

## FASTest® C. diff 2T ad us. vet.

Exclusive UK Distributor For MegaCor Diagnostik info@vetlabsupplies.co.uk



Fast test for the qualitative detection of Glutamate Dehydrogenase and of Toxins A /B from Clostridioides difficile in feces of dog, cat, horse and pig

**Fast aetiological diagnostics** 

Peracute to chronic diarrhoea

**High mortality and lethality** 

**Human pathogen agent** 

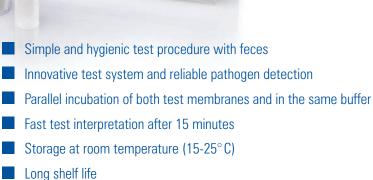
Immediate initiation of specific therapy, quarantine and prophylaxis measures

> **Effective reduction of** economic losses





- Compact test box with 10 tests



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Clostridioides difficile is a gram positive anaerobical spore former. It causes diarrhoea in various species. Studies prove the incidence of *C. difficile* in animal food. Therefore, a zoonotic potential for humans (diarrhoea, colitis) must be implied. Additionally there are hints of mutual transfer between dog/cat and human within a household.

Most important virulence factors for the development of C. difficile infection (CDI) are the enterotoxin A (TcdA) and cytotoxin B (TcdB).

**Dog/cat:** *C. difficile* can be proven in feces of healthy juvenile and adult animals as well as in animals with diarrhoea (single animals, nosocomial infections in animal hospitals and shelters). A significant correlation between *C. difficile* and diarrhoea could not be proven, but feces samples of animals with diarrhoea showed significantly higher TcdA (increased secretion of liquid into the intestinal lumen) and/or TcdB (lethal damage of the intestinal wall) detection as with healthy animals.

**Horse:** Both in single animals and with diarrhoea outbreaks in herds CDI (TcdA & TcdB) occur, especially in foals, partly associated with *C. perfringens*, then mostly with deathly course within 3 days. Clinically indicative are colic, partly without/before diarrhoea onset and massive antibiotic associated colitis.

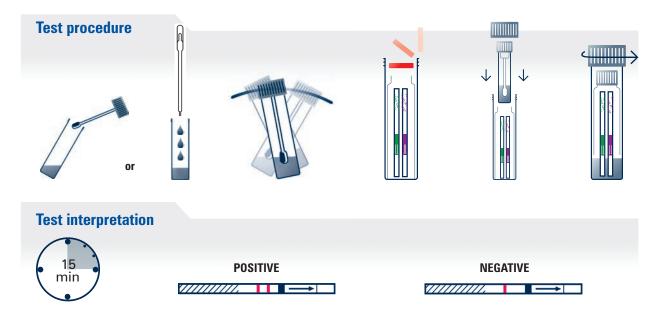
**Pig:** In 1–7 days old piglets, CDI is one of the most important diarrhoea diseases (mortality up to 16%). The prevalence decreases with increasing age. The fecal-oral colonisation with *C. difficile* happens in endemic areas at 100% within 48 h, lactogenic via the sow (ca. 25%) or aerogenic via surroundings. Clinical symptoms (yellow-watery diarrhoea, but also constipation) are not always visible. Risk factors for development of an acute CDI are age, provocation dose, but also associated toxins and the administration of antibiotics. Retarded growth, lower weaning weight and severe economical losses are the consequences.

Diagnosis of an acute CDI can be difficult due to the endemic nature of  $\it C. difficile.$  With a two-step diagnostics of GDH (Glutamate Dehydrogenase) and the Toxins A/B, the proof can

Sensitivity 96 % 99 %
Specificity 98 % 96.3 %

succeed with high certainty. The proof of GDH is said to be very sensitive compared to culture (golden standard) and therefore can be used as so-called "exclusion test". On the other hand, the proof of the Toxins A/B is seen as highly specific (but less sensitive) compared to culture. Therefore, the double test can be optimally used as confirmation test.

In combination with anamnesis and clinic, the **FASTest® C. diff 2T** is suitable as on-site diagnostic test for the secure exclusion or proof of a *C. difficile* infection.



It is generally advisable for diarrhoea to perform differential diagnostics with **FASTest® C. perfringens** (serous-catarrhal enteritis [type A] or necrotising enteritis [type C]), **FASTest® CCOV** Strip, **FASTest® CRYPTO** Strip, **FASTest® CRYPTO-GIARDIA** Strip, **FASTest® CRYPTO-ROTA** 

D2T, FASTest® GIARDIA Strip, FASTest® PARVO Card/Strip or FASTest® ROTA Strip as well as the proof of inflammation with FASTest® CRP canine.

Distribution:



