TECHNOLOGY

RS-593 Variant Infectious Bursal Disease Virus

OVERVIEW

Infectious Bursal Disease (IBD) has been identified as a significant economic drain in the poultry (chiefly, chicken) industry. Estimated costs due to damage caused by IBDV infection are several million dollars annually. IBD is caused by virulent field viruses that cause highly contagious immunosuppressant disease condition, which exacerbates other infections in the chicken population. This disease has the greatest impact on young chickens (less than three weeks old) and is characterized by lesions in the lymphoidal follicles of the bursa of Fabricius. Newborn chicks are not yet immunologically competent and rely on protective maternal antibodies passed on to them from the breeder hens. Current preventative treatments include inoculation of either the breeder hens or the chicks with a vaccine that protects against many strains of IBDV.

A researcher at the University of Maryland has recently discovered a novel strain of Infectious Bursal Disease Virus against which current vaccines appears to be ineffective. This particular strain was identified by the use of a battery of neutralizing monoclonal antibodies against IBDV samples, and immunological protection toward the variant was evaluated by challenging progeny of hens inoculated against known IBDV strains. The new variant, RS-593, has been isolated from poultry farms on both the east and west coasts. Therefore, it is possible that transmission of RS-593 could lead to widespread infection of poultry flocks. Now that RS-593 has been isolated, a vaccine can be prepared to prevent such a catastrophic epidemic in the poultry industry.

For additional information please contact the Office of Technology Commercialization, University of Maryland, College Park, MD 20742.
Phone (301) 405-3947. Email: otc@umd.edu

CONTACT INFO

UM Ventures
0134 Lee Building
7809 Regents Drive
College Park, MD 20742
Email: umdtechtransfer@umd.edu
Phone: (301) 405-3947 | Fax: (301) 314-9502

Additional Information

INSTITUTION

University of Maryland, College Park

PATENT STATUS

Tangible Research Property

LICENSE STATUS

Contact OTL for licensing information

EXTERNAL RESOURCES