

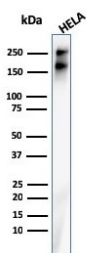
## Recombinant Spectrin beta III Antibody / SPTBN2 [clone rSPTBN2/1778] (V7890)

Catalog No.	Formulation	Size
V7890-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7890-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7890SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

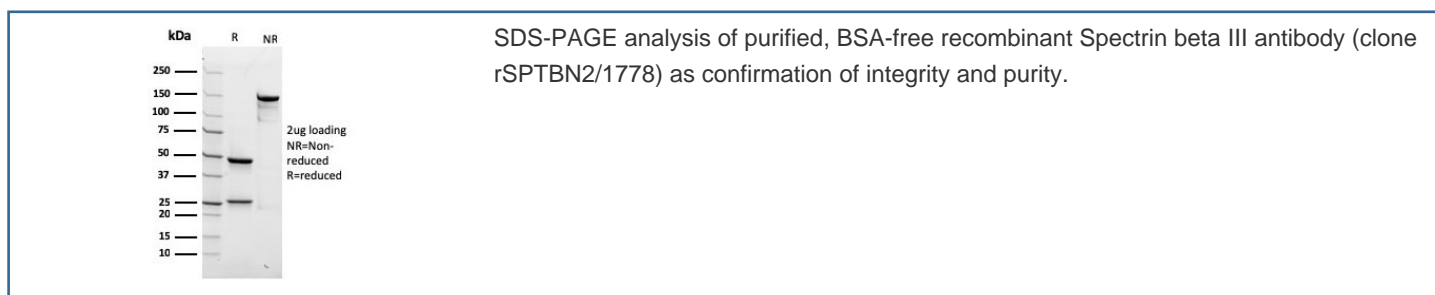
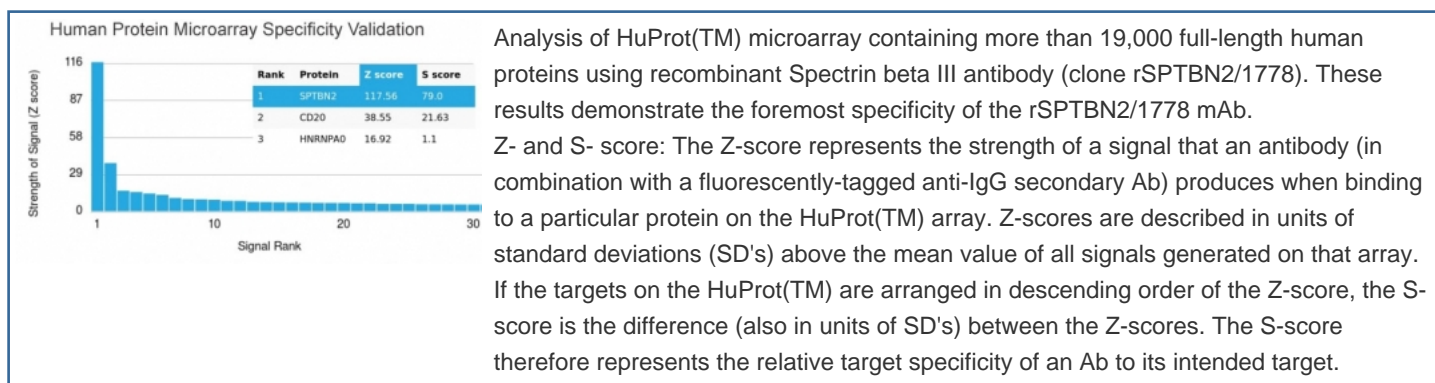
Recombinant **MOUSE MONOCLONAL**

[Bulk quote request](#)

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Recombinant Mouse Monoclonal
<b>Isotype</b>	Mouse IgG1, kappa
<b>Clone Name</b>	rSPTBN2/1778
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	O15020
<b>Applications</b>	ELISA (order BSA-free Format For Coating) : Western Blot : 1-2ug/ml
<b>Limitations</b>	This recombinant Spectrin beta III antibody is available for research use only.



Western blot testing of human HeLa cell lysate with recombinant Spectrin beta III antibody. Predicted molecular weight ~246 kDa.



## Description

Recombinant Spectrin beta III antibody detects spectrin beta chain non-erythrocytic 2, encoded by the SPTBN2 gene. Spectrin beta III is a large cytoskeletal protein that forms heterotetramers with alpha spectrin to support plasma membrane integrity and organization. Unlike erythrocytic spectrins, spectrin beta III is expressed predominantly in neuronal tissues, where it plays critical roles in axonal stability, synaptic function, and intracellular transport. Because of its importance in neurobiology and disease, Recombinant Spectrin beta III antibody is a valuable tool in neuroscience, cytoskeletal biology, and pathology.

Spectrin beta III contains multiple spectrin repeats that assemble into elongated flexible rods, forming a scaffold beneath the plasma membrane. In neurons, this scaffolding supports the axon initial segment, stabilizes voltage-gated ion channels, and coordinates vesicular trafficking. Mutations in SPTBN2 are linked to spinocerebellar ataxia type 5, a neurodegenerative disorder characterized by progressive motor dysfunction, underscoring the protein's essential role in the nervous system.

The Recombinant Spectrin beta III antibody clone rSPTBN2/1778 provides reproducible and specific recognition. Recombinant production ensures lot-to-lot consistency, which is crucial for studies requiring reliable cytoskeletal mapping. Clone rSPTBN2/1778 has been cited in peer-reviewed work on neuronal architecture, ataxia pathogenesis, and spectrin-associated protein complexes. Its reliability makes it suitable for immunohistochemistry, immunoblotting, and advanced imaging applications.

Research using clone rSPTBN2/1778 has clarified how spectrin beta III contributes to neuronal polarity and long-range stability of axons. Detection of spectrin beta III has been critical in understanding axonal periodic cytoskeletal organization, where spectrins form repeating ring-like structures. These findings have transformed the view of neuronal architecture, revealing new mechanisms underlying nervous system function. In pathology, detection with this antibody has provided insights into the molecular disruptions that lead to neurodegenerative disease.

NSJ Bioreagents provides this Recombinant Spectrin beta III antibody to support neuroscience, cytoskeletal biology, and neurodegeneration research. Alternate designations include SPTBN2 antibody, spectrin beta chain non-erythrocytic 2 antibody, brain spectrin antibody, spinocerebellar ataxia type 5 protein antibody, and axonal cytoskeleton protein antibody.

## Application Notes

Optimal dilution of the recombinant Spectrin beta III antibody should be determined by the researcher.

## **Immunogen**

A recombinant human partial protein (amino acids 356-475) was used as the immunogen for the recombinant Spectrin beta III antibody.

## **Storage**

Store the recombinant Spectrin beta III antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).