

Request for Diagnostic Testing Pig / Swine



Testing laboratory accredited by the DAkkS according to
DIN EN ISO/IEC 17025.



Deutsche
Akkreditierungsstelle
D-PL-18303-02-00

To:

IVD GmbH

Innovative Veterinary Diagnostic Laboratory
Albert-Einstein-Str. 5 30926 Seelze-Letter **GERMANY**

Phone: + 49 (0)511-22 00 29-0 **Fax:** -99

E-Mail: service@ivd-gmbh.de <https://www.ivd-gmbh.de/en>

Veterinarian / Sender:	Address of animal owner:	Other / Location of the animals:
Name	Name	Name
Street	Street	Street
City / Postal code	City / Postal code	City / Postal code
Country	Country	Country
Phone	Phone	Phone
E-Mail:	E-Mail:	E-Mail:
Vet-ID-No.: (for Salmonella monitoring Qualiproof® by QS)	VVVO-No.: (for Salmonella monitoring Qualiproof® by QS)	VVVO-No.: (if different)
Results to:		Invoice <u>only</u> to:
☐ Veterinarian ☐ Animal owner ☐ Others		☐ Veterinarian / Sender VAT Reg. No.:

Sampling date:				
Type of operation: breeding: ☐ sows ☐ boars ☐ multiplier ☐ production of gilts ☐ production of boars mast: ☐ farrowing operation ☐ nursery ☐ finishing operation ☐ closed system				
Herd size:	number of ☐ sows / ☐ boars:	number of piglets:	number of fatteners:	total number of animals:
Symptoms: ☐ no symptoms (health check) ☐ respiratory ☐ enteric ☐ reproductive ☐ dermal ☐ neurological ☐ other:				
Clinical history:				
Animals treated:	☐ no ☐ yes	For how long / last on:	with:	
Animals vaccinated against:	☐ no ☐ yes	last vaccination on:	vaccine:	
	☐ no ☐ yes	last vaccination on:	vaccine:	
	☐ no ☐ yes	last vaccination on:	vaccine:	

Location and date	Signature of veterinarian / sender
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The current price list is available on request. All services are subject to our General Terms and Conditions of Sale, which can be reviewed at <https://www.ivd-gmbh.de/en/home/>
Our privacy policy can be found at <https://www.ivd-gmbh.de/datenschutz>

Sample No.	animal ID / bar code	material *	sex / age **	Sample No.	animal ID / bar code	material *	sex / age **
1				26			
2				27			
3				28			
4				29			
5				30			
6				31			
7				32			
8				33			
9				34			
10				35			
11				36			
12				37			
13				38			
14				39			
15				40			
16				41			
17				42			
18				43			
19				44			
20				45			
21				46			
22				47			
23				48			
24				49			
25				50			

* blood (serum, plasma), BALF, organs, urine, feces, etc.

** sow (**s**, **gilt**); boar (**b**); piglet (**p**); suckling piglet (**sp**), weaning piglet (**wp**), growing pig (**gp**); fattening pig (**f**)

Tests requested:

Serological tests for specific agents (Detection of antibodies)



- No. ☐ *Actinobacillus pleuropneumoniae* (App)
ApxIV ELISA (standard)
- No. ☐ App LPS Mix ELISA
- App serotyping /
Single App serotypes / groups:**
- No. ☐ App ELISA virulent plus screening:
highly virulent serotypes 1/9/11, 5a/b
& 2 (dominant in EU)
- No. ☐ App ELISA full screening:
all 12 serotypes
- No. ☐ App ELISA serotypes 1/9/11
- No. ☐ App ELISA serotype 2
- No. ☐ App ELISA serotypes 3/6/8
- No. ☐ App ELISA serotypes 4/7
- No. ☐ App ELISA serotypes 5a/b
- No. ☐ App ELISA serotype 10
- No. ☐ App ELISA serotype 12
- No. ☐ *Erysipelothrix rhusiopathiae* ("Erysipelas")
ELISA
- No. ☐ *Glaesserella (Haemophilus) parasuis*
ELISA
- No. ☐ Influenza A Virus (IAV) ELISA
(standard)
- No. ☐ Influenza A Virus (IAV) OF ELISA
for oral fluids only
- No. ☐ Influenza A Virus (IAV) or Swine
Influenza A Virus (SIV) HI
(H1N1, H1N2, H3N2, pH1N1 & pH1N2)
(recommended for vaccinated sows, **no EDTA!**)
- No. ☐ *Lawsonia intracellularis* ELISA
- No. ☐ *Leptospira* (pathogenic serovars) MAT
- No. ☐ *Mesomycoplasma hyopneumoniae* ELISA
- No. ☐ *Mesomycoplasma hyorhinis* ELISA
- No. ☐ Porcine Circovirus 2 (PCV2)
IgM/IgG ELISA (standard)
- No. ☐ PCV2 ELISA (alternative)
- No. ☐ Porcine Parvovirus (PPV) ELISA
- No. ☐ Porcine Reproductive and Respiratory
Syndrome Virus (PRRSV) ELISA
(standard)
- No. ☐ *Salmonella* ELISA
- No. ☐ Export into Qualiproof® data base (QS)
- No. ☐ *Sarcoptes scabiei* var. *suis* ("Scabies")
ELISA
- No. ☐ Transmissible Gastroenteritis Virus/
Porcine Respiratory Coronavirus
(TGEV/PRCV) ELISA

For further serological examinations only, e.g. concerning
export examinations, not for exclusion of registered
diseases

- No. ☐ AKV (Virus of Aujeszky's Disease or
Pseudorabies also PRV) ELISA
- No. ☐ ASFV (Virus of African Swine Fever) ELISA
- No. ☐ *Brucella* RBT (no EDTA!)
- No. ☐ CSFV (Virus of Classical or European Swine
Fever) ELISA
- No. ☐ SVDV (Virus of Swine Vesicular Disease)
ELISA

Further examinations and services on request

Serological Screenings

- No. ☐ **Respiratory screening "Ahlem":**
App, *M. hyopneu.*, PRRSV,
IAV: ELISA/ ☐ HI
- No. ☐ **Respiratory screening "Glässer":**
App, Gps (*Hps*), PRRSV,
IAV: ELISA/ ☐ HI
- No. ☐ **Reproductive tract screening
"Ery+Parvo":**
PRRSV, PPV, *Leptospira*, Erysipelas
- No. ☐ **Reproductive tract screening "Melle":**
PCV2 (IgM/IgG), PRRSV, *Leptospira*,
IAV: ELISA/ ☐ HI
- No. ☐ **Screening "Sow Vaccination":**
PCV2 (IgG titer), PRRSV, PPV,
IAV HI
recommended: from 3 weeks post vacc.
- No. ☐ **Health Check "Swine":**
App, *M. hyopneu.*, Erysipelas, *Leptospira*,
PRRSV, PPV,
IAV: ELISA/ ☐ HI
- No. ☐ **Screening "Outdoor -Pigs" - Blood:**
Erysipelas, *Leptospira*,
PRRSV, IAV (ELISA)

Important!

The material best suited for all serological examinations is **serum or blood without anticoagulants**.
Furthermore, in selected cases detection of antibodies is also possible
in bodily fluids, especially oral fluids.
Please call us (+49 511 220029-0) or see our website <https://www.ivd-gmbh.de/en/home/> for more information.

Tests requested:



Detection by PCR

Please specify if a pool of (up to 5) individual samples is to be tested: e.g. pool 1-4, 6-10 or 1+2+11+12+13, etc.

Please indicate if it is already a pooled sample!

- No. ☐ **A. pleuropneumoniae** (App)
- No. ☐ **Brachyspira hyodysenteriae**
- No. ☐ **Brachyspira pilosicoli**
- No. ☐ **Brachyspira spec.**,
B. pilosicoli, *B. hampsonii*, *B. intermedia*, *B. innocens*, *B. suanatina* and *B. murdochii*
- No. ☐ **Brachyspiren** with differentiation of all species above incl. **Brachyspira hyodysenteriae**
- No. ☐ **Campylobacter spec.**, *C. coli* and *C. jejuni*
- No. ☐ **Chlamydia**
- No. ☐ **Clostridium difficile**
(genes coding for toxin B & binary toxin B)
- No. ☐ **Clostridium perfringens**
(detection of types A and C)
- No. ☐ **Cystoisospora suis**
- No. ☐ **Coronavirus** (TGEV + PEDV)
- No. ☐ **Escherichia coli**
(virulence associated factor genes)
- No. ☐ **E. coli**
(only edema disease)
- No. ☐ **Glaesserella (Haemophilus) parasuis** + potential virulence marker
- No. ☐ **Influenza-A-Virus** (IAV)
- No. ☐ **only subsequent to positive swIAV PCR with Ct value ≤ 30**
Swine Influenza Virus (swIAV) Subtyping PCR
- No. ☐ Nucleotide sequence analysis of an **Influenza A Virus** PCR product (HA-gene) incl. alignment
- No. ☐ **Lawsonia intracellularis**
- No. ☐ **Lawsonia intracellularis** quantitative PCR
(Only testing of individual samples is useful!)
- No. ☐ **Leptospira** (Differentiation of pathogenic Leptospira subclades P1 and P2)
- No. ☐ **Mesomycoplasma hyopneumoniae**
- No. ☐ **Mesomycoplasma hyorhinis**
- No. ☐ **Metamycoplasma hyosynoviae**
- No. ☐ **Eperythrozoon (Mycoplasma) suis**
("Eperythrozoonosis")
- No. ☐ **Pasteurella multocida** Toxin A
- No. ☐ **PCV2/3**
- No. ☐ **PCV2** quantitative PCR
(Only testing of individual samples is useful!)
- No. ☐ Nucleotide sequence analysis of a **PCV2** PCR product (orf2) incl. alignment
- No. ☐ **PPV**
- No. ☐ Nucleotide sequence analysis of a **PPV1** PCR product (VP2) incl. alignment

- No. ☐ **PRRSV-1+2** (EU/NA)
- No. ☐ Nucleotide sequence analysis of a **PRRSV** PCR product (ORF5 or ORF7) incl. alignment
- No. ☐ PRRSV-1 (EU) ☐ PRRSV-2 (NA)
- No. ☐ Additional alignment to further PRRSV sequences:
- No. ☐ Nucleotide sequence analysis of a **PRRSV** PCR **genomic region (ORF2 to ORF7)** incl. alignment
- No. ☐ PRRSV-1 (EU) ☐ PRRSV-2 (NA)
- No. ☐ **Rotavirus** group A / C
- No. ☐ **Salmonella** spec., Serovar Choleraesuis and Typhimurium
- No. ☐ **Streptococcus suis**

Important! If swabs are used for PCR, they have to be **dry and free of medium**.

PCR-Screenings

(combination of single PCRs)

- No. ☐ **PCR "Respiration":**
App, *M. hyopneumoniae*, swIAV, PRRSV
- No. ☐ **PCR "Respiration plus":**
App, *M. hyopneumoniae*, swIAV, PCV2/3, PRRSV
- No. ☐ **PCR "Bakum":**
M. hyopneumoniae, swIAV, PCV2/3, PRRSV
- No. ☐ **PCR "Dessau":**
App, *M. hyopneumoniae*, PCV2/3, PRRSV
- No. ☐ **PCR "Reproduction":**
Chlamydia, *Leptospira*, PCV2/3, PPV, PRRSV
- No. ☐ **PCR "Dysentery/Ileitis":**
Brachyspira hyodysenteriae,
Lawsonia intracellularis
- No. ☐ **PCR "Enteritis":**
Brachyspira hyodysenteriae,
Lawsonia intracellularis, *Salmonella spec.*
- No. ☐ **PCR "Rota-/Coronavirus":**
Rotavirus group A/C, TGEV, PEDV
- No. ☐ **PCR "Suckling piglet diarrhea":**
E. coli incl. typing; *Clostr. perfringens* (typ A&C),
Cystoisospora suis, Rotavirus A/C
- No. ☐ **PCR "Finisher":**
E. coli incl. typing; *Brachyspira hyodysenteriae*,
Lawsonia intracellularis, *Salmonella spec.*
- No. ☐ **PCR "Finisher plus":**
E. coli incl. typing; *Brachyspira hyodysenteriae*,
Lawsonia intracellularis, *Salmonella spec.*,
Rotavirus group A/C, TGEV, PEDV

Important!

There is no pathogen cultivation during the PCR-Screenings, a resistance test and the preservation of isolates are not possible without further cultural examination!!

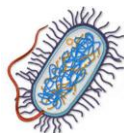
- No. ☐ **PCR "Outdoor Pigs" for Herd Check:**
M. hyopneumoniae, *M. hyorhinis*, swIAV, PCMV, PCV2, PRRSV, PPV, PEDV, Rotavirus group A/C, *Brachyspira hyodysenteriae*, *Lawsonia intracellularis*
- No. ☐ **PCR "Outdoor Pigs" - Feces:**
Brachyspira, with differentiation of species (PCR),
Lawsonia intracellularis (PCR), *Salmonella*
Choleraesuis - Typhimurium (PCR),
Detection of parasites

Tests requested:



Multiplex PCRs

- No. ☐ **Multiplex PCR "Neumünster":**
M. hyopneumoniae, *M. hyorhinis*, IAV, PCMV,
PCV2, PRCV, PRRSV
- No. ☐ **Multiplex PCR "APP/GPS (HPS) + vir":**
App, *Gps* (HPS) + potential virulence marker
- No. ☐ **Multiplex PCR "Serositis":**
Gps (HPS) + potential virulence marker,
M. hyorhinis
- No. ☐ **Multiplex PCR "Arthritis":**
Gps (HPS), *M. hyorhinis*, *M. hyosynoviae*,
Streptococcus suis



Bacteriological testing

- No. ☐ Examination by bacteriological culture in general
- No. ☐ Examination by bacteriological culture only for: (specify bacteriological agents)
-
- No. ☐ Custodial storage of pathogenic isolates

Antimicrobial susceptibility testing of pathogenic isolates

- No. ☐ Agar diffusion test
- No. ☐ Microdilution technique

Typing of bacterial isolates / of conserved nucleic acid from suitable samples

- No. ☐ **NO TYPING required**
- No. ☐ **App** Serotyping & Toxin typing (PCR)
☐ only: **App** cps typing (PCR)
☐ only: **App** Apx toxin typing (PCR)
- No. ☐ **Clostridioides difficile**
Toxin genes A/B and binary toxin genes A/B (PCR)
- No. ☐ **Clostridium perfringens**
Genotyping and toxin production (PCR & Immunoblot)
☐ only PCR
☐ only Immunoblot
- No. ☐ **Escherichia coli** pathotype PCR
Virulence-associated factors incl. "Edema disease"
- No. ☐ **Glaesserella (Haemophilus) parasuis**
Serotyping & Pathotyping (PCR)
☐ only **Gps** (Hps) Serotyping (PCR)
☐ only **vtaA-LS-PCR**
Pathotyping for prognosis of the virulence potential of *Gps* (Hps)
- No. ☐ **mcr-1-Gen** (PCR) (colistin resistance)

- No. ☐ **MRSA Methicillin-Resistant Staphylococcus aureus**
mecA gene and PBP2 expression (PCR & agglutination)
- No. ☐ **Pasteurella multocida Toxin**
Detection of *tox*A gene (PCR)
- No. ☐ **Pasteurella multocida capsular typing**
Capsular type A, B, D, E and F as well as haemorrhagic septicaemic (HS) capsular type B (PCR)
- No. ☐ **Porcine Mykoplasma** Differentiation:
M. flocculare, *M. hyopneumoniae*,
M. hyosynoviae, *M. hyorhinis* (PCR)
- No. ☐ **Salmonella PCR**
Salmonella spec., Serovar Choleraesuis and Typhimurium
- No. ☐ **Salmonella Differentiation Vaccine and Field strain**
(Salmoporc®)
- No. ☐ **Staphylococcus hyicus**
Exfoliative toxin genes A-D and virulence-associated factor (PCR)
- No. ☐ **Streptococcus suis (cps)**
Capsular type (cps 1, 2, 4, 7 or 9) and virulence-associated factors (PCR)
- No. ☐ **Streptococcus suis (IgM protease)**
Classification according to IgM protease groups A, B and C (PCR)
- No. ☐ **16S rRNA typing**
for general species identification

* only PCR

Diagnostic Profiles

- No. ☐ **"Suckling piglet Diarrhoea":**
(only with feces samples, **no swabs!**)
- Rotavirus and Coronavirus (PCR)
 - *E. coli* and *C. perfringens* (culture)
 - Detection of parasites
- ☐ **with typing E. coli**
- ☐ **with typing C. perfringens**
- with susceptibility testing**
- ☐ Agar diffusion test
- ☐ Microdilution technique

microbiological disinfection check

- Nr. ☐ **microbiol. disinfection check**
only total bacterial count
- ☐ **with E. coli, C. perfringens** and mold fungi



Tests requested:

Parasitological testing

Detection of parasite stages in feces:

- No. _____ ☐ Helminth eggs (worm eggs), protozoan oocysts and cysts (feces) incl. Coccidia
- No. _____ ☐ *Cryptosporidium* (feces)
- No. _____ ☐ Liver fluke (*Fasciola*, *Dicrocoelium*) (feces)

Detection of skin parasites:

- No. _____ ☐ Mites (*Sarcoptes* (Scabies), *Demodex* mites (Demodicosis), etc.) (deep skin scrapings)
- No. _____ ☐ Lice (*Haematopinus suis*) (adhesive film copy)

Further testing and services on request:

e.g. examinations for the international swine trade (incl. Classical Swine Fever, Aujeszky's disease, TGE, SVD etc.); provision of characterized, bacterial isolates, etc.

Comment/Miscellaneous:



Tests requested:

Pathological testing

- No. _____ ☐ Necropsy of fetuses
- No. _____ ☐ Histology

Immunohistology

- No. _____ ☐ *Actinobacillus pleuropneumoniae*
- No. _____ ☐ Influenza A Virus (IAV)
- No. _____ ☐ *Lawsonia intracellularis*
- No. _____ ☐ *Mesomycoplasma hyopneumoniae*
- No. _____ ☐ PCV2
- No. _____ ☐ Rotavirus group A

For information about suitable specimen for the detection of various agents visit our website <https://www.ivd-gmbh.de/en/home> or call us (+49 511 220029-0). On our website you will also find a request form for suitable packaging material for samples.