

Product Datasheet

SPTBN2 Antibody / Spectrin beta III (orb750057)

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. Spectrin $\hat{1}\pm$ and spectrin $\hat{1}^2$ are present in erythrocytes, whereas spectrin $\hat{1}\pm$ II (fodrin $\hat{1}\pm$) and spectrin $\hat{1}^2$ (fodrin $\hat{1}^2$) are present in other somatic cells. SPTBN2/Spectrin $\hat{1}^2$ III is highly homologous to both spectrin $\hat{1}^2$ I and spectrin $\hat{1}^2$ II. SPTBN2 is highly expressed in brain, kidney, pancreas and liver, and at lower levels in lung and placenta.
Species/Host	Mouse
Reactivity	Human
Conjugation	Unconjugated
Tested Applications	FACS, IF, IHC-P, WB
Immunogen	Human recombinant partial protein corresponding to amino acids 356-475 was used as the immunogen for this Spectrin beta III antibody.
Preservatives	0.2 mg/ml in 1X PBS with 0.1 mg/ml rAlbumin (US sourced) and 0.05% sodium azide
Storage	Store the Spectrin beta III antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).
Note	For research use only
Application notes	The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the Spectrin beta III antibody to be titered up or down for optimal performance.
Formula	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide
Isotype	Mouse IgG2b, kappa
Clonality	Monoclonal

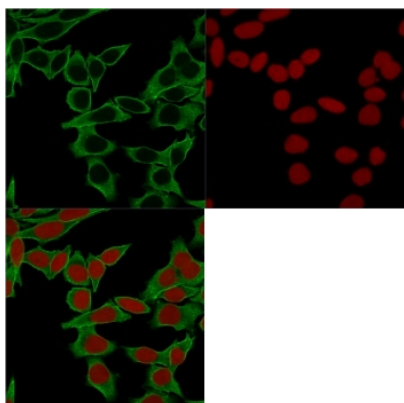
Biorbyt Ltd.

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:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

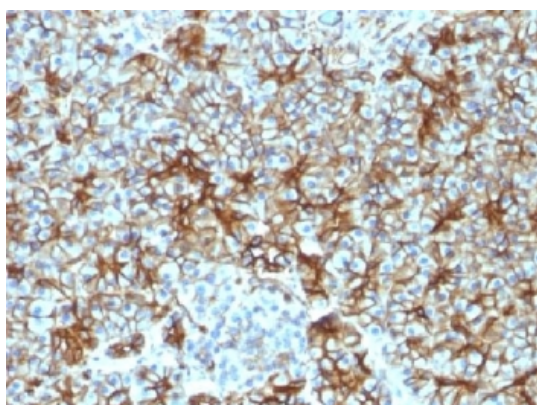
Biorbyt LLC.

68 TW Alexander Drive,
Durham, NC, 27713, United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: [+1 \(415\) 906-5211](tel:+1(415)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

Clone Number	SPTBN2/1583
Purity	Protein G affinity chromatography
Uniprot ID	O15020
Hazard Information	This Spectrin beta III antibody is available for research use only.
Entrez	6712
Dilution Range	Flow cytometry: 1-2ug/million cells,Immunofluorescence: 0.5-1ug/ml,Western blot: 0.5-1ug/ml,Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
Expiration Date	12 months from date of receipt.



Immunofluorescent staining of MeOH fixed human HeLa cells with Spectrin beta III antibody (clone SPTBN2/1583, green) and Reddot nuclear stain (red).



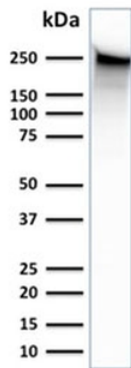
IHC testing of FFPE human pancreas with Spectrin beta III antibody (clone SPTBN2/1583). Required HIER: boil tissue sections in 10mM citrate buffer, pH6, for 10-20 min followed by cooling at RT for 20 min.

Biorbyt Ltd.

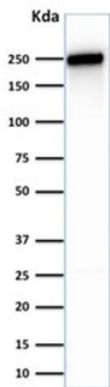
7 Signet Court, Swann's Road,
Cambridge, CB5 8LA, United Kingdom
Email: info@biorbyt.com, support@biorbyt.com
Phone: [+44 \(0\) 1223 859-353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

Biorbyt LLC.

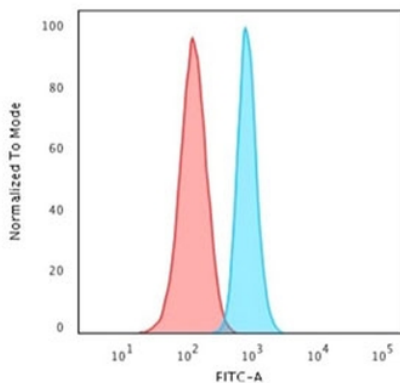
68 TW Alexander Drive,
Durham, NC, 27713, United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: [+1 \(415\) 906-5211](tel:+1(415)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)



Western blot testing of human PANC-1 cell lysate with Spectrin beta III antibody. Predicted molecular weight ~246 kDa.



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



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

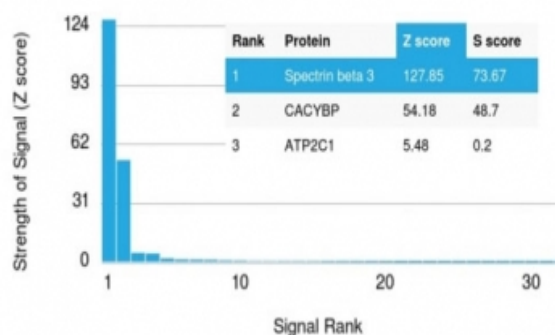
Biorbyt Ltd.

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:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

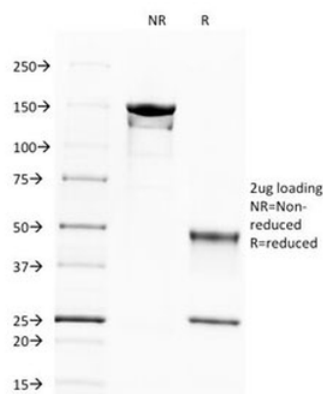
Biorbyt LLC.

68 TW Alexander Drive,
Durham, NC, 27713, United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: [+1 \(415\) 906-5211](tel:+1(415)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

Human Protein Microarray Specificity Validation



Analysis of HuProt (TM) microarray containing more than 19,000 full-length human proteins using Spectrin beta III antibody (clone SPTBN2/1583). These results demonstrate the foremost specificity of the SPTBN2/1583 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt (TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt (TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE Analysis of Purified, BSA-Free Spectrin beta III Antibody (clone SPTBN2/1583). Confirmation of Integrity and Purity of the Antibody.

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:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

Biorbyt LLC.

68 TW Alexander Drive,
Durham, NC, 27713, United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: [+1 \(415\) 906-5211](tel:+1(415)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)