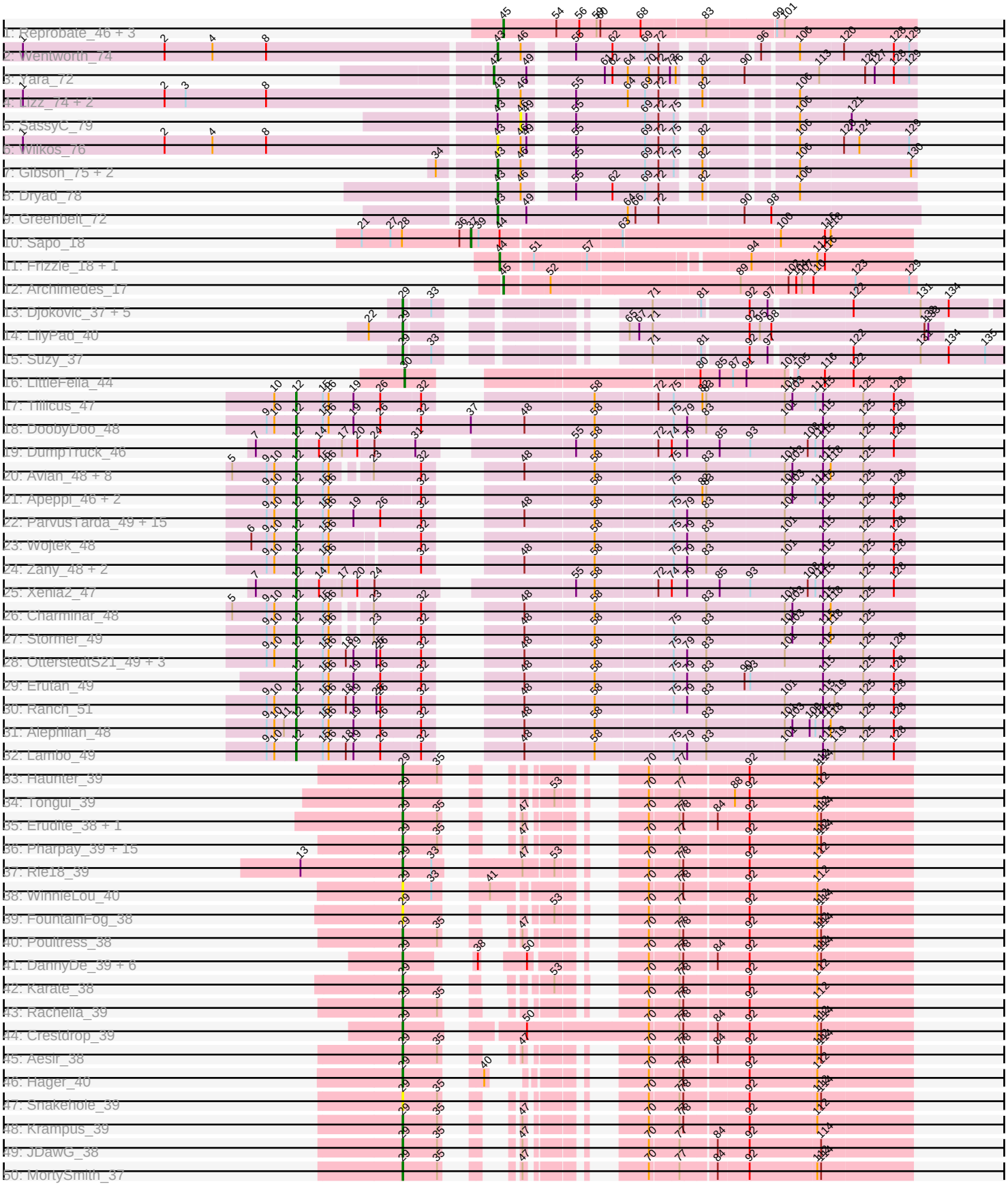
Pham 347416


1: Reprobate_46 + 3
2: Wentworth_74
3: Yara_72
4: Tizz_74 + 2
5: SassyC_79
6: Wilkos_76
7: Gibson_75 + 2
8: Dryad_78
9: Greenbelt_72
10: Sapo_18
11: Frizzle_18 + 1
12: Archimedes_17
13: Djokovic_37 + 5
14: LilyPad_40
15: Suzy_37
16: LittleFella_44
17: Tilicus_47
18: DoobyDoo_48
19: DumpTruck_46
20: Avian_48 + 8
21: Apeppi_46 + 2
22: ParvusTarda_49 + 15
23: Wojtek_48
24: Zany_48 + 2
25: Xenia2_47
26: Charminar_48
27: Stormer_49
28: OtterstedtS21_49 + 3
29: Erutan_49
30: Ranch_51
31: Alephilan_48
32: Lambo_49
33: Haunter_39
34: Tongui_39
35: Erudite_38 + 1
36: Pharpay_39 + 15
37: Rie18_39
38: WinnieLou_40
39: FountainFog_38
40: Poultress_38
41: DannyDe_39 + 6
42: Karate_38
43: Rachella_39
44: Crestdrop_39
45: Aesir_38
46: Hager_40
47: Snakehole_39
48: Krampus_39
49: JDawG_38
50: MontySmith_37

Pham 347416



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 347416 Report

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

Pham number 347416 has 116 members, 14 are drafts.

Phages represented in each track:
• Track 1 : Reprobate_46, Nehemiah_45, Mysterious_45, Phelemich_45
• Track 2 : Wentworth_74
• Track 3 : Yara_72
• Track 4 : Lizz_74, ShakeNBake_74, PHTowN_74
• Track 5 : SassyC_79
• Track 6 : Wilkos_76
• Track 7 : Gibson_75, Rooney_75, Virizion_81
• Track 8 : Dryad_78
• Track 9 : Greenbelt_72
• Track 10 : Sapo_18
• Track 11 : Frizzle_18, Ghobes_19
• Track 12 : Archimedes_17
• Track 13 : Djokovic_37, Terapin_38, Sienna_37, Beyoncage_37, Madi_37, BiteSize_37
• Track 14 : LilyPad_40
• Track 15 : Suzy_37
• Track 16 : LittleFella_44
• Track 17 : Tillicus_47
• Track 18 : DoobyDoo_48
• Track 19 : DumpTruck_46
• Track 20 : Avian_48, NovaSharks_51, Jamemuya19_49, RazorC_49, Astralis_49, Rumi_50, Alyssamiracle_52, Riduram_48, Genamy16_52
• Track 21 : Apeppi_46, LuckyLeo_48, Aaravos_46
• Track 22 : ParvusTarda_49, Pywacket_48, Jalebi_49, LavAbarElk_49, GOATification_50, Yikes_51, Mima20_49, MoiGyank_53, NorManre_52, BirthdayBoy_52, Rukungu_52, Fulcrum_50, Gibbin_51, DaviePasture_50, Patos_52, Sampudon_50
• Track 23 : Wojtek_48
• Track 24 : Zany_48, Rota_48, Nettle_50
• Track 25 : Xenia2_47
• Track 26 : Charminar_48
• Track 27 : Stormer_49
• Track 28 : OtterstedtS21_49, GretelLyn_49, Lila22_50, Sadboi_50
• Track 29 : Erutan_49
• Track 30 : Ranch_51
• Track 31 : Alephilan_48
• Track 32 : Lambo_49

• Track 33 : Haunter_39
• Track 34 : Tongui_39
• Track 35 : Erudite_38, Dauntless_38
• Track 36 : Pharpay_39, Neptune_39, CoolCookie_39, Anakin_39, Gilda_39, OverHedge_39, OhDear_39, PhunaPhoke_39, AnnaSerena_39, Potty_39, Tedro_39, Artiphact_39, Cybele_39, NarutoRun_39, SafetyGuy_39, Tiggy93_39
• Track 37 : Rie18_39
• Track 38 : WinnieLou_40
• Track 39 : FountainFog_38
• Track 40 : Poultress_38
• Track 41 : DannyDe_39, Hiddenleaf_39, SilentWarrior_39, JingleBells_39, FreddieHg_39, Annapurna_39, Chivey_39
• Track 42 : Karate_38
• Track 43 : Rachella_39
• Track 44 : Crestdrop_39
• Track 45 : Aesir_38
• Track 46 : Hager_40
• Track 47 : Snakehole_39
• Track 48 : Krampus_39
• Track 49 : JDawG_38
• Track 50 : MortySmith_37
• Track 51 : Wollypog_39

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

The start number called the most often in the published annotations is 29, it was called in 44 of the 102 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aesir_38, Anakin_39, AnnaSerena_39, Annapurna_39, Artiphact_39, Beyoncage_37, BiteSize_37, Chivey_39, CoolCookie_39, Crestdrop_39, Cybele_39, DannyDe_39, Dauntless_38, Djokovic_37, Erudite_38, FountainFog_38, FreddieHg_39, Gilda_39, Hager_40, Haunter_39, Hiddenleaf_39, JDawG_38, JingleBells_39, Karate_38, Krampus_39, LilyPad_40, Madi_37, MortySmith_37, NarutoRun_39, Neptune_39, OhDear_39, OverHedge_39, Pharpay_39, PhunaPhoke_39, Potty_39, Poultress_38, Rachella_39, Rie18_39, SafetyGuy_39, Sienna_37, SilentWarrior_39, Snakehole_39, Suzy_37, Tedro_39, Terapin_38, Tiggy93_39, Tongui_39, WinnieLou_40,

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

Genes that do not have the "Most Annotated" start:
• Aaravos_46, Alephilan_48, Alyssamiracle_52, Apeppi_46, Archimedes_17, Astralis_49, Avian_48, BirthdayBoy_52, Charminar_48, DaviePasture_50, DoobyDoo_48, Dryad_78, DumpTruck_46, Erutan_49, Frizzle_18, Fulcrum_50, GOATification_50, Genamy16_52, Ghobes_19, Gibbin_51, Gibson_75, Greenbelt_72, GretelLyn_49, Jalebi_49, Jamemuya19_49, Lambo_49, LavAbarElk_49, Lila22_50, LittleFella_44, Lizz_74, LuckyLeo_48, Mima20_49, MoiGyank_53, Mysterious_45, Nehemiah_45, Nettle_50, NorManre_52,

NovaSharks_51, OtterstedtS21_49, PHTowN_74, ParvusTarda_49, Patos_52, Phelemich_45, Pywacket_48, Ranch_51, RazorC_49, Reprobate_46, Riduram_48, Rooney_75, Rota_48, Rukungu_52, Rumi_50, Sadboi_50, Sampudon_50, Sapo_18, SassyC_79, ShakeNBake_74, Stormer_49, Tillicus_47, Virizion_81, Wentworth_74, Wilkos_76, Wojtek_48, Wollypog_39, Xenia2_47, Yara_72, Yikes_51, Zany_48,

Summary by start number:

Start 12:
• Found in 46 of 116 (39.7%) of genes in pham
• Manual Annotations of this start: 40 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aaravos_46 (DV), Alephilan_48 (DV), Alyssamiracle_52 (DV), Apeppi_46 (DV), Astralis_49 (DV), Avian_48 (DV), BirthdayBoy_52 (DV), Charminar_48 (DV), DaviePasture_50 (DV), DoobyDoo_48 (DV), DumpTruck_46 (DV), Erutan_49 (DV), Fulcrum_50 (DV), GOATification_50 (DV), Genamy16_52 (DV), Gibbin_51 (DV), GretelLyn_49 (DV), Jalebi_49 (DV), Jamemuya19_49 (DV), Lambo_49 (DV), LavAbarElk_49 (DV), Lila22_50 (DV), LuckyLeo_48 (DV), Mima20_49 (DV), MoiGyank_53 (DV), Nettle_50 (DV), NorManre_52 (DV), NovaSharks_51 (DV), OtterstedtS21_49 (DV), ParvusTarda_49 (DV), Patos_52 (DV), Pywacket_48 (DV), Ranch_51 (DV), RazorC_49 (DV), Riduram_48 (DV), Rota_48 (DV), Rukungu_52 (DV), Rumi_50 (DV), Sadboi_50 (DV), Sampudon_50 (DV), Stormer_49 (DV), Tillicus_47 (DV), Wojtek_48 (DV), Xenia2_47 (DV), Yikes_51 (DV), Zany_48 (DV),

Start 29:
• Found in 48 of 116 (41.4%) of genes in pham
• Manual Annotations of this start: 44 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aesir_38 (EF), Anakin_39 (EF), AnnaSerena_39 (EF), Annapurna_39 (EF), Artiphact_39 (EF), Beyoncage_37 (DG1), BiteSize_37 (DG1), Chivey_39 (EF), CoolCookie_39 (EF), Crestdrop_39 (EF), Cybele_39 (EF), DannyDe_39 (EF), Dauntless_38 (EF), Djokovic_37 (DG1), Erudite_38 (EF), FountainFog_38 (EF), FreddieHg_39 (EF), Gilda_39 (EF), Hager_40 (EF), Haunter_39 (EF), Hiddenleaf_39 (EF), JDawG_38 (EF), JingleBells_39 (EF), Karate_38 (EF), Krampus_39 (EF), LilyPad_40 (DG1), Madi_37 (DG1), MortySmith_37 (EF), NarutoRun_39 (EF), Neptune_39 (EF), OhDear_39 (EF), OverHedge_39 (EF), Pharpay_39 (EF), PhunaPhoke_39 (EF), Potty_39 (EF), Poultress_38 (EF), Rachella_39 (EF), Rie18_39 (EF), SafetyGuy_39 (EF), Sienna_37 (DG1), SilentWarrior_39 (EF), Snakehole_39 (EF), Suzy_37 (DG1), Tedro_39 (EF), Terapin_38 (DG1), Tiggy93_39 (EF), Tongui_39 (EF), WinnieLou_40 (EF),

Start 30:
• Found in 2 of 116 (1.7%) of genes in pham
• Manual Annotations of this start: 2 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LittleFella_44 (DG2), Wollypog_39 (singleton),

Start 37:
• Found in 2 of 116 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 102
• Called 50.0% of time when present

• Phage (with cluster) where this start called: Sapo_18 (DA),

Start 42:
• Found in 1 of 116 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yara_72 (BN),

Start 43:
• Found in 11 of 116 (9.5%) of genes in pham
• Manual Annotations of this start: 8 of 102
• Called 90.9% of time when present
• Phage (with cluster) where this start called: Dryad_78 (BN), Gibson_75 (BN), Greenbelt_72 (BN), Lizz_74 (BN), PHTowN_74 (BN), Rooney_75 (BN), ShakeNBake_74 (BN), Virizion_81 (BN), Wentworth_74 (BN), Wilkos_76 (BN),

Start 44:
• Found in 3 of 116 (2.6%) of genes in pham
• Manual Annotations of this start: 2 of 102
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Frizzle_18 (DA), Ghobes_19 (DA),

Start 45:
• Found in 5 of 116 (4.3%) of genes in pham
• Manual Annotations of this start: 4 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Archimedes_17 (DA), Mysterious_45 (B5), Nehemiah_45 (B5), Phelemich_45 (B5), Reprobate_46 (B5),

Start 46:
• Found in 10 of 116 (8.6%) of genes in pham
• No Manual Annotations of this start.
• Called 10.0% of time when present
• Phage (with cluster) where this start called: SassyC_79 (BN),

Summary by clusters:

There are 8 clusters represented in this pham: singleton, BN, EF, DA, DG2, B5, DG1, DV,

Info for manual annotations of cluster B5:
•Start number 45 was manually annotated 3 times for cluster B5.

Info for manual annotations of cluster BN:
•Start number 42 was manually annotated 1 time for cluster BN.
•Start number 43 was manually annotated 8 times for cluster BN.

Info for manual annotations of cluster DA:
•Start number 37 was manually annotated 1 time for cluster DA.
•Start number 44 was manually annotated 2 times for cluster DA.
•Start number 45 was manually annotated 1 time for cluster DA.

Info for manual annotations of cluster DG1:

•Start number 29 was manually annotated 8 times for cluster DG1.

Info for manual annotations of cluster DG2:
•Start number 30 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster DV:
•Start number 12 was manually annotated 40 times for cluster DV.

Info for manual annotations of cluster EF:
•Start number 29 was manually annotated 36 times for cluster EF.

Gene Information:

Gene: Aaravos_46 Start: 36150, Stop: 36998, Start Num: 12
Candidate Starts for Aaravos_46:
(9, 36105), (10, 36117), (Start: 12 @36150 has 40 MA's), (15, 36192), (16, 36201), (32, 36333), (58, 36519), (75, 36633), (82, 36678), (83, 36684), (101, 36801), (103, 36813), (111, 36849), (115, 36861), (125, 36921), (128, 36969),

Gene: Aesir_38 Start: 25004, Stop: 25594, Start Num: 29
Candidate Starts for Aesir_38:
(Start: 29 @25004 has 44 MA's), (35, 25058), (47, 25094), (70, 25208), (77, 25250), (78, 25256), (84, 25301), (92, 25346), (112, 25448), (114, 25454),

Gene: Alephilan_48 Start: 36707, Stop: 37567, Start Num: 12
Candidate Starts for Alephilan_48:
(9, 36662), (10, 36674), (11, 36689), (Start: 12 @36707 has 40 MA's), (15, 36749), (16, 36758), (19, 36797), (26, 36839), (32, 36899), (48, 36983), (58, 37085), (83, 37250), (101, 37367), (103, 37379), (109, 37406), (111, 37415), (115, 37427), (118, 37439), (125, 37487), (128, 37535),

Gene: Alyssamiracle_52 Start: 36033, Stop: 36866, Start Num: 12
Candidate Starts for Alyssamiracle_52:
(5, 35934), (9, 35988), (10, 36000), (Start: 12 @36033 has 40 MA's), (15, 36075), (16, 36084), (23, 36129), (32, 36198), (48, 36282), (58, 36384), (75, 36498), (83, 36549), (101, 36666), (103, 36678), (115, 36726), (118, 36738), (125, 36786),

Gene: Anakin_39 Start: 25324, Stop: 25914, Start Num: 29
Candidate Starts for Anakin_39:
(Start: 29 @25324 has 44 MA's), (35, 25378), (47, 25414), (70, 25528), (77, 25570), (92, 25666), (112, 25768), (114, 25774),

Gene: AnnaSerena_39 Start: 25359, Stop: 25949, Start Num: 29
Candidate Starts for AnnaSerena_39:
(Start: 29 @25359 has 44 MA's), (35, 25413), (47, 25449), (70, 25563), (77, 25605), (92, 25701), (112, 25803), (114, 25809),

Gene: Annapurna_39 Start: 24633, Stop: 25223, Start Num: 29
Candidate Starts for Annapurna_39:
(Start: 29 @24633 has 44 MA's), (38, 24687), (50, 24723), (70, 24837), (77, 24879), (78, 24885), (84, 24930), (92, 24975), (112, 25077), (114, 25083),

Gene: Apeppi_46 Start: 36209, Stop: 37057, Start Num: 12
Candidate Starts for Apeppi_46:
(9, 36164), (10, 36176), (Start: 12 @36209 has 40 MA's), (15, 36251), (16, 36260), (32, 36392), (58, 36578), (75, 36692), (82, 36737), (83, 36743), (101, 36860), (103, 36872), (111, 36908), (115, 36920), (125, 36980), (128, 37028),

Gene: Archimedes_17 Start: 16783, Stop: 16172, Start Num: 45
Candidate Starts for Archimedes_17:
(Start: 45 @16783 has 4 MA's), (52, 16720), (89, 16441), (102, 16372), (104, 16360), (107, 16351), (110, 16333), (123, 16267), (129, 16183),

Gene: Artiphact_39 Start: 25348, Stop: 25938, Start Num: 29
Candidate Starts for Artiphact_39:
(Start: 29 @25348 has 44 MA's), (35, 25402), (47, 25438), (70, 25552), (77, 25594), (92, 25690), (112, 25792), (114, 25798),

Gene: Astralis_49 Start: 35611, Stop: 36444, Start Num: 12
Candidate Starts for Astralis_49:
(5, 35512), (9, 35566), (10, 35578), (Start: 12 @35611 has 40 MA's), (15, 35653), (16, 35662), (23, 35707), (32, 35776), (48, 35860), (58, 35962), (75, 36076), (83, 36127), (101, 36244), (103, 36256), (115, 36304), (118, 36316), (125, 36364),

Gene: Avian_48 Start: 35761, Stop: 36594, Start Num: 12
Candidate Starts for Avian_48:
(5, 35662), (9, 35716), (10, 35728), (Start: 12 @35761 has 40 MA's), (15, 35803), (16, 35812), (23, 35857), (32, 35926), (48, 36010), (58, 36112), (75, 36226), (83, 36277), (101, 36394), (103, 36406), (115, 36454), (118, 36466), (125, 36514),

Gene: Beyoncage_37 Start: 31421, Stop: 32200, Start Num: 29
Candidate Starts for Beyoncage_37:
(Start: 29 @31421 has 44 MA's), (33, 31460), (71, 31679), (81, 31742), (92, 31808), (97, 31835), (122, 31952), (131, 32057), (134, 32099),

Gene: BirthdayBoy_52 Start: 37410, Stop: 38270, Start Num: 12
Candidate Starts for BirthdayBoy_52:
(9, 37365), (10, 37377), (Start: 12 @37410 has 40 MA's), (15, 37452), (16, 37461), (19, 37500), (26, 37542), (32, 37602), (48, 37686), (58, 37788), (75, 37902), (79, 37923), (83, 37953), (101, 38070), (115, 38130), (125, 38190), (128, 38238),

Gene: BiteSize_37 Start: 31507, Stop: 32286, Start Num: 29
Candidate Starts for BiteSize_37:
(Start: 29 @31507 has 44 MA's), (33, 31546), (71, 31765), (81, 31828), (92, 31894), (97, 31921), (122, 32038), (131, 32143), (134, 32185),

Gene: Charminar_48 Start: 35379, Stop: 36212, Start Num: 12
Candidate Starts for Charminar_48:
(5, 35280), (9, 35334), (10, 35346), (Start: 12 @35379 has 40 MA's), (15, 35421), (16, 35430), (23, 35475), (32, 35544), (48, 35628), (58, 35730), (83, 35895), (101, 36012), (103, 36024), (115, 36072), (118, 36084), (125, 36132),

Gene: Chivey_39 Start: 24582, Stop: 25172, Start Num: 29
Candidate Starts for Chivey_39:

(Start: 29 @24582 has 44 MA's), (38, 24636), (50, 24672), (70, 24786), (77, 24828), (78, 24834), (84, 24879), (92, 24924), (112, 25026), (114, 25032),

Gene: CoolCookie_39 Start: 25354, Stop: 25944, Start Num: 29
Candidate Starts for CoolCookie_39:
(Start: 29 @25354 has 44 MA's), (35, 25408), (47, 25444), (70, 25558), (77, 25600), (92, 25696), (112, 25798), (114, 25804),

Gene: Crestdrop_39 Start: 24493, Stop: 25206, Start Num: 29
Candidate Starts for Crestdrop_39:
(Start: 29 @24493 has 44 MA's), (50, 24637), (70, 24820), (77, 24862), (78, 24868), (84, 24913), (92, 24958), (112, 25060), (114, 25066),

Gene: Cybele_39 Start: 25324, Stop: 25914, Start Num: 29
Candidate Starts for Cybele_39:
(Start: 29 @25324 has 44 MA's), (35, 25378), (47, 25414), (70, 25528), (77, 25570), (92, 25666), (112, 25768), (114, 25774),

Gene: DannyDe_39 Start: 24588, Stop: 25178, Start Num: 29
Candidate Starts for DannyDe_39:
(Start: 29 @24588 has 44 MA's), (38, 24642), (50, 24678), (70, 24792), (77, 24834), (78, 24840), (84, 24885), (92, 24930), (112, 25032), (114, 25038),

Gene: Dauntless_38 Start: 24910, Stop: 25500, Start Num: 29
Candidate Starts for Dauntless_38:
(Start: 29 @24910 has 44 MA's), (35, 24964), (47, 25000), (70, 25114), (77, 25156), (78, 25162), (84, 25207), (92, 25252), (112, 25354), (114, 25360),

Gene: DaviePasture_50 Start: 37051, Stop: 37911, Start Num: 12
Candidate Starts for DaviePasture_50:
(9, 37006), (10, 37018), (Start: 12 @37051 has 40 MA's), (15, 37093), (16, 37102), (19, 37141), (26, 37183), (32, 37243), (48, 37327), (58, 37429), (75, 37543), (79, 37564), (83, 37594), (101, 37711), (115, 37771), (125, 37831), (128, 37879),

Gene: Djokovic_37 Start: 31420, Stop: 32199, Start Num: 29
Candidate Starts for Djokovic_37:
(Start: 29 @31420 has 44 MA's), (33, 31459), (71, 31678), (81, 31741), (92, 31807), (97, 31834), (122, 31951), (131, 32056), (134, 32098),

Gene: DoobyDoo_48 Start: 35865, Stop: 36803, Start Num: 12
Candidate Starts for DoobyDoo_48:
(9, 35820), (10, 35832), (Start: 12 @35865 has 40 MA's), (15, 35907), (16, 35916), (19, 35955), (26, 35997), (32, 36057), (Start: 37 @36135 has 1 MA's), (48, 36219), (58, 36321), (75, 36435), (79, 36456), (83, 36486), (101, 36603), (115, 36663), (125, 36723), (128, 36771),

Gene: Dryad_78 Start: 52632, Stop: 52060, Start Num: 43
Candidate Starts for Dryad_78:
(Start: 43 @52632 has 8 MA's), (46, 52596), (55, 52539), (62, 52482), (69, 52431), (72, 52410), (82, 52359), (106, 52239),

Gene: DumpTruck_46 Start: 35046, Stop: 35921, Start Num: 12
Candidate Starts for DumpTruck_46:

(7, 34986), (Start: 12 @35046 has 40 MA's), (14, 35079), (17, 35112), (20, 35136), (24, 35157), (31, 35217), (55, 35412), (58, 35439), (72, 35529), (74, 35550), (79, 35574), (85, 35625), (93, 35670), (108, 35757), (111, 35769), (115, 35781), (125, 35841), (128, 35889),

Gene: Erudite_38 Start: 24910, Stop: 25500, Start Num: 29
Candidate Starts for Erudite_38:
(Start: 29 @24910 has 44 MA's), (35, 24964), (47, 25000), (70, 25114), (77, 25156), (78, 25162), (84, 25207), (92, 25252), (112, 25354), (114, 25360),

Gene: Erutan_49 Start: 36477, Stop: 37337, Start Num: 12
Candidate Starts for Erutan_49:
(Start: 12 @36477 has 40 MA's), (15, 36519), (16, 36528), (19, 36567), (26, 36609), (32, 36669), (48, 36753), (58, 36855), (75, 36969), (79, 36990), (83, 37020), (90, 37080), (93, 37086), (115, 37197), (125, 37257), (128, 37305),

Gene: FountainFog_38 Start: 24631, Stop: 25224, Start Num: 29
Candidate Starts for FountainFog_38:
(Start: 29 @24631 has 44 MA's), (53, 24757), (70, 24838), (77, 24880), (92, 24976), (112, 25078), (114, 25084),

Gene: FreddieHg_39 Start: 24598, Stop: 25188, Start Num: 29
Candidate Starts for FreddieHg_39:
(Start: 29 @24598 has 44 MA's), (38, 24652), (50, 24688), (70, 24802), (77, 24844), (78, 24850), (84, 24895), (92, 24940), (112, 25042), (114, 25048),

Gene: Frizzle_18 Start: 17372, Stop: 16779, Start Num: 44
Candidate Starts for Frizzle_18:
(Start: 44 @17372 has 2 MA's), (51, 17324), (57, 17252), (94, 17027), (112, 16928), (116, 16916),

Gene: Fulcrum_50 Start: 36704, Stop: 37564, Start Num: 12
Candidate Starts for Fulcrum_50:
(9, 36659), (10, 36671), (Start: 12 @36704 has 40 MA's), (15, 36746), (16, 36755), (19, 36794), (26, 36836), (32, 36896), (48, 36980), (58, 37082), (75, 37196), (79, 37217), (83, 37247), (101, 37364), (115, 37424), (125, 37484), (128, 37532),

Gene: GOATification_50 Start: 36704, Stop: 37564, Start Num: 12
Candidate Starts for GOATification_50:
(9, 36659), (10, 36671), (Start: 12 @36704 has 40 MA's), (15, 36746), (16, 36755), (19, 36794), (26, 36836), (32, 36896), (48, 36980), (58, 37082), (75, 37196), (79, 37217), (83, 37247), (101, 37364), (115, 37424), (125, 37484), (128, 37532),

Gene: Genamy16_52 Start: 36019, Stop: 36852, Start Num: 12
Candidate Starts for Genamy16_52:
(5, 35920), (9, 35974), (10, 35986), (Start: 12 @36019 has 40 MA's), (15, 36061), (16, 36070), (23, 36115), (32, 36184), (48, 36268), (58, 36370), (75, 36484), (83, 36535), (101, 36652), (103, 36664), (115, 36712), (118, 36724), (125, 36772),

Gene: Ghobes_19 Start: 17373, Stop: 16780, Start Num: 44
Candidate Starts for Ghobes_19:
(Start: 44 @17373 has 2 MA's), (51, 17325), (57, 17253), (94, 17028), (112, 16929), (116, 16917),

Gene: Gibbin_51 Start: 37360, Stop: 38220, Start Num: 12
Candidate Starts for Gibbin_51:

(9, 37315), (10, 37327), (Start: 12 @37360 has 40 MA's), (15, 37402), (16, 37411), (19, 37450), (26, 37492), (32, 37552), (48, 37636), (58, 37738), (75, 37852), (79, 37873), (83, 37903), (101, 38020), (115, 38080), (125, 38140), (128, 38188),

Gene: Gibson_75 Start: 51969, Stop: 51397, Start Num: 43
Candidate Starts for Gibson_75:
(34, 52047), (Start: 43 @51969 has 8 MA's), (46, 51933), (55, 51876), (69, 51768), (72, 51747), (75, 51723), (82, 51696), (106, 51576), (130, 51405),

Gene: Gilda_39 Start: 25348, Stop: 25938, Start Num: 29
Candidate Starts for Gilda_39:
(Start: 29 @25348 has 44 MA's), (35, 25402), (47, 25438), (70, 25552), (77, 25594), (92, 25690), (112, 25792), (114, 25798),

Gene: Greenbelt_72 Start: 48069, Stop: 47428, Start Num: 43
Candidate Starts for Greenbelt_72:
(Start: 43 @48069 has 8 MA's), (49, 48024), (64, 47868), (66, 47856), (72, 47820), (90, 47694), (98, 47655),

Gene: GretelLyn_49 Start: 37434, Stop: 38294, Start Num: 12
Candidate Starts for GretelLyn_49:
(9, 37389), (10, 37401), (Start: 12 @37434 has 40 MA's), (15, 37476), (16, 37485), (18, 37512), (19, 37524), (25, 37560), (26, 37566), (32, 37626), (48, 37710), (58, 37812), (75, 37926), (79, 37947), (83, 37977), (101, 38094), (115, 38154), (125, 38214), (128, 38262),

Gene: Hager_40 Start: 24835, Stop: 25425, Start Num: 29
Candidate Starts for Hager_40:
(Start: 29 @24835 has 44 MA's), (40, 24916), (70, 25039), (77, 25081), (78, 25087), (92, 25177), (112, 25279),

Gene: Haunter_39 Start: 24740, Stop: 25330, Start Num: 29
Candidate Starts for Haunter_39:
(Start: 29 @24740 has 44 MA's), (35, 24794), (70, 24944), (77, 24986), (92, 25082), (112, 25184), (114, 25190),

Gene: Hiddenleaf_39 Start: 24582, Stop: 25172, Start Num: 29
Candidate Starts for Hiddenleaf_39:
(Start: 29 @24582 has 44 MA's), (38, 24636), (50, 24672), (70, 24786), (77, 24828), (78, 24834), (84, 24879), (92, 24924), (112, 25026), (114, 25032),

Gene: JDawG_38 Start: 24999, Stop: 25589, Start Num: 29
Candidate Starts for JDawG_38:
(Start: 29 @24999 has 44 MA's), (35, 25053), (47, 25089), (70, 25203), (77, 25245), (84, 25296), (92, 25341), (114, 25449),

Gene: Jalebi_49 Start: 37779, Stop: 38639, Start Num: 12
Candidate Starts for Jalebi_49:
(9, 37734), (10, 37746), (Start: 12 @37779 has 40 MA's), (15, 37821), (16, 37830), (19, 37869), (26, 37911), (32, 37971), (48, 38055), (58, 38157), (75, 38271), (79, 38292), (83, 38322), (101, 38439), (115, 38499), (125, 38559), (128, 38607),

Gene: Jamemuya19_49 Start: 35624, Stop: 36457, Start Num: 12
Candidate Starts for Jamemuya19_49:

(5, 35525), (9, 35579), (10, 35591), (Start: 12 @35624 has 40 MA's), (15, 35666), (16, 35675), (23, 35720), (32, 35789), (48, 35873), (58, 35975), (75, 36089), (83, 36140), (101, 36257), (103, 36269), (115, 36317), (118, 36329), (125, 36377),

Gene: JingleBells_39 Start: 24703, Stop: 25293, Start Num: 29
Candidate Starts for JingleBells_39:
(Start: 29 @24703 has 44 MA's), (38, 24757), (50, 24793), (70, 24907), (77, 24949), (78, 24955), (84, 25000), (92, 25045), (112, 25147), (114, 25153),

Gene: Karate_38 Start: 25350, Stop: 25943, Start Num: 29
Candidate Starts for Karate_38:
(Start: 29 @25350 has 44 MA's), (53, 25476), (70, 25557), (77, 25599), (78, 25605), (92, 25695), (112, 25797),

Gene: Krampus_39 Start: 25356, Stop: 25946, Start Num: 29
Candidate Starts for Krampus_39:
(Start: 29 @25356 has 44 MA's), (35, 25410), (47, 25446), (70, 25560), (77, 25602), (78, 25608), (92, 25698), (112, 25800),

Gene: Lambo_49 Start: 36805, Stop: 37665, Start Num: 12
Candidate Starts for Lambo_49:
(9, 36760), (10, 36772), (Start: 12 @36805 has 40 MA's), (15, 36847), (16, 36856), (18, 36883), (19, 36895), (26, 36937), (32, 36997), (48, 37081), (58, 37183), (75, 37297), (79, 37318), (83, 37348), (101, 37465), (115, 37525), (119, 37543), (125, 37585), (128, 37633),

Gene: LavAbarElk_49 Start: 35920, Stop: 36780, Start Num: 12
Candidate Starts for LavAbarElk_49:
(9, 35875), (10, 35887), (Start: 12 @35920 has 40 MA's), (15, 35962), (16, 35971), (19, 36010), (26, 36052), (32, 36112), (48, 36196), (58, 36298), (75, 36412), (79, 36433), (83, 36463), (101, 36580), (115, 36640), (125, 36700), (128, 36748),

Gene: Lila22_50 Start: 37402, Stop: 38262, Start Num: 12
Candidate Starts for Lila22_50:
(9, 37357), (10, 37369), (Start: 12 @37402 has 40 MA's), (15, 37444), (16, 37453), (18, 37480), (19, 37492), (25, 37528), (26, 37534), (32, 37594), (48, 37678), (58, 37780), (75, 37894), (79, 37915), (83, 37945), (101, 38062), (115, 38122), (125, 38182), (128, 38230),

Gene: LilyPad_40 Start: 32787, Stop: 33488, Start Num: 29
Candidate Starts for LilyPad_40:
(22, 32736), (Start: 29 @32787 has 44 MA's), (65, 33009), (67, 33024), (71, 33045), (92, 33192), (95, 33207), (98, 33225), (132, 33459), (133, 33465),

Gene: LittleFella_44 Start: 34392, Stop: 35063, Start Num: 30
Candidate Starts for LittleFella_44:
(Start: 30 @34392 has 2 MA's), (80, 34752), (85, 34782), (87, 34803), (91, 34824), (101, 34881), (105, 34893), (116, 34935), (122, 34974),

Gene: Lizz_74 Start: 51798, Stop: 51226, Start Num: 43
Candidate Starts for Lizz_74:
(1, 52524), (2, 52302), (3, 52269), (8, 52143), (Start: 43 @51798 has 8 MA's), (46, 51762), (55, 51705), (64, 51624), (69, 51597), (72, 51576), (82, 51525), (106, 51405),

Gene: LuckyLeo_48 Start: 36209, Stop: 37057, Start Num: 12

Candidate Starts for LuckyLeo_48:
(9, 36164), (10, 36176), (Start: 12 @36209 has 40 MA's), (15, 36251), (16, 36260), (32, 36392), (58, 36578), (75, 36692), (82, 36737), (83, 36743), (101, 36860), (103, 36872), (111, 36908), (115, 36920), (125, 36980), (128, 37028),

Gene: Madi_37 Start: 31498, Stop: 32277, Start Num: 29
Candidate Starts for Madi_37:
(Start: 29 @31498 has 44 MA's), (33, 31537), (71, 31756), (81, 31819), (92, 31885), (97, 31912), (122, 32029), (131, 32134), (134, 32176),

Gene: Mima20_49 Start: 36951, Stop: 37811, Start Num: 12
Candidate Starts for Mima20_49:
(9, 36906), (10, 36918), (Start: 12 @36951 has 40 MA's), (15, 36993), (16, 37002), (19, 37041), (26, 37083), (32, 37143), (48, 37227), (58, 37329), (75, 37443), (79, 37464), (83, 37494), (101, 37611), (115, 37671), (125, 37731), (128, 37779),

Gene: MoiGyank_53 Start: 37848, Stop: 38708, Start Num: 12
Candidate Starts for MoiGyank_53:
(9, 37803), (10, 37815), (Start: 12 @37848 has 40 MA's), (15, 37890), (16, 37899), (19, 37938), (26, 37980), (32, 38040), (48, 38124), (58, 38226), (75, 38340), (79, 38361), (83, 38391), (101, 38508), (115, 38568), (125, 38628), (128, 38676),

Gene: MortySmith_37 Start: 24387, Stop: 24977, Start Num: 29
Candidate Starts for MortySmith_37:
(Start: 29 @24387 has 44 MA's), (35, 24441), (47, 24477), (70, 24591), (77, 24633), (84, 24684), (92, 24729), (112, 24831), (114, 24837),

Gene: Mysterious_45 Start: 41019, Stop: 40390, Start Num: 45
Candidate Starts for Mysterious_45:
(Start: 45 @41019 has 4 MA's), (54, 40938), (56, 40902), (59, 40875), (60, 40869), (68, 40806), (83, 40710), (99, 40608), (101, 40596),

Gene: NarutoRun_39 Start: 25324, Stop: 25914, Start Num: 29
Candidate Starts for NarutoRun_39:
(Start: 29 @25324 has 44 MA's), (35, 25378), (47, 25414), (70, 25528), (77, 25570), (92, 25666), (112, 25768), (114, 25774),

Gene: Nehemiah_45 Start: 41019, Stop: 40390, Start Num: 45
Candidate Starts for Nehemiah_45:
(Start: 45 @41019 has 4 MA's), (54, 40938), (56, 40902), (59, 40875), (60, 40869), (68, 40806), (83, 40710), (99, 40608), (101, 40596),

Gene: Neptune_39 Start: 25324, Stop: 25914, Start Num: 29
Candidate Starts for Neptune_39:
(Start: 29 @25324 has 44 MA's), (35, 25378), (47, 25414), (70, 25528), (77, 25570), (92, 25666), (112, 25768), (114, 25774),

Gene: Nettle_50 Start: 37342, Stop: 38193, Start Num: 12
Candidate Starts for Nettle_50:
(9, 37297), (10, 37309), (Start: 12 @37342 has 40 MA's), (15, 37384), (16, 37393), (32, 37525), (48, 37609), (58, 37711), (75, 37825), (79, 37846), (83, 37876), (101, 37993), (115, 38053), (125, 38113), (128, 38161),

Gene: NorManre_52 Start: 37060, Stop: 37920, Start Num: 12
Candidate Starts for NorManre_52:
(9, 37015), (10, 37027), (Start: 12 @37060 has 40 MA's), (15, 37102), (16, 37111), (19, 37150), (26, 37192), (32, 37252), (48, 37336), (58, 37438), (75, 37552), (79, 37573), (83, 37603), (101, 37720), (115, 37780), (125, 37840), (128, 37888),

Gene: NovaSharks_51 Start: 35610, Stop: 36443, Start Num: 12
Candidate Starts for NovaSharks_51:
(5, 35511), (9, 35565), (10, 35577), (Start: 12 @35610 has 40 MA's), (15, 35652), (16, 35661), (23, 35706), (32, 35775), (48, 35859), (58, 35961), (75, 36075), (83, 36126), (101, 36243), (103, 36255), (115, 36303), (118, 36315), (125, 36363),

Gene: OhDear_39 Start: 25322, Stop: 25912, Start Num: 29
Candidate Starts for OhDear_39:
(Start: 29 @25322 has 44 MA's), (35, 25376), (47, 25412), (70, 25526), (77, 25568), (92, 25664), (112, 25766), (114, 25772),

Gene: OtterstedtS21_49 Start: 36720, Stop: 37580, Start Num: 12
Candidate Starts for OtterstedtS21_49:
(9, 36675), (10, 36687), (Start: 12 @36720 has 40 MA's), (15, 36762), (16, 36771), (18, 36798), (19, 36810), (25, 36846), (26, 36852), (32, 36912), (48, 36996), (58, 37098), (75, 37212), (79, 37233), (83, 37263), (101, 37380), (115, 37440), (125, 37500), (128, 37548),

Gene: OverHedge_39 Start: 25314, Stop: 25904, Start Num: 29
Candidate Starts for OverHedge_39:
(Start: 29 @25314 has 44 MA's), (35, 25368), (47, 25404), (70, 25518), (77, 25560), (92, 25656), (112, 25758), (114, 25764),

Gene: PHTowN_74 Start: 51796, Stop: 51224, Start Num: 43
Candidate Starts for PHTowN_74:
(1, 52522), (2, 52300), (3, 52267), (8, 52141), (Start: 43 @51796 has 8 MA's), (46, 51760), (55, 51703), (64, 51622), (69, 51595), (72, 51574), (82, 51523), (106, 51403),

Gene: ParvusTarda_49 Start: 36222, Stop: 37082, Start Num: 12
Candidate Starts for ParvusTarda_49:
(9, 36177), (10, 36189), (Start: 12 @36222 has 40 MA's), (15, 36264), (16, 36273), (19, 36312), (26, 36354), (32, 36414), (48, 36498), (58, 36600), (75, 36714), (79, 36735), (83, 36765), (101, 36882), (115, 36942), (125, 37002), (128, 37050),

Gene: Patos_52 Start: 37059, Stop: 37919, Start Num: 12
Candidate Starts for Patos_52:
(9, 37014), (10, 37026), (Start: 12 @37059 has 40 MA's), (15, 37101), (16, 37110), (19, 37149), (26, 37191), (32, 37251), (48, 37335), (58, 37437), (75, 37551), (79, 37572), (83, 37602), (101, 37719), (115, 37779), (125, 37839), (128, 37887),

Gene: Pharpay_39 Start: 25369, Stop: 25959, Start Num: 29
Candidate Starts for Pharpay_39:
(Start: 29 @25369 has 44 MA's), (35, 25423), (47, 25459), (70, 25573), (77, 25615), (92, 25711), (112, 25813), (114, 25819),

Gene: Phelemich_45 Start: 41018, Stop: 40389, Start Num: 45
Candidate Starts for Phelemich_45:

(Start: 45 @41018 has 4 MA's), (54, 40937), (56, 40901), (59, 40874), (60, 40868), (68, 40805), (83, 40709), (99, 40607), (101, 40595),

Gene: PhunaPhoke_39 Start: 25342, Stop: 25932, Start Num: 29
Candidate Starts for PhunaPhoke_39:
(Start: 29 @25342 has 44 MA's), (35, 25396), (47, 25432), (70, 25546), (77, 25588), (92, 25684), (112, 25786), (114, 25792),

Gene: Potty_39 Start: 25347, Stop: 25937, Start Num: 29
Candidate Starts for Potty_39:
(Start: 29 @25347 has 44 MA's), (35, 25401), (47, 25437), (70, 25551), (77, 25593), (92, 25689), (112, 25791), (114, 25797),

Gene: Poultress_38 Start: 25693, Stop: 26283, Start Num: 29
Candidate Starts for Poultress_38:
(Start: 29 @25693 has 44 MA's), (35, 25747), (47, 25783), (70, 25897), (77, 25939), (78, 25945), (92, 26035), (112, 26137), (114, 26143),

Gene: Pywacket_48 Start: 37551, Stop: 38411, Start Num: 12
Candidate Starts for Pywacket_48:
(9, 37506), (10, 37518), (Start: 12 @37551 has 40 MA's), (15, 37593), (16, 37602), (19, 37641), (26, 37683), (32, 37743), (48, 37827), (58, 37929), (75, 38043), (79, 38064), (83, 38094), (101, 38211), (115, 38271), (125, 38331), (128, 38379),

Gene: Rachella_39 Start: 25350, Stop: 25940, Start Num: 29
Candidate Starts for Rachella_39:
(Start: 29 @25350 has 44 MA's), (35, 25404), (70, 25554), (77, 25596), (78, 25602), (92, 25692), (112, 25794),

Gene: Ranch_51 Start: 35892, Stop: 36752, Start Num: 12
Candidate Starts for Ranch_51:
(9, 35847), (10, 35859), (Start: 12 @35892 has 40 MA's), (15, 35934), (16, 35943), (18, 35970), (19, 35982), (25, 36018), (26, 36024), (32, 36084), (48, 36168), (58, 36270), (75, 36384), (79, 36405), (83, 36435), (101, 36552), (115, 36612), (119, 36630), (125, 36672), (128, 36720),

Gene: RazorC_49 Start: 35763, Stop: 36596, Start Num: 12
Candidate Starts for RazorC_49:
(5, 35664), (9, 35718), (10, 35730), (Start: 12 @35763 has 40 MA's), (15, 35805), (16, 35814), (23, 35859), (32, 35928), (48, 36012), (58, 36114), (75, 36228), (83, 36279), (101, 36396), (103, 36408), (115, 36456), (118, 36468), (125, 36516),

Gene: Reprobate_46 Start: 41023, Stop: 40394, Start Num: 45
Candidate Starts for Reprobate_46:
(Start: 45 @41023 has 4 MA's), (54, 40942), (56, 40906), (59, 40879), (60, 40873), (68, 40810), (83, 40714), (99, 40612), (101, 40600),

Gene: Riduram_48 Start: 35339, Stop: 36172, Start Num: 12
Candidate Starts for Riduram_48:
(5, 35240), (9, 35294), (10, 35306), (Start: 12 @35339 has 40 MA's), (15, 35381), (16, 35390), (23, 35435), (32, 35504), (48, 35588), (58, 35690), (75, 35804), (83, 35855), (101, 35972), (103, 35984), (115, 36032), (118, 36044), (125, 36092),

Gene: Rie18_39 Start: 24840, Stop: 25496, Start Num: 29

Candidate Starts for Rie18_39:
(13, 24684), (Start: 29 @24840 has 44 MA's), (33, 24885), (47, 24984), (53, 25029), (70, 25110), (77, 25152), (78, 25158), (92, 25248), (112, 25350),

Gene: Rooney_75 Start: 51945, Stop: 51373, Start Num: 43
Candidate Starts for Rooney_75:
(34, 52023), (Start: 43 @51945 has 8 MA's), (46, 51909), (55, 51852), (69, 51744), (72, 51723), (75, 51699), (82, 51672), (106, 51552), (130, 51381),

Gene: Rota_48 Start: 36369, Stop: 37220, Start Num: 12
Candidate Starts for Rota_48:
(9, 36324), (10, 36336), (Start: 12 @36369 has 40 MA's), (15, 36411), (16, 36420), (32, 36552), (48, 36636), (58, 36738), (75, 36852), (79, 36873), (83, 36903), (101, 37020), (115, 37080), (125, 37140), (128, 37188),

Gene: Rukungu_52 Start: 37632, Stop: 38492, Start Num: 12
Candidate Starts for Rukungu_52:
(9, 37587), (10, 37599), (Start: 12 @37632 has 40 MA's), (15, 37674), (16, 37683), (19, 37722), (26, 37764), (32, 37824), (48, 37908), (58, 38010), (75, 38124), (79, 38145), (83, 38175), (101, 38292), (115, 38352), (125, 38412), (128, 38460),

Gene: Rumi_50 Start: 35307, Stop: 36140, Start Num: 12
Candidate Starts for Rumi_50:
(5, 35208), (9, 35262), (10, 35274), (Start: 12 @35307 has 40 MA's), (15, 35349), (16, 35358), (23, 35403), (32, 35472), (48, 35556), (58, 35658), (75, 35772), (83, 35823), (101, 35940), (103, 35952), (115, 36000), (118, 36012), (125, 36060),

Gene: Sadboi_50 Start: 37435, Stop: 38295, Start Num: 12
Candidate Starts for Sadboi_50:
(9, 37390), (10, 37402), (Start: 12 @37435 has 40 MA's), (15, 37477), (16, 37486), (18, 37513), (19, 37525), (25, 37561), (26, 37567), (32, 37627), (48, 37711), (58, 37813), (75, 37927), (79, 37948), (83, 37978), (101, 38095), (115, 38155), (125, 38215), (128, 38263),

Gene: SafetyGuy_39 Start: 25330, Stop: 25920, Start Num: 29
Candidate Starts for SafetyGuy_39:
(Start: 29 @25330 has 44 MA's), (35, 25384), (47, 25420), (70, 25534), (77, 25576), (92, 25672), (112, 25774), (114, 25780),

Gene: Sampudon_50 Start: 37779, Stop: 38639, Start Num: 12
Candidate Starts for Sampudon_50:
(9, 37734), (10, 37746), (Start: 12 @37779 has 40 MA's), (15, 37821), (16, 37830), (19, 37869), (26, 37911), (32, 37971), (48, 38055), (58, 38157), (75, 38271), (79, 38292), (83, 38322), (101, 38439), (115, 38499), (125, 38559), (128, 38607),

Gene: Sapo_18 Start: 17320, Stop: 16661, Start Num: 37
Candidate Starts for Sapo_18:
(21, 17491), (27, 17446), (28, 17428), (36, 17338), (Start: 37 @17320 has 1 MA's), (39, 17308), (Start: 44 @17275 has 2 MA's), (63, 17101), (100, 16867), (116, 16798), (118, 16789),

Gene: SassyC_79 Start: 52762, Stop: 52226, Start Num: 46
Candidate Starts for SassyC_79:
(Start: 43 @52798 has 8 MA's), (46, 52762), (49, 52753), (55, 52705), (69, 52597), (72, 52576), (75, 52552), (106, 52405), (121, 52327),

Gene: ShakeNBake_74 Start: 51823, Stop: 51251, Start Num: 43
Candidate Starts for ShakeNBake_74:
(1, 52549), (2, 52327), (3, 52294), (8, 52168), (Start: 43 @51823 has 8 MA's), (46, 51787), (55, 51730), (64, 51649), (69, 51622), (72, 51601), (82, 51550), (106, 51430),

Gene: Sienna_37 Start: 31498, Stop: 32277, Start Num: 29
Candidate Starts for Sienna_37:
(Start: 29 @31498 has 44 MA's), (33, 31537), (71, 31756), (81, 31819), (92, 31885), (97, 31912), (122, 32029), (131, 32134), (134, 32176),

Gene: SilentWarrior_39 Start: 24595, Stop: 25185, Start Num: 29
Candidate Starts for SilentWarrior_39:
(Start: 29 @24595 has 44 MA's), (38, 24649), (50, 24685), (70, 24799), (77, 24841), (78, 24847), (84, 24892), (92, 24937), (112, 25039), (114, 25045),

Gene: Snakehole_39 Start: 24527, Stop: 25117, Start Num: 29
Candidate Starts for Snakehole_39:
(Start: 29 @24527 has 44 MA's), (35, 24581), (70, 24731), (77, 24773), (78, 24779), (92, 24869), (112, 24971), (114, 24977),

Gene: Stormer_49 Start: 35311, Stop: 36144, Start Num: 12
Candidate Starts for Stormer_49:
(9, 35266), (10, 35278), (Start: 12 @35311 has 40 MA's), (15, 35353), (16, 35362), (23, 35407), (32, 35476), (48, 35560), (58, 35662), (75, 35776), (83, 35827), (101, 35944), (103, 35956), (115, 36004), (118, 36016), (125, 36064),

Gene: Suzy_37 Start: 32010, Stop: 32801, Start Num: 29
Candidate Starts for Suzy_37:
(Start: 29 @32010 has 44 MA's), (33, 32049), (71, 32268), (81, 32331), (92, 32397), (97, 32424), (122, 32541), (131, 32646), (134, 32688), (135, 32745),

Gene: Tedro_39 Start: 24820, Stop: 25410, Start Num: 29
Candidate Starts for Tedro_39:
(Start: 29 @24820 has 44 MA's), (35, 24874), (47, 24910), (70, 25024), (77, 25066), (92, 25162), (112, 25264), (114, 25270),

Gene: Terapin_38 Start: 31422, Stop: 32201, Start Num: 29
Candidate Starts for Terapin_38:
(Start: 29 @31422 has 44 MA's), (33, 31461), (71, 31680), (81, 31743), (92, 31809), (97, 31836), (122, 31953), (131, 32058), (134, 32100),

Gene: Tiggy93_39 Start: 25353, Stop: 25943, Start Num: 29
Candidate Starts for Tiggy93_39:
(Start: 29 @25353 has 44 MA's), (35, 25407), (47, 25443), (70, 25557), (77, 25599), (92, 25695), (112, 25797), (114, 25803),

Gene: Tillicus_47 Start: 36141, Stop: 36998, Start Num: 12
Candidate Starts for Tillicus_47:
(10, 36108), (Start: 12 @36141 has 40 MA's), (15, 36183), (16, 36192), (19, 36231), (26, 36273), (32, 36333), (58, 36519), (72, 36609), (75, 36633), (82, 36678), (83, 36684), (101, 36801), (103, 36813), (111, 36849), (115, 36861), (125, 36921), (128, 36969),

Gene: Tongui_39 Start: 24947, Stop: 25540, Start Num: 29
Candidate Starts for Tongui_39:
(Start: 29 @24947 has 44 MA's), (53, 25073), (70, 25154), (77, 25196), (88, 25271), (92, 25292), (112, 25394),

Gene: Virizion_81 Start: 52165, Stop: 51593, Start Num: 43
Candidate Starts for Virizion_81:
(34, 52243), (Start: 43 @52165 has 8 MA's), (46, 52129), (55, 52072), (69, 51964), (72, 51943), (75, 51919), (82, 51892), (106, 51772), (130, 51601),

Gene: Wentworth_74 Start: 51841, Stop: 51269, Start Num: 43
Candidate Starts for Wentworth_74:
(1, 52567), (2, 52345), (4, 52270), (8, 52186), (Start: 43 @51841 has 8 MA's), (46, 51805), (55, 51748), (62, 51691), (69, 51640), (72, 51619), (96, 51499), (106, 51448), (120, 51382), (128, 51304), (129, 51280),

Gene: Wilkos_76 Start: 52007, Stop: 51435, Start Num: 43
Candidate Starts for Wilkos_76:
(1, 52733), (2, 52511), (4, 52436), (8, 52352), (Start: 43 @52007 has 8 MA's), (46, 51971), (49, 51962), (55, 51914), (69, 51806), (72, 51785), (75, 51761), (82, 51734), (106, 51614), (120, 51548), (124, 51524), (129, 51446),

Gene: WinnieLou_40 Start: 24904, Stop: 25548, Start Num: 29
Candidate Starts for WinnieLou_40:
(Start: 29 @24904 has 44 MA's), (33, 24949), (41, 24997), (70, 25162), (77, 25204), (78, 25210), (92, 25300), (112, 25402),

Gene: Wojtek_48 Start: 36233, Stop: 37084, Start Num: 12
Candidate Starts for Wojtek_48:
(6, 36164), (9, 36188), (10, 36200), (Start: 12 @36233 has 40 MA's), (15, 36275), (16, 36284), (32, 36416), (58, 36602), (75, 36716), (79, 36737), (83, 36767), (101, 36884), (115, 36944), (125, 37004), (128, 37052),

Gene: Wollypog_39 Start: 29480, Stop: 30064, Start Num: 30
Candidate Starts for Wollypog_39:
(Start: 30 @29480 has 2 MA's), (33, 29522), (86, 29789), (117, 29933), (118, 29939),

Gene: Xenia2_47 Start: 35094, Stop: 35969, Start Num: 12
Candidate Starts for Xenia2_47:
(7, 35034), (Start: 12 @35094 has 40 MA's), (14, 35127), (17, 35160), (20, 35184), (24, 35205), (55, 35460), (58, 35487), (72, 35577), (74, 35598), (79, 35622), (85, 35673), (93, 35718), (108, 35805), (111, 35817), (115, 35829), (125, 35889), (128, 35937),

Gene: Yara_72 Start: 51136, Stop: 50543, Start Num: 42
Candidate Starts for Yara_72:
(Start: 42 @51136 has 1 MA's), (49, 51085), (61, 50986), (62, 50974), (64, 50950), (70, 50917), (72, 50902), (73, 50884), (76, 50875), (82, 50851), (90, 50794), (113, 50692), (126, 50623), (127, 50608), (128, 50578), (129, 50554),

Gene: Yikes_51 Start: 37846, Stop: 38706, Start Num: 12
Candidate Starts for Yikes_51:
(9, 37801), (10, 37813), (Start: 12 @37846 has 40 MA's), (15, 37888), (16, 37897), (19, 37936), (26, 37978), (32, 38038), (48, 38122), (58, 38224), (75, 38338), (79, 38359), (83, 38389), (101, 38506),

(115, 38566), (125, 38626), (128, 38674),

Gene: Zany_48 Start: 36845, Stop: 37696, Start Num: 12
Candidate Starts for Zany_48:
(9, 36800), (10, 36812), (Start: 12 @36845 has 40 MA's), (15, 36887), (16, 36896), (32, 37028), (48, 37112), (58, 37214), (75, 37328), (79, 37349), (83, 37379), (101, 37496), (115, 37556), (125, 37616), (128, 37664),