

#### UNC84B Antibody (Center) Blocking peptide Synthetic peptide

Catalog # BP12437c

## Specification

# **UNC84B Antibody (Center) Blocking peptide - Product Information**

Primary Accession

<u>Q9UH99</u>

## UNC84B Antibody (Center) Blocking peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## UNC84B Antibody (Center) Blocking peptide - 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) Blocking peptide - Protocols**

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

#### <u>Blocking Peptides</u>

#### UNC84B Antibody (Center) Blocking peptide - Images

## UNC84B Antibody (Center) Blocking peptide - Background

SUN1 (MIM 607723) and SUN2 are inner nuclear membrane(INM) proteins that play a major role in nuclear-cytoplasmicconnection by formation of a 'bridge' across the nuclear envelope,known as the LINC complex, via interaction with the conservedluminal KASH domain of nesprins (e.g., SYNE1; MIM 608441) located in the outer nuclear membrane (ONM). The LINC complex provides adirect 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 byOMIM].

## UNC84B Antibody (Center) Blocking peptide - 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) :