

KOVA Liqua-Trol® with Microscopics Level I (Abnormal) Urinalysis Control

KOVA Liqua-Trol		Lot No: K305407							Expiration Date: 2023-06	
CONSTITUENT	REAGENT TEST STRIP RESULTS ¹									
	SIEMENS REAGENT STRIP ^a								BIOSYS ^j UriScan Optima™ and Optima II™ PSS® Select Consult® Diagnostics	IRIS REAGENT STRIP ⁱ
	Visual	Clinitek®50	Clinitek®STATUS ¹¹	Clinitek®100	Clinitek® 500 / Advantus	Clinitek®Atlas	Clinitek®Novus			
pH	7.0 - 8.0	7.0 - 8.0	7.0 - 8.0	7.0 - 8.5	7.0 - 8.0	7.0 - 8.0	7.0 - 8.0		6.5 - 8.0	6.5 - 8.0
Protein	Trace - ≥ 300 mg/dL	Trace - ≥ 300 mg/dL	Trace - ≥ 300 mg/dL	Trace - ≥ 300 mg/dL	Trace - ≥ 300 mg/dL	Trace - ≥ 300 mg/dL	Trace - ≥ 1000 mg/dL		10.0 - 1000 mg/dL	30 - ≥ 500 mg/dL
Glucose	100 - 2000 mg/dL	100 - ≥ 1000 mg/dL	100 - ≥ 1000 mg/dL	Trace - ≥ 1000 mg/dL	100 - ≥ 1000 mg/dL	100 - ≥ 1000 mg/dL	100 - ≥ 1000 mg/dL		100 - 2000 mg/dL	50 - ≥ 500 mg/dL
Ketones	5 - 160 mg/dL	Trace - ≥ 80 mg/dL	Trace - ≥ 160 mg/dL	Trace - ≥ 80 mg/dL	Trace - ≥ 80 mg/dL	Trace - ≥ 80 mg/dL	Trace - ≥ 160 mg/dL		5.0 - 100 mg/dL	5 - 80 mg/dL
Bilirubin	1 + - 3 + ⁶	Small - Large	Small - Large	Small - Large	Small - Large	Small - Large	Small - Large		0.5 - 3.0 mg/dL	2 - 4 mg/dL
Blood (hemoglobin)	Trace - 3 + ⁸	Trace - Lysed - Large	Trace - Lysed - Large	Trace - Large	Trace - Lysed - Large	Trace - Large	Trace - Large		5.0 - 250 RBC/μL	0.03 - ≥ 1 Ery/μL
Nitrite	Positive	Positive	Positive	Positive	Positive	Positive	Positive		Positive	Positive
Urobilinogen	2 - 8 EU/dL	2.0 - ≥ 8.0 EU/dL	2.0 - ≥ 8.0 EU/dL	2.0 - ≥ 8.0 EU/dL	2.0 - ≥ 8.0 EU/dL	2.0 - ≥ 8.0 EU/dL	1.0 - ≥ 8.0 EU/dL		1.0 - 12.0 mg/dL	2.0 - 4.0 mg/dL
Specific Gravity	1.015 - 1.030	1.015 - ≥ 1.030	1.020 - ≥ 1.030	1.020 - ≥ 1.030	1.015 - ≥ 1.030	1.020 - ≥ 1.030 ⁹	1.020 - ≥ 1.030 ⁹		1.010 - ≥ 1.030	1.020 - 1.030 ⁹
Leukocyte Esterase ⁵	Trace - 3 +	Trace - Large	Trace - Large	Trace - Large	Trace - Large	Trace - Large	Trace - Large		10.0 - 500 WBC/μL	25 - 500 Leu/μL
Microalbumin	N/A	30 - 150 mg/L ¹³	30 - 150 mg/L ¹³	30 - 150 mg/L ¹³	N/A	N/A	30 - 150 mg/L ¹²		N/A	N/A
Creatinine	100 - 300 mg/dL	100 - 300 mg/dL	100 - 300 mg/dL	100 - 300 mg/dL	100 - 300 mg/dL	N/A	100 - ≥ 300 mg/dL ¹²		N/A	NA
A:C	N/A	30 - 300 mg/g Abnormal - > 300 mg/g High Abnormal ¹³			N/A	N/A	150 - ≥ 300 mg/g ¹²		N/A	N/A
Ascorbic Acid	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	Negative

PHYSICAL CHARACTERISTICS

Property	Value Range	Method
Appearance	Slightly Cloudy	Visual
Color	Amber - Red	Visual
Specific Gravity	1.024 - 1.028	Refractometer (Room Temp.)
Osmolality	775 - 875 mOsm Freezing Pt. Depression	
pH	7.0 - 8.0	pH meter

ALTERNATIVE TESTS

Constituent/Method	Value Range
Bilirubin/Ictotest® ^a	Positive: Pink - Purple
Protein/Sulfosalicylic Acid (3%)	
Qualitative	Trace - 4 + Pink - Orange
Glucose / AimTab™ Reducing Substances™	1/4 - 1% Positive: Purple - Green
Ketone / K-Check® ^q	Small - Large
Nitrazine Paper/pHizatest ^r	7.0 - 7.5

Note: Other manufacturers' methods will work and should be confirmed by the laboratory.

PREGNANCY TESTING

Method	Result
Beckman Coulter ICON® 20 hCG ^e	Negative
Quidel QuickVue® hCG ^d	Negative
Siemens Clinitest® hCG ^a	Negative
McKesson Consult® hCG Dipstick/Cassette ^l	Negative
Cardinal Health® hCG Dipstick/Cassette ⁿ	Negative
Fisher Sure-Vue™ hCG/Strips/STAT ^s	Not Assigned

KOVA Liqua-Trol® with Microscopics Level I (Abnormal) Urinalysis Control

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CONSTITUENT	REAGENT TEST STRIP RESULTS ¹									
	ROCHE REAGENT STRIP ^b							77 ELEKTRONIKA REAGENT STRIP ^c		
	Combur-Test® Visual	Chemstrip® Visual	Chemstrip Criterion II™	URISYS 1800™	URISYS 1100™	Cobas® U 411	URISYS® 2400	HandUReader, DocUReader, DocUReader 2, LabUReader, LabUReader Plus, LabUReader Plus 2, LabUMat, LabUMat 2, Visual Reading		
pH	7 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7 - 8		6 - 7	6 - 7
Protein	30 - 500 mg/dL	Trace - 500 mg/dL	15 - 500 mg/dL	25 - 500 mg/dL	Trace - 500 mg/dL	15 (25) - 500 (500) mg/dL ⁷	25 - 500 mg/dL		30 - 500 mg/dL ¹⁰	+ - +++ ¹⁰
Glucose	100 - 1000 mg/dL	100 - 1000 mg/dL	100 - 1000 mg/dL	100 - 1000 mg/dL	100 - > 1000 mg/dL	100 (100) -1000 (1000) mg/dL ⁷	100 - 1000 mg/dL		150 - 1000 mg/dL	++ - ++++
Ketones	1 + - 3 + ²	1 + - 3 + ²	5 - 150 mg/dL	5 - 150 mg/dL	15 - 150 mg/dL	5 - 150 mg/dL	5 - 150 mg/dL		15 - 150 mg/dL	+ - +++
Bilirubin	1 + - 3 +	1 + - 3 +	1 - 6 mg/dL	1 - 6 mg/dL	1 - 6 mg/dL	1 - 6 mg/dL	1 - 6 mg/dL		1 - 6 mg/dL	+ - +++
Blood (hemoglobin)	5 - 10 - 250 Ery/μL	Trace - 250 Ery/μL	10 - 250 Ery/μL	10 - 250 Ery/μL	Trace - 250 Ery/μL	10 - 250 Ery/μL	10 - 250 Ery/μL		10 - 300 Ery/μL	+ - +++
Nitrite	Positive	Positive	Positive	Positive	Positive	Positive	Positive		Positive	Positive
Urobilinogen	Positive ³	Positive ³	4 - 12 mg/dL	4 - 12 mg/dL	4 - ≥ 12 mg/dL	4 - 12 mg/dL	4 - 12 mg/dL		Normal - 12 mg/dL ¹⁰	Normal - ++++ ¹⁰
Specific Gravity	1.005 - 1.030	1.005 - 1.030	1.010 - 1.030	1.010 - 1.030	1.005 - 1.030	1.010 - 1.030	1.020 - 1.030 ⁹		1.005 - 1.030	1.005 - 1.030
Leukocyte Esterase ⁵	10 - 25 - 500 Leu/μL	Trace - 2 +	25 - 500 Leu/μL	25 - 500 Leu/μL	25 - 500 Leu/μL	25 - 500 Leu/μL	25 - 500 Leu/μL		25 - 500 Leu/μL ¹⁰	+ - +++ ¹⁰
Microalbumin	N/A	N/A	N/A	N/A	N/A	N/A	N/A		150 - 500 mg/L	150 - 500 mg/L
Creatinine	N/A	N/A	N/A	N/A	N/A	N/A	N/A		100 - 300 mg/dL	100 - 300 mg/dL
A:C	N/A	N/A	N/A	N/A	N/A	N/A	N/A		31 - 299 mg/g Abnormal - ≥ 300 mg/g High Abnormal	31 - 299 mg/g Abnormal - ≥ 300 mg/g High Abnormal
Ascorbic Acid	N/A	N/A	N/A	N/A	N/A	N/A	N/A		Negative	Negative

MICROSCOPIC QUALITY CONTROL CELL COUNTS ^{4,5}

Constituent	Fixed Rotor	Swing Rotor	DIRUI ^h FUS-2000	Iris ⁱ iQ200	Siemens ^a Atellica UAS 800	UriSed Variants ^c COBIO Variants	Mindray ^o EH-20 Series	Toyobo ^p USCANNER(E)	Toyobo ^p USCANNER premio	YD URISCAN PluScope
Qualitative ^f										
Red Cells/hpf	10 - 65	28 - 94	---	---	41 - 90	22 - 137	---	10 - 200	20 - 120	---
White Cells/hpf	12 - 51	21 - 84	---	---	25 - 46	15 - 73	---	10 - 190	50 - 160	---
Quantitative ^g										
Red Cells/μL †	109 - 209	177 - 329	13 - 35	3 - 6	182 - 397	100 - 600	22 - 178	30 - 600	60 - 360	22 - 300
White Cells/μL †	75 - 151	149 - 277	70 - 124	46 - 65	110 - 204	70 - 320	11 - 112	30 - 570	150 - 480	11 - 250
Crystals ***	Present	Present	---	---	(- - +)	Present	None - Present	---	---	None - Present
Casts (low power)	< 1	< 1	---	---	(-)	Not Present	< 1	---	---	< 1
Bacteria	Present	Present	---	---	(- - +)	Present	---	---	---	---

† Iris iQ200 cells/hpf.

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

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CONSTITUENT	REAGENT TEST STRIP RESULTS ¹							
	DIRUI ^h DIRUI REAGENT STRIP [®] DIRUI H-100 DIRUI H-800 / FUS-2000		McKesson ⁱ Consult [®] Diagnostics REAGENT STRIPS 120 Urine Analyzer	ARKRAY ^k Aution Reagent Strip Aution Hybrid [™] AU-4050	Mindray ^o Hyssen Urinalysis Reagent Strips UA-5600,5800,6600,6800	CARDINAL HEALTH Urinalysis Analyzer (UAREADER2)	YD URISCAN Urine Test Strips (Visual)	YD URISCAN PRO II, URISCAN Optima II PRO, URISCAN Optima Super and Super+
	pH	7.0 - 8.0	7.0 - 8.0	7.0 - 8.0	7.0 - 8.0	6.5- 8.5	7.0 - 8.0	6.5- 8.0
Protein	Trace - ≥ 300 mg/dL	Trace - ≥ 300 mg/dL	15 - 300 mg/dL	10 - 600 - over mg/dL	15 - 300 mg/dL	10 - 1000 mg/dL	2 + - 4 +	2 + - 4 +
Glucose	100 - ≥ 1000 mg/dL	100 - ≥ 1000 mg/dL	100 - 1000 mg/dL	70 - 1000 - over mg/dL	50 - 1000 mg/dL	100 - 1000 mg/dL	Trace - 3 +	Trace - 3 +
Ketones	5 - ≥ 80 mg/dL	5 - ≥ 80 mg/dL	5 - 80 mg/dL	5 - 150 - over mg/dL	15 - 80 mg/dL	5 - 100 mg/dL	1 + - 3 +	1 + - 3 +
Bilirubin	1 - ≥ 6 mg/dL	1 - ≥ 6 mg/dL	1 - 4 mg/dL	0.5 - 10.0 - over mg/dL	1 - 6 mg/dL	0.5 - 3.0 mg/dL	1 + - 3 +	1 + - 3 +
Blood (hemoglobin)	10 - ≥ 200 Ery/μL	10 - ≥ 200 Ery/μL	10 - 200 Ery/μL	0.03 - 1 - over mg/dL	10 - 200 Ery/μL	5 - 250 RBC/μL	1 + - 3 +	1 + - 3 +
Nitrite	Positive	Positive	Positive	1 + - 2 +	Positive	Positive	Positive	Positive
Urobilinogen	0.2 - ≥ 8 mg/dL	0.2 - ≥ 8 mg/dL	2 - 8 mg/dL	2 - 12 - over mg/dL	1 - 4 mg/dL	1.0 - 12.0 mg/dL	2 + - 4 +	2 + - 4 +
Specific Gravity	1.020 - ≥ 1.030	1.015 - ≥ 1.030	1.010 - 1.030	1.020 - 1.030 ⁹	1.010 - 1.030	1.010 - 1.030	1.010 - 1.025	1.010 - 1.033
Leukocyte Esterase ⁵	15 - ≥ 500 Leu/μL	15 - ≥ 500 Leu/μL	15 - 500 Leu/μL	25 - 500 Leu/μL	70 - 500 Leu/μL	10 - 500 WBC/μL	1 + - 3 +	1 + - 3 +
Microalbumin	30 - 150 mg/L	30 - 150 mg/L	N/A	N/A	3 - 15 mg/dL	30 - 150 mg/L	N/A	30 - 150 mg/L
Creatinine	100 - 300 mg/dL	100 - 300 mg/dL	N/A	N/A	50 - 300 mg/dL	100 - 300 mg/dL	N/A	100 - 300 mg/dL
A:C	< 30 mg/g Normal - 30 - 300 mg/g Abnormal	< 30 mg/g Normal - 30 - 300 mg/g Abnormal	N/A	N/A	N/A	30 - 300 mg/g Abnormal - > 300 mg/g High Abnormal	N/A	N/A
Ascorbic Acid	N/A	N/A	N/A	N/A	N/A	N/A	Negative	Negative

- Methodology changes or variability in reagent strip lots can influence Liqua-Trol recoveries. It is recommended that the value listed here be used as guidelines until the laboratory has established its own quality control ranges.
- An atypical brownish-purple visual result may be noted on the ketone pad. Use the color intensity to interpret the results.
- A pink-lavender visual result on the Roche Chemstrip urobilinogen pad should be interpreted as positive.
- 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.
- 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.
- An atypical pink-reddish brown visual result may be noted on the Siemens bilirubin pad. Use the color intensity to interpret the results.
- Ranges assigned in USA mg/dL and with International mg/dL in parentheses.
- An atypical navy-blue visual result may be observed on the blood pad. Use the color intensity to interpret the results.
- Value assigned with normal system settings at .005 increments.
- An atypical color for protein, urobilinogen and leukocyte esterase.
- Value Assignment done with software 1.900.002.
- Values assigned for international use only.
- Microalbumin values are assigned with Siemens Microalbumin strips on the CLINITEK 50, STATUS, and 100 only.

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

- Siemens Medical Solutions Diagnostics
- Roche Diagnostics Corporation
- 77 Elektronika KFT (**For International Use Only**)
- Quidel Corporation
- Beckman Coulter, Inc
- Using KOVA[®] System with KOVA[®] Slide II, KOVA Glasstic[®] Slide 10
- Using KOVA[®] System with KOVA[®] Glasstic[®] Slide 10 with Grids
- DIRUI Industrial Co., Ltd (**For International Use Only**)
- Iris Diagnostics
- BIOSYS Laboratories, Inc
- ARKRAY, Inc
- McKesson Medical-Surgical / Consult[®]Diagnostics
- Germaine Laboratories, Inc.
- Cardinal Health[®]
- Mindray
- Toyobo Co.,Ltd
- Biorex Labs
- Micro Essential Laboratory
- Fisher Healthcare

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KOVA Liqua-Trol® with Microscopics Level II (Normal with hCG) Urinalysis Control

KOVA Liqua-Trol		Lot No: K306291						Expiration Date: 2024-12-31		
CONSTITUENT	REAGENT TEST STRIP RESULTS ¹									
	SIEMENS REAGENT STRIP ^a								BIOSYS ^h	IRIS REAGENT STRIP ^g
	Visual	Clinitek® 50	Clinitek® STATUS / STATUS +	Clinitek® 100	Clinitek® 500 / Advantus	Clinitek® Atlas	Clinitek® Novus	UriScan Optima™ and Optima II™ PSS® Select Consult® Diagnostics	iChem® Velocity™	
pH	6.0 - 7.0	6.0 - 7.0	6.0 - 7.5	6.0 - 7.0	6.0 - 7.5	N/A	6.0 - 7.0		6.0 - 7.0	6.0 - 7.0
Protein	Negative	Negative	Negative	Negative	Negative	N/A	Negative		Negative	Negative
Glucose	Negative	Negative	Negative	Negative	Negative	N/A	Negative		Negative	Negative
Ketones	Negative	Negative	Negative	Negative	Negative	N/A	Negative		Negative	Negative
Bilirubin	Negative	Negative	Negative	Negative	Negative	N/A	Negative		Negative	Negative
Blood (hemoglobin)	Negative	Negative	Negative	Negative	Negative	N/A	Negative		Negative	Negative
Nitrite	Negative	Negative	Negative	Negative	Negative	N/A	Negative		Negative	Negative
Urobilinogen	0.2 - 1 EU/dL	0.2 - 1.0 EU/dL	0.2 - 1.0 EU/dL	0.2 - 1.0 EU/dL	0.2 - 1.0 EU/dL	N/A	0.2 - 1.0 EU/dL		Normal	Normal
Specific Gravity	1.005 - 1.020	≤ 1.005 - 1.020	≤ 1.005 - 1.025	≤ 1.005 - 1.025	≤ 1.005 - 1.025	N/A ⁵	≤ 1.005 - 1.015 ⁵		≤ 1.005 - 1.020	1.005 - 1.015 ⁵
Leukocyte Esterase ³	Negative	Negative	Negative	Negative	Negative	N/A	Negative		Negative	Negative
Microalbumin	N/A	≤ 10 mg/L ⁴	≤ 10 mg/L ⁴	≤ 10 mg/L ⁴	N/A	N/A	≤ 10 mg/L ⁶		N/A	N/A
Creatinine	100 - 300 mg/dL	100 - 300 mg/dL	100 - 300 mg/dL	100 - 300 mg/dL	100 - 300 mg/dL	N/A	100 - ≥ 300 mg/dL ⁶		N/A	N/A
A:C	N/A	< 30 mg/g Normal ⁴			N/A	N/A	Normal:Dilute - Normal ⁶		N/A	N/A
Ascorbic Acid	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	Negative

PHYSICAL CHARACTERISTICS

Property	Value Range	Method
Appearance	Clear	Visual
Color	Yellow - Green	Visual
Specific Gravity	1.005 - 1.009	Refractometer (Room Temp.)
Osmolality	275 - 375 mOsm	Freezing Pt. Depression
pH	6.0 - 7.0	pH meter

ALTERNATIVE TESTS

Constituent/Method	Value Range
Bilirubin/Ictotest® ^a	Negative
Protein/Sulfosalicylic Acid (3%)	
Qualitative	Negative
Glucose/AimTab™ Reducing Substances ^k	Negative
Ketone/K-Check® ^o	Negative
Nitrazine Paper/pHizatest ^p	6.0 - 7.0

Note: Other manufacturers' methods will work and should be confirmed by the laboratory.

PREGNANCY TESTING

Method	Result
Beckman Coulter ICON® 20 hCG ^e	Positive
Quidel QuickVue® hCG ^d	Positive
Siemens Clinitest® hCG ^a	Positive
McKesson Consult® hCG Dipstick/Cassette ^j	Positive
Cardinal Health® hCG Dipstick/Cassette ^l	Positive
Fisher Sure-Vue™ hCG/Strips/STAT ^q	Positive

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CONSTITUENT	REAGENT TEST STRIP RESULTS ¹									
	ROCHE REAGENT STRIP ^b							77 ELEKTRONIKA REAGENT STRIP ^c		
	Combur-Test® Visual	Chemstrip® Visual	Chemstrip Criterion II™	URISYS 1800™	URISYS 1100™	Cobas® U 411	Cobas® U 601	HandUReader, DocUReader, DocUReader 2, LabUReader LabUReader Plus, LabUReader Plus 2, LabUMat LabUMat 2, Visual Reading		
pH	6 - 7	6 - 7	6 - 7	6 - 7	6 - 7	6 - 7	6 - 7		6 - 7	6 - 7
Protein	Negative	Negative	Negative	Negative	Negative	Negative	Negative		Negative	Negative
Glucose	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal
Ketones	Negative	Negative	Negative	Negative	Negative	Negative	Negative		Negative	Negative
Bilirubin	Negative	Negative	Negative	Negative	Negative	Negative	Negative		Negative	Negative
Blood (hemoglobin)	Negative	Negative	Negative	Negative	Negative	Negative	Negative		Negative	Negative
Nitrite	Negative	Negative	Negative	Negative	Negative	Negative	Negative		Negative	Negative
Urobilinogen	Normal	Normal	Normal	Normal	Normal	Normal	Normal		Normal	Normal
Specific Gravity	1.005 - 1.015	1.005 - 1.015	1.005 - 1.015	1.005 - 1.015	1.005 - 1.015	1.005 - 1.015	1.005 - 1.015		1.000 - 1.025	1.000 - 1.025
Leukocyte Esterase ³	Negative	Negative	Negative	Negative	Negative	Negative	Negative		Negative	Negative
Microalbumin	N/A	N/A	N/A	N/A	N/A	N/A	N/A		≤ 10 mg/L	≤ 10 mg/L
Creatinine	N/A	N/A	N/A	N/A	N/A	N/A	N/A		50 - 300 mg/dL	50 - 300 mg/dL
A:C	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A
Ascorbic Acid	N/A	N/A	N/A	N/A	N/A	N/A	N/A		Negative	Negative

MICROSCOPIC QUALITY CONTROL

CELL COUNTS ^{4,5}

Constituent	Fixed Rotor	Swing Rotor	Iris ^g iQ200	Siemens ^a Atellica UAS 800	UriSed Variants ^c COBIO Variant	Mindray ^m EH-20 Series	Toyobo ⁿ USCANNER(E)	Toyobo ⁿ USCANNER premio	YD URISCAN ^r PluScope
Qualitative									
Red Cells/hpf	0 - 1	0 - 1	---	0 - 1	0 - 2	---	0 - 10	0 - 10	---
White Cells/hpf	0 - 7	0 - 5	---	0 - 2	0 - 6	---	0 - 10	0 - 10	---
Quantitative									
Red Cells/μL †	0 - 1	0 - 1	0 - 1	0 - 1	0 - 5	N/A	0 - 30	0 - 30	0 - 30
White Cells/μL †	0 - 6	0 - 16	0 - 3	0 - 11	0 - 25	N/A	0 - 30	0 - 30	0 - 30
Crystals *	≤ 1	≤ 1	---	(-)	Maybe Present	N/A	---	---	None - Present
Casts (low power)	< 1	< 1	---	(-)	None	N/A	---	---	None - Present
Bacteria	< 1	< 1	---	(-)	Maybe Present	---	---	---	---

† Iris iQ200 cells/hpf.

* Urinary artifacts may be present

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CONSTITUENT	REAGENT TEST STRIP RESULTS ¹							
	DIRUI ^f DIRUI REAGENT STRIP® DIRUI H-100	McKesson ^j Consult® Diagnostics Reagent Strips 120 Urine Analyzer	ARKRAY ⁱ Aution Reagent Strip Aution Hybrid TM AU-4050	Mindray ^m Hyssen Urinalysis Reagent Strips UA-5600,5800,6600,6800	CARDINAL HEALTH ^l Urinalysis Analyzer (UAREADER2)	YD URISCAN ^r Urine Test Strips (Visual)	YD URISCAN ^r PRO II, URISCAN Optima II PRO, URISCAN Optima Super and Super+	
pH	N/A	6.0 - 7.0	6.0 - 7.0	N/A	5.5 - 7.0	5.5 - 7.0	5.5 - 7.0	
Protein	N/A	Negative	Negative	N/A	Negative	Negative	Negative	
Glucose	N/A	Negative	Negative	N/A	Negative	Negative	Negative	
Ketones	N/A	Negative	Negative	N/A	Negative	Negative	Negative	
Bilirubin	N/A	Negative	Negative	N/A	Negative	Negative	Negative	
Blood (hemoglobin)	N/A	Negative	Negative	N/A	Negative	Negative	Negative	
Nitrite	N/A	Negative	Negative	N/A	Negative	Negative	Negative	
Urobilinogen	N/A	0.2 - 1 mg/dL	Normal	N/A	Normal	Normal	Normal	
Specific Gravity	N/A	1.005 - 1.025	1.005 - 1.015 ⁵	N/A ⁵	< 1.005 - 1.025	1.010 - 1.025	1.000 - 1.025	
Leukocyte Esterase ³	N/A	Negative	Negative	N/A	Negative	Negative	Negative	
Microalbumin	N/A	N/A	N/A	N/A	Negative	N/A	Negative	
Creatinine	N/A	N/A	N/A	N/A	100 - 300 mg/dL	N/A	50 - 300 mg/dL	
A:C	N/A	N/A	N/A	N/A	< 30 mg/g Normal	N/A	N/A	
Ascorbic Acid	N/A	N/A	N/A	N/A	N/A	Negative	Negative	

1. Methodology changes or variability in reagent strip lots can influence Ligua-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. Microalbumin values are assigned with Siemens Microalbumin strips on the Clinitek 50, STATUS, STATUS + and 100 only.
5. Value assigned with Normal system settings at .005 increments.
6. Values assigned for international use only.

a Siemens Medical Solutions Diagnostics
 b Roche Diagnostics
 c 77 Elektronika KFT (For International Use Only)
 d Quidel Corporation
 e Beckman Coulter Inc.
 f DIRUI Industrial Co., Ltd (For International Use Only)
 g Iris Diagnostics
 h BIOSYS Laboratories Inc.
 i ARKRAY, Inc.

j McKesson Medical-Surgical / Consult® Diagnostics
 k Germaine Laboratories, Inc.
 l Cardinal Health®
 m Mindray
 n Toyobo Co., Ltd.
 o Biorex Labs
 p Micro Essential Laboratory
 q Fisher Healthcare
 r YD Diagnostics Corporation

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