-PELP1 antibody [EPR22864-62]

Description Rabbit monoclonal [EPR22864-62] to PELP1

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), IHC-P, ICC/IF, WB

Unsuitable for: P

Reacts with: Human Species reactivity

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: MCF7, HeLa and HEK-293 whole cell lysate. IHC-P: Human colon, colon cancer and breast

cancer tissue. ICC/IF: HeLa and MCF7 cells. Flow Cyt (intra): HeLa and MCF7 cells.

General notes 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 production

For more information see here.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number EPR22864-62

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab256488 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/500.
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/2000.
WB		1/1000.

Application notes

Is unsuitable for IP.

Target

Function

Coactivator of estrogen receptor-mediated transcription and a corepressor of other nuclear hormone receptors and sequence-specific transcription factors. Plays a role in estrogen receptor (ER) genomic activity when present in the nuclear compartment by activating the ER target genes in a hormonal stimulation dependent manner. Can facilitate ER non-genomic signaling via SRC and PI3K interaction in the cytosol. Plays a role in E2-mediated cell cycle progression by interacting with RB1. May have important functional implications in ER/growth factor cross-talk. Interacts with several growth factor signaling components including EGFR and HRS. Involved in nuclear receptor signaling via its interaction with AR and NR3C1. May promote tumorigenesis via its interaction with and modulation of several oncogenes including SRC, PI3K, STAT3 and EGFR. Plays a role in cancer cell metastasis via its ability to modulate E2-mediated cytoskeleton changes and cell migration via its interaction with SRC and PI3K.

Tissue specificity

Isoform 2 is expressed in breast cancer cell lines. Isoform 1 is widely expressed.

Domain

The Glu-rich region mediates histones interaction.

The Leu-Xaa-Xaa-Leu-Leu (LXXLL) motifs are required for the association with nuclear receptor

ESR1.

Post-translational modifications

Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization

Nucleus. Cytoplasm. Also found associated with the plasma membrane. Mainly in cytoplasm in a subset of breast tumors. Localization is widely deregulated in endometrial cancers with predominantly cytoplasm localization in high-grade endometrial tumors.

Images



Western blot - Anti-PELP1 antibody [EPR22864-62] (ab256488)

All lanes : Anti-PELP1 antibody [EPR22864-62] (ab256488) at 1/1000 dilution

Lane 1 : MCF7 (human breast adenocarcinoma epithelial cell), whole cell lysate

Lane 2: HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate

Lane 3 : HEK-293 (human embryonic kidney epithelial cell), whole cell lysate

Lysates/proteins at 20 µg per lane.

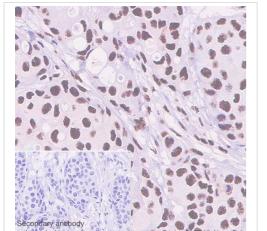
Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Observed band size: 160 kDa

Exposure time: 16 seconds

Blocking and Dilution Buffer and concentration: 5% NFDM/TBST. The expression molecular weight observed is consistent with what has been described in the literature (PMID: PMID:11481323).

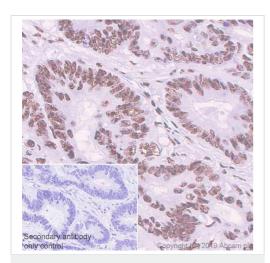


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PELP1 antibody
[EPR22864-62] (ab256488)

Immunohistochemical analysis of paraffin-embedded human breast cancer tissue labeling PELP1 with ab256488 at 1/2000 dilution (0.24µg/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining in human breast cancer (PMID: 19495959) is observed. The section was incubated with ab256488 for 15 mins at room temperature. Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

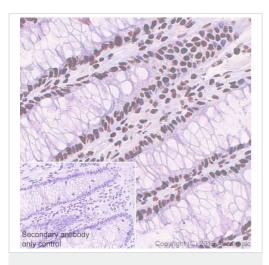


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PELP1 antibody
[EPR22864-62] (ab256488)

Immunohistochemical analysis of paraffin-embedded human colon cancer tissue labeling PELP1 with ab256488 at 1/2000 dilution (0.24µg/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining in human colon cancer (PMID: 19478391) is observed. The section was incubated with ab256488 for 15 mins at room temperature. Counterstained with hematoxylin.

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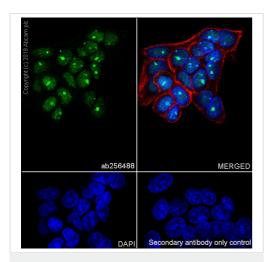


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PELP1 antibody
[EPR22864-62] (ab256488)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling PELP1 with ab256488 at 1/2000 dilution (0.24µg/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining in human colon (PMID: 19478391) is observed. The section was incubated with ab256488 for 15 mins at room temperature. Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

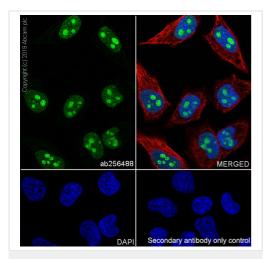
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-PELP1 antibody [EPR22864-62] (ab256488)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling PELP1 with ab256488 at 1/2000 (0.2 µg/ml) dilution, followed by **ab150077** AlexaFluor[®]488 Goat anti-Rabbit secondary antibody at 1/1000 (2 µg/ml) dilution (Green). Confocal image showing nuclear staining in MCF7 cell line. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) was used to counterstain tubulin at 1/200 dilution (Red). The nuclear counterstain was DAPI (Blue).

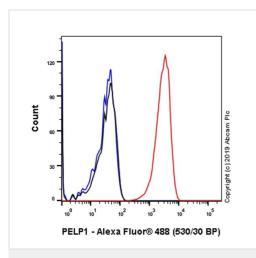
Secondary antibody only control: Secondary antibody is $\underline{ab150077}$ AlexaFluor[®]488 Goat anti-Rabbit secondary at 1/1000 (2 μ g/ml) dilution.



Immunocytochemistry/ Immunofluorescence - Anti-PELP1 antibody [EPR22864-62] (ab256488)

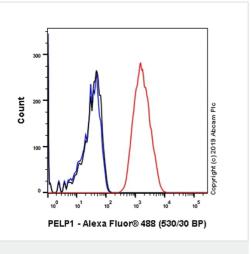
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervix adenocarcinoma epithelial cell) cells labeling PELP1 with ab256488 at 1/2000 (0.2 μ g/ml) dilution, followed by **ab150077** AlexaFluor[®]488 Goat anti-Rabbit secondary antibody at 1/1000 (2 μ g/ml) dilution (Green). Confocal image showing nuclear staining in HeLa cell line. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594) was used to counterstain tubulin at 1/200 dilution (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150077 AlexaFluor[®]488 Goat anti-Rabbit secondary at 1/1000 (2 µg/ml) dilution.



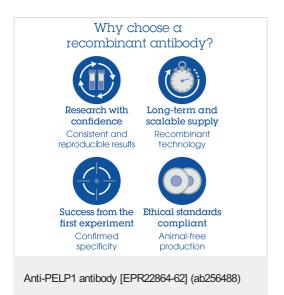
Flow Cytometry (Intracellular) - Anti-PELP1 antibody [EPR22864-62] (ab256488)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling PELP1 with ab256488 at 1/500 (Red) compared with a Rabbit monoclonal IgG (ab172730) / Black isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-PELP1 antibody [EPR22864-62] (ab256488)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling PELP1 with ab256488 at 1/500 (Red) compared with a Rabbit monoclonal IgG (ab172730) / Black isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody.



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