Product Datasheet

SCP3/SYCP3 Antibody
NB300-230

Unit Size: 0.1 ml

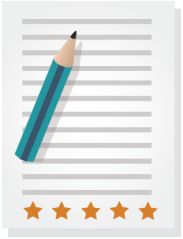
Store at 4C. Do not freeze.

www.novusbio.com technical@novusbio.com

Reviews: 1 Publications: 21

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NB300-230

Updated 12/20/2023 v.20.1



NB300-230

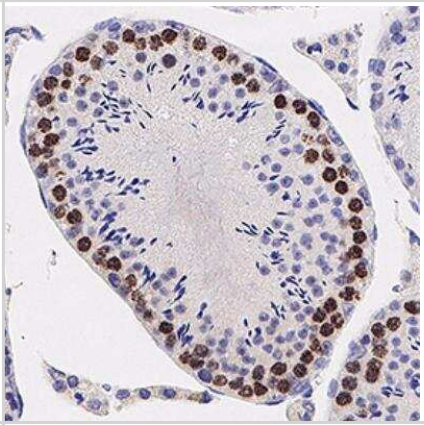
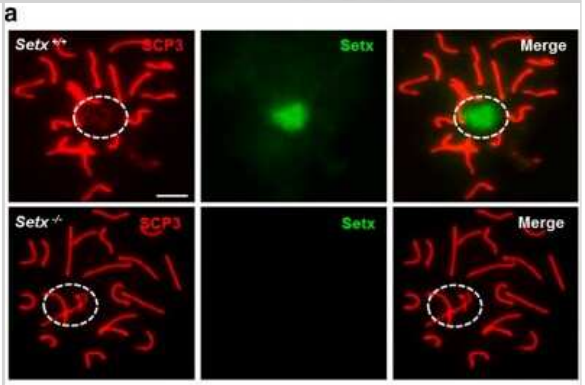
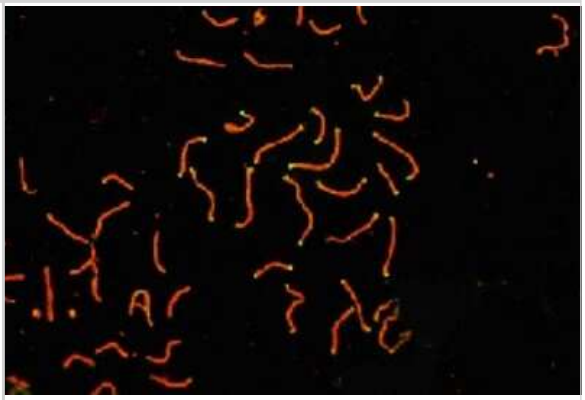
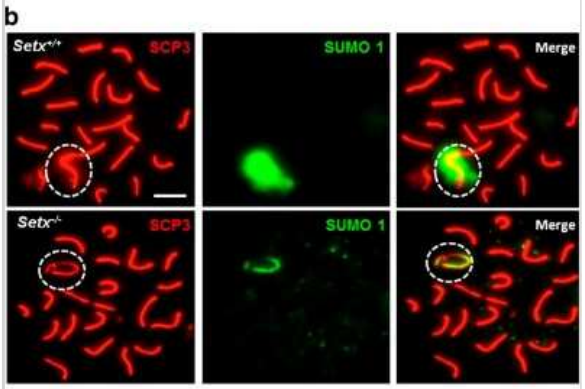
SCP3/SYCP3 Antibody

Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.1% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris-Citrate/Phosphate (pH 7.0 - 8.0)

Product Description	
Host	Rabbit
Gene ID	50511
Gene Symbol	SYCP3
Species	Human, Mouse, Porcine, Bovine
Immunogen	A synthetic peptide made to the N-terminal region of the mouse SCP3 protein. [UniProt# P70281]

Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot, Immunohistochemistry 1:750, Immunocytochemistry/ Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:750
Application Notes	Western Blot usage reported in scientific literature (PMID: 27462424).

Images

Immunohistochemistry-Paraffin: SCP3/SYCP3 Antibody [NB300-230] - Analysis of human testis using SCP3 antibody at 1:500 on a Bond Rx autostainer (Leica Biosystems). The assay involved 20 minutes of heat induced antigen retrieval (HIER) using 10mM sodium citrate buffer (pH 6.0) and endogenous peroxidase quenching with peroxide block. The sections were incubated with primary antibody for 30 minutes and Bond Polymer Refine Detection (Leica Biosystems) with DAB was used for signal development followed by counterstaining with hematoxylin. Whole slide scanning and capturing of representative images was performed using Aperio AT2 (Leica Biosystems). Nuclear staining was observed. Staining was performed by Histowiz.	
Immunocytochemistry/Immunofluorescence: SCP3/SYCP3 Antibody [NB300-230] - Senataxin is SUMOylated at the XY chromosomes in spermatocytes. Immunostaining for senataxin revealed its localization to the XY chromosomes as a diffuse cloud during the pachytene stage in spermatocytes of Setx+/+ mice. Some background staining was also observed on the autosomes. As expected, no senataxin was detected in Setx-/- spermatocytes. Dotted circle, XY chromosomes. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/celldisc201525), licensed under a CC-BY license.	
Immunocytochemistry/Immunofluorescence: SCP3/SYCP3 Antibody [NB300-230] - Mouse pachytene preparation (red). CDK2 staining, near teleomeres, is also present (green).	
Immunocytochemistry/Immunofluorescence: SCP3/SYCP3 Antibody [NB300-230] - Senataxin is SUMOylated at the XY chromosomes in spermatocytes. Immunostaining for SUMO-1 in Setx+/+ and Setx-/- spermatocytes revealed a diffuse staining over the XY chromosomes in Setx+/+ spermatocytes. In contrast, staining was largely restricted to the axes of the XY chromosomes in Setx-/- spermatocytes. Dotted circle, XY chromosomes. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/celldisc201525), licensed under a CC-BY license.	

Publications

Wang H, Liu L, Liu C et al. Induction of meiosis by embryonic gonadal somatic cells differentiated from pluripotent stem cells Stem cell research & therapy 2021-12-20 [PMID: 34930450] (ICC/IF, Mouse)

Rore H, Owen N, Pina-Aguilar Re Et Al. Testicular somatic cell-like cells derived from embryonic stem cells induce differentiation of epiblasts into germ cells Communications biology 2021-06-28 [PMID: 34183774] (ICC/IF)

McNicoll F, Kühnel A, Biswas U et al. Meiotic sex chromosome cohesion and autosomal synapsis are supported by Esco2 Life Sci Alliance 2020-03-01 [PMID: 32051254] (ICC/IF, Mouse)

Tian C, Liu L, Ye X, et al. Functional Oocytes Derived from Granulosa Cells Cell Rep 2019-12-24 [PMID: 31875537] (ICC/IF, Mouse)

Biswas B, Batista F, Sundaram S, Stanley P. MGAT1 and Complex N-Glycans Regulate ERK Signaling During Spermatogenesis. Sci Rep. 2018-01-31 [PMID: 29386567] (IF/IHC, Mouse)

Zhou Z, Wang L, Ge F, Gong P. Pold3 is required for genomic stability and telomere integrity in embryonic stem cells and meiosis. Nucleic Acids Res. 2018-02-13 [PMID: 29447390] (ICC/IF)

Biswas U, Stevense M, Jessberger R. SMC1a Substitutes for Many Meiotic Functions of SMC1b but Cannot Protect Telomeres from Damage Curr. Biol. 2018-01-22 [PMID: 29337080] (ICC/IF)

Wang N, Satirapod C, Ohguchi Y et al. Genetic studies in mice directly link oocytes produced during adulthood to ovarian function and natural fertility Sci Rep 2017-08-30 [PMID: 28855574] (ICC/IF, Mouse)

Biswas U, Hempel K, Llano E et al. Distinct Roles of Meiosis-Specific Cohesin Complexes in Mammalian Spermatogenesis. PLoS Genet. 2016-10-01 [PMID: 27792785] (Mouse)

Yeo AJ, Becherel OJ, Luff JE et al. Senataxin controls meiotic silencing through ATR activation and chromatin remodeling. Cell Discov 2015-09-29 [PMID: 27462424] (WB)

Laine V, Frokjaer-Jensen C, Couchoux H et al. The alpha1 subunit EGL-19, the alpha2/delta subunit UNC-36, and the beta subunit CCB-1 underlie voltage-dependent calcium currents in Caenorhabditis elegans striated muscle. J Biol Chem 2011-10-21 [PMID: 21878625]

Winters T, McNicoll F, Jessberger R. Meiotic cohesin STAG3 is required for chromosome axis formation and sister chromatid cohesion. EMBO J. 2014-05-05 [PMID: 24797474] (ICC/IF, Mouse)

More publications at http://www.novusbio.com/NB300-230

Procedures

Immunocytochemistry/Immunofluorescence Protocol for SCP3 Antibody (NB300-230)
SCP3/SYCP3 Antibody:
Immunofluorescence Procedure

1. Freshly prepared slides are soaked in 1X ADB for 75 minutes.

2. Primary antibodies are added concurrently (SCP3 and CDK2).

3. The primary antibodies are incubated overnight in a humid chamber (37 degrees Celsius).

4. The slides are washed for 40 minutes in 1X ADB.

5. The slides are detected with the appropriate secondary antibodies (RDAR for SCP1 and FDAM for CDK2).

6. The slides are incubated for 4 hours in a humid chamber (37 degrees Celsius).

7. The slides are washed for 20 minutes in 1X ADB, followed by 3 washes, 10 minutes each, in 1X PBS.

8. The slides are counterstained with DAPI.

9. Images are captured after allowing the slides to remain in the dark overnight at RT.

Novus Biologicals USA
10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada
21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd
19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information
www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NB300-230

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications