

Nesprin1 Rabbit mAb

Catalog # AP77822

Product Information

Application WB, IHC-P, IF, FC, ICC

Primary Accession <u>Q8NF91</u>

Reactivity Rat, Human, Mouse

Host Rabbi

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human Nesprin 1

Purification Affinity Chromatography

Calculated MW 1011086

Additional Information

Gene ID 23345

Other Names SYNE1

Dilution WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

Protein Information

Name SYNE1 (HGNC:17089)

Function Multi-isomeric modular protein which forms a linking network between

organelles and the actin cytoskeleton to maintain the subcellular spatial organization. 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. May be involved in nucleus- centrosome attachment and nuclear migration in neural progenitors implicating LINC complex association with SUN1/2 and probably association with cytoplasmic dynein-dynactin motor complexes; SYNE1 and SYNE2 may act redundantly. Required for centrosome migration to the apical cell surface during early ciliogenesis. May be involved in nuclear remodeling during sperm head formation in spermatogenesis; a probable SUN3:SYNE1/KASH1 LINC complex may tether spermatid nuclei to posterior

cytoskeletal structures such as the manchette.

Cellular Location

Nucleus outer membrane; Single-pass type IV membrane protein; Cytoplasmic side Nucleus. Nucleus envelope. Cytoplasm, cytoskeleton. Cytoplasm, myofibril, sarcomere. Note=The largest part of the protein is cytoplasmic, while its C-terminal part is associated with the nuclear envelope, most probably the outer nuclear membrane. In skeletal and smooth muscles, a significant amount is found in the sarcomeres. In myoblasts, relocalized from the nuclear envelope to the nucleus and cytoplasm during cell differentiation

Tissue Location

Expressed in HeLa, A431, A172 and HaCaT cells (at protein level). Widely expressed. Highly expressed in skeletal and smooth muscles, heart, spleen, peripheral blood leukocytes, pancreas, cerebellum, stomach, kidney and placenta. Isoform GSRP-56 is predominantly expressed in heart and skeletal muscle (at protein level).

Images



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