abcam

Product datasheet

Anti-LRPPRC/GP130 antibody [EPR24052-38] ab259927

Recombinant RabMAb

1 References 13 Images

Overview

Product name Anti-LRPPRC/GP130 antibody [EPR24052-38]

Description Rabbit monoclonal [EPR24052-38] to LRPPRC/GP130

Host species Rabbit

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

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HeLa, HEK-293T, PC-12, HepG2, SH-SY5Y, RAW264.7, NIH/3T3, Neuro-2a, Mouse brain,

Mouse heart lysates. IHC-P: Human pancreas, Human tonsil, Human colon, Human endometrial carcinoma tissues. ICC: HeLa, NIH/3T3 cells. Flow Cyt: HeLa, NIH/3T3 cells. IP: HeLa, NIH/3T3

cells.

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

Improved sensitivity and specificityLong-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.

Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR24052-38

1

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab259927 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
IP		1/30.
WB		1/1000. Predicted molecular weight: 158 kDa.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/50.
ICC/IF		1/200.

Target

Function

May play a role in RNA metabolism in both nuclei and mitochondria. In the nucleus binds to HNRPA1-associated poly(A) mRNAs and is part of nmRNP complexes at late stages of mRNA maturation which are possibly associated with nuclear mRNA export. May bind mature mRNA in the nucleus outer membrane. In mitochondria binds to poly(A) mRNA. Plays a role in translation or stability of mitochondrially encoded cytochrome c oxidase (COX) subunits. May be involved in transcription regulation. Cooperates with PPARGC1A to regulate certain mitochondrially encoded genes and gluconeogenic genes and may regulate docking of PPARGC1A to transcription factors. Seems to be involved in the transcription regulation of the multidrug-related genes MDR1 and MVP. Part of a nuclear factor that binds to the invMED1 element of MDR1 and MVP gene promoters. Binds single-stranded DNA.

Tissue specificity

Expressed ubiquitously. Expression is highest in heart, skeletal muscle, kidney and liver, intermediate in brain, non-mucosal colon, spleen and placenta, and lowest in small intestine, thymus, lung and peripheral blood leukocytes.

Involvement in disease

Leigh syndrome French-Canadian type

Sequence similarities

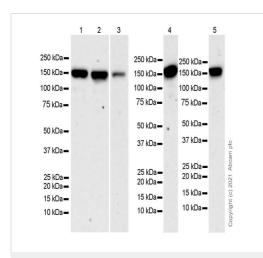
Contains 20 PPR (pentatricopeptide) repeats.

Cellular localization

 $\label{thm:local_equation} \mbox{Mitochondrion. Nucleus, nucleoplasm. Nucleus inner membrane. Nucleus outer membrane.}$

Seems to be predominantly mitochondrial.

Images



Western blot - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

All lanes : Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927) at 1/5000 dilution

Lane 1 : HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate

Lane 2: HEK-293T (human embryonic kidney epithelial cell), whole cell lysate

Lane 3 : PC-12 (rat adrenal gland pheochromocytoma), whole cell lysate

Lane 4 : HepG2 (human hepatocellar carcinoma epithelial cell), whole cell lysate 20

Lane 5: SH-SY5Y (human neuroblastoma epithelial cell), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

Lane 1: Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

Lanes 2-3: Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/10000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

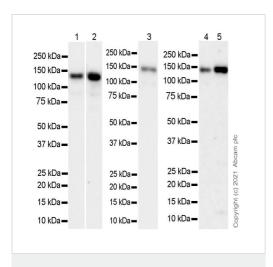
Lanes 4-5: Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 158 kDa **Observed band size:** 150 kDa

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

Lysates should be made freshly and used in WB immediately to minimize protein degradation.

Exposure time: Lanes 1-2/4-5: 147 seconds; Lanes 3: 3 minutes



Western blot - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

All lanes : Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927) at 1/1000 dilution

Lane 1 : RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage), whole cell lysate

Lane 2: NIH/3T3 (mouse embryonic fibroblast), whole cell lysate Lane 3: Neuro-2a (mouse neuroblastoma neuroblast), whole cell lysate

Lane 4 : Mouse brain tissue lysate
Lane 5 : Mouse heart tissue lysate

Lysates/proteins at 10 µg per lane.

Secondary

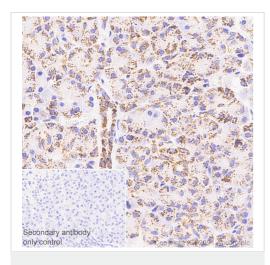
All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (ab97051) at 1/100000 dilution

Predicted band size: 158 kDa Observed band size: 150 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Exposure time: Lanes 1-2: 59 seconds ; Lane 3: 26 seconds Lanes

4-5: 3 minutes

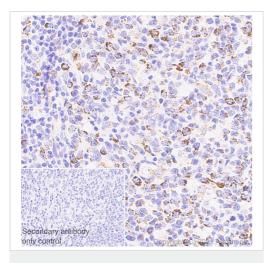


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

Immunohistochemical analysis of paraffin-embedded Human pancreas tissue labelling LRPPRC/GP130 with ab259927 at 1/100 (5.84 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human pancreas. The section was incubated with ab259927 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 LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

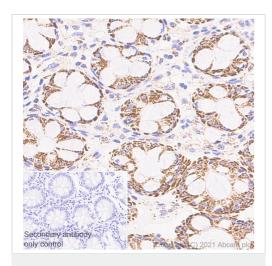


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labelling LRPPRC/GP130 with ab259927 at 1/100 (5.84 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human tonsil. The section was incubated with ab259927 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 LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labelling LRPPRC/GP130 with ab259927 at 1/100 (5.84 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human colon. The section was incubated with ab259927 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 LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

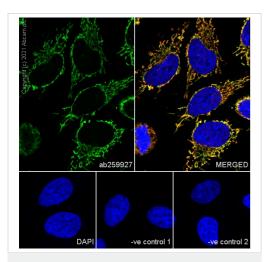


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

Immunohistochemical analysis of paraffin-embedded Human endometrial carcinoma tissue labelling LRPPRC/GP130 with ab259927 at 1/100 (5.84 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human endometrial carcinoma. The section was incubated with ab259927 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 LeicaDS9800 (Bond™ Polymer Refine Detection).

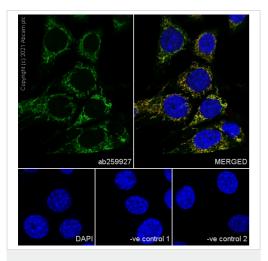
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunocytochemistry/ Immunofluorescence - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HeLa cells labelling LRPPRC/GP130 with ab259927 at 1/200 (2.92 ug/ml) dilution, followed by **ab150081** Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2ug/ml) dilution (Green). Confocal image showing co-locolization staining with Mitochondrial Marker in HeLa cells is observed. **ab14748** Anti-ATP5A mouse monoclonal antibody - Mitochondrial Marker was used to counterstain tubulin at 1/500 (2ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

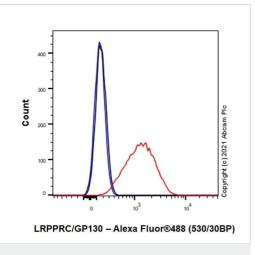
Secondary antibody only control: Secondary antibody is <u>ab150081</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2ug/ml) dilution.



Immunocytochemistry/ Immunofluorescence - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

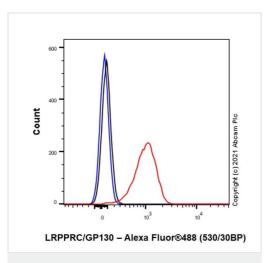
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized NIH/3T3 cells labelling LRPPRC/GP130 with ab259927 at 1/200 (2.92 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing co-locolization staining with Mitochondrial Marker in NIH/3T3 cells is observed. ab14748 Anti-ATP5A mouse monoclonal antibody - Mitochondrial Marker was used to counterstain tubulin at 1/500 (2 ug/ml) dilution (Red). 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.



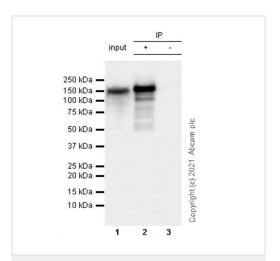
Flow Cytometry (Intracellular) - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

Flow cytometric analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labelling LRPPRC/GP130 with ab259927 at 1/50 dilution (1ug) (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 F(ab')2 Anti-Rabbit IgG(DyLight® 488, ab98507) at 1/500 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

Flow cytometric analysis of NIH/3T3 (Mouse embryonic fibroblast) cells labelling LRPPRC/GP130 with ab259927 at 1/500 dilution (0.1ug) (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 F(ab')2 Anti-Rabbit IgG(DyLight® 488, ab98507) at 1/500 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

LRPPRC/GP130 was immunoprecipitated from 0.35 mg HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate 10 ug with ab259927 at 1/30 dilution (2 ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab259927 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP) (ab131366) was used at 1/5000 dilution.

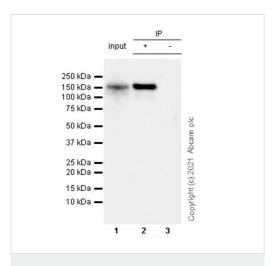
Lane 1: HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate 10 ug

Lane 2: abab259927 IP in HeLa whole cell lysate

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab259927 in HeLa whole cell lysate

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

Exposure time: 3 seconds



Immunoprecipitation - Anti-LRPPRC/GP130 antibody [EPR24052-38] (ab259927)

LRPPRC/GP130 was immunoprecipitated from 0.35 mg NIH/3T3 (mouse embryonic fibroblast) whole cell lysate 10 ug with ab259927 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab259927 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: NIH/3T3 (mouse embryonic fibroblast) whole cell lysate 10 ug

Lane 2: abab259927 IP in NIH/3T3 whole cell lysate

Lane 3:Rabbit monoclonal IgG ($\underline{ab172730}$) instead of ab259927 in NIH/3T3 whole cell lysate

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

Exposure time: 10 seconds



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