

Rabbit Anti-SPECA antibody

SL2675R

Product Name:	SPECA
Chinese Name:	a-包衬蛋白抗体
Alias:	Fodrin alpha chain; (ALPHA)II-SPECTRIN; Alpha II Spectrin; FLJ44613; Fodrin, alpha; NEAS; Non erythrocytic spectrin alpha; SPECA; Spectrin alpha chain; Spectrin alpha chain brain; Spectrin alpha non erythrocytic 1; Spectrin non erythroid alpha chain; Spectrin, alpha, non-erythrocytic 1 (alpha-fodrin); Spectrin, nonerythroid, alpha subunit; Spna2; SPTA 2; SPTA2; SPTAN 1; SPTAN1; SPTA1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	284kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SPECA:551-650/2472
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:	a-Fodrin is a universally expressed membrane associated cytoskeletal protein consisting of alpha and beta subunits. The protein is important for maintaining normal membrane structure and supporting cell surface protein function. Alpha Fodrin is one of the

important targets cleaved by caspases during apoptosis. The full length 240 kDa protein can be cleaved at several sites within its sequence by activated caspases generating N terminal 150 kDa, C terminal 120 kDa, and 35 kDa major products. Cleavage of alpha Fodrin leads to membrane malfunction and cell shrinkage.

Function:

Fodrin, which seems to be involved in secretion, interacts with calmodulin in a calcium-dependent manner and is thus candidate for the calcium-dependent movement of the cytoskeleton at the membrane.

Subunit:

Like erythrocyte spectrin, the spectrin-like proteins are capable of forming dimers which can further associate to tetramers. Interacts with isoform 1 of ACP1. Interacts with CALM and EMD. Interacts (via C-terminal spectrin repeats) with TRPC4. Identified in a complex with ACTN4, CASK, IQGAP1, MAGI2, NPHS1 and SPTBN1.

Subcellular Location:

Cytoplasm, cytoskeleton. Cytoplasm, cell cortex. Note=Expressed along the cell membrane in podocytes and presumptive tubule cells during glomerulogenesis and is expressed along lateral cell margins in tubule cells.

Post-translational modifications:

Phosphorylation of Tyr-1176 decreases sensitivity to cleavage by calpain in vitro

DISEASE:

Defects in SPTAN1 are the cause of epileptic encephalopathy early infantile type 5 (EIEE5) [MIM:613477]. EIEE5 is a disorder characterized by seizures associated with hypsarrhythmia profound mental retardation with lack of visual attention and speech development, as well as spastic quadriplegia.

Similarity:

Belongs to the spectrin family.

Contains 3 EF-hand domains.

Contains 1 SH3 domain.

Contains 23 spectrin repeats.

SWISS:

Q13813

Gene ID:

6709

Database links:

Entrez Gene: 374234Chicken

Entrez Gene: 6709Human

Entrez Gene: 64159Rat

Omim: 182810Human

SwissProt: P07751Chicken

SwissProt: Q13813Human

SwissProt: P16546Mouse

SwissProt: P16086Rat

Unigene: 372331Human

Unigene: 204969 Mouse

Unigene: 5812Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.