

# TURBOVET CRP PORCINE

## Turbidimetric method for the quantification of C-reactive protein (CRP) in pig serum samples

C-reactive protein (CRP) belongs to the major acute phase proteins class in the pig. CRP concentration in the serum of healthy pigs is lower than 10 mg/L, increasing up to 100-200 mg/L during an acute phase response. CRP analysis is used for the detection of infectious or inflammatory diseases. The sensitivity of detection can be improved by the use of an APP index, such as that formed by CRP and pig-MAP.

## Main features

- **Automated:** Easy to program on any type of automated analyzer
- **Antibodies and calibrators specific of the porcine species**
- Not affected by hemolysis or lipaemia
- **Excellent precision and reproducibility**

## Analytical principle

CRP from serum reacts with anti-CRP antibodies covalently bound to latex particles. The immuno-aggregates formed originate an increase of turbidity in the reaction media, which is determined by a measurement of Absorbance. The increase of turbidity is proportional to CRP concentration in the sample.



Type of assay	Particle enhanced turbidimetric immunoassay (latex)
Format	2 liquid reagents, ready to use
Standard	Internal reference material calibrated with purified porcine CRP
Range	0 - 100 mg/L
Security range (prozone)	> 200 mg/L
Interferences	No interferences by hemoglobin (20 g/L) bilirubin (0.15 g/L) or triglycerides (10 g/L intralipid)

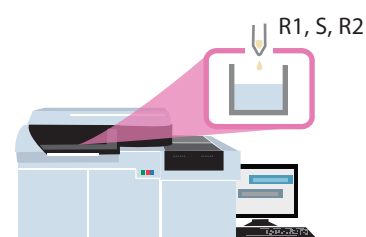
Concentration (g/L)	Precision*	
	Within-run CV(%)	Within-day CV(%)
0.087	0.82	1.57
0.025	2.43	5.00

\*20 days study in an Olympus AU400 analyzer. Every day samples were analyzed in duplicates, in two runs.

## Assay procedure\*

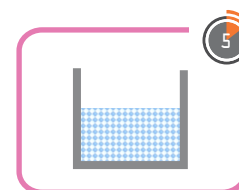
- 1 Add buffer (R1, 250 µl)  
Add sample (S, 3 µl)  
Add immunoparticles (R2, 50 µl)  
1st reading (M1)

M1: Abs 550nm



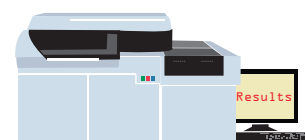
- 2 Incubate 5 min  
2nd reading (M2)

M2: Abs 550nm



- 3 Results

M2-M1 → C



\*Recommended procedure. Volume, time and wavelength may be adjusted depending on the analyzer features