PURPOSE: All prepared media received will be examined visually for colour change, precipitate, lysis of blood, contamination, etc. An order will automatically be generated in TQC when media is received. Any atypical observation should be brought to the attention of the Technologist II who will then notify the supplier. Performance quality control testing for routine commercially prepared media is not required except for the following media:

Denim Blue agar	Sorbitol MacConkey agar
Colorex VRE agar	Campylobacter agar
StrepB *Select* agar	LIM broth
Uri *Select* 4 agar	

SUPPLIES:

- Plastic Vitek tubes and caps
- 0.45% saline
- Sterile swabs
- ATCC organisms
- DensiCHEK Plus
- 1 µL loop

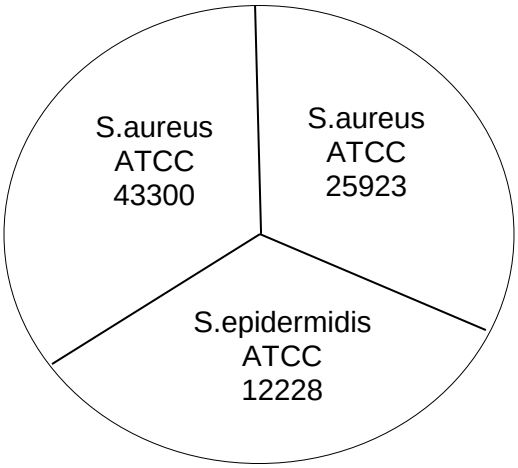
SPECIAL SAFETY PRECAUTIONS:

Containment Level 2 facilities, equipment, and operational practices for work involving infectious or potential infectious materials or cultures.

- Lab gown must be worn when performing activities with potential pathogens.
- Gloves must be worn when direct skin contact with infected materials is unavoidable.
- Eye protection must be used when there is a known or potential risk of exposure of splashes.
- All procedures that may produce aerosols, or involve high concentrations or large volumes should be conducted in a biological safety cabinet (BSC).
- The use of needles, syringes and other sharp objects should be strictly limited.

All patient specimens are assumed to be potentially infectious. Universal precautions must be followed. Since viable micro-organisms are used, all cultures must be handled with appropriate precautions. All equipment in contact with cultures should be decontaminated by appropriate methods.

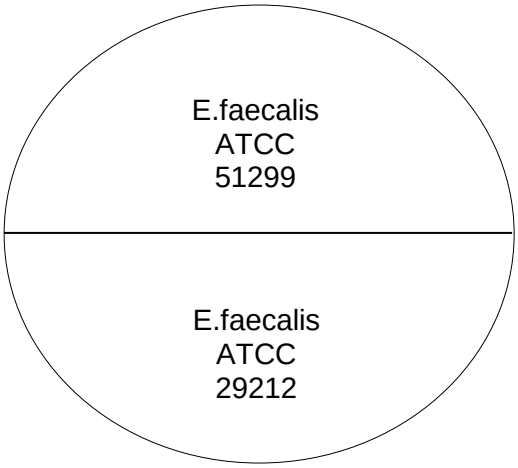
PROCEDURE INSTRUCTIONS:

Step	Action
Media quality control for Denim Blue agar	
1	The following 3 quality control organisms are used to perform QC testing on Denim Blue agar: 1. *Staphylococcus aureus* ATCC 43300 2. *Staphylococcus aureus* ATCC 25923 3. *Staphylococcus epidermidis* ATCC 12228
2	Divide the agar plate into 3 equal sections and label as follows: 
3	Label 3 Vitek test tubes with each of the above QC organisms. Dispense 3 mL of saline into each tube.
4	Prepare a 0.5 McFarland standard suspension of all required isolates.
5	Dip a 1 µL loop into the 0.5 McFarland concentration of the QC organism and inoculate the media.
6	Incubate in the O_2 incubator for 16-24 hours.
7	Enter results into TQC. Refer to MIC60110.

EXPECTED RESULTS:

S.aureus ATCC 43300	Denim Blue colonies
S.aureus ATCC 25923	No growth
S.epidermidis ATCC 12228	No growth

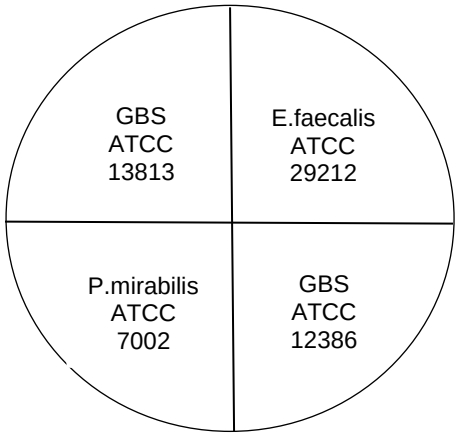
PROCEDURE INSTRUCTIONS:

Step	Action
Media quality control for Colorex VRE agar	
1	The following 2 quality control organisms are used to perform QC testing on Colorex VRE agar: 1. *Enterococcus faecalis* ATCC 51299 2. *Enterococcus faecalis* ATCC 29212
2	Divide the agar plate into 2 equal sections and label as follows: 
3	Label 2 Vitek test tubes with each of the above QC organisms. Dispense 3 mL of saline into each tube.
4	Prepare a 0.5 McFarland standard suspension of all required isolates.
5	Dip a 1 µL loop into the 0.5 McFarland concentration of the QC organism and inoculate the media.
6	Incubate in the O_2 incubator for 24-48 hours.
7	Enter results into TQC. Refer to MIC60110.

EXPECTED RESULTS:

E.faecalis ATCC 51299	Pink/mauve colonies
E.faecalis ATCC 29212	No growth

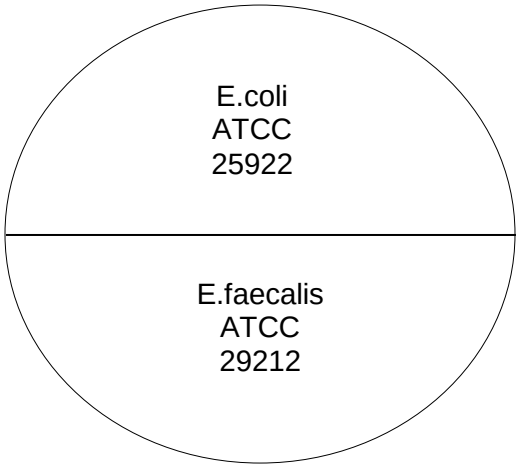
PROCEDURE INSTRUCTIONS:

Step	Action
Media quality control for StrepB *Select* agar	
1	The following 4 quality control organisms are used to perform QC testing on StrepB *Select* agar: 1. *Streptococcus agalactiae* ATCC 13813 2. *Streptococcus agalactiae* ATCC 12386 3. *Enterococcus faecalis* ATCC 29212 4. *Proteus mirabilis* ATCC 7002
2	Divide the agar plate into 4 equal sections and label as follows: 
3	Label 4 Vitek test tubes with each of the above QC organisms. Dispense 3 mL of saline into each tube.
4	Prepare a 0.5 McFarland standard suspension of all required isolates.
5	Dip a 1 µL loop into the 0.5 McFarland concentration of the QC organism and inoculate the media.
6	Incubate in the O_2 incubator for 24-48 hours.
7	Enter results into TQC. Refer to MIC60110.

EXPECTED RESULTS:

S.agalactiae ATCC 13813	Turquoise/blue colonies
S.agalactiae ATCC 12386	Turquoise/blue colonies
E. faecalis ATCC 29212	Pink/purple colonies
P.mirabilis ATCC 7002	No growth

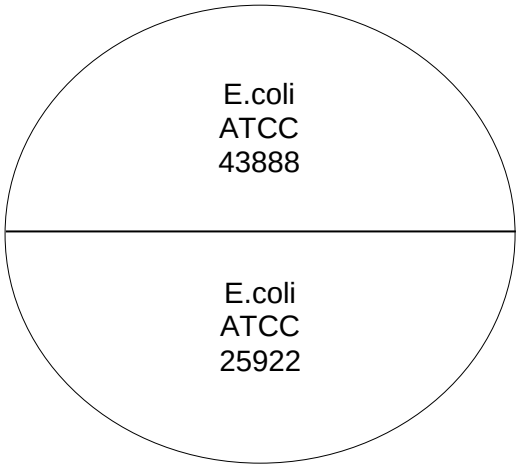
PROCEDURE INSTRUCTIONS:

Step	Action
Media quality control for Uri *Select* 4 agar	
1	The following 2 quality control organisms are used to perform QC testing on Uri *Select* 4 agar: 1. *Escherichia coli* ATCC 25922 2. *Enterococcus faecalis* ATCC 29212
2	Divide the agar plate into 2 equal sections and label as follows: 
3	Label 2 Vitek test tubes with each of the above QC organisms. Dispense 3 mL of saline into each tube.
4	Prepare a 0.5 McFarland standard suspension of all required isolates.
5	Dip a 1 µL loop into the 0.5 McFarland concentration of the QC organism and inoculate the media.
6	Incubate in the O_2 incubator for 16-24 hours.
7	Enter results into TQC. Refer to MIC60110.

EXPECTED RESULTS:

E.coli ATCC 25922	Pink colonies
E.faecalis ATCC 29212	Turquoise colonies

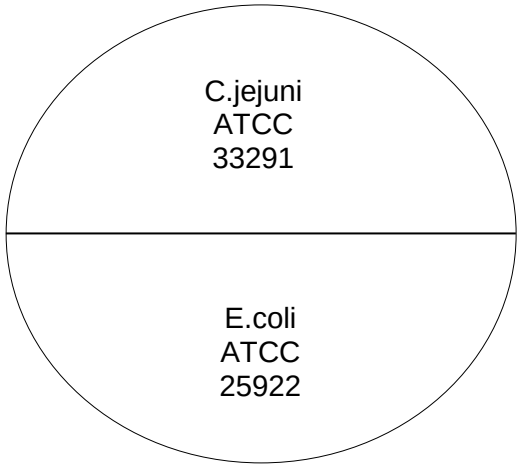
PROCEDURE INSTRUCTIONS:

Step	Action
Media quality control for Sorbitol MacConkey agar	
1	The following 2 quality control organisms are used to perform QC testing on Sorbitol MacConkey agar: 1. *Escherichia coli* ATCC 43888 2. *Escherichia coli* ATCC 25922
2	Divide the agar plate into 2 equal sections and label as follows: 
3	Label 2 Vitek test tubes with each of the above QC organisms. Dispense 3 mL of saline into each tube.
4	Prepare a 0.5 McFarland standard suspension of all required isolates.
5	Dip a 1 µL loop into the 0.5 McFarland concentration of the QC organism and inoculate the media.
6	Incubate in the O_2 incubator for 18-24 hours.
7	Enter results into TQC. Refer to MIC60110.

EXPECTED RESULTS:

E.coli ATCC 43888	Clear colonies
E.coli ATCC 25922	Pink colonies

PROCEDURE INSTRUCTIONS:

Step	Action
Media quality control for Campylobacter agar	
1	The following 2 quality control organisms are used to perform QC testing on Campylobacter agar: 1. *Campylobacter jejuni* ATCC 33291 2. *Escherichia coli* ATCC 25922
2	Divide the agar plate into 2 equal sections and label as follows: 
3	Label 2 Vitek test tubes with each of the above QC organisms. Dispense 3 mL of saline into each tube.
4	Prepare a 0.5 McFarland standard suspension of all required isolates.
5	Dip a 1 µL loop into the 0.5 McFarland concentration of the QC organism and inoculate the media.
6	Place plate in the "Campy Jar" rack in the CO_2 incubator to be set up in campy jar for 72 hours.
7	Enter results into TQC. Refer to MIC60110.

EXPECTED RESULTS:

C.jejuni ATCC 33291	Growth
E.coli ATCC 25922	No growth

PROCEDURE INSTRUCTIONS:

Step	Action
Media quality control for LIM broth	
1	The following 2 quality control organisms are used to perform QC testing on Lim broth: 1. *Streptococcus agalactiae* ATCC12386 2. *Escherichia coli* ATCC 25922
2	Label 2 Vitek test tubes with each of the above QC organisms. Dispense 3 mL of saline into each tube.
3	Prepare a 0.5 McFarland standard suspension of all required isolates.
4	Dip a 1 µL loop into the *S.agalactiae* 0.5 McFarland suspension and then dip into the LIM broth and mix. Using a new 1 µL loop, repeat with the *E.coli* 0.5 McFarland suspension.
5	Loosely cap the LIM broth and incubate in the CO_2 incubator for 18-24 hours.
6	After overnight incubation, using a sterile swab, inoculate Blood agar with the LIM broth. Streak for isolated growth using the whole plate.
7	Incubate in the O_2 incubator for24 hours.
8	Enter results into TQC. Refer to MIC60110.

EXPECTED RESULTS:

S.agalactiae ATCC 33291	Growth of *S.agalactiae* on Blood agar subculture plate
E.coli ATCC 25922	No growth of *E.coli* on Blood agar subculture plate

REFERENCES:

- CLSI. *Quality Control for Commercially Prepared Microbiological Culture Media; Approved Standard—Third Edition.* CLSI document M22-A3. Wayne, PA: Clinical and Laboratory Standards Institute; 2004.
- Oxoid Denim Blue agar, Sorbitol MacConkey agar, Campylobacter agar and LIM broth package inserts, 23-05-15
- Alere Colorex VRE agar package insert, 5/2013
- Bio-Rad StrepB Select agar package insert, 01/2008
- Bio-Rad Uri Select 4 agar package insert, 2013/11

REVISION HISTORY:

REVISION	DATE	Description of Change	REQUESTED BY
1.0		Initial Release	L. Steven