

SUN1 (H-300): sc-135076

BACKGROUND

UNC84A (UNC84 homolog A), also known as SUN1, is a multi-pass nuclear membrane protein that is involved in nuclear anchoring and migration. Highly expressed in heart, brain and testis, UNC84A functions as an A-type lamin-binding protein that forms a link between the inner and outer nuclear envelope membranes. This link acts as a structural bridge between the nuclear interior and the actin cytoskeleton and is essential for proper localization of nuclear envelope proteins. Additionally, UNC84A may be involved in telomere attachment and in normal testis development. UNC84A contains one UNC84 (SUN) domain and exists as four isoforms due to alternative splicing events.

REFERENCES

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4. Padmakumar, V.C., et al. 2005. The inner nuclear membrane protein SUN1 mediates the anchorage of Nesprin-2 to the nuclear envelope. *J. Cell Sci.* 118: 3419-3430.
5. Wang, Q., et al. 2006. Characterization of the structures involved in localization of the SUN proteins to the nuclear envelope and the centrosome. *DNA Cell Biol.* 25: 554-562.
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CHROMOSOMAL LOCATION

Genetic locus: SUN1 (human) mapping to 7p22.3; Sun1 (mouse) mapping to 5 G2.

SOURCE

SUN1 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 (deletion 221-247) mapping at the N-terminus of SUN1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SUN1 (H-300) is recommended for detection of SUN1 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SUN1 siRNA (h): sc-106672, SUN1 siRNA (m): sc-108011, SUN1 shRNA Plasmid (h): sc-106672-SH, SUN1 shRNA Plasmid (m): sc-108011-SH, SUN1 shRNA (h) Lentiviral Particles: sc-106672-V and SUN1 shRNA (m) Lentiviral Particles: sc-108011-V.

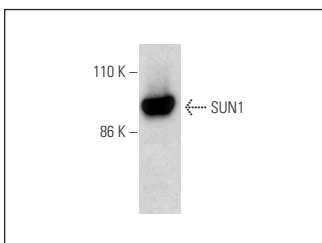
Molecular Weight of SUN1: 100 kDa.

Positive Controls: mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



SUN1 (H-300): sc-135076. Western blot analysis of SUN1 expression in mouse brain tissue extract.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **SUN1 (2D10): sc-293292**, our highly recommended monoclonal alternative to SUN1 (H-300).