

KRUUSE Quick Tests



KRUUSE Quick Tests

With our new KRUUSE Quick Tests, we now offer veterinary practices a series of quick tests that extend the diagnostic possibilities in your practice

Cat. No

- 296051 KRUUSE FIV/FeLV Quick, 5/pk
- 296052 KRUUSE FIV/FeLV Quick, 10/pk
- 296053 KRUUSE Borrelia Quick, 5/pk
- 296055 KRUUSE Parvo Quick, 5/pk
- 296056 KRUUSE Giardia Quick, 5/pk
- 296057 KRUUSE Ehrlichia Quick, 5/pk
- 296058 KRUUSE BoDia Quick, 5/pk
- 296059 KRUUSE PiDia Light, 5/pk
- 296060 KRUUSE IgG Foal Quick, 5/pk

These products are fast, uncomplicated and easy to use, which means that specific therapeutic interventions can happen without delay.

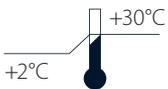
KRUUSE Quick Tests can be used as emergency diagnostic tools or as a part of your screening work.

KRUUSE Quick Tests are produced in Germany under constant quality control in collaboration with Georg August University, Göttingen. Quality and reliability have high priority: These tests have high sensitivity (92-98%) as well as high specificity (94-96%).

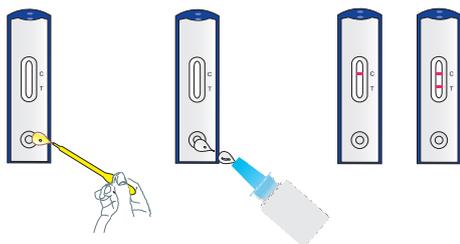
The manufacturer has the highly recognized GMP (Good Manufacturing Practice) seal of approval.

All the products are easy, uncomplicated and quick to use, so that targeted therapeutic measures can be implemented quickly.

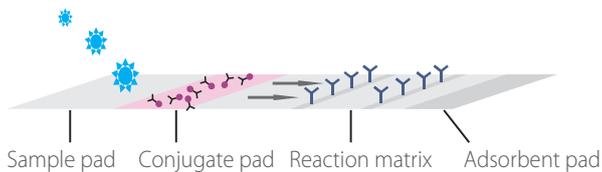
Easy to store:



Easy to use:



Easy to trust:



KRUUSE FIV/FeLV Quick

Feline Leukemia Virus (FeLV) as well as Feline Immunodeficiency Virus (FIV) are retroviruses and among the most common infectious diseases of cats.

The symptoms of infection with FeLV and FIV are quite varied and alike, and include loss of appetite, poor coat condition, infections of the skin, bladder and respiratory tract, oral disease, seizures, lymphadenopathy, skin lesions, fatigue, fever, weight loss, stomatitis, gingivitis, pancytopenia, anemia, diarrhea and jaundice.

In contrast to FIV, FeLV is an infection of friendly, outgoing and social cats, and in multi-cat households, FeLV infection can be endemic. Asymptomatic carriers, are also a part of the picture and these cats will show no signs of disease, often for many years.

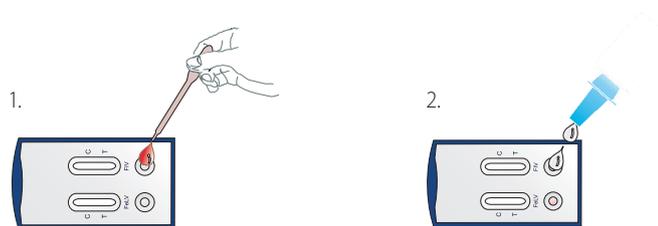
As cats infected with FIV and FeLV show very similar symptoms a combined test, to differentiate the two infections, is recommended.

KRUUSE FIV/FeLV Quick – for diagnosis and screening

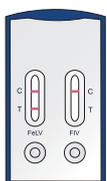
- Rapid diagnostics and screening on site
- Use either serum, plasma or whole blood
- Read the result after only 10 minutes
- Userfriendly test-kit
- Storage at room temperature

Test Procedure for serum, plasma or whole blood

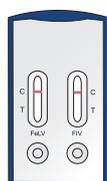
- 1) Place 2 drops of serum or plasma or 1 drop of whole blood in each sample well
 - 2) Apply 2 drops of buffer in each sample well
- Read the result after 10 minutes



Test results



Positive test result
Two lines are visible; test line (T) and control line (C) In this example FeLV antigens were detected in the sample material



Negative test result
Only the control line (C) is visible. No test line (T) appears on the test strip. In this example neither FeLV nor FIV antibodies were detected in the sample material



KRUUSE FIV/FeLV Quick

Cat. No 296051, 5/pk

Cat. No 296052, 10/pk

KRUUSE Borrelia Quick

Lyme disease is one of the diseases transmitted by vectors (ticks). The pathogen *Borrelia burgdorferi* is a gram-negative, spiral-shaped and movable bacterium (spirochete). Worldwide, at least 13 genospecies belong to the *Borrelia burgdorferi sensu lato* (Bsl) complex. The three most important species *B. burgdorferi sensu stricto* (Bss), *B. garinii* (Bg) and *B. afzelii* (Ba) are also pathogenic for humans. For dogs, the pathogenicity of *B. burgdorferi sensu stricto* has been verified.

The natural reservoir for *Borrelia* is wild animals. *Borrelia* is transmitted by ticks of the species *Ixodes ricinus*. An infection does not always lead to immediate illness, it may take a long time (2-5 months) before clinical symptoms occur.

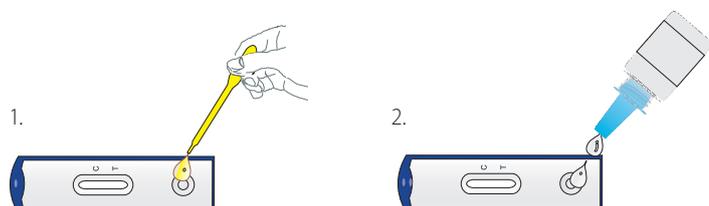
Clinical signs of the disease in dogs often develop insidiously and can be nonspecific symptoms such as lethargy, lymphadenopathy and intermittent fever. A possible clinical manifestation is infection-related arthritis in one or more joints, sometimes with shifting leg lameness. Occasionally glomerulopathies occur. Even with effective antibiotic therapy a complete elimination of the pathogens is difficult.

KRUUSE Borrelia Quick – for diagnosis and screening

- Rapid diagnostics and screening on site
- Use either serum, plasma or whole blood
- Read the result after only 10 minutes
- Userfriendly test-kit
- Storage at room temperature

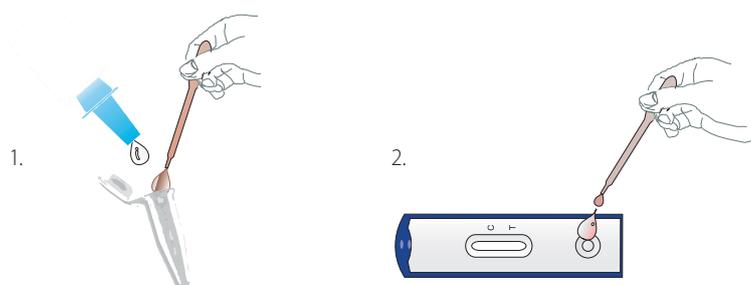
Test Procedure for serum and plasma

- 1) Place 1 drop of serum or plasma into the sample well
- 2) Apply 2 drops of buffer into sample well
- 3) Read the result after 5-10 minutes



Test Procedure for whole blood

- 1) Place 1 drop of whole blood into the sample tube
- 2) Apply 3 drops of buffer into sample tube. Mix whole blood and buffer
- 3) Apply 2 drops of sample solution into sample well
- 4) Read the result after 5-10 minutes



KRUUSE Borrelia Quick

Cat. No 296053, 5/pk

NB! Also suitable for equine



KRUUSE Parvo Quick

Rapid test for detection of specific antigens of Parvovirus (CPV as well as FPV) in faeces from dogs and cats.

Canine Parvovirus type 2 (CPV-2) is one of the causative agents of gastroenteritis.

Canine Coronavirus (CCV) is the second leading viral cause of diarrhoea in puppies with canine Parvovirus being number one. Cats can also be infected with canine parvovirus. According to current German estimates, about 10% of the clinically ill cats are infected by CPV-2a or CPV-2b. These cats have a potential risk of infecting dogs. Parvovirus is the smallest non-enveloped DNA virus, it is highly contagious and spread worldwide. This poses a high, sometimes deadly risk, especially for unvaccinated dogs.

Feline parvovirus is closely related to canine parvovirus and a causative pathogen of feline panleukopenia (also known as feline distemper). This highly contagious disease is also spread worldwide, but occurs mainly in cats. Canine parvovirus (CPV) first appeared in the mid-70's as a mutated variant of feline parvovirus (FPV). 99% of

the DNA structures of the two viruses are identical, differing in only a few nucleic acid sequences in the viral capsid protein.

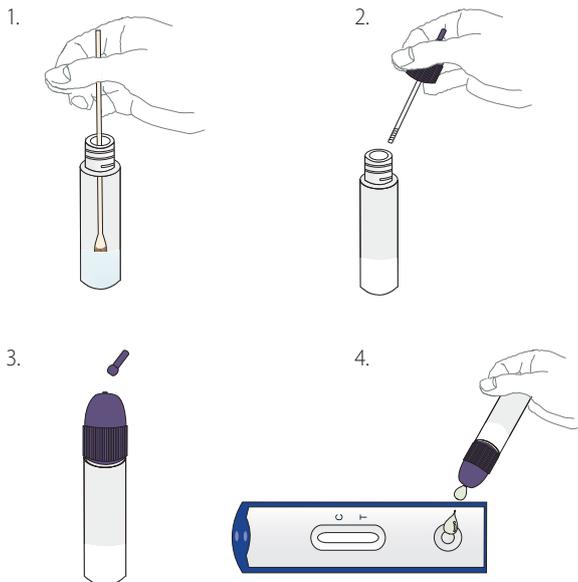
It is estimated that almost half of all virus associated diarrheas are caused by Parvovirus. If an infection is present, immediate treatment is required. Therefore, it is imperative that the cause of the illness is quickly and accurately identified.

KRUUSE Parvo Quick

- Rapid diagnostics and screening on site
- Read the result after only 10 minutes
- Userfriendly test-kit
- Storage at room temperature

Test procedure

- 1) Place the tip of the swab with the faecal sample into the test tube containing the dilution buffer. Stir up the fluid with the swab.
- 2) Tightly close the test tube with the buffer/sample. Shake the test tube well for a few seconds.
- 3) Break off the pin and place 3 drops solution in the sample well
- 4) Read the result in 5-10 minutes



KRUUSE Parvo Quick
Cat. No 296055, 5/pk

KRUUSE Giardia Quick

Giardia is a microscopic intestinal parasite. *Giardia duodenalis* (also known as *Giardia intestinalis*, *Lamblia intestinalis* or *Giardia lamblia*) belongs to the group of flagellates with two nuclei. The protozoa can colonize and infect various mammals and birds worldwide. The intestinal parasites have a pear-shaped form with two typical nuclei, that appear as a pair of eyes. To move around Giardia use their flagella. With the help of an abdominal adhesive disc, the diarrheal pathogens are capable of adhering to the intestinal wall of the host, i.e. they do not penetrate into the tissue. On the surface of the intestinal mucosa, they then multiply millionfold. Giardia are among the most widespread intestinal parasite worldwide.

Giardia have a relatively high survival ability against environmental influences, and they are extremely resistant, even to disinfectants. To infect other creatures (i. a. dogs, cats and humans), Giardia encyst in the intestine and pass in the faeces. Cysts can survive in the environment for days, even weeks until they are ingested by a new host, for example through contaminated water or food.

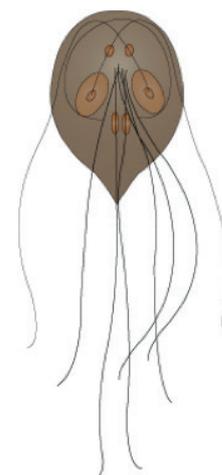
Giardiasis is usually is a latent disorder of the digestive system. Clinically manifested giardiasis occurs mainly in young animals aged between 6 and 12 months. Older animals seem to have developed some immunity against an infection with Giardia. The duration of the disease varies from one week to several months, if the animal is not treated.

Giardiasis is diagnosed by the detection of mobile Giardiatrophozoites in fresh faeces. Because the excretion of Giardia cysts and trophozoites often is intermittent, repeated testing is recommended. At least three different faecal examinations over a period of approximately seven to ten days should be conducted where all results are negative before a potential Giardiasis can be excluded.

NB: Giardia is zoonotic

KRUUSE Giardia Quick

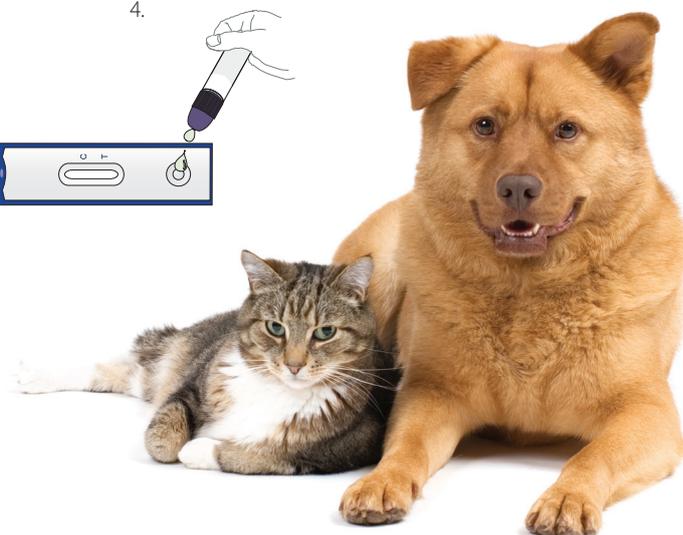
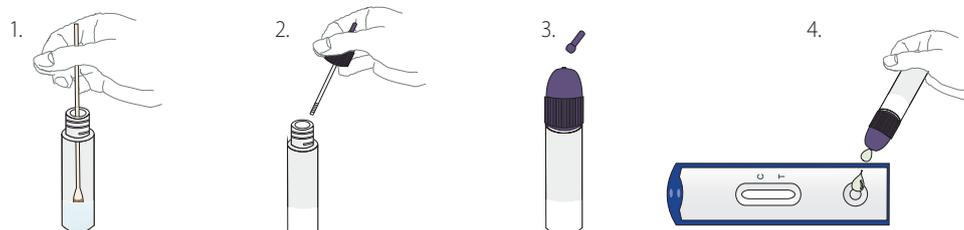
- Rapid diagnostics and screening on site
- Read the result after only 10 minutes
- Userfriendly test-kit
- Storage at room temperature



Giardia protozo

Test procedure

- 1) Place the tip of the swab with the faecal sample into the test tube containing the dilution buffer. Stir up the fluid with the swab.
- 2) Tightly close the test tube with the buffer/sample. Shake the test tube well for a few seconds.
- 3) Break off the pin and place 3 drops solution in the sample well
- 4) Read the result in 5-10 minutes



KRUUSE Giardia Quick
Cat. No 296056, 5/pk

KRUUSE Ehrlichia Quick

Ehrlichia canis

Canine monocytic ehrlichiosis (CME) is a vector-borne disease transmitted by ticks.

The pathogen *Ehrlichia canis* (*E. canis*) is a Rickettsiaceae (gram-negative obligate intracellular bacteria) and is transmitted by the brown dog tick *Rhipicephalus sanguineus* (*R. sanguineus*). The disease occurs in dogs, especially in southern Europe.

After an incubation period of 8 to 20 days, the course of the disease is divided into three phases. In the first acute phase, the clinical symptoms are not pathognomonic and rather mild with nonspecific clinical signs such as fatigue, fever, swollen lymph nodes, anorexia, and dyspnoea.

The pathogen infects lymphocytes and monocytes. The second subclinical phase may last from several months to years and is characterized by pathogen persistence, with an increased antibody production. These dogs appear clinically healthy. The third phase is chronic CME characterized by complex clinical symptoms resulting from different organ manifestations of the pathogen and persistent antibody production. The consequences can be immune complex-mediated glomerulopathies, arthropathies, splenomegaly, or neurological symptoms. Nonspecific symptoms such as fever, anorexia and lethargy also continue.

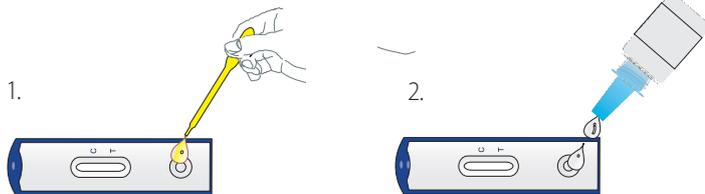
A serological test for antibodies against *Ehrlichia canis* should always be interpreted in conjunction with the current clinical symptoms. The detection of antibodies is possible after the seventh day of infection, and indicates a past contact with the pathogen. However, the sero-conversion can sometimes take up to four weeks. With the KRUUSE Ehrlichia Quick veterinarians have a useful tool for the accurate and rapid detection of an infection with *Ehrlichia canis* at an early stage so correct treatment and prevention can be implemented.

KRUUSE Ehrlichia Quick

- Rapid diagnostics and screening on site
- Use either serum, plasma or whole blood
- Read the result after only 10 minutes
- Userfriendly test-kit
- Storage at room temperature

Test Procedure for serum, plasma or whole blood

- 1) Place 1 drop of serum, plasma or whole blood into the sample well
- 2) Apply 2 drops of buffer into sample well
- 3) Read the result after 10 minutes



KRUUSE IgG Foal Quick Test

Immunoglobulin G - IgG

Foal losses between 2% and 12% have been reported, depending on age, management and breeding area. Identification of foals at risk and assessment of postnatal disease symptoms can be difficult, but waiting for the onset of clinically manifest symptoms costs valuable time. An adequate supply of immunoglobulins (IgG) from the colostrum of the mother is important for healthy development of a newborn foal.

Failure of transfer of colostral IgG is one of the most important predisposing factors for infectious diseases in foals. Studies have shown that under increased risk of infection of foals, an IgG concentration of >800 mg/dl in the blood is required for adequate protection against infections.

In the equine no immunoglobulins are transferred through placenta, like in many other mammals, which makes it even more important that the foal have enough colostrum both regarding amount and quality.

Horses (and pigs) have epitheliochorial placentae, which prevent intra-uterine passage of antibodies from mother to fetus. The trophoblast cells are juxtaposed with but do not invade the epithelial cells; fusion of the trophoblast cells with the uterine epithelial cells may also occur. This type of placenta has six cell layers and inhibits the passage of immunoglobulins and other immunological factors to the fetus during pregnancy.

Therefore, the only immunity a newborn receives from its mother derives from the colostrum.

As part of the veterinary examination of a newborn foal, the importance of routine determination of IgG levels as a way to identify susceptible animals cannot be overestimated.

It ensures the early diagnosis of immune deficit to initiate further actions.

KRUUSE IgG Foal Quick Test

- Rapid diagnostics and screening on site
- Use either serum, plasma or whole blood
- Read the result after only 10 minutes
- Userfriendly test-kit
- Storage at room temperature

Test Procedure for serum, plasma or whole blood

- 1) Place 1 drop of serum, plasma or whole blood in the sample well
- 2) Apply 2 drops of buffer in the sample well
- 3) Read the result after 10 minutes



KRUUSE IgG Foal Quick Test
Cat. No. 296060, 5/pk

KRUUSE BoDia Quick

Calf diarrhea poses a major health problem in herds, and is therefore a significant economic risk in cattle breeding. The causes of diarrhea are multiple. Infectious and non-infectious factors can trigger the onset of calf diarrhea. Non-infectious factors that may trigger diarrhea include, among others, hygienic conditions, the vitality of the calf's immune system and the physical condition of the calf.

Infectious factors include viruses, bacteria, single-cell parasites and other causative organisms. Some of the most common causative organisms are:

- Rotavirus
- Coronavirus
- Escherichia Coli K99
- Cryptosporidium parvum

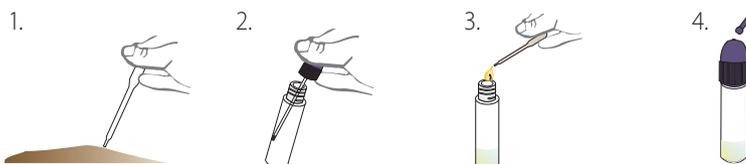
These organisms, among others things, alter the structure of epithelial cells in the gastrointestinal tract, which interfere with normal digestion and absorption of nutrients and cause diarrhea. A calf with diarrhea excretes an increased volume of faeces with elevated content of water, causing disequilibrium in fluid balance. When a calf suffers from diarrhea, immediate treatment is required. It is imperative that the cause of the illness quickly and accurately is identified.

KRUUSE BoDia Quick

- Rapid diagnostics and screening on site
- Direct identification of 4 infectious pathogens
- Read the result after only 10 minutes
- User-friendly test-kit
- Storage at room temperature

Test procedure for liquid faeces

- 1) Pick up a faeces with the pipette
- 2) Open the purple lid of the sample test tube and remove the sampler
- 3) Add 3 drops of faeces into the test tube. If the faecal sample is very watery add up till 8 drops totally
- 4) Return the sampler to the tube and close it tightly. Shake the tube well and break off the pin in the opposite end of the test tube. Apply 3-4 drops of sample fluids into each of the sample wells by slightly squeezing the tube



Test procedure for grainy faeces or faeces with larger particles

- 1) Remove the purple lid of the test tube and use the sample stick, within in tube, for sampling
- 2) Stab the pin into three different places of the faeces
- 3) Return the sampler to the tube and close it tightly. Shake the tube well The clear liquid should change to a slightly brown/yellow colour
- 4) Break off the pin in the opposite end of the test tube. Apply 3-4 drops of sample fluids into each of the sample wells by slightly squeezing the tube



KRUUSE BoDia Quick
Cat. No 296058, 5/pk



KRUUSE PiDia Light

Rotavirus and Clostridium perfringens in pigs

Diarrhea can cause severe losses in livestock farming, especially during the first 3 weeks of life. Diarrhea generally leads to deterioration in individual animal health and can cause serious economic losses in herds.

Dominant pathogens vary between different herds. Diarrhea is usually caused by mixed infections. A thorough diagnosis is therefore of particular importance.

KRUUSE PiDia Light can reliably detect two of the most common pathogens causing diarrhea: Rotavirus and Clostridium perfringens. Problems in livestock management, such as husbandry, feeding and climate, can also cause or exacerbate diarrhea. In good livestock management, regular screening is recommended to check for possible increased concentrations of pathogens in order to identify and handle problems as fast and effectively as possible. For example,

if a high concentration of Clostridium perfringens (<10⁴ Clostridium perfringens/gram) is detected when screening, immediate preventive measures should be taken.

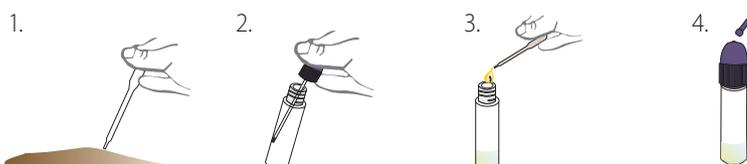
KRUUSE PiDia Light has been developed as an on-site diagnostic test for mixed infections causing diarrhea. Furthermore KRUUSE PiDia Light is also a screening instrument in herd management.

KRUUSE PiDia Light

- Rapid diagnostics and screening on site
- Read the result after 5 to 10 minutes
- Userfriendly test-kit
- Storage at room temperature

Test procedure for liquid faeces

- 1) Pick up a faeces with the pipette
- 2) Open the purple lid of the sample test tube and remove the sampler
- 3) Add 3 drops of faeces into the test tube. If the faecal sample is very watery add up till 8 drops totally
- 4) Return the sampler to the tube and close it tightly. Shake the tube well and break off the pin in the opposite end of the test tube. Apply 3-4 drops of sample fluids into each of the sample wells by slightly squeezing the tube



Test procedure for grainy faeces or faeces with larger particles

- 1) Remove the purple lid of the test tube and use the sample stick, within in tube, for sampling
- 2) Stab the pin into three different places of the faeces
- 3) Return the sampler to the tube and close it tightly. Shake the tube well The clear liquid should change to a slightly brown/yellow colour
- 4) Break off the pin in the opposite end of the test tube. Apply 3-4 drops of sample fluids into each of the sample wells by slightly squeezing the tube



KRUUSE PiDia Light
Cat. No 296059, 5/pk





JØRGEN KRUUSE A/S
Havretoften 4
DK-5550 Langeskov - Danmark
Tlf.: +45 72 14 15 11
info@kruuse.com
www.kruuse.com