



INTERPRETATION OF THE ASF DIAGNOSTIC RESULTS

Taken together, sensitive, specific and robust laboratory diagnostic assays are available but, as for any other disease, there is not a single test being 100% reliable (sensitive and specific). For this reason, final diagnosis should be based on the interpretation of the results derived from the use of appropriate samples and validated tests in combination with the information coming from disease epidemiology, the presence of clinical signs and the scenario,. A thorough understanding of the viremia and antibody seroconversion timing during ASFV infection is a prerequisite to conclude the dynamic of the infection in the investigated areas, and to support control and eradication programs.

Positive results for both virus and antibodies indicate that the tested animal was infected at the time of sampling, whereas a positive ASFV antibody test in absence of virus indicates an ongoing or past infection, where the animal has recovered or could be chronically or sub-clinically infected with attenuated strain (see table below).

Assay	Result	Most likely scenarios
PCR Ab-ELISA IPT	Weak _(ct>35) Negative Negative	The animal was recently infected and it has not yet seroconverted (< 7 days). Clinical signs may not be evident.
PCR Ab-ELISA IPT	Positive Negative Positive	The animal was recently infected, develop clinical signs and is initiating the seroconversion (7-10 days).
PCR Ab-ELISA IPT	Positive Positive Positive	 a) Infection in course. The animal is still viraemic with clinical signs and has already seroconverted (>10 days). b) Reinfection of an animal with preformed antibodies from a previous infection (recovered, surviving pig). IPT titer will offer
	Positive	information on the time of infection.
PCR	<mark>Weak</mark> (ct>35) Or Negative	 Past infection. The animal has recovered from acute or subacute infection and may not present clinical signs.
Ab-ELISA	Positive	 b) The animal was infected with an attenuated strain (with or without clinical signs).
IPT	Positive	 c) Reinfection of an animal with preformed antibodies from a previous infection (recovered, surviving pig).IPT titer will offer information on the time of infection.

Table. Interpretation of the ASF diagnostic results.