

# DECREASED INCIDENCE OF E. COLI PERITONITIS<sup>1</sup>

# DECREASED MORTALITY, INCREASED LIVABILITY RESULTS IN **MORE EGGS** PER HEN HOUSED

**DEAD BIRDS DON'T LAY EGGS:** Improve bird health and welfare, while maximizing genetic potential with *E. coli* and *Salmonella* protection using SRP technology.

**REDUCED E. COLI AND SALMONELLA:** Effective against mortality caused by *E. coli.*Zero mortality was observed in vaccinated groups in our challenge studies. Effective against colonization of *E. coli* in the **reproductive tract**, internal organs and air sacs. Effective against SE colonization of the **reproductive tract**, internal organs and intestinal tract.<sup>1</sup>

**BROAD PROTECTION:** By combining *E. coli* and *Salmonella* vaccines into one dose, you get 2X the protection for 1X the labor.

**SAFETY FIRST:** SRP vaccines are highly purified proteins, which often result in less flock setback and less tissue reaction than whole cell bacterins.

**INNOVATIVE:** First and only US-licensed combination *E. coli* & SE vaccine in the market. Uses siderophore receptor and porin (SRP) proteins as immunogens.

Proteins are good immunogens – stimulating both cell-mediated and humoral immune systems.

Induces good anamnestic response.

Focuses host immune response to bacterial SRP irrespective of serotype.

SRPs are highly conserved between strains of

- Specificity of SRP antibodies does not depend on the serotype of the challenge strain
- SRP antibodies will attach to multiple serotypes<sup>2</sup>



# EFFECTIVE AGAINST E. COLI CHALLENGE

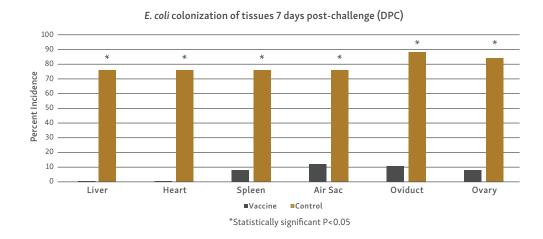
This product has been shown to be effective against mortality caused by E. coli<sup>1</sup>

#### IMPROVED OVERALL LIVABILITY OF VACCINATED FLOCK MAY RESULT IN:

- · More eggs per hen-housed
- · Healthier birds, therefore better egg production
- · Maximized genetic potential

## THIS PRODUCT HAS BEEN SHOWN TO BE EFFECTIVE AGAINST COLONIZATION OF E. COLI IN THE REPRODUCTIVE TRACT, INTERNAL ORGANS AND AIR SACS:1

- Reduced incidence of peritonitis, air sacculitis, colibacillosis
- · Reduced potential for secondary bacterial infections after viral infections or other stressors



# EFFECTIVE AGAINST SALMONELLA ENTERITIDIS (SE)

This product has been shown to be effective against SE colonization of the reproductive tract, internal organs, and intestinal tract

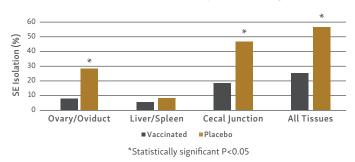
### **SALMONELLA SRP BENEFITS:**

- · Reduced probability of vertical transfer of SE to progeny
- · Reduced potential for horizontal spread and environmental contamination

# ANTIBODIES TO SE SRP HAVE BEEN OBSERVED TO LAST THROUGHOUT LAY PERIOD OF BROILER BREEDERS:3

- SE SRP antibodies were detected in broiler breeders up to 62 weeks of age
- SE SRP are passively transferred to progeny and detected until 14 days of age

### SE colonization of tissues 14 days post-challenge (DPC)



#### **REFERENCES:**

- 1. productdata.aphis.usda.gov.
- 2. Data on file at Vaxxinova US.
- 3. Data on file. Study No. M2101. Vaxxinova US. May 2022.

