## **Product Datasheet**

### Streptococcus pneumoniae Antibody - BSA Free NB100-64502

Unit Size: 1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

www.novusbio.com



technical@novusbio.com

#### **Publications: 4**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at: www.novusbio.com/NB100-64502

Updated 2/21/2025 v.20.1

# Earn rewards for product reviews and publications.

Submit a publication at www.novusbio.com/publications Submit a review at www.novusbio.com/reviews/destination/NB100-64502



#### NB100-64502

Streptococcus pneumoniae Antibody - BSA Free

Product Information	
Unit Size	1 ml
Concentration	4.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.1% Sodium Azide
Isotype	IgG
Purity	Protein A purified
Buffer	PBS
Product Description	
Host	Rabbit
Species	Bacteria
Specificity/Sensitivity	NB100-64502 recognizes Streptococcus pneumoniae and reacts with types 3, 4, 6, 7, 9, 14, 18, 19 and 23. S. pneumoniae is a non-motile gram-positive bacteria that is found in the human upper respiratory tract and often as diplococci (pairs of cocci). NB100-64502 is not absorbed and may react with related microorganisms.
Immunogen	Whole cell blend of numerous serotypes
Product Application Details	
Application Notes	Use in Immunohistochemistry-paraffin reported in scientific literature (Smith AP et al).



#### Images

Immunohistochemistry: Streptococcus pneumoniae Antibody [NB100-64502] - Histopathology of lung sections collected at 24 hr pbi from mice co-infected with mouse adapted influenza A/Puerto Rico/8/34 (H1N1) (PR8) and type 2 pneumococcal strain D39 variants. Serial lung sections were subjected to immunohistochemistry (IHC) for pneumococcus using Rabbit Anti-Streptococcus pneumoniae Polyclonal Antibody (Catalog # NB100-64502) at 4 ug/mL or neutrophils using Rat Anti-Ly-6G6C Monoclonal Antibody (Catalog # NB600-1387) at 2 ug/mL. Representative images at 4x magnification with 60x magnification inset are shown. Images courtesy of Dr. Amanda P. Smith, UTHSC, TN //doi.org/10.1101/659557

Immunohistochemistry: Streptococcus pneumoniae Antibody [NB100-64502] - Effect of ethanol exposure on neutrophil and Streptococcus pneumoniae localization and bacterial phagocytosis after infection. IHC staining was performed on formalin-fixed lung sections with antibodies against Ly6G for neutrophils (brown) and S. pneumoniae (pink) and counterstained with hematoxylin. Representative images are at 100x magnification for the top panel (scale bar = 200um) and 400x magnification for the bottom panel (scale bar = 50 um). Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/35603143/) licensed under a CC-BY license.

Immunohistochemistry: Streptococcus pneumoniae Antibody [NB100-64502] - Effect of ethanol exposure on neutrophil & S. pneumoniae localization & bacterial phagocytosis after infection. (A) IHC staining was performed onformalin-fixed lung sections with antibodies against Ly6G for neutrophils (brown) & S. pneumoniae (pink) & counterstained with hematoxylin. Representative images are at 100x magnification for the top panel (scale bar = 200µm) & 400x magnification for the bottom panel (scale bar = 50 µm). (B) Percent phagocytosis of S. pneumoniae as measured by the ratio of cells with internalized bacteria to total nucleated cells. Black arrows denote cells with internalized S. pneumoniae. Data are presented as mean  $\pm$  SEM. n = 3-4 mice per group per experiment & are representative of 2 individual experiments. \*p < 0.05 by unpaired t test. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/35603143), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

#### Publications

Tsukamoto T, Nakajima N, Sakurai A et al. Lung Pathology of Mutually Exclusive Co-infection with SARS-CoV-2 and Streptococcus pneumoniae Emerging Infectious Diseases 2021-03-01 [PMID: 33443011]

McMahan RH, Hulsebus HJ, Najarro KM et al. Age-Related Intestinal Dysbiosis and Enrichment of Gut-specific Bacteria in the Lung Are Associated With Increased Susceptibility to Streptococcus pneumoniae Infection in Mice Frontiers in Aging 2022-04-08 [PMID: 35392033] (Immunohistochemistry, Immunohistochemistry-Paraffin)

Hulsebus HJ, Najarro KM, McMahan RH et al. Ethanol Intoxication Impairs Respiratory Function and Bacterial Clearance and Is Associated With Neutrophil Accumulation in the Lung After Streptococcus pneumoniae Infection Frontiers in Immunology 2022-05-04 [PMID: 35603143] (Immunohistochemistry, Immunohistochemistry-Paraffin)

Smith AP, Lane LC, van Opijnen T et al. Dynamic pneumococcal genetic adaptations support bacterial growth and inflammation during coinfection with influenza Infect Immun 2021-04-20 [PMID: 33875471]







Vehicle + S. pneumoniae

Ethanol + S. pneumoniae







#### 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@biotechne.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/NB100-64502

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

