Table S4. Validation of the CRISPR-Cas systems detection on systems with *in vivo* effects listed in the review by Bondy-Denomy et. al 2014 (Table 1) [1]

Bacterial species	Type	References	Detection
Campylobacter jejuni	II-C	[2]	YES*
Clostridium difficile	I-B	[3]	YES
Enterococcus sp.	II-A	[4]	YES
Escherichia coli	I-E, I-F	[5-7]	YES
Francisella tularensis subsp. *novicida*	II-B	[8,9]	YES
Haloferax volcanii	I-B	[10]	YES
Mycoplasma gallisepticum	II	[11]	YES - One II-U detected
Neisseria meningitidis	II-C	[12]	YES*
Pectobacterium atrosepticum	I-F	[13]	YES
Porphyromonas gingivalis	I-C, III-B	[14]	YES
Pseudomonas aeruginosa	I-F	[15,16]	YES
Salmonella enterica serovar Typhimurium	I-E	[17]	YES
Staphylococcus epidermidis	III-A	[18]	YES
Streptococcus agalactiae	II-A	[19]	YES
Streptococcus pyogenes	II-A, I-C	[20,21]	YES
Streptococcus thermophilus	II-A	[22]	YES
Sulfolobus spp.	I-A	[23-25]	YES
Thermococcus kodakarensis	I-A, I-B	[26]	YES
Xanthomonas oryzae	I-C	[27]	YES
Yersinia pestis	I-F	[28]	YES
Erwinia amylovora	I-E	[29]	YES§
Lactococcus lactis	III-A	[30]	NA - Plasmids not in our dataset
Leptospirillum group II	III	[31,32]	NA - Environmental sample
Vibrio cholerae	I-F	[33]	NA - *V. cholerae* variant not in our dataset

NA - Not applicable because the data were not in our genomic dataset; green "Detection" cells mean the systems were detected. *Type II-C: detected clusters containing only Cas1, Cas2 and Cas9 recently proposed as Type II-C [34]. Because they are difficult to distinguish with degraded Type II-A or Type II-B systems, we preferred classify them as Type II-U (U for unclassified). §In the paper by Bondy-Denomy et. al 2014 [1] (Table 1), a type I-F is attributed to *Erwinia amylovora* based on a publication by Rezzonico et. al. 2011 [29]. However in this paper, the Type I-F was described in *E. pyrifoliae* and *tasmaniensis*, not in *E. amylovora* (Figure 1).

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