



Alkaline phosphatase FS* (IFCC mod. 37 °C)

In-vitro-Diagnostic for veterinary use only

Diagnostic reagent for quantitative in vitro determination of alkaline phosphatase (AP) in serum or plasma on DiaSys respons[®]910 VET

Order Information

Cat. No. 1 0441 99 11 920

4 twin containers for 200 tests each

Method

Kinetic photometric test, according to IFCC (International Federation of Clinical Chemistry and Laboratory Medicine)

Principle

p-Nitrophenylphosphate + H₂O AP→ Phosphate + p-Nitrophenol

Reagents

Components and Concentrations

2-Amino-2-methyl-1-propanol	pH 10.4	1.1 mol/L
Magnesium acetate		2 mmol/L
Zinc sulphate		0.5 mmol/L
HEDTA		2.5 mmol/L
p-Nitrophenylphosphate		80 mmol/L
	Magnesium acetate Zinc sulphate HEDTA	Magnesium acetate Zinc sulphate HEDTA

Storage Instructions and Reagent Stability

The reagents are stable up to the end of the indicated month of expiry, if stored at 35.6 – 46.4°F and contamination is avoided. Do not freeze the reagents! Reagents must be protected from light. DiaSys respons containers provide protection from light.

Warnings and Precautions

- The reagents contain sodium azide (0.95 g/L) as preservative. Do not swallow! Avoid contact with skin and mucous membranes.
- 2. During reaction p-nitrophenol is produced which is poisonous when inhaled, swallowed or absorbed through skin. If the reaction mixture comes in contact with skin or mucous membranes wash copiously with water!
- In very rare cases, samples of animals with gammopathy might give falsified results.
- 4. Please refer to the safety data sheets and take the necessary precautions for the use of laboratory reagents. For diagnostic purposes, the results should always be assessed with the animal's medical history, clinical examinations and other findings.
- 5. For professional use only!

Waste Management

Please refer to local legal requirements.

Reagent Preparation

The reagents are ready to use. The bottles are placed directly onto the reagent rotor.

Specimen

Serum or heparin plasma Do not use hemolytic samples!

Stability:

2 days at 39.2°F to 46.4°F

Discard contaminated specimens.

Calibrators and Controls

For calibration, DiaSys TruCal U calibrator is recommended. This method is traceable to the molar extinction coefficient. For internal quality control DiaSys TruLab N and P controls should be assayed. Each laboratory should establish corrective actions in case of deviations in control recovery.

	Cat. No.	Kit size	
TruCal U	5 9100 99 11 063	20 x 3 mL	
TruLab N	5 9000 99 11 062	20 x 5 mL	
TruLab P	5 9050 99 11 062	20 x 5 mL	

Performance Characteristics

The performance characteristics were evaluated with human samples and might differ from results obtained with various animal specimen.

Measuring range up to 1400 U/L AP (in case of higher activities remeasure samples after manual dilution with NaCl solution (9 g/L) or use rerun function).			
Limit of detection**	3 U/L AP		
On-board stability	7 days		
Calibration stability	7 days		

Interfering substance	Interferences < 10%	AP [U/L]
Ascorbate	up to 30 mg/dL	154
Hemoglobin	up to 100 mg/dL	74.2
	up to 100 mg/dL	310
Bilirubin, conjugated	up to 80 mg/dL	95.2
	up to 80 mg/dL	182
Bilirubin, unconjugated	up to 70 mg/dL	94.9
	up to 70 mg/dL	188
Lipemia (triglycerides)	up to 2200 mg/dL	98.6
_	up to 2200 mg/dL	202

For further information on interfering substances refer to Young DS. Effects of Drugs on Clinical Laboratory Tests. 5th. ed. Volume 1 and 2. Washington, DC: The American Association for Clinical Chemistry Press, 2000.

Conversion Factor

 $AP [U/L] \times 0.0167 = AP [\mu kat/L]$

Reference Range

M		1		
DOG	CAT	HORSE	CATTLE	Unit
11 – 162	7 – 68	44 – 216	27 – 165	U/L

Source:

Reference ranges have been validated by DiaSys USA according to National Reference Laboratory standards.

Each laboratory should check if the reference ranges are transferable to its own animal population and determine own reference ranges if necessary.

Manufacturer

DiaSys Diagnostic Systems GmbH Alte Strasse 9 65558 Holzheim Germany

^{**} according to NCCLS document EP17-A, vol. 24, no. 34