animals

The Occurrence and Characterization of Extended-Spectrum-Beta-Lactamase-Producing *Escherichia coli* Isolated from Clinical Diagnostic Specimens of Equine Origin

Leta Elias [1], David C. Gillis [1], Tanya Gurrola-Rodriguez [1], Jeong Ho Jeon [2], Jung Hun Lee [2], Tae Yeong Kim [2], Sang Hee Lee [2], Sarah A. Murray [1], Naomi Ohta [3], Harvey Morgan Scott [1], Jing Wu [4] and Artem S. Rogovskyy [1,*]

Table S1. Primers used for screening various types of beta-lactamase genes.

Primer Name	Sequence (5′ to 3′)	Product Size (bp)	Reference
Bla_SHV-F	CACTCAAGGATGATGTATTGTG	885	[1]
Bla_SHV-R	TTAGCGTTGCCAGTGCTCG	885	[1]
Bla_TEM-F	TCGGGGAAATGTGCGCG	971	[1]
Bla_TEM-R	TGCTTAATCAGTGAGGCACC	971	[1]
Bla_CTM-m_group1-F	AAAAATCACTGCGCCAGTTC	415	[2]
Bla_CTM-m_group1-R	AGCTTATTCATCGCCACGTT	415	[2]
Bla_CTM-m_group2-F	CGACGCTACCCCTGCTATT	552	[2]
Bla_CTM-m_group2-R	CCAGCGTCAGATTTTTCAGG	552	[2]
Bla_CTM-m_group9-F	CAAAGAGAGTGCAACGGATG	205	[2]
Bla_CTM-m_group9-R	ATTGGAAAGCGTTCATCACC	205	[2]
Bla_CTM-m_group8-F	TGATGAGACATCGCGTTAAG	875	[3]
Bla_CTM-m_group8-R	TAACCGTCGGTG ACGATTTT	875	[3]
Bla_CTM-m_group10-F	CCGCGCTACACTTTGTGGC	944	[3]
Bla_CTM-m_group10-R	TTACAAACCGTTGGTGACG	944	[3]

Table **S2.** Primers for housekeeping genes (*adk*, *fumC*, *gyrB*, *icd*, *mdh*, *purA*, and *recA*) used in MLST analysis.

Primer Name	Sequence (5′ to 3′)	Product Size (bp)	Reference
Adenylate kinase-F	ATTCTGCTTGGCGCTCCGGG	583	[4]
Adenylate kinase-R	CCGTCAACTTTCGCGTATTT	583	[4]
Fumarate hydratase-F	TCACAGGTCGCCAGCGCTTC	806	[4]
Fumarate hydratase-R	GTACGCAGCGAAAAAGATTC	806	[4]
DNA gyrase-F	TCGGCGACACGGATGACGGC	911	[4]
DNA gyrase-R	ATCAGGCCTTCACGCGCATC	911	[4]
Isocitrate dehydrogenase-F	ATGGAAAGTAAAGTAGTTGTTCCGGCACA	878	[4]
Isocitrate dehydrogenase-R	GGACGCAGCAGGATCTGTT	878	[4]
Malate dehydrogenase-F	ATGAAAGTCGCAGTCCTCGGCGCTGCTGG CGG	932	[4]
Malate dehydrogenase-R	TTAACGAACTCCTGCCCCAGAGCGATATC TTTCTT	932	[4]

Adenylosuccinate dehydrogenase-F	CGCGCTGATGAAAGAGATGA	478	[4]
Adenylosuccinate dehydrogenase-R	CATACGGTAAGCCACGCAGA	478	[4]
ATP/GTP binding motif-F	ACCTTTGTAGCTGTACCACG	780	[4] *
ATP/GTP binding motif-R	AGCGTGAAGGTAAAACCTGTG	780	[4] *

* Revised primers were obtained from: http://mlst.warwick.ac.uk/mlst/dbs/Ecoli/documents/primersColi_html.

Table S3. Primers used for phylogroup determination.

Primer Name	Sequence (5′ to 3′)	Product Size (bp)	Reference
ChuA.1-F	GACGAACCAACGGTCAGGAT	279	[4]
ChuA.2-R	TGCCGCCAGTACCAAAGACA	279	[4]
YjaA.1-F	TGAAGTGTCAGGAGACGCTG	211	[4]
YjaA.2-R	ATGGAGAATGCGTTCCTCAAC	211	[4]
TspE4C2.1-F	GAGTAATGTCGGGGCATTCA	152	[4]
TspE4C2.2-R	CGCGCCAACAAAGTATTACG	152	[4]

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