Title of technology	

Preamble

Equine infectious anaemia (EIA) - a chronic and debilitating retroviral disease of equids. The diagnosis of the disease is mainly based on identification of inapparent carriers by detection of antibodies against EIA virus (EIAV) by imported kits of the agar gel immunodiffusion (AGID) test (or Coggin's test) and ELISA albeit with high cost and hassles. EIA diagnosis is routinely done with imported Agar Gel Immunodiffusion (AGID) kit. It generally takes 18-24 hrs (sometimes 48 h) for interpretation of results. It also requires expertise in the field for the subjective interpretation of the result and cost for testing sample with the existing kit is also higher. As an alternative, NRCE has developed recombinant p26 protein antigen based indirect ELISA kit for faster detection of EIA. It provides a homogeneous and permanent source of antigen to ensure continuous availability of antigen at national level. This kit is quite economical as compared to imported kit. This kit is being routinely using forsero-surveillance in India.

Salient features

- This kit is a recombinant antigen (p26) based indirect ELISA for diagnosis of equine infectious anaemia.
- The test detect antibody specific to EIA virus.
- This kit is faster than AGID and it takes 3-4 hrs to complete the assay and result interpretation.
- This kit has high relative sensitivity (100%) and specificity (98.7%) in comparison with AGID assay.
- This kit has successfully been validated extensively with 4545 equine serum samples
- This kit has been validated internationally by OIE-Referral Laboratory
- Test capacity: 45 samples per plate
- Stability of kit reagents : One year at 4oC

Stakeholders

- Biopharmaceutical companies
- State Animal Husbandry Departments
- State Govt Veterinary Biologicals Production Units
- Small Entrepreneurs
- Equine farmers
- Indigenous Horse Societies / Army/ Police Departments

Economic benefits

- This kit is cost-effective as compared to imported kit
- This kit will help in eradicating/declaring EIA-free nation which will be invaluable in terms of exporting our equines in EIA free country.
- The kit will help in better equine health management and make equine husbandry more economical.
- Inclusion of this diagnostic kit in surveillance and monitoring program byvarious establishment/agencies will help to know the status of the disease in India and thereby help in eradicating/declaring equine infectious anaemia free nation.
- This will be invaluable in terms of exporting our equines in EIA free country

