## S4 Table – CNVs detected in 3D7deltaSir2a (vs 3D7): Comparative Genomic Hybridization

<table>
<thead>
<tr>
<th>Chromosome</th>
<th>Event size (bps)</th>
<th>Start</th>
<th>End</th>
<th>Number of probes in event</th>
<th>Average Log2 Ratio of event</th>
<th>Loss / Gain</th>
<th>Subtelomeric # Non-subtelomeric</th>
<th>Gene ID</th>
<th>Gene product categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1,757</td>
<td>23,492</td>
<td>23,249</td>
<td>179</td>
<td>0.79</td>
<td>Gain</td>
<td>Telomeric</td>
<td>PF3D7_0200100</td>
<td>erythrocyte membrane protein 1 (PFEMP1)</td>
</tr>
<tr>
<td>2</td>
<td>25,317</td>
<td>23,580</td>
<td>28,897</td>
<td>75</td>
<td>3.53</td>
<td>Gain</td>
<td>Subtelomeric</td>
<td>PF3D7_0200100</td>
<td>erythrocyte membrane protein 1 (PFEMP1) - exon2, stevor, erythrocyte membrane protein 1 (PFEMP1) (truncated), stevor (pseudogene)</td>
</tr>
<tr>
<td>2</td>
<td>28,949</td>
<td>40,056</td>
<td>69,005</td>
<td>541</td>
<td>1.28</td>
<td>Gain</td>
<td>Subtelomeric</td>
<td>PF3D7_0200200</td>
<td>erythrocyte membrane protein 1 (PFEMP1)</td>
</tr>
<tr>
<td>2</td>
<td>69,077</td>
<td>21,868</td>
<td>90,945</td>
<td>405</td>
<td>2.77</td>
<td>Gain</td>
<td>Subtelomeric</td>
<td>PF3D7_0201300</td>
<td>Plasmodium exported protein (hyp10), Plasmodium exported protein (hyp9), Plasmodium exported protein (PHISTb), DnaJ protein (putative), RESAI</td>
</tr>
<tr>
<td>2</td>
<td>90,993</td>
<td>7,496</td>
<td>98,077</td>
<td>86</td>
<td>5.53</td>
<td>Gain</td>
<td>Subtelomeric</td>
<td>PF3D7_0201900</td>
<td>erythrocyte membrane protein 3</td>
</tr>
<tr>
<td>2</td>
<td>98,653</td>
<td>4,664</td>
<td>103,117</td>
<td>76</td>
<td>1.58</td>
<td>Gain</td>
<td>Subtelomeric</td>
<td>PF3D7_0202000</td>
<td>knob-associated histidine-rich protein</td>
</tr>
<tr>
<td>2</td>
<td>103,353</td>
<td>1,164</td>
<td>104,921</td>
<td>32</td>
<td>6.14</td>
<td>Gain</td>
<td>Subtelomeric</td>
<td>PF3D7_0202200</td>
<td>Plasmodium exported protein (PHISTc), Plasmodium exported protein (PHISTa), Plasmodium exported protein (PHISTd)</td>
</tr>
<tr>
<td>3</td>
<td>58,077</td>
<td>28,576</td>
<td>86,653</td>
<td>455</td>
<td>2.63</td>
<td>Gain</td>
<td>Subtelomeric</td>
<td>PF3D7_0301400</td>
<td>rifin, serine/threonine protein kinase, FIKK family (FIKK3), acyl-CoA synthetase (ACS2), Plasmodium</td>
</tr>
<tr>
<td>4</td>
<td>558,277</td>
<td>1,164</td>
<td>559,441</td>
<td>25</td>
<td>-1.54</td>
<td>Loss</td>
<td>Telomeric</td>
<td>PF3D7_0412600</td>
<td>rifin, pseudogene</td>
</tr>
<tr>
<td>7</td>
<td>576,853</td>
<td>944</td>
<td>577,797</td>
<td>16</td>
<td>-1.01</td>
<td>Loss</td>
<td>Central core</td>
<td>PF3D7_0712600*</td>
<td>erythrocyte membrane protein 1 (PFEMP1)</td>
</tr>
<tr>
<td>9</td>
<td>1,505,793</td>
<td>1,540</td>
<td>1,540</td>
<td>184</td>
<td>0.73</td>
<td>Gain</td>
<td>Telomeric</td>
<td>PF3D7_0937800*</td>
<td>erythrocyte membrane protein 1 (PFEMP1)</td>
</tr>
<tr>
<td>10</td>
<td>1,178,673</td>
<td>62,796</td>
<td>1,241,469</td>
<td>1062</td>
<td>1.30</td>
<td>Gain</td>
<td>Central core</td>
<td>PF3D7_1028700</td>
<td>merozoite TRAP-like protein, conserved Plasmodium protein, adenosine deaminase (putative), RAP protein (putative), transcription factor (putative), RNA</td>
</tr>
<tr>
<td>13</td>
<td>1,215,131</td>
<td>121,552</td>
<td>1,211</td>
<td>12</td>
<td>1.26</td>
<td>Gain</td>
<td>Central core</td>
<td>PF3D7_1328800</td>
<td>transcriptional regulatory protein sir2a</td>
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<tr>
<td>13</td>
<td>2,859,229</td>
<td>2,876</td>
<td>2,862,105</td>
<td>53</td>
<td>2.76</td>
<td>Gain</td>
<td>Subtelomeric</td>
<td>PF3D7_1372700</td>
<td>rifin</td>
</tr>
<tr>
<td>13</td>
<td>2,862,245</td>
<td>2,200</td>
<td>2,864,445</td>
<td>51</td>
<td>1.75</td>
<td>Gain</td>
<td>Subtelomeric</td>
<td>PF3D7_1372800</td>
<td>stevor</td>
</tr>
<tr>
<td>13</td>
<td>2,864,529</td>
<td>2,894,569</td>
<td>30,040</td>
<td>192</td>
<td>0.86</td>
<td>Gain</td>
<td>Subtelomeric / Telomeric</td>
<td>PF3D7_1373500</td>
<td>erythrocyte membrane protein 1 (PFEMP1), rifin, stevor, unknown exported protein</td>
</tr>
</tbody>
</table>

*Shaded cells indicate that the genomic change is shared with NF54 vs 3D7 comparison
#Telomeric subtelomeric regions are demarcated as given in Mok et al. 2008
*Genes located closest to the region