



UNIVERSIDAD COMPLUTENSE DE MADRID  
Facultad de Veterinaria  
Departamento de Sanidad Animal



# STANDARD OPERATING PROCEDURE FOR THE DETECTION OF AFRICAN SWINE FEVER VIRUS (ASFV) BY DIRECT INMUNOFLUORESCENCE (DIF)

[jmvizcaino@vet.ucm.es](mailto:jmvizcaino@vet.ucm.es)  
Av/ Puerta de Hierro s/n.  
28040 Madrid.

Tel: (34) 913944082  
Fax: (34) 913943908



## 1. MATERIALS AND REAGENTS

- Organ impression smears from suspected ASF infected animals and no infected animals as a negative control.
- Anti-ASFV antibodies conjugated with fluorescein isothiocyanate (FITC)
- PBS pH7.2
- Slides
- Glycerine
- Fluorescence microscope
- Humid chamber

### PBS (pH 7.2)

- ClNa [Merck 1.06404]----- 8 gr
- ClK [Merck 1.04873]----- 0.2 gr
- PO<sub>4</sub>H<sub>2</sub>K [Merck 1.06586]----- 0.2 gr
- PO<sub>4</sub>HNa<sub>2</sub> [Merck 1.04936]----- 2.29gr
- H<sub>2</sub>O destilada ----- 1000 ml

## 2. METHODOLOGY

- 2.1 Prepare impression smears of test tissues on slides.
- 2.2 Fix them with heat during 15 minutes using a 60 wattios lamp located at 20 cm from the slide.
- 2.3 Add the immunoglobulin anti-ASFV conjugated with FITC at the recommended dilution.
- 2.4 Incubate it in a humid chamber at 37°C for 30-40 minutes.
- 2.5 Wash three times with PBS pH 7.2
- 2.6 Add glycerine over the slide.
- 2.7 Examine under a fluorescence microscope.

## 3. RESULTS

Positive tissue samples will show specific granular cytoplasmic fluorescence inside the infected cells.

