

APPENDIX

Appendix 1: Macroscopic and Microscopic Features of Bacterial Isolates from HIV positive Patients in Jos.

Colony Code	Medium	Macroscopy			Microscopy		
		Colour	Elevation	Consistency	Gram	Shape	Cell Arrangement
1	SSA	Colourless	Convex	Mucoid	-	Short slender rods	Singly, chains
2	SSA	Colourless with black pigment	Convex	Mucoid	-	Short slender rods	Singly, pairs
3	SSA	Colourless with black pigment	Convex	Mucoid	-	Short slender rods	Pairs, chains
4	SSA	Colourless with black pigment	Convex	Mucoid	-	Short slender rods	Pairs, clusters
5	SSA	Colourless	Convex	Mucoid	-	Long slender rods	Singly, pairs
6	SSA	Colourless	Convex	Mucoid	-	Short slender rods	Singly, pairs
7	SSA	Pinkish	Convex	Mucoid	-	Short slender rods	Pairs, chains
8	SSA	Pinkish	Convex	Mucoid	-	Short slender rods	Singly, pairs
9	SSA	Colourless	Convex	Mucoid	-	Short slender rods	Singly, pairs,
10	MCA	Pinkish	Convex	Mucoid	-	Short slender rods	Pairs, clusters
11	MCA	Pinkish	Convex	Mucoid	-	Long large rods	Singly, pairs
12	MCA	Colourless	Convex	Mucoid	-	Short slender rods	Pairs, chains
13	MCA	Pinkish	Convex	Mucoid	-	Long slender rods	Singly, pairs
14	MCA	Pinkish	Convex	Mucoid	-	Long large rods	Singly, chains
15	MCA	Pinkish	Convex	Mucoid	-	Long slender rods	Singly, clusters
16	MCA	Pinkish	Convex	Mucoid	-	Short slender rods	Singly, clusters
17	MCA	Pinkish	Convex	Mucoid	-	Long slender rods	Singly, chains
18	MCA	Pinkish	Convex	Mucoid	-	Long slender rods	Pairs, chains
19	SSA	Colourless with black pigment	Convex	Mucoid	-	Short slender rods	Pairs, clusters

		Colourless with black					
20	SSA	pigment	Convex	Mucoid	-	Short slender rods	Singly, pairs,
21	MCA	Pinkish	Convex	Mucoid	-	Short slender rods	Pairs, chains
22	SSA	Colourless	Convex	Mucoid	-	Short slender rods	Pairs, clusters
23	SSA	Colourless	Convex	Mucoid	-	Short slender rods	Singly, clusters
24	SSA	Colourless	Convex	Mucoid	-	Short slender rods	Singly, pairs,
25	SSA	Colourless	Convex	Mucoid	-	Short slender rods	Singly, chains

Appendix 2: Biochemical Characteristics of Bacterial Isolates from HIV positive Patients in Jos.

Isolate code	Indole	Methyl Red	Voges Proskauer	Citrate Slant	Triple Sugar Iron				Sugar Fermentation Test									
					Butt	Gas	H ₂ S	Glucose	Sucrose	Fructose	Maltose	Lactose	Acid	Gas				
1	-	+	-	-	Alkaline	Acidic	-	-	+	+	-	-	+	+	+	+	-	-
2	-	+	-	-	Alkaline	Acidic	+	+	+	+	-	-	+	+	+	+	-	-
3	-	+	-	-	Alkaline	Acidic	+	+	+	+	-	-	+	+	+	+	-	-
4	+	+	-	-	Alkaline	Acidic	-	-	+	+	-	-	-	-	+	+	-	-
5	+	+	-	-	Alkaline	Acidic	-	-	+	+	-	-	+	-	+	-	-	-
6	+	+	-	-	Alkaline	Acidic	-	-	+	+	-	-	+	+	+	-	-	-
7	+	+	-	-	Acidic	Acidic	+	-	+	+	+	+	-	-	-	-	+	+
8	+	+	-	-	Acidic	Acidic	+	-	+	+	+	+	-	-	-	-	+	+
9	+	+	-	-	Acidic	Acidic	+	-	+	+	-	-	-	-	-	-	+	+
10	+	+	-	-	Acidic	Acidic	+	-	+	+	+	+	-	-	-	-	+	+
11	+	+	-	-	Acidic	Acidic	+	-	+	+	-	-	-	-	-	-	+	+
12	-	+	-	-	Alkaline	Acidic	+	-	+	+	-	-	+	-	+	-	-	-

13	+	+	-	-	Acidic	Acidic c	+	-	+	+	+	+	-	-	-	-	+	+
14	+	+	-	-	Acidic	Acidic c	+	-	+	+	+	+	-	-	-	-	+	+
15	+	+	-	-	Acidic	Acidic c	+	-	+	+	+	+	-	-	-	-	+	+
16	+	+	-	-	Acidic	Acidic c	+	-	+	+	-	-	-	-	-	-	+	+
17	+	+	-	-	Acidic	Acidic c	+	-	+	+	+	+	-	-	-	-	+	+
18	+	+	-	-	Acidic	Acidic c	+	-	+	+	+	+	-	-	-	-	+	+
19	-	+	-	-	Alkaline	Alkaline c	+	+	+	+	-	-	+	+	+	+	-	-
20	-	+	-	-	Alkaline	Alkaline c	+	+	+	+	-	-	+	+	+	+	-	-
21	+	+	-	-	Acidic	Acidic c	+	-	+	+	-	-	-	-	-	-	+	+
22	+	+	-	-	Alkaline	Alkaline c	+	-	+	+	-	-	+	-	+	-	-	-
24	-	+	-	-	Alkaline	Alkaline c	+	-	+	+	-	-	+	-	+	-	-	-
25	-	+	-	-	Alkaline	Alkaline c	+	-	+	+	-	-	+	-	+	-	-	-

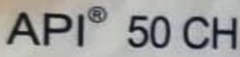
Appendix 3: Sugar fermentation test Bacterial Isolates from HIV positive Patients in Jos.


Isolate code	Sugar Fermentation Test				Most Probable Organism
	Mannose		Arabinose		
	Acid	Gas	Acid	Gas	
1	+	+	-	-	<i>Shigella</i> spp
2	+	+	-	-	<i>Salmonella</i> spp
2	+	+	-	-	<i>Salmonella</i> spp
3	+	+	-	-	<i>Shigella</i> spp
4	+	-	-	-	<i>Shigella</i> spp
5	+	+	-	-	<i>Shigella</i> spp <i>Escherichia</i>
6	-	-	+	+	<i>coli</i> <i>Escherichia</i>
7	-	-	+	+	<i>coli</i> <i>Escherichia</i>
8	-	-	+	+	<i>coli</i> <i>Escherichia</i>
9	-	-	+	+	<i>coli</i> <i>Escherichia</i>
10	-	-	+	+	<i>coli</i>
11	+	-	-	-	<i>Shigella</i> spp <i>Escherichia</i>
12	-	-	+	+	<i>coli</i> <i>Escherichia</i>
13	-	-	+	+	<i>coli</i> <i>Escherichia</i>
14	-	-	+	+	<i>coli</i> <i>Escherichia</i>
15	-	-	+	+	<i>coli</i> <i>Escherichia</i>
16	-	-	+	+	<i>coli</i>

					<i>Escherichia</i>
17	-	-	+	+	<i>coli</i>
18	+	+	-	-	<i>Salmonella</i> spp
19	+	+	-	-	<i>Salmonella</i> spp
					<i>Escherichia</i>
20	-	-	+	+	<i>coli</i>
21	+	-	-	-	<i>Shigella</i> spp
22	+	-	-	-	<i>Shigella</i> spp
24	+	-	-	-	<i>Shigella</i> spp
25	+	-	-	-	<i>Shigella</i> spp

Appendix 4: API 50 CH Results

API 50 CH Results





12138 A


REF.: Gb34a 0.1.0.3/20/20


Origine / Source / Herkunft /
 Origen / Origen / Προέλευση /
 Ursprung / Oprindelse / Pochodzenie :

BIOMÉRIEUX

Brand 30492018
 Imprimé en France / Printed in France

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49				
24 h	-	-	-	-	+	+	+	-	-	-	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	+	+	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+		
48 h	-	-	-	-	+	+	+	-	-	-	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	+	+	+	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+
0	GLY	ERY	DARA	LARA	RIB	DXYL	LXYL	ADO	MDX	GAL	GLU	FRU	MNE	SBE	RHA	DUL	INO	MAN	SOR	MDM	MDG	NAG	AMY	ARB	ESC	SAL	CEL	MAL	LAC	MEL	SAC	TRE	INU	MLZ	RAF	AMD	GLYG	XLT	GEN	TUR	LXX	TAG	DFUC	LFUC	DARL	LARL	GNT	2KG	5KG					

 Inoc./Inok./Υλικό ενοφθαλμισμού :

 Incub./Inkub./Θερμοκρασία επώασης :

Autres tests / Other tests / Andere Tests /
 Otras pruebas / Altri test / Outros testes /
 Άλλες εξετάσεις / Andra tester /
 Andre tests / Inne testy :

Ident. / Ταυτοποίηση :

Appendix 5: Morphological characteristics of Lactic Acid Bacteria isolates

Isolate No.	Colour	Description of colony	Margin	Gram staining
TM9	Cream	Cylindrical, transparent, raised elevation	Entire	Positive
Gb8	Cream	Cylindrical, transparent, raised elevation	Entire	Positive
TM8	Green	Cylindrical, transparent, raised elevation	Entire	Positive

Appendix 6: Biochemical characterization of the lactobacilli isolates

Isolate No	Oxidase test	Catalase test	Starch hydrolysis	MR test	VP test	Xylose	Sorbose	Mannitol	Sucrose	Lactose	Growth in NaCl	Possible organism
A52	-	-	-	+	-	NC	A	A	NC	NC	+	<i>L. casei</i>
B2	-	-	-	+	-	NC	A	A	NC	NC	+	<i>L. casei</i>
C1	-	-	+	+	-	NC	NC	AG	AG	AG	+	<i>L. brevis</i>

Key: (+) = positive reaction; (-) = negative reaction; (AG) = acid and gas production; (A) = acid production only; (NC) = no change; MR = Methyl red; VP = Voges- Proskauer; NaCl = sodium chloride.

Appendix 7. API Kits

