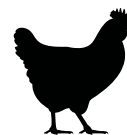


MEVAC™

H1 + H120

RESPIRATORY
INTEGRITY



Live-attenuated freeze-dried bivalent vaccine for immunization against Newcastle Disease and Infectious Bronchitis

INTRODUCTION

Respiratory diseases are among the most devastating challenges in the poultry industry; in most cases, these are the result of more than one pathogen involved. Among several avian viruses with tropism of the respiratory tract, Infectious Bronchitis virus (IBV) and Newcastle disease virus (NDV) are the most important agents compromising poultry health worldwide.¹

Due to the single stranded nature of their genome, these two viruses are able to evolve rapidly, leading to high genetic variability in circulating virus strains. This is even more pronounced in the case of IB, where recombination contributes to genetic variation. IB and ND affect poultry birds of all ages and breeds, but the degree of disease varies based on the age of the birds, with IB being more severe in young chicks, while the severity of ND is more pronounced in chickens of all ages.²

The immunology of domestic birds has been well studied and numerous vaccines have been developed against the two viruses. Most of these vaccines are either inactivated vaccines or live attenuated vaccines. Inactivated vaccines typically induce weaker cellular immune responses and require priming with live vaccines.²

Using various strategies such as combination of live attenuated and inactivated vaccines or the development of combined IB/ND vaccines, will lead to effective programs that contribute to poultry health and food security in many countries on a global scale.²

COMPOSITION (before inactivation)

- Newcastle Disease virus, GII Hitchner B1 [ME/NDV1] $\geq 6.0 \log_{10} \text{EID}_{50}/\text{dose}$.
- Infectious Bronchitis virus, GI-1 H120 [Eg/IBV2] $\geq 3.0 \log_{10} \text{EID}_{50}/\text{dose}$.

TARGET SPECIES

Chickens.

INDICATIONS

For active immunization of commercial chickens against Newcastle Disease and avian Infectious Bronchitis virus.

VACCINATION PROGRAM

Birds can be vaccinated from first day of age onwards, as per advice from your poultry veterinarian.

IMMUNITY

- Onset of immunity: 2 weeks after primary vaccination.
- Duration of immunity: until 6 weeks after single dose.

STORAGE PRECAUTIONS

- Store and transport refrigerated (+2°C to +8°C).
- Do not freeze.
- Store in a dry place protected from direct sunlight.
- Do not use this product after the expiry date.
- Shelf life after first opening the bottle: 3 hours.

VACCINE PREPARATION

- Vaccine shall be reconstituted with sterile water free from disinfectant and/or antiseptic.
- Shake the reconstituted lyophilisate until complete resuspension before administration.
- Do not administer less than the recommended dosage.
- Read instructions for appropriate dilution.

WITHDRAWAL

Zero days.

MEVAC™

HB1 + H120

RESPIRATORY
INTEGRITY



Live-attenuated freeze-dried bivalent vaccine for immunization against Newcastle Disease and Infectious Bronchitis



PRESENTATION

MEVAC™ HB1 + H120 is packed and presented in vials containing a lyophilisate pellet for reconstitution (1000 doses).

ADMINISTRATION

The vaccine should be administered via the eye drop, spray, or drinking water routes.

- Eye drop: For 1,000 birds, reconstitute 1,000 doses into 3 to 5 ml of non-chlorinated drinking water and subsequently dilute it into 30-50 ml of non-chlorinated drinking water. Use a calibrated dropper to distribute 30-50 µl-drops. Place one drop of the vaccine solution on the eye of each bird, allow the drop to spread, and release the bird.
- Spray vaccination: For 1,000 birds, spray the vaccine solution above the birds using a spray capable of producing micro-droplets (mean diameter 80-100 µm). Make sure that birds are closely confined together during spraying. The ventilation system of the poultry house should be inoperative during the spray administration.
- Drinking water: For 1,000 birds, reconstitute the lyophilisate pellet corresponding to 1,000 doses into 3 to 5 ml of non-chlorinated drinking water and subsequently dilute it into the volume of non-chlorinated drinking water to be consumed within two hours.

References

1. Malik YS, Patnayak DP, Goyal SM. Detection of three avian respiratory viruses by single-tube multiplex reverse transcription-polymerase chain reaction assay. *J Vet Diagn Invest.* 2004.
2. Ike et al 2021. Towards Improved Use of Vaccination in the Control of Infectious Bronchitis and Newcastle Disease in Poultry: Understanding the Immunological Mechanisms. *Vaccines* 2021, 9(1), 20; <https://doi.org/10.3390/vaccines9010020>

For further information please contact us:

kemin.biologics@kemin.com

or visit:

kemin.com/eu/en/markets/vaccines



Kemin Industries, Inc. and its group of companies 2024. All rights reserved. ®™ Trademark of Kemin Industries, Inc., U.S.A. Certain statements, product labelling and claims may differ by geography or as required by local governmental regulations.

PTP-12239