## Product Data Sheet

### Lamin A Monoclonal Antibody (133A2)

Catalog Number MA1-06101

### Details

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td>100 µg</td>
</tr>
<tr>
<td><strong>Host/Isotype</strong></td>
<td>Mouse IgG3</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>Monoclonal</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Antibody</td>
</tr>
<tr>
<td><strong>Clone</strong></td>
<td>133A2</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Partially purified recombinant human lamin A.</td>
</tr>
<tr>
<td><strong>Conjugate</strong></td>
<td>Unconjugated</td>
</tr>
<tr>
<td><strong>Concentration</strong></td>
<td>1mg/mL</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Purification</strong></td>
<td>purified</td>
</tr>
<tr>
<td><strong>Storage Buffer</strong></td>
<td>PBS</td>
</tr>
<tr>
<td><strong>Contains</strong></td>
<td>0.09% sodium azide</td>
</tr>
<tr>
<td><strong>Storage Conditions</strong></td>
<td>4°C or -20°C if preferred</td>
</tr>
</tbody>
</table>

### Tested species reactivity

- Bovine, Canine, Human, Mouse, Rat

### Tested Applications

- Flow Cytometry (Flow)
  - Dilution: 1:100 - 1:200
- Immunocytochemistry (ICC)
  - Dilution: 5 µg/mL
- Immunofluorescence (IF)
  - Dilution: 5 µg/mL
- Immunohistochemistry (Frozen) (IHC (F))
  - Dilution: 1:100 - 1:200
- Immunohistochemistry (Paraffin) (IHC (P))
  - Dilution: 1:100-1:200
- Western Blot (WB)
  - Dilution: 1 µg/mL

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

### Tested Applications

- **Flow Cytometry (Flow)**
  - Dilution: 1:100 - 1:200
- **Immunocytochemistry (ICC)**
  - Dilution: 5 µg/mL
- **Immunofluorescence (IF)**
  - Dilution: 5 µg/mL
- **Immunohistochemistry (Frozen) (IHC (F))**
  - Dilution: 1:100 - 1:200
- **Immunohistochemistry (Paraffin) (IHC (P))**
  - Dilution: 1:100-1:200
- **Western Blot (WB)**
  - Dilution: 1 µg/mL

### Background/Target Information

Nuclear lamins form a network of intermediate-type filaments at the nucleoplasmic site of the nuclear membrane. Two main subtypes of nuclear lamins can be distinguished, i.e. A-type lamins and B-type lamins. The A-type lamins comprise a set of three proteins arising from the same gene by alternative splicing, i.e. lamin A, lamin C and lamin Adel 10, while the B-type lamins include two proteins arising from two distinct genes, i.e. lamin B1 and lamin B2.

Recent evidence has revealed that mutations in A-type lamins give rise to a range of rare but dominant genetic disorders, including Emery-Dreifuss muscular dystrophy, dilated cardiomyopathy with conduction-system disease and Dunnigan-type familial partial lipodystrophy. In addition, the expression of A-type lamins coincides with cell differentiation and as A-type lamins specifically interact with chromatin, a role in the regulation of differential gene expression has been suggested for A-type lamins.