

AN INDIRECT ELISA FOR DIFFERENTIATION OF FMDV INFECTED FROM VACCINATED ANIMALS USING RECOMBINANT NON-STRUCTURAL PROTEIN 2C

S. Mahajan¹, J.K. Mohapatra¹, L.K. Pandey¹, B. Pattnaik^{*,1}
Project Directorate on Foot and Mouth Disease (Indian Council of Agricultural Research),
Mukteswar-Kumaon, Nainital, Uttarakhand, India 263 138

DIAGNOSTICS

• FMD MONITORING AND SURVEILLANCE

Transboundary Disease

SIGNIFICANCE

- Developed recombinant 2C_t based immunoassay will help in identification of infected animals amongst the vaccinated animals.
- Antibodies against 2C_t- Most reliable indicator for DIVA as 2C is membrane associated and remain absent in the purified vaccine.
- 2C_t ELISA would help in devising DIVA diagnostic strategy, if Adeno vectored vaccines become a reality future.
- Developed 2C_t NSP can be used alongside the currently used 3AB3 and 3ABC NSP ELISAs to increase the confidence in surveillance results. Multiple NSP-ELISA increase the likelihood of detecting, or confirming, an infected animal.