For Research Use Only

Lamin A/C Recombinant antibody, PBS Only

Catalog Number:81042-1-PBS Featured Product



Basic Information

Catalog Number:

GenBank Accession Number: BC003162

Purification Method: Protein A purification

81042-1-PBS Size:

GeneID (NCBI):

CloneNo.:

1mg/ml

AG0408

4000

5116

Source: Rabbit Isotype:

ENSEMBL Gene ID: ENSG00000160789 **UNIPROT ID:**

Immunogen Catalog Number:

Full Name: lamin A/C

P02545

Calculated MW:

65 kDa Observed MW: 65-70 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, Indirect ELISA

Species Specificity: human, mouse, rat

Background Information

Lamin A/C is also named as LMNA, or LMN1. The lamin family of proteins make up the matrix and are highly conserved in evolution. During mitosis, the lamina matrix is reversibly disassembled as the lamin proteins are phosphorylated. Lamin proteins are thought to be involved in nuclear stability, chromatin structure and gene expression. The lack of lamin A/C can be as a novel marker for undifferentiated embryonic stem cells and lamin A/C expression is as an early indicator of differentiation (PMID: 16179429). Mutations in this gene lead to several diseases: Emery-Dreifuss muscular dystrophy, familial partial lipodystrophy, limb girdle muscular dystrophy, dilated cardiomyopathy, Charcot-Marie-Tooth disease, and Hutchinson-Gilford progeria syndrome. This protein has 4 isoforms produced by alternative splicing with the molecular weight of 74 kDa, 65 kDa, 70 kDa and 64 kDa. This antibody can recognize 4 isoforms of Lamin A/C.

Storage

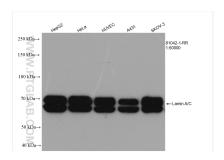
Storage:

Store at -80°C.

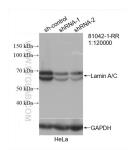
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

PBS Only

Selected Validation Data



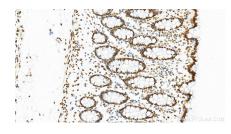
Various lysates were subjected to SDS PAGE followed by western blot with 81042-1-RR (Lamin A/C antibody) at dilution of 1:60000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



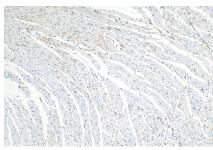
WB result of Lamin A/C antibody (81042-1-RR; 1:120000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Lamin A/C transfected HeLa cells. This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human normal colon slide using 81042-1-RR (Lamin A/C antibody) at dilution of 1:12000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human normal colon slide using 81042-1-RR (Lamin A/C antibody) at dilution of 1:12000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



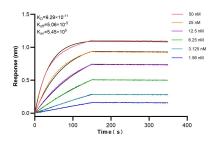
Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 81042-1-RR (Lamin A/C antibody) at dilution of 1:6000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 81042-1-RR (Lamin A/C antibody) at dilution of 1:6000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of $(-20^{\circ}\text{C}\text{ Methanol})$ fixed HepG2 cells using Lamin A/C antibody (81042-1-RR, Clone: 5l16) at dilution of 1:1000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 81042-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 81042-1-RR against Human Lamin A/C were performed. The affinity constant is 92.9 pM.