

Datasheet: 8209-4011

Description:	RABBIT ANTI SALMONELLA GROUP ANTIGEN:Biotin
Specificity:	SALMONELLA GROUP ANTIGEN
Format:	Biotin
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	1 ml

# **Product Details**

## **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
ELISA				
Western Blotting				
Immunofluorescence	•			1/1000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Bacterial
Product Form	Purified IgG conjugated to Biotin - liquid
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.1% Sodium Azide (NaN <sub>3</sub> )
Approx. Protein Concentrations	Protein Concentration 5.0 mg/ml
Immunogen	Mixture of Salmonella enteriditis, S. typhimurium and S. heidelburg.
RRID	AB_616745
Specificity	Rabbit anti Salmonella group antigen antibody recognizes a Sal

**Rabbit anti Salmonella group antigen antibody** recognizes a Salmonella group antigen. Salmonella is a genus of the family *Enterobacteriaceae* populated by a variety of Gram

negative rod-shaped bacteria, many of which are pathogenic and cause a range of diseases in humans. *Salmonellae* possess 3 major surface antigens: the H or flagellar antigen (phase 1 and 2), the O or somatic antigen (part of the LPS moiety) and the Vi or capsular antigen (referred to as K in other *Enterobacteriaceae*). *Salmonellae* also possess the LPS endotoxin characteristic of Gram negative bacteria. This LPS is composed of an O polysaccharide (O antigen) an R core and the endotoxic inner Lipid A.

Rabbit anti *Salmonella* group antigen antibody is polyvalent for *Salmonella* O and H antigens.

Rabbit anti *Salmonella* group antigen antibody is unabsorbed and may cross react with related *Enterobacteriaceae*.

#### References

- 1. Cloak, O.M. *et al.* (1999) Isolation and detection of *Listeria* spp, *Salmonella* spp and *Yersinia* spp using a simultaneous enrichment step followed by a surface adhesion immunofluorescent technique. <u>J Microbiol Methods</u>. 39 (1): 33-43.
- 2. Duffy, G. *et al.* (2000) A membrane-immunofluorescent-viability staining technique for the detection of Salmonella spp. from fresh and processed meat samples. <u>J Appl Microbiol. 89 (4): 587-94.</u>
- 3. Hunter, D.M. *et al.* (2010) Rapid detection and identification of bacterial pathogens by using an ATP bioluminescence immunoassay. <u>J Food Prot. 73: 739-46.</u>
- 4. Le, U.N. *et al.* (2011) Engineering and visualization of bacteria for targeting infarcted myocardium. Mol Ther. 19 (5): 951-9.
- 5. Ewald M *et al.* (2013) A robust sensor platform for label-free detection of anti-*Salmonella* antibodies using undiluted animal sera. <u>Anal Bioanal Chem. 405 (20):</u> 6461-9.
- 6. de Souza, S.O. *et al.* (2014) Osteomyelitis caused by *Salmonella enterica* serovar derby in boa constrictor. <u>J Zoo Wildl Med. 45 (3): 642-4.</u>
- 7. Kim, D.K. *et al.* (2014) Inverse agonist of estrogen-related receptor γ controls *Salmonella typhimurium* infection by modulating host iron homeostasis. <u>Nat Med. 20 (4):</u> 419-24.
- 8. Ewald, M. *et al.* (2015) A multi-analyte biosensor for the simultaneous label-free detection of pathogens and biomarkers in point-of-need animal testing. <u>Anal Bioanal Chem. 407 (14): 4005-13.</u>
- 9. Tian B *et al.* (2015) Blu-ray optomagnetic measurement based competitive immunoassay for *Salmonella* detection. Biosens Bioelectron. 77: 32-39.
- 10. Tian, B. *et al.* (2016) Multi-scale magnetic nanoparticle based optomagnetic bioassay for sensitive DNA and bacteria detection Analytical Methods. 8 (25): 5009-16.
- 11. Volpe, G. *et al.* (2016) Development and evaluation of an ELIME assay to reveal the presence of Salmonella in irrigation water: Comparison with Real-Time PCR and the Standard Culture Method. <u>Talanta. 149: 202-10.</u>
- 12. Tsougeni, K. *et al.* (2016) Plasma nanotextured polymeric lab-on-a-chip for highly efficient bacteria capture and lysis. <u>Lab Chip. 16 (1): 120-31.</u>
- 13. Cruz-Adalia, A. *et al.* (2016) T Cells Capture Bacteria by Transinfection from Dendritic Cells. J Vis Exp. (107): e52976.
- 14. Kastania, A. *et al.* (2017) Binding kinetics of bacteria cells on immobilized antibodies in microfluidic channels: Modeling and experiments Sensors and Actuators B: Chemical.

#### 253: 247-57.

- 15. Farka, Z. *et al.* (2018) Prussian Blue Nanoparticles as a Catalytic Label in a Sandwich Nanozyme-Linked Immunosorbent Assay. <u>Anal Chem. 90 (3): 2348-54.</u>
- 16. Schenk, F. *et al.* (2018) Development of a paper-based lateral flow immunoassay for simultaneous detection of lipopolysaccharides of *Salmonella* serovars. <u>Anal Bioanal</u> Chem. 410 (3): 863-8.
- 17. Tsougeni, K. *et al.* (2019) A modular integrated lab-on-a-chip platform for fast and highly efficient sample preparation for foodborne pathogen screening <u>Sensors and Actuators B: Chemical. 288: 171-9.</u>
- 18. Tsougeni, K. *et al.* (2019) A modular integrated lab-on-a-chip platform for fast and highly efficient sample preparation for foodborne pathogen screening <u>Sensors and</u> Actuators B: Chemical. 288: 171-9.
- 19. Angelopoulou, M. *et al.* (2021) Rapid Detection of *Salmonella typhimurium* in Drinking Water by a White Light Reflectance Spectroscopy Immunosensor. <u>Sensors (Basel). 21 (8): 2683.</u>

#### Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/8209-4011">https://www.bio-rad-antibodies.com/SDS/8209-4011</a> 10040
Regulatory	For research purposes only

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M418895:230427'

### Printed on 12 Aug 2023

© 2023 Bio-Rad Laboratories Inc | Legal | Imprint