

HELP & ADVICE

Below, you can find an overview of some of the genetic tests in our portfolio:

→ Achromatopsia (day blindness) – dog

→ Bardet-Biedl syndrome (BBS) – dog

→ Canine multi-focal retinopathy (CMR) – dog

→ Collie eye anomaly (CEA)* – dog

→ Cone degeneration (CD) – dog

→ Congenital stationary night blindness (CSNB) – dog

→ Dry eye curly coat syndrome (CCS) – dog

→ Glaucoma and goniodysgenesis (GG) – dog

→ Hereditary cataract (HSF4) – dog

→ Macular corneal dystrophy (MCD) – dog

→ Microphthalmia (RBP4) – dog

→ Ocular squamous cell carcinoma (SCC) – horse

→ Primary lens luxation (PLL) – dog

→ Primary open angle glaucoma (POAG) – dog

→ Progressive retinal atrophy (PRA – various mutations) – dog

→ Progressive retinal atrophy (PRA – various mutations) – cat

→ Retinal dysplasia (OSD)* – dog

→ Stargardt disease (STGD, retinal degeneration) – dog

* partner laboratory

Lab profile

Name: LABOKLIN GmbH & Co. KG
Office: Bad Kissingen
Founded: 1989
Type: Laboratory for clinical diagnostics
Qualifications: One of the leading laboratories in Europe
Operating in: Europe, Asia, Arabian Peninsula
Team: Over one hundred specialists and veterinarians
Specialty: Research projects at the federal level

Handed out directly from your vet



(stamp)

Service

This info folder and other useful information is provided [on our website www.laboklin.com](http://www.laboklin.com). Under the heading "Vetinfo – Folder Help & Advice" you can read and download this information.

LABOKLIN

D

Tel.
Fax
E-Mail

Steubenstr. 4
97688 Bad Kissingen
Germany
+49 971 7 20 20
+49 971 6 85 46
info@laboklin.com
www.laboklin.com



LABOKLIN Headquarters Bad Kissingen



As of: November 2022, Picture credits: Laboklin, envatoelements, Adobe Stock

LABOKLIN

ANALYSES FOR EYE DISEASES



HELP & ADVICE

The modern information series provided by your vet and LABOKLIN

Infectious diseases

Feline herpesvirus (FHV) is often the cause of conjunctivitis and ceratitis in cats. Treatment is difficult. Common to all herpesviruses is lifelong latency or persistence in the host organism; stress plays a key role in reactivation of the virus. Feline calicivirus (FCV), FHV, chlamydia and Mycoplasma felis are typical agents contributing to upper respiratory diseases, but can also cause conjunctivitis. Frequently, all four pathogens may be present at once, further complicating treatment. Other bacterial infections must be considered as well.

In dogs, the most common cause of conjunctivitis is an infection with bacteria or canine herpesvirus (CHV) and canine distemper virus (CDV).

Molecular biology

For PCR tests smears of the eye without transport medium

(dry swabs) are required. It is important to collect material containing cells, therefore the sampling should not be performed too tentatively.

The detection of FHV, FCV, chlamydia, Mycoplasma felis, Bordetella bronchiseptica, CHV, CDV, canine adenovirus (CAV), influenza A virus, mycoplasma and canine parainfluenzavirus (CPIV) by PCR are available as single tests. In addition we offer several PCR profiles for the diagnosis of infectious respiratory and ocular diseases:

→ Eye - cat:

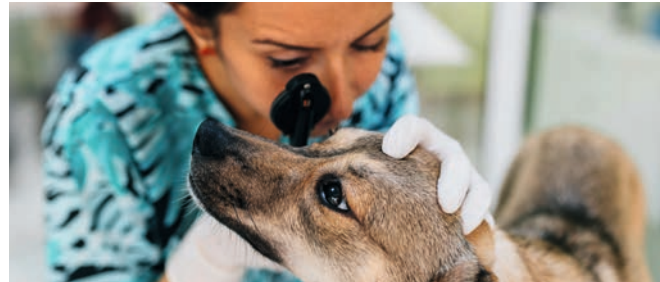
FHV, chlamydia, Mycoplasma felis

→ Respiratory I - cat:

FHV, FCV, chlamydia, Mycoplasma felis, Bordetella bronchiseptica

→ Respiratory II - cat:

FHV, FCV, chlamydia, Mycoplasma felis



→ Respiratory III - cat:

FHV, FCV, chlamydia

→ Respiratory IV - cat:

FHV, FCV

→ Eye - dog:

CHV, chlamydia, mycoplasma

→ Respiratory I - dog:

CHV, CAV-2, CPIV, CRCoV, influenza A virus, distemper virus, Bord. bronchiseptica, mycoplasma

→ Respiratory II - dog:

CAV-2, CPIV, CRCoV, Bord. bronchiseptica, mycoplasma

→ Respiratory III - dog:

CPIV, CRCoV, mycoplasma

Bacteriology

A swab with transport medium should be submitted for cultural examination. If bacterial growth is detected in culture, differentiation of bacteria is performed. If relevant pathogens are detected, we automatically perform an antibiogram to optimise the treatment.

Mycology

Fungal infections should also be considered in case of eye inflammations that are resistant

to treatment. For the cultural detection of moulds or yeasts, a swab with medium is required.

Parasitology

In recent years, dogs with chronic conjunctivitis caused by Thelazia lacrimalis have been observed repeatedly. The adult worms are typically detected between eyeball and eyelid. It has not been clarified yet if these cases were autochthonous or "souvenirs", thus resulting from travelling. In order to determine the species, the worm, ideally formalin-fixed, can be submitted.

Cytology

Cytological examinations of the eye are often performed in conjunction with further tests. When submitting smears it is important to add precise information concerning localisation and clinical picture/suspected diagnosis. Cytologic evaluation is suitable for the detection of neoplastic cells and the determination of their dignity, as well as for the classification of inflammation. Direct detection of pathogens can also be attempted, especially in case of intracellular pathogens or

inclusion bodies. But even if the pathogen can't be detected directly, the type of inflammation may indicate the aetiology. Thereby, the clinical course and the resulting probabilities need to be taken into account. Lymphoplasmacytic inflammation, for example, can be seen in hypersensitivity reactions as well as in chronic infections.

Histopathology

Ocular histology is often used for the evaluation of neoplastic masses. If the lesion is obviously entirely inflammatory, a cytological examination is usually done first to spare the sensitive structures of the eye. Generally, the histologic examination of the inner structures of the eye requires enucleation. This is done in case of irreversible damage with blindness and/or to stop the spreading of a neoplastic process. If enucleation is necessary because of a tumour, the macroscopic evaluation of the eye socket and the eyeball is especially important to assess the completeness of the surgery. Tumour classification is the most frequent indication for the

histological examination of the whole eye following enucleation. Further applications are usually scientific, or the histological examination is done to decide, whether or not the second eye/ the surrounding structures are also affected.

Genetic disorders

In many breeds the genetic causes of certain eye disorders have been found by now. The underlying mutations have mostly been found only in specific breeds, so that the tests are only recommended in the affected breeds. An overview of the available tests is provided on our website.

Note: A genetic test can only detect one specific cause. Therefore, it can't replace the direct examination of the eyes. But, unlike the clinical examination, it can detect hidden carriers of recessive mutations and is thus of critical importance for breeding.

As sample material for genetic testing, 1 ml EDTA whole blood samples or buccal swabs are required.

