

Anti-SUN2 Rabbit Monoclonal Antibody

Catalog # ABO15434

Specification

Anti-SUN2 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format Description WB, IHC, IF, ICC, FC <u>090H99</u> Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-SUN2 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-SUN2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 25777

Other Names SUN domain-containing protein 2, Protein unc-84 homolog B, Rab5-interacting protein, Rab5IP, Sad1/unc-84 protein-like 2, SUN2 (HGNC:14210)

Calculated MW 80 kDa KDa

Application Details WB 1:500-1:2000
IHC 1:100-1:500
ICC/IF 1:50-1:200
FC 1:50

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human SUN2

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-SUN2 Rabbit Monoclonal 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 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

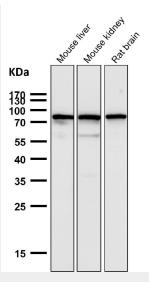
Widely expressed. Highly expressed in heart, lung and muscle. Weakly expressed in fetal heart. Slightly overexpressed in some heart tissues form patients with congenital heart defects

Anti-SUN2 Rabbit Monoclonal Antibody - Protocols

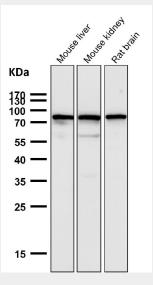
Provided below are standard protocols that you may find useful for product applications.

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

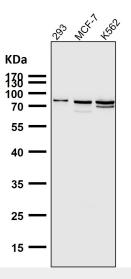
Anti-SUN2 Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.

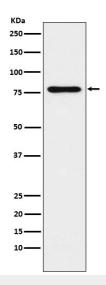


All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.





Western blot analysis of SUN2 expression in Jurkat cell lysate.