

Datasheet: 8209-4006

| Description:  | RABBIT ANTI SALMONELLA GROUP ANTIGEN |
|---------------|--------------------------------------|
| Specificity:  | SALMONELLA GROUP ANTIGEN             |
| Format:       | Purified                             |
| 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 www.bio-rad-antibodies.com/protocols.

|                    | Yes | No | Not Determined | Suggested Dilution |
|--------------------|-----|----|----------------|--------------------|
| ELISA              |     |    |                |                    |
| Western Blotting   |     |    | •              |                    |
| Immunofluorescence |     |    |                |                    |

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 the appropriate negative/positive controls.

| Target Species                    | Bacterial  |
|-----------------------------------|--|
| Product Form                      | Purified IgG - liquid  |
| Buffer Solution                   | Phosphate buffered saline  |
| Preservative<br>Stabilisers       | 0.1% Sodium Azide (NaN <sub>3</sub> )                                |
| Approx. Protein<br>Concentrations | IgG concentration 4.0 mg/ml  |
| Immunogen                         | Mixture of Salmonella enteriditis, S. typhimurium and S. heidelburg. |
|                                   |  |

## **Specificity**

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. 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):</u> 587-94.
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- 3. 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>
- 4. 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): 6461-9.</u>
- 5. 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. J Microbiol Methods. 39 (1): 33-43.
- 6. de Souza, S.O. *et al.* (2014) Osteomyelitis caused by *Salmonella enterica* serovar derby in boa constrictor. J Zoo Wildl Med. 45 (3): 642-4.
- 7. Tian B *et al.* (2015) Blu-ray optomagnetic measurement based competitive immunoassay for *Salmonella* detection. Biosens Bioelectron. 77: 32-39.
- 8. 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>
- 9. Le, U.N. *et al.* (2011) Engineering and visualization of bacteria for targeting infarcted myocardium. Mol Ther. 19 (5): 951-9.
- 10. 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</u>. 149: 202-10.
- 11. Cruz-Adalia, A. *et al.* (2016) T Cells Capture Bacteria by Transinfection from Dendritic Cells. <u>J Vis Exp. (107): e52976.</u>
- 12. Tian, B. *et al.* (2016) Multi-scale magnetic nanoparticle based optomagnetic bioassay for sensitive DNA and bacteria detection. <u>Anal Methods. Jun 3 [Epub ahead of print]</u>
- 13. Kastania, A. *et al.* (2017) Binding kinetics of bacteria cells on immobilized antibodies in microfluidic channels: Modeling and experiments <u>Sensors and Actuators B: Chemical. 253: 247-57.</u>
- 14. Farka, *Z. et al.* (2018) Prussian Blue Nanoparticles as a Catalytic Label in a Sandwich Nanozyme-Linked Immunosorbent Assay. Anal Chem. Jan 18 [Epub ahead of print].
- 15. Schenk, F. *et al.* (2018) Development of a paper-based lateral flow immunoassay for simultaneous detection of lipopolysaccharides of *Salmonella* serovars. <u>Anal Bioanal Chem. 410 (3):</u> 863-8.

### Storage

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

| Shelf Life                       | 18 months from date of despatch.   |
|----------------------------------|--|
| Health And Safety<br>Information | Material Safety Datasheet documentation available at: Material Safety Datasheet Documentation #10303 available at: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10303.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10303.pdf</a> |
| Regulatory                       | For research purposes only   |

# **Related Products**

## **Recommended Secondary Antibodies**

Sheep Anti Rabbit IgG (STAR34...) FITC
Sheep Anti Rabbit IgG (STAR35...) RPE
Goat Anti Rabbit IgG (H/L) (STAR124...) HRP

Goat Anti Rabbit IgG (Fc) (STAR121...) Biotin, FITC, HRP

Sheep Anti Rabbit IgG (2AB02...) Biotin

Email: antibody\_sales\_us@bio-rad.com

Sheep Anti Rabbit IgG (STAR36...) <u>DyLight®488, DyLight®549, DyLight®649,</u>

DyLight®680, DyLight®800

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