

# WOAH Reference Laboratory Reports Activities 2025

This report has been submitted: 30 janvier 2026 10:04

## LABORATORY INFORMATION

<b>*Name of disease (or topic) for which you are a designated WOA Reference Laboratory:</b>	Classical swine fever
<b>*Address of laboratory:</b>	China Institute of Veterinary Drug Control (IVDC)/Center for Veterinary Drug Evaluation (CVDE) Department of Swine Viral Biologics Inspection No.8 Zhongguancun South Street Haidian District Beijing 100081 CHINA (PEOPLES REP. OF)
<b>*Tel:</b>	+86-010 612 55 400
<b>*E-mail address:</b>	wq551@vip.sina.com
<b>Website:</b>	<a href="http://www.ivdc.org.cn/">http://www.ivdc.org.cn/</a>
<b>*Name (including Title) of Head of Laboratory (Responsible Official):</b>	Prof. Weizhong Huang, General Director of IVDC and CVDE
<b>*Name (including Title and Position) of WOA Reference Expert:</b>	Prof. Qin Wang, Designated expert
<b>*Which of the following defines your laboratory? Check all that apply:</b>	Governmental

## TOR1: DIAGNOSTIC METHODS

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.?  
(Not for quality control, proficiency testing or staff training)

Yes

Diagnostic Test	Indicated in WOA Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
<b>Indirect diagnostic tests</b>			
Blocking ELISA Kit to Detect the Antibody against Classical Swine Fever Virus	Yes	2091	0
Fluorescent antibody virus neutralization test(CSFV)	Yes	5	0
<b>Direct diagnostic tests</b>			
Reverse-transcription quantitative polymerase chain reaction (CSFV)	Yes	701	0
Reverse-transcription nest polymerase chain reaction (CSFV)	Yes	5	0
Genetic Typing (CSFV phylogenetic analysis)	Yes	5	0
Virus isolation (CSFV)	Yes	0	0
Fluorescent antibody test (CSFV)	Yes	0	0

## TOR2: REFERENCE MATERIAL

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOA?

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOA Members?

Yes

Type of reagent available	Related diagnostic test	Produced/ provide	Amount supplied nationally (ml, mg)	Amount supplied internationally (ml, mg)	No. of recipient WOA Member Countries	Country of recipients
National reference positive Serum of C-strain vaccine (1ml/Ampoule)	C-strain vaccine test	Produced	361ml	0	1	CHINA (PEOPLE'S REP. OF),
National reference negative serum of CSFV (1ml/Ampoule)	Neutralization test in vitro	Produced	1ml	0	1	CHINA (PEOPLE'S REP. OF),
National reference positive serum of CSFV (1ml/Ampoule)	Neutralization test in vitro	Produced	4ml	0	1	CHINA (PEOPLE'S REP. OF),
National reference negative serum of CSFV	Neutralization test in rabbit	Produced	9ml	0	1	CHINA (PEOPLE'S REP. OF),
National reference positive serum of CSFV(1:(8.5±1.3))	Neutralization test in rabbit	Produced	54ml	0	1	CHINA (PEOPLE'S REP. OF),
National reference negative serum of CSFV	ELISA/NPLA/ AVN for antibody detection, virus Isolation, FAT, IPT for antigen detection	Produced	8ml	0	1	CHINA (PEOPLE'S REP. OF),
National reference positive serum of CSFV (weak 1)	ELISA/NPLA/ AVN for antibody	Produced	7ml	0	1	CHINA (PEOPLE'S REP. OF),
National reference positive serum of CSFV (weak 2)	ELISA/NPLA/ AVN for antibody detection, virus Isolation, FAT, IPT for antigen detection	Produced	7ml	0	1	CHINA (PEOPLE'S REP. OF),
National reference negative swine serum (0.5ml/tube)	ELISA/NPLA/ AVN for antibody detection, virus Isolation, FAT, IPT for antigen detection	Produced	40ml	0	1	CHINA (PEOPLE'S REP. OF),
CSFV E2 monoclonal antibody (1C8) (0.5ml/tube)	ELISA/NPLA/ AVN for antibody detection, virus Isolation, FAT, IPT for antigen detection	Produced	22ml	0	1	CHINA (PEOPLE'S REP. OF),
Indirect immunofluorescence assay(IFA) kit for CSFV (50µl/well, 200 well/kit,)	IFA for CSFV antigen or antibody detection	Produced	140kits	0	1	CHINA (PEOPLE'S REP. OF),
Reference Positive Serum of PRV	Detection for extraneous agents of C-strain vaccine	Produced	232ml	0	1	CHINA (PEOPLE'S REP. OF),
Reference Positive Serum of PCV II	Detection for extraneous agents of C-strain vaccine	Produced	29ml	0	1	CHINA (PEOPLE'S REP. OF),
Reference Positive Serum of PCV II(lyophilized)	Detection for extraneous agents of C-strain vaccine	Produced	25ml	0	1	CHINA (PEOPLE'S REP. OF),
Reference vaccine strain of PRRSV	Detection for extraneous agents of C-strain vaccine	Produced	2ml	0	1	CHINA (PEOPLE'S REP. OF),
Reference Positive Serum of ASFV (lyophilized)	FAVN/NPLA/ELISA	Produced	58ml	0	1	CHINA (PEOPLE'S REP. OF),

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Indirect immunofluorescence assay (IFA) kit for PCV2 (50µl/well, 200 well/kit)	Detection for extraneous agents of swine vaccine	Produced	117 kits	0	1	CHINA (PEOPLE'S REP. OF),
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4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOA Members?

### TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

Yes

7. Did your laboratory validate diagnostic methods according to WOA Standards for the designated pathogen or disease?

Yes

Name of the new test or diagnostic method developed	Description and References (Publication, website, etc.)
Comparison of blocking ELISA and neutralization test for CSFV antibody	Publication. Preparation and Identification of Monoclonal Antibodies against Erns Structural Protein of Classical Swine Fever Virus by Mouse Single B cell. Chinese Journal of Veterinary Medicine. 2025, 61(9) : 18-27

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

9. Did your laboratory validate vaccines according to WOA Standards for the designated pathogen or disease?

### TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOA Members?

No

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOA Member?

Yes

Name of the WOA Member Country receiving a technical consultancy	Purpose	How the advice was provided
SPAIN	Consultation on animal movements to BSL-3 facilities in CSF and ASF contexts	E-mail

### TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOA Members other than the own?

No

13. In exercising your activities, have you identified any regulatory research needs\* relevant for WOA?

No

### TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?

Yes

If the answer is yes, please provide details of the data collected:

The annual reports of the antigen and antibody surveillance and situation of CSFV from Key provinces in pig farms, slaughterhouses and CNAS certified laboratories in mainland China, update to CSFinfo database developed by CSFRL in IVDC.

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?

Yes

If the answer is yes, please provide details of the data collected:

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- 1.The annual surveillance report was submitted to Ministry of Agriculture and Rural Affairs with CSFV epidemiologic data was processed and analysed.
- 2.Peer-reviewed research papers were published in academic journals.
- 3.Organize national CSFV prevention and control training program and present our data in the conference
- 4.Attend academic meetings and give presentations.

16. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category and list the details in the box)

a) Articles published in peer-reviewed journals:

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1. Huang YF, Wu RZ et al. Preparation and Identification of Monoclonal Antibodies against Ems Structural Protein of Classical Swine Fever Virus by Mouse Single B cell. *Chinese Journal of Veterinary Medicine*. 2025, 61(9) :18-27
2. Liu JY, Xia YJ, et al. E2-based mRNA vaccine encapsulated in lipid nanoparticles protects pigs against classical swine fever virus. *J Virol*. 2025 Sep 23;99(9).

b) International conferences:

1

- 1.Current status of CSFV in China. Speaker : Xia YJ. WOAHA Asian Regional workshop on Swine Disease Diagnosis, China, July 15-16th, 2025

c) National conferences:

2

- 1.Application of Chemiluminescence Immunoassay in swine disease diagnosis. The meeting of CSF and PRRS eradication. Speaker: Qin Wang.Chengdu China. 5th September 2025.
- 2.Application of Chemiluminescence Immunoassay in swine disease diagnosis. Training Conference of Chongqing Animal Disease Prevention and Control Center. Speaker : Qin Wang. Chongqing, China. 22th October 2025

d) Other (Provide website address or link to appropriate information):

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- 1.Submitted 2024 annual report of CSF Research Achievements of WOAHA/NCSFRL at IVDC to the Animal Husbandry and Veterinary Bureau of the Ministry of Agriculture and Rural Affairs of China(MARA).
- 2.Submitted 2024 annual surveillance report of CSF in key areas in China to the Animal Husbandry and Veterinary Bureau of MARA.

## TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAHA Members?

Yes

- a) Technical visit : 0
- b) Seminars : 1
- c) Hands-on training courses: 0
- d) Internships (>1 month) 0

Type of technical training provided (a, b, c or d)	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
B	CHINA (PEOPLE'S REP. OF)	40

## TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)

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ABSL-3 CNAS certificates-2027	jpg	ABSL-3 CNAS certificates-2027.jpg
ISO17025 certificates-2030	jpg	ISO17025 certificates-2030.jpg

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Sampling, storage and transportation of CSFV samples	CNAS
Handling CSFV tissue samples	CNAS
CSF viral RNA extraction	CNAS
Isolation of CSFV in cell culture	CNAS
CSFV TCID50 test	CNAS
Fluorescent antibody test for CSFV antigen detection	CNAS
Immunoperoxidase test for CSFV antigen detection	CNAS
Reverse-transcription nest polymerase chain reaction (CSFV)	CNAS
Reverse-transcription quantitative polymerase chain reaction (CSFV)	CNAS
Indirect ELISA Kit to Detect Antibody against Classical Swine Fever	CNAS
Blocking ELISA Kit to Detect the Antibody against Classical Swine Fever Virus	CNAS
Antibody virus neutralization test (rabbit)	CNAS
Florescent antibody virus neutralization test	CNAS
ASFV virus isolation viral isolation in porcine leukocytes and hemadsorption	CNAS

20. Does your laboratory maintain a "biorisk management system" for the pathogen and the disease concerned?

Yes

We have biosafety and biosecurity risk management systems which are in compliance with Chinese and international regulations and continually reviewed and improved through application. In addition, we have established Risk Assessment Report for Classical Swine Fever and Risk Assessment Report for African Swine Fever, which are also reviewed and updated regularly.

## TOR9: SCIENTIFIC MEETINGS

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAHP?

No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAHP?

Yes

Title of event	Date	location	Role (speaker, presenting poster, short communications)	Title of the work presented
WOAH Asian Regional workshop on Swine Disease Diagnosis	2025-07-14	Nanning, China	Speaker	Current status of CSF in China

## TOR10: NETWORK WITH WOAHP REFERENCE LABORATORIES

23. Did your laboratory exchange information with other WOAHP Reference Laboratories designated for the same pathogen or disease?

Yes

24. Are you a member of a network of WOAHP Reference Laboratories designated for the same pathogen?

No

25. Did you organise or participate in inter-laboratory proficiency tests with WOAHP Reference Laboratories designated for the same pathogen during the past 2 years?

Yes

Purpose of the proficiency test:	Role of your Reference Laboratory (organiser/ participant)	No. participating Laboratories	Participating WOAHP Ref. Labs/ organising WOAHP Ref Lab
Participant determining laboratory's capability to conduct diagnostic tests for CSF. My lab is participating CSF inter laboratory proficiency tests 2024-2025 organised by WOAHP/EU Ref Lab for CSF from TiHo Hannover Germany.	participant	1	CSF ref lab in Beijing, CHINA

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26. Did your laboratory collaborate with other WOA Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

No

## TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOA Reference Laboratories for the same pathogen during the past 2 years?

No

*no*

## TOR12: EXPERT CONSULTANTS

28. Did your laboratory place expert consultants at the disposal of WOA?

Yes

Kind of consultancy	Location	Subject (facultative)
Review and advice	China	Review the chapter on classical swine fever (3.09.03) the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals -replies to the Member comments

29. Additional comments regarding your report:

No