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Rabbit Anti-Nesprin 2 antibody

SL19208R

Product Name:	Nesprin 2
Chinese Name:	突触核膜蛋白2抗体
Alias:	Nesprin2; Nesprin-2; DKFZP434H2235; DKFZp686E01115; DKFZp686H1931; FLJ11014; FLJ43727; FLJ45710; FLJ46790; KIAA1011; Nesprin-2; Nesprin2; NUA; NUANCE; Nuclear envelope spectrin repeat protein 2; Nucleus and actin connecting element; Nucleus and actin connecting element protein; Protein NUANCE; Spectrin repeat containing nuclear envelope 2; Synaptic nuclear envelope protein 2; Synaptic nuclei expressed gene 2; SYNE 2; Syne-2; SYNE2; SYNE2_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	796kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Nesprin 2:3801-3900/6885
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The protein encoded by this gene is a nuclear outer membrane protein that binds cytoplasmic F-actin. This binding tethers the nucleus to the cytoskeleton and aids in the

	maintenance of the structural integrity of the nucleus. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009] **Function:** 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. Involved in the maintenance of nuclear organization and structural integrity. Connects nuclei to the cytoskeleton by interacting with the nuclear envelope and with F-actin in the cytoplasm. 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 centrosome migration to the apical cell surface during early ciliogenesis. **Subcellular Location:** Nucleus outer membrane. Sarcoplasmic reticulum membrane. Cell membrane. Cytoplasm > cytoskeleton. Mitochondrion. Nucleus > nucleoplasm. Different isoform patterns are found in the different compartments of the cell. The isoforms having the C-terminal transmembrane span can be found in several organellar membranes like the nuclear envelope, the sarcoplasmic reticulum of myoblasts, or the lamellipodia and focal adhesions at the cell membrane. The largest part of the outer nuclear membrane-associated protein is cytoplasmic, while its C-terminal part is associated with the nuclear envelope, most probably the outer nuclear membrane. Remains associated with the nuclear envelope during its breakdown in mitotic cells. Shorter solubles isoforms can be found in the cytoplasm and within the nucleus. **Tissue Specificity:** Widely expressed, with higher level in kidney, adult and fetal liver, stomach and placenta. Weakly expressed in skeletal muscle and brain. Isoform 5 is highly expressed in pancreas, skeletal muscle and heart. **DISEASE:** Defects in SYNE2 are the cause of Emery-Dreifuss muscular dystrophy type 5 (EDMD5) [MIM:612999]. A degenerative myopathy characterized by weakness and atrophy of muscle without involvement of the nervous system, early contractures of the elbows, Achilles tendons and spine, and cardiomyopathy associated with cardiac conduction defects. **Similarity:** Belongs to the nesprin family. Contains 1 actin-binding domain. Contains 2 CH (calponin-homology) domains. Contains 1 KASH domain. Contains 9 spectrin repeats. **SWISS:**

	Q8WXH0 **Gene ID:** 23224 **Database links:** Entrez Gene: 23224 Human Omim: 608442 Human SwissProt: Q8WXH0 Human Unigene: 525392 Human Unigene: 729020 Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.