

1 10 20 30 40

Paralog I G A A A T A T T A G A C A A A C A G G G A T T A C T A T A G A G A T T T A A A A

Paralog II G A A A T A T T A G A A A A A C A G G G A T T A C T A T A G A G A T T A A A A A

Chimera G A A A T A T T A G A A A A A C A G G G A T T A C T A T A G A G A T T A A A A A



41 50 60 70 80

Paralog I A A T A A A T G C T A A G C C C A G C A A G A A G A G A G A T G A A C C C T G G

Paralog II A A T C A A T G C T A A G C C C A G C A A G A A G A G A G A T G A A C C C T G G

Chimera A A T C A A T G C T A A G C C C A G C A A G A A G A G A G A T G A A C C C T G G



81 90 100 110 120

Paralog I A T A C A T A A A A C A G C A A A G C T A A A A A A C T A A A T G A T G G A A T

Paralog II A T A C A T A A A A C A G C A A A G C T A A A A A A C C A A A T G A T G G A A T

Chimera A T A C A T A A A A C A G C A A A G C T A A A A A A C C A A A T G A T G G A A T



121 130 140 150 160

Paralog I A T A T C A T T A T T A T C A A G T T A A A A A A T G G A C A A A A G A G A A C

Paralog II A T A T C A T T A T T A T C A A G T T A A A A A A T G G A C A - - - G A G A A C

Chimera A T A T C A T T A T T A T C A A G T T A A A A A A T G G A C A - - - G A G A A C



161 170 180 190 200

Paralog I C A T T A A C C A C T A C A G C A T A A A C A A A C A G A A A G A A A G A A C A

Paralog II C A T G A A C C A C T A C A G C A T A A A C A A A C A G A A A G A A A G A A C A

Chimera C A T G A A C C A C T A C A G C A T A A A C A A A C A G A A A G A A A G A A C A



201 210 220 230 240

Paralog I A C A A A A A T T C A A A T G G T A A A A C T G T G G C A T C A T A A C A A A T

Paralog II A C A A A A A T T C A A A T G G T A A A A C T G T G G C A T C A T A A C A A A T

Chimera A C A A A A A T T C A A A T G G T A A A A C T G T G G C A T C A T A A C A A A T



241 250 260 270 280

Paralog I G C A A A A T A A T A T C A C T G G T A A T C T G T A G T G C T C T C T A C A A

Paralog II G C A A A A T A A T A T C A C T G G T A A T C T G T A A T G C T C T C T A C A A

Chimera G C A A A A T A A T A T C A C T G G T A A T C T G T A G T G C T C T C T A C A A



281 290 300 310 320

Paralog I G G A T A T - - - - A T A A A A T C A A C A T G T A G C A C C A A C A T A C A

Paralog II G G A T A T G T A A A A T A A A A T C A A C A T G T A G C A C C A A C A T A C A

Chimera G G A T A T - - - - A T A A A A T C A A C A T G T A G C A C C A A C A T A C A



321 330 340 351

Paralog I C C A A A T A T G A A C A A T T T C A A A C T T G T T T A T G

Paralog II C C A A A T A T G A A G A A T T T C A A A C T T G T T T A T G

Chimera C C A A A T A T G A A C A A T T T C A A A C T T G T T T A T G

