

# Submission Form

## Genetic tests for dogs

(Please write legibly and in block letters)

Membership breed club: YES  NO

(If YES - please attach a copy of your membership card)

**LADR** Biofocus

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Fax: +49 [0] 2361 3000 169  
E-mail: biofocus@ladr.de  
Internet: www.biofocus.de

### Owner/Sender

Full name: \_\_\_\_\_ Country: \_\_\_\_\_

Street: \_\_\_\_\_ Phone: \_\_\_\_\_

City: \_\_\_\_\_ Fax: \_\_\_\_\_

State: \_\_\_\_\_ Zip-Code: \_\_\_\_\_ E-mail: \_\_\_\_\_

Date/Signature: \_\_\_\_\_

### Dog information

Name: \_\_\_\_\_ Tattoo-No.: \_\_\_\_\_

Breed: \_\_\_\_\_ Registration-No.: \_\_\_\_\_

Coat color: \_\_\_\_\_ Chip-No.: \_\_\_\_\_

(required for certificates)

Date of birth: \_\_\_\_\_ Gender: female  male

#### Dog's parents:

(only necessary for coat color and coat type tests)

Dam's name: \_\_\_\_\_ Sire's name: \_\_\_\_\_

Breed: \_\_\_\_\_ Breed: \_\_\_\_\_

Coat color: \_\_\_\_\_ Coat color: \_\_\_\_\_

Coat length longhair  shorthair  Coat length longhair  shorthair

(only necessary for coat length test)

(only necessary for coat length test)

### Sample specification

Sampling by: Owner/Sender  Independent authority (e.g. veterinarian or breed warden)

Sample material: buccal swabs (2 samples)  EDTA-blood (approx. 0.5 ml)

Please perform the buccal swab thoroughly and make sure that the dog being tested has not eaten anything for at least 30 minutes.  
Further information about sample collection is available on our homepage.

Sample labeling: \_\_\_\_\_

Date of sampling: \_\_\_\_\_

I hereby confirm that the identity of the above-listed animal was verified and that the samples derive from the above-listed animal. \_\_\_\_\_

Stamp and signature independent authority

Independent authority name in block letters: \_\_\_\_\_

### Submission of results

Test-results will be send to either the Owner/Sender and/or Veterinarian

Test-results to: Owner/Sender  Veterinarian

Invoice to: Owner/Sender  Veterinarian

Certificate:  certificates will be provided for each test separately

Certificate for the first test is free of charge, certificates for two to five tests will cost 7.14 €, more than five certificates will cost 14.28 € (incl. VAT).

Certificates can only be issued if Chip-no. are provided. It is recommended that sampling is carried out by an independent authority (e.g. veterinarian or breed warden) to confirm sample origin.

**Data privacy statement:** The personal data collected in this form is used to perform the commissioned analysis. Based on art. 6 (1b) EU-DSGVO data will only be used for processing and fulfillment of the contract as well as to process the payment transaction.

Biofocus LADR data protection official is Dirk Fox, Secorvo Security Consultant GmbH, Ettlinger Str. 12-14, 76137 Karlsruhe (email: info@secorvo.de). Information about your personal data stored by Biofocus LADR can be inquired in written form by contacting Manuel Ostendorff (email: m.ostendorff@ladr.de).





Owner/Sender: \_\_\_\_\_

Dog's name: \_\_\_\_\_

## Genetic Disorders

Actual prices are listed on our homepage and can be inquired by e-mail.

Please pay attention to our test-packages described at the end of the form.

<b>Ataxia, cerebellar, ATP1B2-related (SDCA2)</b> (Belgian Shepherd Dog)	<input type="checkbox"/>
<b>Ataxia, cerebellar, KCNJ10-related (SDCA1)</b> (Belgian Shepherd Dog)	<input type="checkbox"/>
<b>Bandera's neonatal ataxia</b> (Coton de Tulear)	<input type="checkbox"/>
<b>Bleeding disorder, P2RY12-related</b> (Great Swiss Mountain Dog)	<input type="checkbox"/>
<b>Brachyury / Tail, short</b> (Australian Shepherd, Austrian Pinscher, Australian Stumpy Tail Cattle Dog, Bourbonnais Pointing Dog, Brazilian Terrier, Brittany Spaniel, Croatian Shepherd Dog, Danish-Swedish Farmdog, Jack Russell Terrier, Karelian Bear Dog, Mudi, Polish Lowland Sheepdog, Pyrenean Sheepdog, Savoy Sheepdog, Schipperke, Spanish Water Dog, Swedish Vallhund)	<input type="checkbox"/>
<b>Chondrodysplasia</b> <b>FGF4-Insertion-CFA18</b> (Basset Hound, Cairn Terrier, Welsh Corgi (Cardigan), Dachshund, Dandie Dinmont Terrier, Lancashire Heeler, Norwich Terrier, Welsh Corgi (Pembroke), Petit Basset Griffon Vendéen, Skye Terrier, Swedish Vallhund, Tebetian Spaniel, West Highland White Terrier)	<input type="checkbox"/>
<b>Chondrodysplasia / Intervertebral Disc Disease Type 1 (IVDD)</b> <b>FGF4-Insertion-CFA12</b> (breeds with short and long leg phenotypes)	<input type="checkbox"/>
<b>Chondrodysplasia / Intervertebral Disc Disease Type 1 (IVDD)</b> <b>FGF4-Insertion-CFA12 and CFA18</b> (breeds with short and long leg phenotypes)	 <input type="checkbox"/>
<b>Copper toxicosis / Wilson disease</b> (Bedlington Terrier)	<input type="checkbox"/>
<b>Cystinuria, type I - A</b> (Newfoundland, Landseer)	<input type="checkbox"/>
<b>Cystinuria, type III</b> SLC3A1 and SLC7A9 mutations (American Bulldog, Bulldog, Continental Bulldog, French Bulldog, Leavitt Bulldog, Olde English Bulldog)	<input type="checkbox"/>
<b>Degenerative myelopathy (DM Combi-Test 1)</b> SOD1:c.118G>A mutation <b>Exon 2*</b> / SOD1: c.166+9_c.166+10ins (Hovawart, Collie (rough), Poodle)	 <input type="checkbox"/>
<b>Degenerative myelopathy (DM Combi-Test 2)</b> SOD1:c.52A>T mutation <b>Exon 1</b> / SOD1:c.118G>A mutation <b>Exon 2*</b> (Bernese Mountain Dog, Great Swiss Mountain Dog)	 <input type="checkbox"/>
<b>Degenerative myelopathy (DM)</b> SOD1:c.52A>T mutation <b>Exon 1</b> (Bernese Mountain Dog, Great Swiss Mountain Dog)	<input type="checkbox"/>
<b>Degenerative myelopathy (DM)*</b> SOD1:c.118G>A mutation <b>Exon 2*</b> (all breeds)	<input type="checkbox"/>
<b>Dry Eye Curly Coat + Episodic Falling (Combi)</b> (Cavalier King Charles Spaniel)	 <input type="checkbox"/>
<b>Dry Eye Curly Coat Syndrom</b> (Cavalier King Charles Spaniel)	<input type="checkbox"/>
<b>Duchenne muscular dystrophy (DMD)</b> (Cavalier King Charles Spaniel)	<input type="checkbox"/>
<b>Epidermolytic Hyperkeratosis (EHK)</b> (Norfolk Terrier)	<input type="checkbox"/>
<b>Episodic falling</b> (Cavalier King Charles Spaniel)	<input type="checkbox"/>
<b>Factor VII deficiency</b> (Airedale Terrier, Alaskan Klee Kai, Beagle, Giant Schnauzer, Deerhound)	<input type="checkbox"/>
<b>Fucosidosis, alpha</b> (English Springer Spaniel)	<input type="checkbox"/>
<b>GM1-Gangliosidosis</b> (Alaskan Husky)	<input type="checkbox"/>
<b>Golden Retriever Muscular dystrophy (GRMD)</b> (Golden Retriever)	<input type="checkbox"/>
<b>Haemophilia A</b> X-linked (Havanese)	<input type="checkbox"/>
<b>Hyperkeratosis, palmoplantar (HFH)</b> (Irish Terrier, Kromfohrlander)	<input type="checkbox"/>
<b>Hyperuricosuria (HU)</b> (all breeds)	<input type="checkbox"/>
<b>Ichthyosis (Icht-GR)</b> (Golden Retriever)	<input type="checkbox"/>
<b>Krabbe disease</b> (Cairn Terrier, Irish Red Setter, West Highland White Terrier)	<input type="checkbox"/>
<b>Leukocyte adhesion deficiency, type I (CLAD)</b> (Irish Red Setter, Irish Red and White Setter)	<input type="checkbox"/>
<b>Malignant hyperthermia (MH)</b> (all breeds)	<input type="checkbox"/>
<b>Mucopolysaccharidosis VII (MPS VII)</b> (German Shepherd Dog)	<input type="checkbox"/>
<b>Multidrug resistance 1 (MDR1)</b> (Australian Shepherd, Bobtail (Old English Sheepdog), Border Collie, Collie (rough), Collie (smooth), Longhaired Whippet, Shetland Sheepdog, Silken Windhound, Wäller, White Swiss Shepherd Dog, Toy Australian Shepherd, German Shepherd Dog)	<input type="checkbox"/>
<b>Muscular hypertrophy (bully whippet)</b> (Whippet)	<input type="checkbox"/>
<b>Musladin-Lueke syndrome (MLS)</b> (Beagle)	<input type="checkbox"/>
<b>Myoclonus epilepsy of Lafora*</b> min. 14 days, blood sample required (Basset Hound, Beagle, Dachshund (wire-haired))	<input type="checkbox"/>
<b>Myopathy, centronuclear (HMLR)</b> (Labrador Retriever)	<input type="checkbox"/>
<b>Narcolepsy</b> (Dachshund, Dobermann, Labrador Retriever)	<input type="checkbox"/>
<b>Neonatal cerebellar cortical degeneration (NCCD)</b> (Beagle)	<input type="checkbox"/>
<b>Neonatal encephalopathy with seizures (NEWS)</b> (Poodle)	<input type="checkbox"/>
<b>Nephropathy</b> (English Cocker Spaniel)	<input type="checkbox"/>
<b>Neuroaxonal dystrophy (NAD)</b> (Papillon, Spanish Water Dog)	<input type="checkbox"/>
<b>Neuronal ceroid lipofuscinosis (NCL)</b> (American Bulldog, American Staffordshire Terrier, Australian Cattle Dog, Australien Sheperd, Border Collie, Chinese Crested, Chihuahua, English Setter, Dachshund (long-haired), Tibet Terrier)	<input type="checkbox"/>
<b>Neutropenia, cyclic / Grey Collie Syndrom</b> (Collie (rough), Collie (smooth))	<input type="checkbox"/>
<b>Oculoskeletal dysplasia 2 (OSD2/DRD2)</b> (Samoyed)	<input type="checkbox"/>
<b>Osteogenesis imperfecta (OI)</b> (Dachshund)	<input type="checkbox"/>
<b>Phosphofruktokinase deficiency (PFK) / Glycogen Storage Disease VII (GSD VII)</b> (American Cocker Spaniel, English Springer Spaniel, Whippet, English Cocker Spaniel, German Spaniel)	<input type="checkbox"/>
<b>Primary ciliary dyskinesia (PCD)</b> (Bobtail (Old English Sheepdog))	<input type="checkbox"/>
<b>Primary hyperoxaluria type I (PH1)</b> (Coton de Tulear)	<input type="checkbox"/>
<b>Pug Dog Enzephalitis (PDE) / Necrotizing meningoencephalitis (NME)</b> (Pug)	<input type="checkbox"/>
<b>Pyruvate dehydrogenase deficiency (PDPD)</b> (Cumber-Spaniel, Sussex-Spaniel)	<input type="checkbox"/>

Owner/Sender: \_\_\_\_\_

Dog's name: \_\_\_\_\_

**Pyruvate kinase deficiency**   
(Basenji, Cairn Terrier, West Highland White Terrier)

**Severe combined immunodeficiency disease (SCID) autosomal**   
(Jack Russell Terrier)

**Severe combined immunodeficiency disease (XSCID) X-linked**   
(Basset Hound, Welsh Corgi (Cardigan))

**Trapped Neutrophil Syndrome (TNS)**   
(Border Collie)

**Von Willebrand disease I (vWDI)**   
(Australian Labradoodle, Basset Hound, Bernese Mountain Dog, Coton de Tulear, Dachshund, German Shepherd Dog, Dobermann, Drentsche Partridge Dog, Stabijhoun, Goldendoodle, Kerry Blue Terrier, Poodle, Manchester Terrier, Papillon, Poodle (Multicolor), Poodle (Toy), Rottweiler, Welsh Corgi (Pembroke), Wolfspitz (Keeshond), Poodle (Miniature), Miniature Schnauzer)

**Von Willebrand disease II (vWDII)**   
(German Pointing Dog (short-haired), German Pointing Dog (wire-haired))

**Von Willebrand disease III (vWDIII)**   
(Scottish Terrier, Shetland Sheepdog)  
*\*partner laboratory*

## Eye Disorders

**Achromatopsia (cone degeneration (CD), hemeralopia)**   
(German Pointing Dog (short-haired))

**Autosomal dominant progressive retinal atrophy (ADPRA)**   
(Mastiff, Bullmastiff)

**Collie eye anomaly (CEA)**   
(Australian Shepherd, Border Collie, Boykin Spaniel, Lancashire heeler, Longhaired Whippet, Collie (rough), Shetland Sheepdog, Silken Windhound, Collie (smooth))

**Cone rod dystrophy 1 (crd1)**   
(American Staffordshire Terrier)

**Cone rod dystrophy 2 (crd2)**   
(American Pitt Bull Terrier)

**Cone rod dystrophy 3 (crd3)\*\***   
(Irish Glen of Imaal Terrier)

**Cone rod dystrophy 4 (crd4 / cord1)**   
(Bolonka Zwetna, Dachshund, English Springer Spaniel)

**Crd - Cone rod dystrophy**   
(Dachshund (wire-haired))

**Generalized progressive retinal atrophy (gPRA)\*\*\***   
*Schapendoes package 1*  
*Generalized progressive retinal atrophy (gPRA), DNA-profile, certificate, blood storage.*

**Generalized progressive retinal atrophy (gPRA)\*\*\***   
*Schapendoes package 2*  
*Generalized progressive retinal atrophy (gPRA), certificate, blood storage.*

**Golden Retriever PRA 1 (GR-PRA1)**   
(Golden Retriever)

**Golden Retriever PRA 2 (GR-PRA2)**   
(Golden Retriever)

**Leber congenital amaurosis / Congenital stationary night blindness (CSNB)**   
(Briard)

**Lens luxation (PLL)**   
(American Eskimo Dog, American Hairless Terrier, Australian Cattle Dog, Chinese Crested Dog, Chinese Foo Dog, Fox Terrier, Jack Russell Terrier, German Hunting Dog, Lakeland Terrier, Lancashire Heeler, Lucas Terrier, Miniature Bull Terrier, Pug, Norfolk Terrier, Norwich Terrier, Parson Russell Terrier, Patterdale Terrier, Rat Terrier, Sealyham Terrier, Teddy Roosevelt Terrier, Tenfterfield Terrier, Tibetan Terrier, Fox Terrier (Toy), Italiano Volpino, Welsh Terrier, Westfalen Terrier, Yorkshire Terrier)

**Multifocal retinopathy 1 (CMR1)**   
(American Bulldog, Australian Shepherd, Boerboel, Bullmastiff, Dogue de Bordeaux, Bulldog, Mastiff, French Bulldog, Pyrenean Mountain Dog, Italian Cane Corso, Dogo Canario)

**Multifocal retinopathy 2 (CMR2)**   
(Coton de Tulear)

**Primary hereditary cataract, early onset (HK/HSF4)**   
(Australian Shepherd, Miniature American Shepherd, Miniature Australian Shepherd)

**Primary hereditary cataract, juvenile (JHK/HSF4)**   
(Boston Terrier, French Bulldog, Staffordshire Bull Terrier)

**Progressive retinal atrophy (PRA1)**   
(Papillon, Phalene)

**Progressive retinal atrophy, CNGA1-related**   
(Shetland Sheepdog)

**Progressive retinal atrophy, type 1 (XLPRA1)**   
X-linked  
(Samoyed, Siberian Huskie, Weimaraner)

**Progressive retinal atrophy, type 2 (XLPRA2)**   
X-linked  
(Mongrel)

**Progressive retinal atrophy, type 3 (PRA3)**   
(Tibetan Terrier, Tibetan Spaniel)

**Progressive rod-cone degeneration (prcd-PRA)**   
(American Cocker Spaniel, Australian Cattle Dog, Australian Shepherd, Australian Stumpy Tail Cattle Dog, Bolonka Zwetna, Chesapeake Bay Retriever, Chinese Crested Dog, Chihuahua, English Cocker Spaniel, Entlebuch Cattle Dog, Finnish Lapphund, Golden Retriever, Karelian Bear Dog, Kuvasz, Labrador Retriever, Lapponian Herder, Poodle (Miniature), Norwegian Elkhound (grey), Norwegian Elkhound (black), Nova Scotia Duck Tolling Retriever, Portugese Water Dog, Spanish Water Dog, Swedish Lapphund, Poodle (Toy), Yorkshire Terrier)

**Rod-cone dysplasia 1 (rcd1-PRA)**   
(Irish Red Setter, Irish Red and White Setter)

**Rod-cone dysplasia 1a (rcd1a-PRA)**   
(Sloughi)

**Rod-cone dysplasia 3 (rcd3-PRA)**   
(Welsh Corgi (Cardigan))

**Rod-cone dysplasia 4 (rcd4-PRA)**   
(Gordon Setter, Irish Red Setter, Tibetan Terrier, Poodle)

**\*\*With the owner's signature it is agreed that the crd3-results of all Glen of Imaal Terrier may be given to *The Kennel Club***

**\*\*\*With the owner's signature it is agreed that the gPRA-results of all Schapendoes may be given to the *International Schapendoes Federation***

Owner/Sender: \_\_\_\_\_

Dog's name: \_\_\_\_\_

## Coat Colors

### A-Locus: ay, aw, at, a-alleles

Sable-fawn, wild type, wolf sable, black-and-tan, saddle-tan, recessive black  
(all breeds)

### B-Locus:

Brown, chocolate  
(all breeds)

### D-Locus:

Dilution  
(all breeds)

### E-Locus: EM-allele

Melanistic mask  
(all breeds)

### E-Locus:

Yellow, lemon, red, cream, apricot  
(all breeds)

### H-Locus:

Coat color harlequin  
(Great Dane)

### K-Locus: KB, ky-alleles, kbr is not tested

Dominant black  
(all breeds)

### M-Locus: m, M, Mc, Ma, Mh-alleles

Coat color merle  
(all breeds)

## Coat Type

### Curly coat

(Airedale Terrier, American Water Spaniel, Bichon Frise, Border Collie, Boykin Spaniel, Chesapeake Bay Retriever, Chihuahua, Dachshund, Havanese, Kerry Blue Terrier, Kuvasz, Leonberger, Maltese, Pharaoh Hound, Portuguese Water Dog, Soft Coated Wheaten Terrier, Welsh Terrier, Wire Fox Terrier)

### Furnishings / Improper coat

(Brussels Griffon, Chinese Crested, Dachshund, German Wirehaired Pointer, Havana Silk Dog, Havanese, Jack Russell Terrier, Portuguese Water Dog, Soft-Coated Wheaten Terrier)

### Hair length

FGF5: c.284G>T; p.Cys95Phe mutation  
(all breeds)

## Test-packages

Our test-packages allow cost-effective selection of multiple tests for genetic disorders, coat colors and coat types within one package. Per animal you can select up to 10 tests and each additional test ordered for the same animal increases discount.

The advantage our test package has, is, that only meaningful tests are performed for a particular animal. You as the customer select the tests needed for your specific animal. This avoids, in comparison to test-packages with fixed tests, screenings for mutations that are not validated for the breed or are meaningless and could have unfavorable effects on breeding decisions.

Caution! Combi-tests, DNA-profiles and tests performed by our partner laboratories cannot be selected within a test-package. If you order two and more genetic tests in addition to a Combi-test for the same animal, selecting the parameters of the Combi-test as single tests will result in a higher discount.

## DNA-profile (ISAG)

DNA-profile

Certificate DNA-profile

- Each certificate (DNA-profile) will cost 7.14 € (incl. VAT).
- Certificates can only be issued if Chip-no. are provided.
- It is recommended that sampling is carried out by an independent authority (e.g. veterinarian or breed warden) to confirm sample origin.
- Certificates will contain the marker-information (ISAG –standard) and can be used for identification and parentage verification.
- The DNA-profile is stored for at least 10 years.

## Parentage verification

- please use the parentage verification submission form –