

SUN2 Antibody

Rabbit mAb Catalog # AP91947

Specification

SUN2 Antibody - Product Information

Application WB, IHC, FC, ICC

Primary Accession
Reactivity
Q9UH99
Rat

Clonality Monoclonal

Other Names FRIGG; UNC84B;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 80311 Da

SUN2 Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500 FC~~1:10~50 ICC~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

SUN2

Description SUN proteins form part of the LINC

complex - a protein bridge that spans the

nuclear envelope linking the

nucleoskeleten to the actin cytoskeleten. They are located on the inner nuclear

membrane side of the complex.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

SUN2 Antibody - Protein Information

Name SUN2 (HGNC:14210)

Function

As a component of the LINC (Linker of Nucleoskeleton and Cytoskeleton) complex, involved in the connection between the nuclear lamina and the cytoskeleton. The nucleocytoplasmic interactions established by the LINC complex play an important role in the transmission of mechanical forces across the nuclear envelope and in nuclear movement and positioning. Specifically, SYNE2 and SUN2 assemble in arrays of transmembrane actin-associated nuclear (TAN) lines which are bound to F-actin cables and couple the nucleus to retrograde actin flow during actin-dependent nuclear



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movement. 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. Required for nuclear migration in retinal photoreceptor progenitors implicating association with cytoplasmic dynein-dynactin and kinesin motor complexes, and probably B-type lamins; SUN1 and SUN2 seem to act redundantly. The SUN1/2:KASH5 LINC complex couples telomeres to microtubules during meiosis; SUN1 and SUN2 seem to act at least partial redundantly. 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. May also function on endocytic vesicles as a receptor for RAB5-GDP and participate in the activation of RAB5.

Cellular Location

Nucleus inner membrane; Single-pass type II membrane protein. Nucleus envelope. Endosome membrane; Single-pass type II membrane protein

Tissue Location

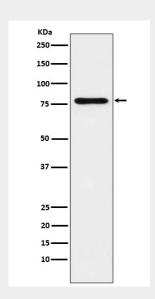
Widely expressed. Highly expressed in heart, lung and muscle. Weakly expressed in fetal heart. Slightly overexpressed in some heart tissues form patients with congenital heart defects

SUN2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SUN2 Antibody - Images



Western blot analysis of SUN2 expression in Jurkat cell lysate.