

Express[®] FP 5-VL5

Boehringer Ingelheim Animal Health

Bovine Rhinotracheitis-Virus Diarrhea-Parainfluenza 3-Respiratory Syncytial Virus Vaccine

Modified Live Virus

Campylobacter Fetus-Leptospira Canicola-Grippotyphosa-Hardjo-Icterohaemorrhagiae-Pomona Bacterin

BEEF & DAIRY CATTLE

Indications: For vaccination of healthy cows and heifers prior to breeding for prevention of persistently infected calves caused by Bovine Virus Diarrhea (BVD) virus types 1 and 2; as an aid in the prevention of abortion due to Infectious Bovine Rhinotracheitis (IBR) virus; for the prevention of urinary shedding of *L. borgpetersenii* serovar *hardjo* (type *hardjo-bovis*); as an aid in the prevention of respiratory disease caused by IBR virus, BVD virus types 1 and 2, Bovine Respiratory Syncytial Virus (BRSV); as an aid in the reduction of respiratory disease caused by Parainfluenza 3 (PI3) virus; and as an aid in reduction of infertility, delayed conception, or abortion caused by *Campylobacter fetus* var. *venerealis*, and leptospirosis caused by 5 serovars of *Leptospira* (*L. canicola*, *L. grippotyphosa*, *L. hardjo*, *L. icterohaemorrhagiae*, and *L. pomona*).

A 12-month duration of immunity has been demonstrated against IBR-induced abortion and against disease, including persistently infected calves, caused by BVD types 1 and 2. In addition, vaccinated animals subsequently exposed to *L. borgpetersenii* serovar *hardjo* (type *hardjo-bovis*) have been shown to clear renal infections within 8 weeks of exposure.

This vaccine may be administered to pregnant cattle provided they were vaccinated, according to label directions, with any Express[®] FP vaccine within the past 12 months. May also be administered to calves nursing pregnant cows provided their dams were vaccinated within the past 12 months with Express FP products. See insert for details.

Composition: The product in the amber glass vial contains IBR, BVD Type 1 (Singer 1a cytopathic) and Type 2 (296 cytopathic), PI3, and BRSV modified live viruses. The plastic vial contains *C. fetus* and the *Leptospira* organisms listed above, in an adjuvant system. Contains neomycin and thimerosal as preservatives.

Directions and dosage: Rehydrate the vaccine by adding the accompanying killed bacterin diluent to the vaccine vial. Shake well. Using aseptic technique, inject 2 mL subcutaneously or intramuscularly. If using subcutaneous route, inject in front of the shoulder and midway of the neck, away from the suprascapular lymph node. If initial vaccination, repeat with any Express[®] vaccine containing *C. fetus*, *Leptospira*, and BRSV modified live virus (MLV) in 14-28 days. Calves vaccinated before 6 months of

age should be revaccinated at 6 months. A 2 mL booster dose is recommended once annually.

Cows and Heifers: Using aseptic technique, annually inject a single 2 mL dose subcutaneously or intramuscularly at or about 4 weeks prior to breeding. Pregnant cows and nursing calves may be vaccinated provided they were vaccinated, according to label directions, with any Express FP vaccine within the past 12 months. See below for details. If initial vaccination, see above.

Precautions: Store out of direct sunlight at 35-45°F (2-7°C). Avoid freezing. Use entire contents when first opened. Burn containers and all unused contents. Do not vaccinate within 21 days before slaughter. Stressed cattle should not be vaccinated. Injection site swelling may occur. Anaphylactoid reactions may occur. Antidote: Epinephrine.

Note: It is possible that healthy-appearing cattle can be persistently infected with or incubating virulent BVD virus at the time of vaccination. In view of these findings and suggested causes, BVD vaccine is contraindicated in persistently infected cattle and use should be limited only to healthy, immunocompetent, unstressed cattle.

Caution: Animal inoculation only. Accidental injection into humans can cause serious local reactions. Contact a physician immediately if accidental injection occurs.