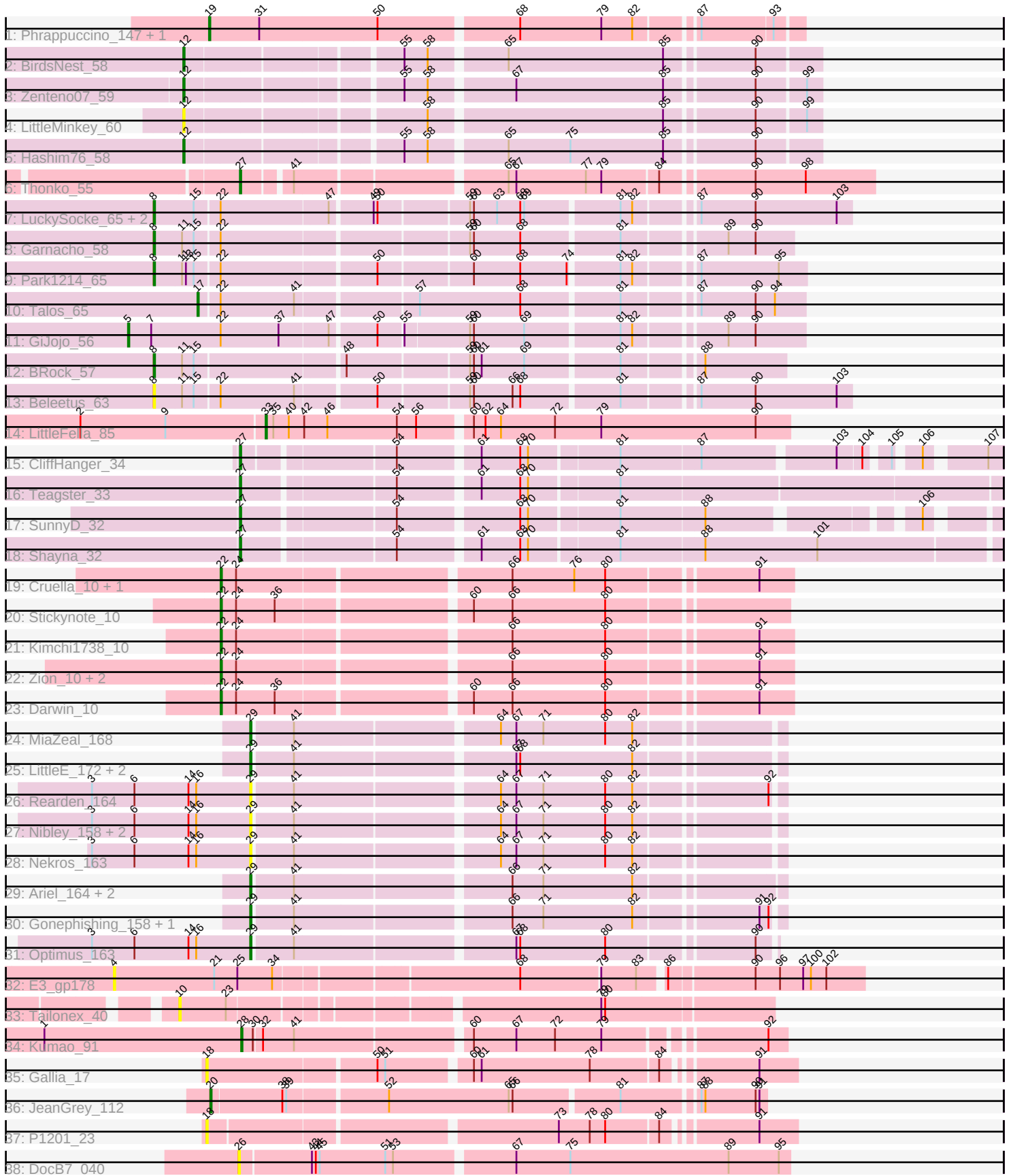


Pham 330941



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 330941 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330941 has 51 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Phrappuccino_147, Settecandela_147
- Track 2 : BirdsNest_58
- Track 3 : Zenteno07_59
- Track 4 : LittleMinkey_60
- Track 5 : Hashim76_58
- Track 6 : Thonko_55
- Track 7 : LuckySocke_65, Alone3_66, Fudan_63
- Track 8 : Garnacho_58
- Track 9 : Park1214_65
- Track 10 : Talos_65
- Track 11 : GiJojo_56
- Track 12 : BRock_57
- Track 13 : Beleetus_63
- Track 14 : LittleFella_85
- Track 15 : CliffHanger_34
- Track 16 : Teagster_33
- Track 17 : SunnyD_32
- Track 18 : Shayna_32
- Track 19 : Cruella_10, C3PO_10
- Track 20 : Stickynote_10
- Track 21 : Kimchi1738_10
- Track 22 : Zion_10, PotatoChip_10, PeteyPab_10
- Track 23 : Darwin_10
- Track 24 : MiaZeal_168
- Track 25 : LittleE_172, Lucky2013_161, Porcelain_165
- Track 26 : Rearden_164
- Track 27 : Nibley_158, BronnyJames_160, Shaboozey_163
- Track 28 : Nekros_163
- Track 29 : Ariel_164, Superphikiman_162, Courthouse_161
- Track 30 : Gonephishing_158, Squint_159
- Track 31 : Optimus_163
- Track 32 : E3_gp178
- Track 33 : Tailonex_40
- Track 34 : Kumao_91
- Track 35 : Gallia_17
- Track 36 : JeanGrey_112
- Track 37 : P1201_23

- Track 38 : DocB7_040

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

The start number called the most often in the published annotations is 29, it was called in 9 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel_164, BronnyJames_160, Courthouse_161, Gonephishing_158, LittleE_172, Lucky2013_161, MiaZeal_168, Nekros_163, Nibley_158, Optimus_163, Porcelain_165, Rearden_164, Shaboozey_163, Squint_159, Superphikiman_162,

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

•

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

- Alone3_66, BRock_57, Beleetus_63, BirdsNest_58, C3PO_10, CliffHanger_34, Cruella_10, Darwin_10, DocB7_040, E3_gp178, Fudan_63, Gallia_17, Garnacho_58, GiJojo_56, Hashim76_58, JeanGrey_112, Kimchi1738_10, Kumao_91, LittleFella_85, LittleMinkey_60, LuckySocke_65, P1201_23, Park1214_65, PeteyPab_10, Phrappuccino_147, PotatoChip_10, Settecandela_147, Shayna_32, Stickynote_10, SunnyD_32, Tailonex_40, Talos_65, Teagster_33, Thonko_55, Zenteno07_59, Zion_10,

Summary by start number:

Start 4:

- Found in 1 of 51 (2.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3_gp178 (singleton),

Start 5:

- Found in 1 of 51 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GiJojo_56 (BS),

Start 8:

- Found in 7 of 51 (13.7%) of genes in pham
- Manual Annotations of this start: 6 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alone3_66 (BS), BRock_57 (BS), Beleetus_63 (BS), Fudan_63 (BS), Garnacho_58 (BS), LuckySocke_65 (BS), Park1214_65 (BS),

Start 10:

- Found in 1 of 51 (2.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Tailonex_40 (singleton),

Start 12:

- Found in 4 of 51 (7.8%) of genes in pham
- Manual Annotations of this start: 3 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BirdsNest_58 (B13), Hashim76_58 (B13), LittleMinkey_60 (B13), Zenteno07_59 (B13),

Start 17:

- Found in 1 of 51 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Talos_65 (BS),

Start 18:

- Found in 2 of 51 (3.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gallia_17 (singleton), P1201_23 (singleton),

Start 19:

- Found in 2 of 51 (3.9%) of genes in pham
- Manual Annotations of this start: 2 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phrappuccino_147 (AA), Settecandela_147 (AA),

Start 20:

- Found in 1 of 51 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JeanGrey_112 (singleton),

Start 22:

- Found in 16 of 51 (31.4%) of genes in pham
- Manual Annotations of this start: 8 of 38
- Called 50.0% of time when present
- Phage (with cluster) where this start called: C3PO_10 (EN), Cruella_10 (EN), Darwin_10 (EN), Kimchi1738_10 (EN), PeteyPab_10 (EN), PotatoChip_10 (EN), Stickynote_10 (EN), Zion_10 (EN),

Start 26:

- Found in 1 of 51 (2.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DocB7_040 (singleton),

Start 27:

- Found in 5 of 51 (9.8%) of genes in pham
- Manual Annotations of this start: 5 of 38
- Called 100.0% of time when present

- Phage (with cluster) where this start called: CliffHanger_34 (EB), Shayna_32 (EB), SunnyD_32 (EB), Teagster_33 (EB), Thonko_55 (B8),

Start 28:

- Found in 1 of 51 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao_91 (singleton),

Start 29:

- Found in 15 of 51 (29.4%) of genes in pham
- Manual Annotations of this start: 9 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel_164 (J), BronnyJames_160 (J), Courthouse_161 (J), Gonephishing_158 (J), LittleE_172 (J), Lucky2013_161 (J), MiaZeal_168 (J), Nekros_163 (J), Nibley_158 (J), Optimus_163 (J), Porcelain_165 (J), Rearden_164 (J), Shaboozey_163 (J), Squint_159 (J), Superphikiman_162 (J),

Start 33:

- Found in 1 of 51 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LittleFella_85 (DG2),

Summary by clusters:

There are 9 clusters represented in this pham: AA, singleton, EN, J, EB, DG2, B13, BS, B8,

Info for manual annotations of cluster AA:

- Start number 19 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster B13:

- Start number 12 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B8:

- Start number 27 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster BS:

- Start number 5 was manually annotated 1 time for cluster BS.
- Start number 8 was manually annotated 6 times for cluster BS.
- Start number 17 was manually annotated 1 time for cluster BS.

Info for manual annotations of cluster DG2:

- Start number 33 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster EB:

- Start number 27 was manually annotated 4 times for cluster EB.

Info for manual annotations of cluster EN:

- Start number 22 was manually annotated 8 times for cluster EN.

Info for manual annotations of cluster J:

- Start number 29 was manually annotated 9 times for cluster J.

Gene Information:

Gene: Alone3_66 Start: 23782, Stop: 24288, Start Num: 8

Candidate Starts for Alone3_66:

(Start: 8 @23782 has 6 MA's), (15, 23812), (Start: 22 @23830 has 8 MA's), (47, 23911), (49, 23941), (50, 23944), (59, 24010), (60, 24013), (63, 24031), (68, 24049), (69, 24052), (81, 24121), (82, 24130), (87, 24172), (90, 24214), (103, 24277),

Gene: Ariel_164 Start: 83788, Stop: 84171, Start Num: 29

Candidate Starts for Ariel_164:

(Start: 29 @83788 has 9 MA's), (41, 83818), (66, 83974), (71, 83998), (82, 84067),

Gene: BRock_57 Start: 20332, Stop: 20787, Start Num: 8

Candidate Starts for BRock_57:

(Start: 8 @20332 has 6 MA's), (11, 20353), (15, 20362), (48, 20470), (59, 20560), (60, 20563), (61, 20569), (69, 20602), (81, 20671), (88, 20725),

Gene: Beleetus_63 Start: 22462, Stop: 22968, Start Num: 8

Candidate Starts for Beleetus_63:

(Start: 8 @22462 has 6 MA's), (11, 22483), (15, 22492), (Start: 22 @22510 has 8 MA's), (41, 22567), (50, 22624), (59, 22690), (60, 22693), (66, 22723), (68, 22729), (81, 22801), (87, 22852), (90, 22894), (103, 22957),

Gene: BirdsNest_58 Start: 48152, Stop: 47700, Start Num: 12

Candidate Starts for BirdsNest_58:

(Start: 12 @48152 has 3 MA's), (55, 48002), (58, 47984), (65, 47930), (85, 47810), (90, 47747),

Gene: BronnyJames_160 Start: 84592, Stop: 84972, Start Num: 29

Candidate Starts for BronnyJames_160:

(3, 84469), (6, 84502), (14, 84544), (16, 84550), (Start: 29 @84592 has 9 MA's), (41, 84622), (64, 84769), (67, 84781), (71, 84802), (80, 84850), (82, 84871),

Gene: C3PO_10 Start: 5555, Stop: 5971, Start Num: 22

Candidate Starts for C3PO_10:

(Start: 22 @5555 has 8 MA's), (24, 5567), (66, 5765), (76, 5813), (80, 5837), (91, 5945),

Gene: CliffHanger_34 Start: 22466, Stop: 22987, Start Num: 27

Candidate Starts for CliffHanger_34:

(Start: 27 @22466 has 5 MA's), (54, 22574), (61, 22631), (68, 22661), (70, 22667), (81, 22733), (87, 22793), (103, 22889), (104, 22907), (105, 22922), (106, 22937), (107, 22976),

Gene: Courthouse_161 Start: 84232, Stop: 84615, Start Num: 29

Candidate Starts for Courthouse_161:

(Start: 29 @84232 has 9 MA's), (41, 84262), (66, 84418), (71, 84442), (82, 84511),

Gene: Cruella_10 Start: 5555, Stop: 5971, Start Num: 22

Candidate Starts for Cruella_10:

(Start: 22 @5555 has 8 MA's), (24, 5567), (66, 5765), (76, 5813), (80, 5837), (91, 5945),

Gene: Darwin_10 Start: 5554, Stop: 5970, Start Num: 22

Candidate Starts for Darwin_10:

(Start: 22 @5554 has 8 MA's), (24, 5566), (36, 5596), (60, 5734), (66, 5764), (80, 5836), (91, 5944),

Gene: DocB7_040 Start: 39094, Stop: 38681, Start Num: 26

Candidate Starts for DocB7_040:

(26, 39094), (43, 39043), (44, 39040), (45, 39037), (51, 38986), (53, 38980), (67, 38893), (75, 38851), (89, 38728), (95, 38689),

Gene: E3_gp178 Start: 119909, Stop: 120457, Start Num: 4

Candidate Starts for E3_gp178:

(4, 119909), (21, 119987), (25, 120005), (34, 120032), (68, 120209), (79, 120269), (83, 120296), (86, 120311), (90, 120374), (96, 120392), (97, 120410), (100, 120416), (102, 120428),

Gene: Fudan_63 Start: 23143, Stop: 23649, Start Num: 8

Candidate Starts for Fudan_63:

(Start: 8 @23143 has 6 MA's), (15, 23173), (Start: 22 @23191 has 8 MA's), (47, 23272), (49, 23302), (50, 23305), (59, 23371), (60, 23374), (63, 23392), (68, 23410), (69, 23413), (81, 23482), (82, 23491), (87, 23533), (90, 23575), (103, 23638),

Gene: Gallia_17 Start: 9538, Stop: 9963, Start Num: 18

Candidate Starts for Gallia_17:

(18, 9538), (50, 9664), (51, 9670), (60, 9730), (61, 9736), (78, 9820), (84, 9871), (91, 9934),

Gene: Garnacho_58 Start: 22022, Stop: 22483, Start Num: 8

Candidate Starts for Garnacho_58:

(Start: 8 @22022 has 6 MA's), (11, 22043), (15, 22052), (Start: 22 @22070 has 8 MA's), (59, 22250), (60, 22253), (68, 22289), (81, 22361), (89, 22433), (90, 22454),

Gene: GiJojo_56 Start: 22495, Stop: 22989, Start Num: 5

Candidate Starts for GiJojo_56:

(Start: 5 @22495 has 1 MA's), (7, 22513), (Start: 22 @22567 has 8 MA's), (37, 22612), (47, 22648), (50, 22681), (55, 22699), (59, 22747), (60, 22750), (69, 22789), (81, 22858), (82, 22867), (89, 22930), (90, 22951),

Gene: Gonephishing_158 Start: 85692, Stop: 86072, Start Num: 29

Candidate Starts for Gonephishing_158:

(Start: 29 @85692 has 9 MA's), (41, 85722), (66, 85878), (71, 85902), (82, 85971), (91, 86058), (92, 86064),

Gene: Hashim76_58 Start: 48722, Stop: 48270, Start Num: 12

Candidate Starts for Hashim76_58:

(Start: 12 @48722 has 3 MA's), (55, 48572), (58, 48554), (65, 48500), (75, 48452), (85, 48380), (90, 48317),

Gene: JeanGrey_112 Start: 87695, Stop: 88102, Start Num: 20

Candidate Starts for JeanGrey_112:

(Start: 20 @87695 has 1 MA's), (38, 87749), (39, 87752), (52, 87824), (65, 87917), (66, 87920), (81, 87998), (87, 88052), (88, 88055), (90, 88094), (91, 88097),

Gene: Kimchi1738_10 Start: 5556, Stop: 5972, Start Num: 22

Candidate Starts for Kimchi1738_10:

(Start: 22 @5556 has 8 MA's), (24, 5568), (66, 5766), (80, 5838), (91, 5946),

Gene: Kumao_91 Start: 57065, Stop: 57454, Start Num: 28

Candidate Starts for Kumao_91:

(1, 56912), (Start: 28 @57065 has 1 MA's), (30, 57074), (32, 57080), (41, 57104), (60, 57230), (67, 57263), (72, 57293), (79, 57329), (92, 57440),

Gene: LittleE_172 Start: 88564, Stop: 88944, Start Num: 29

Candidate Starts for LittleE_172:

(Start: 29 @88564 has 9 MA's), (41, 88594), (67, 88753), (68, 88756), (82, 88843),

Gene: LittleFella_85 Start: 60323, Stop: 60721, Start Num: 33

Candidate Starts for LittleFella_85:

(2, 60182), (9, 60248), (Start: 33 @60323 has 1 MA's), (35, 60329), (40, 60341), (42, 60353), (46, 60371), (54, 60425), (56, 60440), (60, 60476), (62, 60485), (64, 60497), (72, 60539), (79, 60575), (90, 60695),

Gene: LittleMinkey_60 Start: 48361, Stop: 47909, Start Num: 12

Candidate Starts for LittleMinkey_60:

(Start: 12 @48361 has 3 MA's), (58, 48193), (85, 48019), (90, 47956), (99, 47920),

Gene: Lucky2013_161 Start: 84061, Stop: 84441, Start Num: 29

Candidate Starts for Lucky2013_161:

(Start: 29 @84061 has 9 MA's), (41, 84091), (67, 84250), (68, 84253), (82, 84340),

Gene: LuckySocke_65 Start: 23092, Stop: 23598, Start Num: 8

Candidate Starts for LuckySocke_65:

(Start: 8 @23092 has 6 MA's), (15, 23122), (Start: 22 @23140 has 8 MA's), (47, 23221), (49, 23251), (50, 23254), (59, 23320), (60, 23323), (63, 23341), (68, 23359), (69, 23362), (81, 23431), (82, 23440), (87, 23482), (90, 23524), (103, 23587),

Gene: MiaZeal_168 Start: 85208, Stop: 85588, Start Num: 29

Candidate Starts for MiaZeal_168:

(Start: 29 @85208 has 9 MA's), (41, 85238), (64, 85385), (67, 85397), (71, 85418), (80, 85466), (82, 85487),

Gene: Nekros_163 Start: 87008, Stop: 87388, Start Num: 29

Candidate Starts for Nekros_163:

(3, 86885), (6, 86918), (14, 86960), (16, 86966), (Start: 29 @87008 has 9 MA's), (41, 87038), (64, 87185), (67, 87197), (71, 87218), (80, 87266), (82, 87287),

Gene: Nibley_158 Start: 84169, Stop: 84549, Start Num: 29

Candidate Starts for Nibley_158:

(3, 84046), (6, 84079), (14, 84121), (16, 84127), (Start: 29 @84169 has 9 MA's), (41, 84199), (64, 84346), (67, 84358), (71, 84379), (80, 84427), (82, 84448),

Gene: Optimus_163 Start: 87886, Stop: 88260, Start Num: 29

Candidate Starts for Optimus_163:

(3, 87763), (6, 87796), (14, 87838), (16, 87844), (Start: 29 @87886 has 9 MA's), (41, 87916), (67, 88075), (68, 88078), (80, 88144), (90, 88249),

Gene: P1201_23 Start: 11182, Stop: 11604, Start Num: 18

Candidate Starts for P1201_23:

(18, 11182), (73, 11437), (78, 11461), (80, 11473), (84, 11512), (91, 11575),

Gene: Park1214_65 Start: 23564, Stop: 24034, Start Num: 8

Candidate Starts for Park1214_65:

(Start: 8 @23564 has 6 MA's), (11, 23585), (13, 23588), (15, 23594), (Start: 22 @23612 has 8 MA's), (50, 23726), (60, 23795), (68, 23831), (74, 23867), (81, 23903), (82, 23912), (87, 23954), (95, 24014),

Gene: PeteyPab_10 Start: 5532, Stop: 5948, Start Num: 22

Candidate Starts for PeteyPab_10:

(Start: 22 @5532 has 8 MA's), (24, 5544), (66, 5742), (80, 5814), (91, 5922),

Gene: Phrappuccino_147 Start: 102698, Stop: 103132, Start Num: 19

Candidate Starts for Phrappuccino_147:

(Start: 19 @102698 has 2 MA's), (31, 102737), (50, 102827), (68, 102929), (79, 102992), (82, 103016), (87, 103058), (93, 103112),

Gene: Porcelain_165 Start: 85007, Stop: 85387, Start Num: 29

Candidate Starts for Porcelain_165:

(Start: 29 @85007 has 9 MA's), (41, 85037), (67, 85196), (68, 85199), (82, 85286),

Gene: PotatoChip_10 Start: 5534, Stop: 5950, Start Num: 22

Candidate Starts for PotatoChip_10:

(Start: 22 @5534 has 8 MA's), (24, 5546), (66, 5744), (80, 5816), (91, 5924),

Gene: Rearden_164 Start: 85395, Stop: 85775, Start Num: 29

Candidate Starts for Rearden_164:

(3, 85272), (6, 85305), (14, 85347), (16, 85353), (Start: 29 @85395 has 9 MA's), (41, 85425), (64, 85572), (67, 85584), (71, 85605), (80, 85653), (82, 85674), (92, 85767),

Gene: Settecandela_147 Start: 102698, Stop: 103132, Start Num: 19

Candidate Starts for Settecandela_147:

(Start: 19 @102698 has 2 MA's), (31, 102737), (50, 102827), (68, 102929), (79, 102992), (82, 103016), (87, 103058), (93, 103112),

Gene: Shaboozey_163 Start: 84613, Stop: 84993, Start Num: 29

Candidate Starts for Shaboozey_163:

(3, 84490), (6, 84523), (14, 84565), (16, 84571), (Start: 29 @84613 has 9 MA's), (41, 84643), (64, 84790), (67, 84802), (71, 84823), (80, 84871), (82, 84892),

Gene: Shayna_32 Start: 22699, Stop: 23253, Start Num: 27

Candidate Starts for Shayna_32:

(Start: 27 @22699 has 5 MA's), (54, 22810), (61, 22867), (68, 22897), (70, 22903), (81, 22969), (88, 23032), (101, 23119),

Gene: Squint_159 Start: 84873, Stop: 85253, Start Num: 29

Candidate Starts for Squint_159:

(Start: 29 @84873 has 9 MA's), (41, 84903), (66, 85059), (71, 85083), (82, 85152), (91, 85239), (92, 85245),

Gene: Stickynote_10 Start: 5587, Stop: 6000, Start Num: 22

Candidate Starts for Stickynote_10:

(Start: 22 @5587 has 8 MA's), (24, 5599), (36, 5629), (60, 5767), (66, 5797), (80, 5869),

Gene: SunnyD_32 Start: 22741, Stop: 23256, Start Num: 27

Candidate Starts for SunnyD_32:

(Start: 27 @22741 has 5 MA's), (54, 22852), (68, 22939), (70, 22945), (81, 23011), (88, 23074), (106, 23212),

Gene: Superphikiman_162 Start: 83928, Stop: 84311, Start Num: 29

Candidate Starts for Superphikiman_162:

(Start: 29 @83928 has 9 MA's), (41, 83958), (66, 84114), (71, 84138), (82, 84207),

Gene: Tailonex_40 Start: 33261, Stop: 32836, Start Num: 10

Candidate Starts for Tailonex_40:

(10, 33261), (23, 33225), (79, 32964), (80, 32961),

Gene: Talos_65 Start: 22927, Stop: 23367, Start Num: 17

Candidate Starts for Talos_65:

(Start: 17 @22927 has 1 MA's), (Start: 22 @22942 has 8 MA's), (41, 22999), (57, 23086), (68, 23164), (81, 23236), (87, 23287), (90, 23329), (94, 23344),

Gene: Teagster_33 Start: 23532, Stop: 24086, Start Num: 27

Candidate Starts for Teagster_33:

(Start: 27 @23532 has 5 MA's), (54, 23643), (61, 23700), (68, 23730), (70, 23736), (81, 23802),

Gene: Thonko_55 Start: 46989, Stop: 46534, Start Num: 27

Candidate Starts for Thonko_55:

(Start: 27 @46989 has 5 MA's), (41, 46956), (65, 46806), (67, 46800), (77, 46746), (79, 46734), (84, 46692), (90, 46626), (98, 46587),

Gene: Zenteno07_59 Start: 48384, Stop: 47932, Start Num: 12

Candidate Starts for Zenteno07_59:

(Start: 12 @48384 has 3 MA's), (55, 48234), (58, 48216), (67, 48156), (85, 48042), (90, 47979), (99, 47943),

Gene: Zion_10 Start: 5532, Stop: 5948, Start Num: 22

Candidate Starts for Zion_10:

(Start: 22 @5532 has 8 MA's), (24, 5544), (66, 5742), (80, 5814), (91, 5922),