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MEMORANDUM CIRCULAR
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SUBJECT: TECHNICAL STANDARDS ON THE LIST OF AFRICAN SWINE FEVER (ASF) DIAGNOSTICS TESTS REGISTERED IN THE PHILIPPINES AND THE INTERPRETATION OF THEIR TEST RESULTS

Laboratory diagnosis of ASF is important in instituting immediate disease control measures and containing disease outbreaks. Since the detection of ASF in the country, the BAI has regulated the registration of different ASF laboratory test kits which can aid in the diagnosis of ASF in the country.

This issuance is released to provide guidance to the public on the list of ASF registered diagnostic test kits, as of the time of writing, and the interpretation of its test results. Annex A and B describe the list of registered diagnostic tests and interpretation of diagnostic results, respectively.

For your reference and information.

Done this 13th day of June 2021.

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Officer-in-Charge, Director

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Annex A. List of ASF Diagnostic Tests Registered in the Philippines (as of October 2021)

Location where test is done	Test, detection	Recommended Use/ Purpose	Name of Tests/ VBPR No	Date Issued/ Remarks
Laboratory-based	Real-time PCR (qPCR) *ASF viral genome*	Suspicious, Confirmatory test Surveillance Individual and Herd testing	VetMAX ASD Virus Detection Kit/ R-2247 IDDEX/ M SAS/ R-2249	
Laboratory and Point-of-need	Convection PCR (cPCR) *ASF viral genome*	Screening	SBC Ltd./ R-2250	
Point-of-need	Insulated Isothermal PCR (iiPCR) *ASF viral genome*	Screening	Pockit Central - GeneReachBC/ R-2252	
Point-of-need	Immunochromatographic assay *ASF virus*	Herd testing (acute forms)	Ingezim ASFV CROM Ag, INGENASA/ R-2251	*Also defined as* Rapid test kit
Point-of-need	Lateral Flow Chromatographic Immunoassay Detection *ASF virus*	Herd testing	VDRF ASFV Ag Rapid Kit, Median DI/ R-2261	*Also defined as* Rapid test kit
Point-of-need	Blocking ELISA for ASFV Antibody	Surveillance Herd Testing	INgezim PPA COMPAC, INGENASA/ R-2264	**OIE List*
Point-of-need	Rapid Screening Test for ASFV	Herd testing (acute forms)	PenCheck, SLRC	*Also defined as* Rapid test kit

Annex B. Interpretation of the ASF diagnostic results available in the Philippines

Kit	Samples	Location of testing	Result	
			Negative	Positive
SURVEILLANCE / CLEARANCE				
Testing in surveillance sampling means the herd is not manifesting any clinical sign indicative of ASF				
Real Time or Conventional PCR (qRTPCR)	Whole blood, EDTA individual or pooled Tissue Samples	Laboratory	-	Can already be diagnosed as ASF infected If revalidation of a positive result is requested by the submitting party, this should be done using the same set of blood samples; When the retesting of a positive herd will be done by collection of new sets of samples, as requested by the submitting party, collection should be done by a veterinary authority.
	Other samples other than blood	Laboratory	-	Collect blood samples from the herd for qRTPCR testing
ELISA, Ab	Serum samples, *individual testing*	Laboratory	-	Indicates prior exposure to ASF virus Collect blood samples and/or tissues for LAMP or qPCR testing to check for viremia. Sampling size should be close to 100% of the herd Decrease the prevalence to 2%

ELISA, Ag	Serum samples, *individual testing*	Laboratory	-	Hold movement and retest after three (3) to five (5) days; Diagnose as ASF if with Positive samples on second testing OR If immediate judgement is required based on the first testing, validate with LAMP or qRTPCR
LFA, Ag	EDTA blood individual testing	Point of need	-	Hold movement and retest after three (3) to five (5) days; Diagnose as ASF if with Positive samples on second testing OR If immediate judgement is required based on the first testing, validate with LAMP or qRTPCR
LAMP *	Whole blood, EDTA, individual or pooled Tissue samples	Point of need? Laboratory	-	Hold movement and retest after three (3) to five (5) days; Diagnose as ASF if with Positive samples on second testing OR If immediate judgement is required based on the first testing, validate with qRTPCR
	Other samples other than blood or tissue samples	Point of need? Laboratory	-	Collect blood samples from the herd for qRTPCR testing
cPCR or iPCR	Whole blood, individual or pooled	Point of need / Laboratory	-	Hold movement and retest after three (3) to five (5) days; OR if immediate

				judgement is required, validate with qRTPCR

DIAGNOSIS				
Testing for diagnostic purposes is being done when there are clinical signs presented highly indicative of ASF disease. It is assumed that samples have been collected from representative animals				
Real Time or Conventional PCR (qRTPCR)	Whole blood, individual or pooled Tissue samples	Laboratory	Not ASF	Diagnose as ASF
ELISA, Ab	NOT INDICATED			
ELISA, Ag	Serum samples, individual testing	Laboratory	If negative but with clinical signs, retesting should be done after three (3) to five(5) days OR Validate immediatel y with LAMP, cPCR or qRTPCR	If with samples testing positive, correlate with clinical signs. Diagnose as ASF, If contested, confirm with LAMP, cPCR, qPCR.
LFA	EDTA blood or serum, individual testing	Point of need	If negative but with clinical signs, retesting should be done after three (3) to five(5) days OR Validate immediatel y with	If with samples testing positive, correlate with clinical signs. Diagnose as ASF, If contested, confirm with LAMP, cPCR, qPCR.

			LAMP, cPCR or qRTPCR	
LAMP *	**Whole blood,** individual or pooled Tissue samples		If negative but with clinical signs, retesting should be done after three (3) to five(5) days OR Validate immediatel y with qRTPCR	If individually tested and with high % positives can already be used to diagnose ASF, in correlation with clinical signs; If a pooled sample is positive or low% positives in individual sample testings, correlate with presence of any clinical sign. Diagnose as ASF.
cPCR or iPCR	Whole blood, individual or pooled	Point of need / Laboratory	If negative but with clinical signs, retesting should be done after three (3) to five (5) days OR Validate immediatel y with qRTPCR	If individually tested, % positive can already be used to diagnose ASF, in correlation with clinical signs; If pooled samples or low% positives in individual sample testings, validate with qPCR

** Not yet a BAI-accredited testing kit*