

# SUN2 Recombinant Rabbit mAb

SUN2 Recombinant Rabbit mAb Catalog # AP94778

#### **Product Information**

**Application** WB, IHC-P, IHC-F, IF, ICC

Reactivity Human
Host Rabbit
Clonality Recombinant
Calculated MW 80 KDa
Physical State Liquid

**Immunogen** Recombinant protein within human SUN2 aa 500-700.

**Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**Post-translational** The disulfid bond with SYNE2 is required for stability of the

modifications SUN2:SYNE2/KASH2 LINC complex under tensile forces though not required

for the interaction. The disulfid bond is proposed to be conserved in LINC

complexes involved in force transmission.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** SUN1 (MIM 607723) and SUN2 are inner nuclear membrane (INM) proteins

that play a major role in nuclear-cytoplasmic connection by formation of a 'bridge' across the nuclear envelope, known as the LINC complex, via

interaction with the conserved luminal KASH domain of nesprins (e.g., SYNE1; MIM 608441) located in the outer nuclear membrane (ONM). The LINC complex provides a direct connection between the nuclear lamina and the cytoskeleton, which contributes to nuclear positioning and cellular rigidity (summary by Hague et al., 2010 [PubMed 19933576]).[supplied by OMIM, Nov

20101

#### **Additional Information**

**Target/Specificity** 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.

**Dilution** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:400-800,ICC/IF=1:50-100,IF=1:100-5

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Format 0.01 M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

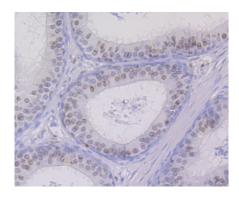
reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

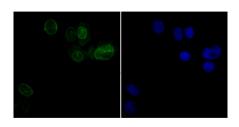
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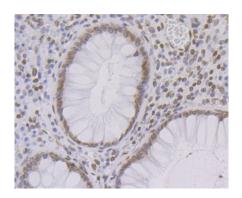
## **Images**



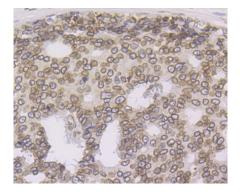
Immunohistochemical analysis of paraffin-embedded rat epididymis tissue using anti-SUN2 antibody. Counter stained with hematoxylin.



ICC staining SUN2 (green) in SK-Br-3 cells. The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

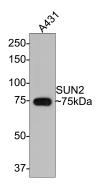


Immunohistochemical analysis of paraffin-embedded human colon tissue using anti-SUN2 antibody. Counter stained with hematoxylin.

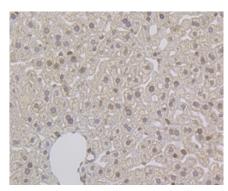


Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue using anti-SUN2 antibody. Counter stained with hematoxylin.

Western blot analysis of SUN2 on A431 cell lysates with Rabbit anti-SUN2 antibody (AP94778) at 1/500 dilution. Lysates/proteins at 10 µg/Lane. Predicted band size: 80 kDa Observed band size: 75 kDa Exposure time: 2 minutes; 8% SDS-PAGE gel. Proteins were transferred to a



PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (AP94778) at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody at 1:300,000 dilution was used for 1 hour at room temperature.



Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-SUN2 antibody. Counter stained with hematoxylin.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.