



Aquagenx

Sef wota blong eniwan, eniples, enitaem

Kompatmen Bag Test (CBT): Hao blong usum



Kompatmen Bag Test (CBT) hemi wan test blong faenem mesamen blong *E. Koli* bacteria insaed long wan 100 mL sample, hemia nao hemi stret wei mo stret volum we Wol Helt Okenaesaesen mo U.S. Enviromen Proteksen Ajensi i kivim blong usum.

CPT test ia yu save karem go long eni ples we yu wantem mo evri samting we yu nidim blong mekem test i stap insaed long hem redi i stap. Test ia hemi save letem eniman long eniples i save se wota blong hem i helti o hemi no helti.

CBT Kit ia hemi kat enaf saplae blong 10 difren test;

- 10 CBT bag
- 10 100 mL sampol botel
- 10 *E. coli* kromojenik kuja medium test buds
- 30 Klorin tablets
- 1 sil klip we yu save usum bakeken

Wan video long hao blong usum CBT test ia i stap long website blong mifala: <http://www.aquagenx.com/how-to-use-the-cbt/>

Wanem i stap insaed long kit ia



Kompatmen Bag



Sampol botel



E. Koli Medium



Klorin Tablets



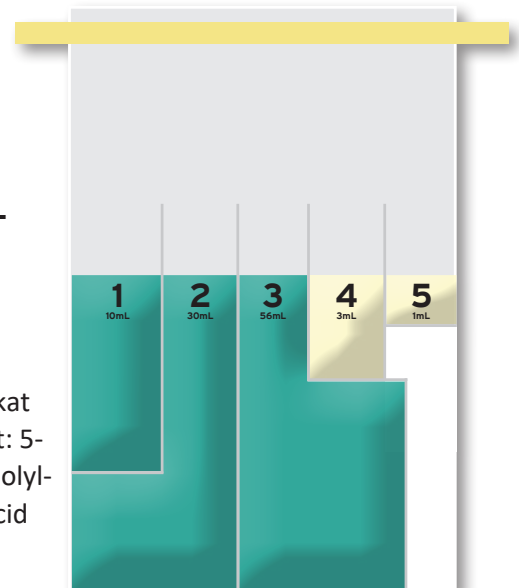
Sil Klip

Ol Volum blong Kompatmen Bag

Plastik bag ia hemi kat 5 difren ples wetem 5 difren volum we enaf long 5 difren test tubes:

- 1 = 10 mL
- 2 = 30 mL
- 3 = 56 mL
- 4 = 3 mL
- 5 = 1 mL

Total = 100 mL



E. coli medium hemi kat kromojenik substraet: 5-bromo-4chloro-3-indolyl-beta-D-glucuronic acid (X-gluc)

Hao blong usum

1. Mekem redi area blong mekem test

- Sanitizem area we bae yu wok long hem wetem wan disinfekted klining solusen wetem plastik kloves.

2. Karem 100mL sampol blong wota

- Fulumap sampol botol blong yu kasem 100mL mak.
- No mas tajem insaed long botol o insaed long lid blong botol.
- Rekodem ol detail blong sampol blong yu.

3. Mixim wota sampol wetem growth medium

- Openem growth medium pouj mo addem medium bud i go lo sampol blong wota.
- No mas tajem medium ia wetem finga o han blong yu.
- Putum bak lid long botol mo disolvem medium ia mo wait 15 minit afta yu seksekem botol i go raon folem shape blong wan sekel.
- Medium bae hemi disolv long karia. Taem medium bae hemi disolv fulwan bae hemi jenisim kala go long waet o bae kolosap bae hemi waet.
- Karia bae hemi no disolv.

4. Kapsaetem sample i go long kompatmen bag

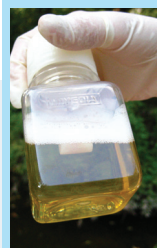
- Terem openem top blong bag
- Bifo yu fulumap bag ia, raetem stret nem long hem afta yu raprapem plastic bag wetem ol finga blong yu blong mekem se i isi blong openem mo fulumap sampol wota i go long bag ia.
- Usum ol waet tab long top blong bag blong holem i open taem yu stap kapsaetem
- Kapsaetem sampol blong yu sloslo nomo i go lo bag
- Leko test buds long botol taem yu stap kapsaetem
- Muvmuvum bag blong mekem se wota volum hemi kasem mak blong hem.
- Ol horizontal laen long bag ia nao hemi ol fill mak blong wota hemi stop long hem .
- Evri ples bae wota i mas kasem sekam fill mak mo wota level i mas semak long evri ples.

5. Sarem bag

- Rolem bag kam daon kasem fill mak afta klosem bag wetem yelo klip blong silim
- Putum waet plastik tu-pis klip . U-Saep pat blong klip bae hemi go krose width blong bag antap long wota level folem fill mak be antanit long ol opening blong ol 5 difren volum ia.
- Pusum gud rod-saep pat blong klip ia long foret blong bag i go long bak blong klip ia long nara-saed blong bag ia blong lokem/silim gud bag ia.

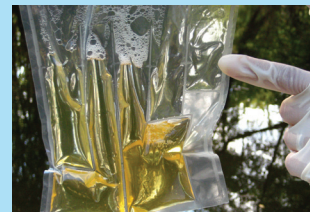
Tip #1 No mas leko sampol blong wota blong yu i stap ova long 6 haoa. Yu save kipim sampol blong yu over long 4 dei nomo sapos yu putum long wan tempereja blong 10 °C o wan tempereja we i go daon mo (be no mekem sampol i aes).

Tip #2 Medium ia nomo bae hemi disolv (lus), be i no karia blong hem. Kari bae hemi jenisim kala i go waet o kolosap bae hemi waet.



Taem medium hemi disolv bae karia bae hemi jenisim kala go long waet.

Tip #3 Bifo yu fulumap bag ia, raetem stret nem long hem afta yu raprapem plastic bag wetem ol finga blong yu blong mekem se yu save openem bag ia mo fulumap ol kompatment ia long semak level evriwan.



Ol horizontal laen lo bag ia nao hemi ol fill mak blong wota hemi stop long hem

Tip #4 Usum waet tu-pis klip ia blong klipim fulap bag tuketa long wan taem. No mas sakem klip ia afta we yu usum, kipim i stap blong usum bakeken.

6. Inkubaet

- Inkubaetem kompatmen bag ia blong mekem bakteria hemi gro
- Inkubaetem bak blong yu long wan temperaja we hemi 25 °C o ova. Sapos tempereja hemi no kasm 25 °C putum insaed long wan kontena o usum wan potepol inkubaeta.

Ol stret tempereja mo taem blong Inkubaet:

35-44.5°C:	inkubaet 20-24 haa
30-35°C:	inkubaet 24-30 haa
25-30°C:	inkubaet 40-48 haa

7. Skorem mo rekotem test risal

- Yelo/yelo-braon i minim se hemi nekat/negetiv (absence) *E. coli*, Blu/blu-grin i minim se hemi kat/positiv (presence) *E. coli*.
- Konsentraesen blong ol bakteria long sampol hemi estimaet blong positiv mo negetiv kompatmen, we hemi kivim one Most Probabel Namba (MPN) estimaet blong *E. coli* per 100 mL
- Usum MPN Tabol olong neks paeg blong faeben *E. coli* konsentraesen
- Rekodem MPN resal

8. Dikontaminaet

- Openem bag mo putum 3 klorin tablet i go insaed. Seksekem bag kasem klorin tablet ia hemi disolv. Leko bag i stap blong 45 minit.
- Afta long 45 minit kapsaetem aot wota long bag i go lo sink, toelet o hol blong graon afta yu sakem bag ia long wan sef ples.
- Putum gud waet plastik klip blong yu save usum bakeken.

Tip #5 Taem yu storem CBT ia i stap blong i redi bae hemi save smel. Yu mas putum CBT ia i go insaed long wan narafala plastik bag blong mekem i no smel taem yu stap wet long hem blong hemi redi.



Yelo/Yelo-Braon =
Nokat *E. Coli*
Blu/Blu-Grin =
Hemi kat *E. coli*

Helt Risk kaedlaen long qualiti blong wota blong drink we wol helt okenisaesen i putum (WHO), 2011

Helt Risk Katekori	<i>E. coli</i> CFU* per 100 mL
Sef	<1
Intamidiat Risk/Sef smol	1-10
Kat hae Risk/Hemi no sef	>10-100
Very Hae Risk/No sef	>100

***MPN and CFU (colony forming units)** tufala i semak nomo, be MPN oli karem long ol quantal test olsm CBT mo CFU oli karem tru long koloni baes test olsem membrane filtraesen.

Most Probabel Namba Tabol

MPN Tabol hemi representem Wol Helt Okenisaesen "Kaedlaen long qualiti blong wota blong drink," 4th Edisen. Table 5.4 ilong kaedlaen hemi kat ol difren risk katekori long wota blong drink bais long *E. coli* level we oli stat long: 0/100 mL = Sef; 1-10/100 mL = Intamidiat Risk; 11-100/100 mL = Hae Risk; mo >100/100 ml = Very Hae Risk.

General agrimen hemi se wota blong drink hemi no mas kat *E. Coil* long hem be sam kaontri *E. Coil* = 10/100mL oli look se hemi kat Intamidiat Risk.

Majem Volum blong kompartment bag blong yu wetem wan long ol 32 aotkam ia.

Compartment #					MPN/100mL	Upper 95% Confidence Interval/100mL	Health Risk Category Based on MPN and Confidence Interval
1	2	3	4	5			
10mL	30mL	56mL	3mL	1mL			
					0.0	2.87	Low Risk/Safe
					1.0	5.14	Intermediate Risk/ Probably Safe
					1.0	4.74	
					1.1	5.16	
					1.2	5.64	
					1.5	7.81	
					2.0	6.32	
					2.1	6.85	
					2.1	6.64	
					2.4	7.81	
					2.4	8.12	
					2.6	8.51	
					3.2	8.38	
					3.7	9.70	
					3.1	11.36	Intermediate Risk/ Possibly Safe
					3.2	11.82	
					3.4	12.53	
					3.9	10.43	
					4.0	10.94	
					4.7	22.75	
					5.2	14.73	
					5.4	12.93	
					5.6	17.14	
					5.8	16.87	
					8.4	21.19	
					9.1	37.04	
					9.6	37.68	
					13.6	83.06	High Risk/Possibly Unsafe
					17.1	56.35	
					32.6	145.55	High Risk/Probably Unsafe
					48.3	351.91	
					>100	9435.10	Unsafe