

Table S8. Singletons present in the *R. prowazekii* str. Madrid E genome.

RiOG	Annotation (68)¹	Size²
2320	190 kDa antigen precursor, putative	138
2664	190 kDa antigen precursor, putative	165
2818	Ankyrin Repeat family protein	107
3482	Antigenic heat-stable 120 kDa protein	247
2708	Lipid A export ATP-binding/permease protein msbA	121
2888	MFS type sugar transporter, putative	43
3485	putative methyltransferase	250
2309	tRNA pseudouridine synthase B	126
3481	ubiquinone biosynthesis protein, putative	96
2204	Hypothetical protein, conserved	91
2347	Hypothetical protein, conserved	60
2717	Hypothetical protein, conserved	67
	Avg.	125.92

¹ Including 56 singleton HPs, with average length of 63.11 amino acids.

² Length in amino acids of predicted ORF.