

# combi<sup>®</sup> screen

## Urinalysis for veterinary care



## CombiScreen VET urine test strips by Analyticon Biotechnologies AG

- ascorbic acid protected
- performs highest quality standards
- excellent price-performance ratio
- automated and visual reading



**Biocon<sup>®</sup>**

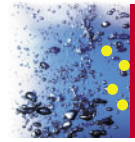
**combi<sup>®</sup>  
screen  
PLUS**

Glucose  
Ascorbic Acid  
Ketones  
Protein  
pH-Value  
Blood  
Nitrite  
Leucocytes  
Spec. Gravity  
Bilirubin  
Urobilinogen

Name	Art.-Nr.	Cont.	Glucose	Ascorbic Acid	Ketones	Protein	pH-Value	Blood	Nitrite	Leucocytes	Spec. Gravity	Bilirubin	Urobilinogen
<b>VET 11 PLUS</b>	94 150	150	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Ascorbic acid, better known as Vitamin C, is being ingested mainly through forage and nutritional supplements. Most of it is excreted unaltered in

the urine again. For this reason a high percentage of the animals shows a clearly increased Ascorbic acid level in the urine.



**ASCORBIC  
ACID  
PROTECTED**

This results in lowered or even false negative results of the blood and glucose pads with many urine test strips on the market. Therefore diagnostic or therapeutic actions may be taken too late.

Analyticon's CombiScreen PLUS test strip offers a considerable higher reliability due to its integrated ascorbic acid protection system.

### General Information:

The use of test strips for examination of urine of animals can provide information which supports the diagnosis of disorders or diseases. Besides test strips evaluation, a macroscopic evaluation

of the urine should be performed (color, turbidity, odor, volume). The reference ranges for different animals are different, details can be taken from the reference table.

Parameter	Horse	Cattle	Pig	Sheep	Goat	Dog	Cat	Bunny	Guinea pig
Bilirubin	neg.	neg.	neg.	neg.	neg.	neg. - weak pos.	neg.	neg.	neg.
Blood	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.
Glucose	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.
Ketones	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.
Leucocytes	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.
Nitrite	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.
pH	7,6 - 9,0	7,0 - 8,4	5,5 - 8,0	7,5 - 8,5	7,5 - 8,5	5,5 - 7,0	5,0 - 7,0	8,2	8,0 - 9,0
Protein	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.	neg.
Specific gravity	1,020 - 1,040	1,020 - 1,040	1,020 - 1,040	1,020 - 1,040	1,020 - 1,040	1,001 - 1,065	1,001 - 1,080	1,003 - 1,036	1,000 - 1,040
Urobilinogen	neg. - weak pos.	neg. - weak pos.	neg. - weak pos.	neg. - weak pos.	neg. - weak pos.	neg. - weak pos.	neg. - weak pos.	neg. - weak pos.	neg. - weak pos.
Color	Clay - ochre	Bright yellow - brown yellow	Bright yellow - dark yellow	Bright yellow - brown yellow	Bright yellow - brown yellow	Paly yellow - brown yellow	Yellow - dark yellow	Bright yellow - auburn	Yellow
Turbidity	Turbid	Clear	Clear	Clear	Clear	Clear	Clear	Clear - turbid	Clear - slightly turbid
24h-Volume (ml/kg)	8 - 30	16 - 50	20 - 80	10 - 40	10 - 40	24 - 50	18 - 25	20 - 350	-
Odor	Aromatic	Aromatic	Aromatic, unpleasant	Aromatic - neutral	Aromatic - neutral	Garlic, meat broth	Caustic	-	-

### Special Information on veterinary urine diagnostics

Besides the information on Combi-Screen test strips (see backside), there is some additional information especially related to veterinary diagnostics. The nutrition, habits of liquid intake, physical activity of the animal and conditions of collection of the sample must be considered during urinalysis of animals.

**Volume:** The volume of urine samples strongly depends on the animal which is examined. Evaluations based on a 24-hour collection of urine are more significant than evaluations based on a single sample.

**Color:** The color differs strongly depending on the animal and the concentration of the urine. Normally it has a yellow appearance. Strongly concentrated urine has got a more intense color than low concentrated urine. Abnormal colorations may occur in case of special medical treatment or nutrition, or at high concentrations of red blood cells.

**Turbidity:** Fresh urine normally is transparent for most animals, excepting for horses. Urine of horses shows a viscous and cloudy appearance. Turbidity may indicate blood, bacteria, epithelia, cells or crystals. Refrigeration may cause the sedimentation of crystals or other components, which produces a cloudy appearance after thawing. This normally has no significance.

**Odor:** Odor should only be checked if fresh urine is available. Urine normally has got a specific odor, depending on the species which is examined. Penetrative odor indicates ammonia, caused e. g. by bacteria, sweet odor indicates diabetes mellitus, smell from acetone indicates ketonuria. Odor can also be influenced by medication and nutrition.

**Blood:** The test normally is negative for all animals.

**Bilirubin:** The test normally is negative for all animals. Dogs may have bilirubin in their urine without being ill.

**Glucose:** The test normally is negative for all animals.

**Ketones:** The test normally is negative for all animals. Ruminants sometimes may show a weak positive test result.

**Leucocytes:** The test normally is negative for all animals.

**Nitrite:** The test normally is negative for all animals. Especially for carnivores, the test may show a limited sensitivity, because the necessary nitrate concentration is not present in their urine in case of a non-vegetarian diet.

**pH:** The pH is strongly influenced by the nutrition. In general, the pH for vegetarians is lying higher than the pH of carnivores.

**Protein:** The test normally is negative for all animals. Urine of cats or dogs may show little protein concentrations. Due to the very high pH of vegetarians, false positive in Protein caused by increased pH may be observed.

**Specific Gravity:** The specific gravity greatly varies in a broad range, depending on the species and on the water intake of the individual animal.

**Urobilinogen:** The test normally is negative or slightly positive for animals.

Distributor information



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**The standard for highest quality**