

Clinical strains	Accession numbers	trpE	trpG	trpD	trpC.F	trpB	trpA
M66-2	NC_012578.1	100%	100%	100%	100%	100%	100%
0395	NZ_CP001235.1	100%	100%	100%	100%	100%	100%
MAK 757	NZ_GG774578.1	100%	100%	100%	100%	100%	100%
V52	NZ_KQ401501.1	100%	100%	100%	100%	100%	99.63%
N16961	NZ_CP028827.1	100%	100%	100%	100%	100%	100%
E7946	NZ_CP024162.1	100%	100%	100%	100%	100%	100%
RC9	NZ_ACHX01000010.1	100%	100%	100%	100%	100%	100%
BX-330286	NZ_ACIA01000002.1	100%	100%	100%	100%	100%	100%
V51	NZ_KQ257375.1	99.43%	96.52%	99.10%	98.29%	99.49%	98.88%
C6706	NZ_CP046844.1	100%	100%	100%	100%	100%	100%
A1552	NZ_CP025936.1	100%	100%	100%	100%	100%	100%
MO10	NZ_CP072849.1	100%	100%	100%	100%	100%	100%
MJ-1236	NZ_CP001485.1	100%	100%	100%	100%	100%	100%
InabaG4222	NZ_CM001785.1	100%	100%	100%	100%	100%	100%
VC1374	NZ_CP040172.1	100%	100%	100%	100%	100%	100%
AM-19226	NZ_KQ257253.1	99.81%	95.52%	99.40%	97.23%	99.24%	99.25%
MZO-3	NZ_KQ257284.1	99.43%	97.01%	99.70%	97.23%	99.49%	98.51%
CIRS-101	NZ_ACVW01000013.1	100%	100%	100%	100%	100%	100%
B33	NZ_ACHZ01000017.1	100%	100%	100%	100%	100%	100%
FJ-147	NZ_CP009042.1	100%	100%	100%	100%	100%	100%
2010EL-1749	NZ_AHGC01000042.1	100%	100%	100%	100%	100%	100%
H1	NZ_AKGH01000001.1	100%	100%	100%	100%	100%	100%
2010EL-1786	NZ_CP003069.1	100%	100%	100%	100%	100%	100%
2011EL-1271	NZ_CP046839.1	99.81%	95.52%	99.70%	97.23%	99.49%	99.63%
2012EL-2176	NZ_CP007634.1	100%	100%	100%	100%	100%	100%
HC1037	NZ_CP026647.1	100%	100%	100%	100%	100%	100%
N1252	NZ_CP102927.1	100%	100%	100%	100%	100%	100%

Table 1. Percent identity of protein sequences of trp operon structural core genes of the clinical strains by blastp.

Environmental strains	Accession numbers	trpE	trpG	trpD	trpC.F	trpB	trpA
N16961	NZ_CP028827.1	100%	100%	100%	100%	100%	100%
2740-80	NZ_KQ257331.1	100%	100%	100%	97.44%	99.75%	98.88%
TMA21	NZ_ACHY01000018.1	99.81%	97.51%	99.10%	96.80%	99.49%	98.13%
623-39	NZ_KQ410584.1	99.81%	95.52%	99.70%	96.80%	99.24%	99.25%
E4	NZ_JALDBX010000002.1	99.62%	96.52%	99.70%	98.08%	99.75%	99.25%
Sa5Y	NZ_CP028892.1	99.43%	97.01%	99.40%	97.87%	99.49%	98.88%
VL426	NZ_ACHV01000001.1	99.24%	96.52%	98.80%	97.23%	98.99%	96.27%
S12	NZ_MDST01000010.1	99.62%	96.52%	99.53%	97.01%	99.75%	97.76%
2011EL-301	NZ_AJFN02000007.1	100%	100%	100%	100%	100%	100%
2012EL-1759	NZ_JAARNH010000066.1	100%	100%	100%	100%	100%	100%
E19	NZ_JALDBY01000001.1	99.81%	96.52%	99.70%	97.23%	99.49%	99.63%
RFB16	NZ_CP043554.1	99.81%	99.00%	99.10%	97.44%	99.24%	98.13%
S1	NZ_JALDBV010000001.1	100%	97.01%	99.40%	98.08%	98.99%	98.88%
S35	NZ_JALDBW01000001.1	99.24%	97.01%	99.70%	98.08%	99.49%	98.51%

Table 2. Percent identity of protein sequences of trp operon structural core genes of the environmental strains by blastp.

Clinical strains	Accession numbers	trpR	Environmental strains	Accession numbers	trpR
M66-2	NC_012578.1	100%	2740-80	NZ_KQ257331.1	100%
0395	NZ_CP001235.1	99.03%	TMA21	NZ_ACHY01000004.1	99.03%
MAK 757	NZ_GG774578.1	100%	623-39	NZ_KQ410584.1	96.94%
V52	NZ_MIPN01000232.1	100%	E4	NZ_JALDBX010000017.1	97.09%
N16961	NZ_CP028827.1	100%	Sa5Y	NZ_CP028892.1	97.09%
E7946	NZ_CP024162.1	100%	VL426	NZ_ACHV01000001.1	96.12%
RC9	NZ_ACHX01000011.1	100%	S12	NZ_MDST01000008.1	99.03%
BX-330286	NZ_ACIA01000002.1	100%	2011EL-301	NZ_AJFN02000021.1	100%
V51	NZ_KQ257372.1	100%	2012EL-1759	NZ_JAARNH010000007.1	99.03%
C6706	NZ_CP046844.1	100%	E19	NZ_JALDBY010000022.1	97.09%
A1552	NZ_CP025936.1	100%	RFB16	NZ_CP043554.1	96.12%
MO10	NZ_CP072849.1	100%	S1	JALDBV010000004.1	98.06%
MJ-1236	NZ_CP001485.1	100%	S35	JALDBW01000006.1	97.09%
InabaG4222	NZ_CM001785.1	100%			
VC1374	NZ_CP040172.1	100%			
AM-19226	NZ_KQ257256.1	99.03%			
MZO-3	NZ_KQ257288.1	100%			
CIRS-101	NZ_ACVW01000005.1	100%			
B33	NZ_ACHZ01000006.1	100%			
FJ-147	NZ_CP009042.1	100%			
2010EL-1749	NZ_AHGC01000048.1	100%			
H1	NZ_AKGH01000001.1	100%			
2010EL-1786	NZ_CP003069.1	100%			
2011EL-1271	NZ_CP046839.1	99.03%			
2012EL-2176	NZ_CP007634.1	100%			
HC1037	NZ_CP026647.1	100%			
N1252	NZ_CP102927.1	100%			

Table 3. Percent identity of protein sequences of trpR of the clinical and environmental strains by blastp.

Clinical strains	Accession numbers	tnaA	Environmental strains	Accession numbers	tnaA
M66-2	NZ_CP001234.1	100%	2740-80	NZ_CP016325.1	99.58%
0395	NZ_CP001236.1	99.79%	TMA21	NZ_ACHY01000016.1	99.79%
MAK 757	NZ_CP159791.1	100%	623-39	AAWG02000024.1	100%
V52	NZ_CP137136.1	99.79%	E4	NZ_CP033513.1	100%
N16961	NZ_CP028828.1	100%	Sa5Y	NZ_CP028893.1	99.58%
E7946	NZ_CP024163.1	100%	VL426	NZ_ACHV01000002.1	99.79%
RC9	NZ_ACHX01000009.1	100%	S12	NZ_MDST01000022.1	100%
BX-330286	NZ_ACIA01000003.1	100%	2011EL-301	NZ_AJFN02000015.1	100%
V51	NZ_AAKI03000003.1	99.36%	2012EL-1759	NZ_JNEW01000035.1	99.79%
C6706	NZ_CP046845.1	100%	E19	NZ_JALDBY01000011.1	99.79%
A1552	NZ_CP072848.1	100%	RFB16	NZ_CP043556.1	100%
MO10	NZ_CP072850.1	100%	S1	NZ_JALDBV01000002.1	100%
MJ-1236	NZ_CP001486.1	100%	S35	NZ_JALDBW01000002.1	99.79%
InabaG4222	NZ_CM001786.1	100%			
VC1374	NZ_CP040173.1	100%			
AM-19226	NZ_AATY02000016.1	100%			
MZO-3	NZ_AAUU02000015.1	100%			
CIRS-101	NZ_ACVW01000014.1	100%			
B33	NZ_ACHZ01000016.1	100%			
FJ-147	NZ_CP009041.1	100%			
2010EL-1749	NZ_AHGC01000143.1	100%			
H1	NZ_AKGH01000002.1	100%			
2010EL-1786	NZ_CP003070.1	100%			
2011EL-1271	NZ_CP046838.1	100%			
2012EL-2176	NZ_CP007635.1	100%			
HC1037	NZ_CP026648.1	100%			
N1252	NZ_CP102928.1	100%			

Table 4. Percent identity of protein sequences of tnaA of the clinical and environmental strains by blastp.

