

Table 2. Microarray analysis of RovA regulon in *Y. pestis*

Identification	ORF description	Array	qRT-PCR
		fold change*	fold change [†]
Down-regulated loci			
YPO0027	Conserved hypothetical protein	-2.6	
YPO0102	Putative exported protein	-4.1	
YPO0289	Putative ATP/GTP-binding protein	-2.8	
YPO0291	Conserved hypothetical protein	-3.3	
YPO0292	Conserved hypothetical protein	-3.4	
YPO0499 [‡]	Hypothetical protein	-4.6	-4.4
YPO0500 [‡]	Conserved hypothetical protein	-5.1	
YPO0501 [‡]	Conserved hypothetical protein	-5.8	
YPO0502 [‡]	Conserved hypothetical protein	-3.7	
YPO0503 [‡]	Conserved hypothetical protein	-5.9	
YPO0504 [‡]	Conserved hypothetical protein	-5.0	-5.1
YPO0505 [‡]	Conserved hypothetical protein	-4.8	
YPO0506 [‡]	<i>clpB/htpM</i> putative Clp ATPase	-5.5	-3.1
YPO0507 [‡]	Conserved hypothetical protein	-5.4	-4.2
YPO0508 [‡]	Hypothetical protein	-5.6	
YPO0509 [‡]	Hypothetical protein	-2.6	
YPO0510 [‡]	Hypothetical protein	-4.6	-5.3
YPO0511 [‡]	Hypothetical protein	-5.3	

YPO0511a [‡]	Hypothetical protein	-5.2	
YPO0512 [‡]	Putative lipoprotein	-5.5	
YPO0513 [‡]	Conserved hypothetical protein	-4.6	
YPO0514 [‡]	Putative OmpA-family membrane protein	-4.4	-3.6
YPO0515 [‡]	Putative membrane protein	-2.6	-2.8
YPO1192	Conserved hypothetical protein	-3.3	
YPO1200	Putative amino acid permease	-16.9	-16.6
YPO1201	Putative amino acid decarboxylase	-5.2	
YPO1224	<i>ampH</i> putative penicillin-binding protein	-2.6	
YPO1301	<i>psaE</i> putative regulatory protein	-5.7	-9.8
YPO1302	<i>psaF</i> putative membrane protein	-4.7	-11.3
YPO1303	<i>psaA</i> pH 6 antigen precursor (antigen 4) (adhesin)	-25.9	-133
YPO1304	<i>psaB</i> chaperone protein PsaB precursor	-8.7	-66.5
YPO1309	<i>lysP/cadR</i> putative lysine-specific permease	-3.6	
YPO1500	Hypothetical protein	-6.3	
YPO1684	Putative membrane protein (pseudogene)	-6.5	
YPO1686	Putative exported protein	-4.3	
YPO1793	<i>inv</i> invasins (pseudogene)	-3.6	
YPO2271	Phage hypothetical protein	-3.0	
YPO2272	Phage hypothetical protein	-2.9	-6.8
YPO2531	<i>elaB</i> putative membrane protein	-3	
YPO2538	Putative lipoprotein	-2.8	
YPO2667	<i>ureC</i> urease alpha subunit	-3.2	-3.1

YPO2668	<i>ureE</i> urease accessory protein	-2.8	
YPO2699	Conserved hypothetical protein	-2.8	
YPO2700	Conserved hypothetical protein	-2.7	
YPO2702	Putative membrane protein	-2.2	
YPO4018	<i>cysM</i> pyridoxal-phosphate dependent protein	-15.1	-43.3
YPO4019	Putative phosphoribosyl transferase protein	-21.3	
YPO4020	Putative membrane protein	-5.0	-12.1
YPO4021	Hypothetical protein	-4.9	
Up-regulated loci			
YPO1232	<i>msgA/dinI</i> putative stress response protein	4.5	5.2
YPO1234	Probable phage antitermination protein Q	3.8	
YPO1239	Putative bacteriophage protein	4.6	11.8
YPO1240	Putative ATP-binding protein	4.7	
YPO1247	Putative bacteriophage tail protein	4.7	
YPO1252	<i>stf</i> putative bacteriophage tail fiber protein	2.6	
YPO1386	<i>ansB</i> putative L-asparaginase II precursor	12.9	17.5
YPO1436	<i>sulA/sfiA</i> putative cell division inhibitor	3.8	4.3
YPO1586	<i>dinI</i> DNA-damage-inducible protein I	3.3	3.9
YPO1718	Putative exported protein	3.1	
YPO2066	<i>zwf</i> glucose-6-phosphate 1-dehydrogenase	5.5	
YPO2080	Conserved hypothetical protein	2.6	
YPO2186	<i>oppF</i> oligopeptide transport ATP-binding protein	4.0	1.4
YPO2274 [§]	Putative phage protein	10.5	

YPO2275 [§]	Putative phage protein	16.7	
YPO2276 [§]	Putative phage-related membrane protein	28.1	
YPO2276a [§]	Putative phage-related membrane protein	18.4	
YPO2277 [§]	Phage hypothetical protein	23.2	66.7
YPO2279 [§]	Putative phage-related membrane protein	29.9	
YPO3307	<i>recA/lexB/umuB/recH/rnmB/tif/zab</i> protein	2.4	2.3
YPO3518	Putative exported protein	5.5	
<i>pst</i>	Pst encoded on pPCP1	4.2	6.5

* Fold difference in gene transcripts between wildtype and the *ΔrovA* mutant as determined by microarray analysis that were ≥ 2 -fold different with a *P* value ≤ 0.05 as described in *Materials and Methods*.

† Fold difference in gene transcripts between wildtype and the *ΔrovA* mutant as determined by qRT-PCR. The value listed is the average fold difference from multiple repeats of qRT-PCR performed on different biological replicates as described in the *Material and Methods*.

‡ IAHP locus (1, 2).

§ CUS-2 phage locus (3).

1. Parkhill, J, Wren B, Thomson NR, Titball RW, Holden MT, Prentice MB, Sebaihia M, James KD, Churcher C, Mungall KL, et al. (2001) *Nature* 413, 523-527.
2. Pukatzki S, Ma AT, Sturtevant D, Krastins B, Sarracino D, Nelson WC, Heidelberg JF, & Mekalanos JJ (2006) *Proc. Natl. Acad. Sci. U.S.A.* 103, 1528-1533.

3. Gonzalez MD, Lichtensteiger CA, & Vimr ER (2001) *FEMS Microbiol. Lett.* 198, 125-128.