

Bio21 Molecular Sciences and Biotechnology Institute University of Melbourne, Building 404, Room G6, 2 Park Drive, Parkville, Victoria 3052

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Dr. Henry Butt BSc MSc PhD

# Bioscreen Faecal Microbial Analysis

Collection Date: 7/05/2014

Receipt Date: 8/05/2014

**Process Date:** 

9/05/2014

**Completed Date** 

16/5/2014

Referred by: Gajjar, Ameeta

Name:

Bullock, Khia

Address:

61 Prince Charles Rd

Frenchs Forest, NSW 2086

Sample ID: 113508

DOB: 14/03/2004

Bullock, Khia

<b>Total Count</b>	cfu/gm	Hi	Lo	Normal Range	% Distribution	Normal Distribution	
Total Bacterial Count	7.64 x 10 <sup>10</sup>			$(1.00 \times 10^9 - 1.00 \times 10^{12})$			
Aerobe:Anaerobe Ratio	2.45	Hi		(1.0 - 2.0)	(Aerobe count/Anaerobe count)x1000		
Aerobes							
Total Aerobe Count	1.87 x 10 <sup>8</sup>	Hi		$(1.00 \times 10^7 - 1.00 \times 10^8)$			
E.coli coliform	5.08 x 10 <sup>7</sup>			$(7.00 \times 10^6 - 9.00 \times 10^7)$			
Escherichia coli	5.08 x 10 <sup>7</sup>				27.21%	(70-90%)	
Enterococcus (Total)	1.27 x 10 <sup>8</sup>	Hi		(<5.00 x 10 <sup>5</sup> )	68.03%	(<5%)	
Enterococcus avium	1.27 x 10 <sup>8</sup>				68.03%		
Streptococcus (Total)	8.89 x 10 <sup>6</sup>	Hi		(<3.00 x 10 <sup>5</sup> )	4.76%	(<5%)	
Streptococcus lutetiensis	8.89 x 10 <sup>6</sup>				4.76%		
Yeast (Total)	<1.00 x 10 <sup>1</sup>			(<1.00 x 10 <sup>4</sup> )			







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Name: Bullock, Khia

Anaerobes	cfu/gm	Hi Lo	Normal Range	% Distribution	Normal Distribution
Total Anaerobe Count	7.63 x 10 <sup>10</sup>		$(1.00 \times 10^8 - 1.00 \times 10^{12})$		
Bacteroides (Total)	7.62 x 10 <sup>10</sup>		$(5.00 \times 10^8 - 9.50 \times 10^{11})$	99.90%	(90-95%)
Bacteroides ovatus Parabacteroides distasonis	1.78 x 10 <sup>10</sup> 5.84 x 10 <sup>10</sup>			23.31% 76.59%	
Eubacterium (Total)	<1.00 x 10 <sup>8</sup>	Lo	(<1.00 x 10 <sup>9</sup> )	0.00%	(<15%)
Lactobacillus (Total)  Lactobacillus paracasei	6.35 x 10 <sup>5</sup> 6.35 x 10 <sup>5</sup>		$(5.00 \times 10^5 - 1.00 \times 10^7)$	0.00%	(0.5-1.5%)
Bifidobacterium (Total)  Bifidobacterium longum	$7.62 \times 10^7$ $7.62 \times 10^7$		$(5.00 \times 10^5 - 5.00 \times 10^8)$	0.10%	(5-11%)
Clostridium (Total)	1.27 x 10 <sup>6</sup>		(<5.00 x 10 <sup>8</sup> )	0.00%	(1-10%)
Clostridium sardiniense	1.27 x 10 <sup>6</sup>			0.00%	

Detection limits: Aerobes 1 x 10<sup>4</sup>: Yeasts 1 x 10<sup>1</sup>: Anaerobes1 x 10<sup>8</sup> cfu/mL. Results are reported as less than these figures if not cultured.

Organisms identified by MALDI-TOF MS (Matrix Assisted Laser Desorption/Ionisation - Time of Flight) Mass Spectrometry.

Reference ranges obtained from Bioscreen data (n=177)

Hi = high; "Lo" = Low; "cfu" = colony forming units (viable count)





<sup>\* =</sup> presumptive identification



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#### Consultants

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Specialist Testing Laboratory

#### Comments

## Eubacterium

- Undetectable Levels of Eubacterium spp.
- Eubacterium sp is member of the intestinal microbial flora of human, and is regarded as one of the most frequently recovered organisms in the gastrointestinal tract, second only to the Bacteroides spp.
- The organism is responsible for the deconjugation of bile acids and the production of butyric acids.
- · The organism requires the amino acids arginine and citrulline for growth.

#### **Faecal Yeasts**

#### Comments

Undetectable levels of yeasts in the sample.

We trust these comments assist you in the interpretation of Bioscreen reports. If you require further assistance please do not hesitate to contact Bioscreen anytime.

### References

- 1. van der Wiel-Korstanje JA, Winkler KC. The faecal flora in ulcerative colitis. J-Med-Microbiol. 1975;8:491-501.
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- Shah M, Beuerlein M, Danayan K. An approach to the patient with a life-threatening acid-base disturbance: the acidemias. University of Toronto Medical Journal 2001;78:122-28.
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