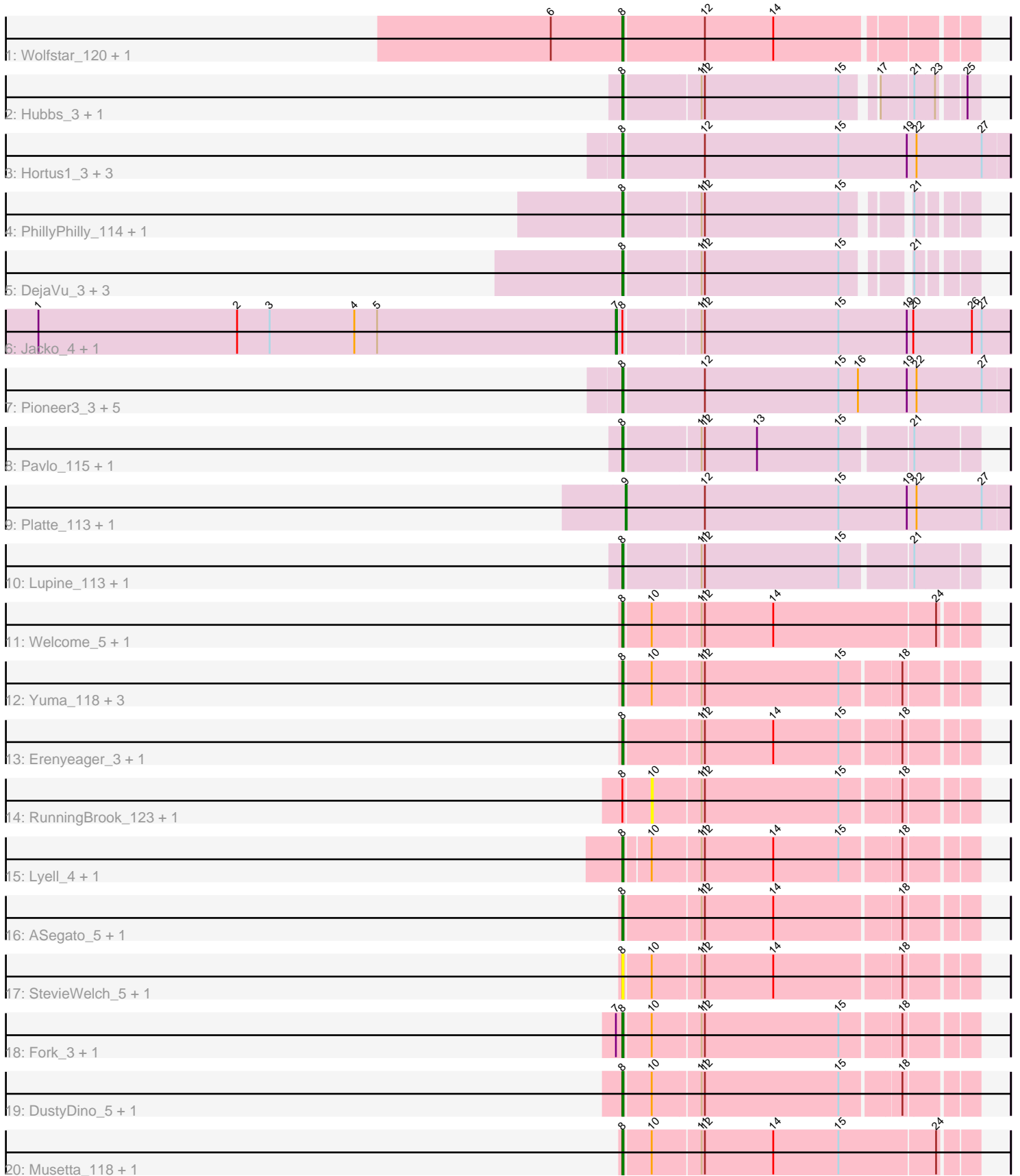


Pham 189812



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 189812 Report

This analysis was run 11/02/24 on database version 579.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 189812 has 50 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Wolfstar_120, Wolfstar_4
- Track 2 : Hubbs_3, Hubbs_117
- Track 3 : Hortus1_3, OlinDD_114, Hortus1_114, OlinDD_3
- Track 4 : PhillyPhilly_114, PhillyPhilly_4
- Track 5 : DejaVu_3, DejaVu_119, Roman_119, Roman_3
- Track 6 : Jacko_4, Jacko_113
- Track 7 : Pioneer3_3, Alleb_4, Alleb_112, Tandem_114, Tandem_3, Pioneer3_114
- Track 8 : Pavlo_115, Pavlo_3
- Track 9 : Platte_113, Platte_3
- Track 10 : Lupine_113, Lupine_3
- Track 11 : Welcome_5, Welcome_122
- Track 12 : Yuma_118, Necrophoxinus_5, Yuma_5, Necrophoxinus_121
- Track 13 : Erenyeager_3, Erenyeager_118
- Track 14 : RunningBrook_123, RunningBrook_5
- Track 15 : Lyell_4, Lyell_119
- Track 16 : ASegato_5, ASegato_119
- Track 17 : StevieWelch_5, StevieWelch_123
- Track 18 : Fork_3, Fork_115
- Track 19 : DustyDino_5, DustyDino_123
- Track 20 : Musetta_118, Musetta_5

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 8, it was called in 42 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASegato_119, ASegato_5, Alleb_112, Alleb_4, DejaVu_119, DejaVu_3, DustyDino_123, DustyDino_5, Erenyeager_118, Erenyeager_3, Fork_115, Fork_3, Hortus1_114, Hortus1_3, Hubbs_117, Hubbs_3, Lupine_113, Lupine_3, Lyell_119,

Lyell_4, Musetta_118, Musetta_5, Necrophoxinus_121, Necrophoxinus_5, OlinDD_114, OlinDD_3, Pavlo_115, Pavlo_3, PhillyPhilly_114, PhillyPhilly_4, Pioneer3_114, Pioneer3_3, Roman_119, Roman_3, StevieWelch_123, StevieWelch_5, Tandem_114, Tandem_3, Welcome_122, Welcome_5, Wolfstar_120, Wolfstar_4, Yuma_118, Yuma_5,

Genes that have the "Most Annotated" start but do not call it:

- Jacko_113, Jacko_4, RunningBrook_123, RunningBrook_5,

Genes that do not have the "Most Annotated" start:

- Platte_113, Platte_3,

Summary by start number:

Start 7:

- Found in 4 of 50 (8.0%) of genes in pham
- Manual Annotations of this start: 2 of 46
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Jacko_113 (ED1), Jacko_4 (ED1),

Start 8:

- Found in 48 of 50 (96.0%) of genes in pham
- Manual Annotations of this start: 42 of 46
- Called 91.7% of time when present
- Phage (with cluster) where this start called: ASegato_119 (ED2), ASegato_5 (ED2), Alleb_112 (ED1), Alleb_4 (ED1), DejaVu_119 (ED1), DejaVu_3 (ED1), DustyDino_123 (ED2), DustyDino_5 (ED2), Erenyeager_118 (ED2), Erenyeager_3 (ED2), Fork_115 (ED2), Fork_3 (ED2), Hortus1_114 (ED1), Hortus1_3 (ED1), Hubbs_117 (ED1), Hubbs_3 (ED1), Lupine_113 (ED1), Lupine_3 (ED1), Lyell_119 (ED2), Lyell_4 (ED2), Musetta_118 (ED2), Musetta_5 (ED2), Necrophoxinus_121 (ED2), Necrophoxinus_5 (ED2), OlinDD_114 (ED1), OlinDD_3 (ED1), Pavlo_115 (ED1), Pavlo_3 (ED1), PhillyPhilly_114 (ED1), PhillyPhilly_4 (ED1), Pioneer3_114 (ED1), Pioneer3_3 (ED1), Roman_119 (ED1), Roman_3 (ED1), StevieWelch_123 (ED2), StevieWelch_5 (ED2), Tandem_114 (ED1), Tandem_3 (ED1), Welcome_122 (ED2), Welcome_5 (ED2), Wolfstar_120 (ED), Wolfstar_4 (ED), Yuma_118 (ED2), Yuma_5 (ED2),

Start 9:

- Found in 2 of 50 (4.0%) of genes in pham
- Manual Annotations of this start: 2 of 46
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Platte_113 (ED1), Platte_3 (ED1),

Start 10:

- Found in 18 of 50 (36.0%) of genes in pham
- No Manual Annotations of this start.
- Called 11.1% of time when present
- Phage (with cluster) where this start called: RunningBrook_123 (ED2), RunningBrook_5 (ED2),

Summary by clusters:

There are 3 clusters represented in this pham: ED2, ED, ED1,

Info for manual annotations of cluster ED:

- Start number 8 was manually annotated 2 times for cluster ED.

Info for manual annotations of cluster ED1:

- Start number 7 was manually annotated 2 times for cluster ED1.
- Start number 8 was manually annotated 22 times for cluster ED1.
- Start number 9 was manually annotated 2 times for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 8 was manually annotated 18 times for cluster ED2.

Gene Information:

Gene: ASegato_5 Start: 1712, Stop: 1410, Start Num: 8

Candidate Starts for ASegato_5:

(Start: 8 @1712 has 42 MA's), (11, 1646), (12, 1643), (14, 1580), (18, 1469),

Gene: ASegato_119 Start: 61161, Stop: 60859, Start Num: 8

Candidate Starts for ASegato_119:

(Start: 8 @61161 has 42 MA's), (11, 61095), (12, 61092), (14, 61029), (18, 60918),

Gene: Alleb_4 Start: 1423, Stop: 1073, Start Num: 8

Candidate Starts for Alleb_4:

(Start: 8 @1423 has 42 MA's), (12, 1351), (15, 1228), (16, 1210), (19, 1165), (22, 1156), (27, 1096),

Gene: Alleb_112 Start: 60902, Stop: 60552, Start Num: 8

Candidate Starts for Alleb_112:

(Start: 8 @60902 has 42 MA's), (12, 60830), (15, 60707), (16, 60689), (19, 60644), (22, 60635), (27, 60575),

Gene: DejaVu_3 Start: 1239, Stop: 955, Start Num: 8

Candidate Starts for DejaVu_3:

(Start: 8 @1239 has 42 MA's), (11, 1173), (12, 1170), (15, 1047), (21, 1002),

Gene: DejaVu_119 Start: 61619, Stop: 61335, Start Num: 8

Candidate Starts for DejaVu_119:

(Start: 8 @61619 has 42 MA's), (11, 61553), (12, 61550), (15, 61427), (21, 61382),

Gene: DustyDino_5 Start: 1629, Stop: 1327, Start Num: 8

Candidate Starts for DustyDino_5:

(Start: 8 @1629 has 42 MA's), (10, 1605), (11, 1563), (12, 1560), (15, 1437), (18, 1386),

Gene: DustyDino_123 Start: 61719, Stop: 61417, Start Num: 8

Candidate Starts for DustyDino_123:

(Start: 8 @61719 has 42 MA's), (10, 61695), (11, 61653), (12, 61650), (15, 61527), (18, 61476),

Gene: Erenyeager_3 Start: 1515, Stop: 1213, Start Num: 8

Candidate Starts for Erenyeager_3:

(Start: 8 @1515 has 42 MA's), (11, 1449), (12, 1446), (14, 1383), (15, 1323), (18, 1272),

Gene: Erenyeager_118 Start: 61176, Stop: 60874, Start Num: 8
Candidate Starts for Erenyeager_118:
(Start: 8 @61176 has 42 MA's), (11, 61110), (12, 61107), (14, 61044), (15, 60984), (18, 60933),

Gene: Fork_3 Start: 1517, Stop: 1215, Start Num: 8
Candidate Starts for Fork_3:
(Start: 7 @1523 has 2 MA's), (Start: 8 @1517 has 42 MA's), (10, 1493), (11, 1451), (12, 1448), (15, 1325), (18, 1274),

Gene: Fork_115 Start: 60508, Stop: 60206, Start Num: 8
Candidate Starts for Fork_115:
(Start: 7 @60514 has 2 MA's), (Start: 8 @60508 has 42 MA's), (10, 60484), (11, 60442), (12, 60439), (15, 60316), (18, 60265),

Gene: Hortus1_3 Start: 1296, Stop: 946, Start Num: 8
Candidate Starts for Hortus1_3:
(Start: 8 @1296 has 42 MA's), (12, 1224), (15, 1101), (19, 1038), (22, 1029), (27, 969),

Gene: Hortus1_114 Start: 61256, Stop: 60906, Start Num: 8
Candidate Starts for Hortus1_114:
(Start: 8 @61256 has 42 MA's), (12, 61184), (15, 61061), (19, 60998), (22, 60989), (27, 60929),

Gene: Hubbs_3 Start: 1446, Stop: 1153, Start Num: 8
Candidate Starts for Hubbs_3:
(Start: 8 @1446 has 42 MA's), (11, 1380), (12, 1377), (15, 1254), (17, 1230), (21, 1203), (23, 1185), (25, 1164),

Gene: Hubbs_117 Start: 61845, Stop: 61552, Start Num: 8
Candidate Starts for Hubbs_117:
(Start: 8 @61845 has 42 MA's), (11, 61779), (12, 61776), (15, 61653), (17, 61629), (21, 61602), (23, 61584), (25, 61563),

Gene: Jacko_4 Start: 1369, Stop: 1013, Start Num: 7
Candidate Starts for Jacko_4:
(1, 1900), (2, 1717), (3, 1687), (4, 1609), (5, 1588), (Start: 7 @1369 has 2 MA's), (Start: 8 @1363 has 42 MA's), (11, 1297), (12, 1294), (15, 1171), (19, 1108), (20, 1102), (26, 1048), (27, 1039),

Gene: Jacko_113 Start: 59762, Stop: 59406, Start Num: 7
Candidate Starts for Jacko_113:
(1, 60293), (2, 60110), (3, 60080), (4, 60002), (5, 59981), (Start: 7 @59762 has 2 MA's), (Start: 8 @59756 has 42 MA's), (11, 59690), (12, 59687), (15, 59564), (19, 59501), (20, 59495), (26, 59441), (27, 59432),

Gene: Lupine_113 Start: 60525, Stop: 60217, Start Num: 8
Candidate Starts for Lupine_113:
(Start: 8 @60525 has 42 MA's), (11, 60459), (12, 60456), (15, 60333), (21, 60273),

Gene: Lupine_3 Start: 1252, Stop: 944, Start Num: 8
Candidate Starts for Lupine_3:
(Start: 8 @1252 has 42 MA's), (11, 1186), (12, 1183), (15, 1060), (21, 1000),

Gene: Lyell_4 Start: 1502, Stop: 1203, Start Num: 8
Candidate Starts for Lyell_4:

(Start: 8 @1502 has 42 MA's), (10, 1481), (11, 1439), (12, 1436), (14, 1373), (15, 1313), (18, 1262),

Gene: Lyell_119 Start: 60669, Stop: 60370, Start Num: 8

Candidate Starts for Lyell_119:

(Start: 8 @60669 has 42 MA's), (10, 60648), (11, 60606), (12, 60603), (14, 60540), (15, 60480), (18, 60429),

Gene: Musetta_118 Start: 61518, Stop: 61207, Start Num: 8

Candidate Starts for Musetta_118:

(Start: 8 @61518 has 42 MA's), (10, 61494), (11, 61452), (12, 61449), (14, 61386), (15, 61326), (24, 61239),

Gene: Musetta_5 Start: 1723, Stop: 1412, Start Num: 8

Candidate Starts for Musetta_5:

(Start: 8 @1723 has 42 MA's), (10, 1699), (11, 1657), (12, 1654), (14, 1591), (15, 1531), (24, 1444),

Gene: Necrophoxinus_5 Start: 1536, Stop: 1234, Start Num: 8

Candidate Starts for Necrophoxinus_5:

(Start: 8 @1536 has 42 MA's), (10, 1512), (11, 1470), (12, 1467), (15, 1344), (18, 1293),

Gene: Necrophoxinus_121 Start: 61779, Stop: 61477, Start Num: 8

Candidate Starts for Necrophoxinus_121:

(Start: 8 @61779 has 42 MA's), (10, 61755), (11, 61713), (12, 61710), (15, 61587), (18, 61536),

Gene: OlinDD_114 Start: 61261, Stop: 60911, Start Num: 8

Candidate Starts for OlinDD_114:

(Start: 8 @61261 has 42 MA's), (12, 61189), (15, 61066), (19, 61003), (22, 60994), (27, 60934),

Gene: OlinDD_3 Start: 1296, Stop: 946, Start Num: 8

Candidate Starts for OlinDD_3:

(Start: 8 @1296 has 42 MA's), (12, 1224), (15, 1101), (19, 1038), (22, 1029), (27, 969),

Gene: Pavlo_115 Start: 61593, Stop: 61285, Start Num: 8

Candidate Starts for Pavlo_115:

(Start: 8 @61593 has 42 MA's), (11, 61527), (12, 61524), (13, 61476), (15, 61401), (21, 61341),

Gene: Pavlo_3 Start: 1337, Stop: 1029, Start Num: 8

Candidate Starts for Pavlo_3:

(Start: 8 @1337 has 42 MA's), (11, 1271), (12, 1268), (13, 1220), (15, 1145), (21, 1085),

Gene: PhillyPhilly_114 Start: 61149, Stop: 60865, Start Num: 8

Candidate Starts for PhillyPhilly_114:

(Start: 8 @61149 has 42 MA's), (11, 61083), (12, 61080), (15, 60957), (21, 60912),

Gene: PhillyPhilly_4 Start: 1660, Stop: 1376, Start Num: 8

Candidate Starts for PhillyPhilly_4:

(Start: 8 @1660 has 42 MA's), (11, 1594), (12, 1591), (15, 1468), (21, 1423),

Gene: Pioneer3_3 Start: 1329, Stop: 979, Start Num: 8

Candidate Starts for Pioneer3_3:

(Start: 8 @1329 has 42 MA's), (12, 1257), (15, 1134), (16, 1116), (19, 1071), (22, 1062), (27, 1002),

Gene: Pioneer3_114 Start: 61092, Stop: 60742, Start Num: 8

Candidate Starts for Pioneer3_114:

(Start: 8 @61092 has 42 MA's), (12, 61020), (15, 60897), (16, 60879), (19, 60834), (22, 60825), (27, 60765),

Gene: Platte_113 Start: 60877, Stop: 60527, Start Num: 9

Candidate Starts for Platte_113:

(Start: 9 @60877 has 2 MA's), (12, 60805), (15, 60682), (19, 60619), (22, 60610), (27, 60550),

Gene: Platte_3 Start: 1329, Stop: 979, Start Num: 9

Candidate Starts for Platte_3:

(Start: 9 @1329 has 2 MA's), (12, 1257), (15, 1134), (19, 1071), (22, 1062), (27, 1002),

Gene: Roman_119 Start: 62530, Stop: 62246, Start Num: 8

Candidate Starts for Roman_119:

(Start: 8 @62530 has 42 MA's), (11, 62464), (12, 62461), (15, 62338), (21, 62293),

Gene: Roman_3 Start: 1443, Stop: 1159, Start Num: 8

Candidate Starts for Roman_3:

(Start: 8 @1443 has 42 MA's), (11, 1377), (12, 1374), (15, 1251), (21, 1206),

Gene: RunningBrook_123 Start: 61695, Stop: 61417, Start Num: 10

Candidate Starts for RunningBrook_123:

(Start: 8 @61719 has 42 MA's), (10, 61695), (11, 61653), (12, 61650), (15, 61527), (18, 61476),

Gene: RunningBrook_5 Start: 1605, Stop: 1327, Start Num: 10

Candidate Starts for RunningBrook_5:

(Start: 8 @1629 has 42 MA's), (10, 1605), (11, 1563), (12, 1560), (15, 1437), (18, 1386),

Gene: StevieWelch_5 Start: 1609, Stop: 1307, Start Num: 8

Candidate Starts for StevieWelch_5:

(Start: 8 @1609 has 42 MA's), (10, 1585), (11, 1543), (12, 1540), (14, 1477), (18, 1366),

Gene: StevieWelch_123 Start: 61855, Stop: 61553, Start Num: 8

Candidate Starts for StevieWelch_123:

(Start: 8 @61855 has 42 MA's), (10, 61831), (11, 61789), (12, 61786), (14, 61723), (18, 61612),

Gene: Tandem_114 Start: 61172, Stop: 60822, Start Num: 8

Candidate Starts for Tandem_114:

(Start: 8 @61172 has 42 MA's), (12, 61100), (15, 60977), (16, 60959), (19, 60914), (22, 60905), (27, 60845),

Gene: Tandem_3 Start: 1329, Stop: 979, Start Num: 8

Candidate Starts for Tandem_3:

(Start: 8 @1329 has 42 MA's), (12, 1257), (15, 1134), (16, 1116), (19, 1071), (22, 1062), (27, 1002),

Gene: Welcome_5 Start: 1723, Stop: 1412, Start Num: 8

Candidate Starts for Welcome_5:

(Start: 8 @1723 has 42 MA's), (10, 1699), (11, 1657), (12, 1654), (14, 1591), (24, 1444),

Gene: Welcome_122 Start: 61867, Stop: 61556, Start Num: 8

Candidate Starts for Welcome_122:

(Start: 8 @61867 has 42 MA's), (10, 61843), (11, 61801), (12, 61798), (14, 61735), (24, 61588),

Gene: Wolfstar_120 Start: 62761, Stop: 62459, Start Num: 8

Candidate Starts for Wolfstar_120:

(6, 62827), (Start: 8 @62761 has 42 MA's), (12, 62689), (14, 62626),

Gene: Wolfstar_4 Start: 1620, Stop: 1318, Start Num: 8

Candidate Starts for Wolfstar_4:

(6, 1686), (Start: 8 @1620 has 42 MA's), (12, 1548), (14, 1485),

Gene: Yuma_118 Start: 60670, Stop: 60368, Start Num: 8

Candidate Starts for Yuma_118:

(Start: 8 @60670 has 42 MA's), (10, 60646), (11, 60604), (12, 60601), (15, 60478), (18, 60427),

Gene: Yuma_5 Start: 1619, Stop: 1317, Start Num: 8

Candidate Starts for Yuma_5:

(Start: 8 @1619 has 42 MA's), (10, 1595), (11, 1553), (12, 1550), (15, 1427), (18, 1376),