LABOKLIN
LABOR FÜR KLINISCHE DIAGNOSTIK GMBH & CO.KG

Direct detection of bacteria, viruses and parasites

Below you find detailed information on DNA-tests performed by LABOKLIN. If you have any questions or need more information, please contact us:
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We carry out all tests three times per week minimum.

1. Feline

-Babesia
B. canis and B. gibsoni can cross-infect cats. The PCR allows a rapid and sensitive detection.
Sample material: 1.0 ml EDTA whole blood

-Chlamydia
C. psittaci (var. felis) causes predominantly conjunctivitis in cats. PCR allows the specific and sensitive detection.
Sample material: conjunctival- or nasal swabs (Please do not use the chlamydia transport medium!!!)

-Feline Corona Virus (FCoV)
as a possible pathogen for feline infectious peritonitis. The virus is shed mainly in faeces. Healthy, asymptotic virus-carriers can be identified.
Sample material: 1.0 ml EDTA whole blood; 0.5 ml serum or ascites, faeces

-Feline Herpes Virus 1 (FHV)/ Feline Calici Virus (FCV)
The specific and sensitive PCR identifies the causative agent of an upper respiratory tract disease. Infected cats can be kept isolated before the infection spreads over.
Sample material: 1.0 ml EDTA whole blood; conjunctival-, nasal- or oropharyngeal swabs

-Feline Panleukopenia (FPV)
Feline panleukopenia is caused by a small, serologically homogeneous parvovirus, which is closely related to CPV. The virus is ubiquitous and all susceptible cats are exposed and infected within the first year of life. PCR allows the specific and sensitive detection of FPV from feline specimens.
Sample material: 1.0 ml EDTA whole blood, faeces (1g), 0.5 ml cerebrospinal fluid

-Haemobartonella felis
Haemobartonellae are mycoplasma bacterias on the surface of erythrocytes of cats and dogs. PCR allows the specific and sensitive detection of Haemobartonella felis and Haemobartonella canis.
Sample material: 1.0 ml EDTA whole blood

2. Canine

-Babesia canis and Babesia gibsoni
Babesiosis is a disease of worldwide significance caused by tick-borne hematozoan organisms of the genus Babesia. B. canis and B. gibsoni are the two species capable of natural infection in the dog. PCR allows a specific and very sensitive detection.
Sample material: 1.0 ml EDTA whole blood

-Borrelia burgdorferi
A rapid diagnosis of the tick-born Lyme disease prevents severe long-term symptoms of this disease.
Sample material: ticks; 1.0 ml EDTA whole blood (only shortly after infection or in case of a cardiomyopathy); 0.5 ml synovial fluid; skin biopsy; 0.5 ml cerebrospinal fluid

-Canine Corona Virus (CCV)
CCV is as well as CPV one of the causative agents of canine viral enteritis.
The PCR test allows a specific and sensitive detection.
Sample material: faeces (1g)

-Canine Distemper Virus
Virus detection by PCR is of great diagnostic value, especially before seroconversion.
Sample material: 1.0 ml EDTA whole blood or 0.5 ml serum up to 4 weeks after infection; 0.5 ml cerebrospinal fluid (CNS form of disease); conjunctival-, nasal- or oropharyngeal swabs
Note that up to 3 weeks after vaccination, the test results might be positive!

-Canine Herpes Virus
The identification of infected bitches by PCR allows rapid quarantine arrangements, preventing infertility, abortion and stillbirths.
Sample material: 1.0 ml EDTA whole blood during viremic phase of infection; genital- or tonsillar swabs; liver- or kidney tissue from dead puppies

-Canine Parvovirus (CPV)
CPV is one of the primary pathogens of canine viral enteritis. Infections cause diarrhea and the virus is rapidly passed from dog to dog. The PCR test allows a specific and rapid detection.
Sample material: 1.0 ml EDTA whole blood during viremic phase of infection (day 1-5), faeces (1g)

-Ehrlichia canis/ Ehrlichia phagozytophila
Ehrlichiosis is a tick-borne disease caused by obligate intracellular parasites of the genus Ehrlichia of the family Rickettsiaceae. The type of ehrlichiosis differs depending on the region and type of tick that transmits the disease The E. canis infection is the classic example of motion sickness. PCR allows the specific and sensitive detection of E. canis and E. phagozytophila.
Sample material: 1.0 ml EDTA whole blood

-Haemobartonella canis
Haemobartonellae are mycoplasma bacterias on the surface of erythrocytes of cats and dogs. PCR allows the specific and sensitive detection of Haemobartonella felis and Haemobartonella canis.
Sample material: 1.0 ml EDTA whole blood

-Leishmania
The detection of Leishmania out of bone marrow- or lymph node aspirate by PCR is the only appropriate control of latent carrier state and therapy control.
Sample material: Bone marrow- or lymph node aspirate; skin biopsy
Whole blood often leads to false negative results!

3. Avian

-Psittacine Beak and Feather Disease (PBFD)
The BFD-virus causes disturbances in the development of feathers, immunosuppression and favours secondary infections. Virus positive asymptomatic psittacine birds can be identified by PCR.
Sample material: 0.2 ml EDTA whole blood or pulpa-containing quills

-Avian Polyoma Virus
Infected adult psittacine birds suffer from septicaemia and hepatitis, nestlings might die. The rapid, sensitive and specific PCR is of great diagnostic value.
Sample material: 0.2 ml EDTA whole blood or pulpa-containing quills

-Chlamydia psittaci
is a zoonotic pathogen causing conjunctivitis and infections of the respiratory tract in humans.
The infection often takes place through inhalation of dried faeces from parrots and psittacine birds.
The PCR differentiates between C. psittaci, C pneumoniae and C. trachomatis.
Sample material: cloacal swabs or faeces

4. Equine

-Equine Herpes Virus 1+4
In case of respiratory disease or abortion, PCR can differ between the two types of viruses and thereby contributes to a definite diagnosis.
Sample material: 0,5 ml EDTA whole blood, nasal- or genital swabs, abortion material

-Borrelia burgdorferi
Similar to the situation in dogs, B. burgdorferi causes Lyme disease in horses.
Sample material: ticks; 1.0 ml EDTA whole blood (only shortly after infection or in case of a cardiomyopathy); 0.5 ml synovial fluid, skin biopsy, 0.5 ml cerebrospinal fluid

5. Porcine

-Brachyspira
Bacteria of Brachyspira genus are involved in different digestive diseases of swine. Brachyspira hyodysenteriae (serpulina) is the etiological agent of swine dysentery, a mucohemorrhagic diarrheal disease. Brachyspira species are difficult to cultivate and their identifications are time consuming. So, a PCR test allows a fast and sensitive detection and differentiation.
Sample material: faeces (1g)

-Salmonella
Salmonella are ubiquitous pathogens that infect a wide variety of mammals, birds and reptiles. Salmonellae from animals have important public health implications because they are capable of causing mild to severe gastroenteritis in humans. The PCR test allows a specific and sensitive detection
Sample material: faeces (1g)

-Porcine respiratory reproductive syndrome virus (PRRSV)
PRRSV is the major cause of reproductive disorders and pneumonia in swine. The PCR assay is able to differentiate between US- and EU-strains.
Sample material: 0,5 ml EDTA whole blood or serum, tissue samples (lung, liver, kidney)

-Porcine Circovirus (PCV)
PCV has been isolated from the tissues of pigs affected with „postweaning multisystemic wasting syndrome" (PMWS). PMWS is characterised clinically by wasting, dyspnea, enlarged lymph nodes, and also less frequently diarrhoea, pallor and jaundice.
Sample material: Tissue samples (lung, liver, tonsils, spleen, lymph nodes, kidney and pancreas) or serum (0,5 ml)

-Chlamydia
Chlamydia cause encephalitis, conjunctivitis, enteritis, pneumonia, polyarthritis and reproductive diseases. Pigs are infected by three species of Chlamydia, namely Chlamydia suis, Chlamydophila pecorum and Chlamydophila abortus. PCR allows the specific and sensitive detection of Chlamydiaceae from porcine specimens.
Sample material: Tissue samples (lung or ileum) in case of respiratory disease and endocervical swabs in case of reproductive disorders.

-Porcine Parvovirus (PPV)
Porcine parvovirus is the causative agent of SMEDI, that is associated with reproductive losses in swine world-wide. The PCR test allows a specific and sensitive detection of the virus.
Sample material: Tissue samples (lung, liver, kidney)

-Lawsonia intracellularis
Proliverative enteropathy (PE), caused by the obligate intracellular bacterium Lawsonia intracellularis is a world widespread disease. Clinical symptoms are watery diarrhoea, loss of appetite, weight loss, reduced feed efficiency and anaemia. PCR detection of L. intracellularis is the only test allowing the detection of bacteria on live pig.
Sample material: faeces (1g)

-**Mycoplasma hyopneumoniae**
is the primary agent of enzootic porcine pneumonia (EPP), one of the most important direct or indirect causes of respiratory infectious diseases. The disease has a world-wide distribution and causes considerable economic losses in swine production due to reduced growth rate and feed conversion efficency. The PCR test allows a specific and rapid detection.
Sample material: Tissue samples (lung)

-Actinobacillus pleuropneumoniae (APP)
A. pleuropneumoniae is the etiological agent of porcine haemorrhagic pleuropneumonia, or actinobacillosis. This disease is the cause of economic losses in a large number of industrial farms. This qualitative PCR test enables the detection of A. pleuropneumoniae and the typing of its constituent strains into 4 groups.
Sample material: Tissue samples (lung, tonsils), nasal swabs

Price for all PCR tests: for diagnosis of pathogens: Euro 23,00, PBFD 25,60€ (plus VAT)