

## Anti-LRPPRC/GP130 Antibody Picoband®

Catalog Number: A03264

### About LRPPRC

Leucine-rich PPR motif-containing protein, mitochondrial is a protein that in humans is encoded by the LRPPRC gene. It is mapped to 2p21. This gene encodes a leucine-rich protein that has multiple pentatricopeptide repeats (PPR). The precise role of this protein is unknown but studies suggest it may play a role in cytoskeletal organization, vesicular transport, or in transcriptional regulation of both nuclear and mitochondrial genes. The protein localizes primarily to mitochondria and is predicted to have an N-terminal mitochondrial targeting sequence. Mutations in this gene are associated with the French-Canadian type of Leigh syndrome.

### Overview

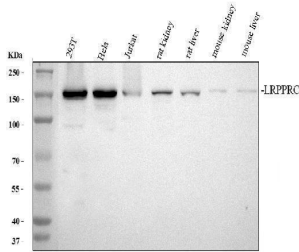
Product Name	Anti-LRPPRC/GP130 Antibody Picoband®
Reactive Species	Human, Monkey, Mouse, Rat
Description	Boster Bio Anti-LRPPRC/GP130 Antibody Picoband® catalog # A03264. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Monkey, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P42704

### Technical Details

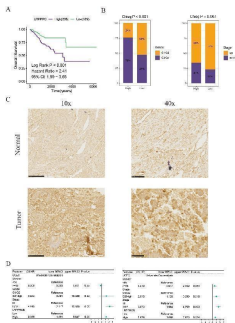
Immunogen	E.coli-derived human LRPPRC/GP130 recombinant protein (Position: A1281-S1394).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.25ug/ml, Human, Mouse, Rat, Monkey Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 2ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10 <sup>6</sup> cells, Human, Rat ELISA, 0.1-0.5ug/ml, -

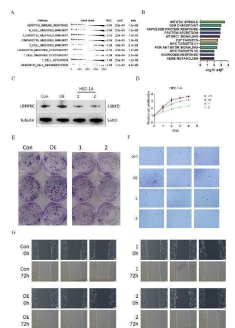
## Anti-LRPPRC/GP130 Antibody Picoband® (A03264) Images



Western blot analysis of LRPPRC using anti-LRPPRC antibody (A03264). Electrophoresis was performed on a 8% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human 293T whole cell lysates, Lane 2: human Hela whole cell lysates, Lane 3: human Jurkat whole cell lysates, Lane 4: rat kidney tissue lysates, Lane 5: rat liver tissue lysates, Lane 6: mouse kidney tissue lysates, Lane 7: mouse liver tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-LRPPRC antigen affinity purified polyclonal antibody (A03264) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for LRPPRC at approximately 158 kDa. The expected band size for LRPPRC is at 158 kDa.

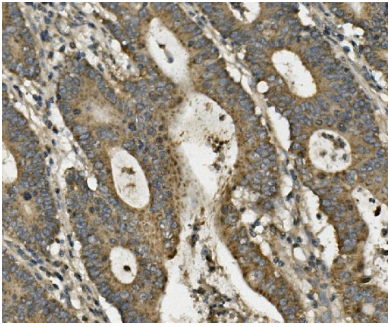


LRPPRC expression is associated with the prognosis of patients with UCEC. (A) Kaplan-Meier survival estimates for patients with high and low LRPPRC expression. (B) Proportions of different grades and stages in high and low LRPPRC groups. (C) Representative IHC staining of LRPPRC in paracancerous and tumor UCEC samples. (D) Univariate and multivariate Cox analyses evaluating the independent prognostic value of LRPPRC in UCEC patients. Index in PubMed under a CC BY license. PMID: 39445012

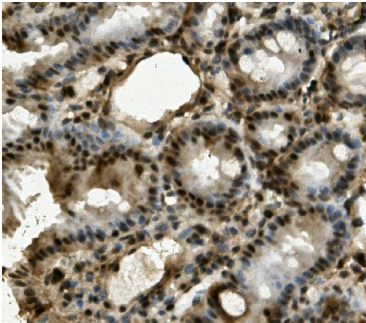


Knockdown of LRPPRC restrained the proliferation and invasion abilities of UCEC. (A) GO analysis displaying the normalized enrichment scores (NES) of adaptive immune response and immune cell-related pathways in UCEC patients with high LRPPRC expression. Negative NES indicates a negative correlation between the pathway and LRPPRC expression. (B) GSEA analysis showing enrichment of HALLMARK signaling pathways or processes in UCEC patients with high LRPPRC expression. (C) Western blot validation of LRPPRC knockdown in HEC-1A cells. (D) Proliferation of LRPPRC knockdown versus control cells. (E-G) Clone formation, migration, and invasion abilities of indicated UCEC cells. Index in PubMed under a CC BY license. PMID: 39445012

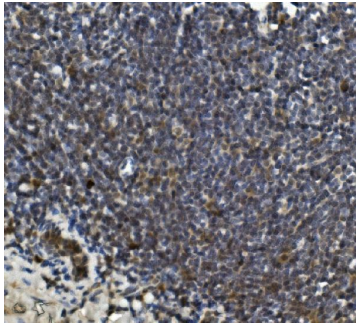
IHC analysis of LRPPRC using anti-LRPPRC antibody (A03264). LRPPRC was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated



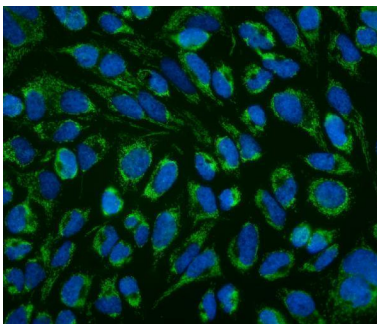
antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-LRPPRC Antibody (A03264) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IHC analysis of LRPPRC using anti-LRPPRC antibody (A03264). LRPPRC was detected in paraffin-embedded section of mouse intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-LRPPRC Antibody (A03264) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

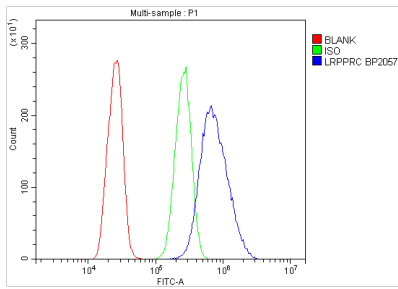


IHC analysis of LRPPRC using anti-LRPPRC antibody (A03264). LRPPRC was detected in paraffin-embedded section of rat intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-LRPPRC Antibody (A03264) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

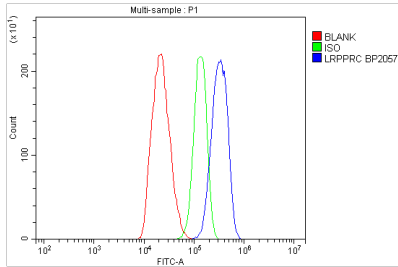


IF analysis of LRPPRC using anti-LRPPRC antibody (A03264). LRPPRC was detected in immunocytochemical section of HeLa cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-LRPPRC Antibody (A03264) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

Flow Cytometry analysis of A431 cells using anti-LRPPRC antibody (A03264). Overlay histogram showing A431 cells stained with A03264 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-LRPPRC Antibody (A03264, 1ug/1x10<sup>6</sup> cells)



for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Flow Cytometry analysis of C6 cells using anti-LRPPRC antibody (A03264). Overlay histogram showing C6 cells stained with A03264 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-LRPPRC Antibody (A03264, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

## 2 Publications Citing This Product

1. PubMed ID: 10.1007/s10571-021-01052-z, Proteomic Profiling of Cerebrum Mitochondria, Myelin Sheath, and Synaptosome Revealed Mitochondrial Damage and Synaptic Impairments in Association with 3 × Tg<sup>APP</sup>AD Mice Model
2. PubMed ID: 33560469, Shen L, Yang A, Chen X, Xiao S, Liu X, Lin J, Zhao Y, Zhang K, Li C, Ke J, Zhang H, Khan NU. Proteomic Profiling of Cerebrum Mitochondria, Myelin Sheath, and Synaptosome Revealed Mitochondrial Damage and Synaptic Impairments in Association with 3 × Tg-AD Mice Model.C

Visit [bosterbio.com/anti-lrpprc-gp130-picoband-trade-antibody-a03264-boster.html](https://bosterbio.com/anti-lrpprc-gp130-picoband-trade-antibody-a03264-boster.html) to see all 2 publications.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-LRPPRC/GP130 Antibody

For Research Use Only. Not for use in diagnostic procedures.