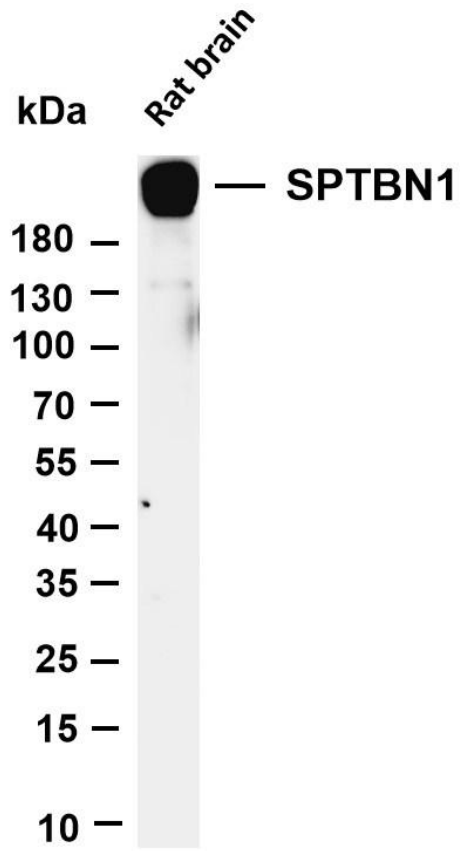
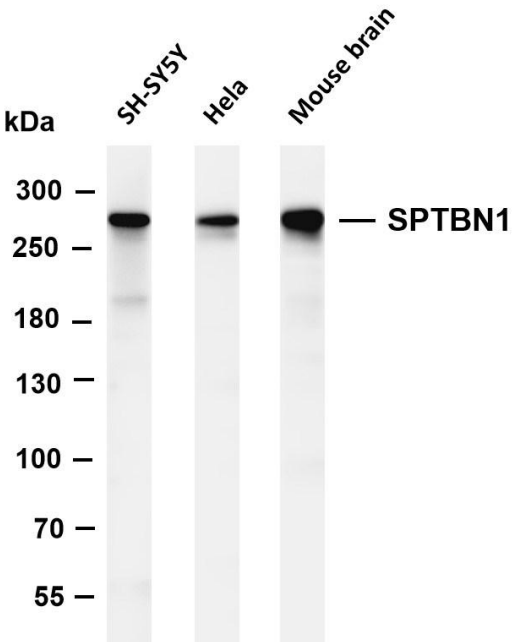
SPTBN1 Rabbit mAb

Catalog No	YP-rAb-17849
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	SPTBN1
Protein Name	Spectrin beta chain non-erythrocytic 1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:1000-1:5000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	SPTBN1 ; SPTB2 ; Spectrin beta chain ; non-erythrocytic 1 ; Beta-II spectrin ; Fodrin beta chain ; Spectrin, non-erythroid beta chain 1
Observed Band	275kD
Calculated Molecular Weight	275kD
Cell Pathway	Cytoplasm, Membrane
Tissue Specificity	Isoform 2 is present in brain, lung and kidney (at protein level).
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:Isoform 2 is phosphorylated on Ser-8 and Ser-10.,similarity:Belongs to the spectrin family.,similarity:Contains 1 PH domain.,similarity:Contains 17 spectrin repeats.,similarity:Contains 2 CH (calponin-homology) domains.,subcellular location:Colocalizes with ANK2 in a distinct intracellular compartment of neonatal cardiomyocytes.,subunit:Like erythrocyte spectrin, the spectrin-like proteins are capable to form dimers which can further associate to tetramers. The short form cannot bind to the axonal protein fodaxin. Interacts with ANK2.,tissue specificity:Isoform 2 is present in brain, lung and kidney (at protein level).,

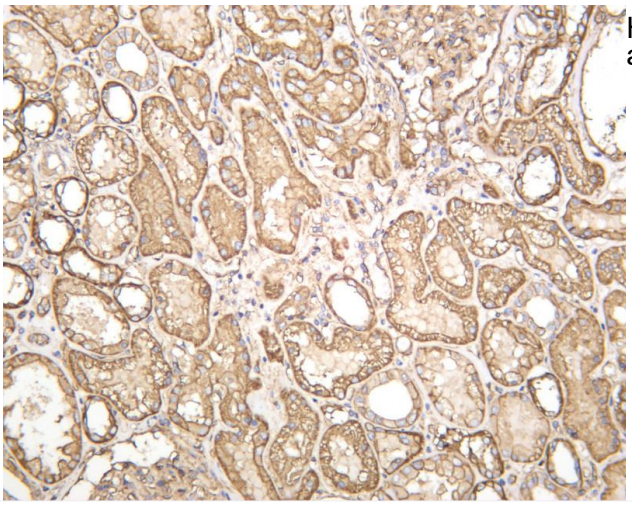
Background	Spectrin is an actin crosslinking and molecular scaffold protein that links the plasma membrane to the actin cytoskeleton, and functions in the determination of cell shape, arrangement of transmembrane proteins, and organization of organelles. It is composed of two antiparallel dimers of alpha- and beta- subunits. This gene is one member of a family of beta-spectrin genes. The encoded protein contains an N-terminal actin-binding domain, and 17 spectrin repeats which are involved in dimer formation. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],
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.



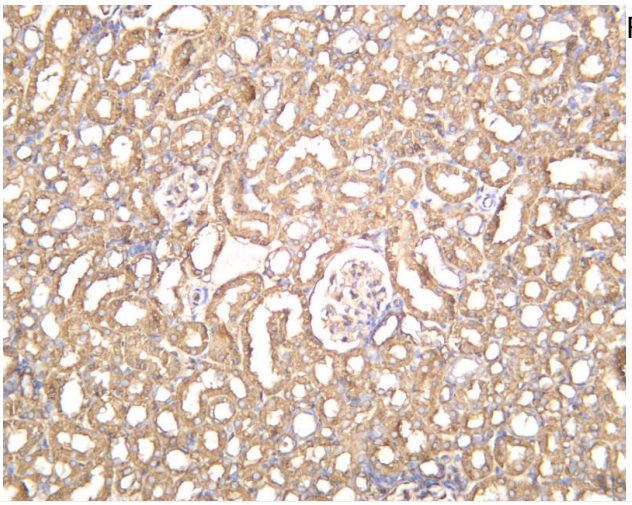
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-SPTBN1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Rat brain Predicted band size: 275kDa Observed band size: 275kDa



Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-SPTBN1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: SH-SY5Y Lane 2: Hela Lane 3: Mouse brain Predicted band size: 275kDa Observed band size: 275kDa



Human kidney was stained with anti-SPTBN1 rabbit antibody



Rat kidney was stained with anti-SPTBN1 rabbit antibody

A B C

Immunofluorescence analysis of HEK293. Picture A: SPTBN1 antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B