abcam

Product datasheet

Anti-Lamin B Receptor/LBR antibody ab169306

3 References 4 Images

Overview

Product name	Anti-Lamin B Receptor/LBR antibody
Description	Mouse polyclonal to Lamin B Receptor/LBR
Host species	Mouse
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Human **Predicted to work with:** Orangutan
Immunogen	Recombinant full length protein within Human Lamin B Receptor/LBR aa 1-650. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support team to discuss your requirements. Database link: **Q14739** Run BLAST with Run BLAST with
Positive control	Lamin B Receptor/LBR transfected 293T cell lysate; Jurkat cell lysate; Human small intestine tissue; HeLa cells.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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 long term.
Storage buffer	pH: 7.4 Constituent: 99% PBS
Purity	Protein A purified
Clonality	Polyclonal

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab169306 in the following tested applications.

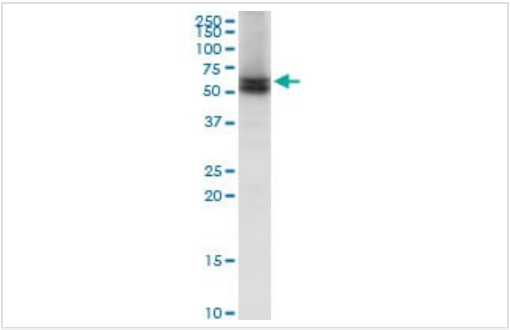
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 71 kDa.
IHC-P		Use a concentration of 3 µg/ml. Antigen retrieval is not essential but may optimise staining.
ICC/IF		Use a concentration of 10 µg/ml.

Target

Function	Anchors the lamina and the heterochromatin to the inner nuclear membrane.
Involvement in disease	Defects in LBR are a cause of Pelger-Huet anomaly (PHA) [MIM:169400]. PHA is an autosomal dominant inherited abnormality of neutrophils, characterized by reduced nuclear segmentation and an apparently looser chromatin structure. Heterozygotes show hypolobulated neutrophil nuclei with coarse chromatin. Presumed homozygous individuals have ovoid neutrophil nuclei, as well as varying degrees of developmental delay, epilepsy, and skeletal abnormalities. Defects in LBR are the cause of hydrops-ectopic calcification-moth-eaten skeletal dysplasia (HEM) [MIM:215140]; also known as Greenberg skeletal dysplasia. HEM is a rare autosomal recessive chondrodystrophy characterized by early in utero lethality and, therefore, considered to be nonviable. Affected fetuses typically present with fetal hydrops, short-limbed dwarfism, and a marked disorganization of chondro-osseous calcification and may present with polydactyly and additional nonskeletal malformations. Defects in LBR may be a cause of Reynolds syndrome (REYNS) [MIM:613471]. It is a syndrome specifically associating limited cutaneous systemic sclerosis and primary biliray cirrhosis. It is characterized by liver disease, telangiectasia, abrupt onset of digital paleness or cyanosis in response to cold exposure or stress (Raynaud phenomenon), and variable features of scleroderma. The liver disease is characterized by pruritis, jaundice, hepatomegaly, increased serum alkaline phosphatase and positive serum mitochondrial autoantibodies, all consistent with primary biliary cirrhosis.
Sequence similarities	Belongs to the ERG4/ERG24 family.
Post-translational modifications	Phosphorylated by CDK1 protein kinase in mitosis when the inner nuclear membrane breaks down into vesicles that dissociate from the lamina and the chromatin. It is phosphorylated by different protein kinases in interphase when the membrane is associated with these structures. Phosphorylation of LBR and HP1 proteins may be responsible for some of the alterations in chromatin organization and nuclear structure which occur at various times during the cell cycle.
Cellular localization	Nucleus inner membrane.

Images

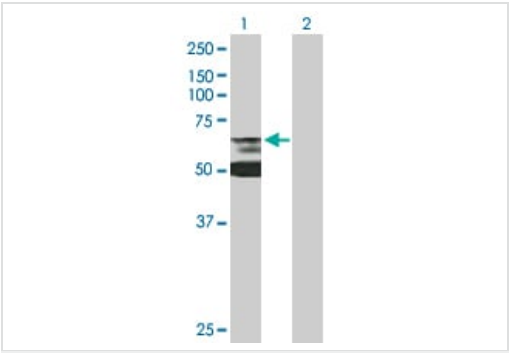


Western blot - Anti-Lamin B Receptor/LBR antibody (ab169306)

Anti-Lamin B Receptor/LBR antibody (ab169306) at 1 µg/ml + Jurkat cell lysate at 50 µg

Developed using the ECL technique.

Predicted band size: 71 kDa



Western blot - Anti-Lamin B Receptor/LBR antibody (ab169306)

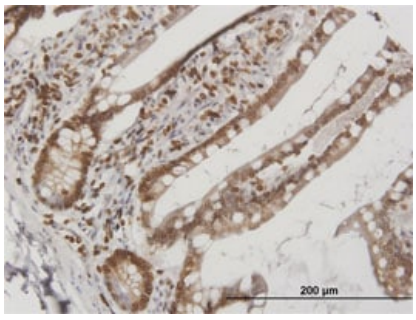
All lanes : Anti-Lamin B Receptor/LBR antibody (ab169306) at 1 µg/ml

Lane 1 : Lamin B Receptor/LBR transfected 293T cell lysate
Lane 2 : Non-transfected 293T cell lysate

Lysates/proteins at 15 µl per lane.

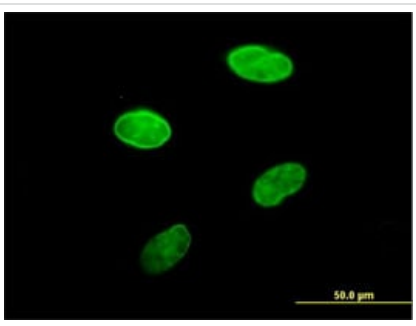
Developed using the ECL technique.

Predicted band size: 71 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Lamin B Receptor/LBR antibody (ab169306)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human small intestine tissue labeling Lamin B Receptor/LBR with ab169306 at 3µg/ml.



Immunocytochemistry/ Immunofluorescence - Anti-Lamin B Receptor/LBR antibody (ab169306)

Immunofluorescent analysis of HeLa cells labeling Lamin B Receptor/LBR with ab169306 at 10µg/ml.

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