

Supplementary File S1: The nucleotide sequence of *pleD* gene of *Rickettsia rickettsii* strains Sheila Smith and Iowa. The full-length *pleD* gene was amplified using *pleD*-F and *pleD*-R primers as mentioned in the methods section. The PCR product was cloned into pGEM-T Easy vector and Sanger sequencing of the insert (*pleD* gene) was performed using T7 and SP6 primers (A). Alignment of *R. rickettsii* str. Iowa (Rr_I) and *R. rickettsii* str. Sheila Smith (Rr_SS) *PleD* protein sequences. The amino acid change at position 236 is highlighted in red (B).

A. *pleD* gene sequences from *R. rickettsii* strains

R. rickettsii str. Iowa

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ATGACCACAATATTAGTAGTAGATGATATAGAACCCAATATTAAGTTACTAACAGCCAACTTTTAAAAGAGTATTA
TACGGTTCCTACTGCAAATAGCGGTAAAGAAGCACTAGCAATTCTTAAAAAGAAAAATTGATATTATACTACTTG
ATGTTATGATGCCGAAATTGATGGATTTGAGGTATGTAAAACGATAAAAACCGATCCGGAAACTACTCATATACCG
GTTGTAATGGTAACTGCACTTTCCGATATTGATGATCGAGTTAAAGGTCTTGAGGCAGGAGCTGATGAGTTTTTAAC
AAAGCCGATTAACGATACTGCTCTATTTGTAAGACTTAAATCGCTATCTAGAATGAAAAGCTTAATTGATGAGTTAA
AGCTTCGTAATAGCACTAATGCATTATTAGGCGTAACAAATATCGAAATGCATGACACTTTTGCAGATAAAAAAATA
TTACTCATTAATGATGATGTGGTGCAAACATAAAATATAAAACAAATGTTACTTAAGCTTACCCAAAACGTAAAGGT
AATAAGTAATTCCGATGAATTAGATATTATAAATGAATATAACCCCGATTTAGTAATTATCAGTAGTACGCTCGAAA
ATGACGATCCTTTGAGGATCAGTGTTATTTTAAGAGGTAAAGCAGAAATAAGCGGCGTAGTAATAATTTTACAAATT
GATGAAGACGGTATGCCTTTGGTTGTGAAAGGTATTGAACTCGGTATTAATGATTATTTTCGTTTATCCTATAGAGGA
AAGCGAATTGCTTGCTAGAATTAGAACACAATTAAGACGTAAGCAATATCAAGATAATTTACGTAATGATCTTGAAC
AAAGTGCAATTTAGCAGTTAAAGACGGTCTAACCGGCTTATTTAATCGTCGCTATTTTCGATATACATCTCAAACAA
ATTATTGAGAAAACTAATAAAGAAAGTATTAAATTATGTTTACTTATGTGCGATATCGACAAATTTAAACATGTAAA
CGATACTTACGGTCATCAAGCAGGCGATAAGGTTTTAACAATTGTATCCCGTATTTTGAAGAATACTCTCAGAGTAA
CAGACTTAATAGCAAGATTCGGCGGTGAAGAATTTACTATACTCTTAACGGATATAGATATTTCTAAAGCAATTGAA
ACTGCGGAGAGAGTGAGAGTTAAATAGAATATATGAATTTTACATTGAAGATCAAATTGAACCTTTAAAAACAAC
TATTTCAATCGGAGTTACGAAATATAAAAAAGAAGAATCAATAGAATCTTTTCATTGAACGTGCTGACAAAGCTATGT
ATGAAGCTAAAACAACGGGTAAAAATAAAGTAGTAAAATTATAA
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R. rickettsii str. Sheila Smith

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ATGACCACAATATTAGTAGTAGATGATATAGAACCCAATATTAAGTTACTAACAGCCAACTTTTAAAAGAGTATTA
TACGGTTCCTACTGCAAATAGCGGTAAAGAAGCACTAGCAATTCTTAAAAAGAAAAATTGATATTATACTACTTG
ATGTTATGATGCCGAAATTGATGGATTTGAGGTATGTAAAACGATAAAAACCGATCCGGAAACTACTCATATACCG
GTTGTAATGGTAACTGCACTTTCCGATATTGATGATCGAGTTAAAGGTCTTGAGGCAGGAGCTGATGAGTTTTTAAC
AAAGCCGATTAACGATACTGCTCTATTTGTAAGACTTAAATCGCTATCTAGAATGAAAAGCTTAATTGATGAGTTAA
AGCTTCGTAATAGCACTAATGCATTATTAGGCGTAACAAATATCGAAATGCATGACACTTTTGCAGATAAAAAAATA
TTACTCATTAATGATGATGTGGTGCAAACATAAAATATAAAACAAATGTTACTTAAGCTTACCCAAAACGTAAAGGT
AATAAGTAATTCCGATGAATTAGATATTATAAATGAATATAACCCCGATTTAGTAATTATCAGTAGTACGCTCGAAA
ATGACGATCCTTTGAGGATCAGTGTTATTTTAAGAGGTAAAGCAGAAATAAGCGGCGTAGTAATAATTTTACAAATT
GATGAAGACGGTATACCTTTGGTTGTGAAAGGTATTGAACTCGGTATTAATGATTATTTTCGTTTATCCTATAGAGGA
AAGCGAATTGCTTGCTAGAATTAGAACACAATTAAGACGTAAGCAATATCAAGATAATTTACGTAATGATCTTGAAC
AAAGTGCAATTTAGCAGTTAAAGACGGTCTAACCGGCTTATTTAATCGTCGCTATTTTCGATATACATCTCAAACAA
ATTATTGAGAAAACTAATAAAGAAAGTATTAAATTATGTTTACTTATGTGCGATATCGACAAATTTAAACATGTAAA
CGATACTTACGGTCATCAAGCAGGCGATAAGGTTTTAACAATTGTATCCCGTATTTTGAAGAATACTCTCAGAGTAA
CAGACTTAATAGCAAGATTCGGCGGTGAAGAATTTACTATACTCTTAACGGATATAGATATTTCTAAAGCAATTGAA
ACTGCGGAGAGAGTGAGAGTTAAATAGAATATATGAATTTTACATTGAAGATCAAATTGAACCTTTAAAAACAAC
TATTTCAATCGGAGTTACGAAATATAAAAAAGAAGAATCAATAGAATCTTTTCATTGAACGTGCTGACAAAGCTATGT
ATGAAGCTAAAACAACGGGTAAAAATAAAGTAGTAAAATTATAA
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B. Alignment of PleD protein sequences from *R. rickettsii* strains

Rr_I: *R. rickettsii* str. Iowa; Rr_SS: *R. rickettsii* str. Sheila Smith

Rr_I	MTTILVVDDIEPNIKLLTAKLLKEYYTVLTANSKGKEALAILKKEKIDIILLDVMMP EIDG	60
Rr_SS	MTTILVVDDIEPNIKLLTAKLLKEYYTVLTANSKGKEALAILKKEKIDIILLDVMMP EIDG *****	60
Rr_I	FEVCKTIKTDPE TTHIPVVMVTALSDIDDRVKGLEAGADEFLTKPINDTALFVRLKSLSR	120
Rr_SS	FEVCKTIKTDPE TTHIPVVMVTALSDIDDRVKGLEAGADEFLTKPINDTALFVRLKSLSR *****	120
Rr_I	MKSLIDELKLRNSTNALLGVTNIEMHDTFADKKILLINDDVVQTKNIQMLLKL TQNVKV	180
Rr_SS	MKSLIDELKLRNSTNALLGVTNIEMHDTFADKKILLINDDVVQTKNIQMLLKL TQNVKV *****	180
Rr_I	ISNSDELDIINEYTPDLV IISSTLENDDPLRISVILRGKAEISGVV IILQIDEDG M PLVV	240
Rr_SS	ISNSDELDIINEYTPDLV IISSTLENDDPLRISVILRGKAEISGVV IILQIDEDG M PLVV *****	240
Rr_I	KGIELGINDYFVYPIEESELLARIRTQLRRKQYQDNLRNDLEQSVNLAVKDGLTG LFNRR	300
Rr_SS	KGIELGINDYFVYPIEESELLARIRTQLRRKQYQDNLRNDLEQSVNLAVKDGLTG LFNRR *****	300
Rr_I	YFDIHLKQ IIEKTNKESIKLCLLMCDIDNFKHVNDTYGHQAGDKVLTIVSRILKNTLRVT	360
Rr_SS	YFDIHLKQ IIEKTNKESIKLCLLMCDIDNFKHVNDTYGHQAGDKVLTIVSRILKNTLRVT *****	360
Rr_I	DLIARFGGEEFTILLTDIDISKA IETAERVRVKIEYMNFIHEDQIEPLKTTISIGVTKYK	420
Rr_SS	DLIARFGGEEFTILLTDIDISKA IETAERVRVKIEYMNFIHEDQIEPLKTTISIGVTKYK *****	420
Rr_I	KEESIESFIERADKAMYEAKTTGKNKVVKL	450
Rr_SS	KEESIESFIERADKAMYEAKTTGKNKVVKL *****	450