VECTOR VACCINE

vectormune® HVT LT

- **Laryngotracheitis**
- **Marek's Disease**

APPROVED SPECIES

- Chickens

VACCINE TYPE

- Live HVT vector LT vaccine

VACCINE CONSTRUCT

- Vector: Live serotype 3 turkey herpes virus (HVT)
- Donor Insert: Infectious Laryngotracheitis

DISEASE PROTECTION

- Infectious Laryngotracheitis
- Marek's Disease

ROUTE OF ADMINISTRATION

- Subcutaneous injection
- *In ovo* injection

AGE OF ADMINISTRATION

- SC: 1-day-old chickens
- *In ovo*: 18- to 19-day-old embryonated chicken eggs

PACKAGING (PRODUCT CODE)

- 5 ampules per cane
- 1,000-dose ampule (B390H1US)
- 2,000-dose ampule (B390I1US)
- 4,000-dose ampule (B390K1US)

VACCINE PRESENTATION

- Cell associated
- Frozen in liquid nitrogen

QUALITY

- Thoroughly tested for purity, sterility, potency, and safety, and compliant with all applicable USDA and Ceva standards.

Key Advantages

- ILT protection without use of a conventional live LT vaccine
- No spreading of the vaccine strain in the environment, preventing vaccine-induced ILT outbreaks
- One-time administration at the hatchery saves labor and allows controlled application vs field vaccination
- No respiratory tract damage, eliminating post-vaccination respiratory reactions
- No rolling ILT respiratory reactions and secondary respiratory infections
- No live ILT virus in vaccine so latency, persistence, and shedding of ILTV does not occur following vaccination
- Provides Marek's disease protection equal to conventional HVT vaccines

vectormune®

See reverse side and package label for complete use directions and information

Ceva

VECTORMUNE® HVT LT

FOWL LARYNGOTRACHEITIS - MAREK'S DISEASE VACCINE
Serotype 3, Live Marek's Disease Vector

DESCRIPTION

VECTORMUNE® HVT LT contains a genetically engineered Marek's disease vaccine of serotype 3 (turkey herpesvirus or HVT) expressing a laryngotracheitis virus key protective antigen. This vaccine is recommended for use in chickens as an aid in the prevention of laryngotracheitis and Marek's disease. This Marek's disease vaccine containing serotype 3 is presented in a frozen cell associated form. The cells and virus particles are very fragile and require careful handling to prevent damage or loss of titer in order to achieve optimum efficacy. The vaccine is stored and shipped in frozen form in liquid nitrogen.

STORAGE CONDITIONS

- Vaccine ampules: Store in liquid nitrogen
- Diluent: Store at room temperature between 68 - 77°F (20 - 25°C)

INDICATIONS

The vaccine is recommended for use in healthy one-day-old chicks or in 18- to 19-day-old embryonated chicken eggs as an aid in the prevention of laryngotracheitis and Marek's disease. Good management practices are recommended to reduce exposure to laryngotracheitis virus and Marek's disease virus for at least two weeks following vaccination.

PREPARATION AND ADMINISTRATION OF VACCINE

Carefully read the directions before use. The instructions must be completely followed. Match the vaccine dose size to the proper diluent size and route of administration as follows:

1. For subcutaneous injection of 1-day-old chicks: Mix 200 mL of diluent for each 1000 doses of vaccine.
2. For *in ovo* vaccination of 18- to 19-day-old chicken embryos: Mix 100 mL of diluent for each 1000 doses of vaccine to administer 0.1 mL per chicken embryo or mix 50 mL for each 1000 doses of vaccine to administer 0.05 mL per chicken embryo.

VACCINE PREPARATION

1. Be familiar with all safety and precautionary measures for handling liquid nitrogen to prevent personal injury.
2. Wear gloves, a plastic face shield and protective goggles before removing vaccine ampules from the liquid nitrogen.
3. Check the container to confirm a sufficient amount of liquid nitrogen is present to keep the vaccine frozen. If thawed, do not use the vaccine. The containers (Dewars) must be checked regularly for liquid nitrogen level and must be refilled as needed.
4. After matching the dose size of the vaccine with the diluent size, quickly remove the exact number of ampules needed.
5. A maximum of 3 ampules should be thawed at one time. After inspecting the diluent and completing all preparations, the vaccine should be quickly removed from the Dewar and placed into a clean 80°F (26.5°C) thaw bath. This step can be repeated until the appropriate dosage has been reached. Gentle agitation during the thawing process promotes rapid, uniform thawing and evenly distributes the vaccine in the ampule.
6. Immediately after thawing, mix the vaccine with the diluent at room temperature (68°-77°F or 20°-25°C). Gently draw the vaccine from the ampule with an 18-gauge, 1.5 inch needle and slowly mix with the diluent. Rinse the ampule one time with the diluted vaccine.
7. Immediately use the vaccine and mix occasionally to ensure uniform suspension of cells.

SUBCUTANEOUS VACCINATION

1. For subcutaneous injection, sterilize the automatic syringe, needles and other accessory equipment by autoclaving or boiling prior to vaccination.
2. Use a short (3/8 inch or 1/2 inch) 20-gauge needle for vaccination. Subcutaneously inject 0.2 mL into the back of the neck of each chick.

IN OVO VACCINATION

1. The vaccine is administered *in ovo* to 18- to 19-day-old embryonated eggs. Read the egg injection system operator's manual before initiating vaccination. Failure to follow instructions may result in personal injury, excessive embryonic mortality and low hatchability. Inoculate each embryo with 1 full dose (0.05 mL or 0.1 mL).
2. Sanitize the egg injection system before and after use following the procedures described in the operator's manual.

NOTICE

This vaccine has been thoroughly tested for safety, purity, potency, and sterility and is in compliance with all applicable USDA and Ceva standards.

CAUTION

1. Read the above directions carefully.
2. Do not vaccinate within 21 days before slaughter.
3. The vaccine contains gentamicin and amphotericin B as preservatives.
4. Burn containers and all unused contents.
5. Do not remove vaccine from liquid nitrogen until ready for use.
6. Do not refreeze the vaccine.
7. Do not use vaccine that has thawed in the liquid nitrogen container.
8. Do not overdose or over dilute the vaccine
9. The effect of combining this vaccine with other products is not known and could impact vaccine efficacy.

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