

LngA-E9034A	1	MSLLEVIIVLGIIGTIAAGVVILAQRAFDSRAVTDLVTNTNTVVRVAMKDAYQRDGYPDFVDP LSLTANT
LngA-M526-C6B	1	MSLLEVIIVLGIIGTIAAGVVILAQRAFDSRAVTDLVTNTNTVVRVAMKDAYQRDGYPDFVDP LSLTANT
LngA-01117-5	1	MSLLEVIIVLGIIGTIAAGVVILAQRAFDSRAVTDLVTNTNTVVRVAMKDAYQRDGYPDFVDP LSLTANT
LngA-M626-C	1	MSLLEVIIVLGIIGTIAAGVVILAQRAFDSRAVTDLVTNTNTVVRVAMKDAYQRDGYPDFVDP LSLTANT
LngA-10159a	1	MSLLEVIIVLGIIGTIAAGVVILAQRAFDSRAVTDLVTNTNTVVRVAMKDAYQRDGYPDFVDP LSLTANT
LngA-B7A	1	MSLLEVIIVLGIIGTIAAGVVILAQRAFDSRAVTDLVTNTNTVVRVAMKDAYQRDGYPDFVDP LSLTANT
LngA-Br5	1	MSLLEVIIVLGIIGTIAAGVVILAQRAFDSRAVTDLVTNTNTVVRVAMKDAYQRDGYPDFVDP LSLTANT
LngA-M633-C1	1	MSLLEVIIVLGIIGTIAAGVVILAQRAFDSRAVTDLVTNTNTVVRVAMKDAYQRDGYPDFVDP LSLTANT
LngA-11381a	1	MSLLEVIIVLGIIGTIAAGVVILAQRAFDSRAVTDLVTNTNTVVRVAMKDAYQRDGYPDFVDP LSLTANT
LngA-ECOR27	1	MSLLEVIIVLGIIGTIAAGVVILAQRAFDSRAVTELVNTNTVVRVAMKDAYQRDGYPDFVDP LSLTANT

LngA-E9034A	71	IKTDTS GIPAAQLVQLGKITPDEVRRNNSGDFI AIGGALTSNGA QVKKGF AIELNGLSQEQCRS ILGQVG
LngA-M526-C6B	71	IKTDTS GIPAAQLVQLGKITPDEVRRNNSGDFI AIGGALTSNGA QVKKGF AIELNGLSQEQCRS ILGQVG
LngA-01117-5	71	IKTDTS GIPAAQLVQLGKITPDEVRRNNSGDFI AIGGALTSNGA QVKKGF AIELNGLSQEQCRS ILGQVG
LngA-M626-C	71	IKKDTG KIPAAQLVQLGKITPDEVRRNNSGDFI AIGGALTSNGA TVKKGF AIELNGLSQEQCRS ILGQVG
LngA-10159a	71	IKKDTG KIPAAQLVQLGKITPDEVRRNNSGDFI AIGGALTSNGA TVKKGF AIELNGLSQEQCRS ILGQVG
LngA-B7A	71	IKTNTG KIPAAQLVQLGKITPDEVRRNNSGDFI AIGGALTSNGA TVKKGF AIELNGLSQEQCRS ILGQVG
LngA-Br5	71	IKTDTG KIPAAQLVQLGKITPDEVRRNNSGDFI AIGGALTSNGA TVKKGF AIELNGLSQEQCRS ILGQVG
LngA-M633-C1	71	IKTDTG KIPAAQLVQLGKITPDEVRRNNSGDFI AIGGALTSNGA TVKKGF AIELNGLSQEQCRS ILGQVG
LngA-11381a	71	IKTDTG KIPAAQLVQLGKITPDEVRRNNSGDFI AIGGALTSNGA TVKKGF AIELNGLSQEQCRS ILGQVG
LngA-ECOR27	71	INTTDT KIPAAQLVQLGKIS PDEVRRNNSGDFI GIGGAKTSA AATV NKG FV IELNGLSQEQCR TILGQVG

LngA-E9034A	141	NNWEYVAIGT SASGS YAMTAT GVDMSVAASTT VLRSLGNNG QTLTADKILS TCTAQVNSITLGSR
LngA-M526-C6B	141	NNWEYVAIGT SASGS YAMTAT GVDMSVAASTT VLRSLGNNG QTLTADKILS TCTAQVNSITLGSR
LngA-01117-5	141	NNWEYVAIGT SASGS YAMTAT GVDMSVAASTT VLRSLGNNG QTLTADKILS TCTAQVNSITLGSR
LngA-M626-C	141	NNWEYVAVGNSASGS YAMQAAEVDMSVAATGD I LRTLGTDDG QTLTADKILS TCTAQVNSITLGSR
LngA-10159a	141	NNWEYVAVGNSASGS YAMQAAEVDMSVAATGD I LRTLGTDDG QTLTADKILS TCTAQVNSITLGSR
LngA-B7A	141	NNWEYVAVGNSASGS YAMQAAEVDMSVAATGD I LRTLGTDDG QTLTADKILS TCTAQVNSITLGSR
LngA-Br5	141	NNWEYVAVGNSASGS YAMQAAEVDMSVAATGD I LRTLGTDDG QTLTADKILS TCTAQVNSITLGSR
LngA-M633-C1	141	NNWEYVAVGNSASGS YAMQAAEVDMSVAATGD I LRTLGTDDG QTLTADKILS TCTAQVNSITLGSR
LngA-11381a	141	NNWEYVAVGNSASGS YAMQAAEVDMSVAATGD I LRTLGTDDG QTLTADKILS TCTAQVNSITLGSR
LngA-ECOR27	141	NNWEYVAVGNSASGAYSLTNT ALDMTTAANGTSLRSLGAN SQTLTAEKILATCTATVNSITLGSR

Supplemental Figure S1. Amino acid sequence alignment of LngA variants. Mature non-redundant LngA sequences from various ETEC strains: E9034A, GenBank Accession No. AAC33154; M526-C6B, ABV57880; 01117-5, ABV57862; M626-C, ABV57875; 10159a, ABV57868; B7A, ABV57871; Br5, ABV57878; M633-C1, ABV57876; 11381a, ABV57869; and ECOR27, ABV57879. Identical residues are shown in white text with red shading; homologous residues have black text and yellow shading.