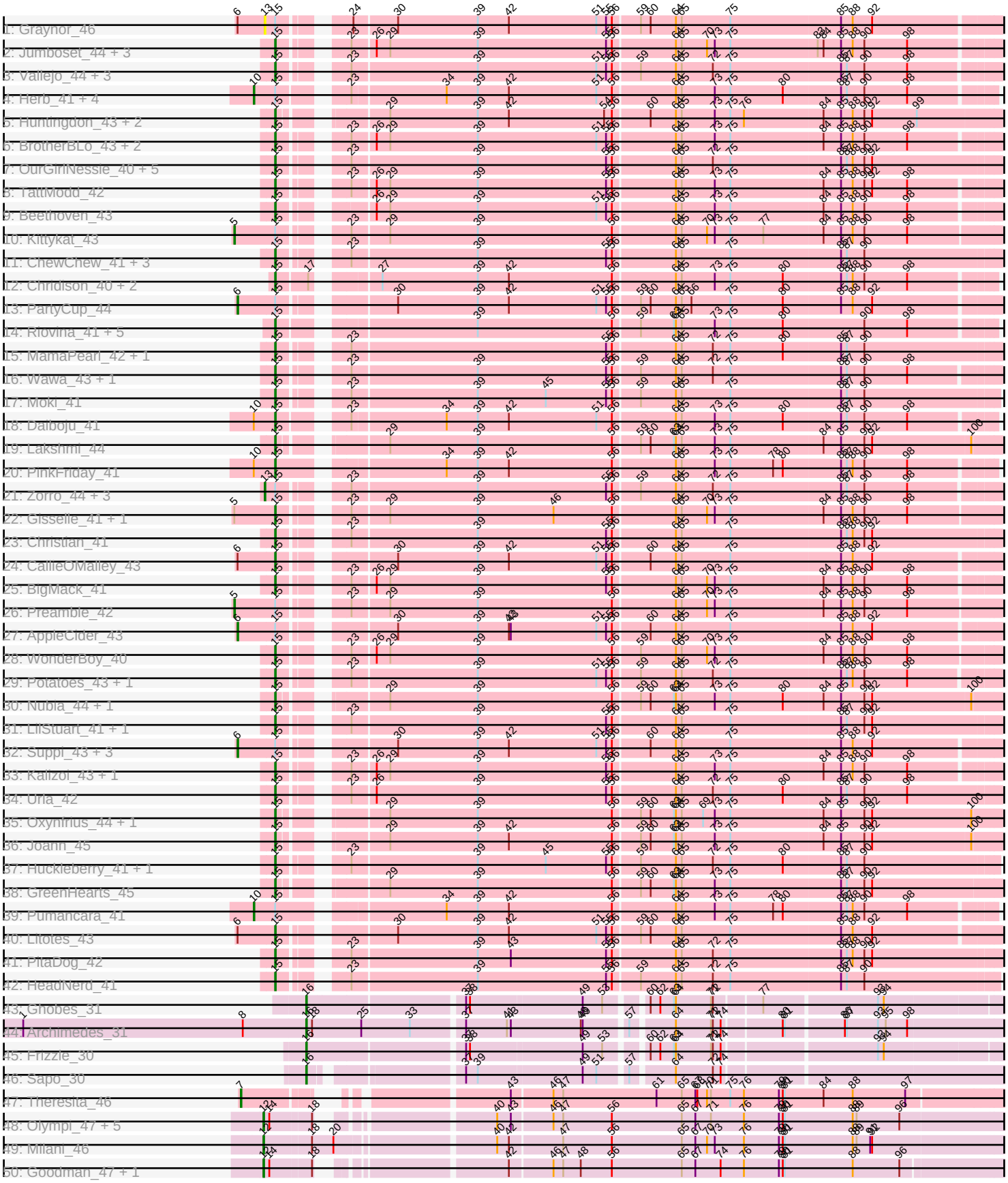
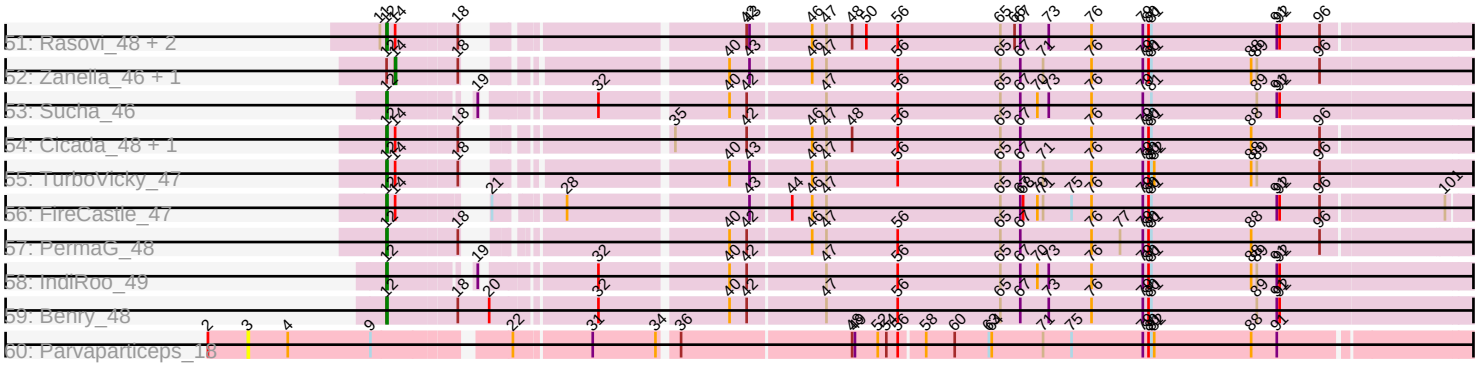
Pham 347423


1: Graynor_46
2: Jumboset_44 + 3
3: Vallejo_44 + 3
4: Herb_41 + 4
5: Huntingdon_43 + 2
6: BrotherBLo_43 + 2
7: OurGirlNessie_40 + 5
8: TattModd_42
9: Beethoven_43
10: Kittykat_43
11: ChewChew_41 + 3
12: Chrudison_40 + 2
13: PartyCup_44
14: Riovina_41 + 5
15: MamaPearl_42 + 1
16: Wawa_43 + 1
17: Moki_41
18: Daiboju_41
19: Lakshmi_44
20: PinkFriday_41
21: Zorro_44 + 3
22: Gisselle_41 + 1
23: Christian_41
24: CallieOMalley_43
25: BigMack_41
26: Preamble_42
27: AppleCider_43
28: WonderBoy_40
29: Potatoes_43 + 1
30: Nubia_44 + 1
31: LilStuart_41 + 1
32: Suppi_43 + 3
33: Kalizol_43 + 1
34: Orla_42
35: Oxynirus_44 + 1
36: Joann_45
37: Huckleberry_41 + 1
38: GreenHearts_45
39: Pumancara_41
40: Litotes_43
41: PitaDog_42
42: HeadNerd_41
43: Ghobes_31
44: Archimedes_31
45: Frizzle_30
46: Sapo_30
47: Theresita_46
48: Olympi_47 + 5
49: Milani_46
50: Goodman_47 + 1

Pham 347423


51: Rasovi_48 + 2
52: Zanella_46 + 1
53: Sucha_46
54: Cicada_48 + 1
55: TurboVicky_47
56: FireCastle_47
57: PermaG_48
58: IndiRoo_49
59: Benry_48
60: Parvaparticeps_18

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 347423 Report

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

Pham number 347423 has 114 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Graynor_46
• Track 2 : Jumboset_44, MrGloopy_44, Glenn_44, Savage2526_44
• Track 3 : Vallejo_44, Riverdale_44, Immaculata_43, Carpal_43
• Track 4 : Herb_41, Temper16_41, Maria1952_40, KingBob_41, Sergei_41
• Track 5 : Huntingdon_43, Misaeng_43, RcigaStruga_43
• Track 6 : BrotherBLo_43, Rozby_43, Fluke_44
• Track 7 : OurGirlNessie_40, Lennox_41, Makoto_41, Lucy_41, Pterodactyl_41, DrRobert_40
• Track 8 : TattModd_42
• Track 9 : Beethoven_43
• Track 10 : Kittykat_43
• Track 11 : ChewChew_41, CristinaYang_41, Bodacious_41, Nancia_41
• Track 12 : Chridison_40, Vulture_41, HunterDalle_41
• Track 13 : PartyCup_44
• Track 14 : Riovina_41, AustinPowers_41, Supakev_41, OMalley_41, Eunoia_41, Aledel_41
• Track 15 : MamaPearl_42, EstebanJulior_42
• Track 16 : Wawa_43, Korra_43
• Track 17 : Moki_41
• Track 18 : Daiboju_41
• Track 19 : Lakshmi_44
• Track 20 : PinkFriday_41
• Track 21 : Zorro_44, MeganNoll_43, Dino_44, RAP15_44
• Track 22 : Gisselle_41, DreamTeam_41
• Track 23 : Christian_41
• Track 24 : CallieOMalley_43
• Track 25 : BigMack_41
• Track 26 : Preamble_42
• Track 27 : AppleCider_43
• Track 28 : WonderBoy_40
• Track 29 : Potatoes_43, Cholula_43
• Track 30 : Nubia_44, Albanese_44
• Track 31 : LilStuart_41, Lasagna_40
• Track 32 : Suppi_43, Canowicakte_43, Wayne_43, MrBoss_45
• Track 33 : Kalizoi_43, Scuttle_43
• Track 34 : Urla_42
• Track 35 : Oxynfrius_44, Greenhouse_45

• Track 36 : Joann_45
• Track 37 : Huckleberry_41, Bennie_41
• Track 38 : GreenHearts_45
• Track 39 : Pumancara_41
• Track 40 : Litotes_43
• Track 41 : PitaDog_42
• Track 42 : HeadNerd_41
• Track 43 : Ghobes_31
• Track 44 : Archimedes_31
• Track 45 : Frizzle_30
• Track 46 : Sapo_30
• Track 47 : Theresita_46
• Track 48 : Olympi_47, Typher_48, AyoTeo_47, Rootkit7_46, Jera_47, Alove_46
• Track 49 : Milani_46
• Track 50 : Goodman_47, Johann_47
• Track 51 : Rasovi_48, Linayshia_48, Htur_48
• Track 52 : Zanella_46, Labella_48
• Track 53 : Sucha_46
• Track 54 : Cicada_48, SBlackberry_46
• Track 55 : TurboVicky_47
• Track 56 : FireCastle_47
• Track 57 : PermaG_48
• Track 58 : IndiRoo_49
• Track 59 : Benry_48
• Track 60 : Parvaparticeps_18

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

The start number called the most often in the published annotations is 15, it was called in 67 of the 110 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albanese_44, Aledel_41, AustinPowers_41, Beethoven_43, Bennie_41, BigMack_41, Bodacious_41, BrotherBLo_43, CallieOMalley_43, Carpal_43, ChewChew_41, Cholula_43, Chridison_40, Christian_41, CristinaYang_41, Daiboju_41, DrRobert_40, DreamTeam_41, EstebanJulior_42, Eunoia_41, Fluke_44, Gisselle_41, Glenn_44, GreenHearts_45, Greenhouse_45, HeadNerd_41, Huckleberry_41, HunterDalle_41, Huntingdon_43, Immaculata_43, Joann_45, Jumboset_44, Kalizoi_43, Korra_43, Lakshmi_44, Lasagna_40, Lennox_41, LilStuart_41, Litotes_43, Lucy_41, Makoto_41, MamaPearl_42, Misaeng_43, Moki_41, MrGloopy_44, Nancia_41, Nubia_44, OMalley_41, OurGirlNessie_40, Oxynfrius_44, PinkFriday_41, PitaDog_42, Potatoes_43, Pterodactyl_41, RcigaStruga_43, Riovina_41, Riverdale_44, Rozby_43, Savage2526_44, Scuttle_43, Supakev_41, TattModd_42, Urla_42, Vallejo_44, Vulture_41, Wawa_43, WonderBoy_40,

Genes that have the "Most Annotated" start but do not call it:
• AppleCider_43, Canowicakte_43, Dino_44, Graynor_46, Herb_41, KingBob_41, Kittykat_43, Maria1952_40, MeganNoll_43, MrBoss_45, PartyCup_44, Preamble_42, Pumancara_41, RAP15_44, Sergei_41, Suppi_43, Temper16_41, Wayne_43,

Zorro_44,

Genes that do not have the "Most Annotated" start:
• Alove_46, Archimedes_31, AyoTeo_47, Benry_48, Cicada_48, FireCastle_47, Frizzle_30, Ghobes_31, Goodman_47, Htur_48, IndiRoo_49, Jera_47, Johann_47, Labella_48, Linayshia_48, Milani_46, Olympi_47, Parvaparticeps_18, PermaG_48, Rasovi_48, Rootkit7_46, SBlackberry_46, Sapo_30, Sucha_46, Theresita_46, TurboVicky_47, Typher_48, Zanella_46,

Summary by start number:

Start 3:
• Found in 1 of 114 (0.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Parvaparticeps_18 (UNK),

Start 5:
• Found in 4 of 114 (3.5%) of genes in pham
• Manual Annotations of this start: 2 of 110
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Kittykat_43 (AK), Preamble_42 (AK),

Start 6:
• Found in 9 of 114 (7.9%) of genes in pham
• Manual Annotations of this start: 5 of 110
• Called 66.7% of time when present
• Phage (with cluster) where this start called: AppleCider_43 (AK), Canowicakte_43 (AK), MrBoss_45 (AK), PartyCup_44 (AK), Suppi_43 (AK), Wayne_43 (AK),

Start 7:
• Found in 1 of 114 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 110
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Theresita_46 (EA7),

Start 10:
• Found in 8 of 114 (7.0%) of genes in pham
• Manual Annotations of this start: 6 of 110
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Herb_41 (AK), KingBob_41 (AK), Maria1952_40 (AK), Pumancara_41 (AK), Sergei_41 (AK), Temper16_41 (AK),

Start 12:
• Found in 22 of 114 (19.3%) of genes in pham
• Manual Annotations of this start: 20 of 110
• Called 90.9% of time when present
• Phage (with cluster) where this start called: Alove_46 (EJ), AyoTeo_47 (EJ), Benry_48 (EJ), Cicada_48 (EJ), FireCastle_47 (EJ), Goodman_47 (EJ), Htur_48 (EJ), IndiRoo_49 (EJ), Jera_47 (EJ), Johann_47 (EJ), Linayshia_48 (EJ), Milani_46 (EJ), Olympi_47 (EJ), PermaG_48 (EJ), Rasovi_48 (EJ), Rootkit7_46 (EJ), SBlackberry_46 (EJ), Sucha_46 (EJ), TurboVicky_47 (EJ), Typher_48 (EJ),

Start 13:
• Found in 5 of 114 (4.4%) of genes in pham
• Manual Annotations of this start: 4 of 110
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dino_44 (AK), Graynor_46 (AK), MeganNoll_43 (AK), RAP15_44 (AK), Zorro_44 (AK),

Start 14:
• Found in 17 of 114 (14.9%) of genes in pham
• Manual Annotations of this start: 1 of 110
• Called 11.8% of time when present
• Phage (with cluster) where this start called: Labella_48 (EJ), Zanella_46 (EJ),

Start 15:
• Found in 86 of 114 (75.4%) of genes in pham
• Manual Annotations of this start: 67 of 110
• Called 77.9% of time when present
• Phage (with cluster) where this start called: Albanese_44 (AK), Aledel_41 (AK), AustinPowers_41 (AK), Beethoven_43 (AK), Bennie_41 (AK), BigMack_41 (AK), Bodacious_41 (AK), BrotherBLo_43 (AK), CallieOMalley_43 (AK), Carpal_43 (AK), ChewChew_41 (AK), Cholula_43 (AK), Chridison_40 (AK), Christian_41 (AK), CristinaYang_41 (AK), Daiboju_41 (AK), DrRobert_40 (AK), DreamTeam_41 (AK), EstebanJulior_42 (AK), Eunoia_41 (AK), Fluke_44 (AK), Gisselle_41 (AK), Glenn_44 (AK), GreenHearts_45 (AK), Greenhouse_45 (AK), HeadNerd_41 (AK), Huckleberry_41 (AK), HunterDalle_41 (AK), Huntingdon_43 (AK), Immaculata_43 (AK), Joann_45 (AK), Jumboset_44 (AK), Kalizoi_43 (AK), Korra_43 (AK), Lakshmi_44 (AK), Lasagna_40 (AK), Lennox_41 (AK), LilStuart_41 (AK), Litotes_43 (AK), Lucy_41 (AK), Makoto_41 (AK), MamaPearl_42 (AK), Misaeng_43 (AK), Moki_41 (AK), MrGloopy_44 (AK), Nancia_41 (AK), Nubia_44 (AK), OMalley_41 (AK), OurGirlNessie_40 (AK), Oxynfrius_44 (AK), PinkFriday_41 (AK), PitaDog_42 (AK), Potatoes_43 (AK), Pterodactyl_41 (AK), RcigaStruga_43 (AK), Riovina_41 (AK), Riverdale_44 (AK), Rozby_43 (AK), Savage2526_44 (AK), Scuttle_43 (AK), Supakev_41 (AK), TattModd_42 (AK), Urla_42 (AK), Vallejo_44 (AK), Vulture_41 (AK), Wawa_43 (AK), WonderBoy_40 (AK),

Start 16:
• Found in 4 of 114 (3.5%) of genes in pham
• Manual Annotations of this start: 4 of 110
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Archimedes_31 (DA), Frizzle_30 (DA), Ghobes_31 (DA), Sapo_30 (DA),

Summary by clusters:

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

Info for manual annotations of cluster AK:
•Start number 5 was manually annotated 2 times for cluster AK.
•Start number 6 was manually annotated 5 times for cluster AK.
•Start number 10 was manually annotated 6 times for cluster AK.
•Start number 13 was manually annotated 4 times for cluster AK.
•Start number 15 was manually annotated 67 times for cluster AK.

Info for manual annotations of cluster DA:
•Start number 16 was manually annotated 4 times for cluster DA.

Info for manual annotations of cluster EA7:
•Start number 7 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EJ:
•Start number 12 was manually annotated 20 times for cluster EJ.
•Start number 14 was manually annotated 1 time for cluster EJ.

Gene Information:

Gene: Albanese_44 Start: 29446, Stop: 30498, Start Num: 15
Candidate Starts for Albanese_44:
(Start: 15 @29446 has 67 MA's), (29, 29572), (39, 29707), (56, 29914), (59, 29953), (60, 29968), (63, 30004), (64, 30007), (65, 30016), (73, 30067), (75, 30091), (80, 30172), (84, 30232), (85, 30259), (90, 30295), (92, 30307), (100, 30457),

Gene: Aledel_41 Start: 28837, Stop: 29880, Start Num: 15
Candidate Starts for Aledel_41:
(Start: 15 @28837 has 67 MA's), (39, 29104), (56, 29311), (59, 29350), (63, 29401), (64, 29404), (65, 29413), (73, 29464), (75, 29488), (80, 29569), (90, 29692), (98, 29758),

Gene: Alove_46 Start: 29826, Stop: 30893, Start Num: 12
Candidate Starts for Alove_46:
(Start: 12 @29826 has 20 MA's), (Start: 14 @29835 has 1 MA's), (18, 29895), (40, 30111), (43, 30132), (46, 30192), (47, 30207), (56, 30282), (65, 30390), (67, 30411), (71, 30435), (76, 30486), (79, 30540), (80, 30546), (81, 30549), (88, 30654), (89, 30660), (96, 30726),

Gene: AppleCider_43 Start: 28800, Stop: 29906, Start Num: 6
Candidate Starts for AppleCider_43:
(Start: 6 @28800 has 5 MA's), (Start: 15 @28857 has 67 MA's), (30, 28998), (39, 29121), (42, 29169), (43, 29172), (51, 29304), (55, 29319), (56, 29328), (60, 29382), (64, 29421), (65, 29430), (75, 29505), (85, 29673), (88, 29691), (92, 29721),

Gene: Archimedes_31 Start: 29275, Stop: 28235, Start Num: 16
Candidate Starts for Archimedes_31:
(1, 29710), (8, 29371), (Start: 16 @29275 has 4 MA's), (18, 29266), (25, 29191), (33, 29116), (37, 29041), (41, 28978), (43, 28972), (48, 28864), (49, 28861), (57, 28801), (64, 28741), (71, 28687), (72, 28684), (74, 28672), (80, 28588), (81, 28585), (86, 28501), (87, 28498), (93, 28450), (95, 28438), (98, 28405),

Gene: AustinPowers_41 Start: 28835, Stop: 29878, Start Num: 15
Candidate Starts for AustinPowers_41:
(Start: 15 @28835 has 67 MA's), (39, 29102), (56, 29309), (59, 29348), (63, 29399), (64, 29402), (65, 29411), (73, 29462), (75, 29486), (80, 29567), (90, 29690), (98, 29756),

Gene: AyoTeo_47 Start: 29592, Stop: 30659, Start Num: 12
Candidate Starts for AyoTeo_47:

(Start: 12 @29592 has 20 MA's), (Start: 14 @29601 has 1 MA's), (18, 29661), (40, 29877), (43, 29898), (46, 29958), (47, 29973), (56, 30048), (65, 30156), (67, 30177), (71, 30201), (76, 30252), (79, 30306), (80, 30312), (81, 30315), (88, 30420), (89, 30426), (96, 30492),

Gene: Beethoven_43 Start: 28809, Stop: 29852, Start Num: 15
Candidate Starts for Beethoven_43:
(Start: 15 @28809 has 67 MA's), (26, 28914), (29, 28935), (39, 29070), (51, 29253), (55, 29268), (56, 29277), (64, 29370), (65, 29379), (73, 29430), (75, 29454), (84, 29595), (85, 29622), (88, 29640), (90, 29658), (98, 29724),

Gene: Bennie_41 Start: 27620, Stop: 28669, Start Num: 15
Candidate Starts for Bennie_41:
(Start: 15 @27620 has 67 MA's), (23, 27692), (39, 27881), (45, 27986), (55, 28079), (56, 28088), (59, 28127), (64, 28181), (65, 28190), (72, 28238), (75, 28265), (80, 28346), (85, 28433), (87, 28442), (90, 28469),

Gene: Benry_48 Start: 28836, Stop: 29945, Start Num: 12
Candidate Starts for Benry_48:
(Start: 12 @28836 has 20 MA's), (18, 28905), (20, 28938), (32, 29037), (40, 29163), (42, 29181), (47, 29259), (56, 29334), (65, 29442), (67, 29463), (73, 29493), (76, 29538), (79, 29592), (80, 29598), (81, 29601), (89, 29712), (91, 29733), (92, 29736),

Gene: BigMack_41 Start: 27720, Stop: 28763, Start Num: 15
Candidate Starts for BigMack_41:
(Start: 15 @27720 has 67 MA's), (23, 27792), (26, 27825), (29, 27846), (39, 27981), (55, 28179), (56, 28188), (64, 28281), (65, 28290), (70, 28329), (73, 28341), (75, 28365), (84, 28506), (85, 28533), (88, 28551), (90, 28569), (98, 28635),

Gene: Bodacious_41 Start: 27678, Stop: 28730, Start Num: 15
Candidate Starts for Bodacious_41:
(Start: 15 @27678 has 67 MA's), (23, 27750), (39, 27939), (55, 28137), (56, 28146), (64, 28239), (65, 28248), (75, 28323), (85, 28491), (87, 28500), (90, 28527),

Gene: BrotherBLo_43 Start: 28841, Stop: 29884, Start Num: 15
Candidate Starts for BrotherBLo_43:
(Start: 15 @28841 has 67 MA's), (23, 28913), (26, 28946), (29, 28967), (39, 29102), (51, 29285), (55, 29300), (56, 29309), (64, 29402), (65, 29411), (73, 29462), (75, 29486), (84, 29627), (85, 29654), (88, 29672), (90, 29690), (98, 29756),

Gene: CallieOMalley_43 Start: 28857, Stop: 29906, Start Num: 15
Candidate Starts for CallieOMalley_43:
(Start: 6 @28800 has 5 MA's), (Start: 15 @28857 has 67 MA's), (30, 28998), (39, 29121), (42, 29169), (51, 29304), (55, 29319), (56, 29328), (60, 29382), (64, 29421), (65, 29430), (75, 29505), (85, 29673), (88, 29691), (92, 29721),

Gene: Canowicakte_43 Start: 28835, Stop: 29941, Start Num: 6
Candidate Starts for Canowicakte_43:
(Start: 6 @28835 has 5 MA's), (Start: 15 @28892 has 67 MA's), (30, 29033), (39, 29156), (42, 29204), (51, 29339), (55, 29354), (56, 29363), (60, 29417), (64, 29456), (65, 29465), (75, 29540), (85, 29708), (88, 29726), (92, 29756),

Gene: Carpal_43 Start: 28821, Stop: 29864, Start Num: 15
Candidate Starts for Carpal_43:

(Start: 15 @28821 has 67 MA's), (23, 28893), (39, 29082), (51, 29265), (55, 29280), (56, 29289), (59, 29328), (64, 29382), (65, 29391), (72, 29439), (75, 29466), (85, 29634), (87, 29643), (90, 29670), (98, 29736),

Gene: ChewChew_41 Start: 27809, Stop: 28861, Start Num: 15
Candidate Starts for ChewChew_41:
(Start: 15 @27809 has 67 MA's), (23, 27881), (39, 28070), (55, 28268), (56, 28277), (64, 28370), (65, 28379), (75, 28454), (85, 28622), (87, 28631), (90, 28658),

Gene: Cholula_43 Start: 28867, Stop: 29910, Start Num: 15
Candidate Starts for Cholula_43:
(Start: 15 @28867 has 67 MA's), (23, 28939), (39, 29128), (51, 29311), (55, 29326), (56, 29335), (59, 29374), (64, 29428), (65, 29437), (72, 29485), (75, 29512), (85, 29680), (87, 29689), (88, 29698), (90, 29716), (98, 29782),

Gene: Chridison_40 Start: 28767, Stop: 29810, Start Num: 15
Candidate Starts for Chridison_40:
(Start: 15 @28767 has 67 MA's), (17, 28812), (27, 28887), (39, 29034), (42, 29082), (56, 29241), (64, 29334), (65, 29343), (73, 29394), (75, 29418), (80, 29499), (85, 29586), (87, 29595), (88, 29604), (90, 29622), (98, 29688),

Gene: Christian_41 Start: 27666, Stop: 28718, Start Num: 15
Candidate Starts for Christian_41:
(Start: 15 @27666 has 67 MA's), (23, 27738), (39, 27927), (55, 28125), (56, 28134), (64, 28227), (65, 28236), (75, 28311), (85, 28479), (87, 28488), (88, 28497), (90, 28515), (92, 28527),

Gene: Cicada_48 Start: 30146, Stop: 31207, Start Num: 12
Candidate Starts for Cicada_48:
(Start: 12 @30146 has 20 MA's), (Start: 14 @30155 has 1 MA's), (18, 30215), (35, 30374), (42, 30449), (46, 30512), (47, 30527), (48, 30554), (56, 30602), (65, 30710), (67, 30731), (76, 30806), (79, 30860), (80, 30866), (81, 30869), (88, 30974), (96, 31046),

Gene: CristinaYang_41 Start: 27805, Stop: 28854, Start Num: 15
Candidate Starts for CristinaYang_41:
(Start: 15 @27805 has 67 MA's), (23, 27877), (39, 28066), (55, 28264), (56, 28273), (64, 28366), (65, 28375), (75, 28450), (85, 28618), (87, 28627), (90, 28654),

Gene: Daiboju_41 Start: 28848, Stop: 29891, Start Num: 15
Candidate Starts for Daiboju_41:
(Start: 10 @28815 has 6 MA's), (Start: 15 @28848 has 67 MA's), (23, 28929), (34, 29067), (39, 29115), (42, 29163), (51, 29298), (56, 29322), (64, 29415), (65, 29424), (73, 29475), (75, 29499), (80, 29580), (85, 29667), (87, 29676), (90, 29703), (98, 29769),

Gene: Dino_44 Start: 28953, Stop: 30011, Start Num: 13
Candidate Starts for Dino_44:
(Start: 13 @28953 has 4 MA's), (Start: 15 @28968 has 67 MA's), (23, 29040), (39, 29229), (55, 29427), (56, 29436), (59, 29475), (64, 29529), (65, 29538), (72, 29586), (75, 29613), (85, 29781), (87, 29790), (90, 29817), (98, 29883),

Gene: DrRobert_40 Start: 27446, Stop: 28498, Start Num: 15
Candidate Starts for DrRobert_40:
(Start: 15 @27446 has 67 MA's), (23, 27518), (39, 27707), (55, 27905), (56, 27914), (64, 28007), (65, 28016), (72, 28064), (75, 28091), (85, 28259), (87, 28268), (88, 28277), (90, 28295), (92, 28307),

Gene: DreamTeam_41 Start: 27775, Stop: 28827, Start Num: 15
Candidate Starts for DreamTeam_41:
(Start: 5 @27712 has 2 MA's), (Start: 15 @27775 has 67 MA's), (23, 27847), (29, 27901), (39, 28036), (46, 28153), (56, 28243), (64, 28336), (65, 28345), (70, 28384), (73, 28396), (75, 28420), (84, 28561), (85, 28588), (88, 28606), (90, 28624), (98, 28690),

Gene: EstebanJulior_42 Start: 28824, Stop: 29876, Start Num: 15
Candidate Starts for EstebanJulior_42:
(Start: 15 @28824 has 67 MA's), (23, 28896), (55, 29283), (56, 29292), (64, 29385), (65, 29394), (72, 29442), (75, 29469), (80, 29550), (85, 29637), (87, 29646), (90, 29673),

Gene: Eunoia_41 Start: 28837, Stop: 29880, Start Num: 15
Candidate Starts for Eunoia_41:
(Start: 15 @28837 has 67 MA's), (39, 29104), (56, 29311), (59, 29350), (63, 29401), (64, 29404), (65, 29413), (73, 29464), (75, 29488), (80, 29569), (90, 29692), (98, 29758),

Gene: FireCastle_47 Start: 29953, Stop: 31011, Start Num: 12
Candidate Starts for FireCastle_47:
(Start: 12 @29953 has 20 MA's), (Start: 14 @29962 has 1 MA's), (21, 30022), (28, 30079), (43, 30259), (44, 30298), (46, 30319), (47, 30334), (65, 30517), (67, 30538), (68, 30541), (70, 30556), (71, 30562), (75, 30592), (76, 30613), (79, 30667), (80, 30673), (81, 30676), (91, 30808), (92, 30811), (96, 30853), (101, 30976),

Gene: Fluke_44 Start: 29084, Stop: 30127, Start Num: 15
Candidate Starts for Fluke_44:
(Start: 15 @29084 has 67 MA's), (23, 29156), (26, 29189), (29, 29210), (39, 29345), (51, 29528), (55, 29543), (56, 29552), (64, 29645), (65, 29654), (73, 29705), (75, 29729), (84, 29870), (85, 29897), (88, 29915), (90, 29933), (98, 29999),

Gene: Frizzle_30 Start: 29118, Stop: 28120, Start Num: 16
Candidate Starts for Frizzle_30:
(Start: 16 @29118 has 4 MA's), (37, 28893), (38, 28887), (49, 28719), (53, 28689), (60, 28638), (62, 28623), (63, 28602), (64, 28599), (71, 28545), (72, 28542), (74, 28530), (93, 28308), (94, 28299),

Gene: Ghobes_31 Start: 29118, Stop: 28120, Start Num: 16
Candidate Starts for Ghobes_31:
(Start: 16 @29118 has 4 MA's), (37, 28893), (38, 28887), (49, 28719), (53, 28689), (60, 28638), (62, 28623), (63, 28602), (64, 28599), (71, 28545), (72, 28542), (77, 28476), (93, 28308), (94, 28299),

Gene: Gisselle_41 Start: 27775, Stop: 28827, Start Num: 15
Candidate Starts for Gisselle_41:
(Start: 5 @27712 has 2 MA's), (Start: 15 @27775 has 67 MA's), (23, 27847), (29, 27901), (39, 28036), (46, 28153), (56, 28243), (64, 28336), (65, 28345), (70, 28384), (73, 28396), (75, 28420), (84, 28561), (85, 28588), (88, 28606), (90, 28624), (98, 28690),

Gene: Glenn_44 Start: 29075, Stop: 30118, Start Num: 15
Candidate Starts for Glenn_44:
(Start: 15 @29075 has 67 MA's), (23, 29147), (26, 29180), (29, 29201), (39, 29336), (55, 29534), (56, 29543), (64, 29636), (65, 29645), (70, 29684), (73, 29696), (75, 29720), (83, 29852), (84, 29861), (85, 29888), (88, 29906), (90, 29924), (98, 29990),

Gene: Goodman_47 Start: 29916, Stop: 30977, Start Num: 12

Candidate Starts for Goodman_47:
(Start: 12 @29916 has 20 MA's), (Start: 14 @29925 has 1 MA's), (18, 29985), (42, 30219), (46, 30282), (47, 30297), (48, 30324), (56, 30372), (65, 30480), (67, 30501), (74, 30540), (76, 30576), (79, 30630), (80, 30636), (81, 30639), (88, 30744), (96, 30816),

Gene: Graynor_46 Start: 28863, Stop: 29927, Start Num: 13
Candidate Starts for Graynor_46:
(Start: 6 @28821 has 5 MA's), (Start: 13 @28863 has 4 MA's), (Start: 15 @28878 has 67 MA's), (24, 28956), (30, 29019), (39, 29142), (42, 29190), (51, 29325), (55, 29340), (56, 29349), (59, 29388), (60, 29403), (64, 29442), (65, 29451), (75, 29526), (85, 29694), (88, 29712), (92, 29742),

Gene: GreenHearts_45 Start: 29737, Stop: 30792, Start Num: 15
Candidate Starts for GreenHearts_45:
(Start: 15 @29737 has 67 MA's), (29, 29863), (39, 29998), (56, 30205), (59, 30244), (60, 30259), (63, 30295), (64, 30298), (65, 30307), (73, 30358), (75, 30382), (85, 30550), (87, 30559), (90, 30586), (92, 30598),

Gene: Greenhouse_45 Start: 29457, Stop: 30509, Start Num: 15
Candidate Starts for Greenhouse_45:
(Start: 15 @29457 has 67 MA's), (29, 29583), (39, 29718), (56, 29925), (59, 29964), (60, 29979), (63, 30015), (64, 30018), (65, 30027), (69, 30060), (73, 30078), (75, 30102), (84, 30243), (85, 30270), (90, 30306), (92, 30318), (100, 30468),

Gene: HeadNerd_41 Start: 27619, Stop: 28668, Start Num: 15
Candidate Starts for HeadNerd_41:
(Start: 15 @27619 has 67 MA's), (23, 27691), (39, 27880), (55, 28078), (56, 28087), (59, 28126), (64, 28180), (65, 28189), (72, 28237), (75, 28264), (85, 28432), (87, 28441), (90, 28468),

Gene: Herb_41 Start: 28814, Stop: 29890, Start Num: 10
Candidate Starts for Herb_41:
(Start: 10 @28814 has 6 MA's), (Start: 15 @28847 has 67 MA's), (23, 28928), (34, 29066), (39, 29114), (42, 29162), (51, 29297), (56, 29321), (64, 29414), (65, 29423), (73, 29474), (75, 29498), (80, 29579), (85, 29666), (87, 29675), (90, 29702), (98, 29768),

Gene: Htur_48 Start: 30379, Stop: 31446, Start Num: 12
Candidate Starts for Htur_48:
(11, 30373), (Start: 12 @30379 has 20 MA's), (Start: 14 @30388 has 1 MA's), (18, 30448), (42, 30688), (43, 30691), (46, 30751), (47, 30766), (48, 30793), (50, 30808), (56, 30841), (65, 30949), (66, 30964), (67, 30970), (73, 31000), (76, 31045), (79, 31099), (80, 31105), (81, 31108), (91, 31240), (92, 31243), (96, 31285),

Gene: Huckleberry_41 Start: 27602, Stop: 28651, Start Num: 15
Candidate Starts for Huckleberry_41:
(Start: 15 @27602 has 67 MA's), (23, 27674), (39, 27863), (45, 27968), (55, 28061), (56, 28070), (59, 28109), (64, 28163), (65, 28172), (72, 28220), (75, 28247), (80, 28328), (85, 28415), (87, 28424), (90, 28451),

Gene: HunterDalle_41 Start: 28766, Stop: 29809, Start Num: 15
Candidate Starts for HunterDalle_41:
(Start: 15 @28766 has 67 MA's), (17, 28811), (27, 28886), (39, 29033), (42, 29081), (56, 29240), (64, 29333), (65, 29342), (73, 29393), (75, 29417), (80, 29498), (85, 29585), (87, 29594), (88, 29603), (90, 29621), (98, 29687),

Gene: Huntingdon_43 Start: 29269, Stop: 30324, Start Num: 15
Candidate Starts for Huntingdon_43:
(Start: 15 @29269 has 67 MA's), (29, 29395), (39, 29530), (42, 29578), (54, 29725), (56, 29737), (60, 29791), (64, 29830), (65, 29839), (73, 29890), (75, 29914), (76, 29935), (84, 30055), (85, 30082), (88, 30100), (90, 30118), (92, 30130), (99, 30199),

Gene: Immaculata_43 Start: 28867, Stop: 29910, Start Num: 15
Candidate Starts for Immaculata_43:
(Start: 15 @28867 has 67 MA's), (23, 28939), (39, 29128), (51, 29311), (55, 29326), (56, 29335), (59, 29374), (64, 29428), (65, 29437), (72, 29485), (75, 29512), (85, 29680), (87, 29689), (90, 29716), (98, 29782),

Gene: IndiRoo_49 Start: 28952, Stop: 30028, Start Num: 12
Candidate Starts for IndiRoo_49:
(Start: 12 @28952 has 20 MA's), (19, 29021), (32, 29120), (40, 29246), (42, 29264), (47, 29342), (56, 29417), (65, 29525), (67, 29546), (70, 29564), (73, 29576), (76, 29621), (79, 29675), (80, 29681), (81, 29684), (88, 29789), (89, 29795), (91, 29816), (92, 29819),

Gene: Jera_47 Start: 28716, Stop: 29780, Start Num: 12
Candidate Starts for Jera_47:
(Start: 12 @28716 has 20 MA's), (Start: 14 @28725 has 1 MA's), (18, 28785), (40, 29001), (43, 29022), (46, 29082), (47, 29097), (56, 29172), (65, 29280), (67, 29301), (71, 29325), (76, 29376), (79, 29430), (80, 29436), (81, 29439), (88, 29544), (89, 29550), (96, 29616),

Gene: Joann_45 Start: 29532, Stop: 30584, Start Num: 15
Candidate Starts for Joann_45:
(Start: 15 @29532 has 67 MA's), (29, 29658), (39, 29793), (42, 29841), (56, 30000), (59, 30039), (60, 30054), (63, 30090), (64, 30093), (65, 30102), (73, 30153), (75, 30177), (84, 30318), (85, 30345), (90, 30381), (92, 30393), (100, 30543),

Gene: Johann_47 Start: 29916, Stop: 30977, Start Num: 12
Candidate Starts for Johann_47:
(Start: 12 @29916 has 20 MA's), (Start: 14 @29925 has 1 MA's), (18, 29985), (42, 30219), (46, 30282), (47, 30297), (48, 30324), (56, 30372), (65, 30480), (67, 30501), (74, 30540), (76, 30576), (79, 30630), (80, 30636), (81, 30639), (88, 30744), (96, 30816),

Gene: Jumboset_44 Start: 28983, Stop: 30026, Start Num: 15
Candidate Starts for Jumboset_44:
(Start: 15 @28983 has 67 MA's), (23, 29055), (26, 29088), (29, 29109), (39, 29244), (55, 29442), (56, 29451), (64, 29544), (65, 29553), (70, 29592), (73, 29604), (75, 29628), (83, 29760), (84, 29769), (85, 29796), (88, 29814), (90, 29832), (98, 29898),

Gene: Kalizoi_43 Start: 28808, Stop: 29851, Start Num: 15
Candidate Starts for Kalizoi_43:
(Start: 15 @28808 has 67 MA's), (23, 28880), (26, 28913), (29, 28934), (39, 29069), (55, 29267), (56, 29276), (64, 29369), (65, 29378), (73, 29429), (75, 29453), (84, 29594), (85, 29621), (88, 29639), (90, 29657), (98, 29723),

Gene: KingBob_41 Start: 28815, Stop: 29891, Start Num: 10
Candidate Starts for KingBob_41:
(Start: 10 @28815 has 6 MA's), (Start: 15 @28848 has 67 MA's), (23, 28929), (34, 29067), (39, 29115), (42, 29163), (51, 29298), (56, 29322), (64, 29415), (65, 29424), (73, 29475), (75, 29499), (80, 29580), (85, 29667), (87, 29676), (90, 29703), (98, 29769),

Gene: Kittykat_43 Start: 28006, Stop: 29121, Start Num: 5
Candidate Starts for Kittykat_43:
(Start: 5 @28006 has 2 MA's), (Start: 15 @28069 has 67 MA's), (23, 28141), (29, 28195), (39, 28330), (56, 28537), (64, 28630), (65, 28639), (70, 28678), (73, 28690), (75, 28714), (77, 28765), (84, 28855), (85, 28882), (88, 28900), (90, 28918), (98, 28984),

Gene: Korra_43 Start: 28820, Stop: 29863, Start Num: 15
Candidate Starts for Korra_43:
(Start: 15 @28820 has 67 MA's), (23, 28892), (39, 29081), (55, 29279), (56, 29288), (59, 29327), (64, 29381), (65, 29390), (72, 29438), (75, 29465), (85, 29633), (87, 29642), (90, 29669), (98, 29735),

Gene: Labella_48 Start: 29598, Stop: 30656, Start Num: 14
Candidate Starts for Labella_48:
(Start: 12 @29589 has 20 MA's), (Start: 14 @29598 has 1 MA's), (18, 29658), (40, 29874), (43, 29895), (46, 29955), (47, 29970), (56, 30045), (65, 30153), (67, 30174), (71, 30198), (76, 30249), (79, 30303), (80, 30309), (81, 30312), (88, 30417), (89, 30423), (96, 30489),

Gene: Lakshmi_44 Start: 29420, Stop: 30472, Start Num: 15
Candidate Starts for Lakshmi_44:
(Start: 15 @29420 has 67 MA's), (29, 29546), (39, 29681), (56, 29888), (59, 29927), (60, 29942), (63, 29978), (64, 29981), (65, 29990), (73, 30041), (75, 30065), (84, 30206), (85, 30233), (90, 30269), (92, 30281), (100, 30431),

Gene: Lasagna_40 Start: 27444, Stop: 28496, Start Num: 15
Candidate Starts for Lasagna_40:
(Start: 15 @27444 has 67 MA's), (23, 27516), (39, 27705), (55, 27903), (56, 27912), (64, 28005), (65, 28014), (75, 28089), (85, 28257), (87, 28266), (90, 28293), (92, 28305),

Gene: Lennox_41 Start: 27652, Stop: 28704, Start Num: 15
Candidate Starts for Lennox_41:
(Start: 15 @27652 has 67 MA's), (23, 27724), (39, 27913), (55, 28111), (56, 28120), (64, 28213), (65, 28222), (72, 28270), (75, 28297), (85, 28465), (87, 28474), (88, 28483), (90, 28501), (92, 28513),

Gene: LilStuart_41 Start: 27793, Stop: 28845, Start Num: 15
Candidate Starts for LilStuart_41:
(Start: 15 @27793 has 67 MA's), (23, 27865), (39, 28054), (55, 28252), (56, 28261), (64, 28354), (65, 28363), (75, 28438), (85, 28606), (87, 28615), (90, 28642), (92, 28654),

Gene: Linayshia_48 Start: 30347, Stop: 31414, Start Num: 12
Candidate Starts for Linayshia_48:
(11, 30341), (Start: 12 @30347 has 20 MA's), (Start: 14 @30356 has 1 MA's), (18, 30416), (42, 30656), (43, 30659), (46, 30719), (47, 30734), (48, 30761), (50, 30776), (56, 30809), (65, 30917), (66, 30932), (67, 30938), (73, 30968), (76, 31013), (79, 31067), (80, 31073), (81, 31076), (91, 31208), (92, 31211), (96, 31253),

Gene: Litotes_43 Start: 28845, Stop: 29894, Start Num: 15
Candidate Starts for Litotes_43:
(Start: 6 @28788 has 5 MA's), (Start: 15 @28845 has 67 MA's), (30, 28986), (39, 29109), (42, 29157), (51, 29292), (55, 29307), (56, 29316), (59, 29355), (60, 29370), (64, 29409), (65, 29418), (75, 29493), (85, 29661), (88, 29679), (92, 29709),

Gene: Lucy_41 Start: 27790, Stop: 28842, Start Num: 15

Candidate Starts for Lucy_41:
(Start: 15 @27790 has 67 MA's), (23, 27862), (39, 28051), (55, 28249), (56, 28258), (64, 28351), (65, 28360), (72, 28408), (75, 28435), (85, 28603), (87, 28612), (88, 28621), (90, 28639), (92, 28651),

Gene: Makoto_41 Start: 27663, Stop: 28715, Start Num: 15
Candidate Starts for Makoto_41:
(Start: 15 @27663 has 67 MA's), (23, 27735), (39, 27924), (55, 28122), (56, 28131), (64, 28224), (65, 28233), (72, 28281), (75, 28308), (85, 28476), (87, 28485), (88, 28494), (90, 28512), (92, 28524),

Gene: MamaPearl_42 Start: 28824, Stop: 29876, Start Num: 15
Candidate Starts for MamaPearl_42:
(Start: 15 @28824 has 67 MA's), (23, 28896), (55, 29283), (56, 29292), (64, 29385), (65, 29394), (72, 29442), (75, 29469), (80, 29550), (85, 29637), (87, 29646), (90, 29673),

Gene: Maria1952_40 Start: 28814, Stop: 29890, Start Num: 10
Candidate Starts for Maria1952_40:
(Start: 10 @28814 has 6 MA's), (Start: 15 @28847 has 67 MA's), (23, 28928), (34, 29066), (39, 29114), (42, 29162), (51, 29297), (56, 29321), (64, 29414), (65, 29423), (73, 29474), (75, 29498), (80, 29579), (85, 29666), (87, 29675), (90, 29702), (98, 29768),

Gene: MeganNoll_43 Start: 29025, Stop: 30083, Start Num: 13
Candidate Starts for MeganNoll_43:
(Start: 13 @29025 has 4 MA's), (Start: 15 @29040 has 67 MA's), (23, 29112), (39, 29301), (55, 29499), (56, 29508), (59, 29547), (64, 29601), (65, 29610), (72, 29658), (75, 29685), (85, 29853), (87, 29862), (90, 29889), (98, 29955),

Gene: Milani_46 Start: 29258, Stop: 30367, Start Num: 12
Candidate Starts for Milani_46:
(Start: 12 @29258 has 20 MA's), (18, 29327), (20, 29360), (40, 29585), (42, 29603), (47, 29681), (56, 29756), (65, 29864), (67, 29885), (70, 29903), (73, 29915), (76, 29960), (79, 30014), (80, 30020), (81, 30023), (88, 30128), (89, 30134), (91, 30155), (92, 30158),

Gene: Misaeng_43 Start: 29393, Stop: 30448, Start Num: 15
Candidate Starts for Misaeng_43:
(Start: 15 @29393 has 67 MA's), (29, 29519), (39, 29654), (42, 29702), (54, 29849), (56, 29861), (60, 29915), (64, 29954), (65, 29963), (73, 30014), (75, 30038), (76, 30059), (84, 30179), (85, 30206), (88, 30224), (90, 30242), (92, 30254), (99, 30323),

Gene: Moki_41 Start: 27765, Stop: 28814, Start Num: 15
Candidate Starts for Moki_41:
(Start: 15 @27765 has 67 MA's), (23, 27837), (39, 28026), (45, 28131), (55, 28224), (56, 28233), (59, 28272), (64, 28326), (65, 28335), (75, 28410), (85, 28578), (87, 28587), (90, 28614),

Gene: MrBoss_45 Start: 28785, Stop: 29891, Start Num: 6
Candidate Starts for MrBoss_45:
(Start: 6 @28785 has 5 MA's), (Start: 15 @28842 has 67 MA's), (30, 28983), (39, 29106), (42, 29154), (51, 29289), (55, 29304), (56, 29313), (60, 29367), (64, 29406), (65, 29415), (75, 29490), (85, 29658), (88, 29676), (92, 29706),

Gene: MrGloopy_44 Start: 28969, Stop: 30012, Start Num: 15
Candidate Starts for MrGloopy_44:
(Start: 15 @28969 has 67 MA's), (23, 29041), (26, 29074), (29, 29095), (39, 29230), (55, 29428), (56, 29437), (64, 29530), (65, 29539), (70, 29578), (73, 29590), (75, 29614), (83, 29746), (84, 29755), (85,

29782), (88, 29800), (90, 29818), (98, 29884),

Gene: Nancia_41 Start: 27678, Stop: 28727, Start Num: 15
Candidate Starts for Nancia_41:
(Start: 15 @27678 has 67 MA's), (23, 27750), (39, 27939), (55, 28137), (56, 28146), (64, 28239), (65, 28248), (75, 28323), (85, 28491), (87, 28500), (90, 28527),

Gene: Nubia_44 Start: 29365, Stop: 30417, Start Num: 15
Candidate Starts for Nubia_44:
(Start: 15 @29365 has 67 MA's), (29, 29491), (39, 29626), (56, 29833), (59, 29872), (60, 29887), (63, 29923), (64, 29926), (65, 29935), (73, 29986), (75, 30010), (80, 30091), (84, 30151), (85, 30178), (90, 30214), (92, 30226), (100, 30376),

Gene: OMalley_41 Start: 28837, Stop: 29880, Start Num: 15
Candidate Starts for OMalley_41:
(Start: 15 @28837 has 67 MA's), (39, 29104), (56, 29311), (59, 29350), (63, 29401), (64, 29404), (65, 29413), (73, 29464), (75, 29488), (80, 29569), (90, 29692), (98, 29758),

Gene: Olympi_47 Start: 29394, Stop: 30461, Start Num: 12
Candidate Starts for Olympi_47:
(Start: 12 @29394 has 20 MA's), (Start: 14 @29403 has 1 MA's), (18, 29463), (40, 29679), (43, 29700), (46, 29760), (47, 29775), (56, 29850), (65, 29958), (67, 29979), (71, 30003), (76, 30054), (79, 30108), (80, 30114), (81, 30117), (88, 30222), (89, 30228), (96, 30294),

Gene: OurGirlNessie_40 Start: 27407, Stop: 28459, Start Num: 15
Candidate Starts for OurGirlNessie_40:
(Start: 15 @27407 has 67 MA's), (23, 27479), (39, 27668), (55, 27866), (56, 27875), (64, 27968), (65, 27977), (72, 28025), (75, 28052), (85, 28220), (87, 28229), (88, 28238), (90, 28256), (92, 28268),

Gene: Oxynfrius_44 Start: 29386, Stop: 30438, Start Num: 15
Candidate Starts for Oxynfrius_44:
(Start: 15 @29386 has 67 MA's), (29, 29512), (39, 29647), (56, 29854), (59, 29893), (60, 29908), (63, 29944), (64, 29947), (65, 29956), (69, 29989), (73, 30007), (75, 30031), (84, 30172), (85, 30199), (90, 30235), (92, 30247), (100, 30397),

Gene: PartyCup_44 Start: 29014, Stop: 30120, Start Num: 6
Candidate Starts for PartyCup_44:
(Start: 6 @29014 has 5 MA's), (Start: 15 @29071 has 67 MA's), (30, 29212), (39, 29335), (42, 29383), (51, 29518), (55, 29533), (56, 29542), (59, 29581), (60, 29596), (64, 29635), (65, 29644), (66, 29659), (75, 29719), (80, 29800), (85, 29887), (88, 29905), (92, 29935),

Gene: Parvaparticeps_18 Start: 10557, Stop: 11783, Start Num: 3
Candidate Starts for Parvaparticeps_18:
(2, 10515), (3, 10557), (4, 10599), (9, 10686), (22, 10809), (31, 10884), (34, 10950), (36, 10965), (48, 11139), (49, 11142), (52, 11166), (54, 11175), (56, 11187), (58, 11211), (60, 11241), (63, 11277), (64, 11280), (71, 11334), (75, 11364), (79, 11439), (80, 11445), (81, 11448), (82, 11451), (88, 11553), (91, 11580),

Gene: PermaG_48 Start: 30045, Stop: 31100, Start Num: 12
Candidate Starts for PermaG_48:
(Start: 12 @30045 has 20 MA's), (18, 30114), (40, 30327), (42, 30345), (46, 30408), (47, 30423), (56, 30498), (65, 30606), (67, 30627), (76, 30702), (77, 30732), (79, 30756), (80, 30762), (81, 30765), (88, 30870), (96, 30942),

Gene: PinkFriday_41 Start: 27951, Stop: 29000, Start Num: 15
Candidate Starts for PinkFriday_41:
(Start: 10 @27918 has 6 MA's), (Start: 15 @27951 has 67 MA's), (34, 28176), (39, 28224), (42, 28272), (56, 28431), (64, 28524), (65, 28533), (73, 28584), (75, 28608), (78, 28674), (80, 28689), (85, 28776), (87, 28785), (88, 28794), (90, 28812), (98, 28878),

Gene: PitaDog_42 Start: 27803, Stop: 28855, Start Num: 15
Candidate Starts for PitaDog_42:
(Start: 15 @27803 has 67 MA's), (23, 27875), (39, 28064), (43, 28115), (55, 28262), (56, 28271), (64, 28364), (65, 28373), (72, 28421), (75, 28448), (85, 28616), (87, 28625), (88, 28634), (90, 28652), (92, 28664),

Gene: Potatoes_43 Start: 28867, Stop: 29910, Start Num: 15
Candidate Starts for Potatoes_43:
(Start: 15 @28867 has 67 MA's), (23, 28939), (39, 29128), (51, 29311), (55, 29326), (56, 29335), (59, 29374), (64, 29428), (65, 29437), (72, 29485), (75, 29512), (85, 29680), (87, 29689), (88, 29698), (90, 29716), (98, 29782),

Gene: Preamble_42 Start: 27872, Stop: 28987, Start Num: 5
Candidate Starts for Preamble_42:
(Start: 5 @27872 has 2 MA's), (Start: 15 @27935 has 67 MA's), (23, 28007), (29, 28061), (39, 28196), (56, 28403), (64, 28496), (65, 28505), (70, 28544), (73, 28556), (75, 28580), (84, 28721), (85, 28748), (88, 28766), (90, 28784), (98, 28850),

Gene: Pterodactyl_41 Start: 27644, Stop: 28696, Start Num: 15
Candidate Starts for Pterodactyl_41:
(Start: 15 @27644 has 67 MA's), (23, 27716), (39, 27905), (55, 28103), (56, 28112), (64, 28205), (65, 28214), (72, 28262), (75, 28289), (85, 28457), (87, 28466), (88, 28475), (90, 28493), (92, 28505),

Gene: Pumancara_41 Start: 27830, Stop: 28912, Start Num: 10
Candidate Starts for Pumancara_41:
(Start: 10 @27830 has 6 MA's), (Start: 15 @27863 has 67 MA's), (34, 28088), (39, 28136), (42, 28184), (56, 28343), (64, 28436), (65, 28445), (73, 28496), (75, 28520), (78, 28586), (80, 28601), (85, 28688), (87, 28697), (88, 28706), (90, 28724), (98, 28790),

Gene: RAP15_44 Start: 29025, Stop: 30083, Start Num: 13
Candidate Starts for RAP15_44:
(Start: 13 @29025 has 4 MA's), (Start: 15 @29040 has 67 MA's), (23, 29112), (39, 29301), (55, 29499), (56, 29508), (59, 29547), (64, 29601), (65, 29610), (72, 29658), (75, 29685), (85, 29853), (87, 29862), (90, 29889), (98, 29955),

Gene: Rasovi_48 Start: 30379, Stop: 31446, Start Num: 12
Candidate Starts for Rasovi_48:
(11, 30373), (Start: 12 @30379 has 20 MA's), (Start: 14 @30388 has 1 MA's), (18, 30448), (42, 30688), (43, 30691), (46, 30751), (47, 30766), (48, 30793), (50, 30808), (56, 30841), (65, 30949), (66, 30964), (67, 30970), (73, 31000), (76, 31045), (79, 31099), (80, 31105), (81, 31108), (91, 31240), (92, 31243), (96, 31285),

Gene: RcigaStruga_43 Start: 29269, Stop: 30324, Start Num: 15
Candidate Starts for RcigaStruga_43:
(Start: 15 @29269 has 67 MA's), (29, 29395), (39, 29530), (42, 29578), (54, 29725), (56, 29737), (60, 29791), (64, 29830), (65, 29839), (73, 29890), (75, 29914), (76, 29935), (84, 30055), (85, 30082), (88,

30100), (90, 30118), (92, 30130), (99, 30199),

Gene: Riovina_41 Start: 28837, Stop: 29880, Start Num: 15
Candidate Starts for Riovina_41:
(Start: 15 @28837 has 67 MA's), (39, 29104), (56, 29311), (59, 29350), (63, 29401), (64, 29404), (65, 29413), (73, 29464), (75, 29488), (80, 29569), (90, 29692), (98, 29758),

Gene: Riverdale_44 Start: 29005, Stop: 30048, Start Num: 15
Candidate Starts for Riverdale_44:
(Start: 15 @29005 has 67 MA's), (23, 29077), (39, 29266), (51, 29449), (55, 29464), (56, 29473), (59, 29512), (64, 29566), (65, 29575), (72, 29623), (75, 29650), (85, 29818), (87, 29827), (90, 29854), (98, 29920),

Gene: Rootkit7_46 Start: 29826, Stop: 30893, Start Num: 12
Candidate Starts for Rootkit7_46:
(Start: 12 @29826 has 20 MA's), (Start: 14 @29835 has 1 MA's), (18, 29895), (40, 30111), (43, 30132), (46, 30192), (47, 30207), (56, 30282), (65, 30390), (67, 30411), (71, 30435), (76, 30486), (79, 30540), (80, 30546), (81, 30549), (88, 30654), (89, 30660), (96, 30726),

Gene: Rozby_43 Start: 28797, Stop: 29840, Start Num: 15
Candidate Starts for Rozby_43:
(Start: 15 @28797 has 67 MA's), (23, 28869), (26, 28902), (29, 28923), (39, 29058), (51, 29241), (55, 29256), (56, 29265), (64, 29358), (65, 29367), (73, 29418), (75, 29442), (84, 29583), (85, 29610), (88, 29628), (90, 29646), (98, 29712),

Gene: SBlackberry_46 Start: 29789, Stop: 30850, Start Num: 12
Candidate Starts for SBlackberry_46:
(Start: 12 @29789 has 20 MA's), (Start: 14 @29798 has 1 MA's), (18, 29858), (35, 30017), (42, 30092), (46, 30155), (47, 30170), (48, 30197), (56, 30245), (65, 30353), (67, 30374), (76, 30449), (79, 30503), (80, 30509), (81, 30512), (88, 30617), (96, 30689),

Gene: Sapo_30 Start: 29120, Stop: 28092, Start Num: 16
Candidate Starts for Sapo_30:
(Start: 16 @29120 has 4 MA's), (37, 28919), (39, 28901), (49, 28745), (51, 28724), (57, 28685), (64, 28625), (72, 28568), (74, 28556),

Gene: Savage2526_44 Start: 29034, Stop: 30077, Start Num: 15
Candidate Starts for Savage2526_44:
(Start: 15 @29034 has 67 MA's), (23, 29106), (26, 29139), (29, 29160), (39, 29295), (55, 29493), (56, 29502), (64, 29595), (65, 29604), (70, 29643), (73, 29655), (75, 29679), (83, 29811), (84, 29820), (85, 29847), (88, 29865), (90, 29883), (98, 29949),

Gene: Scuttle_43 Start: 28994, Stop: 30037, Start Num: 15
Candidate Starts for Scuttle_43:
(Start: 15 @28994 has 67 MA's), (23, 29066), (26, 29099), (29, 29120), (39, 29255), (55, 29453), (56, 29462), (64, 29555), (65, 29564), (73, 29615), (75, 29639), (84, 29780), (85, 29807), (88, 29825), (90, 29843), (98, 29909),

Gene: Sergei_41 Start: 28815, Stop: 29891, Start Num: 10
Candidate Starts for Sergei_41:
(Start: 10 @28815 has 6 MA's), (Start: 15 @28848 has 67 MA's), (23, 28929), (34, 29067), (39, 29115), (42, 29163), (51, 29298), (56, 29322), (64, 29415), (65, 29424), (73, 29475), (75, 29499), (80, 29580), (85, 29667), (87, 29676), (90, 29703), (98, 29769),

Gene: Sucha_46 Start: 28453, Stop: 29529, Start Num: 12
Candidate Starts for Sucha_46:
(Start: 12 @28453 has 20 MA's), (19, 28522), (32, 28621), (40, 28747), (42, 28765), (47, 28843), (56, 28918), (65, 29026), (67, 29047), (70, 29065), (73, 29077), (76, 29122), (79, 29176), (81, 29185), (89, 29296), (91, 29317), (92, 29320),

Gene: Supakev_41 Start: 28837, Stop: 29880, Start Num: 15
Candidate Starts for Supakev_41:
(Start: 15 @28837 has 67 MA's), (39, 29104), (56, 29311), (59, 29350), (63, 29401), (64, 29404), (65, 29413), (73, 29464), (75, 29488), (80, 29569), (90, 29692), (98, 29758),

Gene: Suppi_43 Start: 28835, Stop: 29941, Start Num: 6
Candidate Starts for Suppi_43:
(Start: 6 @28835 has 5 MA's), (Start: 15 @28892 has 67 MA's), (30, 29033), (39, 29156), (42, 29204), (51, 29339), (55, 29354), (56, 29363), (60, 29417), (64, 29456), (65, 29465), (75, 29540), (85, 29708), (88, 29726), (92, 29756),

Gene: TattModd_42 Start: 28654, Stop: 29697, Start Num: 15
Candidate Starts for TattModd_42:
(Start: 15 @28654 has 67 MA's), (23, 28726), (26, 28759), (29, 28780), (39, 28915), (55, 29113), (56, 29122), (64, 29215), (65, 29224), (73, 29275), (75, 29299), (84, 29440), (85, 29467), (88, 29485), (90, 29503), (92, 29515), (98, 29569),

Gene: Temper16_41 Start: 28815, Stop: 29891, Start Num: 10
Candidate Starts for Temper16_41:
(Start: 10 @28815 has 6 MA's), (Start: 15 @28848 has 67 MA's), (23, 28929), (34, 29067), (39, 29115), (42, 29163), (51, 29298), (56, 29322), (64, 29415), (65, 29424), (73, 29475), (75, 29499), (80, 29580), (85, 29667), (87, 29676), (90, 29703), (98, 29769),

Gene: Theresita_46 Start: 28078, Stop: 29154, Start Num: 7
Candidate Starts for Theresita_46:
(Start: 7 @28078 has 1 MA's), (43, 28396), (46, 28456), (47, 28471), (61, 28615), (65, 28654), (67, 28675), (68, 28678), (70, 28693), (71, 28699), (75, 28729), (76, 28750), (79, 28804), (80, 28810), (81, 28813), (84, 28873), (88, 28918), (97, 28999),

Gene: TurboVicky_47 Start: 30002, Stop: 31069, Start Num: 12
Candidate Starts for TurboVicky_47:
(Start: 12 @30002 has 20 MA's), (Start: 14 @30011 has 1 MA's), (18, 30071), (40, 30287), (43, 30308), (46, 30368), (47, 30383), (56, 30458), (65, 30566), (67, 30587), (71, 30611), (76, 30662), (79, 30716), (80, 30722), (81, 30725), (82, 30728), (88, 30830), (89, 30836), (96, 30902),

Gene: Typher_48 Start: 29589, Stop: 30656, Start Num: 12
Candidate Starts for Typher_48:
(Start: 12 @29589 has 20 MA's), (Start: 14 @29598 has 1 MA's), (18, 29658), (40, 29874), (43, 29895), (46, 29955), (47, 29970), (56, 30045), (65, 30153), (67, 30174), (71, 30198), (76, 30249), (79, 30303), (80, 30309), (81, 30312), (88, 30417), (89, 30423), (96, 30489),

Gene: Urla_42 Start: 28818, Stop: 29870, Start Num: 15
Candidate Starts for Urla_42:
(Start: 15 @28818 has 67 MA's), (23, 28890), (26, 28923), (39, 29079), (55, 29277), (56, 29286), (64, 29379), (65, 29388), (72, 29436), (75, 29463), (80, 29544), (85, 29631), (87, 29640), (90, 29667), (98, 29733),

Gene: Vallejo_44 Start: 29008, Stop: 30051, Start Num: 15
Candidate Starts for Vallejo_44:
(Start: 15 @29008 has 67 MA's), (23, 29080), (39, 29269), (51, 29452), (55, 29467), (56, 29476), (59, 29515), (64, 29569), (65, 29578), (72, 29626), (75, 29653), (85, 29821), (87, 29830), (90, 29857), (98, 29923),

Gene: Vulture_41 Start: 28766, Stop: 29809, Start Num: 15
Candidate Starts for Vulture_41:
(Start: 15 @28766 has 67 MA's), (17, 28811), (27, 28886), (39, 29033), (42, 29081), (56, 29240), (64, 29333), (65, 29342), (73, 29393), (75, 29417), (80, 29498), (85, 29585), (87, 29594), (88, 29603), (90, 29621), (98, 29687),

Gene: Wawa_43 Start: 28841, Stop: 29884, Start Num: 15
Candidate Starts for Wawa_43:
(Start: 15 @28841 has 67 MA's), (23, 28913), (39, 29102), (55, 29300), (56, 29309), (59, 29348), (64, 29402), (65, 29411), (72, 29459), (75, 29486), (85, 29654), (87, 29663), (90, 29690), (98, 29756),

Gene: Wayne_43 Start: 28881, Stop: 29987, Start Num: 6
Candidate Starts for Wayne_43:
(Start: 6 @28881 has 5 MA's), (Start: 15 @28938 has 67 MA's), (30, 29079), (39, 29202), (42, 29250), (51, 29385), (55, 29400), (56, 29409), (60, 29463), (64, 29502), (65, 29511), (75, 29586), (85, 29754), (88, 29772), (92, 29802),

Gene: WonderBoy_40 Start: 27638, Stop: 28687, Start Num: 15
Candidate Starts for WonderBoy_40:
(Start: 15 @27638 has 67 MA's), (23, 27710), (26, 27743), (29, 27764), (39, 27899), (56, 28106), (59, 28145), (64, 28199), (65, 28208), (70, 28247), (73, 28259), (75, 28283), (84, 28424), (85, 28451), (88, 28469), (90, 28487), (98, 28553),

Gene: Zanella_46 Start: 29837, Stop: 30895, Start Num: 14
Candidate Starts for Zanella_46:
(Start: 12 @29828 has 20 MA's), (Start: 14 @29837 has 1 MA's), (18, 29897), (40, 30113), (43, 30134), (46, 30194), (47, 30209), (56, 30284), (65, 30392), (67, 30413), (71, 30437), (76, 30488), (79, 30542), (80, 30548), (81, 30551), (88, 30656), (89, 30662), (96, 30728),

Gene: Zorro_44 Start: 28953, Stop: 30011, Start Num: 13
Candidate Starts for Zorro_44:
(Start: 13 @28953 has 4 MA's), (Start: 15 @28968 has 67 MA's), (23, 29040), (39, 29229), (55, 29427), (56, 29436), (59, 29475), (64, 29529), (65, 29538), (72, 29586), (75, 29613), (85, 29781), (87, 29790), (90, 29817), (98, 29883),