

TURBOVET PIG-MAP

Turbidimetric method for the quantification of pig-MAP/ITI4 in pig serum samples

The concentration of Pig-MAP in the serum of healthy pigs is lower than 1 mg/mL increasing up to 10-15 mg/mL during acute inflammation. Pig-MAP is one of the main acute phase proteins in swine and an excellent marker of inflammation and distress in this species. Elevated pig-MAP levels indicate that the animal is affected by infections, inflammatory lesions or stress due to non optimal management at the farm, which results in a poor animal welfare and decreased productive performance.

Features

- **Automated:** easy to program on a variety of clinical chemistry analyzers
- **Wide analytical range without pre-dilution** of the sample
- **Excellent precision and reproducibility**
- Coefficient of **correlation** of 0.99 with **ELISA** method

Analytical principle

In the reaction media Pig-MAP from serum reacts with anti-pig-MAP antibodies to form immuno-complexes. The insoluble aggregates formed originate an increase of turbidity, which is determined by a measurement of Absorbance. The increase of turbidity is proportional to pig-MAP concentration in the sample.

Type of assay	Turbidimetric immunoassay, 340 nm reading
Format	2 liquid reagents, ready to use
Standard	Standardised to the European reference serum for acute phase proteins (EU Concerted Action QLK5-CT-1999-0153)
Range	0 - 5 g/L
Security range (prozone)	> 15 g/L
Interferences	No interferences by hemoglobin (20 g/L) bilirubin (0.15 g/L) and triglycerides < 4 g/L (intralipid)

Precision*		
Concentration (g/L)	Within-run CV(%)	Whithin-day CV(%)
2.06	1.38	2.01
0.40	3.53	7.31

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

Assay procedure*

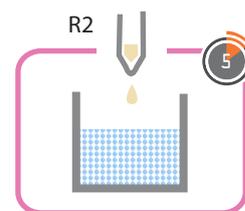
- 1 Add buffer (R1, 270 µl)
Add sample (S, 3 µl)
1st reading (M1)

M1: Abs 340nm



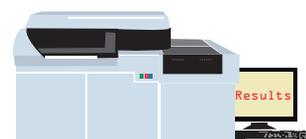
- 2 Add antibody (R2, 30 µl)
Incubate 5 min
2nd reading (M2)

M2: Abs 340nm



- 3 Results

M2-M1 → C



*Recommended procedure. Volume and time may be adjusted according to the analyzer features