



Cleaved-Spectrin α II (D1185) Polyclonal Antibody

Catalog No	YP-Ab-02899
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;ELISA
Gene Name	SPTAN1
Immunogen	The antiserum was produced against synthesized peptide derived from human SPTA2. AA range:1136-1185
Specificity	Cleaved-Spectrin α II (D1185) Polyclonal Antibody detects endogenous levels of fragment of activated Spectrin α II protein resulting from cleavage adjacent to D1185.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	Spectrin α II;SPTAN1;Spectrin alpha chain non-erythrocytic 1;NEAS;SPTA2; Spectrin alpha chain;non-erythrocytic 1;Alpha-II spectrin;Fodrin alpha chain; Spectrin;non-erythroid alpha subunit
Observed Band	137kD
Calculated Molecular Weight	137kD
Cell Pathway	Cytoplasm, cytoskeleton. Cytoplasm, cell cortex. Expressed along the cell membrane in podocytes and presumptive tubule cells during glomerulogenesis and is expressed along lateral cell margins in tubule cells. .
Tissue Specificity	Aorta,Brain,Epithelium,Fetal brain,Fetal brain cortex,Fetal liver,L
Function	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., PTM:Phosphorylation of Tyr-1176 decreases sensitivity to cleavage by calpain in vitro.,similarity:Belongs to the spectrin family.,similarity:Contains 1 SH3 domain.,similarity:Contains 23 spectrin repeats.,similarity:Contains 3 EF-hand



domains.,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.,

Background

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],

matters needing attention

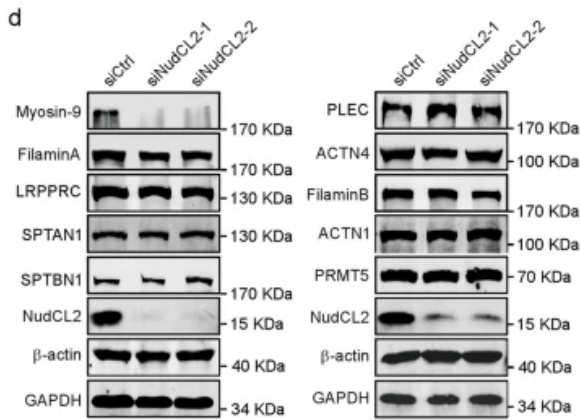
Avoid repeated freezing and thawing!

Usage suggestions

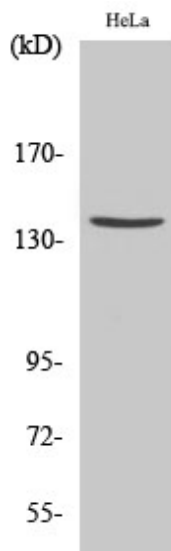
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



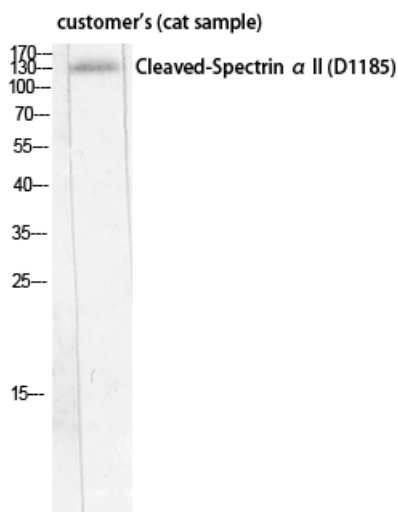
Products Images



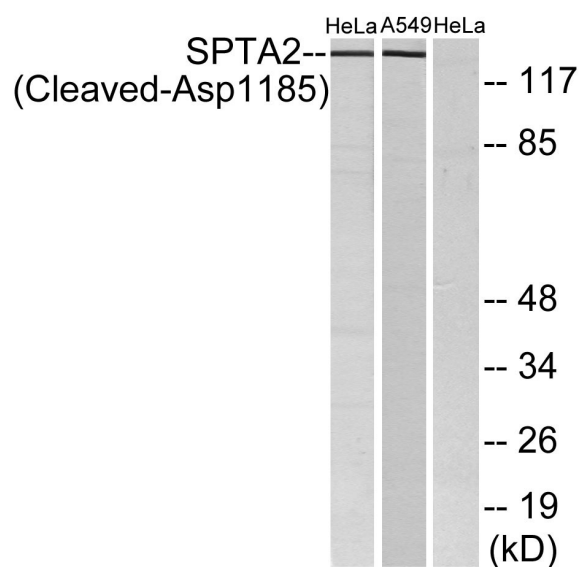
Chen, W., Wang, W., Sun, X. et al. NudCL2 regulates cell migration by stabilizing both myosin-9 and LIS1 with Hsp90. Cell Death Dis 11, 534 (2020).



Western Blot analysis of various cells using Cleaved-Spectrin α II (D1185) Polyclonal Antibody diluted at 1:500



Western Blot analysis of customer's (cat sample) using Cleaved-Spectrin α II (D1185) Polyclonal Antibody diluted at 1:500



Western blot analysis of lysates from HeLa and A549 cells, treated with etoposide 25uM 24H, using SPTA2 (Cleaved-Asp1185) Antibody. The lane on the right is blocked with the synthesized peptide.