



## Equine Coli Endotox®

Escherichia Coli Antibody, Equine Origin

### Product Numbers

**Equine Coli Endotox®**

212 - 10 mL - 1 dose

213 - 100 mL - 10 doses

For use in newborn foals as an aid in the prevention of colibacillosis and septicemia caused by K99 piliated *Escherichia coli*.

- **Immediate Protection** — **Equine Coli Endotox** goes to work immediately, eliminating doubt that newborn foals ingested adequate levels of the antibody to ward off deadly *E. coli*.
- **Broad Spectrum Effectiveness** — **Equine Coli Endotox** provides protection against systemic *E. coli* infection (septicemia) in newborns. In studies conducted by research scientists at Novartis, 100 percent of foals treated with **Equine Coli Endotox** were protected against death following severe *E. coli* challenge. **See Figure 1** on back page.
- **Safe** — Donor horses which generate the antibody in **Equine Coli Endotox** are routinely tested to be free of equine infectious anemia, glanders, brucellosis, and equine viral arteritis.



## Equine Coli Endotox®

**DIRECTIONS:** Shake well before using. Administer 10 mL orally to foals less than 12 hours old. Slowly syringe toward the back of the foal's mouth. Colostrum should be fed to each foal.

**PRECAUTIONS:** Store out of direct sunlight at 2°-7° C (35°-45° F). DO NOT FREEZE. Use entire contents when first opened. Anaphylactic reactions may occur. Symptomatic treatment: Epinephrine. Contains oxytetracycline, phenol, and thimerosal as preservatives.



**Customer Service**  
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## Technical disease information

Endotoxemia, septicemia, and enteric infections are the most severe problems affecting neonatal foals, often culminating in death. Approximately 25 percent of all septicemias in foals are caused by *Escherichia coli*. Invasive strains of this bacteria enter the foal's bloodstream either through the intestinal tract, the respiratory tract, or the umbilical cord. Bacteria begin to circulate throughout the body, releasing toxins and causing symptoms, such as lethargy, depression, anorexia and sudden death. Septicemia in foals often results in chronic arthritis, since the bacteria tend to take refuge in the joint cavities where they are difficult to reach with antibiotics. Foals with *E. coli* infection may also show diarrhea, but this is less common than in other species such as calves and piglets.

The most common factor predisposing foals to developing *E. coli* septicemia is hypogammaglobulinemia (inadequate levels of passive antibody protection from the mare's colostrum). This is caused by several factors, such as foals failing to nurse adequately, poor quality colostrum in the mare, or loss of colostrum prior to foaling in mares that leak milk. Up until now, measures to combat this problem were limited to complex procedures such as blood transfusions from mare to foal, or obtaining colostrum from another mare to feed to the foal. Since a foal is often not recognized as being hypogammaglobulinemic until it becomes sick, treatment is often ineffective.

**Equine Coli Endotox** is not a replacement for colostrum. Colostrum contains components that are necessary for the total health of the foal. Good management practices are necessary to ensure adequate colostrum intake by the foal.

Since many foals do not receive protective passive immunity and many are born in an environment highly contaminated with *E. coli* organisms, they often lack adequate ability to fight septicemia caused by *E. coli*.

One dose of **Equine Coli Endotox** given orally to the newborn foal provides a safe, easy, effective method of giving the foal specific, passive antibodies it needs to help ward off *E. coli* infections that can be deadly. **See Table 1.**

**Figure 1**



**Equine Coli Endotox** is available both in ten dose bottles and in a single dose disposable syringe. Each foal receives one 10 mL dose orally as soon after birth as practical (within 12 hours of birth) which safely and simply provides the necessary passive antibody protection in the fight against neonatal *E. coli* infections.

**Table 1: Equine Coli Endotox challenge study\***

Group	Mortality	Average Clinical Score
Control = 7	5/7 (71%)	76
Treated = 9	0/9 (0%)	6

\*All foals were rated for fecal consistency, dehydration, depression, anorexia, and death. Observations were made at 12, 24, 36, 48, 60, and 72 hours post challenge.

The above trial clearly illustrates the importance of including **Equine Coli Endotox** in a routine foal health program. The post-challenge mortality in non-treated controls exceeded 70 percent, while no deaths occurred in the treatment group.

In addition, a 12-fold reduction in clinical scores was seen in the treatment group, which reflects protective capabilities achieved from using **Equine Coli Endotox**.