

KOVA Liqua-Trol® with Microscopics

Level I (Abnormal) Urinalysis Control

Level II (Normal with hCG) Urinalysis Control

KOVA Liqua-Trol				Lot No: K306712				Expiration Date: 2025-12-31			
REAGENT TEST STRIP RESULTS ¹											
CONSTITUENT	AUTION MAX AX-4280 AUTION MAX AX-4030 SUPER AUTION EX SA-4250	AUTION JET AJ-4270 AUTION MINI AM-4290 AUTION MICRO PU-4210 AUTION ELEVEN AE-4020 POCKETCHEM UA PU-4010	UC-MAX ⁵ LabUReader Plus 2 ⁵ DocUReader 2 Pro ⁵	CONSTITUENT	AUTION MAX AX-4280 AUTION MAX AX-4030 SUPER AUTION EX SA-4250	AUTION JET AJ-4270 AUTION MINI AM-4290 AUTION MICRO PU-4210 AUTION ELEVEN AE-4020 POCKETCHEM UA PU-4010	UC-MAX LabUReader Plus 2 DocUReader 2 Pro				
Glucose	+ 2 - + 4	+ 2 - + 4	± - + 4	Glucose	- Negative	- Normal	Normal				
Protein	+ 1 - + 4	+ 1 - + 4	± - + 3	Protein	- Negative	- Negative	Negative				
Bilirubin	+ 1 - + 4	+ 1 - + 4	± - + 3	Bilirubin	- Negative	- Negative	Negative				
Urobilinogen ⁴	Normal - + 3	Normal - + 3	Normal - + 4	Urobilinogen	± Normal	Normal	Normal				
pH	7.0 - 9.0	7.0 - 9.0	6.0 - 8.0	pH	5.5 - 7.5	5.5 - 7.5	5.5 - 7.5				
Specific Gravity	1.010 - > 1.030	1.010 - > 1.030	1.010 - > 1.030	Specific Gravity	1.000 - 1.020	1.000 - 1.020	< 1.005 - 1.020				
Blood (hemoglobin)	+ 1 - + 3	+ 1 - + 3	+ 1 - + 3	Blood (hemoglobin)	- Negative	- Negative	Negative				
Ketones	+ 2 - + 4	+ 2 - + 4	± - + 3	Ketones	- Negative	- Negative	Negative				
Nitrite	+ 1 - + 2	+ 1 - + 2	+ 1	Nitrite	- Negative	- Negative	Negative				
Leukocyte Esterase ³	25 - 500 LEU/μL	25 - 500 LEU/μL	25 - 500 LEU/μL	Leukocyte Esterase ³	- Negative	- Negative	Negative				
Ascorbic Acid	---	---	---	Ascorbic Acid	---	---	---				

Level I						
PHYSICAL CHARACTERISTICS			MICROSCOPIC QUALITY CONTROL			
			CELL COUNTS ^{2, 3}			
Property	Value Range	Method	Constituent	Fixed Rotor	Swing Rotor	<small>sediMax(> sw v3.2) sediMax 2 sediMAX con TRUST sediMAX LITE sediMAX conTRUST PRO</small> sedimax (< SW v3.2)
Appearance	Clear - Slightly Cloudy	Visual	Qualitative ^a			
Color	Amber - Red	Visual	Red Cells/hpf	16 - 66	63 - 106	---
Specific Gravity	1.024 - 1.028	Refractometer (Room Temp.)	White Cells/hpf	16 - 60	48 - 101	---
Osmolality	800 - 900	mOsm Freezing Pt. Depression	Quantitative ^b			
pH	7.0 - 8.0	pH meter	Red Cells/μL	170 - 280	308 - 462	30 - 230 300 - 600
			White Cells/μL	165 - 265	278 - 405	30 - 220 140 - 360
			Crystals *	Present	Present	---
			Bacteria	Present	Present	---
			Casts (low power)	< 1	< 1	---

* Calcium oxalate, calcium phosphate, amorphous material.
 Urinary artifacts may be present.
 Any mucus threads observed are artifactual.

Level II						
PHYSICAL CHARACTERISTICS			MICROSCOPIC QUALITY CONTROL			
			CELL COUNTS ^{2, 3}			
Property	Value Range	Method	Constituent	Fixed Rotor	Swing Rotor	<small>sediMax(> sw v3.2) sediMax 2 sediMAX con TRUST sediMAX LITE sediMAX conTRUST PRO</small> sedimax (< SW v3.2)
Appearance	Clear	Visual	Qualitative ^a			
Color	Yellow - Green	Visual	Red Cells/hpf	0 - 1	0 - 1	---
Specific Gravity	1.005 - 1.009	Refractometer (Room Temp.)	White Cells/hpf	0 - 7	0 - 11	---
Osmolality	275 - 375	mOsm Freezing Pt. Depression	Quantitative ^b			
pH	6.0 - 7.0	pH meter	Red Cells/μL	0 - 1	0 - 1	0 - 5 0 - 5
			White Cells/μL	0 - 10	1 - 25	0 - 20 0 - 40
			Crystal **	≤ 1	≤ 1	---
			Casts (low power)	< 1	< 1	---

** Urinary artifacts may be present.

1. Methodology changes or variability in reagent strip lots can influence Liqua-Trol recoveries. It is recommended that the values listed here be used as guidelines until the laboratory has established its own quality control ranges.
2. The cell count ranges apply to a microscopic field viewed using a 10X wide eyepiece and a 40X objective lens. The approximate diameter of such a field under high power magnification is 0.50 mm; therefore, an appropriate correction factor should be applied when a microscope with a different field size is used in order to maintain consistency in reporting results.
3. A microscopic examination of the sedimentation is recommended in conjunction with a screening test for leukocyte esterase to detect lysed leukocytes. Testing for leukocyte esterase should not be used to replace microscopic analysis as significant and often critical pathologically diagnostic elements will go undetected.
4. The flag "!" may occur even with correct results for urobilinogen.
5. An atypical visual result may be noted on the urobilinogen, proteins or leukocyte esterase pads: use the color intensity to interpret the results. The atypical urobilinogen coloration may give a false negative result in case of automated reading.

NOTE: Particulate may form during storage. Gently swirl the control before use to assure good mixing and resuspension of the microscopic constituents.

- a Using KOVA® System with KOVA® Slide II, KOVA® Glasstic® Slide 10
- b Using KOVA® System with KOVA® Glasstic® Slide 10 with Grids

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