

Table S3 Incongruities between FvH4 and Fvb. Listed are scaffolds from FvH4 that map to Fvb linkage groups in ways incompatible with their assembly position in FvH4. Some of these likely represent assembly errors, while others likely represent real translocations or inversions.

| Scaffold | Pseudochromosome | Start | End | Linkage_Group | Entire scaffold? ^a | Type |
|--------------|------------------|----------|----------|---------------|-------------------------------|--|
| scf0512942 | FvH4_0 | 317810 | 486710 | 4 | yes | assignment of unanchored scaffold |
| scf0512960 | FvH4_0 | 771617 | 922450 | 5 | yes | assignment of unanchored scaffold |
| scf0512975 | FvH4_0 | 932451 | 1031722 | 4 | yes | assignment of unanchored scaffold |
| scf0513018 | FvH4_0 | 1199431 | 1488070 | 2 | yes | assignment of unanchored scaffold |
| scf0513028 | FvH4_0 | 1498071 | 1647224 | 4 | yes | assignment of unanchored scaffold |
| scf0513041 | FvH4_0 | 2252495 | 2721037 | 1 | yes | assignment of unanchored scaffold |
| scf0513045 | FvH4_0 | 2731038 | 2792572 | 5 | yes | assignment of unanchored scaffold |
| scf0513068 | FvH4_0 | 2802573 | 3345236 | 2 | yes | assignment of unanchored scaffold |
| scf0513081 | FvH4_0 | 4365948 | 5638289 | 1 | yes | assignment of unanchored scaffold |
| scf0513119 | FvH4_0 | 5648290 | 6841401 | 2 | yes | assignment of unanchored scaffold |
| scf0513137 | FvH4_0 | 7326933 | 8406320 | 2 | yes | assignment of unanchored scaffold |
| scf0513148 | FvH4_0 | 9021620 | 9922368 | 2 | yes | assignment of unanchored scaffold |
| scf0513155 | FvH4_0 | 9932369 | 11179145 | 4 | yes | assignment of unanchored scaffold |
| scf0513189 | FvH4_0 | 11189146 | 11767950 | 1,2 | no | assignment of unanchored scaffold, interchromosome translocation |
| scf0513151 | FvH4_1 | 1 | 1445376 | 4,1 | no | interchromosome translocation, inversion |
| scf0513105 | FvH4_1 | 1455377 | 3331343 | 1 | yes | inversion |
| scf0513114 | FvH4_1 | 3341344 | 4120631 | 5 | yes | interchromosome translocation |
| scf0512959 | FvH4_1 | 4829947 | 5419653 | 1,5 | no | inversion, interchromosome translocation |
| scf0513095 | FvH4_1 | 13186592 | 14572914 | 6 | no | interchromosome translocation |
| scf0513168_1 | FvH4_1 | 17339065 | 19938125 | 3,6 | no | interchromosome translocation (x2) |
| scf0512938 | FvH4_2 | 2272727 | 2456317 | 2 | yes | intrachromosome translocation |
| scf0513057 | FvH4_2 | 5704770 | 6000074 | 4 | yes | interchromosome translocation |
| scf0512968 | FvH4_2 | 17482696 | 18535496 | 2 | yes | inversion |
| scf0513134 | FvH4_2 | 18667366 | 21445916 | 2 | yes | inversion |
| scf0513194 | FvH4_2 | 21455917 | 24538926 | 2 | yes | inversion |
| scf0513171 | FvH4_3 | 1 | 1497153 | 3 | yes | inversion |
| scf0513104 | FvH4_3 | 1507154 | 3362024 | 3 | yes | inversion |
| scf0513072 | FvH4_3 | 3372025 | 3727613 | 6 | yes | interchromosome translocation |
| scf0513017 | FvH4_3 | 3737614 | 4232872 | 3 | yes | inversion |
| scf0513082 | FvH4_3 | 4410664 | 5334373 | 3 | yes | inversion |
| scf0513173 | FvH4_3 | 6456995 | 8718722 | 3 | yes | inversion |
| scf0513089 | FvH4_3 | 9045060 | 9383133 | 7 | yes | interchromosome translocation |

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|-------------------------|--------|----------|----------|-----|-----|--|
| scf0513156 | FvH4_3 | 9809969 | 11035985 | 7 | yes | interchromosome translocation |
| scf0513115 | FvH4_3 | 11045986 | 11903823 | 5 | yes | interchromosome translocation |
| scf0513053 | FvH4_3 | 15204652 | 15608968 | 4 | yes | interchromosome translocation |
| scf0513125 | FvH4_3 | 19509464 | 21597487 | 2 | yes | interchromosome translocation |
| scf0513015 | FvH4_3 | 27880400 | 28601208 | 3 | yes | intrachromosome translocation |
| scf0513029 | FvH4_3 | 30982798 | 31368128 | 3 | yes | inversion |
| scf0513065 | FvH4_4 | 1 | 206650 | 6 | yes | interchromosome translocation |
| scf0513090 | FvH4_4 | 7833870 | 8595096 | 3 | yes | interchromosome translocation |
| scf0513124_4 | FvH4_4 | 9525261 | 10260387 | 6 | no | interchromosome translocation |
| scf0513150 | FvH4_4 | 12599598 | 14043386 | 5 | no | interchromosome translocation |
| scf0512935 | FvH4_4 | 14053387 | 15031722 | 4 | yes | intrachromosome translocation |
| scf0513004 | FvH4_4 | 22938187 | 23936647 | 6 | no | interchromosome translocation |
| scf0513025 | FvH4_4 | 23946648 | 24163290 | 4 | yes | inversion |
| scf0513158_4 | FvH4_4 | 24298703 | 26557413 | 7 | no | interchromosome translocation |
| scf0513012 | FvH4_5 | 1 | 128260 | 3 | yes | interchromosome translocation |
| scf0513098 | FvH4_5 | 138261 | 3585757 | 6 | no | interchromosome translocation |
| scf0513052 | FvH4_5 | 3595758 | 3984026 | 2 | yes | interchromosome translocation |
| scf0511962 | FvH4_5 | 5833229 | 5933781 | 5 | yes | intrachromosome translocation |
| scf0513135 | FvH4_5 | 8572001 | 11121459 | 5 | yes | inversion |
| scf0513066 | FvH4_5 | 13220304 | 13294433 | 1 | yes | interchromosome translocation |
| scf0513166 | FvH4_5 | 14797581 | 15196668 | 5 | yes | intrachromosome translocation |
| scf0513094 | FvH4_5 | 17913724 | 20360920 | 5 | yes | inversion |
| scf0513146_5 | FvH4_5 | 20370921 | 21946032 | 1 | no | interchromosome translocation |
| scf0513187 | FvH4_5 | 23614770 | 26212222 | 4 | no | interchromosome translocation |
| scf0512965 | FvH4_5 | 26222223 | 26854803 | 5 | yes | intrachromosome translocation |
| scf0513087 | FvH4_5 | 27369861 | 27940252 | 4 | no | interchromosome translocation |
| scf0512963 ^b | FvH4_5 | 27950253 | 28286745 | 5 | yes | intrachromosome translocation |
| scf0513011 ^b | FvH4_5 | 28296746 | 28438568 | 5 | yes | intrachromosome translocation |
| scf0513168_6 | FvH4_6 | 213555 | 1544462 | 5,6 | no | interchromosome translocation, inversion |
| scf0512983 | FvH4_6 | 1554463 | 1973909 | 6 | yes | intrachromosome translocation |
| scf0513061 | FvH4_6 | 1983910 | 3376700 | 6 | yes | inversion |
| scf0513177 | FvH4_6 | 4210475 | 8315614 | 6 | yes | inversion |
| scf0513185 | FvH4_6 | 11066533 | 11863480 | 7 | yes | interchromosome translocation |
| scf0513196 | FvH4_6 | 13162357 | 15497570 | 2 | no | interchromosome translocation |
| scf0513176 | FvH4_6 | 16117078 | 18575326 | 1 | no | interchromosome translocation |
| scf0512952 | FvH4_6 | 19487000 | 19734822 | 5 | no | interchromosome translocation |

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|-------------------------|--------|----------|----------|-------|-----|--|
| scf0513040 | FvH4_6 | 25990763 | 26193578 | 4 | yes | interchromosome translocation |
| scf0512991 | FvH4_6 | 34044179 | 36036831 | 1, 6 | no | interchromosome translocation, intrachromosome translocation |
| scf0512961 | FvH4_6 | 36046832 | 36389855 | 6 | yes | intrachromosome translocation |
| scf0513112 | FvH4_6 | 38173164 | 39347594 | 2,6 | no | interchromosome translocation, inversion |
| scf0513170 | FvH4_7 | 1 | 5155874 | 1,3,7 | no | interchromosome translocation (x2), intrachromosome translocation |
| scf0513080 | FvH4_7 | 7699732 | 8246547 | 5 | no | interchromosome translocation |
| scf0512990 ^c | FvH4_7 | 11408502 | 12404147 | 7 | no | inversion |
| scf0512946 ^c | FvH4_7 | 12414148 | 13183493 | 7 | no | inversion |
| scf0513113 ^d | FvH4_7 | 15242379 | 16658559 | 6,7 | no | interchromosome translocation, inversion |
| scf0513044 ^d | FvH4_7 | 16668560 | 19276478 | 2,6 | no | interchromosome translocation (x2) |
| scf0513190 | FvH4_7 | 19286479 | 22556666 | 7 | yes | inversion |

^aIndicates whether data are compatible with the entire scaffold, and only the entire scaffold, contributing to the incongruity. Such scaffolds may represent assembly errors.

^bsame translocation from FvH4_5 to a different part of Fvb5

^c same inversion on FvH4_7

^dsame translocation from FvH4_7 to Fvb6