abcam

ab192242

Anti-LHFPL5 antibody [EPR16285] - C-terminal

Recombinant | RabMAb

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	EPR16285
Purification technique	Affinity purification Protein A
Concentration	1.04 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/60
Notes	-

Expected

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

WB

Tested

Species	Mouse
Dilution info	1/1000 - 1/10000
Notes	-

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Species	Rat
Dilution info	1/1000 - 1/10000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/180
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

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

Target data

See full target information LHFPL5

Function	Auxiliary subunit of the mechanotransducer (MET) non-specific cation channel complex located at the tips of the shorter stereocilia of cochlear hair cells and that mediates sensory transduction in the auditory system. The MET complex is composed of two dimeric pore-forming ion-conducting transmembrane TMC (TMC1 or TMC2) subunits, and aided by several auxiliary proteins including LHFPL5, TMIE, CIB2/3 and TOMT, and the tip-link PCDH15. Functionally couples PCDH15 to the transduction channel.

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.

Supplementary info

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

Activity summary	LHFPL5 also known as TMHS (Tetraspan Membrane Protein of the Hair Cell Stereocilia) functions mechanically as a component of mechanotransduction in hair cells. This protein has an estimated mass of around 25 kDa and is mainly expressed in the inner ear's cochlear and vestibular systems. It resides in the stereocilia of hair cells where it plays an important role in auditory systems through its association with mechanotransduction channels.
Biological function summary	LHFPL5 contributes to auditory transduction by interacting with other proteins in a complex critical for hair cell function. This complex is involved in converting mechanical stimuli into neural signals. LHFPL5 supports the integrity and function of the mechanotransduction channel allowing the inner ear to detect sound and balance changes. The protein acts as a molecular anchor directly influencing the gating of the channel and overall sensory capabilities.
Pathways	LHFPL5 integrates into the auditory mechanotransduction pathway necessary for hearing. It works in conjunction with proteins such as protocadherin 15 (PCDH15) and myosin 7a which are vital for the linking of molecular structures within the stereocilia. These interactions contribute to the pathway's role in enabling the propagation of electrical signals generated from mechanical excitation fundamental to auditory perception.
Associated diseases and disorders	Mutations in LHFPL5 are linked to Usher syndrome which causes deafness and progressive vision loss. Additionally its dysfunction is associated with non-syndromic hearing loss. These conditions often involve abnormal interactions with other implicated proteins such as cadherin 23 (CDH23) highlighting the interconnected nature of LHFPL5 within the structural and functional frameworks essential for normal hearing and balance.

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

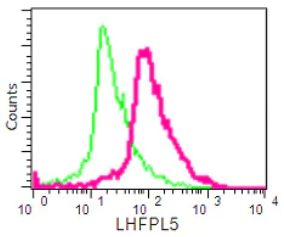
We do not recommend this combination. It is not covered by our product promise.

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.

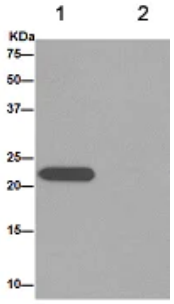
5 product images



Flow Cytometry (Intracellular) - Anti-LHFPL5 antibody [EPR16285] - C-terminal (ab192242)

LHFPL5 Flow Cytometry (Intracellular) staining using rabbit Anti-LHFPL5 antibody

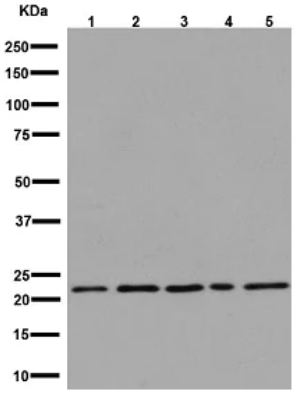
Intracellular flow cytometric analysis of HepG2 cells (paraformaldehyde-fixed, 2%) labeling LHFPL5with ab192242 at 1/180 dilution (red) or a rabbit IgG (negative) (green), followed by Goat anti rabbit IgG (FITC) secondary at 1/150 dilution.



Immunoprecipitation - Anti-LHFPL5 antibody [EPR16285] - C-terminal (ab192242)

Western blot analysis of immunoprecipitation pellet from Human fetal brain lysate immunoprecipitated using ab192242 at 1/60 dilution (lane 1) or PBS control (lane 2).
Secondary: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500 dilution.
All lanes:
Immunoprecipitation - Anti-LHFPL5 antibody [EPR16285] - C-terminal (ab192242)

Predicted band size: 24 kDa



Western blot - Anti-LHFPL5 antibody [EPR16285] - C-terminal (ab192242)

All lanes:
Western blot - Anti-LHFPL5 antibody [EPR16285] - C-terminal (ab192242) at 1/1000 dilution

Lane 1:
Mouse brain lysate at 10 µg

Lane 2:
Mouse heart lysate at 10 µg

Lane 3:
Mouse kidney lysate at 10 µg

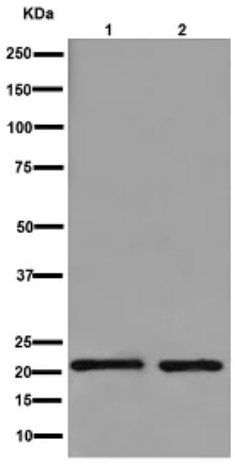
Lane 4:
Rat heart lysate at 10 µg

Lane 5:
Rat kidney lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 24 kDa



Western blot - Anti-LHFPL5 antibody [EPR16285] - C-terminal (ab192242)

All lanes:
Western blot - Anti-LHFPL5 antibody [EPR16285] - C-terminal (ab192242) at 1/2000 dilution

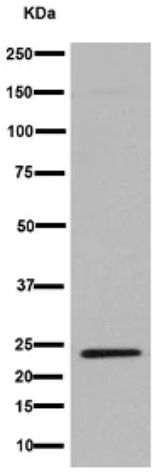
Lane 1:
Human fetal brain lysate at 20 µg

Lane 2:
Human fetal lung lysate at 20 µg

Secondary

All lanes:
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 24 kDa



Western blot - Anti-LHFPL5 antibody [EPR16285] - C-terminal (ab192242)

All lanes:
Western blot - Anti-LHFPL5 antibody [EPR16285] - C-terminal (ab192242) at 1/2000 dilution

All lanes:
HepG2 cell lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 24 kDa

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