				☐ 1 copies ☐ 3 copies
Listeria monocytogenes J Listeria monocytogenes s Listeria monocytogenes s Listeria monocytogenes s	erotype 4b str. 81-0558 erotype 4b str. 81-0592 erotype 4b str. 81-0861	+25 +26 +27 +25 +25 +27 +25 +26 +27 +25 +26 +27		
Listeria monocytogenes s Listeria monocytogenes V Listeria monocytogenes V Listeria monocytogenes V	erotype 4b str. 10-0809 VSLC 1018 ELCC2378	125 125 127 125 127 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 127		
Listeria monocytogenes N Listeria monocytogenes C Listeria monocytogenes L	IE IIMS-NV-3 MJF5203	+25 +26 +27 +25 +26 +27 +25 +26 +27		
Listeria monocytogenes n Listeria monocytogenes I Listeria monocytogenes L Listeria monocytogenes s	.0-092876-1547 LM7 R8 erotype 4h str. 02-1103	125 126 127 125 126 127 125 126 127 125 126 127 125 127 125 127		
Listeria monocytogenes I Listeria monocytogenes N Listeria monocytogenes L Listeria monocytogenes L	.8 ITSN M43 M39	+25 +26 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27		
Listeria monocytogenes s Listeria monocytogenes C Listeria monocytogenes L Listeria monocytogenes F	erotype 4b str. F2365 4b F2365 IIMS-PH-1 I 2108 DAARGOS_607	+25 +26 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27		
Listeria monocytogenes V Listeria monocytogenes F Listeria monocytogenes A Listeria monocytogenes V	/IMVR081 DAARGOS_778 LTCC 13932 VSLC 1047	125 126 127 125 126 127 125 126 127 125 125 125 127 127 125 126 127		
Listeria monocytogenes V Listeria monocytogenes C Listeria monocytogenes 1	/IMHA007 :FSAN054108 :0-092876-1155 M6	125 126 127 125 125 126 127 125 126 127 125 125 127 125 126 127		
Listeria monocytogenes L Listeria monocytogenes S Listeria monocytogenes s Listeria monocytogenes J Listeria monocytogenes J	icottA tr. Scott A 1-220	125 126 127 125 127 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 127		
Listeria monocytogenes P Listeria monocytogenes A Listeria monocytogenes A Listeria monocytogenes P Listeria monocytogenes P		125 125 127 125 125 127 125 125 127 126 127		
Listeria monocytogenes 1 Listeria monocytogenes 1 Listeria monocytogenes 2 Listeria monocytogenes c	.6 10 30 dinical isolate of L. monocytogenes FSAN006122 NUSAL000019	125 125 127 125 125 127 125 125 127 125 126 127		
Listeria monocytogenes P Listeria monocytogenes I Listeria monocytogenes C Listeria monocytogenes N Listeria monocytogenes N		125 126 127 125 126 127 125 126 127 125 126 127		
	inio-quida ian ian ilnical isolate of L. monocytogenes i8020621 .0-092876-0769 LM12	125 - 126 - 127 125 - 126 - 127 125 - 126 - 127 125 - 126 - 127		
Listeria monocytogenes I Listeria monocytogenes J Listeria monocytogenes J Listeria monocytogenes J	1817	+25 +25 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27		
Listeria monocytogenes I Listeria monocytogenes F Listeria monocytogenes C Listeria monocytogenes C		125 125 127 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127		
Listeria monocytogenes C Listeria monocytogenes C Listeria monocytogenes C Listeria monocytogenes C Listeria monocytogenes C		125 126 127 125 127 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 127		
Listeria monocytogenes C Listeria monocytogenes 2 Listeria monocytogenes 1 Listeria monocytogenes N	FSAN002349 2017-TE-6913-1 10-092876-1063 LM3	125 125 127 125 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 126 127 126 127		
Listeria monocytogenes II Listeria monocytogenes L Listeria monocytogenes s	nan 312 Serotype 4b str. CLIP 80459 Clip80459 37850776	125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 127		
Listeria monocytogenes s Listeria monocytogenes s Listeria monocytogenes s Listeria monocytogenes C	2-064 2-064	125 125 127 125 125 127 125 126 127 125 126 127		
Listeria monocytogenes n Listeria monocytogenes 1 Listeria monocytogenes 1 Listeria monocytogenes L	o-092876-0145 LM9 0-092876-1016 LM11	+25 +25 +27 +25 +25 +27 +25 +25 +27 +25 +26 +27		
Listeria monocytogenes 1 Listeria monocytogenes F	5 DA709873-33 DA709873-31	125 125 127 125 127 125 125 127 125 127 125 126 127 125 126 127 125 126 127 125 126 127		
Listeria monocytogenes F Listeria monocytogenes C Listeria monocytogenes C Listeria monocytogenes C	FSAN023459 FSAN029793 FSAN008100	125 125 127 125 125 127 125 125 127 125 125 127		
Listeria monocytogenes C Listeria monocytogenes S Listeria monocytogenes F Listeria monocytogenes D	2859 DRC_049 M18	125 - 126 - 127 125 - 126 - 127 125 - 126 - 127 125 - 126 - 127		
Listeria monocytogenes Li Listeria monocytogenes I Listeria monocytogenes II Listeria monocytogenes II Listeria monocytogenes Li	0-092876-0168 CDC-LM188 M928	125 126 127 125 126 127 125 126 127 125 126 127		
Listeria monocytogenes Li Listeria monocytogenes Fi Listeria monocytogenes H Listeria monocytogenes 13 Listeria monocytogenes 12		125 - 226 - 227 125 - 226 - 227 125 - 226 - 227		
Listeria monocytogenes 12 Listeria monocytogenes 11 Listeria monocytogenes SI Listeria monocytogenes FS Listeria monocytogenes EL Listeria monocytogenes RJ Listeria monocytogenes RJ		125 - 126 - 127 125 - 126 - 127 125 - 126 - 127 125 - 126 - 127		
Listeria monocytogenes Li Listeria monocytogenes SL Listeria monocytogenes SL Listeria monocytogenes SL Listeria monocytogenes 14		125 126 127 125 126 127 125 126 127 125 126 127		
	ocytogenes LM850658 ocytogenes 4/52-1953 ocytogenes HCC23 ocytogenes M7	+25 +25 +27 +25 +26 +27 +25 +26 +27 +25 +25 +27 +25 +26 +27		
Listeria mon	ocytogenes L99 ocytogenes 52860 ocytogenes 52873	125 126 127 125 127 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 127		
Listeria mono Listeria mono Listeria mono Listeria mono	cytogenes WSLC 1019 cytogenes WSLC 1020 cytogenes SLCC2376 cytogenes FDAARGOS_554	125 125 127 125 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127		
Listeria monocytogenes XYSN	togenes UKVDL9	125 126 127 125 126 127 125 126 127 125 125 127 125 127 125 127		
Jisteria monocytogenes Prius Jisteria monocytogenes Usteria monocytogenes Usteria monocytogenes Jisteria monocytogenes Usteria monocytogenes	30161 AUSMDU00000235 CFSAN054109 6179	125 126 127 128 128 128 128 127 128 127 128 127 128 127 128 127 128		
Listeria monocytogenes P Listeria monocytogenes N Listeria monocytogenes P Listeria monocytogenes	NCCP 15743 NUSAL000009	125 126 127 125 126 127 125 126 127 125 126 127		
Listeria monocytogenes CF Listeria monocytogenes I Listeria monocytogenes I	SAN004330 Lm 3136 MOD1 15152	125 125 127 125 127 125 125 127 125 127 125 125 127 125 125 127 125 126 127 125 126 127		
— Listeria monocytogenes Listeria monocytogenes Listeria monocytogenes Listeria monocytogenes Listeria monocytogenes		125 126 127 125 126 127 125 126 127 125 125 127 125 126 127 127		
Listeria monocytogenes Listeria monocytogenes Listeria monocytogenes Listeria monocytogenes Listeria monocytogenes		+25 +26 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27		
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Listeria monocytogenes: Listeria monocytogenes Listeria monocytogenes Listeria monocytogenes Listeria monocytogenes.		125 126 127 125 126 127 125 126 127 125 126 127 125 127 125 127		
Listeria monocytogenes Listeria monocytogenes	FSL R2-561 FSLR2-561 AUSMDU00000224	125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 125 127 126 127		
Listeria monocytogenes : Listeria monocytogenes : Listeria monocytogenes : Listeria monocytogenes 5	EGD-e EGD-e 52869	125 125 127 125 127 125 125 125 125 127 125 125 127 125 125 127 125 126 127 125 126 127 127		
Listeria monocytogenes L Listeria monocytogenes I Listeria monocytogenes I Listeria monocytogenes I	LI-387 Lm16 Finland 1998 Finland 1998 (IH 42573) AUSMDU00007774	125 125 127 125 126 127 125 126 127 125 126 127	+25 +26 -547	-357 = +26 = +27
Listeria monocytogenes (Listeria monocytogenes 1 Listeria monocytogenes C Listeria monocytogenes C Listeria monocytogenes s	FORC_057 0-092876-1559 LM1 FSAN007956	+25 +25 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27		
Listeria monocytogenes I Listeria monocytogenes P Listeria monocytogenes F	L2625 NUSAL000096 DARGOS 1080	+25 +25 +27 +25 +25 +27 +25 +25 +27 +25 +26 +27		
Listeria monocytogenes 32 Listeria monocytogenes 8 Listeria monocytogenes P Listeria monocytogenes P		125 - 126 - 127 125 - 126 - 127 125 - 126 - 127 125 - 126 - 127		
	FSAN042079 08-5923 Aug-23 serotype 1/2a str. 10-1046 serotype 1/2a str. 10-1321 serotype 1/2a str. 10-5024	125 125 127 125 125 127 125 125 127 125 126 127		
	erotype 1/2a str. 10-5024 serotype 1/2a str. 01-6771 serotype 1/2a str. 99-6871 4PB2088 serotype 1/2a str. 88-0478	125 125 127 125 125 127 125 125 127 125 125 127 125 126 127		
Listeria monocytogenes s Listeria monocytogenes s Listeria monocytogenes s Listeria monocytogenes s	4PB2088 errotype 1/2a str. 88-0478 errotype 1/2a str. 08-7362 errotype 1/2a str. 08-7364 errotype 1/2a str. 08-7363 errotype 1/2a str. 98-2035 errotype 1/2a str. 98-2035	125 126 127 128 128 128 128 127 128 127 128 127 128 127 128 127 128		
Listeria monocytogenes s Listeria monocytogenes s Listeria monocytogenes s Listeria monocytogenes s	serotype 1/2a str. 04-5457 serotype 1/2a str. 08-6056 18-5578 Aug-78 serotype 1/2a str. 08-6569 #PB5622	125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 125 126 127		
	HPB5622 HPB5415 serotype 1/2a str. 01-1280 serotype 1/2a str. 98-0291 serotype 1/2a str. 01-1468	125 126 127 128 128 128 127 128 127 128 127 128 127 128 127 128 127 128 127 128		
Listeria monocytogenes s Listeria monocytogenes s Listeria monocytogenes s	erotype 1/2a str. 02-5993 erotype 1/2a str. 01-5252 erotype 3a str. 88-1059	125 126 127 125 126 127 125 126 127 125 126 127 125 126 127 125 127 126 127		
Listeria monocytogenes s Listeria monocytogenes s Listeria monocytogenes s Listeria monocytogenes 1	erotype 1/2a str. 08-7669 erotype 1/2a str. 95-0093 erotype 1/2a str. 03-5473 10-092876-0731 LM5	125 126 127 125 126 127 125 126 127 125 126 127 125 127 125 127		
Listeria monocytogenes L Listeria monocytogenes s Listeria monocytogenes I	meu ierotype 1/2a str. 11-4254 ZSAM_Lm_15_17439_A144 19-05816	+25 +26 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27		
	dinical isolate of L. monocytogenes R479a .m N1546 din isolate of L. monocytogenes	+25 +26 +27 +25 +25 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27		
Listeria monocytogenes s Listeria monocytogenes 1 Listeria monocytogenes 1 Listeria monocytogenes C	0-092876-1763 LM10 EFSAN022990	+25 +25 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27		
Listeria monocytogenes L Listeria monocytogenes I Listeria monocytogenes Li Listeria monocytogenes Li Listeria monocytogenes Li		+25 +26 +27 +25 +26 +27 +25 +26 +27 +25 +25 +27 +25 +26 +27		
Listeria monocytogenes N. Alsteria monocytogenes N. Listeria monocytogenes N. Listeria monocytogenes na Listeria monocytogenes LM Listeria monocytogenes LM Listeria monocytogenes SL		+25 +25 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27		
Listeria monocytogenes SL Listeria monocytogenes SL Listeria monocytogenes FE Listeria monocytogenes Lil Listeria monocytogenes LiM Listeria monocytogenes IM Listeria monocytogenes FS		125 125 127 125 125 127 125 126 127 125 126 127 125 126 127		
Listeria monocytogenes NC Listeria monocytogenes EG Listeria monocytogenes WS	IC/9/3 SD SLC1001	925 925 927 925 925 927 925 926 927 925 926 927 925 926 927		
Listeria monocytogenes SL Listeria monocytogenes L2 Listeria monocytogenes L2 Listeria monocytogenes sei	CC5850 TC10357 626 rotype 1/2a str. 10-0812	+25 +26 +27 +25 +26 +27 +25 +26 +27 +25 +26 +27		
Listeria monocytogenes L2 Listeria monocytogenes GI Listeria monocytogenes GI Listeria monocytogenes GI	b/b rotype 4b str. LIS0087 MC2015:Lmc22 MC2009:LmcUH4	125 126 127 125 126 127 125 126 127 125 127 125 127 125 127		
Listeria monocytogenes 1U Listeria monocytogenes AU Listeria monocytogenes 34 Listeria monocytogenes 13	4035 53 4	+25		
Listeria monocytogenes GI Listeria monocytogenes 20 Listeria monocytogenes 20	MC2016:Lmc547 618 115TE19005-1355	+25 +25 +27 +25 +25 +27 +25 +26 +27 +25 +26 +27 +27 +29 +27 +29 +27 +29 +27 +27		
Listeria monocytogenes 20 Listeria monocytogenes 20 Listeria monocytogenes 20 Listeria monocytogenes 20		+25 +25 +27 +25 +25 +27 +25 +26 +27 +25 +26 +27 +27		
Listeria monocytogenes 20 0.0143866	19:574480	*25 *26 <u>*27</u>		