

Supplementary Material for:

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**Molecular analysis of *Arthrobacter* myovirus vB\_ArtM-ArV1: we blame it on the tail**

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**Table S1. Homologous proteins found in *Arthrobacter* phages ArV1, Martha, Jawnski, PrincessTrina, TaeYoung, Brent, Sonny, and BarretLemon as determined by CoreGenes 3.5 (<http://binf.gmu.edu:8080/CoreGenes3.5/BatchCoreGenes.html>).**

	<b>Arthrobacter phage vB_ArM- ArV1 <a href="#">NC_026606</a></b>	<b>Arthrobacter phage Martha <a href="#">KU160656</a></b>	<b>Arthrobacter phage Jawnski <a href="#">KU160651</a></b>	<b>Arthrobacter phage PrincessTrina <a href="#">KU160660</a></b>	<b>Arthrobacter phage TaeYoung <a href="#">KU160668</a></b>	<b>Arthrobacter phage Brent <a href="#">KT365401</a></b>	<b>Arthrobacter phage Sonny <a href="#">KU160665</a></b>	<b>Arthrobacter phage BarretLemon <a href="#">KU647629</a></b>
<b>1</b>	GI: <a href="#">764161603</a> terminase large subunit	GI: <a href="#">974133111</a> terminase large subunit	GI: <a href="#">974132783</a> terminase large subunit	GI: <a href="#">974133309</a> terminase large subunit	GI: <a href="#">974133927</a> terminase large subunit	GI: <a href="#">928542245</a> terminase large subunit	GI: <a href="#">974133735</a> terminase large subunit	GI: <a href="#">1001941625</a> terminase large subunit
<b>2</b>	GI: <a href="#">764161604</a> portal protein	GI: <a href="#">974133112</a> portal protein	GI: <a href="#">974132784</a> portal protein	GI: <a href="#">974133310</a> portal protein	GI: <a href="#">974133928</a> portal protein	GI: <a href="#">928542246</a> portal protein	GI: <a href="#">974133736</a> portal protein	GI: <a href="#">1001941626</a> portal protein
<b>3</b>	GI: <a href="#">764161605</a> putative structural protein	GI: <a href="#">974133113</a> capsid maturation protease	GI: <a href="#">974132785</a> hypothetical protein	GI: <a href="#">974133311</a> head assembly protein	GI: <a href="#">974133929</a> capsid maturation protease	GI: <a href="#">928542247</a> hypothetical protein	GI: <a href="#">974133737</a> capsid maturation protease	GI: <a href="#">1001941627</a> hypothetical protein
<b>4</b>	GI: <a href="#">764161606</a> hypothetical protein	GI: <a href="#">974133114</a> hypothetical protein	GI: <a href="#">974132786</a> hypothetical protein	GI: <a href="#">974133312</a> hypothetical protein	GI: <a href="#">974133930</a> hypothetical protein	GI: <a href="#">928542248</a> hypothetical protein	GI: <a href="#">974133738</a> hypothetical protein	GI: <a href="#">1001941628</a> hypothetical protein
<b>5</b>	GI: <a href="#">764161609</a> putative structural protein	GI: <a href="#">974133116</a> scaffolding protein	GI: <a href="#">974132787</a> scaffolding protein	GI: <a href="#">974133316</a> capsid maturation protease	GI: <a href="#">974133932</a> scaffolding protein	GI: <a href="#">928542249</a> scaffolding protein	GI: <a href="#">974133740</a> scaffolding protein	GI: <a href="#">1001941629</a> scaffolding protein
<b>6</b>	GI: <a href="#">764161610</a> putative structural protein	GI: <a href="#">974133117</a> hypothetical protein	GI: <a href="#">974132788</a> hypothetical protein	GI: <a href="#">974133317</a> head decoration protein	GI: <a href="#">974133933</a> hypothetical protein	GI: <a href="#">928542250</a> hypothetical protein	GI: <a href="#">974133741</a> hypothetical protein	GI: <a href="#">1001941630</a> hypothetical protein
<b>7</b>	GI: <a href="#">764161611</a> major capsid protein	GI: <a href="#">974133118</a> major capsid protein	GI: <a href="#">974132789</a> major capsid subunit	GI: <a href="#">974133318</a> major capsid subunit	GI: <a href="#">974133934</a> major capsid subunit	GI: <a href="#">928542251</a> major capsid protein	GI: <a href="#">974133742</a> major capsid subunit	GI: <a href="#">1001941631</a> major capsid protein

8	GI: <a href="#">764161612</a> putative structural protein	GI: <a href="#">974133119</a> hypothetical protein	GI: <a href="#">974132790</a> hypothetical protein	GI: <a href="#">974133319</a> hypothetical protein	GI: <a href="#">974133935</a> hypothetical protein	GI: <a href="#">928542252</a> hypothetical protein	GI: <a href="#">974133743</a> hypothetical protein	GI: <a href="#">1001941632</a> hypothetical protein
9	GI: <a href="#">764161613</a> putative structural protein	GI: <a href="#">974133120</a> hypothetical protein	GI: <a href="#">974132791</a> hypothetical protein	GI: <a href="#">974133320</a> hypothetical protein	GI: <a href="#">974133936</a> hypothetical protein	GI: <a href="#">928542253</a> hypothetical protein	GI: <a href="#">974133744</a> hypothetical protein	GI: <a href="#">1001941633</a> hypothetical protein
10	GI: <a href="#">764161614</a> virion morphogenesis protein	GI: <a href="#">974133121</a> head-to-tail connector	GI: <a href="#">974132792</a> hypothetical protein	GI: <a href="#">974133321</a> minor tail protein	GI: <a href="#">974133937</a> head-to-tail connector	GI: <a href="#">928542254</a> head-tail connector	GI: <a href="#">974133745</a> head-to-tail connector	GI: <a href="#">1001941634</a> head-to-tail connector
11	GI: <a href="#">764161615</a> putative structural protein	GI: <a href="#">974133122</a> hypothetical protein	GI: <a href="#">974132793</a> hypothetical protein	GI: <a href="#">974133322</a> hypothetical protein	GI: <a href="#">974133938</a> hypothetical protein	GI: <a href="#">928542255</a> hypothetical protein	GI: <a href="#">974133746</a> hypothetical protein	GI: <a href="#">1001941635</a> hypothetical protein
12	GI: <a href="#">764161616</a> hypothetical protein	GI: <a href="#">974133123</a> hypothetical protein	GI: <a href="#">974132794</a> hypothetical protein	GI: <a href="#">974133323</a> hypothetical protein	GI: <a href="#">974133939</a> hypothetical protein	GI: <a href="#">928542256</a> hypothetical protein	GI: <a href="#">974133747</a> hypothetical protein	GI: <a href="#">1001941636</a> hypothetical protein
13	GI: <a href="#">764161617</a> tail sheath protein	GI: <a href="#">974133124</a> tail sheath	GI: <a href="#">974132795</a> tail sheath	GI: <a href="#">974133324</a> major tail sheath	GI: <a href="#">974133940</a> tail sheath	GI: <a href="#">928542257</a> tail sheath	GI: <a href="#">974133748</a> tail sheath	GI: <a href="#">1001941637</a> tail sheath protein
14	GI: <a href="#">764161618</a> putative structural protein	GI: <a href="#">974133125</a> hypothetical protein	GI: <a href="#">974132796</a> hypothetical protein	GI: <a href="#">974133325</a> hypothetical protein	GI: <a href="#">974133941</a> hypothetical protein	GI: <a href="#">928542258</a> hypothetical protein	GI: <a href="#">974133749</a> hypothetical protein	GI: <a href="#">1001941638</a> hypothetical protein
15	GI: <a href="#">764161619</a> hypothetical protein	GI: <a href="#">974133126</a> hypothetical protein	GI: <a href="#">974132797</a> hypothetical protein	GI: <a href="#">974133326</a> hypothetical protein	GI: <a href="#">974133942</a> hypothetical protein	GI: <a href="#">928542259</a> hypothetical protein	GI: <a href="#">974133750</a> hypothetical protein	GI: <a href="#">1001941639</a> hypothetical protein
16	GI: <a href="#">764161620</a> tape measure protein	GI: <a href="#">974133128</a> tapemeasure protein	GI: <a href="#">974132798</a> tapemeasure protein	GI: <a href="#">974133328</a> tapemeasure protein	GI: <a href="#">974133944</a> tapemeasure protein	GI: <a href="#">928542260</a> putative tapemeasure	GI: <a href="#">974133752</a> tapemeasure protein	GI: <a href="#">1001941641</a> tape measure

<b>17</b>	GI: <a href="#">764161621</a> peptidoglycan-binding protein LysM	GI: <a href="#">974133129</a> LysM	GI: <a href="#">974132799</a> LysM domain protein	GI: <a href="#">974133329</a> LysM domain protein	GI: <a href="#">974133945</a> LysM	GI: <a href="#">928542261</a> peptidoglycan-binding protein	GI: <a href="#">974133753</a> LysM	GI: <a href="#">1001941642</a> LysM
<b>18</b>	GI: <a href="#">764161622</a> CHAP domain protein	GI: <a href="#">974133130</a> tail protein	GI: <a href="#">974132800</a> tail protein	GI: <a href="#">974133330</a> tail protein	GI: <a href="#">974133946</a> tail protein	GI: <a href="#">928542262</a> peptidoglycan hydrolase	GI: <a href="#">974133754</a> tail protein	GI: <a href="#">1001941643</a> tail protein
<b>19</b>	GI: <a href="#">764161623</a> putative structural protein	GI: <a href="#">974133131</a> hypothetical protein	GI: <a href="#">974132801</a> hypothetical protein	GI: <a href="#">974133331</a> tail protein	GI: <a href="#">974133947</a> hypothetical protein	GI: <a href="#">928542263</a> hypothetical protein	GI: <a href="#">974133755</a> hypothetical protein	GI: <a href="#">1001941644</a> hypothetical protein
<b>20</b>	GI: <a href="#">764161624</a> putative tail fiber protein	GI: <a href="#">974133132</a> minor tail protein	GI: <a href="#">974132802</a> minor tail protein	GI: <a href="#">974133332</a> tail protein	GI: <a href="#">974133948</a> minor tail protein	GI: <a href="#">928542264</a> hypothetical protein	GI: <a href="#">974133756</a> minor tail protein	GI: <a href="#">1001941645</a> minor tail protein
<b>21</b>	GI: <a href="#">764161625</a> putative structural protein	GI: <a href="#">974133133</a> minor tail protein	GI: <a href="#">974132803</a> minor tail protein	GI: <a href="#">974133333</a> tail protein	GI: <a href="#">974133949</a> minor tail protein	GI: <a href="#">928542265</a> hypothetical protein	GI: <a href="#">974133757</a> minor tail protein	GI: <a href="#">1001941646</a> minor tail protein
<b>22</b>	GI: <a href="#">764161628</a> lysin	GI: <a href="#">974133137</a> endolysin	GI: <a href="#">974132807</a> endolysin	GI: <a href="#">974133337</a> endolysin	GI: <a href="#">974133953</a> endolysin	GI: <a href="#">928542269</a> lysin	GI: <a href="#">974133761</a> gendolysin	GI: <a href="#">1001941650</a> endolysin
<b>23</b>	GI: <a href="#">764161634</a> baseplate wedge subunit	GI: <a href="#">974133139</a> tail lysozyme	GI: <a href="#">974132809</a> hypothetical protein	GI: <a href="#">974133344</a> baseplate wedge subunit	GI: <a href="#">974133955</a> tail lysozyme	GI: <a href="#">928542271</a> tail lysozyme	GI: <a href="#">974133763</a> tail lysozyme	GI: <a href="#">1001941652</a> tail lysozyme
<b>24</b>	GI: <a href="#">764161635</a> baseplate J-like protein	GI: <a href="#">974133140</a> baseplate J-like protein	GI: <a href="#">974132810</a> baseplate J-like protein	GI: <a href="#">974133345</a> baseplate J-like protein	GI: <a href="#">974133956</a> baseplate J-like protein	GI: <a href="#">928542272</a> baseplate J-like protein	GI: <a href="#">974133764</a> baseplate J-like protein	GI: <a href="#">1001941653</a> baseplate J-like protein
<b>25</b>	GI: <a href="#">764161636</a> putative structural protein	GI: <a href="#">974133141</a> tail protein	GI: <a href="#">974132811</a> tail protein	GI: <a href="#">974133346</a> hypothetical protein	GI: <a href="#">974133957</a> tail protein	GI: <a href="#">928542273</a> hypothetical protein	GI: <a href="#">974133765</a> tail protein	GI: <a href="#">1001941654</a> tail protein

<b>26</b>	GI: <a href="#">764161641</a> endonuclease	GI: <a href="#">974133143</a> exonuclease	GI: <a href="#">974132813</a> exonuclease	GI: <a href="#">974133352</a> endonuclease	GI: <a href="#">974133959</a> exonuclease	GI: <a href="#">928542275</a> exonuclease	GI: <a href="#">974133767</a> exonuclease	GI: <a href="#">1001941656</a> exonuclease
<b>27</b>	GI: <a href="#">764161642</a> recombinase RecT	GI: <a href="#">974133144</a> RecT-like recombinase	GI: <a href="#">974132814</a> RecT-like protein	GI: <a href="#">974133353</a> recombinase	GI: <a href="#">974133960</a> RecT-like recombinase	GI: <a href="#">928542276</a> RecT-like recombinase	GI: <a href="#">974133768</a> RecT-like recombinase	GI: <a href="#">1001941657</a> RecT-like recombinase
<b>28</b>	GI: <a href="#">764161683</a> endodeoxyribonu clease	GI: <a href="#">974133151</a> RusA	GI: <a href="#">974132820</a> RusA	GI: <a href="#">974133400</a> endodeoxyribonu clease	GI: <a href="#">974133967</a> RusA	GI: <a href="#">928542283</a> endodeoxyribonu clease	GI: <a href="#">974133775</a> RusA	GI: <a href="#">1001941664</a> RusA-like protein
<b>29</b>	GI: <a href="#">764161689</a> ssDNA-binding protein	GI: <a href="#">974133146</a> ssDNA binding protein	GI: <a href="#">974132816</a> ssDNA binding domain protein	GI: <a href="#">974133405</a> ssDNA binding protein	GI: <a href="#">974133962</a> ssDNA binding protein	GI: <a href="#">928542278</a> single-stranded DNA-binding protein	GI: <a href="#">974133770</a> ssDNA binding protein	GI: <a href="#">1001941659</a> single-stranded DNA binding protein
<b>30</b>	GI: <a href="#">764161693</a> DNA polymerase III subunit beta	GI: <a href="#">974133182</a> DNA polymerase III beta subunit	GI: <a href="#">974132849</a> DNA polymerase III beta subunit	GI: <a href="#">974133408</a> DNA polymerase III beta subunit	GI: <a href="#">974133999</a> DNA polymerase III beta subunit	GI: <a href="#">928542313</a> DNA polymerase III subunit beta	GI: <a href="#">974133806</a> DNA polymerase III beta subunit	GI: <a href="#">1001941695</a> DNA polymerase III beta subunit
<b>31</b>	GI: <a href="#">764161700</a> hypothetical protein	GI: <a href="#">974133177</a> hypothetical protein	GI: <a href="#">974132844</a> hypothetical protein	GI: <a href="#">974133307</a> hypothetical protein	GI: <a href="#">974133994</a> hypothetical protein	GI: <a href="#">928542308</a> hypothetical protein	GI: <a href="#">974133801</a> hypothetical protein	GI: <a href="#">1001941690</a> hypothetical protein
<b>32</b>	GI: <a href="#">764161701</a> hypothetical protein	GI: <a href="#">974133110</a> hypothetical protein	GI: <a href="#">974132782</a> HTH DNA binding domain protein	GI: <a href="#">974133308</a> hypothetical protein	GI: <a href="#">974133926</a> HTH DNA binding domain protein	GI: <a href="#">928542244</a> HTH DNA binding protein	GI: <a href="#">974133734</a> HTH DNA binding protein	GI: <a href="#">1001941624</a> HTH DNA binding protein