



ACUVET ELISA pig CRP

ACUTE PHASE PROTEINS

Rev. 05/19

C-reactive protein (CRP) belongs to the major acute phase proteins (APP) class in the pig. APP are blood proteins that increase in concentration in response to inflammation caused by injuries or lesions, infection or stress. CRP analysis is used in the detection and monitoring of inflammatory responses. CRP concentration in the serum of healthy pigs is lower than 15 µg/mL, and can increase up to 200 µg/mL in acute conditions.

In farm animals APP measurement allows the detection of subclinical diseases or stressors that compromise animal welfare and reduce productive performance, and can be used as biomarkers for animal health and welfare. Studies have shown that the sensitivity of detection can be improved by the use of an APP index, such as that formed by CRP and pig-MAP.

Enzymatic immunoassay for the quantification of C-reactive protein in pig serum or plasma

Validated method- antibodies and standard species-specific (swine)

Type of method	Sandwich ELISA. Polyclonal antibodies. Pig-specific.
Format	96 wells microtiter plates with 8 wells separable strips. Two formats: 96 and 192 test
Reading	Abs 450 nm
Standard	Liquid. Internal standardization. No International standard available.
Assay time	90 min
Matrix	Serum, plasma,*

* Other matrix: request information

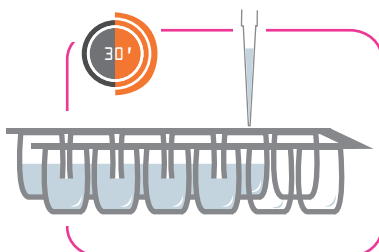
Parameter	Result
Measurement range	7-220 ng/mL
Limit of detection	2 ng/mL
Intra-assay CV	< 6%
Inter-assay CV	< 10%
Linearity	R ² > 0.99
Recovery	98-116%
Methods comparison: Turbidimetry	R > 0.98 Analytical equivalence



Validation report available on request

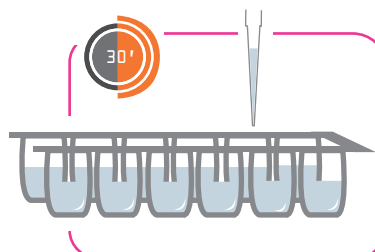
Assay procedure

Sample incubation



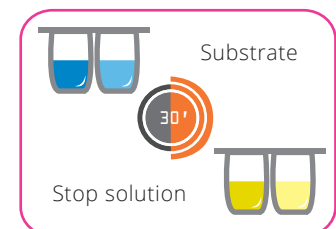
- 1-Dilute sample
- 2-Add sample
- 3-Incubate (30min)
- 4-Wash

Conjugate incubation



- 5-Add conjugate
- 6-Incubate (30 min)
- 7-Wash

Results



- 8-Add substrate
- 9-Incubate (30min)
- 10-Stop reaction
- 11-Read
- 12-Obtain value