

I-KOVA PLASTICS GLASSTIC SLIDE 10 neSikhokelo sokuQala Ngokukhawuleza se-Grid

REF

I-KOVA Plastics Glasstic Slide 10 ene-grid yobungakanani yenzelwe ukuba isetyenziswe kunye neNkqubo yoHlalutyo lomchamo ye-KOVA Microscopic Urinalysis System esemgangathweni:



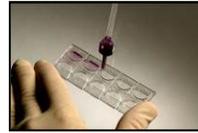
Dlulisa i-12mL yesampuli yomchamo ukusuka kwi -**KOVA Plastics Cup** ukuya kwi -**KOVA Plastics Tube**. Beka i -**KOVA Plastics Cap** kwi- **KOVA Plastics Tube** kwaye emva koko u-centrifuge kwi- **400 rcf** (-1500 rpm) **imizuzu emi-5**.



Faka i -**KOVA Plastics Petter** ngokuqinileyo ezantsi kwetyhubhu kwaye uqinisekise ukuba ikliphu ekwibalhbu ibotshelwele kumda ongaphandle we - **KOVA Plastics Tube** uze uyigalele. **1-1.0mL** yentlenge iya kubanjiswa yi- **KOVA Plastics Petter**.



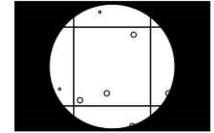
Xuba kwakhona ngobunono usebenzisa i -**KOVA Plastics Petter**. Yongeza i- **1 drop ye -KOVA Stain** ngaphambi kokuxuba kwakhona, ukuba kuyimfuneko, ukuphuculwa kobungakanani.



Usebenzisa i -**KOVA Plastics Petter**, galela isampuli kwi-cut-out notch kwigumbi le-slide. Beka i-pipette ihambelane ne-slide xa ugcwalisa igumbi. Kuphephe ukubamba umqobo omilise u-V ngelixa ukhupha ulwelo. Ukubekwa ngendlela engafanelekanga xa ukhupha kunokubangela ukuphuphumala ukusuka kwelinye igumbi ukuya kwelinye. Ukongezwa ngokucokisekileyo kweesampuli kuqinisekisa iipropati zokuphatha ucoceko lwe- **KOVA System**.



Ngesenzo se-capillary i-6.6 μ L yesampuli iya kutsalwa kwi- **KOVA ye-Plastic Slide10** kwigumbi elikhokelela kumxube olinganayo wentlenge. Musa ukuphinda usebenzise iimveliso ze-KOVA.



Ukulinganisa ii-cast kumandla aphantsi (100x). Ukulinganisa zonke iiseli kumandla aphezulu (400x). Bala iiseli **ngaphakathi** kwemigca ye-grid encinci ye-0.33 mm yesikwere (njengoko kubonisiwe). Jonga kwitafle yexabiso yesibalo seseli nge- μ L nganye yesampuli yesigulana.

ITAFILE YEXABISO

Isampulu eziPhantsi zeSeli Ezibaliweyo:

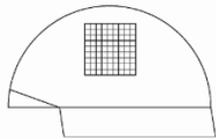
Bala iiseli zizonke zohlobo oluthile oluqulethwe kwii-grid ezincinci ezili-10 ngaphakathi kwee-quadrants ezahlukeneyo ze-grid yokubala.

Iiseli Zizonke	Iiseli / μ L
1	1
2	2
3	2
4	3
5	4
6	5
7	5
8	6
9	7
10	8
11	8
12	9
13	10
14	11
15	11
16	12
17	13
18	14
19	15
20	15
21	16
22	17
23	18
24	18
25	19
26	20
27	21
28	21

Isampulu eziPhezulu zeSeli Ezibaliweyo:

Bala iiseli zizonke zohlobo oluthile oluqulethwe kwii-grid ezincinci ezi-5 ngaphakathi kwee-quadrants ezahlukeneyo ze-grid yokubala.

Iiseli Zizonke	Iiseli / μ L
5	8
6	9
7	11
8	12
9	14
10	15
11	17
12	18
13	20
14	21
15	23
16	24
17	26
18	28
19	29
20	31
21	32
22	34
23	35
24	37
25	38
30	46
35	54
40	61
45	69
50	77
60	92
70	107



I-KOVA ye-Plastic Slide seGlasstiki ye-10 eneGumbi le-Grid
Umthamo weGumbi:
 6,6 μ L
Ubunzulu beGumbi:
 0,1 mm
Ubungakanani be-grid yangaphandle:
 3 mm x 3 mm
Umthamo kwi-grid:
 0,9 μ L
Ubungakanani be-Grid encinci:
 0,33 mm x 0,33 mm
Umthamo we-Grid eNcinci:
 0,01111 μ L

PHAWULA: Kwiisampuli ezingaphantsi kwe-12mL, nciphisa ubungakanani be-centrifuge ukuya kwi-6mL kwaye uphinde kabini iziphumo ezifunyenweyo ngaphambi kokusebenzisa itafle (ngasentla).

Uhlobo lweSeli	Luqhelekile
Leukocytes	0-4/ μ L
Erythrocytes	0-2/ μ L

Umda	Pathological*
4-6/ μ L	> 6/ μ L
2-3/ μ L	> 3/ μ L

Olunye Ubalo: Misela inani eliqhelekileyo leeseli kwi-grid nganye encinci kwaye emva koko usebenzise uphinda-phindo olulandelayo ukubala iiseli nge- μ L nganye.

Ukubala iiseli / μ L usebenzisa i-KOVA ye-Plastic Slide ye-Glasstic ye-10 nge-Grid:

- Kwiisampuli ezingena-centrifuge okanye ezicocekileyo, phinda-phinda iiseli eziqhelekileyo ezifunyenwe ngokwe-grid nganye encinci x **90**.
- Kwiisampuli ze-10mL ezixutywe kwi-1mL, phindaphinda iiseli eziqhelekileyo ezifunyenwe ngegridi encinci x **9**.
- Kwiisampuli ze-10mL ezixutywe kwi-0.5mL, phindaphinda iiseli eziqhelekileyo ezifunyenwe ngegridi encinci x **4.5**.
- Kwiisampuli ze-12mL ezixutywe kwi-1mL (i-KOVA System), phindaphinda iiseli eziqhelekileyo ezifunyenwe ngegridi encinci x **7.5**.

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Umzekelo wokubala (Usebenzisa i-KOVA System 12mL ukuya ku-1mL indlela):

Iiseli	Ii-grid Ezibaliweyo	Iiseli Zizonke	Iiseli Ezizhelekileyo / ii-Grid	x Factor Ezininzi(7,5)	Iiseli kwi-µL nganye veeSampuli
Leukocytes	10	5	0,5	0,5 x 7,5	3,8
Erythrocytes	10	14	1,4	1,4 x 7,5	10,5

* Isalathisi: Aiken, CD kunye neSokeland, J. (1983). Urologie. Thiems, Stuttgart, uHlelo lwesithoba, iphe.79

ITAFILE YEXABISO UMCHAMO ONGAXUTYWANGA, ONGAFAKWANGA KWI-CENTRIFUGE UCHITHO OKANYE IISAMPULI ZOLWELO LOMZIMBA

IISAMPULI EZIPHANTSI ZESELI EZIBALIWEYO

Bala iiseli zizonke zohlobo oluthile oluqulethwe kwii-grid ezincinci **ezingama-36** okanye ii-quadrants ezi-4 ezipheleleyo ze-grid yokubala.

Iiseli Zizonke	Iiseli/µL	Iiseli/mL
1	3	2,500
2	5	5,000
3	8	7,500
4	10	10,000
5	13	12,500
6	15	15,000
7	18	17,500
8	20	20,000
9	23	22,500
10	25	25,000
11	28	27,500
12	30	30,000
13	33	32,500
14	35	35,000
15	38	37,500
16	40	40,000
17	43	42,500
18	45	45,000
19	48	47,500
20	50	50,000
25	63	62,500
30	75	75,000
40	100	100,000
50	126	125,500

Olunye Ubalo:

Phinda-phinda iiseli ezizhelekileyo ezifunyenwe ngokwe-grid nganye encinci ngama-90 ukuze ufumane iiseli nge-µL nganye; phindaphinda ngama-90,000 ukufumana iiseli nge-mL nganye.

IISAMPULI EZIPHEZULI ZESELI EZIBALIWEYO

Bala iiseli zizonke zohlobo oluthile oluqulethwe kwii-grid ezincinci **ezili-10** kwii-quadrants ezahlukeneyo ze-grid yokubala.

Iiseli Zizonke	Iiseli/µL	Iiseli/mL
1	9	9,000
2	18	18,000
3	27	27,000
4	36	36,000
5	45	45,000
6	54	54,000
7	63	63,000
8	72	72,000
9	81	81,000
10	90	90,000
20	180	180,000
25	225	225,000
30	270	270,000
35	315	315,000
40	360	360,000
50	450	450,000
60	540	540,000
70	630	630,000
80	720	720,000
90	810	810,000
100	900	900,000
150	1350	1,350,000
200	1800	1,800,000
250	2250	2,250,000

Olunye Ubalo:

Phinda-phinda iiseli ezizhelekileyo ezifunyenwe ngokwe-grid nganye encinci ngama-90 ukuze ufumane iiseli nge-µL nganye; phindaphinda ngama-90,000 ukufumana iiseli nge-mL nganye.

INDLELA YOKUBALA ULWELO LOMZIMBA OLUXUTYIWEYO:

Iiseli / µL = Inani eliqhelekileyo leeseli kwi-grid encinci nganye x 90 (uphinda-phindo) x nokuxuba umz., Ulwelo loMnqonqo oluxutyiweyo 1:10; lunonke ngama-50 eeRBC's abalwe kwii-grid ezincinci ezili-10

$$\text{RBC}/\mu\text{L} = \frac{\text{iiseli ezingama-50}}{\text{ii-grid ezili-10}} \times 90 (\text{i-factor}) \times 10 (\text{ukuxuba})$$

$$= 5 \times 90 = 4,500 \text{ RBC's}/\mu\text{L}$$

umz., Isidoda esixutyiweyo 1:20; Isidoda sisonke singama-150 esibalwe kwii-grid ezincinci ezi-5

$$\text{Isidoda}/\mu\text{L} = \frac{150}{5} \times 90 (\text{i-factor}) \times 20 (\text{ukuxuba})$$

$$= 30 \times 180 = 54,000 \text{ amadlozi}/\mu\text{L}$$



UBALO LWESELI LULONKE LULUHLU LWESIQHELO⁽¹⁾

ULWELO	UHLOBO LWESELI	LUQHELEKILE	ALUQHELEKANGA	ULWELO	UHLOBO LWESELI	LUQHELEKILE	ALUQHELEKANGA
Umchamo (2)	Leukocytes	0-6/µL	> 6/µL	Synovial	Leukocytes	< 200/µL	> 200/µL
	Erythrocytes	0-3/µL	> 3/µL		Erythrocytes	< 2,000/µL	> 2,000/µL
CSF (Uluhlu lwabantu abadala)	Leukocytes	0-5/µL	> 5/µL	Pleural	Leukocytes	< 1,000/µL	> 1,000/µL
				Pericardial	Leukocytes	< 1,000/µL	> 1,000/µL
Intanda	Isidoda	40,000/µL - 160,000/µL	< 40,000/µL	Pertoneal	Leukocytes	< 300/µL	> 300/µL
					Erythrocytes	< 100,000/µL	> 100,000/µL

Izalathisi: (1) Strasinger, SK (1985) *Urinalysis kunye ne-Body Fluids*, FA Davis, Philadelphia • (2) Aiken, CD, kunye no-Sokeland, J. (1983) *Urologie*, Thiems, Stuttgart, Edition yesithoba, iphe. 79