Quick-Read™ Precision Cell Slide Chart of Values

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

LOW CELL COUNT SAMPLES:
Count the total cells of specific type contained in 9 circles.

Total Cells Per 9 Circles	Table A 12mL Concentrated to 1mL	Table B 10mL Concentrated to 1mL
	Cells/µL	Cells/µL
1	1	1
2	2	2
3	2	3
4	3	4
5	4	5
6	5	6
7	5	7
8	6	8
9	7	9
10	8	10
11	9	11
12	9	12
13	10	13
14	11	14
15	12	15
16	13	16
17	14	17
18	14	18
19	15	19
20	16	20
21	17	21
22	18	22
23	19	23
24	19	24
25	20	25
26	21	26
27	22	27
28	23	28

HIGHER CELL COUNT SAMPLES:
Count the total cells of specific type in any 3 circles.

Total Cells Per 3 Circles	Table C 12mL Concentrated to 1mL	Table D 10mL Concentrated to 1mL
	Cells/µL	Cells/µL
4	9	12
5	12	15
6	15	18
7	17	21
8	20	24
9	22	27
10	25	30
11	17	33
12	30	36
13	32	39
14	35	42
15	37	45
16	40	48
17	42	51
18	45	54
19	47	57
20	50	60
21	52	63
22	55	66
23	57	69
24	69	72
25	62	75
30	75	90
35	87	105
40	100	120
45	112	135
50	125	150
60	150	180
70	175	210

Note: For samples that are less than 12mL, reduce the centrifuged quanitity to 6mL and double the results obtained before using the A or C tables above.

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

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

Undiluted, Uncentrifuged Samples

LOW CELL COUNT SAMPLES:
Count the total cells of specific type contained in 18 circles.

Total Cells/18 Circles	Cells/µL	Cells/µL
1	5	5,000
2	10	10,000
3	15	15,000
4	20	20,000
5	25	25,000
6	30	30,000
7	35	35,000
8	40	40,000
9	45	45,000
10	50	50,000
11	55	55,000
12	60	60,000
13	65	65,000
14	70	70,000
15	75	75,000
16	80	80,000
17	85	85,000
18	90	90,000
19	95	95,000
20	100	100,000
25	125	125,000
30	150	150,000
35	175	175,000
40	200	200,000
50	250	250,000

HIGH CELL COUNT SAMPLES:
Count the total cells of specific type contained in 9 circles.

Total Cells/9 Circles	Cells/µL	Cells/µL
1	10	10,000
2	20	20,000
3	30	30,000
4	40	40,000
5	50	50,000
6	60	60,000
7	70	70,000
8	80	80,000
9	90	90,000
10	100	100,000
20	200	200,000
25	250	250,000
30	300	300,000
35	350	350,000
40	400	400,000
50	500	500,000
60	600	600,000
70	700	700,000
80	800	800,000
90	900	900,000
100	1000	1,000,000
150	1500	1,500,000
200	2000	2,000,000
250	2500	2,500,000

Alternative Calculation:

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

Uncentrifuged, Diluted Body Fluids Calculation Method:

Cells/µL = average number of cells per circle x 90(factor) x Dilution

Example:

A specimen is diluted 1:10
90 RBC cells are counted in 9 circles.

$$\text{RBC cells/µl} = \frac{90 \text{ cells}}{9 \text{ circles}} \times 90 \text{ (factor)} \times 10 \text{ (dilution)} = 9000$$

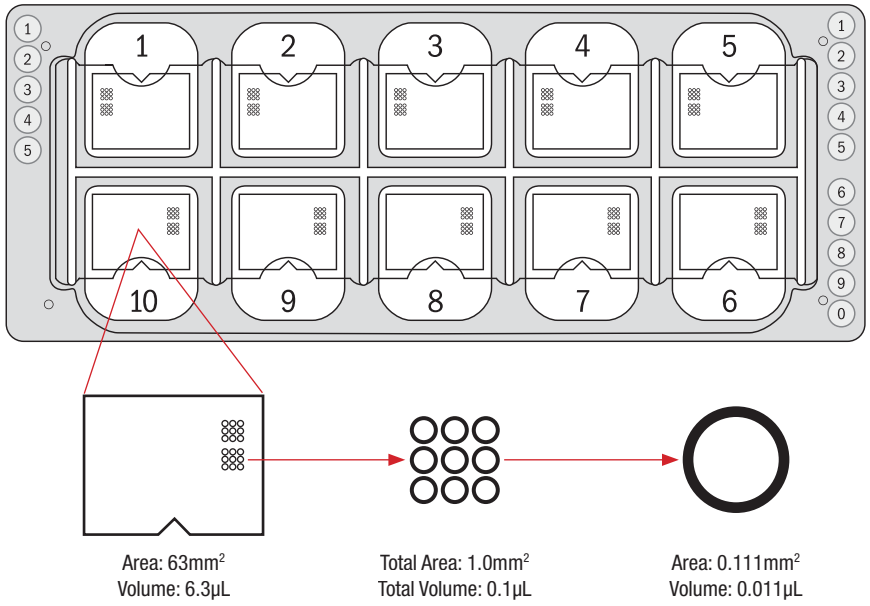
Quick-Read™ Precision Cell

Multi-Slide Urinalysis System



For Standardized Microscopic Examination of Urinary Sediment

Specifications



About Quick-Read™ Precision Cell

The Quick-Read™ Precision Cell slide is an innovative product designed to provide accuracy, uniformity and safety in the microscopic examination of urinary sediment. Made of optically clear acrylic for optimal viewing, the slide consists of 10 chambers, each chamber containing 18 circles. Unlike other systems that utilize a series of grids for counting, the Quick-Read Precision Cell slide incorporates pre-measured circles that contain specific volumes of urinary sediment within its circumference. This facilitates a convenient and rapid microscopic examination of the cellular elements in each specimen.

Method

In the Quick-Read Precision Cell method for urinary sediment analysis, a determination is made of the average number of cellular elements within one circle 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 circles and divide the total number counted by the number of circles viewed. Best results are obtained by counting the total number in all 18 circles and then dividing by 18 to obtain the average; however, an average may be obtained by counting fewer circles 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 or 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-Pettor™.

5. With the Quick-Pettor, place a drop of well-mixed sediment into the scalloped area of a numbered chamber on the Quick-Read Precision Cell slide. The sediment will distribute uniformly in the viewing chamber by capillary action.

6. Scan low power fields at 100x magnification to enumerate casts.

7. Enumerate all other formed elements by scanning high power fields (at 400x magnification, one circle will be in complete view) and determine the average number of elements per circle. (See METHOD on previous page).

Results

If you started with 10mL of urine:

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

Note: see accompanying CHART OF VALUES on next page for more specific information.

Ordering Information

Item #	Description	Packaging
3805	Quick-Read Precision Cell 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



Item #3825
Quick-Prep