ARG10836
anti-Lamin B Receptor antibody [BB2SS3F3]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [BB2SS3F3] recognizes Lamin B Receptor
Tested Reactivity	Hu, Ms
Tested Application	ICC/IF, IHC-Fr, WB
Host	Mouse
Clonality	Monoclonal
Clone	BB2SS3F3
Isotype	IgG1, kappa
Target Name	Lamin B Receptor
Species	Human
Immunogen	GST fused protein around aa. 1-211 (N-terminus) of Human Lamin B Receptor.
Conjugation	Un-conjugated
Alternate Names	PHA; LMN2R; TDRD18; DHCR14B; Integral nuclear envelope inner membrane protein; Lamin-B receptor

Application Instructions

Application table

Application	Dilution
ICC/IF	Assay-dependent
IHC-Fr	Assay-dependent
WB	Assay-dependent

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: HeLa, C2C12 and NIE-116 cells.

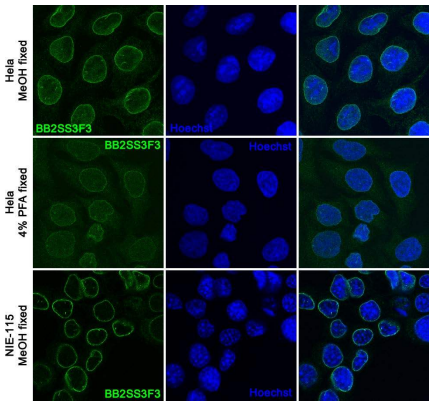
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide.
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

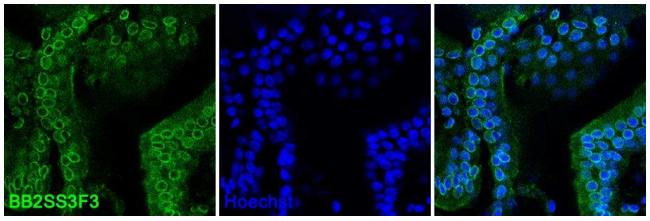
Gene Symbol	LBR
Gene Full Name	lamin B receptor
Background	The protein encoded by this gene belongs to the ERG4/ERG24 family. It localized in the nuclear envelope inner membrane and anchors the lamina and the heterochromatin to the membrane. It may mediate interaction between chromatin and lamin B. Mutations 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. [provided by RefSeq, Jul 2008]
Function	Anchors the lamina and the heterochromatin to the inner nuclear membrane. [UniProt]
Calculated Mw	71 kDa
PTM	Phosphorylated by CDK1 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. Phosphorylated by SRPK1. In late anaphase LBR is dephosphorylated, probably by PP1 and/or PP2A, allowing reassociation with chromatin.

Images



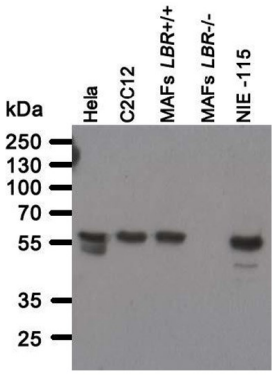
ARG10836 anti-Lamin B Receptor antibody [BB2SS3F3] ICC/IF image

Immunofluorescence: Confocal images of HeLa and Mouse NIE-115 cell lines stained with ARG10836 anti-Lamin B Receptor antibody [BB2SS3F3]. Left: Primary antibodies (green). Middle: Hoechst (blue). Right: Merge.



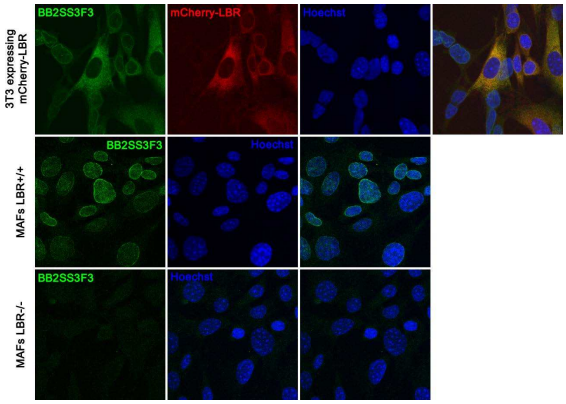
ARG10836 anti-Lamin B Receptor antibody [BB2SS3F3] IHC-Fr image

Immunohistochemistry: Small intestine from adult C57BL/6 mice was transferred to OCT compound and frozen in liquid nitrogen. Tissue cryosections were fixed in 10% neutral buffered formalin, permeabilized and stained with ARG10836 anti-Lamin B Receptor antibody [BB2SS3F3].



ARG10836 anti-Lamin B Receptor antibody [BB2SS3F3] WB image

Western blot: Whole cell lysate from HeLa, C2C12, immortalized Mouse adult fibroblasts (MAFs) and NIE-115 cell lysates stained with ARG10836 anti-Lamin B Receptor antibody [BB2SS3F3].



ARG10836 anti-Lamin B Receptor antibody [BB2SS3F3] ICC/IF image

Immunofluorescence: 3T3 expressing mCherry-LBR (upper panel), Wild-type immortalized mouse adult fibroblast (MAFs LBR+/+) (middle panel) and LBR-null MEFs (MAFs LBR-/-) (lower panel) were methanol fixed and stained with ARG10836 anti-Lamin B Receptor antibody [BB2SS3F3]. The nuclei were counter-stained with Hoechst. Rightmost: Merged picture.