


Product datasheet

Anti-SUN1 antibody ab103021

4 References 2 Images

Overview

<b>Product name</b>	Anti-SUN1 antibody
<b>Description</b>	Rabbit polyclonal to SUN1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat <b>Predicted to work with:</b> Chinese hamster 
<b>Immunogen</b>	Synthetic peptide conjugated to KLH derived from within residues 200 - 300 of Mouse SUN1. Read Abcam's proprietary immunogen policy
<b>Positive control</b>	WB: Mouse and rat embryonic brain E14, E16 and E18 tissue lysates. ICC/IF: HepG2 cells.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Note: Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab103021** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 5 µg/ml.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 110 kDa (predicted molecular weight: 102 kDa). Abcam recommends using milk as the blocking agent - 3%

## Target

### Function

Component of SUN-protein-containing multivariate complexes also called LINC complexes which link the nucleoskeleton and cytoskeleton by providing versatile outer nuclear membrane attachment sites for cytoskeletal filaments. Required for interkinetic nuclear migration (INM) and essential for nucleokinesis and centrosome-nucleus coupling during radial neuronal migration in the cerebral cortex and during glial migration. Anchors chromosome movement in the prophase of meiosis and is involved in selective gene expression of coding and non-coding RNAs needed for gametogenesis. Required for telomere attachment to nuclear envelope and gametogenesis. Helps to define the distribution of nuclear pore complexes (NPCs).

### Sequence similarities

Contains 1 SUN domain.

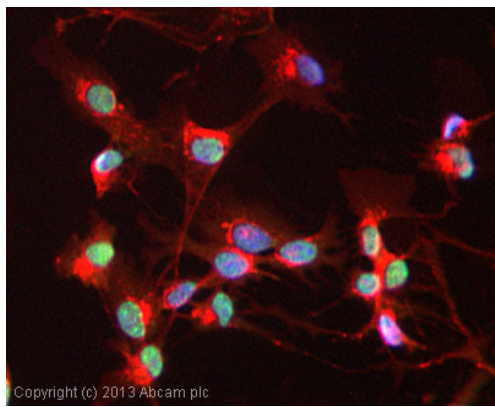
### Domain

The SUN domain may play a role in the nuclear anchoring and/or migration.

### Cellular localization

Nucleus inner membrane.

## Images



Immunocytochemistry/ Immunofluorescence - Anti-SUN1 antibody (ab103021)

ICC/IF image of ab103021 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab103021, 5µg/ml) overnight at +4°C. The secondary antibody (green) was [ab96899](#), DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 4% formaldehyde fixed (10 min) HeLa, Hek293 and MCF7 cells at 5µg/ml, and in 100% methanol fixed (5 min) HeLa and MCF7 cells at 5µg/ml.



Western blot - Anti-SUN1 antibody (ab103021)

**All lanes** : Anti-SUN1 antibody (ab103021) at 1 µg/ml (Milk blocking - 3%)

**Lane 1** : E14 Mouse Embryo Brain Tissue Lysate

**Lane 2** : E16 Mouse Embryo Brain Tissue Lysate

**Lane 3** : E18 Mouse Embryo Brain Tissue Lysate

**Lane 4** : E14 Rat Embryo Brain Tissue Lysate

**Lane 5** : E16 Rat Embryo Brain Tissue Lysate

**Lane 6** : E18 Rat Embryo Brain Tissue Lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 102 kDa

**Observed band size:** 110 kDa

**Additional bands at:** 150 kDa, 24 kDa, 64 kDa, 80 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 3 minutes

Abcam recommends using milk as the blocking agent. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above. This blot was produced using a 10% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Bovine Serum Albumin before being incubated with ab103021 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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