Quick-Read™ Precision Grid Slide Chart of Values

10 or 12mL Urine or Body Fluid Specimens Concentrated to 1mL

LOW CELL COUNT SAMPLES:

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Count the total cells of specific type contained in 10 squares				
	Table A	Table B		
Total Cells Per 10 Squares	12mL Concentrated to 1mL	10mL Concentrated to 1mL		
	Cells/µL	Cells/µL		
1	1	1		
2	2	2		
3	2	3		
4		4		
5	4	5		
6	5	5		
7	5	6		
8	6	7		
9	7	8		
10	8	9		
11	8	10		
12	9	11		
13	10	12		
14	11	13		
15	11	14		
16	12	14		
17	13	15		
18	14	16		
19	14	17		
20	15	18		
21	16	19		
22	17	20		
23	17	21		
24	18	22		
25	19	23		
26	20	23		
27	20	24		
28	21	25		

Count the total cells of specific type in any 5 squares.				
	Table C	Table D		
Total Cells Per 5 Squares	12mL Concentrated to 1mL	10mL Concentrated to 1mL		
	Cells/µL	Cells/µL		
5	8	9		
6	9	11		
7	11	13		
8	12	14		
9	14	16		
10	15	18		
11	17	20		
12	18	22		
13	20	23		
14	21	25		
15	23	27		
16	24	29		
17	26	31		
18	27	32		
19	29	34		
20	30	36		
21	32	38		
22	33	40		
23	35	41		
24	36	43		
25	38	45		
30	45	54		
35	52	63		
40	60	72		
45	68	81		
50	75	90		
60	90	108		
70	105	126		

Note: For samples that are less than 10mL, centrifuge 6mL and double the results obtained before using the A or C tables above.

Method of Calculation of Cells/µL using Quick-Read Precision Grid Slide:

- 1. For 12mL samples concentrated to 1mL, multiply average cells obtained per square by 7.5.
- 2. For uncentrifuged 12mL samples, multiply average cells obtained per square by 90.
- 3. For 10mL samples concentrated to 1mL, multiply average cells obtained per square by 9.
- 4. For 10mL samples concentrated to 0.5mL, multiply average cells obtained per square by 4.5.

Undiluted, Uncentrifuged Samples

LOW CELL COUNT SAMPLES:

HIGH CELL COUNT SAMPLES:

Count the total cells of specific type
Count the total cells of specific type

Contain	contained in 18 squares.		contained in 9 squares.			
Total Cells/18 Squares	Cells/µL	Cells/mL		Total Cells/9 Squares	Cells/µL	Cells/mL
1	5	5,000		1	10	10,000
2	10	10,000		2	20	20,000
3	15	15,000		3	30	30,000
4	20	20,000		4	40	40,000
5	25	25,000		5	50	50,000
6	30	30,000		6	60	60,000
7	35	35,000		7	70	70,000
8	40	40,000		8	80	80,000
9	45	45,000		9	90	90,000
10	50	50,000		10	100	100,000
11	55	55,000		20	200	200,000
12	60	60,000		25	250	250,000
13	65	65,000		30	300	300,000
14	70	70,000		35	350	350,000
15	75	75,000		40	400	400,000
16	80	80,000		50	500	500,000
17	85	85,000		60	600	600,000
18	90	90,000		70	700	700,000
19	95	95,000		80	800	800,000
20	100	100,000		90	900	900,000
25	125	125,000		100	1000	1,000,000
30	150	150,000		150	1500	1,500,000
35	175	175,000		200	2000	2,000,000
40	200	200,000		250	2500	2,500,000
50	250	250,000				

Alternative Calculation:

Multiply the average number of cells per square by 90 to obtain the cells per µL; multiply by 90,000 to obtain cells per mL.

Uncentrifuged, Diluted Body Fluids Calculation Method:

Cells/ μ L = average number of cells per square x 90(factor) x Dilution

Example:

A specimen is diluted 1:10

90 RBC cells are counted in 9 squares.

RBC cells/ μ l = 90 cells x 90 (factor) x 10 (dilution) = 9000 9 squares

Quick-Read™ Precision Grid

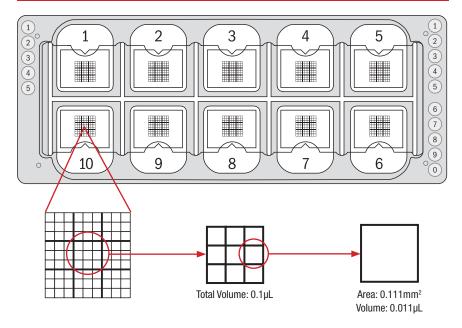
Multi-Slide Urinalysis System



For Standardized Microscopic Examination of **Urinary Sediment**



Specifications



About Quick-Read™ Precision Grid Slide

The Quick-Read™ Precision Grid slide is an innovative product designed to provide accuracy, uniformity and safety in the microscopic examination of urinary sediment. The slides are made of optically clear acrylic for optimal viewing. Each slide consists of ten chambers. Each chamber has a grid with 81 well defined, pre-measured squares. Each pre-measured square holds a specific volume of urinary sediment which facilitates the convenient and rapid microscopic examination of the cellular elements in each specimen.

Method

In the Quick-Read™ Precision Grid method for urinary sediment analysis, a determination is made of the average number of cellular elements within one square at 400X magnification. This provides the reportable count per HPF (high power field) subject to the dilution factor described on the next page. To arrive at this average number, count the elements in one or more squares and divide the total number counted by the number of squares viewed. Best results are obtained by counting the total number in a higher number of squares and then dividing by the number of squares counted to obtain the average; however, an average may be obtained by counting fewer squares since the cellular elements should be uniformly distributed throughout the entire chamber. Since differing amounts of urine specimens may be available for testing, saline may be added to reach the required volume. The appropriate factor is then applied based on the non-diluted starting volume to obtain the reportable test results.

Note: to determine cells/mL, see the accompanying CHART OF VALUES.

Instructions

- 1. When using the Quick-Prep[™] System: Add urine to the 10mL mark on the conical test tube (item #112010) and affix stopper (item #116142).
- 2. Centrifuge for 5 minutes at 400 rcf (1500 rpm).
- **3.** Decant 9mL from the 10mL tube, leaving 1mL of sediment at the bottom.
- **4.** If preferred, add one drop of urine sediment stain to the residual urine sediment to assist in identification of the urinary cellular elements. Resuspend using the Quick-Prep™ urinalysis pipette.
- **5.** With the Quick-Prep[™] urinalysis pipette, place a drop of well-mixed sediment into the scalloped area of a numbered chamber on the Quick-Read[™] Precision Grid slide. The sediment will distribute uniformly in the viewing chamber by capillary action.
- **6.** Scan low power fields at 100x magnification to count casts.
- **7.** Count all other formed elements by scanning high power fields (at 400x magnification, one square will be in complete view) and determine the average number of elements per square. (See METHOD on previous page).

Results

If you started with 10mL of urine:

The average number of cellular elements in one square is the reportable number per HPF (High Power Field).

If you started with 12mL of urine:

Multiply the average number of cellular elements in the one square by 0.8333. The value thus obtained is equivalent to the number per HPF (High Power Field).

Note: For more accurate results, count the total cells of specific types contained in 9 squares.

Ordering Information				
Item #	Description	Packaging		
3800	Quick-Read™ Precision Grid urinalysis system	100/box		
3825	Quick-Prep [™] (10mL tube and pipette system)	1000/case		
112010	10mL conical tube	4 x 500/case		
116142	16mm white plug stopper	4 x 1000/case		
112015	12mL flared urine tube	2 x 1000/case		
113137	Snap-cap with sanitary grip for 12mL tube	3 x 500/case		
112192	Patient identification labels, 25/sheet	80 x 25/case		
6207	3.5 oz plastic specimen cups	2500/case		

