



## Cellular and humoral immune response of three chicken strains of broilers to avian infectious bronchitis vaccines

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### **ARTICLE INFO**

**Received:** 30.04.2013

**Revised:** 30. 05.2013

**Accepted:** 10.06.2013

**Publish online:** 25. 06.2013

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### **Abstract**

*The aim of this study* was to know, which of broiler strains have the best cellular and humoral immune response

against infectious bronchitis virus vaccines (IBVv). Differences in genetic immune response and susceptibility are known for many of the major viral pathogens of poultry. Consequently, the study was done. An increase in the level of humoral and cellular immunity provides a possible means of enhancing protection of flocks against IBVv. One-day-old consist of three chicken strain of broilers (Cobb 500, Ross 308 and Hubbard F-15) were assigned into six equal groups of 25 bird as fallow G1, G2 and G3 were vaccinated with IBV Ma5 strain at day 8 and with 4/91 strain at day 21, while the last three groups G4, G5 and G6 did not vaccinated with IB vaccine. All groups were vaccinated with Newcastle disease (ND) vaccine. After completing the immune tests Enzyme Linked Immunosorbent Assay (ELISA), Phytohemagglotnin (PHA)-skin test and lymphoid organs indices it turned out that the Hubbard chicken strain had the lowest and slowest immune response in comparison with Ross and Cobb chicken strains.

**To cite this article: Mohammed S. Abdul-Aziz, Latif I. kadhim. (2013.) Cellular and humoral immune response of three chicken strains of broilers to avian infectious bronchitis vaccines. Mirror of Research in Veterinary Sciences and animals. MRSVA 2 (3), 1-10. DOI: [10.22428/mrvsa.2307-8073.2013.00231.x](https://doi.org/10.22428/mrvsa.2307-8073.2013.00231.x)**

**Keywords:** cellular and humoral immune response, different chicken strains, infectious bronchitis virus vaccines.