



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Klebsiella oxytoca Catalog Number: 0530 Lot Number: 530-13 Reference Number: ATCC® 13182™* Purity: > 99.9% of Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 2	Expiration Date: 2018/9/30 Release Information: Quality Control Technologist: Christine Condon Release Date: 2016/11/22
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Performance	
Macroscopic Features: Large, circular, convex, entire edge, light gray, smooth and opaque. Microscopic Features: Short, fat, gram negative rods with rounded ends.	Medium: SBAP Method: Gram Stain (1)
ID System: MALDI-TOF See attached ID System results document.	Other Features/ Challenges: Results (1) Oxidase (Kovacs): negative  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: Klebsiella oxytoca
 Analyte Description: 0530
 Analyte ID: 530-13
 Analyte Creation Date/Time: 2016-11-18T15:34:35.556 CC
 Applied MSP Library(ies): BDAL, Mycobacteria Library (bead method), Filamentous Fungi Library 1.0, IVD, Listeria
 Applied Taxonomy Tree:

Analyte Name	Analyte ID	Organism (best match)	Score Value
B6(+++) (C)	530-13	Klebsiella oxytoca	2.442

Comments:

Klebsiella oxytoca and species ornithinolytica / planticola / terrigena of the genus Raoultella have very similar patterns:
 Therefore distinguishing their species is difficult.



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Pseudomonas aeruginosa Catalog Number: 01009 Lot Number: 1009-15 Reference Number: ATCC® 9721™* Purity: > 99.9% of Total Pellet CFU Recovery: >1000 CFUs per pellet Passage from Reference: 4	Expiration Date: 2018/3/31 Release Information: Quality Control Technologist: Christine Condon Release Date: 2016/5/25
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Performance	
Macroscopic Features: Two colony types are present. One type is medium, circular, convex, entire edge, and smooth. The second type is similar except it is umbonate and rougher in appearance. Both types are beta hemolytic and develop a silver sheen.	Medium: SBAP
Microscopic Features: Small, slender gram negative rods with rounded ends; filamentous forms may be present.	Method: Gram Stain (1)

ID System: Vitek GN (1) See attached ID System results document.	Other Features/ Challenges: Results (1) Oxidase (Kovacs): positive Growth at 42 C: positive  Brad Goskowicz, President AUTHORIZED SIGNATURE
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TESTING CERT #2655.01

Microbiologics

bioMerieux Customer: 1012555
System #: 521711

Laboratory Report

Printed May 20, 2016 09:39 CDT
Printed by: cmc

Isolate Group: 1009 15-1

Bench: CC

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

Bionumber: 1003453103501252

Organism Quantity:

Comments:	
	GN QC OK

Identification Information	Card: GN	Lot Number: 241370540	Expires: Feb 4, 2017 12:00 CST
	Completed: May 19, 2016 22:38 CDT	Status: Final	Analysis Time: 6.75 hours
Selected Organism	94% Probability Pseudomonas aeruginosa		
	Bionumber: 1003453103501252		Confidence: Very good identification
SRF Organism			
Analysis Organisms and Tests to Separate:			
Analysis Messages:			
Contraindicating Typical Biopattern(s)			
Pseudomonas aeruginosa APPA(1),			

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 saprophyticus Catalog Number: 0134 Lot Number: 134-26 Reference Number: ATCC® BAA-750™* 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: 2016/7/21
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Performance	
Macroscopic Features: Medium, circular, convex, entire edge, white, glistening Microscopic Features: Gram positive cocci singly, in pairs and tetrads	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): positive (1) Coagulase (rabbit plasma-tube): negative  Brad Goskowicz, President AUTHORIZED SIGNATURE

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TESTING CERT #2655.01

Microbiologics

bioMerieux Customer: 1012555
System #: 521711

Laboratory Report

Printed Jul 19, 2016 12:44 CDT
Printed by: cmc

Isolate Group: 134-26

Bench: KN

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

Bionumber: 030000056670231

Organism Quantity:

Comments:	
	GP QC OK

Identification Information	Card: GP	Lot Number: 242385140	Expires: Jun 30, 2017 13:00 CDT
	Completed: Jul 8, 2016 13:31 CDT	Status: Final	Analysis Time: 5.00 hours
Selected Organism	99% Probability Staphylococcus saprophyticus		
	Bionumber: 030000056670231		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: Haemophilus influenzae (type c) Catalog Number: 0185 Lot Number: 185-26 Reference Number: ATCC® 9007™* Purity: > 99.9% of Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 4	Expiration Date: 2017/12/31 Release Information: Quality Control Technologist: Marie M Howe Release Date: 2016/2/4
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Performance	
Macroscopic Features: Large, circular, low convex, entire edge, pale tan, glistening Microscopic Features: Gram negative short rods or coccobacilli; may show marked pleomorphism	Medium: Chocolate Method: Gram Stain (1)
ID System: Vitek NH (1) See attached ID System results document.	Other Features/ Challenges: Results V factor (Strips): negative X factor (Strips): negative X V factor (Strips): positive (1) Beta Lactamase (Cefinase Disk): negative H. influenzae antiserum - Type c: positive  Brad Goskowicz, President AUTHORIZED SIGNATURE

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TESTING CERT #2655.01

Microbiologics

bioMerieux Customer: 05871
System #: C21105

Laboratory Report

Printed Feb 4, 2016 08:11 CST
Printed by: mmh
Report Version: 2 of 2

Isolate Group: 185-26
Last Updated: Feb 4, 2016 08:10 CST
Card Type: NH Testing Instrument: 00000A6D6328 (1116)

By: mmh

Bench: MH

Bionumber: 5715040647
Organism Quantity:

Comments:	
	NH-QC OK 2/4/16 MH

Identification Information	Card: NH	Lot Number: 245361420	Expires: Nov 5, 2016 13:00 CDT
	Completed: Feb 3, 2016 20:28 CST	Status: Final	Analysis Time: 6.00 hours
Selected Organism	99% Probability Haemophilus influenzae		
	Bionumber: 5715040647	Confidence: Excellent identification	
SRF Organism			
Analysis Organisms and Tests to Separate:			
Analysis Messages: See product information for additional information.			
Contraindicating Typical Biopattern(s)			

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: Eikenella corrodens Catalog Number: 0189 Lot Number: 189-27 Reference Number: ATCC® BAA-1152™* Purity: > 99.9% of Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 4	Expiration Date: 2017/12/31 Release Information: Quality Control Technologist: Marie M Howe Release Date: 2016/2/10
Performance	
Macroscopic Features: Medium, circular, convex, entire edge, light tan, glistening, "bleach-like" odor; as culture ages, margins flatten out. Microscopic Features: Gram negative straight rod with rounded ends.	Medium: Chocolate Method: Gram Stain (1)
ID System: Vitek NH (1) See attached ID System results document.	Other Features/ Challenges: Results (1) Oxidase (Kovacs): positive (1) Catalase (3% Hydrogen Peroxide): negative MacConkey Agar (AER/35 C/48 Hr): no growth  Brad Goskowicz, President AUTHORIZED SIGNATURE
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Microbiologics

bioMerieux Customer: 05871
System #: C21105

Laboratory Report

Printed Feb 5, 2016 07:35 CST
Printed by: mmh
Report Version: 2 of 2

Isolate Group: 189-27
Last Updated: Feb 5, 2016 07:35 CST
Card Type: NH Testing Instrument: 00000A6D6328 (1116)

By: mmh

Bench: MH

Bionumber: 0622002400
Organism Quantity:

Comments:	
	NH-QC OK 2/5/16 MH

Identification Information	Card:	NH	Lot Number:	245361420	Expires:	Nov 5, 2016 13:00 CDT
	Completed:	Feb 4, 2016 21:04 CST	Status:	Final	Analysis Time:	6.00 hours
Selected Organism	97% Probability		Eikenella corrodens			
	Bionumber: 0622002400			Confidence: Excellent identification		
SRF Organism						
Analysis Organisms and Tests to Separate:						
Analysis Messages:						
Contraindicating Typical Biopattern(s)						
Eikenella corrodens dMLT(16),						

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: Shigella sonnei Catalog Number: 0303 Lot Number: 303-85 Reference Number: ATCC® 25931™* 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: 2016/9/23
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Performance	
Macroscopic Features: Two colony types (both are large and can spread); circular, convex, light gray, smooth and other type is irregular, raised, darker gray, and rough, (spreads more than other colony type). 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 D: positive (1) Motility B Medium: negative  Brad Goskowicz, President AUTHORIZED SIGNATURE

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TESTING CERT #2655.01

Microbiologics

bioMerieux Customer: 1012555
System #: 521711

Laboratory Report

Printed Sep 21, 2016 12:31 CDT
Printed by: tab

Isolate Group: 303 85-1

Bench: TB

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

Bionumber: 0405611140563610

Organism Quantity:

Comments:	

Identification Information	Card:	GN	Lot Number:	241370540	Expires:	Feb 4, 2017 12:00 CST
	Completed:	Sep 14, 2016 14:22 CDT	Status:	Final	Analysis Time:	5.00 hours
Selected Organism	99% Probability Shigella sonnei Bionumber: 0405611140563610 Confidence: Excellent identification					
SRF Organism						
Analysis Organisms and Tests to Separate:						
Analysis Messages: Confirm by serological tests						
Contraindicating Typical Biopattern(s)						

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	BAIap	-
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: Citrobacter freundii Catalog Number: 0315 Lot Number: 315-118 Reference Number: ATCC® 8090™* 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: Marie M Howe Release Date: 2016/3/28
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Performance	
Macroscopic Features: Medium to large gray circular, convex, entire, translucent, glistening colonies Microscopic Features: Straight gram negative 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  Brad Goskowicz, President AUTHORIZED SIGNATURE

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TESTING CERT #2655.01

Microbiologics

bioMerieux Customer: 1012555
System #: 521711

Laboratory Report

Printed Mar 24, 2016 15:29 CDT
Printed by: jrh
Report Version: 1 of 1

Isolate Group: 315 118-1

Bench: MH

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

Bionumber: 461761555561211

Organism Quantity:

Comments:	

Identification Information	Card: GN	Lot Number: 241356410	Expires: Sep 16, 2016 13:00 CDT
	Completed: Mar 23, 2016 21:03 CDT	Status: Final	Analysis Time: 5.00 hours
Selected Organism	95% Probability Citrobacter freundii Bionumber: 4617615555561211Confidence: Very good identification		
SRF Organism			
Analysis Organisms and Tests to Separate:			
Analysis Messages:			
Contraindicating Typical Biopattern(s)			
Citrobacter freundii PLE(9),dCEL(7),			

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: Candida albicans Catalog Number: 0332 Lot Number: 332-104 Reference Number: ATCC® 14053™* Purity: < 0.1% Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 2		Expiration Date: 2017/12/31 Release Information: Quality Control Technologist: Tracy A Blenker Release Date: 2016/2/22
Performance		
Macroscopic Features: Medium to large, white to cream, waxy, circular, convex, entire edge Microscopic Features: Gram positive, spherical, budding yeast cells	Medium: PDA Method: Gram Stain (1)	
ID System: Vitek YST (1) See attached ID System results document.	Other Features/ Challenges: Results (1) Germ Tube Test: positive (1) Chlamydospore production: positive  Brad Goskowitz, President AUTHORIZED SIGNATURE	
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Microbiologics

bioMerieux Customer: 05871
System #: C21105

Laboratory Report

Printed Feb 10, 2016 07:33 CST
Printed by: tab
Report Version: 1 of 1

Isolate Group: 332 104-1

Bench: TB

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

Bionumber: 6102546065327371

Organism Quantity:

Comments:	

Identification Information	Card: YST	Lot Number: 243370420	Expires: Feb 3, 2017 12:00 CST
	Completed: Feb 10, 2016 05:56 CST	Status: Final	Analysis Time: 18.50 hours
Selected Organism	99% Probability Candida albicans		
	Bionumber: 6102546065327371		Confidence: Excellent identification
SRF Organism			
Analysis Organisms and Tests to Separate:			
Analysis Messages:			
Contraindicating Typical Biopattern(s)			

Biochemical Details																	
3	LysA	-	4	IMLTa	+	5	LeuA	+	7	ARG	+	10	ERYa	-	12	GLYLa	-
13	TyrA	-	14	BNAG	-	15	ARBa	-	18	AMYa	-	19	dGALa	+	20	GENa	-
21	dGLUa	+	23	LACa	-	24	MAdGa	+	26	dCELa	-	27	GGT	-	28	dMALa	+
29	dRAFa	-	30	NAGA1	+	32	dMNEa	+	33	dMELa	-	34	dMLZa	-	38	ISBEa	-
39	IRHAa	-	40	XLTa	+	42	dSORa	+	44	SACa	+	45	URE	-	46	AGLU	+
47	dTURa	+	48	dTREa	+	49	NO3a	-	51	IARaAa	-	52	dGATa	+	53	ESC	-
54	IGLTa	+	55	dXYLa	+	56	LATa	+	58	ACEa	+	59	CITa	+	60	GRTas	-
61	IPROa	+	62	2KGa	+	63	NAGa	+	64	dGNTa	+						

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: Escherichia coli Catalog Number: 0335 Lot Number: 335-184 Reference Number: ATCC® 25922™* Purity: > 99.9% of Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 4	Expiration Date: 2018/3/31 Release Information: Quality Control Technologist: Tanner E Rothstein Release Date: 2016/5/2
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Performance	
Macroscopic Features: 2 colony types, both are gray & beta hemolytic: one is circular to irregular, convex, slightly erose edge & smooth; other is larger, irregular, low convex, erose edge & rough	Medium: SBAP
Microscopic Features: Gram negative straight rod	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 (1) Ampicillin (10 mcg - Disk Susceptibility): 16 - 22 mm (1) Gentamicin (10 mcg - Disk Susceptibility): 19 - 26 mm (1) SXT (1.25/23.75 mcg - Disk Susceptibility): 23 - 29 mm  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.

⚠ Refer to the enclosed product insert for instructions, intended use and hazard/safety information.

Individual products are traceable to a recognized culture collection.



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(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: Escherichia coli

Analyte Description: 0335

Analyte ID: 335-184

Analyte Creation Date/Time: 2016-04-27T15:02:21.540 TR

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 ATCC 25922 THL	2.468	562
2(+++)	Escherichia coli ATCC 25922 CHB	2.376	562
3(+++)	Escherichia coli DSM 682 DSM	2.329	562
4(++)	Escherichia coli DSM 1103_QC DSM	2.292	562
5(++)	Escherichia coli MB11464_1 CHB	2.234	562
6(++)	Escherichia coli DH5alpha BRL	2.217	562
7(++)	Escherichia coli RV412_A1_2010_06a LBK	2.216	562
8(++)	Escherichia coli Nissl VML	2.215	562
9(++)	Escherichia coli ESBL_EA_RSS_1528T CHB	2.187	562
10(++)	Escherichia coli DSM 1576 DSM	2.158	562



Certificate of Analysis: Lyophilized Microorganism Specification and Performance Upon Release

Specifications Microorganism Name: Pseudomonas aeruginosa Catalog Number: 0353 Lot Number: 353-260 Reference Number: ATCC® 27853™* Purity: > 99.9% of Total Pellet CFU Recovery: > 1000 CFUs per Pellet Passage from Reference: 2	Expiration Date: 2018/11/30 Release Information: Quality Control Technologist: Christine Condon Release Date: 2016/12/5	
Performance Macroscopic Features: Two colony types: Large, flat, circular to irregular shaped, gray with silver sheen(98%); And small and compact 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 (1) Gentamicin (10 mcg - Disk Susceptibility): 16 - 21 mm  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. ⚠ 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



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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: 0353
 Analyte ID: 353-260
 Analyte Creation Date/Time: 2016-11-29T13:36:38.952 KN/CC
 Applied MSP Library(ies): BDAL, Mycobacteria Library (bead method), Filamentous Fungi Library 1.0, IVD, Listeria
 Applied Taxonomy Tree:

Analyte Name	Analyte ID	Organism (best match)	Score Value
E1 (+++) (A)	353-260	Pseudomonas aeruginosa	2.501

Comments:

N/A