

Consensus 1 10 20 30 40 50 60 70 80 90 100 110 120 130
 CAACTGTGAGGACTGTTTCAGCCGAAACTTTTGCACAAAGTGAAGGAAGGTTTGTCTTGCACAAAGGAAGATGTTACGAAACCTGTCTGAGGGCTTCTCTGCTGCCAACGGCACGATGGAATGCAGCAGTCCGG

1. Pvi RSPO1 Ref 1 10 20 30 40 50 60 70 80 90 100 110 120 130

 Primer GF

2. BAC 100-O13
 3. BAC 215-D15
 4. Female 1
 5. Female 2
 6. Female 3
 7. Male 1
 8. Male 2
 9. Male 3

Consensus 140 150 160 170 180 190 200 210 220 230 240 250 260 270
 GTGAGTGTGGACACGAGGCAGCGAGGGTGGGGTGGG---NNGGTGGCGGTCTGTCTTCTGCTCTCTGCGGCCGGCCTGCCTACTCAGGTCCGCAGTTGGGTCCAGGGGCCATAAGGCAGGTCAGCTCGAC

1. Pvi RSPO1 Ref 140 150 160 170 176 186 196 206 216 226 236 246 256 266
-G.....T.....

2. BAC 100-O13-G.....
 3. BAC 215-D15-G.....
 4. Female 1NNNN.....
 5. Female 2-----.....
 6. Female 3K.....-G.....
 7. Male 1-G.....
 8. Male 2-----R.....
 9. Male 3-----A.....

Consensus 280 290 300 310 320 330 340 350 360 370 380 390 400 410
 AGGGTGCTTTCCAAGCCCTTCCCTGCCCAATGGCCCGAAAGGGCCAYCACGCTCTCCACGTTAGGAGCCTGACTTTCTGGAACYCCRCATCCCAGTGCCAGGGTCAGTTCGCAAGCTTGGCAGAAACAGGCTCAG

1. Pvi RSPO1 Ref 276 286 296 306 316 326 336 346 356 366 376 386 396 406
A.C.....C.G.....A.....

2. BAC 100-O13C.G.....T.A.....
 3. BAC 215-D15C.G.....T.A.....
 4. Female 1R.....C.....R.....
 5. Female 2R.....C.....R.....
 6. Female 3C.....
 7. Male 1K.....C.A.....
 8. Male 2T.....C.....
 9. Male 3C.....R.....C.....Y.....A.....

420 430 440 450 460 470 480 490 500 510 520 530 540
 Consensus TGGCAAGTTGACGTCTCTACGTGCGGCCAAAGCCAGCTCCAGAGGAGAYTTCTCAGGTTTCCTCCACGGGCTGCAGCATTTGTAAACCCCTGAGGTGCATTCTAGTTA-TCACGAAAGGTAGGGAGGAGTGAAG

416 426 436 446 456 466 476 486 496 506 516 525 535
 1. Pvi RSPO1 RefC.....G.....-.....

2. BAC 100-O13T.....-.....
 3. BAC 215-D15T.....-.....
 4. Female 1C.....-.....
 5. Female 2Y.....C.....-.....
 6. Female 3K.....N.....
 7. Male 1C.....K.....-.....
 8. Male 2C.....-.....
 9. Male 3R.....R.....C.....K.....-.....

550 560 570 580 590 600 610 620 630 640 650 660 670 680
 Consensus GAGATCTCCATTCTCTTGACAGGTCTGAAAACAAAGCACTGTACTCTGACTTTTAGAACTAGGAATGCTTGCAATTGATATCACTGGATTTTGCAACTCTTCAGAGCTGCACCTCTTAAAGAGCCATTTCCCCCAA

545 555 565 575 585 595 605 615 625 635 645 655 665 675
 1. Pvi RSPO1 RefT.....

2. BAC 100-O13
 3. BAC 215-D15
 4. Female 1Y.....
 5. Female 2Y.....
 6. Female 3Y.....Y.....W.....
 7. Male 1Y.....
 8. Male 2
 9. Male 3C.....

690 700 710 720 730 740 750 760 770 780 790 800 810 820
 Consensus ACTGAACCGGGCACACCAAAGTATTTCCCCAGCCGCATACGACATAAAGGGCGGGCAGCGTAAGGGGAGATATTCTAAACCGGGCAAGTGGGAGCGAGTCAGCGAGCATGCYTTTGTCTTCTTCTTCCCTCCCCG

685 695 705 715 725 735 745 755 765 775 785 795 805 815
 1. Pvi RSPO1 RefC.....T.....T.....

2. BAC 100-O13C.....--
 3. BAC 215-D15C.....--
 4. Female 1K.....T.....
 5. Female 2M.....K.....T.....
 6. Female 3Y.....
 7. Male 1T.....
 8. Male 2Y.....T.....
 9. Male 3T.....

Consensus 830 840 850 860 870 880 890 900 910 920 930 940 948
 --CCCCCCCAGCCCAATGTGAAATGAGCGAGTGGGGGCCGTGGGGCCCTTGCTCCAGAAGGAGAAAGCTGTGCGGCTTCCGGAAGGGCAACAAGGAGCGTTCCCGGTGGATCCTGCAGGTGATTT

1. Pvi RSPO1 Ref 823 833 843 853 863 873 883 893 903 913 923 941
 -----C.



2. BAC 100-O13 -----
 3. BAC 215-D15 -----
 4. Female 1 -----Y-----
 5. Female 2 -----Y-----
 6. Female 3 -----Y-----Y-----
 7. Male 1 -----
 8. Male 2 -----
 9. Male 3 NC-----C-----