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Uranotest 2AC

Reagent strip for determination
of Microalbumin and Creatinine
in urine

Only veterinary use

Intended use

Urinalysis is an important tool in disease detection, as well as monitoring and screening animal health.

Complete urinalysis involves both macroscopic and microscopic assessment and chemical evaluation. Strips are for single use only and they come ready to use, they also do not require additional laboratory equipment.

The analysis is relatively cheap and completed in less than 2 minutes. The interpretation of the results can be made either by visual comparison of the test strip with the coloured blocks printed on the label or automatically using specific reader Uranotest Reader.

Species

Dog and cat.

Storage and Handling

Store in a cool, dry place at temperatures between 2 and 30°C. Do not store the strips in a refrigerator or freezer. Store away from moisture and light. When stored in the original container, the product is stable up to the expiry date printed on the label and (or) vial box. Replace the bottle cap immediately and tightly after removing test strips, and keep the vial tightly closed between tests. Do not remove desiccant from bottle. Do not touch test areas of urine reagent strips. Do not open container until ready to use. Discoloration or darkening of the test pads may indicate deterioration. If this is evident, or if test results are questionable or inconsistent with expected finding, confirm that the product is within its expiration date and is reacting properly using known negative and positive control materials. Do not use after the expiry date. Note once the canister has been opened, the remaining strips keep stable for up to 6 months.

Specimen collection and preparation

Collect urine in a clean, dry container that allows complete immersion of all the fields on the test strip. Do not add preservatives.

Test the specimen as soon as possible (ideally within 30 minutes after collection), with the sample well mixed but not centrifuged. If immediate testing is not possible, the sample should be stored in the refrigerator, but not frozen, and then brought to room temperature before used in the test. Unpreserved urine at room temperature may undergo pH changes due to microbial proliferation, which may interfere with protein determination. Skin cleansers containing chlorhexidine may affect protein test results if specimen contamination occurs.

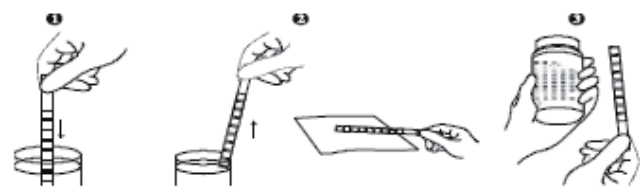
Test Procedure

The procedure must be followed exactly to achieve reliable results.

1 - Dip the strip into the urine up to the test area for no more than two seconds.

2 - Draw the edge of the strip along the brim of the vessel to remove excess urine; at this time, do not make the test areas touched to the brim of the vessel.

3 - Turn the strip on its side and tap once on a piece of absorbent material to remove any remaining urine. Excessive urine on the strip may cause the interaction of chemicals between adjacent reagent pads.



4 - Read the results

a. **If reading visually:** Compare the colours of the reagent pads exactly after 60 seconds with the colour chart on the vial label under good light. While comparing, keep the strip horizontally to prevent possible mixing of chemicals when excessive urine is present.

b. **If using the URANOTEST READER,** carefully follow the directions given in the instrument-operating manual. The instrument will automatically read each test pad result at a specified time.

Interpretation of results

MICROALBUMIN

This test is based on dye binding using sulfonephthalein dye. At a constant pH, albumin binds with sulfonephthalein dye to develop a blue color. The following substances may cause false positive results; a large amount of haemoglobin (5 mg/dl), visibly bloody urine, highly alkaline urine (pH>8), disinfectant including quaternary ammonium compound. Normal albumin levels in urine are under 2 mg/dl. Microalbuminuria is indicated with results of 3-30mg/dl. An abnormal elevation of the urinary albumin excretion rate is often one of the first signs of renal disease or damage that can lead to renal failure. Patients with hypertension or diabetes have the highest risk of renal disease where microalbumin may be present

CREATININE

Creatinine is a byproduct of muscle metabolism and creatinine excretion into the urine is usually constant. Creatinine measurement is used in the diagnosis and treatment of renal diseases, to monitor renal dialysis, and as a calculation basis for measuring other urine analytes. Though the concentration (or dilution) of urine varies throughout the day, the urinary creatinine level is relatively stable which allows its measurement to be used as a corrective factor in random/spot urine samples. When albumin and creatinine are measured simultaneously from a single-void / random urine sample, the albumin to creatinine ratio (A/C) can be determined. Visibly dark brown color urine may affect the results. Substances that cause abnormal urine color, such as drug containing azo dyes, nitrofurantoin, riboflavin may affect the results. The urine of healthy individuals contains 10-300 mg/dl of creatinine. Very low creatinine results can be caused by adulteration of the urine specimen or by severe renal failure.

MICROALBUMIN TO CREATININE RATIO (A/C):

Determine the A/C ratio as follows: microalbumin (in mg/l) concentration / concentration of creatinine (in g/l).

Microalbumin is normally present in urine at concentrations of less than 30 mg albumin/g creatinine. Microalbuminuria is indicated at a ratio result of 30-300 mg/g (Abnormal) and clinical albuminuria at a ratio result of >300 mg/g (High Abnormal):

μA/C		Creatinine, mg/dl (g/l)				
		10 (0,1)	50 (0,5)	100 (1,0)	200 (2,0)	300 (3,0)
Microalbumin mg/l	10	*				
	30					
	80					
	150					
* Specimen is very diluted. Repeat the test with a new specimen, preferably a first-morning collection.						
Ratio μA/C		normal		abnormal		High abnormality
mg/g		< 30		30 - 300		> 300