



Total protein FS*

Order Information

Cat. No.
1 2311 99 11 920

Kit size
 800 (4 x 200)

Intended Use

Diagnostic reagent for quantitative in vitro determination of total protein in serum or heparin plasma on automated DiaSys respons[®]910 VET.

For veterinary use only.

Method

Photometric test according to biuret method

Proteins form a violet blue color complex with copper ions in alkaline solution. The absorbance of the color is directly proportional to the concentration.

Reagents

Components and Concentrations

| | | |
|------------|---------------------------|------------|
| R1: | Sodium hydroxide | 100 mmol/L |
| | Potassium sodium tartrate | 17 mmol/L |
| R2: | Sodium hydroxide | 500 mmol/L |
| | Potassium sodium tartrate | 80 mmol/L |
| | Potassium iodide | 75 mmol/L |
| | Copper sulphate | 30 mmol/L |

Storage and Stability

Reagents are stable up to the date of expiry indicated on the kit, if stored at 35.6 - 77°F and contamination is avoided. Protect the reagents from light.

Warnings and Precautions

- ⚠ Reagent 1: Warning. H290 May be corrosive to metals. P234 Keep only in original container. P390 Absorb spillage to prevent material damage.
- ⚠ Reagent 2: Danger. H290 May be corrosive to metals. H315 Causes skin irritation. H319 Causes serious eye irritation. H372 Causes damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long lasting effects. P234 Keep only in original container. P260 Do not breathe dust/fume/gas/mist/vapors/spray. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing/eye protection. P302+P352 If on skin: Wash with plenty of water/soap. P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P314 Get medical advice/attention if you feel unwell. P337+P313 If eye irritation persists: Get medical advice/attention. P390 Absorb spillage to prevent material damage.
- In serum or plasma of animals who have received large intravenous amounts of polydextrans, too high values can be measured with the biuret method. In such cases an alternative method (e.g. Kjeldahl) has to be used.
- In very rare cases, samples of animals with gammopathy might give falsified results.
- 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.
- For professional use only.

Waste Management

Refer to local legal requirements.

Reagent Preparation

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

Materials Required

General laboratory equipment

Specimen

Serum or heparin plasma

Stability:
2 days at 39.2 – 46.4°F

Discard contaminated specimens.

Calibrators and Controls

DiaSys TruCal U is recommended for calibration. TruCal U calibrator values have been made traceable to the biuret method. Use DiaSys TruLab N and P for internal quality control. Each laboratory should establish corrective action 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 14 g/dL. In case of higher concentrations re-measure samples after manual dilution with NaCl solution (9 g/L) or use rerun function. | |
| Limit of detection** | 0.06 g/dL |
| Onboard stability | 10 days |
| Calibration stability | 7 days |





| Interfering substance | Interferences ≤ 10% up to | Analyte concentration [g/dL] |
|---------------------------------|---------------------------|------------------------------|
| Ascorbic acid | 30 mg/dL | 4.84 |
| Hemoglobin | 550 mg/dL | 6.43 |
| | 550 mg/dL | 7.94 |
| Bilirubin (conjugated) | 60 mg/dL | 6.28 |
| | 60 mg/dL | 7.85 |
| Bilirubin (unconjugated) | 70 mg/dL | 6.33 |
| | 70 mg/dL | 7.80 |
| Lipemia (triglycerides) | 1000 mg/dL | 6.03 |
| | 2000 mg/dL | 8.18 |
| Dextran | 2000 mg/dL | 5.05 |
| | 2000 mg/dL | 6.10 |

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.

** according to CLSI document EP17-A, Vol. 24, No. 34




Reference Range

| | | | | |
|---|---|---|---|-------------|
|  |  |  |  | |
| DOG | CAT | HORSE | CATTLE | Unit |
| 5.4 - 7.2 | 6.4 - 8.5 | 5.7 - 7.8 | 6.5 - 8.4 | g/dL |

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.

 DiaSys Diagnostic Systems GmbH
Alte Strasse 9 65558 Holzheim Germany
www.diasys-us.com

* Fluid Stable