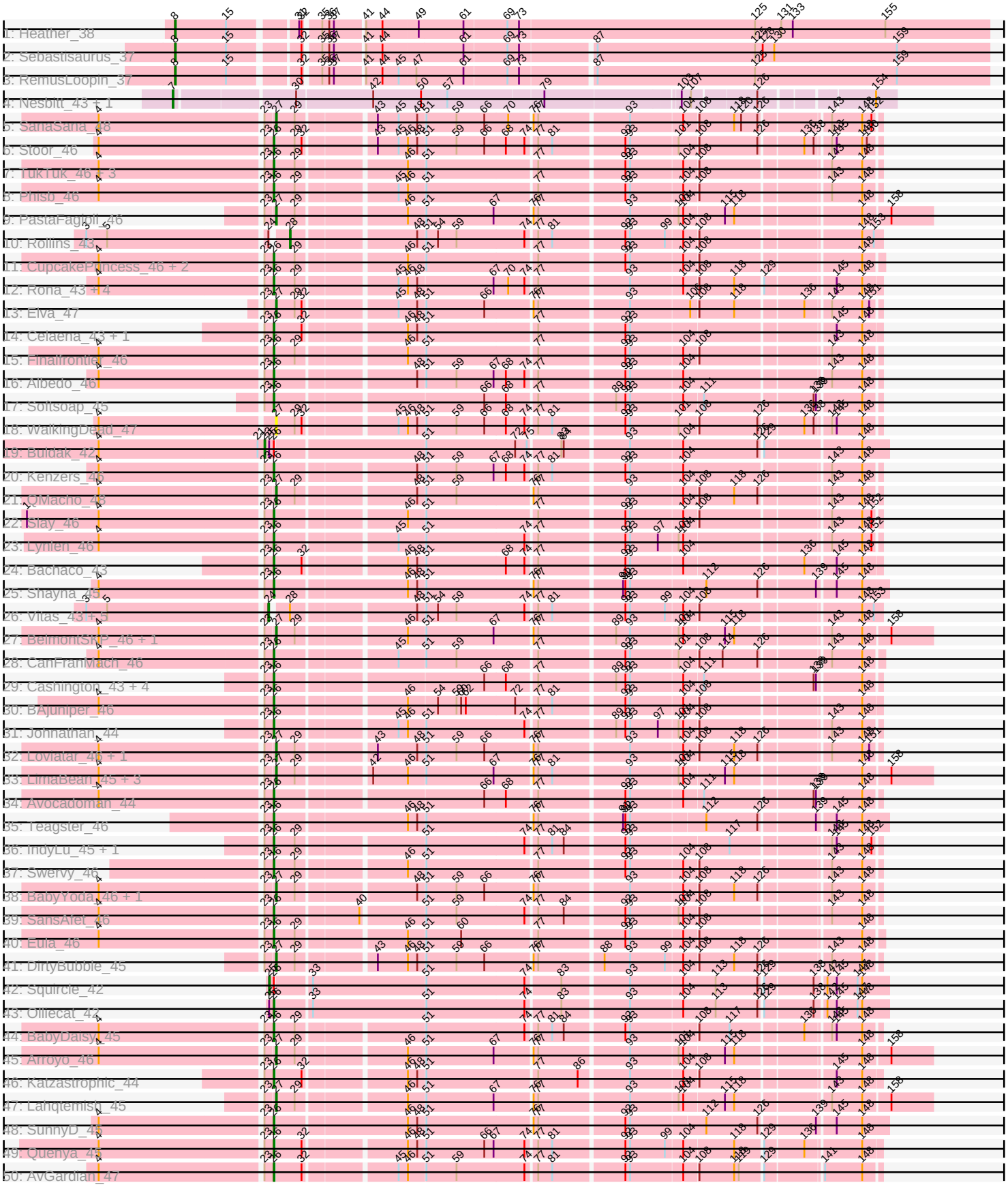
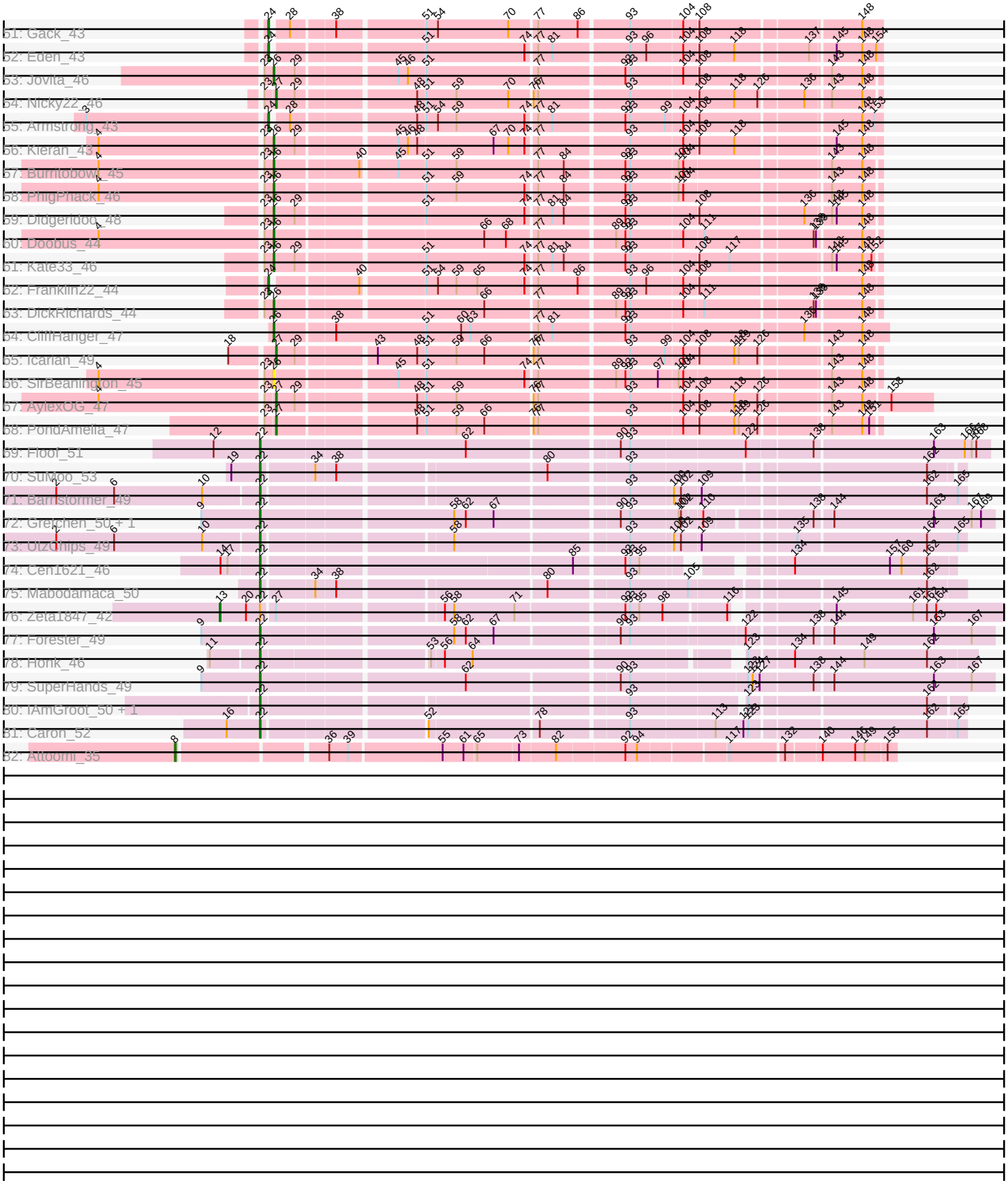
Pham 347432


1: Heather_38
2: Sebastisaurus_37
3: RemusLoopin_37
4: Nesbitt_43 + 1
5: SanaSana_48
6: Stoor_46
7: TukTuk_46 + 3
8: Phisb_46
9: PastaFagioli_46
10: Rollins_43
11: CupcakePrincess_46 + 2
12: Rona_43 + 4
13: Elva_47
14: Celaena_43 + 1
15: Finalfrontier_46
16: Albedo_46
17: Softsoap_45
18: WalkingDead_47
19: Buldak_42
20: Kenzers_46
21: QMacho_43
22: Slay_46
23: Lynlen_46
24: Bachaco_43
25: Shayna_45
26: Vitas_43 + 5
27: BelmontSNP_46 + 1
28: CamFranMach_46
29: Cashington_43 + 4
30: BAjuniper_46
31: Johnathan_44
32: Loviatar_46 + 1
33: LimaBean_45 + 3
34: Avocadoman_44
35: Teagster_46
36: IndyLu_45 + 1
37: Swervy_46
38: BabyYoda_46 + 1
39: SansAlet_46
40: Eula_46
41: DirtyBubble_45
42: Squircle_42
43: Ollecat_42
44: BabyDaisy_45
45: Arroyo_46
46: Katzastrophic_44
47: Lahqtemish_45
48: SunnyD_45
49: Quenya_45
50: AvGardian1_47

Pham 347432


51: Gack_43
52: Eden_43
53: Jovita_46
54: Nicky22_46
55: Armstrong_43
56: Kieran_43
57: Burritobowl_45
58: PhigPhack1_46
59: Diogenidoo_48
60: Doobus_44
61: Kate33_46
62: Franklin22_44
63: DickRichards_44
64: CliffHanger_47
65: Icarian_49
66: SirBeaningdon_45
67: AylexOG_47
68: PondAmelia_47
69: Floof_51
70: SuWoo_53
71: Barnstormer_49
72: Gretchen_50 + 1
73: Otzchips_49
74: Cen1621_46
75: Mabodamaca_50
76: Zeta1847_42
77: Forester_49
78: Honk_46
79: SuperHands_49
80: IAmGroot_50 + 1
81: Caron_52
82: Attoomi_35

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 347432 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347432 has 111 members, 4 are drafts.

Phages represented in each track:
- Track 1 : Heather_38
- Track 2 : Sebastisaurus_37
- Track 3 : RemusLoopin_37
- Track 4 : Nesbitt_43, AbbeyMikolon_45
- Track 5 : SanaSana_48
- Track 6 : Stoor_46
- Track 7 : TukTuk_46, Pecas_47, SarBear_45, Lilo27_46
- Track 8 : Phisb_46
- Track 9 : PastaFagioli_46
- Track 10 : Rollins_43
- Track 11 : CupcakePrincess_46, Jabb_46, MsUbiquitous_46
- Track 12 : Rona_43, ChiliPepper_43, Dismas_43, Kamdara_43, Sharkboy_44
- Track 13 : Elva_47
- Track 14 : Celaena_43, FlameThrower_43
- Track 15 : Finalfrontier_46
- Track 16 : Albedo_46
- Track 17 : Softsoap_45
- Track 18 : WalkingDead_47
- Track 19 : Buldak_42
- Track 20 : Kenzers_46
- Track 21 : QMacho_48
- Track 22 : Slay_46
- Track 23 : Lynlen_46
- Track 24 : Bachaco_43
- Track 25 : Shayna_45
- Track 26 : Vitas_43, Bernstein_43, Skylord_43, Brahms_43, Clayda5_44, Coltrane_43
- Track 27 : BelmontSKP_46, AnnaLie_46
- Track 28 : CanFranMach_46
- Track 29 : Cashington_43, Albright_43, BubbaBear_44, Milomuff_45, Solea_46
- Track 30 : BAjuniper_46
- Track 31 : Johnathan_44
- Track 32 : Loviatar_46, Akino08_46
- Track 33 : LimaBean_45, Bengal_46, Abigail_45, CroZenni_45
- Track 34 : Avocadoman_44
- Track 35 : Teagster_46
- Track 36 : IndyLu_45, Grist_45

• Track 37 : Swervy_46
• Track 38 : BabyYoda_46, Stromboli_46
• Track 39 : SansAfet_46
• Track 40 : Eula_46
• Track 41 : DirtyBubble_45
• Track 42 : Squircle_42
• Track 43 : Olliecat_42
• Track 44 : BabyDaisy_45
• Track 45 : Arroyo_46
• Track 46 : Katzastrophic_44
• Track 47 : Lahqtemish_45
• Track 48 : SunnyD_45
• Track 49 : Quenya_45
• Track 50 : AvGardian_47
• Track 51 : Gack_43
• Track 52 : Eden_43
• Track 53 : Jovita_46
• Track 54 : Nicky22_46
• Track 55 : Armstrong_43
• Track 56 : Kieran_43
• Track 57 : Burritobowl_45
• Track 58 : PhigPhack_46
• Track 59 : Didgeridoo_48
• Track 60 : Doobus_44
• Track 61 : Kate33_46
• Track 62 : Franklin22_44
• Track 63 : DickRichards_44
• Track 64 : CliffHanger_47
• Track 65 : Icarian_49
• Track 66 : SirBeanington_45
• Track 67 : AylexOG_47
• Track 68 : PondAmelia_47
• Track 69 : Floof_51
• Track 70 : SuMoo_53
• Track 71 : Barnstormer_49
• Track 72 : Gretchen_50, Percival_51
• Track 73 : UtzChips_49
• Track 74 : Cen1621_46
• Track 75 : Mabodamaca_50
• Track 76 : Zeta1847_42
• Track 77 : Forester_49
• Track 78 : Honk_46
• Track 79 : SuperHands_49
• Track 80 : IAmGroot_50, GardenState_50
• Track 81 : Caron_52
• Track 82 : Attoomi_35

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

The start number called the most often in the published annotations is 26, it was called in 52 of the 107 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albedo_46, Albright_43, AvGardian_47, Avocadoman_44, BAjuniper_46, BabyDaisy_45, Bachaco_43, BubbaBear_44, Burritobowl_45, CanFranMach_46, Cashington_43, Celaena_43, ChiliPepper_43, CliffHanger_47, CupcakePrincess_46, DickRichards_44, Didgeridoo_48, Dismas_43, Doobus_44, Eula_46, Finalfrontier_46, FlameThrower_43, Grist_45, IndyLu_45, Jabb_46, Johnathan_44, Jovita_46, Kamdara_43, Kate33_46, Katzastrophic_44, Kenzers_46, Kieran_43, Lilo27_46, Lynlen_46, Milomuff_45, MsUbiquitous_46, Olliecat_42, Pecas_47, PhigPhack_46, Phisb_46, Quenya_45, Rona_43, SansAfet_46, SarBear_45, Sharkboy_44, Shayna_45, SirBeanington_45, Slay_46, Softsoap_45, Solea_46, Stoor_46, SunnyD_45, Swervy_46, Teagster_46, TukTuk_46,

Genes that have the "Most Annotated" start but do not call it:
• Buldak_42, Squircle_42,

Genes that do not have the "Most Annotated" start:
• AbbeyMikolon_45, Abigail_45, Akino08_46, AnnaLie_46, Armstrong_43, Arroyo_46, Attoomi_35, AylexOG_47, BabyYoda_46, Barnstormer_49, BelmontSKP_46, Bengal_46, Bernstein_43, Brahms_43, Caron_52, Cen1621_46, Clayda5_44, Coltrane_43, CroZenni_45, DirtyBubble_45, Eden_43, Elva_47, Floof_51, Forester_49, Franklin22_44, Gack_43, GardenState_50, Gretchen_50, Heather_38, Honk_46, IAmGroot_50, Icarian_49, Lahqtemish_45, LimaBean_45, Loviatar_46, Mabodamaca_50, Nesbitt_43, Nicky22_46, PastaFagioli_46, Percival_51, PondAmelia_47, QMacho_48, RemusLoopin_37, Rollins_43, SanaSana_48, Sebastisaurus_37, Skylord_43, Stromboli_46, SuMoo_53, SuperHands_49, UtzChips_49, Vitas_43, WalkingDead_47, Zeta1847_42,

Summary by start number:

Start 7:
• Found in 2 of 111 (1.8%) of genes in pham
• Manual Annotations of this start: 2 of 107
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AbbeyMikolon_45 (BL), Nesbitt_43 (BL),

Start 8:
• Found in 4 of 111 (3.6%) of genes in pham
• Manual Annotations of this start: 4 of 107
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Attoomi_35 (singleton), Heather_38 (BB2), RemusLoopin_37 (BB2), Sebastisaurus_37 (BB2),

Start 13:
• Found in 1 of 111 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 107
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Zeta1847_42 (EH),

Start 22:
• Found in 15 of 111 (13.5%) of genes in pham

• Manual Annotations of this start: 14 of 107
• Called 93.3% of time when present
• Phage (with cluster) where this start called: Barnstormer_49 (EH), Caron_52 (EH), Cen1621_46 (EH), Floof_51 (EH), Forester_49 (EH), GardenState_50 (EH), Gretchen_50 (EH), Honk_46 (EH), IAmGroot_50 (EH), Mabodamaca_50 (EH), Percival_51 (EH), SuMoo_53 (EH), SuperHands_49 (EH), UtzChips_49 (EH),

Start 23:
• Found in 74 of 111 (66.7%) of genes in pham
• Manual Annotations of this start: 1 of 107
• Called 1.4% of time when present
• Phage (with cluster) where this start called: Buldak_42 (EB),

Start 24:
• Found in 11 of 111 (9.9%) of genes in pham
• Manual Annotations of this start: 10 of 107
• Called 90.9% of time when present
• Phage (with cluster) where this start called: Armstrong_43 (EB), Bernstein_43 (EB), Brahms_43 (EB), Clayda5_44 (EB), Coltrane_43 (EB), Eden_43 (EB), Franklin22_44 (EB), Gack_43 (EB), Skylord_43 (EB), Vitas_43 (EB),

Start 25:
• Found in 3 of 111 (2.7%) of genes in pham
• Manual Annotations of this start: 1 of 107
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Squircle_42 (EB),

Start 26:
• Found in 57 of 111 (51.4%) of genes in pham
• Manual Annotations of this start: 52 of 107
• Called 96.5% of time when present
• Phage (with cluster) where this start called: Albedo_46 (EB), Albright_43 (EB), AvGardian_47 (EB), Avocadoman_44 (EB), BAjuniper_46 (EB), BabyDaisy_45 (EB), Bachaco_43 (EB), BubbaBear_44 (EB), Burritobowl_45 (EB), CanFranMach_46 (EB), Cashington_43 (EB), Celaena_43 (EB), ChiliPepper_43 (EB), CliffHanger_47 (EB), CupcakePrincess_46 (EB), DickRichards_44 (EB), Didgeridoo_48 (EB), Dismas_43 (EB), Doobus_44 (EB), Eula_46 (EB), Finalfrontier_46 (EB), FlameThrower_43 (EB), Grist_45 (EB), IndyLu_45 (EB), Jabb_46 (EB), Johnathan_44 (EB), Jovita_46 (EB), Kamdara_43 (EB), Kate33_46 (EB), Katzastrophic_44 (EB), Kenzers_46 (EB), Kieran_43 (EB), Lilo27_46 (EB), Lynlen_46 (EB), Milomuff_45 (EB), MsUbiquitous_46 (EB), Olliecat_42 (EB), Pecas_47 (EB), PhigPhack_46 (EB), Phisb_46 (EB), Quenya_45 (EB), Rona_43 (EB), SansAfet_46 (EB), SarBear_45 (EB), Sharkboy_44 (EB), Shayna_45 (EB), SirBeanington_45 (EB), Slay_46 (EB), Softsoap_45 (EB), Solea_46 (EB), Stoor_46 (EB), SunnyD_45 (EB), Swervy_46 (EB), Teagster_46 (EB), TukTuk_46 (EB),

Start 27:
• Found in 23 of 111 (20.7%) of genes in pham
• Manual Annotations of this start: 21 of 107
• Called 95.7% of time when present
• Phage (with cluster) where this start called: Abigail_45 (EB), Akino08_46 (EB), AnnaLie_46 (EB), Arroyo_46 (EB), AylexOG_47 (EB), BabyYoda_46 (EB), BelmontSKP_46 (EB), Bengal_46 (EB), CroZenni_45 (EB), DirtyBubble_45 (EB),

Elva_47 (EB), Icarian_49 (EB), Lahqtemish_45 (EB), LimaBean_45 (EB), Loviatar_46 (EB), Nicky22_46 (EB), PastaFagioli_46 (EB), PondAmelia_47 (EB), QMacho_48 (EB), SanaSana_48 (EB), Stromboli_46 (EB), WalkingDead_47 (EB),

Start 28:
• Found in 9 of 111 (8.1%) of genes in pham
• Manual Annotations of this start: 1 of 107
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Rollins_43 (EB),

Summary by clusters:

There are 5 clusters represented in this pham: BL, singleton, EH, BB2, EB,

Info for manual annotations of cluster BB2:
•Start number 8 was manually annotated 3 times for cluster BB2.

Info for manual annotations of cluster BL:
•Start number 7 was manually annotated 2 times for cluster BL.

Info for manual annotations of cluster EB:
•Start number 23 was manually annotated 1 time for cluster EB.
•Start number 24 was manually annotated 10 times for cluster EB.
•Start number 25 was manually annotated 1 time for cluster EB.
•Start number 26 was manually annotated 52 times for cluster EB.
•Start number 27 was manually annotated 21 times for cluster EB.
•Start number 28 was manually annotated 1 time for cluster EB.

Info for manual annotations of cluster EH:
•Start number 13 was manually annotated 1 time for cluster EH.
•Start number 22 was manually annotated 14 times for cluster EH.

Gene Information:

Gene: AbbeyMikolon_45 Start: 32601, Stop: 33461, Start Num: 7
Candidate Starts for AbbeyMikolon_45:
(Start: 7 @32601 has 2 MA's), (30, 32742), (42, 32838), (50, 32898), (57, 32931), (79, 33051), (103, 33216), (107, 33228), (126, 33306), (154, 33435),

Gene: Abigail_45 Start: 31658, Stop: 32443, Start Num: 27
Candidate Starts for Abigail_45:
(4, 31442), (Start: 23 @31646 has 1 MA's), (Start: 27 @31658 has 21 MA's), (29, 31682), (42, 31766), (46, 31811), (51, 31832), (67, 31919), (76, 31964), (77, 31970), (81, 31988), (93, 32081), (101, 32141), (104, 32147), (115, 32198), (118, 32210), (148, 32357), (158, 32390),

Gene: Akino08_46 Start: 33884, Stop: 34603, Start Num: 27
Candidate Starts for Akino08_46:
(4, 33668), (Start: 23 @33872 has 1 MA's), (Start: 27 @33884 has 21 MA's), (29, 33908), (43, 33998), (48, 34049), (51, 34058), (59, 34097), (66, 34133), (76, 34190), (77, 34196), (93, 34307), (104, 34373), (108, 34391), (118, 34436), (126, 34466), (143, 34544), (148, 34583), (151, 34592),

Gene: Albedo_46 Start: 32261, Stop: 32983, Start Num: 26
Candidate Starts for Albedo_46:
(4, 32045), (Start: 23 @32249 has 1 MA's), (Start: 26 @32261 has 52 MA's), (48, 32426), (51, 32435), (59, 32474), (67, 32522), (68, 32537), (74, 32561), (77, 32573), (92, 32678), (93, 32684), (104, 32750), (143, 32924), (148, 32963),

Gene: Albright_43 Start: 31191, Stop: 31910, Start Num: 26
Candidate Starts for Albright_43:
(Start: 23 @31179 has 1 MA's), (Start: 26 @31191 has 52 MA's), (66, 31440), (68, 31467), (77, 31503), (89, 31596), (92, 31608), (93, 31614), (104, 31680), (111, 31704), (138, 31836), (139, 31839), (148, 31890),

Gene: AnnaLie_46 Start: 32269, Stop: 33054, Start Num: 27
Candidate Starts for AnnaLie_46:
(4, 32053), (Start: 23 @32257 has 1 MA's), (Start: 27 @32269 has 21 MA's), (29, 32293), (46, 32422), (51, 32443), (67, 32530), (76, 32575), (77, 32581), (89, 32674), (93, 32692), (101, 32752), (104, 32758), (115, 32809), (118, 32821), (143, 32929), (148, 32968), (158, 33001),

Gene: Armstrong_43 Start: 29796, Stop: 30521, Start Num: 24
Candidate Starts for Armstrong_43:
(3, 29571), (Start: 24 @29796 has 10 MA's), (Start: 28 @29814 has 1 MA's), (48, 29961), (51, 29970), (54, 29985), (59, 30009), (74, 30096), (77, 30108), (81, 30126), (92, 30213), (93, 30219), (99, 30264), (104, 30285), (108, 30303), (148, 30495), (153, 30510),

Gene: Arroyo_46 Start: 32377, Stop: 33162, Start Num: 27
Candidate Starts for Arroyo_46:
(4, 32161), (Start: 23 @32365 has 1 MA's), (Start: 27 @32377 has 21 MA's), (29, 32401), (46, 32530), (51, 32551), (67, 32638), (76, 32683), (77, 32689), (93, 32800), (101, 32860), (104, 32866), (115, 32917), (118, 32929), (148, 33076), (158, 33109),

Gene: Attoomi_35 Start: 29442, Stop: 30293, Start Num: 8
Candidate Starts for Attoomi_35:
(Start: 8 @29442 has 4 MA's), (36, 29619), (39, 29643), (55, 29757), (61, 29784), (65, 29799), (73, 29850), (82, 29895), (92, 29979), (94, 29994), (117, 30096), (132, 30159), (140, 30201), (146, 30243), (149, 30255), (156, 30282),

Gene: AvGardian_47 Start: 32285, Stop: 33004, Start Num: 26
Candidate Starts for AvGardian_47:
(4, 32069), (Start: 23 @32273 has 1 MA's), (Start: 26 @32285 has 52 MA's), (32, 32318), (45, 32426), (46, 32438), (51, 32459), (59, 32498), (74, 32585), (77, 32597), (81, 32615), (92, 32702), (93, 32708), (104, 32774), (108, 32792), (118, 32837), (119, 32843), (129, 32870), (141, 32936), (148, 32984),

Gene: Avocadoman_44 Start: 31398, Stop: 32117, Start Num: 26
Candidate Starts for Avocadoman_44:
(4, 31182), (Start: 23 @31386 has 1 MA's), (Start: 26 @31398 has 52 MA's), (66, 31647), (68, 31674), (77, 31710), (92, 31815), (93, 31821), (104, 31887), (111, 31911), (138, 32043), (139, 32046), (148, 32097),

Gene: AylexOG_47 Start: 32343, Stop: 33128, Start Num: 27
Candidate Starts for AylexOG_47:
(4, 32127), (Start: 23 @32331 has 1 MA's), (Start: 27 @32343 has 21 MA's), (29, 32367), (48, 32508), (51, 32517), (59, 32556), (76, 32649), (77, 32655), (93, 32766), (104, 32832), (108, 32850), (118, 32895), (126, 32925), (143, 33003), (148, 33042), (158, 33075),

Gene: BAjuniper_46 Start: 33187, Stop: 33909, Start Num: 26
Candidate Starts for BAjuniper_46:
(4, 32971), (Start: 23 @33175 has 1 MA's), (Start: 26 @33187 has 52 MA's), (46, 33340), (54, 33376), (59, 33400), (60, 33406), (62, 33412), (72, 33475), (77, 33499), (81, 33517), (92, 33604), (93, 33610), (104, 33676), (108, 33694), (148, 33886),

Gene: BabyDaisy_45 Start: 32232, Stop: 32951, Start Num: 26
Candidate Starts for BabyDaisy_45:
(4, 32016), (Start: 23 @32220 has 1 MA's), (Start: 26 @32232 has 52 MA's), (29, 32256), (51, 32406), (74, 32532), (77, 32544), (81, 32562), (84, 32577), (92, 32649), (93, 32655), (108, 32739), (117, 32778), (136, 32865), (143, 32892), (145, 32898), (148, 32931),

Gene: BabyYoda_46 Start: 33001, Stop: 33720, Start Num: 27
Candidate Starts for BabyYoda_46:
(4, 32785), (Start: 23 @32989 has 1 MA's), (Start: 27 @33001 has 21 MA's), (29, 33025), (48, 33166), (51, 33175), (59, 33214), (66, 33250), (76, 33307), (77, 33313), (93, 33424), (104, 33490), (108, 33508), (118, 33553), (126, 33583), (143, 33661), (148, 33700),

Gene: Bachaco_43 Start: 32963, Stop: 33685, Start Num: 26
Candidate Starts for Bachaco_43:
(Start: 23 @32951 has 1 MA's), (Start: 26 @32963 has 52 MA's), (32, 32996), (46, 33116), (48, 33128), (51, 33137), (68, 33239), (74, 33263), (77, 33275), (92, 33380), (93, 33386), (104, 33452), (136, 33596), (145, 33629), (148, 33662),

Gene: Barnstormer_49 Start: 33593, Stop: 34432, Start Num: 22
Candidate Starts for Barnstormer_49:
(2, 33335), (6, 33410), (10, 33524), (Start: 22 @33593 has 14 MA's), (93, 34025), (100, 34076), (102, 34085), (109, 34109), (162, 34382), (165, 34421),

Gene: BelmontSKP_46 Start: 32269, Stop: 33054, Start Num: 27
Candidate Starts for BelmontSKP_46:
(4, 32053), (Start: 23 @32257 has 1 MA's), (Start: 27 @32269 has 21 MA's), (29, 32293), (46, 32422), (51, 32443), (67, 32530), (76, 32575), (77, 32581), (89, 32674), (93, 32692), (101, 32752), (104, 32758), (115, 32809), (118, 32821), (143, 32929), (148, 32968), (158, 33001),

Gene: Bengal_46 Start: 31922, Stop: 32707, Start Num: 27
Candidate Starts for Bengal_46:
(4, 31706), (Start: 23 @31910 has 1 MA's), (Start: 27 @31922 has 21 MA's), (29, 31946), (42, 32030), (46, 32075), (51, 32096), (67, 32183), (76, 32228), (77, 32234), (81, 32252), (93, 32345), (101, 32405), (104, 32411), (115, 32462), (118, 32474), (148, 32621), (158, 32654),

Gene: Bernstein_43 Start: 29878, Stop: 30603, Start Num: 24
Candidate Starts for Bernstein_43:
(3, 29653), (5, 29680), (Start: 24 @29878 has 10 MA's), (Start: 28 @29896 has 1 MA's), (48, 30043), (51, 30052), (54, 30067), (59, 30091), (74, 30178), (77, 30190), (81, 30208), (92, 30295), (93, 30301), (99, 30346), (104, 30367), (108, 30385), (148, 30577), (153, 30592),

Gene: Brahms_43 Start: 29798, Stop: 30523, Start Num: 24
Candidate Starts for Brahms_43:
(3, 29573), (5, 29600), (Start: 24 @29798 has 10 MA's), (Start: 28 @29816 has 1 MA's), (48, 29963), (51, 29972), (54, 29987), (59, 30011), (74, 30098), (77, 30110), (81, 30128), (92, 30215), (93, 30221), (99, 30266), (104, 30287), (108, 30305), (148, 30497), (153, 30512),

Gene: BubbaBear_44 Start: 31851, Stop: 32570, Start Num: 26
Candidate Starts for BubbaBear_44:
(Start: 23 @31839 has 1 MA's), (Start: 26 @31851 has 52 MA's), (66, 32100), (68, 32127), (77, 32163), (89, 32256), (92, 32268), (93, 32274), (104, 32340), (111, 32364), (138, 32496), (139, 32499), (148, 32550),

Gene: Buldak_42 Start: 30417, Stop: 31178, Start Num: 23
Candidate Starts for Buldak_42:
(4, 30204), (21, 30408), (Start: 23 @30417 has 1 MA's), (Start: 25 @30423 has 1 MA's), (Start: 26 @30429 has 52 MA's), (51, 30615), (72, 30729), (75, 30744), (83, 30783), (84, 30786), (93, 30864), (104, 30930), (126, 31026), (129, 31029), (148, 31146),

Gene: Burritobowl_45 Start: 31852, Stop: 32571, Start Num: 26
Candidate Starts for Burritobowl_45:
(4, 31636), (Start: 23 @31840 has 1 MA's), (Start: 26 @31852 has 52 MA's), (40, 31951), (45, 31993), (51, 32026), (59, 32065), (77, 32164), (84, 32197), (92, 32269), (93, 32275), (101, 32335), (104, 32341), (143, 32512), (148, 32551),

Gene: CanFranMach_46 Start: 32308, Stop: 33030, Start Num: 26
Candidate Starts for CanFranMach_46:
(4, 32092), (Start: 23 @32296 has 1 MA's), (Start: 26 @32308 has 52 MA's), (45, 32449), (51, 32482), (59, 32521), (77, 32620), (92, 32725), (93, 32731), (101, 32791), (108, 32815), (114, 32845), (126, 32890), (143, 32968), (148, 33007),

Gene: Caron_52 Start: 34597, Stop: 35439, Start Num: 22
Candidate Starts for Caron_52:
(16, 34555), (Start: 22 @34597 has 14 MA's), (52, 34789), (78, 34924), (93, 35029), (113, 35134), (121, 35170), (123, 35176), (162, 35392), (165, 35428),

Gene: Cashington_43 Start: 31231, Stop: 31950, Start Num: 26
Candidate Starts for Cashington_43:
(Start: 23 @31219 has 1 MA's), (Start: 26 @31231 has 52 MA's), (66, 31480), (68, 31507), (77, 31543), (89, 31636), (92, 31648), (93, 31654), (104, 31720), (111, 31744), (138, 31876), (139, 31879), (148, 31930),

Gene: Celaena_43 Start: 32705, Stop: 33427, Start Num: 26
Candidate Starts for Celaena_43:
(Start: 23 @32693 has 1 MA's), (Start: 26 @32705 has 52 MA's), (32, 32738), (46, 32858), (48, 32870), (51, 32879), (77, 33017), (92, 33122), (93, 33128), (145, 33371), (148, 33404),

Gene: Cen1621_46 Start: 32188, Stop: 32991, Start Num: 22
Candidate Starts for Cen1621_46:
(14, 32140), (17, 32149), (Start: 22 @32188 has 14 MA's), (85, 32566), (92, 32626), (93, 32632), (95, 32644), (134, 32785), (157, 32908), (160, 32923), (162, 32956),

Gene: ChiliPepper_43 Start: 32335, Stop: 33057, Start Num: 26
Candidate Starts for ChiliPepper_43:
(4, 32119), (Start: 23 @32323 has 1 MA's), (Start: 26 @32335 has 52 MA's), (29, 32359), (45, 32476), (46, 32488), (48, 32500), (67, 32596), (70, 32614), (74, 32635), (77, 32647), (93, 32758), (104, 32824), (108, 32842), (118, 32887), (129, 32920), (145, 33001), (148, 33034),

Gene: Clayda5_44 Start: 29785, Stop: 30510, Start Num: 24

Candidate Starts for Clayda5_44:
(3, 29560), (5, 29587), (Start: 24 @29785 has 10 MA's), (Start: 28 @29803 has 1 MA's), (48, 29950), (51, 29959), (54, 29974), (59, 29998), (74, 30085), (77, 30097), (81, 30115), (92, 30202), (93, 30208), (99, 30253), (104, 30274), (108, 30292), (148, 30484), (153, 30499),

Gene: CliffHanger_47 Start: 31124, Stop: 31864, Start Num: 26
Candidate Starts for CliffHanger_47:
(Start: 26 @31124 has 52 MA's), (38, 31193), (51, 31307), (60, 31352), (63, 31364), (77, 31445), (81, 31463), (92, 31550), (93, 31556), (136, 31766), (148, 31832),

Gene: Coltrane_43 Start: 29798, Stop: 30523, Start Num: 24
Candidate Starts for Coltrane_43:
(3, 29573), (5, 29600), (Start: 24 @29798 has 10 MA's), (Start: 28 @29816 has 1 MA's), (48, 29963), (51, 29972), (54, 29987), (59, 30011), (74, 30098), (77, 30110), (81, 30128), (92, 30215), (93, 30221), (99, 30266), (104, 30287), (108, 30305), (148, 30497), (153, 30512),

Gene: CroZenni_45 Start: 31772, Stop: 32557, Start Num: 27
Candidate Starts for CroZenni_45:
(4, 31556), (Start: 23 @31760 has 1 MA's), (Start: 27 @31772 has 21 MA's), (29, 31796), (42, 31880), (46, 31925), (51, 31946), (67, 32033), (76, 32078), (77, 32084), (81, 32102), (93, 32195), (101, 32255), (104, 32261), (115, 32312), (118, 32324), (148, 32471), (158, 32504),

Gene: CupcakePrincess_46 Start: 31958, Stop: 32680, Start Num: 26
Candidate Starts for CupcakePrincess_46:
(4, 31742), (Start: 23 @31946 has 1 MA's), (Start: 26 @31958 has 52 MA's), (29, 31982), (46, 32111), (51, 32132), (77, 32270), (92, 32375), (93, 32381), (104, 32447), (108, 32465), (148, 32657),

Gene: DickRichards_44 Start: 32211, Stop: 32930, Start Num: 26
Candidate Starts for DickRichards_44:
(Start: 23 @32199 has 1 MA's), (Start: 26 @32211 has 52 MA's), (66, 32460), (77, 32523), (89, 32616), (92, 32628), (93, 32634), (104, 32700), (111, 32724), (138, 32856), (139, 32859), (148, 32910),

Gene: Didgeridoo_48 Start: 32578, Stop: 33297, Start Num: 26
Candidate Starts for Didgeridoo_48:
(Start: 23 @32566 has 1 MA's), (Start: 26 @32578 has 52 MA's), (29, 32602), (51, 32752), (74, 32878), (77, 32890), (81, 32908), (84, 32923), (92, 32995), (93, 33001), (108, 33085), (136, 33211), (143, 33238), (145, 33244), (148, 33277),

Gene: DirtyBubble_45 Start: 32669, Stop: 33388, Start Num: 27
Candidate Starts for DirtyBubble_45:
(Start: 23 @32657 has 1 MA's), (Start: 27 @32669 has 21 MA's), (29, 32693), (43, 32783), (46, 32822), (48, 32834), (51, 32843), (59, 32882), (66, 32918), (76, 32975), (77, 32981), (88, 33059), (93, 33092), (99, 33137), (104, 33158), (108, 33176), (118, 33221), (126, 33251), (143, 33329), (148, 33368),

Gene: Dismas_43 Start: 32288, Stop: 33010, Start Num: 26
Candidate Starts for Dismas_43:
(4, 32072), (Start: 23 @32276 has 1 MA's), (Start: 26 @32288 has 52 MA's), (29, 32312), (45, 32429), (46, 32441), (48, 32453), (67, 32549), (70, 32567), (74, 32588), (77, 32600), (93, 32711), (104, 32777), (108, 32795), (118, 32840), (129, 32873), (145, 32954), (148, 32987),

Gene: Doobus_44 Start: 31595, Stop: 32314, Start Num: 26
Candidate Starts for Doobus_44:

(4, 31379), (Start: 23 @31583 has 1 MA's), (Start: 26 @31595 has 52 MA's), (66, 31844), (68, 31871), (77, 31907), (89, 32000), (92, 32012), (93, 32018), (104, 32084), (111, 32108), (138, 32240), (139, 32243), (148, 32294),

Gene: Eden_43 Start: 30525, Stop: 31250, Start Num: 24
Candidate Starts for Eden_43:
(Start: 24 @30525 has 10 MA's), (51, 30699), (74, 30825), (77, 30837), (81, 30855), (93, 30948), (96, 30969), (104, 31014), (108, 31032), (118, 31077), (137, 31164), (145, 31191), (148, 31224), (154, 31242),

Gene: Elva_47 Start: 32903, Stop: 33622, Start Num: 27
Candidate Starts for Elva_47:
(Start: 23 @32888 has 1 MA's), (Start: 27 @32903 has 21 MA's), (29, 32927), (32, 32936), (45, 33044), (48, 33068), (51, 33077), (66, 33152), (76, 33209), (77, 33215), (93, 33326), (106, 33401), (108, 33410), (118, 33455), (136, 33536), (143, 33563), (148, 33602), (151, 33611),

Gene: Eula_46 Start: 31944, Stop: 32666, Start Num: 26
Candidate Starts for Eula_46:
(4, 31728), (Start: 23 @31932 has 1 MA's), (Start: 26 @31944 has 52 MA's), (29, 31968), (46, 32097), (51, 32118), (60, 32163), (77, 32256), (92, 32361), (93, 32367), (104, 32433), (108, 32451), (148, 32643),

Gene: Finalfrontier_46 Start: 32803, Stop: 33522, Start Num: 26
Candidate Starts for Finalfrontier_46:
(4, 32587), (Start: 23 @32791 has 1 MA's), (Start: 26 @32803 has 52 MA's), (29, 32827), (46, 32956), (51, 32977), (77, 33115), (92, 33220), (93, 33226), (104, 33292), (108, 33310), (143, 33463), (148, 33502),

Gene: FlameThrower_43 Start: 32154, Stop: 32876, Start Num: 26
Candidate Starts for FlameThrower_43:
(Start: 23 @32142 has 1 MA's), (Start: 26 @32154 has 52 MA's), (32, 32187), (46, 32307), (48, 32319), (51, 32328), (77, 32466), (92, 32571), (93, 32577), (145, 32820), (148, 32853),

Gene: Floof_51 Start: 34481, Stop: 35374, Start Num: 22
Candidate Starts for Floof_51:
(12, 34421), (Start: 22 @34481 has 14 MA's), (62, 34733), (90, 34916), (93, 34928), (122, 35072), (138, 35153), (163, 35303), (166, 35342), (167, 35351), (168, 35357),

Gene: Forester_49 Start: 35414, Stop: 36301, Start Num: 22
Candidate Starts for Forester_49:
(9, 35342), (Start: 22 @35414 has 14 MA's), (58, 35651), (62, 35666), (67, 35702), (90, 35849), (93, 35861), (122, 35996), (138, 36074), (144, 36095), (163, 36224), (167, 36272),

Gene: Franklin22_44 Start: 30400, Stop: 31122, Start Num: 24
Candidate Starts for Franklin22_44:
(Start: 24 @30400 has 10 MA's), (40, 30499), (51, 30574), (54, 30589), (59, 30613), (65, 30640), (74, 30700), (77, 30712), (86, 30763), (93, 30823), (96, 30844), (104, 30889), (108, 30907), (148, 31099),

Gene: Gack_43 Start: 30444, Stop: 31169, Start Num: 24
Candidate Starts for Gack_43:
(Start: 24 @30444 has 10 MA's), (Start: 28 @30462 has 1 MA's), (38, 30513), (51, 30618), (54, 30633), (70, 30723), (77, 30756), (86, 30807), (93, 30867), (104, 30933), (108, 30951), (148, 31143),

Gene: GardenState_50 Start: 33862, Stop: 34695, Start Num: 22
Candidate Starts for GardenState_50:
(Start: 22 @33862 has 14 MA's), (93, 34300), (123, 34435), (162, 34651),

Gene: Gretchen_50 Start: 35099, Stop: 35974, Start Num: 22
Candidate Starts for Gretchen_50:
(9, 35027), (Start: 22 @35099 has 14 MA's), (58, 35336), (62, 35351), (67, 35387), (90, 35534), (93, 35546), (101, 35606), (102, 35609), (110, 35627), (138, 35747), (144, 35768), (163, 35897), (167, 35945), (169, 35957),

Gene: Grist_45 Start: 32038, Stop: 32757, Start Num: 26
Candidate Starts for Grist_45:
(Start: 23 @32026 has 1 MA's), (Start: 26 @32038 has 52 MA's), (29, 32062), (51, 32212), (74, 32338), (77, 32350), (81, 32368), (84, 32383), (92, 32455), (93, 32461), (117, 32584), (143, 32698), (145, 32704), (148, 32737), (152, 32749),

Gene: Heather_38 Start: 30334, Stop: 31347, Start Num: 8
Candidate Starts for Heather_38:
(Start: 8 @30334 has 4 MA's), (15, 30400), (31, 30478), (32, 30481), (35, 30499), (36, 30508), (37, 30514), (41, 30550), (44, 30571), (49, 30616), (61, 30673), (69, 30727), (73, 30742), (125, 31045), (131, 31078), (133, 31093), (155, 31213),

Gene: Honk_46 Start: 30645, Stop: 31490, Start Num: 22
Candidate Starts for Honk_46:
(11, 30585), (Start: 22 @30645 has 14 MA's), (53, 30843), (56, 30858), (64, 30894), (123, 31206), (134, 31257), (149, 31347), (162, 31428),

Gene: IAmGroot_50 Start: 34329, Stop: 35162, Start Num: 22
Candidate Starts for IAmGroot_50:
(Start: 22 @34329 has 14 MA's), (93, 34767), (123, 34902), (162, 35118),

Gene: Icarian_49 Start: 33677, Stop: 34396, Start Num: 27
Candidate Starts for Icarian_49:
(18, 33626), (Start: 27 @33677 has 21 MA's), (29, 33701), (43, 33791), (48, 33842), (51, 33851), (59, 33890), (66, 33926), (76, 33983), (77, 33989), (93, 34100), (99, 34145), (104, 34166), (108, 34184), (118, 34229), (119, 34235), (126, 34259), (143, 34337), (148, 34376),

Gene: IndyLu_45 Start: 32178, Stop: 32897, Start Num: 26
Candidate Starts for IndyLu_45:
(Start: 23 @32166 has 1 MA's), (Start: 26 @32178 has 52 MA's), (29, 32202), (51, 32352), (74, 32478), (77, 32490), (81, 32508), (84, 32523), (92, 32595), (93, 32601), (117, 32724), (143, 32838), (145, 32844), (148, 32877), (152, 32889),

Gene: Jabb_46 Start: 31958, Stop: 32680, Start Num: 26
Candidate Starts for Jabb_46:
(4, 31742), (Start: 23 @31946 has 1 MA's), (Start: 26 @31958 has 52 MA's), (29, 31982), (46, 32111), (51, 32132), (77, 32270), (92, 32375), (93, 32381), (104, 32447), (108, 32465), (148, 32657),

Gene: Johnathan_44 Start: 31234, Stop: 31953, Start Num: 26
Candidate Starts for Johnathan_44:
(Start: 23 @31222 has 1 MA's), (Start: 26 @31234 has 52 MA's), (45, 31375), (46, 31387), (51, 31408), (74, 31534), (77, 31546), (89, 31639), (92, 31651), (93, 31657), (97, 31693), (101, 31717), (104, 31723), (108, 31741), (143, 31894), (148, 31933),

Gene: Jovita_46 Start: 31973, Stop: 32692, Start Num: 26
Candidate Starts for Jovita_46:
(Start: 23 @31961 has 1 MA's), (Start: 26 @31973 has 52 MA's), (29, 31997), (45, 32114), (46, 32126), (51, 32147), (77, 32285), (92, 32390), (93, 32396), (104, 32462), (108, 32480), (143, 32633), (148, 32672),

Gene: Kamdara_43 Start: 32293, Stop: 33015, Start Num: 26
Candidate Starts for Kamdara_43:
(4, 32077), (Start: 23 @32281 has 1 MA's), (Start: 26 @32293 has 52 MA's), (29, 32317), (45, 32434), (46, 32446), (48, 32458), (67, 32554), (70, 32572), (74, 32593), (77, 32605), (93, 32716), (104, 32782), (108, 32800), (118, 32845), (129, 32878), (145, 32959), (148, 32992),

Gene: Kate33_46 Start: 31923, Stop: 32642, Start Num: 26
Candidate Starts for Kate33_46:
(Start: 23 @31911 has 1 MA's), (Start: 26 @31923 has 52 MA's), (29, 31947), (51, 32097), (74, 32223), (77, 32235), (81, 32253), (84, 32268), (92, 32340), (93, 32346), (108, 32430), (117, 32469), (143, 32583), (145, 32589), (148, 32622), (152, 32634),

Gene: Katzastrophic_44 Start: 32284, Stop: 33006, Start Num: 26
Candidate Starts for Katzastrophic_44:
(Start: 23 @32272 has 1 MA's), (Start: 26 @32284 has 52 MA's), (32, 32317), (46, 32437), (48, 32449), (51, 32458), (77, 32596), (86, 32647), (93, 32707), (104, 32773), (108, 32791), (145, 32950), (148, 32983),

Gene: Kenzers_46 Start: 32014, Stop: 32736, Start Num: 26
Candidate Starts for Kenzers_46:
(4, 31798), (Start: 23 @32002 has 1 MA's), (Start: 26 @32014 has 52 MA's), (48, 32179), (51, 32188), (59, 32227), (67, 32275), (68, 32290), (74, 32314), (77, 32326), (81, 32344), (92, 32431), (93, 32437), (104, 32503), (143, 32677), (148, 32716),

Gene: Kieran_43 Start: 32296, Stop: 33018, Start Num: 26
Candidate Starts for Kieran_43:
(4, 32080), (Start: 23 @32284 has 1 MA's), (Start: 26 @32296 has 52 MA's), (29, 32320), (45, 32437), (46, 32449), (48, 32461), (67, 32557), (70, 32575), (74, 32596), (77, 32608), (93, 32719), (104, 32785), (108, 32803), (118, 32848), (145, 32962), (148, 32995),

Gene: Lahqtemish_45 Start: 32204, Stop: 32989, Start Num: 27
Candidate Starts for Lahqtemish_45:
(Start: 23 @32192 has 1 MA's), (Start: 27 @32204 has 21 MA's), (29, 32228), (46, 32357), (51, 32378), (67, 32465), (76, 32510), (77, 32516), (93, 32627), (101, 32687), (104, 32693), (115, 32744), (118, 32756), (143, 32864), (148, 32903), (158, 32936),

Gene: Lilo27_46 Start: 31852, Stop: 32571, Start Num: 26
Candidate Starts for Lilo27_46:
(4, 31636), (Start: 23 @31840 has 1 MA's), (Start: 26 @31852 has 52 MA's), (29, 31876), (46, 32005), (51, 32026), (77, 32164), (92, 32269), (93, 32275), (104, 32341), (108, 32359), (143, 32512), (148, 32551),

Gene: LimaBean_45 Start: 31536, Stop: 32321, Start Num: 27
Candidate Starts for LimaBean_45:
(4, 31320), (Start: 23 @31524 has 1 MA's), (Start: 27 @31536 has 21 MA's), (29, 31560), (42, 31644), (46, 31689), (51, 31710), (67, 31797), (76, 31842), (77, 31848), (81, 31866), (93, 31959), (101, 32019),

(104, 32025), (115, 32076), (118, 32088), (148, 32235), (158, 32268),

Gene: Loviatar_46 Start: 33899, Stop: 34618, Start Num: 27
Candidate Starts for Loviatar_46:
(4, 33683), (Start: 23 @33887 has 1 MA's), (Start: 27 @33899 has 21 MA's), (29, 33923), (43, 34013), (48, 34064), (51, 34073), (59, 34112), (66, 34148), (76, 34205), (77, 34211), (93, 34322), (104, 34388), (108, 34406), (118, 34451), (126, 34481), (143, 34559), (148, 34598), (151, 34607),

Gene: Lynlen_46 Start: 32014, Stop: 32733, Start Num: 26
Candidate Starts for Lynlen_46:
(4, 31798), (Start: 23 @32002 has 1 MA's), (Start: 26 @32014 has 52 MA's), (45, 32155), (51, 32188), (74, 32314), (77, 32326), (92, 32431), (93, 32437), (97, 32473), (101, 32497), (104, 32503), (143, 32674), (148, 32713), (152, 32725),

Gene: Mabodamaca_50 Start: 35098, Stop: 35934, Start Num: 22
Candidate Starts for Mabodamaca_50:
(Start: 22 @35098 has 14 MA's), (34, 35161), (38, 35185), (80, 35434), (93, 35530), (105, 35602), (162, 35887),

Gene: Milomuff_45 Start: 31760, Stop: 32479, Start Num: 26
Candidate Starts for Milomuff_45:
(Start: 23 @31748 has 1 MA's), (Start: 26 @31760 has 52 MA's), (66, 32009), (68, 32036), (77, 32072), (89, 32165), (92, 32177), (93, 32183), (104, 32249), (111, 32273), (138, 32405), (139, 32408), (148, 32459),

Gene: MsUbiquitous_46 Start: 31958, Stop: 32680, Start Num: 26
Candidate Starts for MsUbiquitous_46:
(4, 31742), (Start: 23 @31946 has 1 MA's), (Start: 26 @31958 has 52 MA's), (29, 31982), (46, 32111), (51, 32132), (77, 32270), (92, 32375), (93, 32381), (104, 32447), (108, 32465), (148, 32657),

Gene: Nesbitt_43 Start: 32499, Stop: 33359, Start Num: 7
Candidate Starts for Nesbitt_43:
(Start: 7 @32499 has 2 MA's), (30, 32640), (42, 32736), (50, 32796), (57, 32829), (79, 32949), (103, 33114), (107, 33126), (126, 33204), (154, 33333),

Gene: Nicky22_46 Start: 32406, Stop: 33125, Start Num: 27
Candidate Starts for Nicky22_46:
(Start: 23 @32394 has 1 MA's), (Start: 27 @32406 has 21 MA's), (29, 32430), (48, 32571), (51, 32580), (59, 32619), (70, 32685), (76, 32712), (77, 32718), (93, 32829), (108, 32913), (118, 32958), (126, 32988), (136, 33039), (143, 33066), (148, 33105),

Gene: Olliecat_42 Start: 30495, Stop: 31241, Start Num: 26
Candidate Starts for Olliecat_42:
(Start: 25 @30489 has 1 MA's), (Start: 26 @30495 has 52 MA's), (33, 30537), (51, 30681), (74, 30807), (83, 30849), (93, 30930), (104, 30996), (113, 31038), (126, 31092), (129, 31095), (138, 31155), (142, 31167), (145, 31176), (147, 31203), (148, 31209),

Gene: PastaFagioli_46 Start: 32598, Stop: 33383, Start Num: 27
Candidate Starts for PastaFagioli_46:
(Start: 23 @32586 has 1 MA's), (Start: 27 @32598 has 21 MA's), (29, 32622), (46, 32751), (51, 32772), (67, 32859), (76, 32904), (77, 32910), (93, 33021), (101, 33081), (104, 33087), (115, 33138), (118, 33150), (148, 33297), (158, 33330),

Gene: Pecas_47 Start: 32158, Stop: 32877, Start Num: 26
Candidate Starts for Pecas_47:
(4, 31942), (Start: 23 @32146 has 1 MA's), (Start: 26 @32158 has 52 MA's), (29, 32182), (46, 32311), (51, 32332), (77, 32470), (92, 32575), (93, 32581), (104, 32647), (108, 32665), (143, 32818), (148, 32857),

Gene: Percival_51 Start: 34934, Stop: 35809, Start Num: 22
Candidate Starts for Percival_51:
(9, 34862), (Start: 22 @34934 has 14 MA's), (58, 35171), (62, 35186), (67, 35222), (90, 35369), (93, 35381), (101, 35441), (102, 35444), (110, 35462), (138, 35582), (144, 35603), (163, 35732), (167, 35780), (169, 35792),

Gene: PhigPhack_46 Start: 31778, Stop: 32497, Start Num: 26
Candidate Starts for PhigPhack_46:
(4, 31562), (Start: 23 @31766 has 1 MA's), (Start: 26 @31778 has 52 MA's), (51, 31952), (59, 31991), (74, 32078), (77, 32090), (84, 32123), (92, 32195), (93, 32201), (101, 32261), (104, 32267), (143, 32438), (148, 32477),

Gene: Phisb_46 Start: 32003, Stop: 32722, Start Num: 26
Candidate Starts for Phisb_46:
(4, 31787), (Start: 23 @31991 has 1 MA's), (Start: 26 @32003 has 52 MA's), (29, 32027), (45, 32144), (46, 32156), (51, 32177), (77, 32315), (92, 32420), (93, 32426), (104, 32492), (108, 32510), (143, 32663), (148, 32702),

Gene: PondAmelia_47 Start: 32820, Stop: 33539, Start Num: 27
Candidate Starts for PondAmelia_47:
(Start: 23 @32808 has 1 MA's), (Start: 27 @32820 has 21 MA's), (48, 32985), (51, 32994), (59, 33033), (66, 33069), (76, 33126), (77, 33132), (93, 33243), (104, 33309), (108, 33327), (118, 33372), (119, 33378), (126, 33402), (143, 33480), (148, 33519), (151, 33528),

Gene: QMacho_48 Start: 32641, Stop: 33360, Start Num: 27
Candidate Starts for QMacho_48:
(4, 32425), (Start: 23 @32629 has 1 MA's), (Start: 27 @32641 has 21 MA's), (29, 32665), (48, 32806), (51, 32815), (59, 32854), (76, 32947), (77, 32953), (93, 33064), (104, 33130), (108, 33148), (118, 33193), (126, 33223), (143, 33301), (148, 33340),

Gene: Quenya_45 Start: 32476, Stop: 33198, Start Num: 26
Candidate Starts for Quenya_45:
(4, 32260), (Start: 23 @32464 has 1 MA's), (Start: 26 @32476 has 52 MA's), (32, 32509), (46, 32629), (48, 32641), (51, 32650), (66, 32725), (67, 32737), (74, 32776), (77, 32788), (81, 32806), (92, 32893), (93, 32899), (99, 32944), (104, 32965), (118, 33028), (129, 33061), (136, 33109), (148, 33175),

Gene: RemusLoopin_37 Start: 30564, Stop: 31568, Start Num: 8
Candidate Starts for RemusLoopin_37:
(Start: 8 @30564 has 4 MA's), (15, 30630), (32, 30711), (35, 30729), (36, 30738), (37, 30744), (41, 30780), (44, 30801), (45, 30822), (47, 30843), (61, 30903), (69, 30957), (73, 30972), (87, 31062), (125, 31266), (159, 31449),

Gene: Rollins_43 Start: 29896, Stop: 30603, Start Num: 28
Candidate Starts for Rollins_43:
(3, 29653), (5, 29680), (Start: 24 @29878 has 10 MA's), (Start: 28 @29896 has 1 MA's), (48, 30043), (51, 30052), (54, 30067), (59, 30091), (74, 30178), (77, 30190), (81, 30208), (92, 30295), (93, 30301), (99, 30346), (104, 30367), (108, 30385), (148, 30577), (153, 30592),

Gene: Rona_43 Start: 32279, Stop: 33001, Start Num: 26
Candidate Starts for Rona_43:
(4, 32063), (Start: 23 @32267 has 1 MA's), (Start: 26 @32279 has 52 MA's), (29, 32303), (45, 32420), (46, 32432), (48, 32444), (67, 32540), (70, 32558), (74, 32579), (77, 32591), (93, 32702), (104, 32768), (108, 32786), (118, 32831), (129, 32864), (145, 32945), (148, 32978),

Gene: SanaSana_48 Start: 33508, Stop: 34227, Start Num: 27
Candidate Starts for SanaSana_48:
(4, 33292), (Start: 23 @33496 has 1 MA's), (Start: 27 @33508 has 21 MA's), (29, 33532), (43, 33622), (45, 33649), (48, 33673), (51, 33682), (59, 33721), (66, 33757), (70, 33787), (76, 33814), (77, 33820), (93, 33931), (104, 33997), (108, 34015), (118, 34060), (120, 34069), (126, 34090), (143, 34168), (148, 34207), (152, 34219),

Gene: SansAfet_46 Start: 31865, Stop: 32584, Start Num: 26
Candidate Starts for SansAfet_46:
(4, 31649), (Start: 23 @31853 has 1 MA's), (Start: 26 @31865 has 52 MA's), (40, 31964), (51, 32039), (59, 32078), (74, 32165), (77, 32177), (84, 32210), (92, 32282), (93, 32288), (101, 32348), (104, 32354), (108, 32372), (143, 32525), (148, 32564),

Gene: SarBear_45 Start: 31651, Stop: 32370, Start Num: 26
Candidate Starts for SarBear_45:
(4, 31435), (Start: 23 @31639 has 1 MA's), (Start: 26 @31651 has 52 MA's), (29, 31675), (46, 31804), (51, 31825), (77, 31963), (92, 32068), (93, 32074), (104, 32140), (108, 32158), (143, 32311), (148, 32350),

Gene: Sebastisaurus_37 Start: 30256, Stop: 31260, Start Num: 8
Candidate Starts for Sebastisaurus_37:
(Start: 8 @30256 has 4 MA's), (15, 30322), (32, 30403), (35, 30421), (36, 30430), (37, 30436), (41, 30472), (44, 30493), (61, 30595), (69, 30649), (73, 30664), (87, 30754), (125, 30958), (128, 30967), (130, 30982), (159, 31141),

Gene: Sharkboy_44 Start: 32378, Stop: 33100, Start Num: 26
Candidate Starts for Sharkboy_44:
(4, 32162), (Start: 23 @32366 has 1 MA's), (Start: 26 @32378 has 52 MA's), (29, 32402), (45, 32519), (46, 32531), (48, 32543), (67, 32639), (70, 32657), (74, 32678), (77, 32690), (93, 32801), (104, 32867), (108, 32885), (118, 32930), (129, 32963), (145, 33044), (148, 33077),

Gene: Shayna_45 Start: 31215, Stop: 31955, Start Num: 26
Candidate Starts for Shayna_45:
(4, 30999), (Start: 23 @31203 has 1 MA's), (Start: 26 @31215 has 52 MA's), (46, 31377), (48, 31389), (51, 31398), (76, 31530), (77, 31536), (91, 31638), (92, 31641), (93, 31647), (112, 31740), (126, 31806), (139, 31872), (145, 31890), (148, 31923),

Gene: SirBeanington_45 Start: 32162, Stop: 32881, Start Num: 26
Candidate Starts for SirBeanington_45:
(4, 31946), (Start: 23 @32150 has 1 MA's), (Start: 26 @32162 has 52 MA's), (45, 32303), (51, 32336), (74, 32462), (77, 32474), (89, 32567), (92, 32579), (93, 32585), (97, 32621), (101, 32645), (104, 32651), (143, 32822), (148, 32861),

Gene: Skylord_43 Start: 29809, Stop: 30534, Start Num: 24
Candidate Starts for Skylord_43:

(3, 29584), (5, 29611), (Start: 24 @29809 has 10 MA's), (Start: 28 @29827 has 1 MA's), (48, 29974), (51, 29983), (54, 29998), (59, 30022), (74, 30109), (77, 30121), (81, 30139), (92, 30226), (93, 30232), (99, 30277), (104, 30298), (108, 30316), (148, 30508), (153, 30523),

Gene: Slay_46 Start: 32379, Stop: 33098, Start Num: 26
Candidate Starts for Slay_46:
(1, 32070), (4, 32163), (Start: 23 @32367 has 1 MA's), (Start: 26 @32379 has 52 MA's), (46, 32532), (51, 32553), (77, 32691), (92, 32796), (93, 32802), (104, 32868), (108, 32886), (143, 33039), (148, 33078), (152, 33090),

Gene: Softsoap_45 Start: 31776, Stop: 32495, Start Num: 26
Candidate Starts for Softsoap_45:
(Start: 23 @31764 has 1 MA's), (Start: 26 @31776 has 52 MA's), (66, 32025), (68, 32052), (77, 32088), (89, 32181), (92, 32193), (93, 32199), (104, 32265), (111, 32289), (138, 32421), (139, 32424), (148, 32475),

Gene: Solea_46 Start: 31760, Stop: 32479, Start Num: 26
Candidate Starts for Solea_46:
(Start: 23 @31748 has 1 MA's), (Start: 26 @31760 has 52 MA's), (66, 32009), (68, 32036), (77, 32072), (89, 32165), (92, 32177), (93, 32183), (104, 32249), (111, 32273), (138, 32405), (139, 32408), (148, 32459),

Gene: Squircle_42 Start: 30488, Stop: 31240, Start Num: 25
Candidate Starts for Squircle_42:
(Start: 25 @30488 has 1 MA's), (Start: 26 @30494 has 52 MA's), (33, 30536), (51, 30680), (74, 30806), (83, 30848), (93, 30929), (104, 30995), (113, 31037), (126, 31091), (129, 31094), (138, 31154), (142, 31166), (145, 31175), (147, 31202), (148, 31208),

Gene: Stoor_46 Start: 33177, Stop: 33896, Start Num: 26
Candidate Starts for Stoor_46:
(4, 32961), (Start: 23 @33165 has 1 MA's), (Start: 26 @33177 has 52 MA's), (29, 33201), (32, 33210), (43, 33291), (45, 33318), (46, 33330), (48, 33342), (51, 33351), (59, 33390), (66, 33426), (68, 33453), (74, 33477), (77, 33489), (81, 33507), (92, 33594), (93, 33600), (101, 33660), (108, 33684), (126, 33759), (136, 33810), (138, 33822), (143, 33837), (145, 33843), (148, 33876), (150, 33882),

Gene: Stromboli_46 Start: 33039, Stop: 33758, Start Num: 27
Candidate Starts for Stromboli_46:
(4, 32823), (Start: 23 @33027 has 1 MA's), (Start: 27 @33039 has 21 MA's), (29, 33063), (48, 33204), (51, 33213), (59, 33252), (66, 33288), (76, 33345), (77, 33351), (93, 33462), (104, 33528), (108, 33546), (118, 33591), (126, 33621), (143, 33699), (148, 33738),

Gene: SuMoo_53 Start: 34756, Stop: 35586, Start Num: 22
Candidate Starts for SuMoo_53:
(19, 34720), (Start: 22 @34756 has 14 MA's), (34, 34819), (38, 34843), (80, 35092), (93, 35188), (162, 35545),

Gene: SunnyD_45 Start: 31220, Stop: 31960, Start Num: 26
Candidate Starts for SunnyD_45:
(4, 31004), (Start: 23 @31208 has 1 MA's), (Start: 26 @31220 has 52 MA's), (46, 31382), (48, 31394), (51, 31403), (76, 31535), (77, 31541), (92, 31646), (93, 31652), (112, 31745), (126, 31811), (139, 31877), (145, 31895), (148, 31928),

Gene: SuperHands_49 Start: 35417, Stop: 36313, Start Num: 22

Candidate Starts for SuperHands_49:
(9, 35345), (Start: 22 @35417 has 14 MA's), (62, 35669), (90, 35852), (93, 35864), (123, 36005), (124, 36011), (127, 36020), (138, 36086), (144, 36107), (163, 36236), (167, 36284),

Gene: Swervy_46 Start: 31923, Stop: 32642, Start Num: 26
Candidate Starts for Swervy_46:
(Start: 23 @31911 has 1 MA's), (Start: 26 @31923 has 52 MA's), (29, 31947), (46, 32076), (51, 32097), (77, 32235), (92, 32340), (93, 32346), (104, 32412), (108, 32430), (143, 32583), (148, 32622),

Gene: Teagster_46 Start: 32113, Stop: 32853, Start Num: 26
Candidate Starts for Teagster_46:
(Start: 23 @32101 has 1 MA's), (Start: 26 @32113 has 52 MA's), (46, 32275), (48, 32287), (51, 32296), (76, 32428), (77, 32434), (91, 32536), (92, 32539), (93, 32545), (112, 32638), (126, 32704), (139, 32770), (145, 32788), (148, 32821),

Gene: TukTuk_46 Start: 31931, Stop: 32650, Start Num: 26
Candidate Starts for TukTuk_46:
(4, 31715), (Start: 23 @31919 has 1 MA's), (Start: 26 @31931 has 52 MA's), (29, 31955), (46, 32084), (51, 32105), (77, 32243), (92, 32348), (93, 32354), (104, 32420), (108, 32438), (143, 32591), (148, 32630),

Gene: UtzChips_49 Start: 33579, Stop: 34418, Start Num: 22
Candidate Starts for UtzChips_49:
(2, 33321), (6, 33396), (10, 33510), (Start: 22 @33579 has 14 MA's), (58, 33801), (93, 34011), (100, 34062), (102, 34071), (109, 34095), (135, 34206), (162, 34368), (165, 34407),

Gene: Vitas_43 Start: 29791, Stop: 30516, Start Num: 24
Candidate Starts for Vitas_43:
(3, 29566), (5, 29593), (Start: 24 @29791 has 10 MA's), (Start: 28 @29809 has 1 MA's), (48, 29956), (51, 29965), (54, 29980), (59, 30004), (74, 30091), (77, 30103), (81, 30121), (92, 30208), (93, 30214), (99, 30259), (104, 30280), (108, 30298), (148, 30490), (153, 30505),

Gene: WalkingDead_47 Start: 33791, Stop: 34510, Start Num: 27
Candidate Starts for WalkingDead_47:
(4, 33572), (Start: 27 @33791 has 21 MA's), (29, 33815), (32, 33824), (45, 33932), (46, 33944), (48, 33956), (51, 33965), (59, 34004), (66, 34040), (68, 34067), (74, 34091), (77, 34103), (81, 34121), (92, 34208), (93, 34214), (101, 34274), (108, 34298), (126, 34373), (136, 34424), (138, 34436), (143, 34451), (145, 34457), (148, 34490),

Gene: Zeta1847_42 Start: 31621, Stop: 32589, Start Num: 13
Candidate Starts for Zeta1847_42:
(Start: 13 @31621 has 1 MA's), (20, 31654), (Start: 22 @31672 has 14 MA's), (Start: 27 @31687 has 21 MA's), (56, 31882), (58, 31894), (71, 31972), (92, 32104), (93, 32110), (95, 32122), (98, 32152), (116, 32227), (145, 32332), (161, 32431), (162, 32449), (164, 32461),