

WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted : 28 mai 2024 02:26

Laboratory Information

Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:	Classical swine fever
Address of laboratory:	6-20-1 Josui-Honcho Kodaira Tokyo 187-0022
Tel.:	+81-42 321 1441
E-mail address:	fukai@affrc.go.jp
Website:	https://www.naro.go.jp/laboratory/niah/index.html
Name (including Title) of Head of Laboratory (Responsible Official):	Ken Katsuda, Director
Name (including Title and Position) of WOAH Reference Expert:	Katsuhiko Fukai, D.V.M., Ph.D., Manager, Division of Transboundary Animal Disease Research
Which of the following defines your laboratory? Check all that apply:	Research agency

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 WOAH Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests			
Neutralization test		970	0
ELISA		370	0
Direct diagnostic tests			
Virus isolation		49	0
Genetic typing		229	0

TOR2: REFERENCE MATERIAL

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

No

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

Yes

TYPE OF REAGENT AVAILABLE	RELATED DIAGNOSTIC TEST	PRODUCED/ PROVIDE	AMOUNT SUPPLIED NATIONALLY (ML, MG)	AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)	NO. OF RECIPIENT WOAH MEMBER COUNTRIES	COUNTRY OF RECIPIENTS
	Conventional RT-PCR					

DNA as positive control	for CSFV RNA detection (Vilcek et al., 1994, Arch. Virol., 136, 309– 323.	Produced and provided	50 samples of 1 set	0	1	JAPAN,
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4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAHP Members?

No

TOR3: NEW PROCEDURES

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

Yes

NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
Solution N	Preparation method of blood, highly colored serum, and highly turbid specimens that were previously unsuitable for real-time RT-PCR testing for classical swine fever https://catalog.takara-bio.co.jp/product/basic_info.php?unitid=U100009568

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

No

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

Yes

NAME OF THE NEW VACCINE DEVELOPED	DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)
vGPE-/PAPEV Erns, vGPE-/PhoPeV Erns	https://www.mdpi.com/1999-4915/15/7/1587

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

No

TOR4: DIAGNOSTIC TESTING FACILITIES

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

No

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

Yes

NAME OF THE WOAHP MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY	PURPOSE	HOW THE ADVICE WAS PROVIDED
THAILAND	Methods of evaluating CSF attenuated vaccine efficacy	Face-to-face

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

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

No

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

No

TOR6: EPIZOOLOGICAL DATA

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

No

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

No

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:

2

Huynh LT, Isoda N, Hew LY, Ogino S, Mimura Y, Kobayashi M, Kim T, Nishi T, Fukai K, Hiono T, Sakoda Y. 2023. Generation and efficacy of two chimeric viruses derived from GPE- vaccine strain as classical swine fever vaccine candidates. *Viruses*. 15(7):1587. doi: 10.3390/v15071587.

Fukai K, Nishi T, Masujin K, Yamada M, Ikezawa M. 2023. Quantitative analysis of viremia and viral shedding in pigs infected experimentally with classical swine fever virus isolates obtained from recent outbreaks in Japan. *Vet. Res.* 54(1):81. doi: 10.1186/s13567-023-01215-4.

b) International conferences:

2

Fukai K, Nishi T, Ikezawa M, Kawaguchi R, Morioka K. 2023. Maternal antibody titers for protection against infection and clinical manifestations caused by recent Japanese classical swine fever virus. *The 8th International Symposium on Emerging and Re-Emerging Pig Diseases*. Bangkok, Thailand, June 5 2023, Oral presentation.

Fukai K. 2023. Maternal antibody titers for protection against infection and clinical manifestations caused by recent Japanese classical swine fever virus. *2023 International Symposium for Classical Swine Fever and Other Important Swine Infectious Diseases*. Wuhan, China, November 29 2023, Oral presentation.

c) National conferences:

1

Fukai K. 2023. Maternal antibody titers for protection against infection and clinical manifestations caused by recent Japanese classical swine fever virus. *The 13th Joint Conference of the 103rd conference of the Japan Pig Veterinary Society, the 2023 conference of the Japanese Society for Clinical Research on Porcine Disease, and the 2023 conference of the Japanese Association of Swine Veterinarians*. Tsukuba, Japan, October 13 2023, Oral presentation.

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

0

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 : 0

c) Hands-on training courses: 0

d) Internships (>1 month) 1

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
D	THAILAND	1

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO17025	ISO17025_certificate.pdf	ISO17025_certificate.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
CSFV RT-PCR	Japan Accreditation Board

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

Yes

Our high-containment facility is compliant with the containment level for group 4 pathogens described in the WOAHP Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2023.

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 (mm/yy)	Location	Role (speaker, presenting poster, short communications)	Title of the work presented
The 8th International Symposium on Emerging and Re-Emerging Pig Diseases	2023-06-05	Bangkok, Thailand	Speaker	Maternal antibody titers for protection against infection and clinical manifestations caused by recent Japanese classical swine fever virus
2023 International Symposium for Classical Swine Fever and Other Important Swine Infectious Diseases	2023-11-29	Wuhan, China	Speaker	Maternal antibody titers for protection against infection and clinical manifestations caused by recent Japanese classical swine fever virus

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. Do you network (collaborate or share information) with other 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?

No

26. Did your laboratory collaborate with other WOAHP 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 WOAHP Reference Laboratories for the same pathogen?

No

TOR12: EXPERT CONSULTANTS

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

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
Revision and update the WOAHP Terrestrial Manual, Classical swine fever virus (infection with classical swine fever virus) Chapter 03.09.03	Remote	Revision and update

29. Additional comments regarding your report:

No