

**Table S3.** Putative conjugation genes found in plasmids pPsv48A (NC\_019265), pPsv48B (NC\_019266) and pPsv48C (NC\_019292) and their identification by three software programs<sup>a</sup>.

RefSeq locus_tag	Gene name	Coordinates	Annotation	oriTfinder <sup>b</sup>	SecReT4 <sup>b</sup>	MOBscan <sup>b</sup>	Comment
<b>pPsv48A</b>							
PSA3335_RS00255	<i>traR</i>	63618..63956	conjugal transfer protein TraR	Y	Y		5' truncated
PSA3335_RS00270	<i>traT</i>	64716..65297	conjugal transfer protein TraT	Y	Y		
PSA3335_RS00275	<i>traU</i>	65272..68328	conjugal transfer protein	Y	Y		
PSA3335_RS00290	<i>traW</i>	69005..70225	conjugal transfer protein TraW	Y	Y		
PSA3335_RS00295	<i>traX</i>	70215..70817	conjugal transfer protein TraX	Y	Y		
PSA3335_RS00300	<i>traY</i>	70844..72859	DotA/TraY family protein	Y	Y		3' frameshifted
PSA3335_RS00310	<i>trbA</i>	73776..74975	hypothetical protein	Y	Y		
PSA3335_RS00315	<i>trbB</i>	75061..76146	thioredoxin fold domain-containing protein	Y	Y		
PSA3335_RS00320	<i>trbC</i>	76133..78421	type IV secretory system conjugative DNA transfer	Y	Y		
<b>pPsv48B</b>							
PSA3335_RS00025	-	3310..>3675	MobA/MobL family protein	N	N	Y	Partial; relaxase MOB <sub>Q</sub>
PSA3335_RS00100	<i>virB1</i>	16184..16900	lytic transglycosylase domain-containing protein	Y	Y		
PSA3335_RS00105	<i>virB2</i>	16900..17235	hypothetical protein	Y	Y		

PSA3335_RS00110	<i>virB3</i>	17248..>17649	VirB3 family type IV secretion system protein	Y	Y		
PSA3335_RS00115	<i>virB4</i>	17585..20137	conjugal transfer protein	Y	Y		
PSA3335_RS00120	<i>virB5</i>	20134..20820	P-type DNA transfer protein VirB5	Y	Y		
PSA3335_RS00130	<i>virB6</i>	21216..22148	type IV secretion system protein	Y	Y		
PSA3335_B0027 <sup>c</sup>	<i>virB7</i>	22093..22536	Type IVA conjugal transfer protein virB7	Y	Y		
PSA3335_RS00135	<i>virB8</i>	22573..23361	type IV secretion system protein	Y	Y		
PSA3335_RS00140	<i>virB9</i>	23351..24160	P-type conjugative transfer protein VirB9	Y	Y		
PSA3335_RS00145	<i>virB10</i>	24147..25496	TrbI/VirB10 family protein	Y	Y		
PSA3335_RS00150	<i>virB11</i>	25506..26564	P-type DNA transfer ATPase VirB11	Y	Y		
PSA3335_RS00165	<i>virB11</i>	27357..27623	hypothetical protein	Y	Y		Partial
PSA3335_RS00180	<i>virD4</i>	30506..32143	type IV secretory system conjugative DNA transfer family protein	Y	Y		
PSA3335_RS00190	<i>traE</i>	32574..34739	type IA DNA topoisomerase	N	N		
PSA3335_RS00220	<i>mobC</i>	38061..38411	relaxosome component	N	N	N	RAP
PSA3335_RS00225	<i>mobB</i>	40132..42174	hypothetical protein	Y	Y	Y	Relaxase MOB <sub>P</sub>
<b>pPsv48C</b>							
PSPSV_RS00130	<i>mobC</i>	21262..21987	CopG family transcriptional regulator	N	N	N	RAP
PSPSV_RS00135	<i>mobB</i>	21977..25741	relaxase/mobilization nuclease domain-containing protein	N	N	Y	Relaxase MOB <sub>P</sub>

PSPSV_RS00235	<i>traA</i>	38832..36706	MobA/MobL family protein	Y	Y	Y	Relaxase MOB <sub>Q</sub>
PSPSV_RS00240	<i>mobC</i>	39055..39300	hypothetical protein	N	N	N	RAP

<sup>a</sup> **oriTFinder**, <https://bioinfo-mml.sjtu.edu.cn/oriTFinder/>, Li et al. (2018) Nucleic Acids Res. 46(W1), W229-W234. doi: 10.1093/nar/gky352. **SecReT4**, <https://bioinfo-mml.sjtu.edu.cn/SecReT4/index.php>, Bi et al. (2013) Nucleic Acids Res. 41(D1), D660-D665. doi: 10.1093/nar/gks1248. **MOBscan**, <https://castillo.dicom.unican.es/mobscan/>, Garcillán-Barcia et al. (2020) In: de la Cruz F. (ed) *Horizontal Gene Transfer. Methods in Molecular Biology*, vol. 2075, pp. 295-308. Humana, New York, NY. doi:10.1007/978-1-4939-9877-7\_21

<sup>b</sup> Y and N indicate that the gene was found or not found, respectively, by each of the programs.

<sup>c</sup> GenBank locus-tag, because it is annotated in record FR820586, but not in the corresponding Refseq record (NC\_019266).