

# Request for Diagnostic Testing Pig / Swine



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



An: **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 <http://www.ivd-gmbh.de>

<b>Veterinarian / Sender:</b> (Please include fax or e-mail for result reports.)		<b>Address of owner:</b> (Please include fax or e-mail for result reports.)		<b>Other:</b> (Please include fax or e-mail for result reports.)	
Name		Name		Name	
Street		Street		Street	
City / Postal code		City / Postal code		City / Postal code	
Country		Country		Country	
Phone		Phone		Phone	
Fax		Fax		Fax	
E-Mail:		E-Mail:		E-Mail:	
<b>Vet-ID-Nr.:</b> (for Salmonella monitoring Qualiproof <sup>®</sup> by QS)		<b>VVVO-Nr.:</b> (for Salmonella monitoring Qualiproof <sup>®</sup> by QS)			
<b>Results to:</b> <input type="checkbox"/> Veterinarian <input type="checkbox"/> by e-mail <input type="checkbox"/> by fax <input type="checkbox"/> Animal owner <input type="checkbox"/> by e-mail <input type="checkbox"/> by fax <input type="checkbox"/> Others <input type="checkbox"/> by e-mail <input type="checkbox"/> by fax			<b>Invoice only to:</b> <input type="checkbox"/> Veterinarian / Sender <input type="checkbox"/> by e-mail <input type="checkbox"/> by fax		

<b>Sampling date:</b>					
<b>Type of operation: breeding:</b> <input type="checkbox"/> sows <input type="checkbox"/> boars <input type="checkbox"/> multiplier <input type="checkbox"/> production of gilts <input type="checkbox"/> production of boars <b>mast:</b> <input type="checkbox"/> farrowing operation <input type="checkbox"/> nursery <input type="checkbox"/> finishing operation <input type="checkbox"/> closed system					
<b>Herd size:</b>		number of <input type="checkbox"/> sows / <input type="checkbox"/> boars:		number of piglets:	
				number of fatteners:	
<b>Symptoms:</b> <input type="checkbox"/> no symptoms (health check) <input type="checkbox"/> respiratory <input type="checkbox"/> enteric <input type="checkbox"/> reproductive <input type="checkbox"/> neurological <input type="checkbox"/> other:					
<b>Clinical history:</b>					
<b>Animals treated:</b>		<input type="checkbox"/> no <input type="checkbox"/> yes		For how long / last on:	
				with:	
<b>Animals vaccinated:</b>		PRRSV <input type="checkbox"/> no <input type="checkbox"/> yes		last vaccination on:	
				vaccine:	
		PCV2 <input type="checkbox"/> no <input type="checkbox"/> yes		last vaccination on:	
				vaccine:	
		<i>M. hyopneumoniae</i> <input type="checkbox"/> no <input type="checkbox"/> yes		last vaccination on:	
				vaccine:	
<b>Other:</b>		<input type="checkbox"/> no <input type="checkbox"/> 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 <http://www.ivd-gmbh.de>

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.  AKV (Virus of Aujeszky's Disease or Pseudorabies also PRV) ELISA
- No.  App (*Actinobacillus pleuropneumoniae*) ApxIV ELISA (standard)
- No.  App LPS Mix ELISA
- 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.  *Brucella* RBT
- No.  *Chlamydia* CFT
- No.  CSFV (Virus of Classical or European Swine Fever) ELISA
- No.  *Erysipelothrix rhusiopathiae* ("Erysipelas") ELISA
- No.  *Hps* (*Haemophilus parasuis*) ELISA
- No.  Influenza A Virus (IAV) ELISA (standard)
- 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.  *Mycoplasma hyopneumoniae* ELISA (standard)
- No.  *M. hyopneumoniae* ELISA (alternative)
- No.  *Mycoplasma hyorhinis* ELISA
- No.  PMT (*Pasteurella multocida* toxin) ELISA
- No.  PCV2 (Porcine Circovirus 2) IgM/IgG ELISA (standard)
- No.  PCV2 ELISA (titration)
- No.  PEDV ELISA
- No.  PPV (Porcine Parvovirus) ELISA
- No.  PRRSV (Porcine Reproductive and Respiratory Syndrome Virus) ELISA (standard)
- No.  PRRSV ELISA (alternative)
- No.  PRRSV OF ELISA **for oral fluids only**

- No.  *Salmonella* ELISA
- Export into Qualiproof® data base (QS)
- No.  *Sarcoptes scabiei* var. *suis* ELISA
- No.  SVDV (Virus of Swine Vesicular Disease) ELISA
- No.  TGEV (Virus of Transmissible Gastroenteritis) ELISA
- No.  *Yersinia* (pathogenic) ELISA

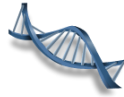
### Serological Screenings

- No.  **Screening for fattening pigs**  
*App*, PMT, PRRSV, *Salmonella*
- No.  **Respiratory screening "Ahlem"**:  
*App*, *M. hyopneu.*, IAV (ELISA/□ HI), PRRSV
- No.  **Respiratory screening "Glässer"**:  
*App*, *Hps*, IAV (ELISA/□ HI), PRRSV
- No.  **Reproductive tract screening "Ery+Parvo"**:  
PRRSV, PPV, *Leptospira*, Erysipelas
- No.  **Reproductive tract screening "Melle"**:  
IAV (ELISA/□ HI), PCV2 (IgM/IgG), PRRSV, *Leptospira*
- No.  **Health Check "Swine"**:  
*App*, *M. hyopneu.*, Erysipelas, *Leptospira*, IAV (ELISA/□ HI), PRRSV, PPV

#### Important!

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

## Tests requested:



### PCR tests for specific agents

Please specify if a **pool** of (up to 5) individual samples is to be tested: e.g. pool 1-4, 5-8 or 1+2+11+12+13, etc.

- No.  *A. pleuropneumoniae* (App)
- No.  *Brachyspira hyodysenteriae*
- No.  *Brachyspira* spec.,  
*B. pilosicoli*, *B. hamptonii* clade I+II,  
*B. innocens*, *B. intermedia*, *B. murdochii*  
and *B. suanatina*
- No.  *Brachyspira* with differentiation of all  
species above incl. *Brachyspira*  
*hyodysenteriae*
- No.  *Campylobacter* sp., *C. coli* and *C. jejuni*
- No.  *Chlamydia*
- No.  *Chlamydia* with differentiation of species
- No.  Coronavirus (TGEV + PEDV)
- No.  *Haemophilus parasuis* + potential  
virulence marker
- No.  Influenza A Virus (IAV)
- SIV (Swine Influenza Virus) Subtyping  
(only subsequent to positive IAV PCR)
- No.  *Lawsonia intracellularis*
- No.  *Lawsonia intracellularis* quantitative PCR  
(Only testing of individual samples is  
useful!)
- No.  *Leptospira* (pathogenic serovars)
- No.  *Mycoplasma hyopneumoniae*
- No.  *Mycoplasma hyorhinis*
- No.  *Mycoplasma hyosynoviae*
- No.  *Mycoplasma suis* ("Eperythrozoonosis")
- No.  *Pasteurella multocida* toxin A
- No.  PCV2
- 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.  PRRSV EU/NA/HP  
(European and North American genotype  
or rather species PRRSV-1 and PRRSV-  
2 as well as "highly pathogenic" PRRSV  
NA variants)
- No.  PRRSV DV  
(PRRSV EU vaccine strain)

- No.  Nucleotide sequence analysis of a PRRSV  
PCR product incl. alignment with the  
reference strain of each genotype  
(Lelystad or VR-2332 = Ingelvac PRRS  
MLV (BIV))  
Alignment with other PRRSV sequences:
- type 1 (EU)  Porcilis PRRS strain DV (MSD/Intervet)
- type 1 (EU)  Unistrain PRRS strain VP-046 bis (Hipra)
- type 1 (EU)  ReproCyc/Ingelvac Flex PRRS EU  
strain 94881 MSV (Boehringer Ingelheim)
- type 1 (EU)  96V198 (Zoetis)
- 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

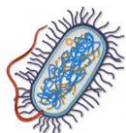
(combination of single PCRs)

- No.  **PCR "Respiration":**  
*App*, *M. hyopneu.*, IAV, PRRSV
- No.  **PCR "Bakum":**  
*M. hyopneu.*, IAV, PCV2, PRRSV
- No.  **PCR "Dessau":**  
*App*, *M. hyopneu.*, PCV2, PRRSV
- No.  **PCR "Dysentery/Ileitis":**  
*Brachyspira hyodysenteriae*, *Lawsonia*  
*intracellularis*
- No.  **PCR "Enteritis":**  
*Brachyspira hyodysenteriae*, *Lawsonia*  
*intracellularis*, *Salmonella* sp.
- No.  **PCR "Reproduction":**  
*Chlamydia*, *Leptospira*, PCV2, PPV,  
PRRSV
- No.  **PCR "Rota-/Coronavirus"**  
Rotavirus group A / C, TGEV, PEDV

#### Multiplex PCRs

- No.  **Multiplex PCR "Neumünster":**  
*M. hyopneu.*, *M. hyorhinis*, IAV, PCMV,  
PCV2, PRCV, PRRSV
- No.  **Multiplex PCR "APPIHPS + vir":**  
*App*, *Hps* + potential virulence marker
- No.  **Multiplex PCR "Serositis":**  
*Hps* + potential virulence marker,  
*M. hyorhinis*
- No.  **Multiplex PCR "Arthritis":**  
*Hps*, *M. hyorhinis*, *M. hyosynoviae*,  
*Streptococcus suis*

## Tests requested:



### Bacteriological testing

- No.  Examination by bacteriological culture in general
- No.  Examination by bacteriological culture only for: (agents)

- No.  Asservation of pathogenic isolates

### Antimicrobial susceptibility testing of pathogenic isolates

- No.  Agar Diffusion Test
- No.  Microdilution technique

### Typing of bacterial isolates

- No.  **App** Apx toxin typing (PCR)
- No.  **App** Serotyping (PCR)
- No.  **Clostridium 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**  
Virulence-associated factors incl. "Edema disease"
- No.  **Haemophilus parasuis** Serotyping (PCR)
- No.  **vtaA-LS-PCR**  
Prognosis of the virulence potential of *Haemophilus parasuis*
- No.  **mcr-1 gene (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.  **Porcine Mycoplasma** Differentiation of:  
*M. flocculare*, *M. hyopneumoniae*,  
*M. hyosynoviae*, *M. hyorhinis* (PCR)
- No.  **Salmonella** Serotyping:  
Serogroups A-E and F-67 (AGG)
- No.  **Staphylococcus hyicus**  
Exfoliative toxin genes A-D and virulence-associated factor (PCR)
- No.  **Streptococcus suis**  
Capsular type (cps 1, 2, 7 or 9) and virulence-associated factors (PCR)
- No.  **16S rRNA typing**  
for identification of any bacterial species

### Comments:



### Parasitological testing

- No.  *Coccidia* (*Eimeria spec.* and *Isospora suis*) detection (feces)
- No.  *Cryptosporidium* detection (feces)
- No.  Examination for worm eggs (feces)
- No.  *Sarcoptes* mites detection (deep skin scraping)

### Pathological testing

- No.  Macroscopic examination
- No.  Histology with a simple report (standard)
- No.  Histology with a detailed report

### Immunohistology

- No.  *Actinobacillus pleuropneumoniae*
- No.  Influenza A Virus (IAV)
- No.  *Lawsonia intracellularis*
- No.  *Leptospira*
- No.  *M. hyopneumoniae*
- No.  PCV2
- No.  PRRSV
- No.  Rotavirus group A

For information about suitable specimens for the detection of various agents see our website <http://www.ivd-gmbh.de> or call us (+49 511 220029-0).

### 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.