

UNC84B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12437c

Specification

UNC84B Antibody (Center) - Product Information

Application WB.E **Primary Accession 09UH99** Other Accession NP 056189.1 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 80311 Antigen Region 237-265

UNC84B Antibody (Center) - 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, FRIGG, KIAA0668, RAB5IP, UNC84B

Target/Specificity

This UNC84B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 237-265 amino acids from the Central region of human UNC84B.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

UNC84B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

UNC84B Antibody (Center) - 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

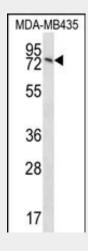
Widely expressed. Highly expressed in heart, lung and muscle. Weakly expressed in fetal heart. Slightly overexpressed in some heart tissues form patients with congenital heart defects

UNC84B Antibody (Center) - Protocols

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

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

UNC84B Antibody (Center) - Images







UNC84B Antibody (Center) (Cat. #AP12437c) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the UNC84B antibody detected the UNC84B protein (arrow).

UNC84B Antibody (Center) - Background

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 Haque et al., 2010 [PubMed 19933576]).[supplied by OMIM].

UNC84B Antibody (Center) - References

Turgay, Y., et al. EMBO J. 29(14):2262-2275(2010)
Haque, F., et al. J. Biol. Chem. 285(5):3487-3498(2010)
Stewart-Hutchinson, P.J., et al. Exp. Cell Res. 314(8):1892-1905(2008)
Cerhan, J.R., et al. Blood 110(13):4455-4463(2007)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007):