

Anti-Lamin B Receptor / LBR Antibody [PSH02-93] - BSA and Azide free

HA750848



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, IF-Cell, FC
Molecular Wt:	Predicted band size: 71 kDa
Clone number:	PSH02-93

Description: Catalyzes the reduction of the C14-unsaturated bond of lanosterol, as part of the metabolic pathway leading to cholesterol biosynthesis. Plays a critical role in myeloid cell cholesterol biosynthesis which is essential to both myeloid cell growth and functional maturation. Mediates the activation of NADPH oxidases, perhaps by maintaining critical levels of cholesterol required for membrane lipid raft formation during neutrophil differentiation. Anchors the lamina and the heterochromatin to the inner nuclear membrane.

Immunogen: Synthetic peptide within human Lamin B Receptor/LBR aa 1-500 / 615.

Positive control: HEK-293 cell lysate, HeLa cell lysate, Jurkat cell lysate, HEK-293, human small intestine tissue, human testis tissue.

Subcellular location: Nucleus inner membrane.

Database links: SwissProt: Q14739 Human

Recommended Dilutions:

WB	1:2,000
IHC-P	1:1,000-10,000
IF-Cell	1:2,000
FC	1:1,000

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

 华安生物
HUABIO
www.huabio.cn

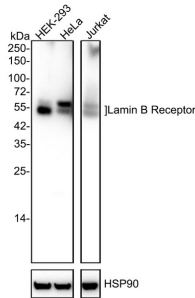
Images

Fig1: Western blot analysis of Lamin B Receptor / LBR on different lysates with Rabbit anti-Lamin B Receptor / LBR antibody (HA750848) at 1/2,000 dilution.

Lane 1: HEK-293 cell lysate

Lane 2: HeLa cell lysate

Lane 3: Jurkat cell lysate



Lysates/proteins at 20 µg/Lane.

Predicted band size: 71 kDa

Observed band size: 58 kDa

Exposure time: Lane 1-2: 1 minute 2 seconds; Lane 3: 5 seconds;

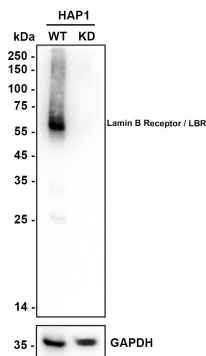
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA750848) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Fig2: Western blot analysis of Lamin B Receptor / LBR on different lysates with Rabbit anti-Lamin B Receptor / LBR antibody (HA750848) at 1/5,000 dilution.

Lane 1: HAP1-parental cell lysate

Lane 2: HAP1-Lamin B Receptor / LBR KD cell lysate



Lysates/proteins at 10 µg/Lane.

Predicted band size: 71 kDa

Observed band size: 58 kDa

Exposure time: 10 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA750848) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Hangzhou Huaan Biotechnology Co., Ltd.

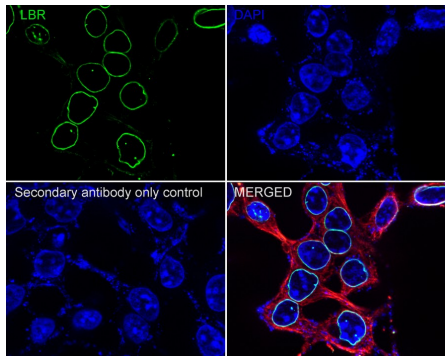
Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

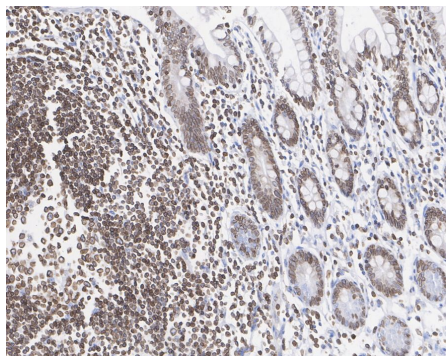
Fig3: Immunocytochemistry analysis of HEK-293 cells labeling Lamin B Receptor / LBR with Rabbit anti-Lamin B Receptor / LBR antibody (HA750848) at 1/2,000 dilution.



Cells were fixed in 100% precooled methanol for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Lamin B Receptor / LBR antibody (HA750848) at 1/2,000 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

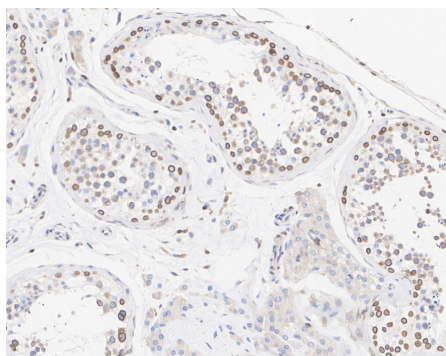
Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4 °C. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

Fig4: Immunohistochemical analysis of paraffin-embedded human small intestine tissue with Rabbit anti-Lamin B Receptor / LBR antibody (HA750848) at 1/10,000 dilution.



The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA750848) at 1/10,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Fig5: Immunohistochemical analysis of paraffin-embedded human testis tissue with Rabbit anti-Lamin B Receptor / LBR antibody (HA750848) at 1/1,000 dilution.



The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA750848) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

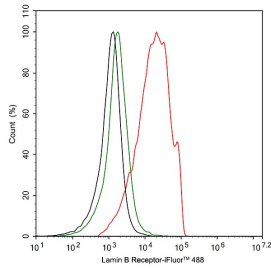


Fig6: Flow cytometric analysis of HEK-293 cells labeling Lamin B Receptor / LBR.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA750848, 1:1,000) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4°C for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4°C. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

Background References

1. Silve S, Dupuy PH, Ferrara P, Loison G. Human lamin B receptor exhibits sterol C14-reductase activity in *Saccharomyces cerevisiae*. *Biochim Biophys Acta*. 1998 Jun 15;1392(2-3):233-44.
2. Waterham HR, Koster J, Mooyer P, Noort Gv Gv, Kelley RI, Wilcox WR, Wanders RJ, Hennekam RC, Oosterwijk JC. Autosomal recessive HEM/Greenberg skeletal dysplasia is caused by 3 beta-hydroxysterol delta 14-reductase deficiency due to mutations in the lamin B receptor gene. *Am J Hum Genet*. 2003 Apr;72(4):1013-7.
3. Oda H, Kato S, Ohsumi K, Iwabuchi M. Lamin B receptor-mediated chromatin tethering to the nuclear envelope is detrimental to the *Xenopus* blastula. *J Biochem*. 2021 Apr 18;169(3):313-326.

Hangzhou Huan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn