

Equine Rotavirus ELISA kit.

Title of technology	Equip Rotavirus Kit
Preamble Rotaviruses, members of the family Reoviridae, are the major etiologic agents of severe, acute dehydrating diarrhoea resulting in high morbidity and mortality in neonatal animals (including foals) and human infants. Rapid diagnosis of rotavirus-associated diarrhoea is important in managing the outbreak and for further spread of disease in the herd. A monoclonal antibody (mAb)-based sandwich enzyme immunoassay has been developed for diagnosis of rotavirus in different animals and human stool samples. This kit employs a polyclonal anti-rotavirus serum as coating antibody to capture the rotavirus antigen and a monoclonal antibody is used for detection of group-specific antigen present on the captured rotaviruses.	
Salient features <ul style="list-style-type: none">• This kit is a monoclonal antibody based ELISA assay for detection of rotavirus from equine stool samples.• The mAb raised against group-specific protein VP6 of rotavirus, for detection of mammalian group A rotaviruses.• Stool suspension or control sample is added in the ELISA modules coated with polyclonal antibody to capture rotavirus antigens.• This kit employs a polyclonal anti-rotavirus serum to capture the rotavirus antigen and a monoclonal antibody detect group-specific antigen present on the captured rotaviruses• The assay has 100% sensitivity and a specificity of 96% in comparison to virus isolation.• The colour intensity in comparison with the negative controls indicates the presence of rotavirus in the samples	
Stakeholders <ul style="list-style-type: none">• Biopharmaceutical companies• State Animal Husbandry Departments• State Govt Veterinary Biologicals Production Units• Small Entrepreneurs• Equine farmers• Indigenous Horse Societies / Army/ Police Departments	
Economic benefits <ul style="list-style-type: none">• This kit will help in timely diagnosis of rotavirus associated diarrhoea in animal and human population• It will help in developing control strategies for the diseases.	