

Nesprin 1 Antibody

Rabbit mAb Catalog # AP91769

Specification

Nesprin 1 Antibody - Product Information

Application WB, IHC, FC, ICC

Primary Accession
Reactivity
Rat

Clonality Monoclonal

Other Names

ARCA1; C6orf98; CPG2; EDMD4; Enaptin; Myne-1; MYNE1; Nesp1; Nesprin-1; SCAR8; Syne-1;

SYNE1;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 1011086 Da

Nesprin 1 Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500 FC~~1:10~50 ICC~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

Nesprin 1

Description Multi-isomeric modular protein which

forms a linking network between

organelles and the actin cytoskeleton to

maintain the subcellular spatial

organization. Component of

SUN-protein-containing multivariate complexes also called LINC complexes which link the nucleoskeleton and

cytoskeleton by providing versatile outer nuclear membrane attachment sites for

cytoskeletal filaments.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

Nesprin 1 Antibody - 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).

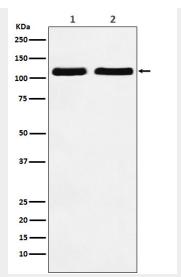
Nesprin 1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Nesprin 1 Antibody - Images





Western blot analysis of Nesprin 1 expression in (1) HeLa cell lysate; (2) RAW264.7 cell lysate.