

Theileria equi ELISA kit

<p>Title of technology</p>	<p>Recombinant antigen based ELISA kit for diagnosis of equine Piroplasmosis</p>
<p>Preamble</p>	
<p>Equine piroplasmosis - also called equine babesiosis - is an acute, sub-acute or chronic tick-borne disease of equids, caused by an intra-erythrocytic protozoa, <i>Theileriaequi</i> (<i>T. equi</i>) or <i>Babesia caballi</i>. The disease caused by <i>T. equi</i>—is more widespread and pathogenic than that by <i>B. caballi</i>. Sero-prevalence of equine piroplasmosis is up to 35% in the indigenous equid population. Recently, NRCE has developed recombinant erythrocyte merozoite antigen-2 (EMA-2) -based ELISA for detection of antibodies against <i>T. equi</i> parasite in equine serum. This ELISA is being used routinely for detection of antibodies against <i>Theileriaequi</i> parasite in equine serum at NRCE.</p>	
<p>Salient features</p> <ul style="list-style-type: none"> • It is a recombinant antigen (EMA-2) based plate ELISA for detection of antibodies against <i>Theileriaequi</i> infection in equine. • The kit has ready-to-use ELISA plate onto which serum samples can be loaded after proper dilution. • The results can be obtained in 1hr 30 min times after application of serum samples. • Serum samples shipped to laboratory at room/ambient temperature can be utilized for application in the kit. • The test sensitivity and specificity is comparable to OIE recommended ELISA. • Test capacity: one ELISA plate can accommodate 42 test serum samples (in duplicate) alongwith reference positive and negative serum samples (in duplicate). • All the reagents are stable at 4°C for up to 6 months 	
<p>Stakeholders</p> <ul style="list-style-type: none"> • Biopharmaceuticals • State Govt Veterinary Biologicals Production Units • Small Entrepreneurs • Equine farmers • Indigenous Horse Societies / Army/ Police Departments etc., 	
<p>Economic benefits</p> <ul style="list-style-type: none"> • More sensitive and early detection of disease • r-ELISA is uniform and there is no batch to batch antigen variation . • r-ELISA kit is comparatively cheaper than the other diagnostic assays. 	
	