

## Anti-Lamin B Receptor/LBR Antibody Picoband®

Catalog Number: A01238-2

### About LBR

Lamin-B receptor is a protein, and in humans, it is encoded by the LBR gene. It is mapped to 1q42.12. The protein encoded by this gene belongs to the ERG4/ERG24 family. It localized in the nuclear envelope inner membrane and anchors the lamina and the heterochromatin to the membrane. It may mediate interaction between chromatin and lamin B. Mutations of this gene has been associated with autosomal recessive HEM/Greenberg skeletal dysplasia. Alternative splicing occurs at this locus and two transcript variants encoding the same protein have been identified.

### Overview

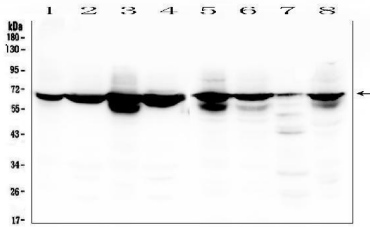
Product Name	Anti-Lamin B Receptor/LBR Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Lamin B Receptor/LBR Antibody Picoband® catalog # A01238-2. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband 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	Q14739

### Technical Details

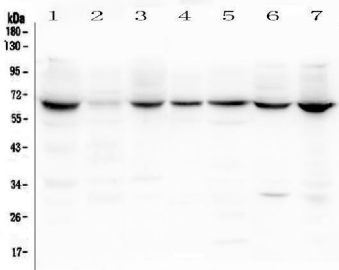
Immunogen	E.coli-derived human Lamin B Receptor/LBR recombinant protein (Position: H102-F209).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) 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, 0.1-0.5ug/ml Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml Immunocytochemistry/Immunofluorescence, 2ug/ml Flow Cytometry (Fixed), 1-3ug/1x10 <sup>6</sup> cells ELISA, 0.1-0.5ug/ml

## Anti-Lamin B Receptor/LBR Antibody Picoband® (A01238-2) Images

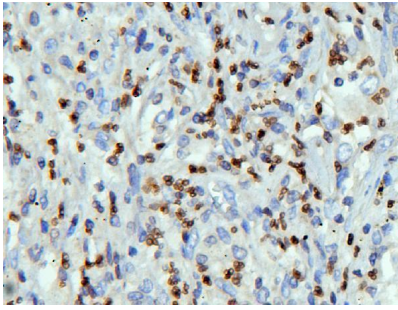


Western blot analysis of LBR using anti-LBR antibody (A01238-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human placenta tissue lysates Lane 2: human HL-60 whole cell lysates Lane 3: human K562 whole cell lysates Lane 4: human THP-1 whole cell lysates Lane 5: human HEK293 whole cell lysates Lane 6: human U2OS whole cell lysates Lane 7: human U-937 whole cell lysates Lane 8: human Caco-2 whole cell lysates After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-LBR antigen affinity purified polyclonal antibody (Catalog # A01238-2) 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 at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for LBR at approximately 65-71KD. The expected band size for LBR is at 71KD.

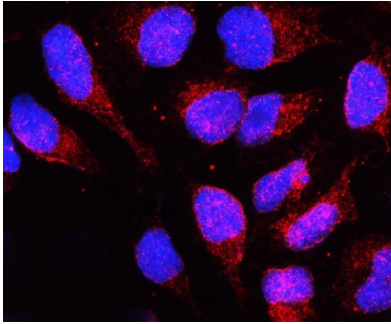


Western blot analysis of LBR using anti-LBR antibody (A01238-2). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat thymus tissue lysates Lane 2: rat spleen tissue lysates Lane 3: rat testicular tissue lysates Lane 4: mouse thymus tissue lysates Lane 5: mouse stomach tissue lysates Lane 6: mouse testicular tissue lysates Lane 7: mouse SP20 whole cell lysates After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-LBR antigen affinity purified polyclonal antibody (Catalog # A01238-2) 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 at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for LBR at approximately 65-71KD. The expected band size for LBR is at 71KD.

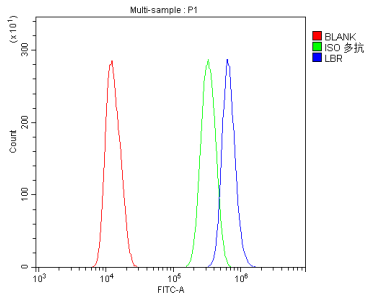
IHC analysis of LBR using anti-LBR antibody (A01238-2). LBR was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml



rabbit anti-LBR Antibody (A01238-2) 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 LBR using anti-LBR antibody (A01238-2). LBR was detected in immunocytochemical section of U2OS 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-LBR Antibody (A01238-2) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) 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 U2OS cells using anti-LBR antibody (A01238-2). Overlay histogram showing U2OS cells stained with A01238-2 (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-LBR Antibody (A01238-2, 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: 32747300, Zhu X, Mao Y, Guo M, Yu H, Hao L, Hua Q, Lu Z, Hong M, An F. Enhancement of anti-acne effect of Scutellaria baicalensis extract by fermentation with symbiotic fungus Penicillium decumbens. *J Biosci Bioeng.* 2020 Nov; 130(5):457-463. doi:10.1016/j.jbiosc.2020.06.008. Ep

2. PubMed ID: 33316740, Tan J, Luo J, Meng C, Jiang N, Cao J, Zhao J. Syringin exerts neuroprotective effects in a rat model of cerebral ischemia through the FOXO3a/NF-kappaB pathway. *Int Immunopharmacol.* 2020 Dec 11; 90:107268. doi:10.1016/j.intimp.2020.107268. Epub ahead of print. PMID:333

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