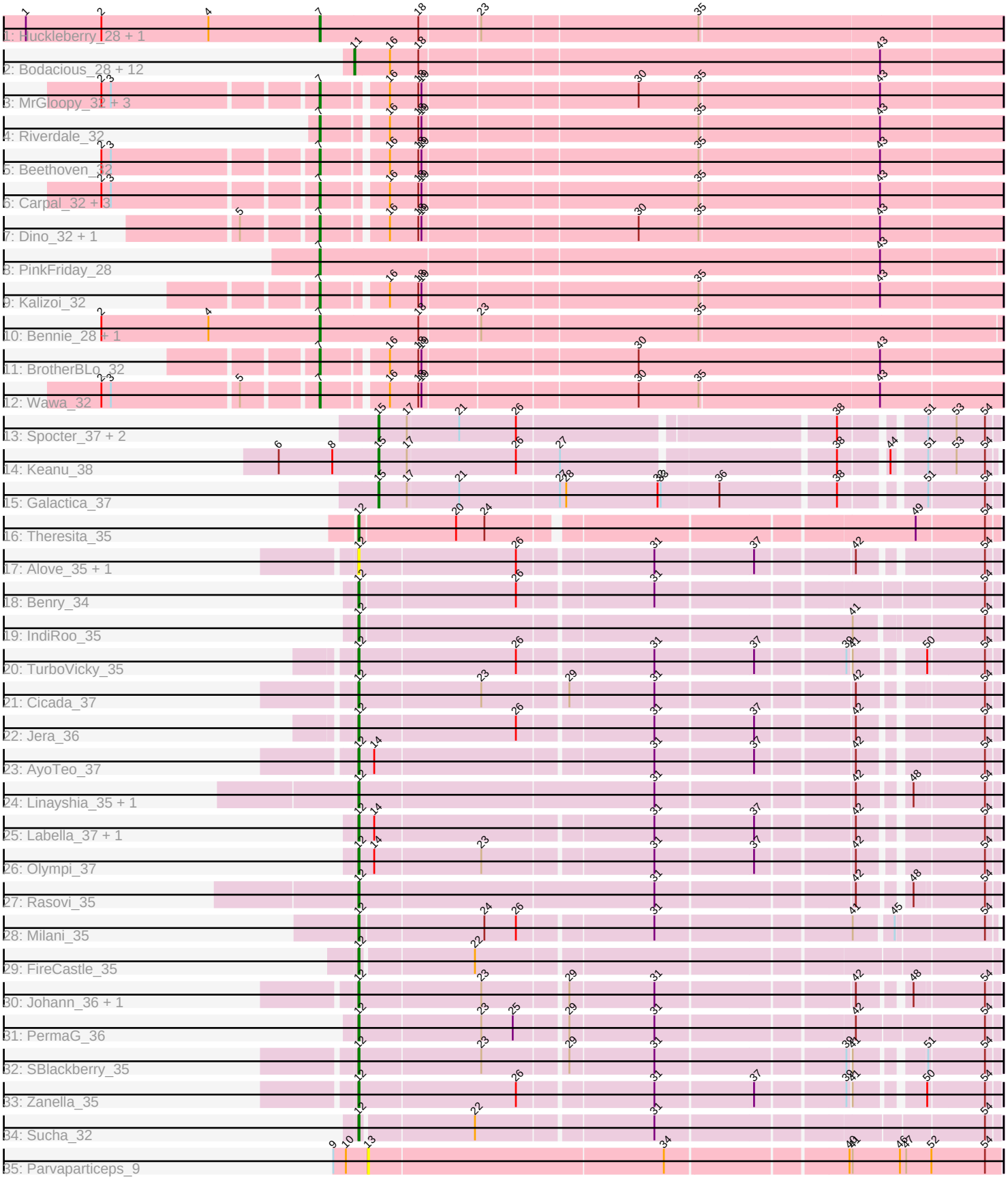
Pham 311607


1: Huckleberry_28 + 1
2: Bodacious_28 + 12
3: MrGloopy_32 + 3
4: Riverdale_32
5: Beethoven_32
6: Carpal_32 + 3
7: Dino_32 + 1
8: PinkFriday_28
9: Kalizoi_32
10: Bennie_28 + 1
11: BrotherBLo_32
12: Wawa_32
13: Spocter_37 + 2
14: Keanu_38
15: Galactica_37
16: Theresita_35
17: Alove_35 + 1
18: Benry_34
19: IndiRoo_35
20: TurboVicky_35
21: Cicada_37
22: Jera_36
23: AyoTeo_37
24: Linayshia_35 + 1
25: Labella_37 + 1
26: Olympi_37
27: Rasovi_35
28: Milani_35
29: FireCastle_35
30: Johann_36 + 1
31: PermaG_36
32: SBlackberry_35
33: Zanella_35
34: Sucha_32
35: Parvaparticeps_9

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 311607 Report

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

Pham number 311607 has 62 members, 5 are drafts.

Phages represented in each track:
• Track 1 : Huckleberry_28, Moki_28
• Track 2 : Bodacious_28, WonderBoy_27, Pterodactyl_28, DrRobert_28, LilStuart_28, Nancia_28, Christian_28, Makoto_28, OurGirlNessie_28, PitaDog_28, Lennox_28, ChewChew_28, CristinaYang_28
• Track 3 : MrGloopy_32, Jumboset_32, RAP15_32, Savage2526_32
• Track 4 : Riverdale_32
• Track 5 : Beethoven_32
• Track 6 : Carpal_32, Scuttle_32, Fluke_32, TattModd_32
• Track 7 : Dino_32, Zorro_32
• Track 8 : PinkFriday_28
• Track 9 : Kalizoi_32
• Track 10 : Bennie_28, HeadNerd_28
• Track 11 : BrotherBLo_32
• Track 12 : Wawa_32
• Track 13 : Spocter_37, Hiyaa_38, Kokushibo_39
• Track 14 : Keanu_38
• Track 15 : Galactica_37
• Track 16 : Theresita_35
• Track 17 : Alove_35, Rootkit7_35
• Track 18 : Benry_34
• Track 19 : IndiRoo_35
• Track 20 : TurboVicky_35
• Track 21 : Cicada_37
• Track 22 : Jera_36
• Track 23 : AyoTeo_37
• Track 24 : Linayshia_35, Htur_35
• Track 25 : Labella_37, Typher_37
• Track 26 : Olympi_37
• Track 27 : Rasovi_35
• Track 28 : Milani_35
• Track 29 : FireCastle_35
• Track 30 : Johann_36, Goodman_36
• Track 31 : PermaG_36
• Track 32 : SBlackberry_35
• Track 33 : Zanella_35
• Track 34 : Sucha_32
• Track 35 : Parvaparticeps_9

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

The start number called the most often in the published annotations is 12, it was called in 20 of the 57 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alove_35, AyoTeo_37, Benry_34, Cicada_37, FireCastle_35, Goodman_36, Htur_35, IndiRoo_35, Jera_36, Johann_36, Labella_37, Linayshia_35, Milani_35, Olympi_37, PermaG_36, Rasovi_35, Rootkit7_35, SBlackberry_35, Sucha_32, Theresita_35, TurboVicky_35, Typher_37, Zanella_35,

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

Genes that do not have the "Most Annotated" start:
• Beethoven_32, Bennie_28, Bodacious_28, BrotherBLo_32, Carpal_32, ChewChew_28, Christian_28, CristinaYang_28, Dino_32, DrRobert_28, Fluke_32, Galactica_37, HeadNerd_28, Hiyaa_38, Huckleberry_28, Jumboset_32, Kalizoi_32, Keanu_38, Kokushibo_39, Lennox_28, LilStuart_28, Makoto_28, Moki_28, MrGloopy_32, Nancia_28, OurGirlNessie_28, Parvaparticeps_9, PinkFriday_28, PitaDog_28, Pterodactyl_28, RAP15_32, Riverdale_32, Savage2526_32, Scuttle_32, Spocter_37, TattModd_32, Wawa_32, WonderBoy_27, Zorro_32,

Summary by start number:

Start 7:
• Found in 20 of 62 (32.3%) of genes in pham
• Manual Annotations of this start: 20 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Beethoven_32 (AK), Bennie_28 (AK), BrotherBLo_32 (AK), Carpal_32 (AK), Dino_32 (AK), Fluke_32 (AK), HeadNerd_28 (AK), Huckleberry_28 (AK), Jumboset_32 (AK), Kalizoi_32 (AK), Moki_28 (AK), MrGloopy_32 (AK), PinkFriday_28 (AK), RAP15_32 (AK), Riverdale_32 (AK), Savage2526_32 (AK), Scuttle_32 (AK), TattModd_32 (AK), Wawa_32 (AK), Zorro_32 (AK),

Start 11:
• Found in 13 of 62 (21.0%) of genes in pham
• Manual Annotations of this start: 13 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bodacious_28 (AK), ChewChew_28 (AK), Christian_28 (AK), CristinaYang_28 (AK), DrRobert_28 (AK), Lennox_28 (AK), LilStuart_28 (AK), Makoto_28 (AK), Nancia_28 (AK), OurGirlNessie_28 (AK), PitaDog_28 (AK), Pterodactyl_28 (AK), WonderBoy_27 (AK),

Start 12:
• Found in 23 of 62 (37.1%) of genes in pham
• Manual Annotations of this start: 20 of 57
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Alove_35 (EJ), AyoTeo_37 (EJ), Benry_34 (EJ), Cicada_37 (EJ), FireCastle_35 (EJ), Goodman_36 (EJ), Htur_35 (EJ), IndiRoo_35 (EJ), Jera_36 (EJ), Johann_36 (EJ), Labella_37 (EJ), Linayshia_35 (EJ), Milani_35 (EJ), Olympi_37 (EJ), PermaG_36 (EJ), Rasovi_35 (EJ), Rootkit7_35 (EJ), SBlackberry_35 (EJ), Sucha_32 (EJ), Theresita_35 (EA7), TurboVicky_35 (EJ), Typher_37 (EJ), Zanella_35 (EJ),

Start 13:
• Found in 1 of 62 (1.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Parvaparticeps_9 (UNK),

Start 15:
• Found in 5 of 62 (8.1%) of genes in pham
• Manual Annotations of this start: 4 of 57
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Galactica_37 (BQ), Hiyaa_38 (BQ), Keanu_38 (BQ), Kokushibo_39 (BQ), Spocter_37 (BQ),

Summary by clusters:

There are 5 clusters represented in this pham: AK, UNK, BQ, EA7, EJ,

Info for manual annotations of cluster AK:
•Start number 7 was manually annotated 20 times for cluster AK.
•Start number 11 was manually annotated 13 times for cluster AK.

Info for manual annotations of cluster BQ:
•Start number 15 was manually annotated 4 times for cluster BQ.

Info for manual annotations of cluster EA7:
•Start number 12 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EJ:
•Start number 12 was manually annotated 19 times for cluster EJ.

Gene Information:

Gene: Alove_35 Start: 24954, Stop: 25508, Start Num: 12
Candidate Starts for Alove_35:
(Start: 12 @24954 has 20 MA's), (26, 25101), (31, 25221), (37, 25311), (42, 25395), (54, 25497),

Gene: AyoTeo_37 Start: 25078, Stop: 25632, Start Num: 12
Candidate Starts for AyoTeo_37:
(Start: 12 @25078 has 20 MA's), (14, 25093), (31, 25345), (37, 25435), (42, 25519), (54, 25621),

Gene: Beethoven_32 Start: 24069, Stop: 24686, Start Num: 7
Candidate Starts for Beethoven_32:

(2, 23880), (3, 23889), (Start: 7 @24069 has 20 MA's), (16, 24123), (18, 24150), (19, 24153), (35, 24405), (43, 24573),

Gene: Bennie_28 Start: 22502, Stop: 23128, Start Num: 7
Candidate Starts for Bennie_28:
(2, 22295), (4, 22397), (Start: 7 @22502 has 20 MA's), (18, 22595), (23, 22649), (35, 22850),

Gene: Benry_34 Start: 23284, Stop: 23847, Start Num: 12
Candidate Starts for Benry_34:
(Start: 12 @23284 has 20 MA's), (26, 23428), (31, 23548), (54, 23836),

Gene: Bodacious_28 Start: 22552, Stop: 23151, Start Num: 11
Candidate Starts for Bodacious_28:
(Start: 11 @22552 has 13 MA's), (16, 22585), (18, 22612), (43, 23038),

Gene: BrotherBLo_32 Start: 24075, Stop: 24695, Start Num: 7
Candidate Starts for BrotherBLo_32:
(Start: 7 @24075 has 20 MA's), (16, 24129), (18, 24156), (19, 24159), (30, 24354), (43, 24582),

Gene: Carpal_32 Start: 24076, Stop: 24693, Start Num: 7
Candidate Starts for Carpal_32:
(2, 23887), (3, 23896), (Start: 7 @24076 has 20 MA's), (16, 24130), (18, 24157), (19, 24160), (35, 24412), (43, 24580),

Gene: ChewChew_28 Start: 22547, Stop: 23146, Start Num: 11
Candidate Starts for ChewChew_28:
(Start: 11 @22547 has 13 MA's), (16, 22580), (18, 22607), (43, 23033),

Gene: Christian_28 Start: 22548, Stop: 23147, Start Num: 11
Candidate Starts for Christian_28:
(Start: 11 @22548 has 13 MA's), (16, 22581), (18, 22608), (43, 23034),

Gene: Cicada_37 Start: 25153, Stop: 25707, Start Num: 12
Candidate Starts for Cicada_37:
(Start: 12 @25153 has 20 MA's), (23, 25267), (29, 25342), (31, 25420), (42, 25594), (54, 25696),

Gene: CristinaYang_28 Start: 22552, Stop: 23151, Start Num: 11
Candidate Starts for CristinaYang_28:
(Start: 11 @22552 has 13 MA's), (16, 22585), (18, 22612), (43, 23038),

Gene: Dino_32 Start: 24074, Stop: 24691, Start Num: 7
Candidate Starts for Dino_32:
(5, 24011), (Start: 7 @24074 has 20 MA's), (16, 24128), (18, 24155), (19, 24158), (30, 24353), (35, 24410), (43, 24578),

Gene: DrRobert_28 Start: 22548, Stop: 23147, Start Num: 11
Candidate Starts for DrRobert_28:
(Start: 11 @22548 has 13 MA's), (16, 22581), (18, 22608), (43, 23034),

Gene: FireCastle_35 Start: 24907, Stop: 25467, Start Num: 12
Candidate Starts for FireCastle_35:
(Start: 12 @24907 has 20 MA's), (22, 25009),

Gene: Fluke_32 Start: 24117, Stop: 24728, Start Num: 7
Candidate Starts for Fluke_32:
(2, 23928), (3, 23937), (Start: 7 @24117 has 20 MA's), (16, 24171), (18, 24198), (19, 24201), (35, 24453), (43, 24621),

Gene: Galactica_37 Start: 27620, Stop: 28168, Start Num: 15
Candidate Starts for Galactica_37:
(Start: 15 @27620 has 4 MA's), (17, 27647), (21, 27695), (27, 27788), (28, 27794), (32, 27881), (33, 27884), (36, 27938), (38, 28040), (51, 28106), (54, 28157),

Gene: Goodman_36 Start: 25066, Stop: 25620, Start Num: 12
Candidate Starts for Goodman_36:
(Start: 12 @25066 has 20 MA's), (23, 25180), (29, 25255), (31, 25333), (42, 25507), (48, 25546), (54, 25609),

Gene: HeadNerd_28 Start: 22502, Stop: 23128, Start Num: 7
Candidate Starts for HeadNerd_28:
(2, 22295), (4, 22397), (Start: 7 @22502 has 20 MA's), (18, 22595), (23, 22649), (35, 22850),

Gene: Hiyaa_38 Start: 28863, Stop: 29399, Start Num: 15
Candidate Starts for Hiyaa_38:
(Start: 15 @28863 has 4 MA's), (17, 28890), (21, 28938), (26, 28992), (38, 29271), (51, 29337), (53, 29361), (54, 29388),

Gene: Htur_35 Start: 25147, Stop: 25710, Start Num: 12
Candidate Starts for Htur_35:
(Start: 12 @25147 has 20 MA's), (31, 25423), (42, 25597), (48, 25636), (54, 25699),

Gene: Huckleberry_28 Start: 22502, Stop: 23131, Start Num: 7
Candidate Starts for Huckleberry_28:
(1, 22223), (2, 22295), (4, 22397), (Start: 7 @22502 has 20 MA's), (18, 22595), (23, 22649), (35, 22850),

Gene: IndiRoo_35 Start: 23491, Stop: 24051, Start Num: 12
Candidate Starts for IndiRoo_35:
(Start: 12 @23491 has 20 MA's), (41, 23929), (54, 24040),

Gene: Jera_36 Start: 24210, Stop: 24764, Start Num: 12
Candidate Starts for Jera_36:
(Start: 12 @24210 has 20 MA's), (26, 24357), (31, 24477), (37, 24567), (42, 24651), (54, 24753),

Gene: Johann_36 Start: 25066, Stop: 25620, Start Num: 12
Candidate Starts for Johann_36:
(Start: 12 @25066 has 20 MA's), (23, 25180), (29, 25255), (31, 25333), (42, 25507), (48, 25546), (54, 25609),

Gene: Jumboset_32 Start: 24069, Stop: 24686, Start Num: 7
Candidate Starts for Jumboset_32:
(2, 23880), (3, 23889), (Start: 7 @24069 has 20 MA's), (16, 24123), (18, 24150), (19, 24153), (30, 24348), (35, 24405), (43, 24573),

Gene: Kalizoi_32 Start: 24068, Stop: 24685, Start Num: 7
Candidate Starts for Kalizoi_32:

(Start: 7 @24068 has 20 MA's), (16, 24122), (18, 24149), (19, 24152), (35, 24404), (43, 24572),

Gene: Keanu_38 Start: 28724, Stop: 29260, Start Num: 15
Candidate Starts for Keanu_38:
(6, 28631), (8, 28682), (Start: 15 @28724 has 4 MA's), (17, 28751), (26, 28853), (27, 28892), (38, 29135), (44, 29174), (51, 29201), (53, 29225), (54, 29252),

Gene: Kokushibo_39 Start: 28813, Stop: 29349, Start Num: 15
Candidate Starts for Kokushibo_39:
(Start: 15 @28813 has 4 MA's), (17, 28840), (21, 28888), (26, 28942), (38, 29221), (51, 29287), (53, 29311), (54, 29338),

Gene: Labella_37 Start: 25076, Stop: 25630, Start Num: 12
Candidate Starts for Labella_37:
(Start: 12 @25076 has 20 MA's), (14, 25091), (31, 25343), (37, 25433), (42, 25517), (54, 25619),

Gene: Lennox_28 Start: 22536, Stop: 23135, Start Num: 11
Candidate Starts for Lennox_28:
(Start: 11 @22536 has 13 MA's), (16, 22569), (18, 22596), (43, 23022),

Gene: LilStuart_28 Start: 22540, Stop: 23139, Start Num: 11
Candidate Starts for LilStuart_28:
(Start: 11 @22540 has 13 MA's), (16, 22573), (18, 22600), (43, 23026),

Gene: Linayshia_35 Start: 25115, Stop: 25678, Start Num: 12
Candidate Starts for Linayshia_35:
(Start: 12 @25115 has 20 MA's), (31, 25391), (42, 25565), (48, 25604), (54, 25667),

Gene: Makoto_28 Start: 22548, Stop: 23147, Start Num: 11
Candidate Starts for Makoto_28:
(Start: 11 @22548 has 13 MA's), (16, 22581), (18, 22608), (43, 23034),

Gene: Milani_35 Start: 23908, Stop: 24465, Start Num: 12
Candidate Starts for Milani_35:
(Start: 12 @23908 has 20 MA's), (24, 24022), (26, 24052), (31, 24172), (41, 24346), (45, 24379), (54, 24457),

Gene: Moki_28 Start: 22502, Stop: 23131, Start Num: 7
Candidate Starts for Moki_28:
(1, 22223), (2, 22295), (4, 22397), (Start: 7 @22502 has 20 MA's), (18, 22595), (23, 22649), (35, 22850),

Gene: MrGloopy_32 Start: 24060, Stop: 24677, Start Num: 7
Candidate Starts for MrGloopy_32:
(2, 23871), (3, 23880), (Start: 7 @24060 has 20 MA's), (16, 24114), (18, 24141), (19, 24144), (30, 24339), (35, 24396), (43, 24564),

Gene: Nancia_28 Start: 22552, Stop: 23151, Start Num: 11
Candidate Starts for Nancia_28:
(Start: 11 @22552 has 13 MA's), (16, 22585), (18, 22612), (43, 23038),

Gene: Olympi_37 Start: 25053, Stop: 25607, Start Num: 12
Candidate Starts for Olympi_37:

(Start: 12 @25053 has 20 MA's), (14, 25068), (23, 25167), (31, 25320), (37, 25410), (42, 25494), (54, 25596),

Gene: OurGirlNessie_28 Start: 22529, Stop: 23128, Start Num: 11
Candidate Starts for OurGirlNessie_28:
(Start: 11 @22529 has 13 MA's), (16, 22562), (18, 22589), (43, 23015),

Gene: Parvaparticeps_9 Start: 6456, Stop: 7037, Start Num: 13
Candidate Starts for Parvaparticeps_9:
(9, 6423), (10, 6435), (13, 6456), (34, 6732), (40, 6894), (41, 6897), (46, 6942), (47, 6948), (52, 6972), (54, 7023),

Gene: PermaG_36 Start: 25083, Stop: 25649, Start Num: 12
Candidate Starts for PermaG_36:
(Start: 12 @25083 has 20 MA's), (23, 25197), (25, 25227), (29, 25272), (31, 25350), (42, 25524), (54, 25638),

Gene: PinkFriday_28 Start: 22551, Stop: 23180, Start Num: 7
Candidate Starts for PinkFriday_28:
(Start: 7 @22551 has 20 MA's), (43, 23070),

Gene: PitaDog_28 Start: 22539, Stop: 23138, Start Num: 11
Candidate Starts for PitaDog_28:
(Start: 11 @22539 has 13 MA's), (16, 22572), (18, 22599), (43, 23025),

Gene: Pterodactyl_28 Start: 22530, Stop: 23129, Start Num: 11
Candidate Starts for Pterodactyl_28:
(Start: 11 @22530 has 13 MA's), (16, 22563), (18, 22590), (43, 23016),

Gene: RAP15_32 Start: 24126, Stop: 24743, Start Num: 7
Candidate Starts for RAP15_32:
(2, 23937), (3, 23946), (Start: 7 @24126 has 20 MA's), (16, 24180), (18, 24207), (19, 24210), (30, 24405), (35, 24462), (43, 24630),

Gene: Rasovi_35 Start: 25147, Stop: 25710, Start Num: 12
Candidate Starts for Rasovi_35:
(Start: 12 @25147 has 20 MA's), (31, 25423), (42, 25597), (48, 25636), (54, 25699),

Gene: Riverdale_32 Start: 24056, Stop: 24673, Start Num: 7
Candidate Starts for Riverdale_32:
(Start: 7 @24056 has 20 MA's), (16, 24110), (18, 24137), (19, 24140), (35, 24392), (43, 24560),

Gene: Rootkit7_35 Start: 24954, Stop: 25508, Start Num: 12
Candidate Starts for Rootkit7_35:
(Start: 12 @24954 has 20 MA's), (26, 25101), (31, 25221), (37, 25311), (42, 25395), (54, 25497),

Gene: SBlackberry_35 Start: 24931, Stop: 25485, Start Num: 12
Candidate Starts for SBlackberry_35:
(Start: 12 @24931 has 20 MA's), (23, 25045), (29, 25120), (31, 25198), (39, 25366), (41, 25369), (51, 25423), (54, 25474),

Gene: Savage2526_32 Start: 24120, Stop: 24737, Start Num: 7
Candidate Starts for Savage2526_32:

(2, 23931), (3, 23940), (Start: 7 @24120 has 20 MA's), (16, 24174), (18, 24201), (19, 24204), (30, 24399), (35, 24456), (43, 24624),

Gene: Scuttle_32 Start: 24125, Stop: 24742, Start Num: 7
Candidate Starts for Scuttle_32:
(2, 23936), (3, 23945), (Start: 7 @24125 has 20 MA's), (16, 24179), (18, 24206), (19, 24209), (35, 24461), (43, 24629),

Gene: Spocter_37 Start: 28786, Stop: 29322, Start Num: 15
Candidate Starts for Spocter_37:
(Start: 15 @28786 has 4 MA's), (17, 28813), (21, 28861), (26, 28915), (38, 29194), (51, 29260), (53, 29284), (54, 29311),

Gene: Sucha_32 Start: 22453, Stop: 23013, Start Num: 12
Candidate Starts for Sucha_32:
(Start: 12 @22453 has 20 MA's), (22, 22555), (31, 22714), (54, 23002),

Gene: TattModd_32 Start: 24119, Stop: 24736, Start Num: 7
Candidate Starts for TattModd_32:
(2, 23930), (3, 23939), (Start: 7 @24119 has 20 MA's), (16, 24173), (18, 24200), (19, 24203), (35, 24455), (43, 24623),

Gene: Theresita_35 Start: 24049, Stop: 24615, Start Num: 12
Candidate Starts for Theresita_35:
(Start: 12 @24049 has 20 MA's), (20, 24139), (24, 24166), (49, 24541), (54, 24604),

Gene: TurboVicky_35 Start: 24958, Stop: 25512, Start Num: 12
Candidate Starts for TurboVicky_35:
(Start: 12 @24958 has 20 MA's), (26, 25105), (31, 25225), (37, 25315), (39, 25393), (41, 25396), (50, 25450), (54, 25501),

Gene: Typher_37 Start: 25076, Stop: 25630, Start Num: 12
Candidate Starts for Typher_37:
(Start: 12 @25076 has 20 MA's), (14, 25091), (31, 25343), (37, 25433), (42, 25517), (54, 25619),

Gene: Wawa_32 Start: 24095, Stop: 24712, Start Num: 7
Candidate Starts for Wawa_32:
(2, 23906), (3, 23915), (5, 24032), (Start: 7 @24095 has 20 MA's), (16, 24149), (18, 24176), (19, 24179), (30, 24374), (35, 24431), (43, 24599),

Gene: WonderBoy_27 Start: 22520, Stop: 23119, Start Num: 11
Candidate Starts for WonderBoy_27:
(Start: 11 @22520 has 13 MA's), (16, 22553), (18, 22580), (43, 23006),

Gene: Zanella_35 Start: 24956, Stop: 25510, Start Num: 12
Candidate Starts for Zanella_35:
(Start: 12 @24956 has 20 MA's), (26, 25103), (31, 25223), (37, 25313), (39, 25391), (41, 25394), (50, 25448), (54, 25499),

Gene: Zorro_32 Start: 24074, Stop: 24691, Start Num: 7
Candidate Starts for Zorro_32:
(5, 24011), (Start: 7 @24074 has 20 MA's), (16, 24128), (18, 24155), (19, 24158), (30, 24353), (35, 24410), (43, 24578),