

		1	120
1	O157:H7.gamma	100.0%	MITHGCVTRTRHKKHKKTLIMLSAGLGGLFFVYNQNSFANGENYFKLGSDSKLLTHDSYQNR.FYTLKTGETVADLSKSQDNLSTIWSLNKH.YSSESEMMKAAPGQOIILPIKKLPFE
2	O145:H28.gamma	99.8%	MITHGCVTRTRHKKHKKTLIMLSAGLGGLFFVYNQNSFANGENYFKLGSDSKLLTHDSYQNR.FYTLKTGETVADLSKSQDNLSTIWSLNKH.YSSESEMMKAAPGQOIILPIKKLPFE
3	O127:H6.alpha	82.6%	MITHGFYARTRHKKHKKKTFIMLSAGLGGLFFVYNQNSFANGENYFKLGSDSKLLTHDSYQNR.FYTLKTGETVADLSKSQDNLSTIWSLNKH.YSSESEMMKAAPGQOIILPIKKLPFE
4	O26:H11.beta	82.1%	MITHGFYARTRHKKHKKKTFIMLSAGLGGLFFVYNQNSFANGENYFKLSSDSKLLTQNAADR.FYTLKTGETVANISKSQGISLSVWSLNKH.YSSESEMMKAGPGQOIILPIKKLSVE
5	O103:H2.epsilon	81.6%	MITHGFYTRTRHKKHKKKTFIMLSAGLGGLFFVYNQNSFANGENYFKLSSDSKLLTQNAADR.FYTLKTGETVANISKSQGISLSVWSLNKH.YSSESEMMKAGPGQOIILPIKKLSVE
6	O121:H19.epsilon	81.6%	MITHGFYTRTRHKKHKKKTFIMLSAGLGGLFFVYNQNSFANGENYFKLSSDSKLLTQNAADR.FYTLKTGETVANISKSQGISLSVWSLNKH.YSSESEMMKAGPGQOIILPIKKLSVE
7	O45:H2.epsilon	81.6%	MITHGFYTRTRHKKHKKKTFIMLSAGLGGLFFVYNQNSFANGENYFKLSSDSKLLTQNAADR.FYTLKTGETVANISKSQGISLSVWSLNKH.YSSESEMMKAGPGQOIILPIKKLSVE
8	O111:H-.theta	88.8%	MITHGFYARTRHKKHKKKTFIMLSAGLGGLFFVYNQNSFANGENYFKLSSDSKLLTQNAADR.FYTLKTGETVSSISKSQGISLSVWSLNKH.YSSESEMMKAAPGQOIILPIKKLSVE
9	Intim1.1	100.0%	MITHGCVTRTRHKKHKKKTLIMLSAGLGGLFFVYNQNSFANGENYFKLGSDSKLLTHDSYQNR.FYTLKTGETVADLSKSQDNLSTIWSLNKH.YSSESEMMKAAPGQOIILPIKKLPFE
10	Intim1.4	100.0%	-----TLIMLSAGLGGLFFVYNQNSFANGENYFKLGSDSKLLTHDSYQNR.FYTLKTGETVADLSKSQDNLSTIWSLNKH.YSSESEMMKAAPGQOIILPIKKLPFE
11	Intim1.6	100.0%	-----FVYNQNSFANGENYFKLGSDSKLLTHDSYQNR.FYTLKTGETVADLSKSQDNLSTIWSLNKH.YSSESEMMKAAPGQOIILPIKKLPFE
12	Intim1.10	100.0%	-----THDSYQNR.FYTLKTGETVADLSKSQDNLSTIWSLNKH.YSSESEMMKAAPGQOIILPIKKLPFE
13	Intim2.8	100.0%	-----KAAPGQOIILPIKKLPFE
14	Intim2.9	100.0%	-----QOIILPIKKLPFE
15	Intim7.7	100.0%	-----

		121	:	2	240
1	O157:H7.gamma	100.0%	YSALPLGSAPLVAAGGVAGHTNKLTKMSPDVTKSNYTDDKAI NYAAQQAASLGSOIQSRSLNGDYAKDTALGIACNQASSQLQAWLOHYGTAEVNLOS GNNFDGSSIDFLLPFYDSEKM		
2	O145:H28.gamma	99.8%	YSALPLLGSAPLVAAGGVAGHTNKLTKMSPDVTKSNYTDDKAI NYAAQQAASLGSOIQSRSLNGDYAKDTALGIACNQASSQLQAWLOHYGTAEVNLOS GNNFDGSSIDFLLPFYDSEKM		
3	O127:H6.alpha	82.6%	YSALPLLGSAPLVAAGGVAGHTNKLTKMSPDVTKSNYTDDKAI NYAAQQAASLGSOIQSRSLNGDYAKDTALGIACNQASSQLQAWLOHYGTAEVNLOS GNNFDGSSIDFLLPFYDSEKM		
4	O26:H11.beta	82.1%	YSALPVLGSAPVVAAGGVAGHTNKLTKMSPDATKSNTTDDKAI NYAAQQAASLGSOIQSRSLNGDYAKDTALGMASSQASSQLQAWLOHYGTAEVNLOS GNNFDGSSIDFLLPFYDSENMM		
5	O103:H2.epsilon	81.6%	YSALPVLGSAPVVAAGGVAGHTNKLTKMSPDATKSNTTDDKAI NYAAQQAASLGSOIQSRSLNGDYAKDTALGMASSQASSQLQAWLOHYGTAEVNLOS GNNFDGSSIDFLLPFYDSENMM		
6	O121:H19.epsilon	81.6%	YSALPVLGSAPVVAAGGVAGHTNKLTKMSPDATKSNTTDDKAI NYAAQQAASLGSOIQSRSLNGDYAKDTALGMASSQASSQLQAWLOHYGTAEVNLOS GNNFDGSSIDFLLPFYDSENMM		
7	O45:H2.epsilon	81.6%	YSALPVLGSAPVVAAGGVAGHTNKLTKMSPDATKSNTTDDKAI NYAAQQAASLGSOIQSRSLNGDYAKDTALGMASSQASSQLQAWLOHYGTAEVNLOS GNNFDGSSIDFLLPFYDSENMM		
8	O111:H-.theta	88.8%	YGALPVLGSAPVVAAGGVAGHTNKLTKMSPDATQSNYTDDKAI NYTAQQAASLGSOIQSRSLHGDYAKDTALGIACNQASSQLQAWLOHYGTAEVNLOS GNNFDGSSIDFLLPFYDSEKM		
9	Intim1.1	100.0%	-----		
10	Intim1.4	100.0%	-----		
11	Intim1.6	100.0%	-----		
12	Intim1.10	100.0%	-----		
13	Intim2.8	100.0%	-----		
14	Intim2.9	100.0%	YSALPL		
15	Intim7.7	100.0%	-----		

		241	:	.	.	.	.	3	.	.	.	:	.	360																																																																																																												
1	O157:H7.gamma	100.0%	L	A	F	G	O	V	G	A	R	Y	I	D	S	R	F	T	A	N	L	G	A	G	O	R	F	F	L	P	A	N	M	L	G	Y	N	V	F	I	D	Q	D	F	S	C	D	N	T	R	L	G	I	G	G	E	Y	W	R	D	Y	F	K	S	S	V	N	G	Y	F	R	M	S	G	W	H	E	S	Y	N	K	K	D	Y	D	E	R	P	A	N	G	F	D	I	R	F	N	G	Y	L	P	S	Y	P	A	L	G	A	K	L	I	Y	E	Q	Y	Y	G	D	N	V	A	L
2	O145:H28.gamma	99.8%	L	A	F	G	O	V	G	A	R	Y	I	D	S	R	F	T	A	N	L	G	A	G	O	R	F	F	L	P	A	N	M	L	G	Y	N	V	F	I	D	Q	D	F	S	C	D	N	T	R	L	G	I	G	G	E	Y	W	R	D	Y	F	K	S	S	V	N	G	Y	F	R	M	S	G	W	H	E	S	Y	N	K	K	D	Y	D	E	R	P	A	N	G	F	D	I	R	F	N	G	Y	L	P	S	Y	P	A	L	G	A	K	L	I	Y	E	Q	Y	Y	G	D	N	V	A	L
3	O127:H6.alpha	82.6%	L	A	F	G	O	V	G	A	R	Y	I	D	S	R	F	T	A	N	L	G	A	G	O	R	F	F	L	P	E	N	M	L	G	Y	N	V	F	I	D	Q	D	F	S	C	D	N	T	R	L	G	I	G	G	E	Y	W	R	D	Y	F	K	S	S	V	N	G	Y	F	R	M	S	G	W	H	E	S	Y	N	K	K	D	Y	D	E	R	P	A	N	G	F	D	I	R	F	N	G	Y	L	P	S	Y	P	A	L	G	A	K	L	I	Y	E	Q	Y	Y	G	D	N	V	A	L
4	O26:H11.beta	82.1%	L	A	F	G	O	V	G	A	R	Y	I	D	S	R	F	T	A	N	L	G	A	G	O	R	F	F	L	P	E	N	M	L	G	Y	N	V	F	I	D	Q	D	F	S	C	D	N	T	R	L	G	I	G	G	E	Y	W	R	D	Y	F	K	S	S	V	N	G	Y	F	R	M	S	G	W	H	E	S	Y	N	K	K	D	Y	D	E	R	P	A	N	G	F	D	I	R	F	N	G	Y	L	P	S	Y	P	A	L	G	A	K	L	I	Y	E	Q	Y	Y	G	D	N	V	A	L
5	O103:H2.epsilon	81.6%	L	A	F	G	O	V	G	A	R	Y	I	D	S	R	F	T	A	N	L	G	A	G	O	R	F	F	L	P	E	N	M	L	G	Y	N	V	F	I	D	Q	D	F	S	C	D	N	T	R	L	G	I	G	G	E	Y	W	R	D	Y	F	K	S	S	V	N	G	Y	F	R	M	S	G	W	H	E	S	Y	N	K	K	D	Y	D	E	R	P	A	N	G	F	D	I	R	F	N	G	Y	L	P	S	Y	P	A	L	G	A	K	L	I	Y	E	Q	Y	Y	G	D	N	V	A	L
6	O121:H19.epsilon	81.6%	L	A	F	G	O	V	G	A	R	Y	I	D	S	R	F	T	A	N	L	G	A	G	O	R	F	F	L	P	E	N	M	L	G	Y	N	V	F	I	D	Q	D	F	S	C	D	N	T	R	L	G	I	G	G	E	Y	W	R	D	Y	F	K	S	S	V	N	G	Y	F	R	M	S	G	W	H	E	S	Y	N	K	K	D	Y	D	E	R	P	A	N	G	F	D	I	R	F	N	G	Y	L	P	S	Y	P	A	L	G	A	K	L	I	Y	E	Q	Y	Y	G	D	N	V	A	L
7	O45:H2.epsilon	81.6%	L	A	F	G	O	V	G	A	R	Y	I	D	S	R	F	T	A																																																																																																							

Accession	Identity (%)	Sequence
15 Intim7.7	100.0%	-----
		361 4 . . . : . . 480
1 O157:H7.gamma	100.0%	FNSDKLQSNPGAATVGVNYTPIPLVTMGIDYRHGTENENDLLYSMQFRYQFDKSWSQQIEPQYVNEPRTLSGSRYDLVQRNNNIILEYKKQDILSLNIPHDINGTEHSTQKIQ LIVKSKY
2 O145:H28.gamma	99.8%	FNSDKLQSNPGAATVGVNYTPIPLVTMGIDYRHGTENENDLLYSMQFRYQFDKSWSQQIEPQYVNEPRTLSGSRYDLVQRNNNIILEYKKQDILSLNIPHDINGTEHSTQKIQ LIVKSKY
3 O127:H6.alpha	82.6%	FNSDKLQSNPGAATVGVNYTPIPLVTMGIDYRHGTENENDLLYSMQFRYQFDKSWSQQIEPQYVNEPRTLSGSRYDLVQRNNNIILEYKKQDILSLNIPHDINGTEHSTQKIQ LIVKSKY
4 O26:H11.beta	82.1%	FNSDKLQSNPGAATVGVNYTPIPLVTMGIDYRHGTENENDLLYSMQFRYQFDKSWSQQIEPQYVNEPRTLSGSRYDLVQRNNNIILEYKKQDILSLNIPHDINGTEHSTQKIQ LIVKSKY
5 O103:H2.epsilon	81.6%	FNSDKLQSNPGAATVGVNYTPIPLVTMGIDYRHGTENENDLLYSMQFRYQFDKSWSQQIEPQYVNEPRTLSGSRYDLVQRNNNIILEYKKQDILSLNIPHDINGTEHSTQKIQ LIVKSKY
6 O121:H19.epsilon	81.6%	FNSDKLQSNPGAATVGVNYTPIPLVTMGIDYRHGTENENDLLYSMQFRYQFDKSWSQQIEPQYVNEPRTLSGSRYDLVQRNNNIILEYKKQDILSLNIPHDINGTEHSTQKIQ LIVKSKY
7 O45:H2.epsilon	81.6%	FNSDKLQSNPGAATVGVNYTPIPLVTMGIDYRHGTENENDLLYSMQFRYQFDKSWSQQIEPQYVNEPRTLSGSRYDLVQRNNNIILEYKKQDILSLNIPHDINGTEHSTQKIQ LIVKSKY
8 O111:H-.theta	88.8%	FNSDKLQSNPGAATVGVNYTPIPLVTMGIDYRHGTENENDLLYSMQFRYQFDKSWSQQIEPQYVNEPRTLSGSRYDLVQRNNNIILEYKKQDILSLNIPHDINGTEHSTQKIQ LIVKSKY
9 Intim1.1	100.0%	-----
10 Intim1.4	100.0%	-----
11 Intim1.6	100.0%	-----
12 Intim1.10	100.0%	-----
13 Intim2.8	100.0%	-----
14 Intim2.9	100.0%	-----
15 Intim7.7	100.0%	----- NENDLLYSMQFRYQFDKS

		481	5	600
1	O157:H7.gamma	100.0%	GLDRIVWDDSAALRSQGGQIQHSGCSQSAQDYQAAILPAYVQGGSNIIYKVTARAYDRNGNSSNNVQLTITVLSNGQVVDQVGVTDFDTADKTSAKADNADTTITYTATVKKNGVAQANVPVSFNI	
2	O145:H28.gamma	99.8%	GLDRIVWDDSAALRSQGGQIQHSGCSQSAQDYQAAILPAYVQGGSNIIYKVTARAYDRNGNSSNNVQLTITVLSNGQVVDQVGVTDFDTADKTSAKADNADTTITYTATVKKNGVAQANVPVSFNI	
3	O127:H6.alpha	82.6%	GLDRIVWDDSAALRSQGGQIQHSGCSQSAQDYQAAILPAYVQGGSNIIYKVTARAYDRNGNSSNNVQLTITVLSNGQVVDQVGVTDFDTADKTSAKADGTEAITTYTATVKKNGVAQANVPVSFNI	
4	O26:H11.beta	82.1%	GLDRIVWDDSAALRSQGGQIQHSGCSQSAQDYQAAILPAYVQGGSNIIYKVTARAYDRNGNSSNNVQLTITVLPNGQVVDQVGVTDFDTADKTSAKADGIEAITTYTATVKKNGVAQANVPVTFSI	
5	O103:H2.epsilon	81.6%	GLDRIVWDDSAALRSQGGQIQHSGCSQSAQDYQAAILPAYVQGGSNIIYKVTARAYDRNGNSSNNVQLTITVLPNGQVVDQVGVTDFDTADKTSAKADNVDTTITYTATVKKNGVAQANAPVTFSI	
6	O121:H19.epsilon	81.6%	GLDRIVWDDSAALRSQGGQIQHSGCSQSAQDYQAAILPAYVQGGSNIIYKVTARAYDRNGNSSNNVQLTITVLPNGQVVDQVGVTDFDTADKTSAKADNVDTTITYTATVKKNGVAQANAPVTFSI	
7	O45:H2.epsilon	81.6%	GLDRIVWDDSAALRSQGGQIQHSGCSQSAQDYQAAILPAYVQGGSNIIYKVTARAYDRNGNSSNNVQLTITVLPNGQVVDQVGVTDFDTADKTSAKADNVDTTITYTATVKKNGVAQANAPVTFSI	
8	O111:H-.theta	88.8%	GLDRIVWDDSAALRSQGGQIQHSGCSQSAQDYQAAILPAYVQGGSNIIYKVTARAYDRNGNSSNNVQLTITVLSNGQVVDQVGVTDFDTADKTSAKADGTEAITTYTATVKKNGVTOANVPVSFNI	
9	Intim1.1	100.0%	-----	
10	Intim1.4	100.0%	-----	
11	Intim1.6	100.0%	-----	
12	Intim1.10	100.0%	-----	
13	Intim2.8	100.0%	-----	
14	Intim2.9	100.0%	-----	
15	Intim7.7	100.0%	-----	

[illegible]

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1	O157:H7.gamma	100.0%
2	O145:H28.gamma	99.8%
3	O127:H6.alpha	82.6%
4	O26:H11.beta	82.1%
5	O103:H2.epsilon	81.6%
6	O121:H19.epsilon	81.6%
7	O45:H2.epsilon	81.6%
8	O111:H-.theta	88.8%
9	Intim1.1	100.0%
10	Intim1.4	100.0%
11	Intim1.6	100.0%
12	Intim1.10	100.0%
13	Intim2.8	100.0%
14	Intim2.9	100.0%
15	Intim7.7	100.0%

1	O157:H7.gamma	100.0%
2	O145:H28.gamma	99.8%
3	O127:H6.alpha	82.6%
4	O26:H11.beta	82.1%
5	O103:H2.epsilon	81.6%
6	O121:H19.epsilon	81.6%
7	O45:H2.epsilon	81.6%
8	O111:H-.theta	88.8%
9	Intim1.1	100.0%
10	Intim1.4	100.0%
11	Intim1.6	100.0%
12	Intim1.10	100.0%
13	Intim2.8	100.0%
14	Intim2.9	100.0%
15	Intim7.7	100.0%