



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Shigella flexneri (serotype 2b) Catalog Number: 0356 Lot Number: 356-78 Reference Number: ATCC® 12022™* Purity: > 99.9% of Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 3	Expiration Date: 2018/8/31 Release Information: Quality Control Technologist: Mary L Bowman Release Date: 2016/10/20
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Performance	
Macroscopic Features: Medium, gray/white, circular, convex colonies Microscopic Features: Gram negative straight rod	Medium: SBAP Method: Gram Stain (1)
ID System: Vitek GN (1) See attached ID System results document.	Other Features/ Challenges: Results (1) Oxidase (Kovacs): negative Hektoen Enteric agar: good growth, colorless to blue-green colonies Shigella Antiserum Poly Group B: positive  Brad Goskowicz, President AUTHORIZED SIGNATURE

Disclaimer: The last digit(s) of the lot number appearing on the packing slip is merely a packaging event number. The lot number displayed on this certificate is the actual base lot number.

Note for Vitek®: Although the Vitek® panel uses many conventional tests, the unique environment of the card, combined with the short incubation period, may produce results that differ from published results obtained by other methods.

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TESTING CERT #2655.01

Microbiologics

bioMerieux Customer: 1012555
System #: 521711

Laboratory Report

Printed Oct 19, 2016 12:25 CDT
Printed by: mlb

Isolate Group: 356 78-1

Bench: MB

Card Type: GN Testing Instrument: 000017919CE3 (15220)

Bionumber: 0005410140100210

Organism Quantity:

Comments:	
	Same ID and similar bionumber to previous lots. 10/19/2016 MB.

Identification Information	Card: GN	Lot Number: 241370540	Expires: Feb 4, 2017 12:00 CST
	Completed: Oct 18, 2016 19:16 CDT	Status: Final	Analysis Time: 6.00 hours
Selected Organism	99% Probability Shigella flexneri		
	Bionumber: 0005410140100210		Confidence: Excellent identification
SRF Organism			
Analysis Organisms and Tests to Separate:			
Shigella group			
Shigella dysenteriae			
Shigella flexneri			
Shigella boydii			
Analysis Messages:			
Confirm by serological tests			
Contraindicating Typical Biopattern(s)			

Installed VITEK 2 Systems Version: 07.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:

Microbiologics

bioMerieux Customer: 1012555
System #: 521711

Laboratory Report

Printed Oct 19, 2016 12:25 CDT
Printed by: mlb

Isolate Group: 356 78-1

Bench: MB

Card Type: GN Testing Instrument: 000017919CE3 (15220)

Bionumber: 0005410140100210

Organism Quantity:

Biochemical Details																	
2	APPA	-	3	ADO	-	4	PyrA	-	5	IARL	-	7	dCEL	-	9	BGAL	-
10	H2S	-	11	BNAG	-	12	AGLTp	-	13	dGLU	+	14	GGT	-	15	OFF	+
17	BGLU	-	18	dMAL	-	19	dMAN	+	20	dMNE	+	21	BXYL	-	22	BAlap	-
23	ProA	-	26	LIP	-	27	PLE	-	29	TyrA	+	31	URE	-	32	dSOR	-
33	SAC	-	34	dTAG	-	35	dTRE	+	36	CIT	-	37	MNT	-	39	5KG	-
40	ILATk	+	41	AGLU	-	42	SUCT	-	43	NAGA	-	44	AGAL	-	45	PHOS	-
46	GlyA	-	47	ODC	-	48	LDC	-	53	IHISa	-	56	CMT	+	57	BGUR	-
58	O129R	+	59	GGAA	-	61	IMLTa	-	62	ELLM	-	64	ILATa	-			

Installed VITEK 2 Systems Version: 07.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Staphylococcus aureus subsp. aureus Catalog Number: 0360 Lot Number: 360-262 Reference Number: ATCC® 25923™* Purity: < 0.1% Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 4	Expiration Date: 2018/2/28 Release Information: Quality Control Technologist: Christine Condon Release Date: 2016/3/8
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Performance	
Macroscopic Features: Medium to large, convex, entire edge, both white and pale white colonies, smooth, opaque, beta hemolytic	Medium: SBAP
Microscopic Features: Gram positive cocci occurring singly, in pairs and in irregular clusters	Method: Gram Stain (1)
ID System: Vitek GP (1) See attached ID System results document.	Other Features/ Challenges: Results (1) Catalase (3% Hydrogen Peroxide): positive (1) Coagulase (rabbit plasma - tube): positive (1) Beta Lactamase (Cefinase Disk): negative (1) Ampicillin (10 mcg - Disk Susceptibility): 27 - 35 mm (1) Penicillin (10 units - Disk Susceptibility): 26 - 37 mm (1) Oxacillin (1 mcg - Disk Susceptibility): 18 - 24 mm  Brad Goskowicz, President AUTHORIZED SIGNATURE

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TESTING CERT #2655.01

bioMerieux Customer: 05871
System #: C21105

Laboratory Report

Printed Mar 7, 2016 08:46 CST
Printed by: cmc
Report Version: 1 of 1

Isolate Group: 360 262-1

Bench: CC

Card Type: GP Testing Instrument: 00000A6D6328 (1116)

Bionumber: 010402033763231

Organism Quantity:

Comments:	

Identification Information	Card: GP	Lot Number: 242371540	Expires: Feb 14, 2017 12:00 CST
	Completed: Mar 3, 2016 21:48 CST	Status: Final	Analysis Time: 6.00 hours
Selected Organism	95% Probability Staphylococcus aureus Bionumber: 010402033763231Confidence: Very good identification		
SRF Organism			
Analysis Organisms and Tests to Separate:			
Analysis Messages:			
Contraindicating Typical Biopattern(s) Staphylococcus aureus AGLU(79),URE(2),			

Biochemical Details

2	AMY	-	4	PIPLC	-	5	dXYL	-	8	ADH1	+	9	BGAL	-	11	AGLU	-
13	APPA	-	14	CDEX	-	15	AspA	-	16	BGAR	-	17	AMAN	-	19	PHOS	+
20	LeuA	-	23	ProA	-	24	BGURr	-	25	AGAL	-	26	PyrA	+	27	BGUR	-
28	AlaA	-	29	TyrA	-	30	dSOR	-	31	URE	+	32	POLYB	+	37	dGAL	-
38	dRIB	+	39	ILATk	+	42	LAC	-	44	NAG	+	45	dMAL	+	46	BACI	+
47	NOVO	-	50	NC6.5	+	52	dMAN	+	53	dMNE	+	54	MBdG	+	56	PUL	-
57	dRAF	-	58	O129R	+	59	SAL	-	60	SAC	+	62	dTRE	+	63	ADH2s	-
64	OPTO	+															

Installed VITEK 2 Systems Version: 07.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Salmonella enterica subsp. enterica serovar typhimurium Catalog Number: 0363 Lot Number: 363-229 Reference Number: ATCC® 14028™* Purity: < 0.1% Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 2		Expiration Date: 2018/2/28 Release Information: Quality Control Technologist: Marie M Howe Release Date: 2016/3/28
Performance		
Macroscopic Features: Medium, gray/white, circular, slightly irregular edges, convex colonies Microscopic Features: Gram negative straight rods	Medium: SBAP Method: Gram Stain (1)	
ID System: Vitek GN (1) See attached ID System results document.	Other Features/ Challenges: Results (1) Oxidase (Kovacs): negative Hektoen Enteric agar: good growth, blue-green colonies with black centers (1) Salmonella O antiserum Factor O:4 (Included in group B): positive (1) Salmonella O antiserum Factor O:5 (Included in group B): positive (1) Salmonella O antiserum Factor O:12 (Included in group B): positive  Brad Goskowicz, President AUTHORIZED SIGNATURE	
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Microbiologics

bioMerieux Customer: 1012555
System #: 521711

Laboratory Report

Printed Mar 28, 2016 11:41 CDT
Printed by: mmh
Report Version: 4 of 4

Isolate Group: 363 229-1
Last Updated: Mar 24, 2016 15:37 CDT
Card Type: GN Testing Instrument: 000017919CE3 (15220)

By: jrh

Bench: MH

Bionumber: 0017610441566210
Organism Quantity:

Comments:	
	Same ID ans similar bionumber as previous lot. 3/24/16 MH

Identification Information	Card: GN	Lot Number: 241370540	Expires: Feb 4, 2017 12:00 CST			
	Completed: Mar 23, 2016 21:02 CDT	Status: Final	Analysis Time: 5.00 hours			
Selected Organism	99% Probability Salmonella ser.Typhimurium					
	Bionumber: 0017610441566210		Confidence: Excellent identification			
SRF Organism						
Analysis Organisms and Tests to Separate:						
Salmonella group						
Salmonella spp						
Salmonella ser.Paratyphi B						
Salmonella ser.Typhimurium						
Salmonella ser.Paratyphi C						
Salmonella ser.Enteritidis						
Salmonella enterica ssp enterica						
Analysis Messages:						
Confirm by serological tests						
Contraindicating Typical Biopattern(s)						

Installed VITEK 2 Systems Version: 07.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:

Microbiologics

bioMerieux Customer: 1012555
System #: 521711

Laboratory Report

Printed Mar 28, 2016 11:41 CDT
Printed by: mmh
Report Version: 4 of 4

Isolate Group: 363 229-1
Last Updated: Mar 24, 2016 15:37 CDT
Card Type: GN Testing Instrument: 000017919CE3 (15220)

By: jrh

Bench: MH

Bionumber: 0017610441566210
Organism Quantity:

Biochemical Details

2	APPA	-	3	ADO	-	4	PyrA	-	5	IARL	-	7	dCEL	-	9	BGAL	-
10	H2S	+	11	BNAG	-	12	AGLTp	-	13	dGLU	+	14	GGT	+	15	OFF	+
17	BGLU	-	18	dMAL	+	19	dMAN	+	20	dMNE	+	21	BXYL	-	22	BAlap	-
23	ProA	-	26	LIP	-	27	PLE	-	29	TyrA	-	31	URE	-	32	dSOR	+
33	SAC	-	34	dTAG	-	35	dTRE	+	36	CIT	+	37	MNT	-	39	5KG	-
40	ILATk	+	41	AGLU	-	42	SUCT	+	43	NAGA	-	44	AGAL	+	45	PHOS	+
46	GlyA	-	47	ODC	+	48	LDC	+	53	IHISa	-	56	CMT	+	57	BGUR	-
58	O129R	+	59	GGAA	-	61	IMLTa	-	62	ELLM	-	64	ILATa	-			

Action	Name (User ID)	Date/Time	Comment
Reviewed by:	(jrh)	Mar 24, 2016 15:37 CDT	

Installed VITEK 2 Systems Version: 07.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Staphylococcus aureus subsp. aureus Catalog Number: 0365 Lot Number: 365-87 Reference Number: ATCC® 29213™* Purity: > 99.9% of Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 4	Expiration Date: 2018/4/30 Release Information: Quality Control Technologist: Tanner E Rothstein Release Date: 2016/5/6
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Performance	
Macroscopic Features: Medium to large, convex, white-yellow, creamy opaque, beta hemolytic Microscopic Features: Gram positive cocci occurring singly, in pairs and in irregular clusters	Medium: SBAP Method: Gram Stain (1)
ID System: MALDI-TOF See attached ID System results document.	Other Features/ Challenges: Results (1) Catalase (3% Hydrogen Peroxide): positive (1) Coagulase (rabbit plasma-tube): positive (1) Beta Lactamase (Cefinase Disk): positive (1) Ampicillin (10 mcg - Disk Susceptibility): <= 28 mm (1) Penicillin (10 units - Disk Susceptibility): <= 28 mm Urea Agar Slant: positive  Brad Goskowicz, President AUTHORIZED SIGNATURE

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TESTING CERT #2655.01

Bruker Daltonik MALDI Biotyper Classification Results



Meaning of Score Values

Range	Description	Symbols	Color
2.300 ... 3.000	highly probable species identification	(+++)	green
2.000 ... 2.299	secure genus identification, probable species identification	(++)	green
1.700 ... 1.999	probable genus identification	(+)	yellow
0.000 ... 1.699	not reliable identification	(-)	red

Meaning of Consistency Categories (A – C)

Category	Description
A	Species Consistency: The best match was classified as 'green' (see above). Further 'green' matches are of the same species as the first one. Further 'yellow' matches are at least of the same genus as the first one.
B	Genus Consistency: The best match was classified as 'green' or 'yellow' (see above). Further 'green' or 'yellow' matches have at least the same genus as the first one. The conditions of species consistency are not fulfilled.
C	No Consistency: Neither species nor genus consistency (Please check for synonyms of names or microbial mixture).

Analyte Name: Staphylococcus aureus subsp. aureus
 Analyte Description: 0365
 Analyte ID: 365-87
 Analyte Creation Date/Time: 2016-05-04T12:42:20.579 TR
 Applied MSP Library(ies): BDAL, Mycobacteria Library (bead method), Filamentous Fungi Library 1.0, IVD, Listeria
 Applied Taxonomy Tree:

Rank (Quality)	Matched Pattern	Score Value	NCBI Identifier
1 (+++)	Staphylococcus aureus ssp aureus DSM 799 DSM	2.369	46170
2 (+++)	Staphylococcus aureus ATCC 29213 THL	2.366	1280
3 (+++)	Staphylococcus aureus ssp aureus DSM 4910 DSM	2.343	46170
4 (+++)	Staphylococcus aureus ssp aureus DSM 346 DSM	2.326	46170
5 (+++)	Staphylococcus aureus ssp aureus DSM 20231T DSM	2.323	46170
6 (++)	Staphylococcus aureus ssp aureus DSM 20232 DSM	2.293	46170
7 (++)	Staphylococcus aureus ATCC 33862 THL	2.27	1280
8 (++)	Staphylococcus aureus ATCC 33591 THL	2.248	1280
9 (++)	Staphylococcus aureus ssp aureus DSM 3463 DSM	2.227	46170
10 (++)	Staphylococcus aureus ATCC 25923 THL	2.21	1280

Comments:

N/A



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Enterococcus faecalis Catalog Number: 0366 Lot Number: 366-244 Reference Number: ATCC® 29212™* Purity: < 0.1% Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 2	Expiration Date: 2018/3/31 Release Information: Quality Control Technologist: Christine Condon Release Date: 2016/4/14
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Performance	
Macroscopic Features: Small to medium, gray/white, translucent, smooth, circular with entire edge Microscopic Features: Gram positive ovoid cells, mostly in pairs or short chains	Medium: SBAP Method: Gram Stain (1)
ID System: Vitek GP (1) See attached ID System results document.	Other Features/ Challenges: Results (1) Catalase (3% Hydrogen Peroxide): negative (1) Bile Esculin Agar: positive (1) Streptomycin (300 mcg - Disk Susceptibility): 14 - 20 mm (1) Gentamicin (120 mcg - Disk Susceptibility): 16 - 23 mm (1) SXT (1.25/23.75 - Disk Susceptibility): >= 20 mm BHIA w/Vancomycin (6 mcg/ml): Sensitive  Brad Goskowicz, President AUTHORIZED SIGNATURE

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TESTING CERT #2655.01

Microbiologics

bioMerieux Customer: 1012555
System #: 521711

Laboratory Report

Printed Apr 11, 2016 11:15 CDT
Printed by: cmc
Report Version: 1 of 1

Isolate Group: 366 244-1

Bench: CC

Card Type: GP Testing Instrument: 000017919CE3 (15220)

Bionumber: 154002761773671

Organism Quantity:

Comments:	

Identification Information	Card: GP	Lot Number: 242385140	Expires: Jun 30, 2017 13:00 CDT
	Completed: Apr 7, 2016 18:56 CDT	Status: Final	Analysis Time: 4.25 hours
Selected Organism	99% Probability Enterococcus faecalis		
	Bionumber: 154002761773671	Confidence: Excellent identification	
SRF Organism			
Analysis Organisms and Tests to Separate:			
Analysis Messages:			
Contraindicating Typical Biopattern(s)			

Biochemical Details

2	AMY	+	4	PIPLC	-	5	dXYL	-	8	ADH1	+	9	BGAL	-	11	AGLU	+
13	APPA	-	14	CDEX	-	15	AspA	+	16	BGAR	-	17	AMAN	-	19	PHOS	-
20	LeuA	(-)	23	ProA	-	24	BGURr	-	25	AGAL	-	26	PyrA	+	27	BGUR	-
28	AlaA	+	29	TyrA	+	30	dSOR	+	31	URE	-	32	POLYB	+	37	dGAL	+
38	dRIB	+	39	ILATk	-	42	LAC	-	44	NAG	+	45	dMAL	+	46	BACI	+
47	NOVO	+	50	NC6.5	+	52	dMAN	+	53	dMNE	+	54	MBdG	+	56	PUL	-
57	dRAF	-	58	O129R	+	59	SAL	+	60	SAC	+	62	dTRE	+	63	ADH2s	+
64	OPTO	+															

Installed VITEK 2 Systems Version: 07.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Pseudomonas aeruginosa Catalog Number: 0416 Lot Number: 416-111 Reference Number: ATCC® 10145™* Purity: > 99.9% of Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 2	Expiration Date: 2018/3/31 Release Information: Quality Control Technologist: Christine Condon Release Date: 2016/5/17
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Performance	
Macroscopic Features: Large, flat, circular to irregular shaped, gray to silver/green, beta hemolytic. A second colony type that is small to medium, white to grey, smooth, entire edge may be present. Microscopic Features: Straight or slightly curved gram negative rod.	Medium: SBAP Method: Gram Stain (1)
ID System: MALDI-TOF See attached ID System results document.	Other Features/ Challenges: Results (1) Oxidase (Kovacs): positive (1) Motility B Medium: positive  Brad Goskowicz, President AUTHORIZED SIGNATURE

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TESTING CERT #2655.01

Bruker Daltonik MALDI Biotyper Classification Results



Meaning of Score Values

Range	Description	Symbols	Color
2.300 ... 3.000	highly probable species identification	(+++)	green
2.000 ... 2.299	secure genus identification, probable species identification	(++)	green
1.700 ... 1.999	probable genus identification	(+)	yellow
0.000 ... 1.699	not reliable identification	(-)	red

Meaning of Consistency Categories (A – C)

Category	Description
A	Species Consistency: The best match was classified as 'green' (see above). Further 'green' matches are of the same species as the first one. Further 'yellow' matches are at least of the same genus as the first one.
B	Genus Consistency: The best match was classified as 'green' or 'yellow' (see above). Further 'green' or 'yellow' matches have at least the same genus as the first one. The conditions of species consistency are not fulfilled.
C	No Consistency: Neither species nor genus consistency (Please check for synonyms of names or microbial mixture).

Analyte Name: Pseudomonas aeruginosa
 Analyte Description: 0416
 Analyte ID: 416-111
 Analyte Creation Date/Time: 2016-05-06T15:09:21.088 CC
 Applied MSP Library(ies): BDAL, Mycobacteria Library (bead method), Filamentous Fungi Library 1.0, IVD, Listeria
 Applied Taxonomy Tree:

Rank(Quality)	Matched Pattern	ScoreValue	NCBIIdentifier
1(+++)	Pseudomonas aeruginosa DSM 1117 DSM	2.548	287
2(+++)	Pseudomonas aeruginosa DSM 50071T_QC DSM	2.485	287
3(+++)	Pseudomonas aeruginosa 8147_2 CHB	2.414	287
4(+++)	Pseudomonas aeruginosa ATCC 27853 THL	2.335	287
5(+++)	Pseudomonas aeruginosa DSM 1128 DSM	2.325	287
6(+++)	Pseudomonas aeruginosa DSM 50071T HAM	2.305	287
7(+++)	Pseudomonas aeruginosa LMG 8029 LMG	2.305	287
8(++)	Pseudomonas aeruginosa 19955_1 CHB	2.122	287
9(++)	Pseudomonas aeruginosa A07_08_Pudu FLR	2.102	287
10(+)	Pseudomonas jinjuensis LMG 21316T HAM	1.873	198616

Comments:

N/A



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Neisseria gonorrhoeae Catalog Number: 0429 Lot Number: 429-59 Reference Number: ATCC® 43069™* Purity: < 0.1% Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 4	Expiration Date: 2018/4/30 Release Information: Quality Control Technologist: Jennifer Holub Release Date: 2016/6/14
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Performance	
Macroscopic Features: Small to medium, opaque, tan to grayish white, raised, glistening and convex.	Medium: Chocolate
Microscopic Features: Gram negative cocci occurring singly but more often in pairs with adjacent sides flattened.	Method: Gram Stain (1)

ID System: Vitek NH (1) See attached ID System results document.	Other Features/ Challenges: Results (1) Oxidase (Kovacs): positive Modified Thayer Martin Agar: good growth (1) Beta Lactamase (Cefinase Disk): negative Nutrient Agar/35 C/CO2: No growth  Brad Goskowicz, President AUTHORIZED SIGNATURE
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TESTING CERT #2655.01

bioMerieux Customer: 1012555
System #: 521711

Laboratory Report

Printed Jun 10, 2016 08:50 CDT
Printed by: jrh

Isolate Group: 42959-1

Bench: JH

Card Type: NH Testing Instrument: 000017919CE3 (15220)

Bionumber: 5233000000

Organism Quantity:

Comments:	

Identification Information	Card: NH	Lot Number: 245369522	Expires: Jan 25, 2017 12:00 CST
	Completed: Jun 9, 2016 23:56 CDT	Status: Final	Analysis Time: 6.00 hours
Selected Organism	96% Probability Neisseria gonorrhoeae Bionumber: 5233000000 Confidence: Excellent identification		
SRF Organism			
Analysis Organisms and Tests to Separate:			
Analysis Messages: Critical Pathogen			
Contraindicating Typical Biopattern(s) Neisseria gonorrhoeae dGLU(92),			

Biochemical Details																	
1	ArgA	+	2	GGT	-	3	LysA	+	4	dGAL	-	5	LeuA	+	6	ELLM	-
7	PheA	+	8	ProA	+	10	PyrA	-	13	TyrA	+	15	APPA	+	18	dGLU	-
19	GLYG	-	20	dMNE	-	22	dMAL	-	28	SAC	-	33	NAG	-	36	URE	-
39	BGALi	-	40	ODC	-	41	AARA	-	45	PVATE	-	46	PHC	-	47	dMLT	-
51	MTE	-	52	IGLM	-	59	PHOS	-	61	dRIB2	-	62	OPS	-	64	dXYL	-

Installed VITEK 2 Systems Version: 07.01
MIC Interpretation Guideline:
AES Parameter Set Name:

Therapeutic Interpretation Guideline:
AES Parameter Last Modified:



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Streptococcus agalactiae (group B) Catalog Number: 0439 Lot Number: 439-61 Reference Number: ATCC® 12386™* Purity: > 99.9% of Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 4	Expiration Date: 2018/5/31 Release Information: Quality Control Technologist: Christine Condon Release Date: 2016/7/18
Performance	
Macroscopic Features: Small, white to gray with beta hemolysis. Microscopic Features: Gram positive cocci in short to long chains.	Medium: SBAP Method: Gram Stain (1)
ID System: MALDI-TOF See attached ID System results document.	Other Features/ Challenges: Results (1) Catalase (3% Hydrogen Peroxide): negative Bacitracin Differential: Resistant Streptococcus Antiserum Group B: positive  Brad Goskowitz, President AUTHORIZED SIGNATURE
Disclaimer: The last digit(s) of the lot number appearing on the packing slip is merely a packaging event number. The lot number displayed on this certificate is the actual base lot number. Note for Vitek®: Although the Vitek® panel uses many conventional tests, the unique environment of the card, combined with the short incubation period, may produce results that differ from published results obtained by other methods. ⚠ Refer to the enclosed product insert for instructions, intended use and hazard/safety information. Individual products are traceable to a recognized culture collection.  (*) The ATCC Licensed Derivative Emblem, the ATCC Licensed Derivative word mark and the ATCC catalog marks are trademarks of ATCC. Microbiologics, Inc. is licensed to use these trademarks and to sell products derived from ATCC® cultures.  (1) These tests are accredited to ISO/IEC 17025:2005. TESTING CERT #2655.01	

Bruker Daltonik MALDI Biotyper Classification Results



Meaning of Score Values

Range	Description	Symbols	Color
2.300 ... 3.000	highly probable species identification	(+++)	green
2.000 ... 2.299	secure genus identification, probable species identification	(++)	green
1.700 ... 1.999	probable genus identification	(+)	yellow
0.000 ... 1.699	not reliable identification	(-)	red

Meaning of Consistency Categories (A – C)

Category	Description
A	Species Consistency: The best match was classified as 'green' (see above). Further 'green' matches are of the same species as the first one. Further 'yellow' matches are at least of the same genus as the first one.
B	Genus Consistency: The best match was classified as 'green' or 'yellow' (see above). Further 'green' or 'yellow' matches have at least the same genus as the first one. The conditions of species consistency are not fulfilled.
C	No Consistency: Neither species nor genus consistency (Please check for synonyms of names or microbial mixture).

Analyte Name: Streptococcus agalactiae (group B)
 Analyte Description: 0439
 Analyte ID: 439-61
 Analyte Creation Date/Time: 2016-07-12T15:57:28.689 CC
 Applied MSP Library(ies): BDAL, Mycobacteria Library (bead method), Filamentous Fungi Library 1.0, IVD, Listeria
 Applied Taxonomy Tree:

Rank(Quality)	Matched Pattern	ScoreValue	NCBIIdentifier
1(++)	Streptococcus agalactiae V29 CTL	2.271	1311
2(++)	Streptococcus agalactiae DSM 6784 DSM	2.159	1311
3(++)	Streptococcus agalactiae 04_158 CTL	2.151	1311
4(++)	Streptococcus agalactiae DSM 16828 DSM	2.12	1311
5(++)	Streptococcus agalactiae 03_102 CTL	2.119	1311
6(++)	Streptococcus agalactiae 03_145 CTL	2.065	1311
7(++)	Streptococcus agalactiae CNR 10 CTL	2.008	1311
8(+)	Streptococcus agalactiae 03_198 CTL	1.951	1311
9(+)	Streptococcus agalactiae DSM 2134T DSM	1.75	1311
10(-)	Streptococcus parauberis DSM 6631T DSM	1.508	1348

Comments:

N/A



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Candida albicans Catalog Number: 0443 Lot Number: 443-605 Reference Number: ATCC® 10231™* Purity: > 99.9% of Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 3	Expiration Date: 2018/6/30 Release Information: Quality Control Technologist: Tracy A Blenker Release Date: 2016/7/18
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Performance	
Macroscopic Features: Small to medium, white, circular, convex, dull colonies. Microscopic Features: Gram positive, ovoidal, budding yeast cells.	Medium: Nutrient Method: Gram Stain (1)
ID System: MALDI-TOF See attached ID System results document.	Other Features/ Challenges: Results (1) Germ Tube Test: positive (1) Chlamydospore production: positive  Brad Goskowicz, President AUTHORIZED SIGNATURE

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Bruker Daltonik MALDI Biotyper Classification Results



Meaning of Score Values

Range	Description	Symbols	Color
2.300 ... 3.000	highly probable species identification	(+++)	green
2.000 ... 2.299	secure genus identification, probable species identification	(++)	green
1.700 ... 1.999	probable genus identification	(+)	yellow
0.000 ... 1.699	not reliable identification	(-)	red

Meaning of Consistency Categories (A – C)

Category	Description
A	Species Consistency: The best match was classified as 'green' (see above). Further 'green' matches are of the same species as the first one. Further 'yellow' matches are at least of the same genus as the first one.
B	Genus Consistency: The best match was classified as 'green' or 'yellow' (see above). Further 'green' or 'yellow' matches have at least the same genus as the first one. The conditions of species consistency are not fulfilled.
C	No Consistency: Neither species nor genus consistency (Please check for synonyms of names or microbial mixture).

Analyte Name: Candida albicans
 Analyte Description: 0443
 Analyte ID: 443-605
 Analyte Creation Date/Time: 2016-07-11T14:15:13.711 TB
 Applied MSP Library(ies): BDAL, Mycobacteria Library (bead method), Filamentous Fungi Library 1.0, IVD, Listeria
 Applied Taxonomy Tree:

Rank (Quality)	Matched Pattern	Score Value	NCBI Identifier
1 (++)	Candida albicans CBS 8190 CBS	2.08	5476
2 (++)	Candida albicans VA_17248_07 04 UKE	2.03	5476
3 (+)	Candida albicans CBS 1905 NT CBS	1.978	5476
4 (+)	Candida albicans ATCC 10231 THL	1.957	5476
5 (+)	Candida albicans CBS 562 NT CBS	1.925	5476
6 (+)	Candida albicans DSM 6659 DSM	1.883	5476
7 (+)	Candida albicans DSM 1665 DSM	1.882	5476
8 (+)	Candida albicans_(africana) CBS 8781 CBS	1.845	241526
9 (+)	Candida albicans DSM 1665 BRB	1.831	5476
10 (+)	Candida albicans DSM 6569 BRB	1.791	5476

Comments:

N/A



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Escherichia coli Catalog Number: 0483 Lot Number: 483-558 Reference Number: ATCC® 8739™* Purity: > 99.9% of Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 4	Expiration Date: 2018/4/30 Release Information: Quality Control Technologist: Christine Condon Release Date: 2016/5/31
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Performance	
Macroscopic Features: Medium to large, gray, mucoid, convex. Microscopic Features: Gram negative straight rod.	Medium: SBAP Method: Gram Stain (1)
ID System: MALDI-TOF See attached ID System results document.	Other Features/ Challenges: Results (1) Oxidase (Kovacs): negative Beta-glucuronidase (E. coli Broth w/MUG): positive  Brad Goskowicz, President AUTHORIZED SIGNATURE

Disclaimer: The last digit(s) of the lot number appearing on the packing slip is merely a packaging event number. The lot number displayed on this certificate is the actual base lot number.

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(1) These tests are accredited to ISO/IEC 17025:2005.

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Bruker Daltonik MALDI Biotyper Classification Results



Meaning of Score Values

Range	Description	Symbols	Color
2.300 ... 3.000	highly probable species identification	(+++)	green
2.000 ... 2.299	secure genus identification, probable species identification	(++)	green
1.700 ... 1.999	probable genus identification	(+)	yellow
0.000 ... 1.699	not reliable identification	(-)	red

Meaning of Consistency Categories (A – C)

Category	Description
A	Species Consistency: The best match was classified as 'green' (see above). Further 'green' matches are of the same species as the first one. Further 'yellow' matches are at least of the same genus as the first one.
B	Genus Consistency: The best match was classified as 'green' or 'yellow' (see above). Further 'green' or 'yellow' matches have at least the same genus as the first one. The conditions of species consistency are not fulfilled.
C	No Consistency: Neither species nor genus consistency (Please check for synonyms of names or microbial mixture).

Analyte Name: Escherichia coli

Analyte Description: 0483

Analyte ID: 483-558

Analyte Creation Date/Time: 2016-05-26T13:48:53.288 CC

Applied MSP Library(ies): BDAL, Mycobacteria Library (bead method), Filamentous Fungi Library 1.0, IVD, Listeria

Applied Taxonomy Tree:

Rank(Quality)	Matched Pattern	ScoreValue	NCBIIdentifier
1(+++)	Escherichia coli DSM 1576 DSM	2.607	562
2(+++)	Escherichia coli DSM 682 DSM	2.415	562
3(+++)	Escherichia coli RV412_A1_2010_06a LBK	2.399	562
4(+++)	Escherichia coli DH5alpha BRL	2.309	562
5(++)	Escherichia coli MB11464_1 CHB	2.266	562
6(++)	Escherichia coli DSM 1103 QC DSM	2.262	562
7(++)	Escherichia coli ESBL_EA_RSS_1528T CHB	2.22	562
8(++)	Escherichia coli Nissl VML	2.2	562
9(++)	Escherichia coli ATCC 25922 THL	2.191	562
10(++)	Escherichia coli ATCC 25922 CHB	2.176	562

Comments:

closely related to Shigella and not definitely distinguishable at the moment