# **Bovine Rotavirus-**Coronavirus Vaccine

Killed Virus



## Escherichia Coli Bacterin

# ScourGuard® 4K

PRODUCT DESCRIPTION: ScourGuard 4K is for vaccination of healthy, pregnant cows and heifers as an aid in preventing diarrhea in their calves caused by bovine rotavirus (serotypes G6 and G10), bovine coronavirus, and enterotoxigenic strains of Escherichia coli having the K99 pili adherence factor. ScourGuard 4K contains a liquid preparation of inactivated bovine rotavirus (serotypes G6 and G10) and coronavirus propagated on established cell lines and a K99 E. coli bacterin. The vaccine is adjuvanted to enhance the immune response.

**EFFICACY:** ScourGuard 4K has been demonstrated to be effective as an aid in preventing diarrhea caused by bovine rotavirus (serotypes G6 and G10), bovine coronavirus, and E. coli in calves of vaccinated dams.

Efficacy of the bovine rotavirus (BRV) fraction of ScourGuard 4K was demonstrated in 2 challenge studies conducted by Zoetis Inc. Healthy neonatal calves were removed from their dams prior to nursing, and were fed colostrum collected from heifers previously vaccinated with either ScourGuard 4KC or a placebo. When challenged with either BRV serotype G6 or G10. calves fed colostrum from ScourGuard 4KC-vaccinated heifers showed significant reductions in abnormal fecal, appetite, attitude and dehydration scores when compared to calves consuming colostrum from control cows.

Efficacy of the bovine coronavirus (BCV) fraction of ScourGuard 4K was demonstrated in a challenge study. Calves were removed from their dams prior to nursing and were fed colostrum obtained from heifers previously vaccinated with the BCV fraction contained in ScourGuard 4K or a placebo. Following challenge, calves that received colostrum from vaccinated cows had significant reductions in mortality and abnormal appetite, attitude and dehydration scores when compared to calves consuming colostrum from control cows.

Efficacy of the E. coli K99 fraction of ScourGuard 4K was demonstrated in an additional study, designed similarly to the previous studies. Following challenge, 95% of calves (19 of 20) receiving colostrum from cows previously vaccinated with the E. coli fraction of ScourGuard 4K were protected. In contrast, 100% of calves (8 of 8) receiving colostrum from control cows died within 48 hours of challenge.

**SAFETY:** The safety of ScourGuard 4K in pregnant cows and heifers was demonstrated in 3 field safety studies conducted in 3 different geographic locations using ScourGuard 4KC. No significant adverse events were observed in vaccinates following administration of ScourGuard 4KC.

### **DIRECTIONS:**

General Directions: Vaccination of healthy, pregnant cows and heifers is recommended. Shake well. Aseptically administer 2 mL intramuscularly (IM) only. In accordance with Beef Quality Assurance guidelines, this product should be administered in the muscular region of the neck.

Primary Vaccination: Administer 2 IM doses approximately 3 weeks apart to pregnant cows, with the second dose given 3-6 weeks before calving.

Revaccination: Revaccination with a single dose 3-6 weeks before each subsequent calving is recommended. Good animal husbandry and herd health management practices, including annual revaccination, should be employed.

### PRECAUTIONS:

Store at 2°-7°C. Prolonged exposure to higher temperatures may adversely affect potency. Do not freeze.

Use entire contents when first opened.

Sterilized syringes and needles should be used to administer this vaccine.

Do not vaccinate within 21 days before slaughter.

Contains gentamicin and merthiolate as preservatives.

Transient temperature increases may occur following vaccina-

As with many vaccines, anaphylaxis may occur after use. Initial antidote of epinephrine is recommended and should be followed with appropriate supportive therapy.

This product has been shown to be efficacious in healthy animals. A protective immune response may not be elicited if animals are incubating an infectious disease, are malnourished or parasitized, are stressed due to shipment or environmental conditions, are otherwise immunocompromised, or the vaccine is not administered in accordance with label directions.

Technical inquiries should be directed to Zoetis Inc. Veterinary Services, (888) 963-8471 (USA), (800) 461-0917 (Canada).

For veterinary use only

U.S. Veterinary License No. 190

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