

Product Datasheet

SPTBN2 Antibody / Spectrin beta III (orb606977)

Catalog Number	orb606977
Category	Antibodies
Description	Spectrin is an actin binding protein that is a major component of the plasma membrane skeleton. Spectrins function as membrane organizers and stabilizers by forming dimers, tetramers and higher polymers. Vertebrate spectrins have two alpha-subunits (alpha-I/alpha-II), four beta-subunits (beta-I-beta-IV) and a beta-H subunit creating diversity and specialization of function. Spectrin and spectrin are present in erythrocytes, whereas spectrin II (also designated fodrin) and spectrin I (also designated fodrin) are present in other somatic cells. The spectrin tetramers in erythrocytes act as barriers to lateral diffusion, but spectrin dimers seem to lack this function. Spectrin III is highly homologous to both spectrin I and spectrin II. Spectrin III is highly expressed in brain, kidney, pancreas and liver, and at lower levels in lung and placenta.
Clonality	Recombinant
Species/Host	Rabbit
Isotype	Rabbit IgG, kappa
Conjugation	Unconjugated
Reactivity	Human
Immunogen	Human recombinant partial protein corresponding to amino acids 356-475 was used as the immunogen for this recombinant Spectrin beta III antibody.
UniProt ID	O15020
Tested applications	ELISA, IF, IHC-P, WB
Dilution range	ELISA: 2-4ug/ml (order BSA/azide-free format), Western blot: 1-2ug/ml, Flow cytometry: 0.5-1ug/million cells Immunofluorescence: 1-2ug/ml, Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT

Biorbyt Ltd.

7 Signet Court, Swann's Road,
Cambridge, CB5 8LA, United Kingdom
Email: info@biorbyt.com, support@biorbyt.com
Phone: [+44 \(0\) 1223 859-353](tel:+44201223859353) | Fax: [+1 \(415\) 651-8558](tel:+14156518558)

Biorbyt LLC.

68 TW Alexander Drive,
Durham, NC, 27713, United States
Email: info@biorbyt.com, support@biorbyt.com
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Application notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the recombinant Spectrin beta III antibody to be titrated up or down for optimal performance.¹ The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Antibody Type

Primary Antibody

Clone Number

SPTBN2/3142R

Formula

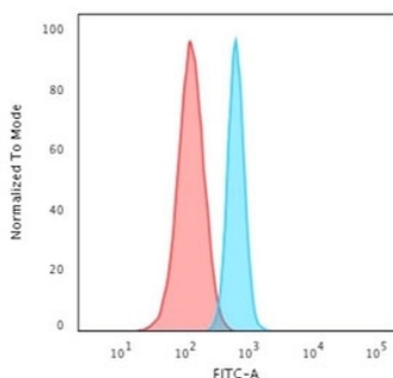
0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide

Storage

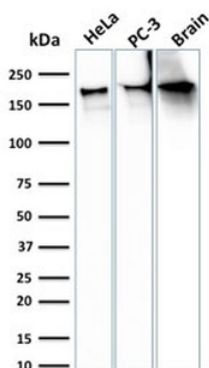
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Note

For research use only



Flow cytometry staining of human HeLa cells with Spectrin beta III antibody; Red=isotype control, Blue= Spectrin beta III antibody.



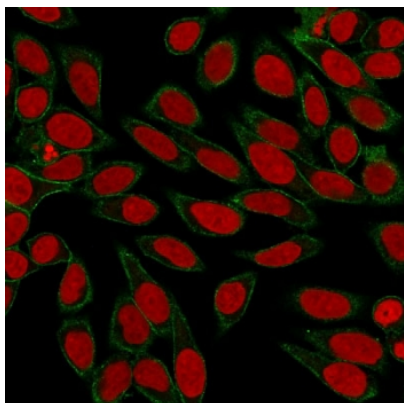
Western blot testing of human HeLa, PC-3 and brain lysate with recombinant Spectrin beta III antibody (clone SPTBN2/3142R). Predicted molecular weight ~246 kDa.

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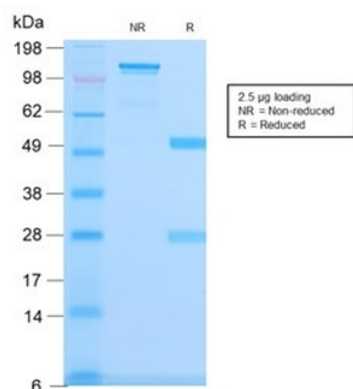
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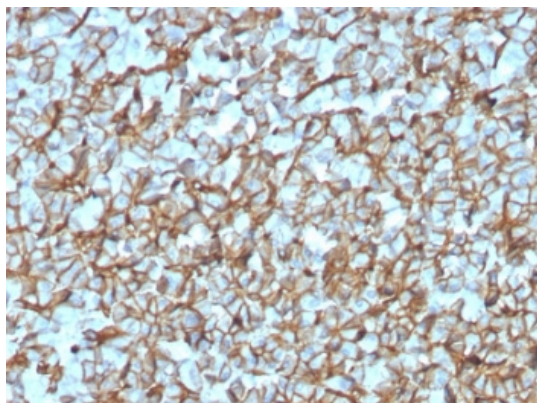
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Immunofluorescent staining of human HeLa cells with recombinant Spectrin beta III antibody (green, clone SPTBN2/3142R) and Reddot nuclear stain (red).



SDS-PAGE analysis of purified, BSA-free recombinant Spectrin beta III antibody (clone SPTBN2/3142R) as confirmation of integrity and purity.



IHC testing of FFPE human pancreas with recombinant Spectrin beta III antibody (clone SPTBN2/3142R). Required HIER: boil tissue sections in 10mM citrate buffer, pH6, for 10-20 min followed by cooling at RT for 20 min.

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