

Table S1. Characteristics of 37 *Escherichia coli* isolates from group B2, subgroup I, and reference strain CFT073

Strain name	Alias	Locale	Host	Context	Group B2	Group B2, sub-group I	CC131	O16 subset, CC31	Achtman ST	Pasteur Institute ST	PCR: gyrB47 / mdh36	PCR: pabB ST131 O25b	PCR: trpA ST131 O16	PCR O-type	O antigen (serological)	Mouse lethality	fimH allele	fimH allele group	gyrA / parC haplotype	papC	papG II	papG III	sfa/foc	afaD	iha	hra	kpsM	neuC	iron	iutA	ireA	fyuA	irp2	hlyD	cnf1	sat	usp	ompT	ibeA	traT	malX	Virulence score		
C045	JJ47	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1A / 1b	0	0	0	0	0	1	1	0	0	0	1	0	1	1	0	0	1	1	1	0	1	1	9		
C068	JJ48	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1A / 1b	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	10		
C069	JJ49	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1A / 1b	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	1	1	0	1	1	10	
C099	JJ50	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1 / 1b	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	9		
C100	JJ51	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1 / 1b	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	9		
DP276	JJ25	Netherlands	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1 / 1b	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	0	1	1	10	
G043	JJ52	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1A / 1b	0	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	10	
G068	JJ53	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1A / 1b	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	10		
G130	JJ54	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			89	41	1 / 1b	0	0	0	0	1	1	0	1	0	0	0	0	1	1	0	0	0	1	1	0	1	1	8		
JJ2029	JJ07	Evanston, IL	Human	Clinical	1	1	1	1	131	506	1	0	1	O16	O16		41	41	1 / 1b	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	10		
JJ2039	JJ08	Evanston, IL	Human	Clinical	1	1	1	1	131	506	1	0	1	O16	O16		41	41	1B / 1b	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	9		
JJ2055	JJ09	Evanston, IL	Human	Clinical	1	1	1	1	131	506	1	0	1	O16	ONT		41	41	1 / 1b	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	10		
JJ2591	JJ11	Minneapolis, MN	Human	Clinical	1	1	1	1	131	506	1	0	1	O16		6/10	41	41	1A / 1b	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	9		
JJ2663	JJ10	Miami, FL	Human	Clinical	1	1	1	1	131	506	1	0	1	O16	O16		41	41	1A / 1b	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	9		
MVAST020	JJ43	Minneapolis, MN	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1A / 1b	0	0	0	0	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	0	1	1	7		
QU019	JJ17	Brisbane, QLD, AU	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1AB / 3A	0	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0	1	1	1	0	1	1	8		
Q090	JJ19	Brisbane, QLD, AU	Human	Clinical	1	1	1	1	131	506	1	0	1	O16		10/10	41	41	1AB / 3A	0	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0	1	1	1	0	1	1	8		
QUC012	JJ18	Brisbane, QLD, AU	Dog	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1A / 1b	1	1	0	0	1	1	0	1	0	0	1	0	1	1	1	1	1	1	0	1	1	13			
RM352	JJ38	Rochester, MN	Human	Clinical	1	1	1	1	131	506	1	0	1	O16		10/10	234	41	1 / 1	1	0	1	0	0	0	1	1	0	0	1	0	1	1	1	0	1	1	0	1	1	0	1	1	10
SE15		Japan	Human	Commensal	1	1	1	1	131	506	1	0	1	O16		8/10	41	41	1 / 1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	1	1	0	1	1	6		
U054	JJ55	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			89	41	1 / 1b	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	9		
U084	JJ56	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1A / 1b	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	10		
U149	JJ58	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16			41	41	1A / 1b	0	0	0	0	0	1	0	1	0	0	0	1	1	0	0	0	1	1	0	1	1	7			
U193	JJ59	Seattle, WA	Human	Clinical	1	1	1	1	131	506	1	0	1	O16		6/10	41	41	1A / 1b	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	10		
USVAST364	JJ30	Dallas, TX	Human	Clinical	1	1	1	1	131	506	1	0	1	O16		10/10*	41	41	1AB / 3A	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	1	1	0	1	1	6			
JJ2449	JJ14	NY, NY	Human	Clinical	1	1	1	0	10112	43	1	1	0	ONT	ONT		30	30	1AB / 1aAB	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	9		
QU-221	JJ20	Brisbane, QLD, AU	Human	Clinical	1	1	1	0	131	43	1	1	0	ONT	ONT		30	30	1AB / 1aAB	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	9		
DAEC18		Brazil	Human	Diarrhea	1	1	1	0	131	43	ND	1	0	O25b			22	22	1 / 1	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	1	1	1	1	11		
NA114		India	Human	Clinical	1	1	1	0	131	43	ND	1	0	O25b			30	30	1AB / 1aAB	1	1	0	0	0	1	0	1	0	0	1	1	1	0	0	1	1	1	0	0	1	1	11		
TU		Tunisia	Human	Clinical	1	1	1	0	131	43	ND	1	0	O25b			30	30	1AB / 1aAB	0	0	0	0	0	1	0	1	0	0	1	1	1	0	0	1	1	1	0	1	1	9			
EC7372		USA	Human	Clinical	1	1	1	0	131	162	ND	1	0	O25b	O25	10/10	298	22	1 / 1	1	1	0	0	1	1	0	1	0	0	1	0	1	1	1	0	1	1	1	0	1	1	12		
DAEC11		Brazil	Human	Diarrhea	1	1	1	0	131	233	ND	1	0	O25b		10/10	22	22	1 / 1	0	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	1	1	1	1	11		
TN03		France	Human	Clinical	1	1	1	0	131	267	ND	1	0	O25b	O25	10/10	30	30	1AB / 1aAB	0	0	0	0	0	1	0	1	0	0	1	0	1	1	0	0	1	1	1	0	1	1	9		
ECOR66		USA	Mammal	Commensal	1	1	0	0	83	207	0	0	0	O4		10/10	21	21	51 / 62	1	0	1	1	0	0	1	1	1	1	0	0	1	1	0	0	0	1	1	0	1	1	10		
LBC24a		France	Human	Commensal	1	1	0	0	538	221	ND	0	1	ONT	O43	10/10	20	20	31 / 41a	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	1	1	0	0	1	6			
M1139		Australia	Mammal	Commensal	1	1	0	0	3623	308	ND	0	0	O16			5	5	51 / 41a	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	1	1	6			
CFT073		Baltimore, MD	Human	Clinical	1	0	0	0	73	4	0	0	0	O6			10	9	7/25b	1	1	0	1	0	1	0	1	0	1	1	1	1	1	0	1	1	1	0	0	1	14			

*Strain USVAST364 exhibited exceptionally rapid mouse lethality.