



Rabbit Anti-Spectrin alpha chain, non-erythrocytic 1 antibody

SL0381R

Product Name:	Spectrin alpha chain, non-erythrocytic 1
Chinese Name:	血影蛋白A链非红细胞型/收缩蛋白/Spectrin α 抗体
Alias:	alpha-II spectrin; SPTN1_HUMAN; Alpha Fodrin; Spectrin-Alpha; SPEC; Spectrin, alpha, non-erythrocytic 1 variant; Spectrin alpha chain, non-erythrocytic 1; Alpha-II spectrin; Fodrin alpha chain; Spectrin, non-erythroid alpha subunit; SPTAN1; SPTA2; spectrin, non-erythroid alpha chain; alpha-fodrin; spectrin, non-erythroid alpha subunit; spectrin alpha chain, non-erythrocytic 1; EIEE5; NEAS; Spectrin α II; Spectrin α -II; Spectrin α II; Spectrin- α II.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,
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:	272kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Spectrin alpha chain, non-erythrocytic 1:30-110/2472
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](#)

Spectrins are a family of filamentous cytoskeletal proteins that function as essential scaffold proteins that stabilize the plasma membrane and organize intracellular organelles. Spectrins are composed of alpha and beta dimers that associate to form tetramers linked in a head-to-head arrangement. This gene encodes an alpha spectrin that is specifically expressed in nonerythrocytic cells. The encoded protein has been implicated in other cellular functions including DNA repair and cell cycle regulation. Mutations in this gene are the cause of early infantile epileptic encephalopathy-5. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Sep 2010]

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

Product Detail:

Database links:

[Gene ID: 6709](#) Human

[SwissProt: Q13813](#) Human

Important Note:

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

血影蛋白(spectrin)又称收缩蛋白, 是红The cell membrane骨架的主要成份, 参与了Cytoskeleton结构的形成。但不是红The cell membrane蛋白的成份, 约占膜提取蛋白的30%。血影蛋白属是类似肌球蛋白的膜的外在性蛋白的一种。Spectrin α 是膜里侧结构蛋白质之一, 除起支持双层脂质外, 还有保持红细胞外形的作用, Spectrin- α 占里侧结构蛋白之60—70%。

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