





Huve-Check® | Technical bulletin 2

Huve-Check® Calf scours 5 First-line diagnosis for neonatal calf diarrhoea

Trial description

Neonatal calf diarrhoea (NCD) is the most severe disease of neonatal calves and results in the greatest economic losses due to disease in this age group in both dairy and beef calves.

To select the most appropriate treatment and prophylactic measures for each case, correct identification of pathogens involved is necessary but clinical signs are not always pathognomonic.

On-farm testing offers best option to sharpen a clinical diagnosis.

The main responsible pathogens are embedded in Huve-Check® calf scours 5:

Rotavirus type A, Coronavirus (BCoV), Cryptosporidium parvum, E.coli F5 (ETEC) (K99) and E.coli CS31A*

* E.coli CS31A: a suspicion of pathogenicity: highly prevalent, found in 20% to 45% of diarrheic feces samples of calves- often associated with other highly prevalent pathogens, such as rotavirus or Cryptosporidium parvum.

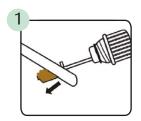


Each kit contains:

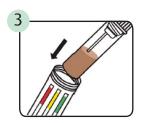
1 sample tube containing a measuring spoon to collect stool and a dilution solution. 1 strip tube containing 5 strips identified by colored labels.

Ease of use:

Minimal hands-on-time
Room temperature incubation
Results available in 10 minutes







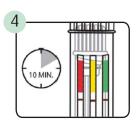


Fig. 1:

Results

Huve-Check® Calf scours 5 strip is a vertical flow immunochromatographic device. The use of monoclonal antibodies as conjugate and to capture the pathogen agents on the strip ensures excellent specificity, sensitivity and very reliable results

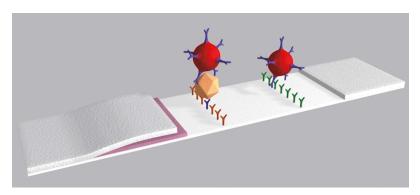


Fig. 2:

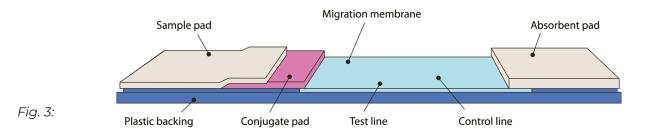


Table 1: Concordance of results between Huve-Check strip and reference methods using kappa factor*

	Reference method	+/+	+/-	-/+	-/-	KAPPA	
ROTAVIRUS	ELISA	48	0	2	40	96%	Excellent
CORONAVIRUS	PCR	7	2	4	74	66%	Good
	ELISA	8	1	1	78	88%	Excellent
E.coli F5 (ETEC) (K99)	PCR	19	1	4	62	85%	Excellent
	ELISA	18	1	2	65	90%	Excellent
Cryptosporidium parvum	Ziehl	32	3	2	63	89%	Excellent

Introduced by J. Cohen in 1960, kappa provides a measure of the degree of consistency between two raters.

Comparison was made on a cohort of 138 stools coming from diarrheic calves aged up to 4 weeks. The prevalence of *E. Coli* CS31a was 22.4% in this group.

	Reference method	+/+	+/-	-/+	-/-	KAPPA	
E.coli CS31A	ELISA	30	7	1	100	84%	Excellent

Conclusions

HuveCheck® is a reliable and convenient method for diagnosis of most common pathogens causing calf scours.



^{*} References Bio-X Diagnostics