iFluor™ 647 Conjugated Anti-Lamin B1 Antibody [SI17-07]

HA720172F

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	IF-Tissue
Molecular Wt:	Predicted band size: 66 kDa
Clone number:	SI17-07

Description: A unique family of cysteine proteases has been described that differs in sequence, structure and substrate specificity from any previously described protease family. This family, termed Ced-3/ICE, functions as key components of the apoptotic machinery and act to destroy specific target proteins which are critical to cellular longevity. Nuclear lamins are critical to maintaining the integrity of the nuclear envelope and cellular morphology as components of the nuclear lamina, a fibrous layer on the nucleoplasmic side of the inner nuclear membrane, which is thought to provide a framework for the nuclear envelope and may also interact with chromatin. B-type lamins undergo a series of modifications, such as farnesylation and phosphorylation. Increased phosphorylation of the lamins occurs before envelope disintegration and probably plays a role in regulating lamin associations. Nuclear Lamin B is fragmented as a consequence of apoptosis by an unidentified member of the ICE family.

Conjugate: iFluor™ 647, Ex: 656nm; Em: 670nm.

Immunogen: Synthetic peptide within Human Lamin B1 aa 511-560 / 586.

Positive control: Rat large intestine tissue, human colon carcinoma tissue, human breast carcinoma tissue.

Subcellular location: Nucleus inner membrane.

Database links: SwissProt: P20700 Human | P70615 Rat

Recommended Dilutions:

IF-Tissue 1:200

Storage Buffer: Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

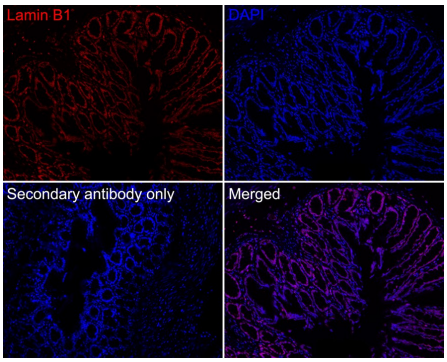

Fig1: Immunofluorescence analysis of paraffin-embedded rat large intestine tissue labeling Lamin B1 (HA720172F).

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS. And then probed with the primary antibody Lamin B1 (HA720172F, iFluor™ 647) at 1/200 dilution overnight at 4 ℃, washed with PBS. DAPI was used as nuclear counterstain.

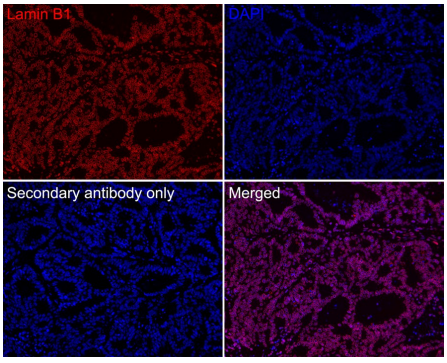

Fig2: Immunofluorescence analysis of paraffin-embedded human colon carcinoma tissue labeling Lamin B1 (HA720172F).

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS. And then probed with the primary antibody Lamin B1 (HA720172F, iFluor™ 647) at 1/200 dilution overnight at 4 ℃, washed with PBS. DAPI was used as nuclear counterstain.

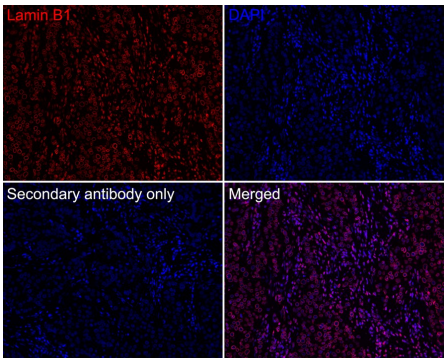

Fig3: Immunofluorescence analysis of paraffin-embedded human breast carcinoma tissue labeling Lamin B1 (HA720172F).

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS. And then probed with the primary antibody Lamin B1 (HA720172F, iFluor™ 647) at 1/200 dilution overnight at 4 ℃, washed with PBS. DAPI was used as nuclear counterstain.

Background References

1. Cruz OH et al. Multinucleation and Polykaryon Formation is Promoted by the EhPC4 Transcription Factor in Entamoeba histolytica. Sci Rep 6:19611 (2016).
2. Lund K et al. Slug-dependent upregulation of L1CAM is responsible for the increased invasion potential of pancreatic cancer cells following long-term 5-FU treatment. PLoS One 10:e0123684 (2015).