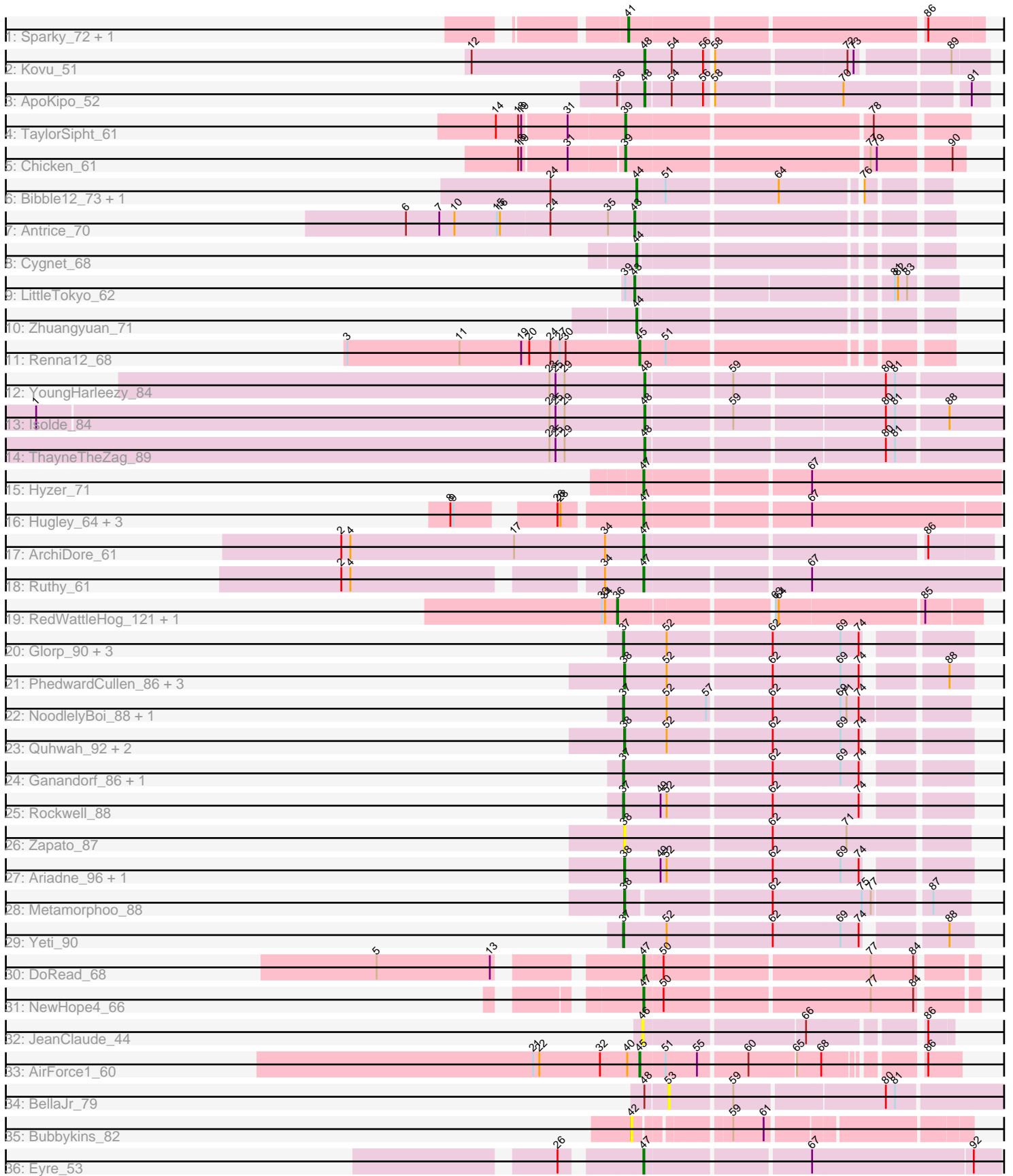


Pham 311675



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 311675 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311675 has 53 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Sparky_72, Farewell_73
- Track 2 : Kovu_51
- Track 3 : ApoKipo_52
- Track 4 : TaylorSipht_61
- Track 5 : Chicken_61
- Track 6 : Bibble12_73, Cote_73
- Track 7 : Antrice_70
- Track 8 : Cygnet_68
- Track 9 : LittleTokyo_62
- Track 10 : Zhuangyuan_71
- Track 11 : Renna12_68
- Track 12 : YoungHarleezy_84
- Track 13 : Isolde_84
- Track 14 : ThayneTheZag_89
- Track 15 : Hyzer_71
- Track 16 : Hugley_64, Herod_66, Bosnia_63, Jalleen_63
- Track 17 : ArchiDore_61
- Track 18 : Ruthy_61
- Track 19 : RedWattleHog_121, Stormageddon_120
- Track 20 : Glorp_90, PierreOrion_88, Phrancesco_89, Lucretia_88
- Track 21 : PhedwardCullen_86, Phorgeous_87, Honeyfin_87, CrazyRich_86
- Track 22 : NoodlelyBoi_88, SirFrank_87
- Track 23 : Quhwah_92, EarickHC_89, KaiHaiDragon_89
- Track 24 : Ganandorf_86, Antares_89
- Track 25 : Rockwell_88
- Track 26 : Zapato_87
- Track 27 : Ariadne_96, Smarties_96
- Track 28 : Metamorphoo_88
- Track 29 : Yeti_90
- Track 30 : DoRead_68
- Track 31 : NewHope4_66
- Track 32 : JeanClaude_44
- Track 33 : AirForce1_60
- Track 34 : BellaJr_79
- Track 35 : Bubbykins_82
- Track 36 : Eyre_53

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

The start number called the most often in the published annotations is 38, it was called in 10 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariadne_96, CrazyRich_86, EarickHC_89, Honeyfin_87, KaiHaiDragon_89, Metamorphoo_88, PhedwardCullen_86, Phorgeous_87, Quhwah_92, Smarties_96, Zapato_87,

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

-

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

- AirForce1_60, Antares_89, Antrice_70, ApoKipo_52, ArchiDore_61, BellaJr_79, Bibble12_73, Bosnia_63, Bubbykins_82, Chicken_61, Cote_73, Cygnet_68, DoRead_68, Eyre_53, Farewell_73, Ganandorf_86, Glorp_90, Herod_66, Hugley_64, Hyzer_71, Isolde_84, Jalleen_63, JeanClaude_44, Kovu_51, LittleTokyo_62, Lucretia_88, NewHope4_66, NoodlelyBoi_88, Phrancesco_89, PierreOrion_88, RedWattleHog_121, Renna12_68, Rockwell_88, Ruthy_61, SirFrank_87, Sparky_72, Stormageddon_120, TaylorSipht_61, ThayneTheZag_89, Yeti_90, YoungHarleezy_84, Zhuangyuan_71,

Summary by start number:

Start 36:

- Found in 3 of 53 (5.7%) of genes in pham
- Manual Annotations of this start: 2 of 44
- Called 66.7% of time when present
- Phage (with cluster) where this start called: RedWattleHog_121 (DX), Stormageddon_120 (DX),

Start 37:

- Found in 10 of 53 (18.9%) of genes in pham
- Manual Annotations of this start: 8 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares_89 (EC), Ganandorf_86 (EC), Glorp_90 (EC), Lucretia_88 (EC), NoodlelyBoi_88 (EC), Phrancesco_89 (EC), PierreOrion_88 (EC), Rockwell_88 (EC), SirFrank_87 (EC), Yeti_90 (EC),

Start 38:

- Found in 11 of 53 (20.8%) of genes in pham
- Manual Annotations of this start: 10 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariadne_96 (EC), CrazyRich_86 (EC), EarickHC_89 (EC), Honeyfin_87 (EC), KaiHaiDragon_89 (EC), Metamorphoo_88 (EC), PhedwardCullen_86 (EC), Phorgeous_87 (EC), Quhwah_92 (EC), Smarties_96 (EC), Zapato_87 (EC),

Start 39:

- Found in 3 of 53 (5.7%) of genes in pham
- Manual Annotations of this start: 2 of 44
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Chicken_61 (AS1), TaylorSipht_61 (AS1),

Start 41:

- Found in 2 of 53 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell_73 (AF), Sparky_72 (AF),

Start 42:

- Found in 1 of 53 (1.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bubbykins_82 (UNK),

Start 43:

- Found in 2 of 53 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antrice_70 (AS2), LittleTokyo_62 (AS2),

Start 44:

- Found in 4 of 53 (7.5%) of genes in pham
- Manual Annotations of this start: 3 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bibble12_73 (AS2), Cote_73 (AS2), Cygnet_68 (AS2), Zhuangyuan_71 (AS2),

Start 45:

- Found in 2 of 53 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AirForce1_60 (FL), Renna12_68 (AS3),

Start 46:

- Found in 1 of 53 (1.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JeanClaude_44 (FB),

Start 47:

- Found in 10 of 53 (18.9%) of genes in pham
- Manual Annotations of this start: 8 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArchiDore_61 (DW), Bosnia_63 (CZ1), DoRead_68 (F1), Eyre_53 (singleton), Herod_66 (CZ1), Hugley_64 (CZ1), Hyzer_71 (CZ1), Jalleen_63 (CZ2), NewHope4_66 (F1), Ruthy_61 (DW),

Start 48:

- Found in 6 of 53 (11.3%) of genes in pham

- Manual Annotations of this start: 5 of 44
- Called 83.3% of time when present
- Phage (with cluster) where this start called: ApoKipo_52 (AL), Isolde_84 (AY), Kovu_51 (AL), ThayneTheZag_89 (AY), YoungHarleezy_84 (AY),

Start 53:

- Found in 1 of 53 (1.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BellaJr_79 (FN),

Summary by clusters:

There are 17 clusters represented in this pham: AS3, AS2, singleton, AF, CZ2, F1, CZ1, AS1, EC, AL, FB, DX, AY, DW, UNK, FL, FN,

Info for manual annotations of cluster AF:

- Start number 41 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster AL:

- Start number 48 was manually annotated 2 times for cluster AL.

Info for manual annotations of cluster AS1:

- Start number 39 was manually annotated 2 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 43 was manually annotated 2 times for cluster AS2.
- Start number 44 was manually annotated 3 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 45 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster AY:

- Start number 48 was manually annotated 3 times for cluster AY.

Info for manual annotations of cluster CZ1:

- Start number 47 was manually annotated 3 times for cluster CZ1.

Info for manual annotations of cluster DW:

- Start number 47 was manually annotated 2 times for cluster DW.

Info for manual annotations of cluster DX:

- Start number 36 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster EC:

- Start number 37 was manually annotated 8 times for cluster EC.
- Start number 38 was manually annotated 10 times for cluster EC.

Info for manual annotations of cluster F1:

- Start number 47 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster FL:

•Start number 45 was manually annotated 1 time for cluster FL.

Gene Information:

Gene: AirForce1_60 Start: 39127, Stop: 39405, Start Num: 45

Candidate Starts for AirForce1_60:

(21, 39022), (22, 39028), (32, 39088), (40, 39115), (Start: 45 @39127 has 2 MA's), (51, 39151), (55, 39181), (60, 39226), (65, 39271), (68, 39295), (86, 39373),

Gene: Antares_89 Start: 52402, Stop: 52716, Start Num: 37

Candidate Starts for Antares_89:

(Start: 37 @52402 has 8 MA's), (62, 52543), (69, 52609), (74, 52627),

Gene: Antrice_70 Start: 37564, Stop: 37842, Start Num: 43

Candidate Starts for Antrice_70:

(6, 37342), (7, 37375), (10, 37390), (15, 37432), (16, 37435), (24, 37483), (35, 37540), (Start: 43 @37564 has 2 MA's),

Gene: ApoKipo_52 Start: 29546, Stop: 29857, Start Num: 48

Candidate Starts for ApoKipo_52:

(Start: 36 @29525 has 2 MA's), (Start: 48 @29546 has 5 MA's), (54, 29570), (56, 29600), (58, 29606), (70, 29726), (91, 29840),

Gene: ArchiDore_61 Start: 43561, Stop: 43887, Start Num: 47

Candidate Starts for ArchiDore_61:

(2, 43264), (4, 43273), (17, 43435), (34, 43525), (Start: 47 @43561 has 8 MA's), (86, 43825),

Gene: Ariadne_96 Start: 52784, Stop: 53098, Start Num: 38

Candidate Starts for Ariadne_96:

(Start: 38 @52784 has 10 MA's), (49, 52820), (52, 52826), (62, 52925), (69, 52991), (74, 53009),

Gene: BellaJr_79 Start: 46632, Stop: 46961, Start Num: 53

Candidate Starts for BellaJr_79:

(Start: 48 @46611 has 5 MA's), (53, 46632), (59, 46689), (80, 46830), (81, 46839),

Gene: Bibble12_73 Start: 37647, Stop: 37922, Start Num: 44

Candidate Starts for Bibble12_73:

(24, 37563), (Start: 44 @37647 has 3 MA's), (51, 37674), (64, 37779), (76, 37851),

Gene: Bosnia_63 Start: 44870, Stop: 45205, Start Num: 47

Candidate Starts for Bosnia_63:

(8, 44720), (9, 44723), (26, 44798), (28, 44801), (Start: 47 @44870 has 8 MA's), (67, 45023),

Gene: Bubbykins_82 Start: 52075, Stop: 52365, Start Num: 42

Candidate Starts for Bubbykins_82:

(42, 52075), (59, 52153), (61, 52183),

Gene: Chicken_61 Start: 38096, Stop: 38404, Start Num: 39

Candidate Starts for Chicken_61:
(18, 38000), (19, 38003), (31, 38045), (Start: 39 @38096 has 2 MA's), (77, 38321), (79, 38327), (90, 38393),

Gene: Cote_73 Start: 37990, Stop: 38265, Start Num: 44
Candidate Starts for Cote_73:
(24, 37906), (Start: 44 @37990 has 3 MA's), (51, 38017), (64, 38122), (76, 38194),

Gene: CrazyRich_86 Start: 51658, Stop: 51972, Start Num: 38
Candidate Starts for CrazyRich_86:
(Start: 38 @51658 has 10 MA's), (52, 51700), (62, 51799), (69, 51865), (74, 51883), (88, 51949),

Gene: Cygnet_68 Start: 37914, Stop: 38189, Start Num: 44
Candidate Starts for Cygnet_68:
(Start: 44 @37914 has 3 MA's),

Gene: DoRead_68 Start: 42042, Stop: 42344, Start Num: 47
Candidate Starts for DoRead_68:
(5, 41814), (13, 41925), (Start: 47 @42042 has 8 MA's), (50, 42060), (77, 42252), (84, 42294),

Gene: EarickHC_89 Start: 52032, Stop: 52346, Start Num: 38
Candidate Starts for EarickHC_89:
(Start: 38 @52032 has 10 MA's), (52, 52074), (62, 52173), (69, 52239), (74, 52257),

Gene: Eyre_53 Start: 35776, Stop: 36111, Start Num: 47
Candidate Starts for Eyre_53:
(26, 35710), (Start: 47 @35776 has 8 MA's), (67, 35929), (92, 36085),

Gene: Farewell_73 Start: 49038, Stop: 49364, Start Num: 41
Candidate Starts for Farewell_73:
(Start: 41 @49038 has 2 MA's), (86, 49311),

Gene: Ganandorf_86 Start: 51533, Stop: 51847, Start Num: 37
Candidate Starts for Ganandorf_86:
(Start: 37 @51533 has 8 MA's), (62, 51674), (69, 51740), (74, 51758),

Gene: Glorp_90 Start: 52154, Stop: 52468, Start Num: 37
Candidate Starts for Glorp_90:
(Start: 37 @52154 has 8 MA's), (52, 52196), (62, 52295), (69, 52361), (74, 52379),

Gene: Herod_66 Start: 45224, Stop: 45559, Start Num: 47
Candidate Starts for Herod_66:
(8, 45074), (9, 45077), (26, 45152), (28, 45155), (Start: 47 @45224 has 8 MA's), (67, 45377),

Gene: Honeyfin_87 Start: 51488, Stop: 51802, Start Num: 38
Candidate Starts for Honeyfin_87:
(Start: 38 @51488 has 10 MA's), (52, 51530), (62, 51629), (69, 51695), (74, 51713), (88, 51779),

Gene: Hugley_64 Start: 45204, Stop: 45539, Start Num: 47
Candidate Starts for Hugley_64:
(8, 45054), (9, 45057), (26, 45132), (28, 45135), (Start: 47 @45204 has 8 MA's), (67, 45357),

Gene: Hyzer_71 Start: 46977, Stop: 47315, Start Num: 47

Candidate Starts for Hyzer_71:
(Start: 47 @46977 has 8 MA's), (67, 47130),

Gene: Isolde_84 Start: 48274, Stop: 48624, Start Num: 48
Candidate Starts for Isolde_84:
(1, 47677), (23, 48181), (25, 48187), (29, 48196), (Start: 48 @48274 has 5 MA's), (59, 48352), (80, 48493), (81, 48502), (88, 48550),

Gene: Jalleen_63 Start: 39042, Stop: 39377, Start Num: 47
Candidate Starts for Jalleen_63:
(8, 38892), (9, 38895), (26, 38970), (28, 38973), (Start: 47 @39042 has 8 MA's), (67, 39195),

Gene: JeanClaude_44 Start: 26657, Stop: 26929, Start Num: 46
Candidate Starts for JeanClaude_44:
(46, 26657), (66, 26807), (86, 26906),

Gene: KaiHaiDragon_89 Start: 52032, Stop: 52346, Start Num: 38
Candidate Starts for KaiHaiDragon_89:
(Start: 38 @52032 has 10 MA's), (52, 52074), (62, 52173), (69, 52239), (74, 52257),

Gene: Kovu_51 Start: 29765, Stop: 30076, Start Num: 48
Candidate Starts for Kovu_51:
(12, 29594), (Start: 48 @29765 has 5 MA's), (54, 29792), (56, 29822), (58, 29828), (72, 29951), (73, 29957), (89, 30041),

Gene: LittleTokyo_62 Start: 35151, Stop: 35429, Start Num: 43
Candidate Starts for LittleTokyo_62:
(Start: 39 @35142 has 2 MA's), (Start: 43 @35151 has 2 MA's), (81, 35376), (82, 35379), (83, 35388),

Gene: Lucretia_88 Start: 52019, Stop: 52333, Start Num: 37
Candidate Starts for Lucretia_88:
(Start: 37 @52019 has 8 MA's), (52, 52061), (62, 52160), (69, 52226), (74, 52244),

Gene: Metamorphoo_88 Start: 52513, Stop: 52830, Start Num: 38
Candidate Starts for Metamorphoo_88:
(Start: 38 @52513 has 10 MA's), (62, 52648), (75, 52735), (77, 52744), (87, 52795),

Gene: NewHope4_66 Start: 42166, Stop: 42468, Start Num: 47
Candidate Starts for NewHope4_66:
(Start: 47 @42166 has 8 MA's), (50, 42184), (77, 42376), (84, 42418),

Gene: NoodlelyBoi_88 Start: 52313, Stop: 52636, Start Num: 37
Candidate Starts for NoodlelyBoi_88:
(Start: 37 @52313 has 8 MA's), (52, 52355), (57, 52394), (62, 52454), (69, 52520), (71, 52526), (74, 52538),

Gene: PhedwardCullen_86 Start: 51405, Stop: 51719, Start Num: 38
Candidate Starts for PhedwardCullen_86:
(Start: 38 @51405 has 10 MA's), (52, 51447), (62, 51546), (69, 51612), (74, 51630), (88, 51696),

Gene: Phorgeous_87 Start: 51529, Stop: 51843, Start Num: 38
Candidate Starts for Phorgeous_87:
(Start: 38 @51529 has 10 MA's), (52, 51571), (62, 51670), (69, 51736), (74, 51754), (88, 51820),

Gene: Phrancesco_89 Start: 52295, Stop: 52609, Start Num: 37

Candidate Starts for Phrancesco_89:

(Start: 37 @52295 has 8 MA's), (52, 52337), (62, 52436), (69, 52502), (74, 52520),

Gene: PierreOrion_88 Start: 52004, Stop: 52318, Start Num: 37

Candidate Starts for PierreOrion_88:

(Start: 37 @52004 has 8 MA's), (52, 52046), (62, 52145), (69, 52211), (74, 52229),

Gene: Quhwah_92 Start: 52589, Stop: 52903, Start Num: 38

Candidate Starts for Quhwah_92:

(Start: 38 @52589 has 10 MA's), (52, 52631), (62, 52730), (69, 52796), (74, 52814),

Gene: RedWattleHog_121 Start: 91759, Stop: 92091, Start Num: 36

Candidate Starts for RedWattleHog_121:

(33, 91744), (34, 91747), (Start: 36 @91759 has 2 MA's), (63, 91897), (64, 91900), (85, 92038),

Gene: Renna12_68 Start: 37756, Stop: 38031, Start Num: 45

Candidate Starts for Renna12_68:

(3, 37471), (11, 37582), (19, 37642), (20, 37648), (24, 37669), (27, 37678), (30, 37684), (Start: 45 @37756 has 2 MA's), (51, 37780),

Gene: Rockwell_88 Start: 52221, Stop: 52535, Start Num: 37

Candidate Starts for Rockwell_88:

(Start: 37 @52221 has 8 MA's), (49, 52257), (52, 52263), (62, 52362), (74, 52446),

Gene: Ruthy_61 Start: 43412, Stop: 43750, Start Num: 47

Candidate Starts for Ruthy_61:

(2, 43145), (4, 43154), (34, 43376), (Start: 47 @43412 has 8 MA's), (67, 43565),

Gene: SirFrank_87 Start: 51899, Stop: 52222, Start Num: 37

Candidate Starts for SirFrank_87:

(Start: 37 @51899 has 8 MA's), (52, 51941), (57, 51980), (62, 52040), (69, 52106), (71, 52112), (74, 52124),

Gene: Smarties_96 Start: 52781, Stop: 53095, Start Num: 38

Candidate Starts for Smarties_96:

(Start: 38 @52781 has 10 MA's), (49, 52817), (52, 52823), (62, 52922), (69, 52988), (74, 53006),

Gene: Sparky_72 Start: 50632, Stop: 50958, Start Num: 41

Candidate Starts for Sparky_72:

(Start: 41 @50632 has 2 MA's), (86, 50905),

Gene: Stormageddon_120 Start: 91693, Stop: 92025, Start Num: 36

Candidate Starts for Stormageddon_120:

(33, 91678), (34, 91681), (Start: 36 @91693 has 2 MA's), (63, 91831), (64, 91834), (85, 91972),

Gene: TaylorSipht_61 Start: 37405, Stop: 37719, Start Num: 39

Candidate Starts for TaylorSipht_61:

(14, 37285), (18, 37306), (19, 37309), (31, 37351), (Start: 39 @37405 has 2 MA's), (78, 37633),

Gene: ThayneTheZag_89 Start: 47969, Stop: 48319, Start Num: 48

Candidate Starts for ThayneTheZag_89:

(23, 47876), (25, 47882), (29, 47891), (Start: 48 @47969 has 5 MA's), (80, 48188), (81, 48197),

Gene: Yeti_90 Start: 51725, Stop: 52039, Start Num: 37

Candidate Starts for Yeti_90:

(Start: 37 @51725 has 8 MA's), (52, 51767), (62, 51866), (69, 51932), (74, 51950), (88, 52016),

Gene: YoungHarleezy_84 Start: 47912, Stop: 48262, Start Num: 48

Candidate Starts for YoungHarleezy_84:

(23, 47819), (25, 47825), (29, 47834), (Start: 48 @47912 has 5 MA's), (59, 47990), (80, 48131), (81, 48140),

Gene: Zapato_87 Start: 51752, Stop: 52078, Start Num: 38

Candidate Starts for Zapato_87:

(Start: 38 @51752 has 10 MA's), (62, 51893), (71, 51965),

Gene: Zhuangyuan_71 Start: 38148, Stop: 38423, Start Num: 44

Candidate Starts for Zhuangyuan_71:

(Start: 44 @38148 has 3 MA's),