

# 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](http://www.novusbio.com)



[technical@novusbio.com](mailto:technical@novusbio.com)

### Publications: 4

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NB100-64502](http://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](http://www.novusbio.com/publications)

Submit a review at [www.novusbio.com/reviews/destination/NB100-64502](http://www.novusbio.com/reviews/destination/NB100-64502)



**NB100-64502**

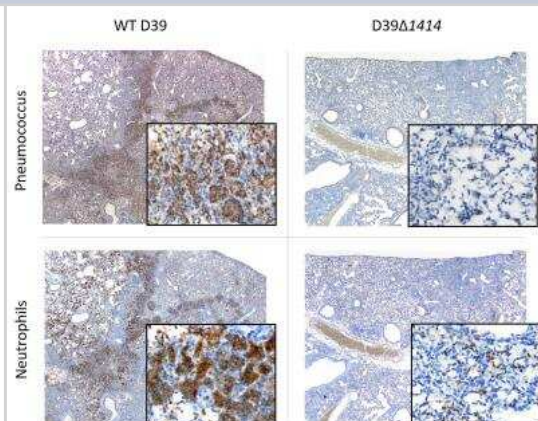
Streptococcus pneumoniae Antibody - BSA Free

<b>Product Information</b>	
<b>Unit Size</b>	1 ml
<b>Concentration</b>	4.0 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.1% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Protein A purified
<b>Buffer</b>	PBS
<b>Product Description</b>	
<b>Host</b>	Rabbit
<b>Species</b>	Bacteria
<b>Specificity/Sensitivity</b>	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.
<b>Immunogen</b>	Whole cell blend of numerous serotypes
<b>Product Application Details</b>	
<b>Application Notes</b>	Use in Immunohistochemistry-paraffin reported in scientific literature (Smith AP et al).

## Images

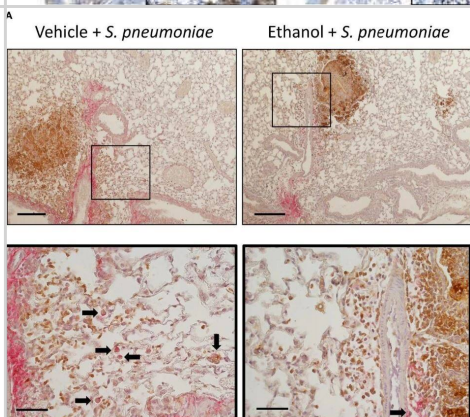
Immunohistochemistry: Streptococcus pneumoniae Antibody [NB100-64502] - Histopathology of lung sections collected at 24 hr pbi from mice co-infected with mouse adapted influenza A/Puerto Rico/8/34 (H1N1) (PR8) and type 2 pneumococcal strain D39 variants. Serial lung sections were subjected to immunohistochemistry (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

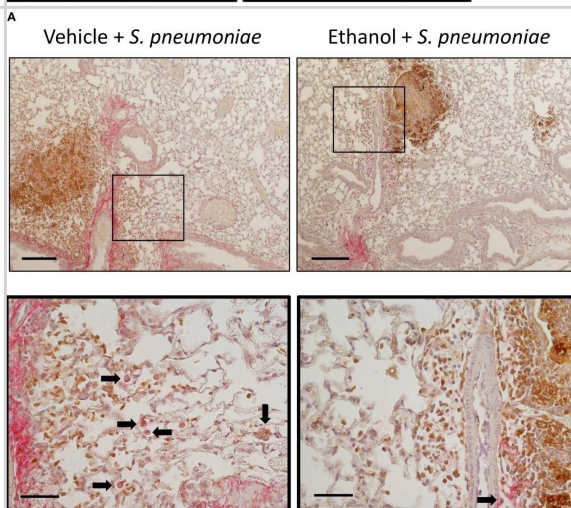


Immunohistochemistry: Streptococcus pneumoniae Antibody [NB100-64502] - Effect of ethanol exposure on neutrophil and Streptococcus pneumoniae localization and bacterial phagocytosis after infection. IHC staining was performed on formalin-fixed lung sections with antibodies against Ly6G for neutrophils (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.

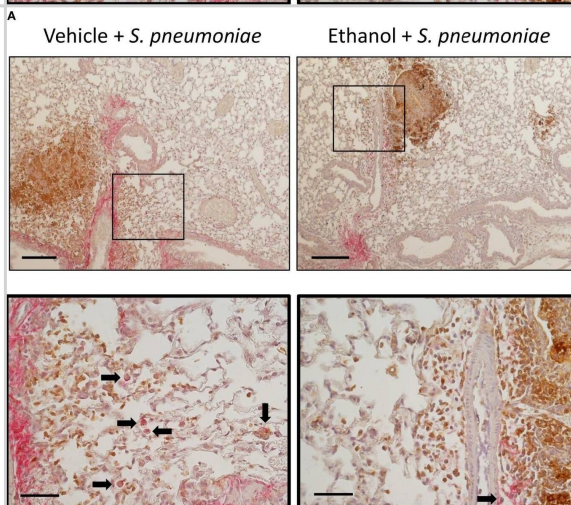


Immunohistochemistry: Streptococcus pneumoniae Antibody [NB100-64502] - Effect of ethanol exposure on neutrophil & *S. pneumoniae* localization & bacterial phagocytosis after infection. (A) IHC staining was performed on formalin-fixed lung sections with antibodies against Ly6G for neutrophils (brown) & *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 ± 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.



Effect of ethanol exposure on neutrophil and *S. pneumoniae* localization and bacterial phagocytosis after infection. (A) 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 = 200µm) and 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 +/- SEM. n = 3-4 mice per group per experiment and are representative of 2 individual experiments. \*p < 0.05 by unpaired t test. Image collected and cropped by CiteAb from the following open publication

(https://pubmed.ncbi.nlm.nih.gov/35603143), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

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]

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]

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]

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]





### **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](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NB100-64502](http://www.novusbio.com/reviews/submit/NB100-64502)

Earn gift cards/discounts by submitting a publication using this product:  
[www.novusbio.com/publications](http://www.novusbio.com/publications)

