

### SPTBN1 (PT0477R) PT® Rabbit mAb

Catalog No: YM8310

**Reactivity:** Human; Mouse; Rat;

**Applications:** WB;IHC;IF;IP;ELISA

Target: Spectrin β II

Gene Name: SPTBN1

**Protein Name:** Spectrin beta chain non-erythrocytic 1

Q01082

Q62261

Human Gene Id: 6711

**Human Swiss Prot** 

No:

Mouse Gene Id: 20742

**Mouse Swiss Prot** 

No:

**Specificity:** endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

**Source :** Monoclonal, rabbit, IgG, Kappa

**Dilution:** IHC 1:1000-1:5000;WB 1:2000-1:10000;IF 1:200-1:1000;ELISA

1:5000-1:20000;IP 1:50-1:200;

Purification: Protein A

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 275kD

Observed Band: 275kD



### **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],

#### **Function:**

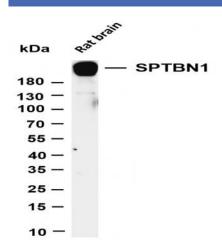
function:Fodrin, which seems to be involved in secretion, interacts with calmodulin in a calcium-dependent manner and is thus candidate for the calcium-dependent movement of the cytoskeleton at the membrane.,PTM:Isoform 2 is phosphorylated on Ser-8 and Ser-10.,similarity:Belongs to the spectrin family.,similarity:Contains 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).,

## Subcellular Location :

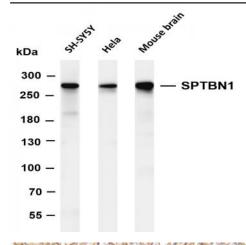
Cytoplasm, Membrane

**Expression:** Isoform 2 is present in brain, lung and kidney (at protein level).

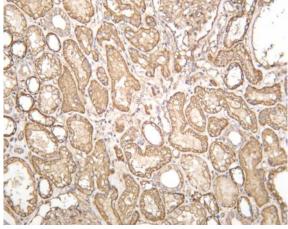
# **Products Images**



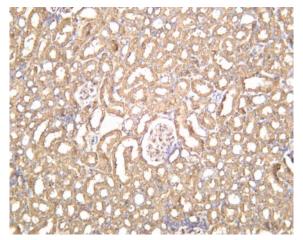
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-SPTBN1 (PT0477R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Rat brain Predicted band size: 275kDa Observed band size: 275kDa



Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-SPTBN1 (PT0447R) 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 (PT0477R) rabbit antibody



Rat kidney was stained with anti-SPTBN1 (PT0477R) rabbit antibody