### Overview

**Product name**  
Anti-SUN2 antibody [EPR6557]

**Description**  
Rabbit monoclonal [EPR6557] to SUN2

**Host species**  
Rabbit

**Tested applications**  
Suitable for: Flow Cyt, WB, IHC-P, ICC/IF

**Species reactivity**  
Reacts with: Mouse, Rat, Human

**Immunogen**  
Synthetic peptide within Human SUN2 aa 700-800 (C terminal). The exact sequence is proprietary.

**Positive control**  

**General notes**  
Our RabMab® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents

This product is a recombinant rabbit monoclonal antibody.

### Properties

**Form**  
Liquid

**Storage instructions**  
Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**Dissociation constant (K_D)**  
$K_D = 5.43 \times 10^{-11} \text{ M}$

**Storage buffer**  
P pH: 7.20
Preservative: 0.01% Sodium azide
Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
Purity: Protein A purified
Clonality: Monoclonal
Clone number: EPR6557
Isotype: IgG

Relevance: SUN proteins form part of the LINC complex - a protein bridge that spans the nuclear envelope linking the nucleoskeleton to the actin cytoskeleton. They are located on the inner nuclear membrane side of the complex. The LINC complex is thought to function in controlling nuclear position, contributing to mechanical resistance and the overall architecture of the cell. SUN2 can exist in a heterodimer with SUN1. Both can interact with lamins and nesprins in the nuclear envelope.

Cellular localization: Nuclear membrane, endosome membrane, mitotic spindle organization.

Applications

Our Abpromise guarantee covers the use of ab124916 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<td>Flow Cyt</td>
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<td>1/30.</td>
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<tr>
<td>IHC-P</td>
<td></td>
<td>1/250 - 1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.</td>
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<tr>
<td>ICC/IF</td>
<td></td>
<td>1/100 - 1/800.</td>
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</tbody>
</table>

Target

Relevance: SUN proteins form part of the LINC complex - a protein bridge that spans the nuclear envelope linking the nucleoskeleton to the actin cytoskeleton. They are located on the inner nuclear membrane side of the complex. The LINC complex is thought to function in controlling nuclear position, contributing to mechanical resistance and the overall architecture of the cell. SUN2 can exist in a heterodimer with SUN1. Both can interact with lamins and nesprins in the nuclear envelope.

Cellular localization: Nuclear membrane, endosome membrane, mitotic spindle organization.
ab124916 staining SUN2 in mouse testis tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed and paraffin-embedded, antigen retrieval was by heat mediation in Tris/EDTA buffer pH9. Samples were incubated with primary antibody (1/500). An HRP-conjugated goat anti-rabbit IgG, ab97051 (1/500) was used as the secondary antibody. Tissue counterstained with Hematoxylin. PBS was used in the negative control rather than the Primary antibody.

Anti-SUN2 antibody [EPR6557] (ab124916) at 1/5000 dilution + Rat brain lysate at 10 µg

**Secondary**
Goat Anti-Rabbit IgG, (H+L), HRP- conjugated at 1/1000 dilution

**Predicted band size:** 80 kDa
Flow cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling SUN2 (red) with ab124916 at a 1/30 dilution. Cells were fixed with 80% methanol and permeabilized with 0.1% Tween-20. A goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (ab172730). Blue (unlabeled control) - Cells without incubation with the primary and secondary antibodies.

Flow Cytometry - Anti-SUN2 antibody [EPR6557] (ab124916)

ab124916 staining SUN2 in Human colon tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed and paraffin-embedded, antigen retrieval was by heat mediation in Tris/EDTA buffer pH9. Samples were incubated with primary antibody (1/500). An HRP-conjugated Goat anti-rabbit IgG, ab97051 (1/500), was used as the secondary antibody. Tissue counterstained with Hematoxylin. PBS was used in the negative control rather than the Primary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SUN2 antibody [EPR6557] (ab124916)
Anti-SUN2 antibody [EPR6557] (ab124916) at 1/5000 dilution + Mouse heart lysate at 20 µg

**Secondary**
Goat Anti-Rabbit IgG, (H+L), HRP-conjugated at 1/1000 dilution

**Predicted band size:** 80 kDa

ab124916, unpurified, at a 1/250 dilution, staining SUN2 in paraffin embedded Human ovarian tissue by Immunohistochemistry.
**Western blot** - Anti-SUN2 antibody [EPR6557] (ab124916)

*All lanes:* Anti-SUN2 antibody [EPR6557] (ab124916) at 1/5000 dilution

*Lane 1:* HeLa cell Lysate

*Lane 2:* Jurkat cell Lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

*All lanes:* Goat Anti-Rabbit IgG, (H+L), HRP- conjugated at 1/1000 dilution

**Predicted band size:** 80 kDa

ab124916, unpurified, at a 1/250 dilution, staining SUN2 in paraffin embedded Human lung tissue by Immunohistochemistry.

**Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SUN2 antibody [EPR6557] (ab124916)**
Western blot - Anti-SUN2 antibody [EPR6557] (ab124916)

All lanes: Anti-SUN2 antibody [EPR6557] (ab124916) at 1/1000 dilution (unpurified)

Lane 1: Human fetal muscle lysate
Lane 2: Saos-2 lysate
Lane 3: HeLa lysate
Lane 4: Jurkat lysate
Lane 5: HepG2 lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 80 kDa

Equilibrium disassociation constant (K_D)
Learn more about K_D

Click here to learn more about K_D

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