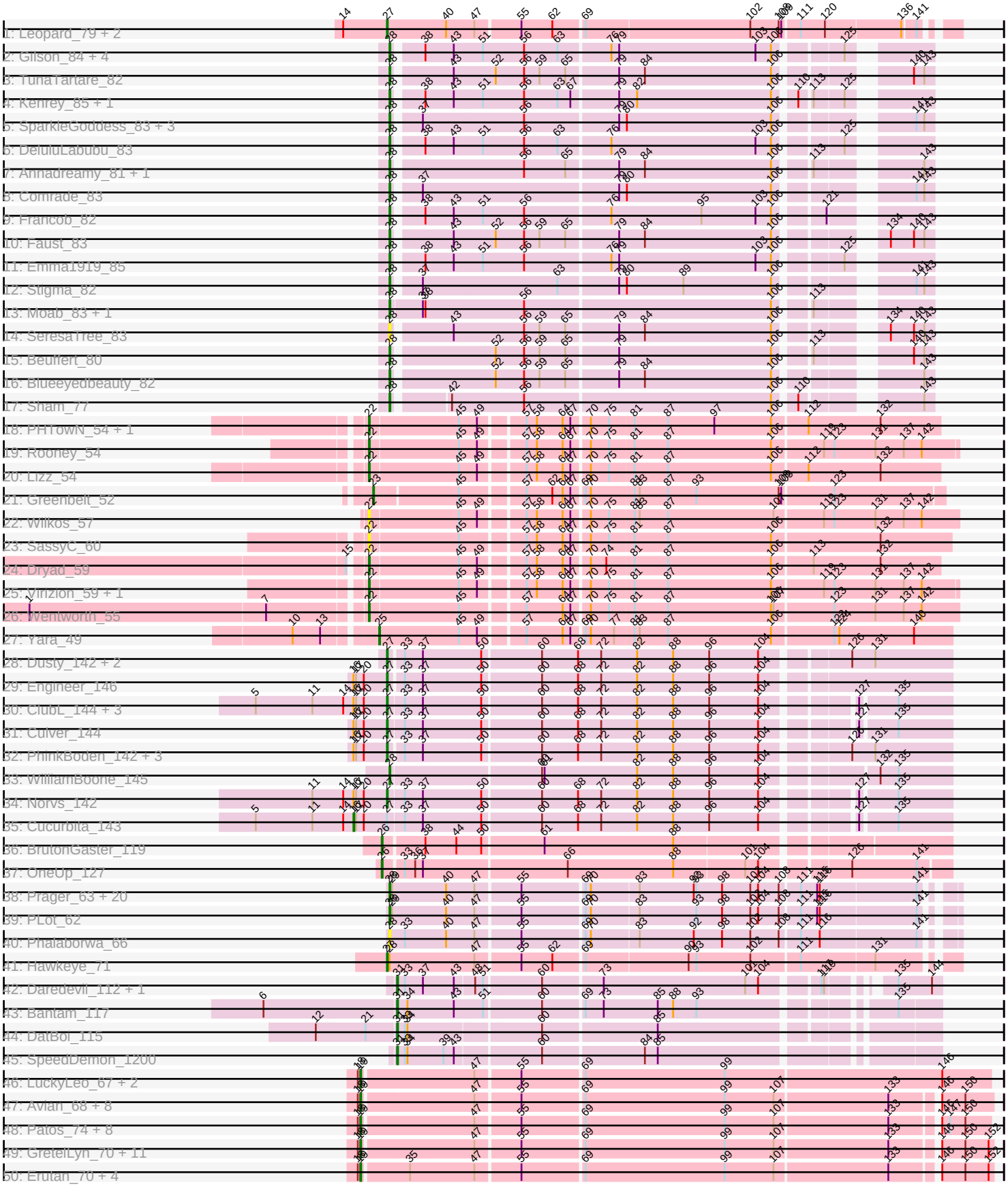
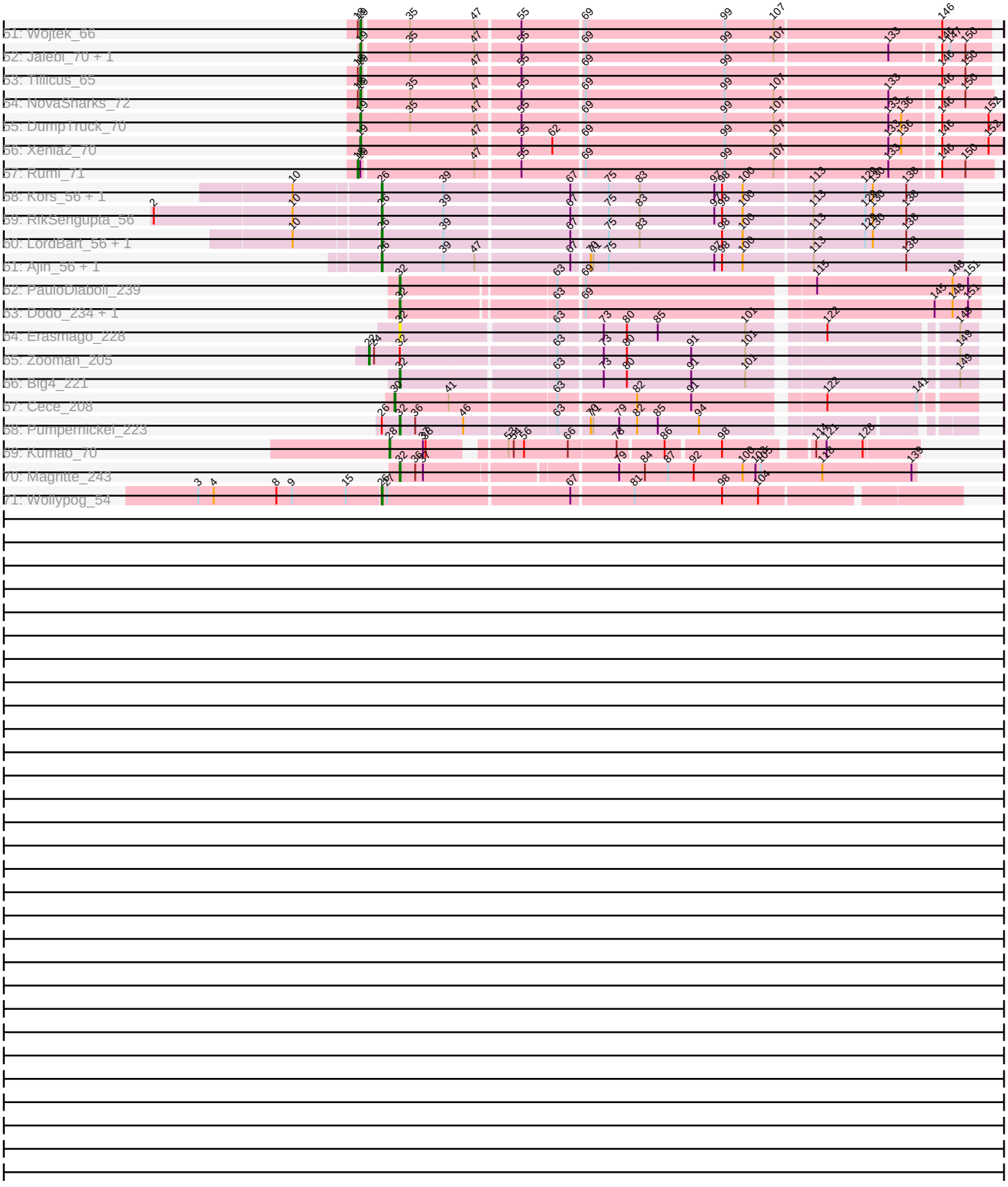
Pham 340899


1: Leopard_79 + 2
2: Glison_84 + 4
3: TunaTartare_82
4: Kenrey_85 + 1
5: SparkleGoddess_83 + 3
6: DeluluLabubu_83
7: Annadreamy_81 + 1
8: Comrade_83
9: Francob_82
10: Faust_83
11: Emma1919_85
12: Stigma_82
13: Moab_83 + 1
14: SeresaTree_83
15: Beuffert_80
16: Blueeyedbeauty_82
17: Sham_77
18: PHTowN_54 + 1
19: Rooney_54
20: Lizz_54
21: Greenbelt_52
22: Wilkos_57
23: SassyC_60
24: Dryad_59
25: Vinzion_59 + 1
26: Wentworth_55
27: Yara_49
28: Dusty_142 + 2
29: Engineer_146
30: ClubL_144 + 3
31: Culver_144
32: PhilkBoden_142 + 3
33: WilliamBoone_145
34: Norvs_142
35: Cucurbita_143
36: BrutonGaster_119
37: OneUp_127
38: Prager_63 + 20
39: PLot_62
40: Phalaborwa_66
41: Hawkeye_71
42: Daredevil_112 + 1
43: Bantam_117
44: DatBoi_115
45: SpeedDemon_1200
46: LuckyLeo_67 + 2
47: Avian_68 + 8
48: Patos_74 + 8
49: GretelLyn_70 + 11
50: Erutan_70 + 4

Pham 340899


51: Wojtek_66
52: Jalebi_70 + 1
53: Tilicus_65
54: NovaSharks_72
55: DumpTruck_70
56: Xenia2_70
57: Rumi_71
58: Kors_56 + 1
59: RikSengupta_56
60: LordBart_56 + 1
61: Ajin_56 + 1
62: PauloDiaboli_239
63: Dodo_234 + 1
64: Erasmago_228
65: Zooman_205
66: Big4_221
67: Cece_208
68: Pumpernickel_223
69: Kumao_70
70: Magritte_243
71: Wollypog_54

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 340899 Report

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

Pham number 340899 has 152 members, 14 are drafts.

Phages represented in each track:
- Track 1 : Leopard_79, Aikoy_80, Onyinye_80
- Track 2 : Gilson_84, MeganTheeKilla_82, Jada_84, Maupel_83, Forrest_86
- Track 3 : TunaTartare_82
- Track 4 : Kenrey_85, Phredrick_83
- Track 5 : SparkleGoddess_83, Belfort_85, Karp_81, Westy_84
- Track 6 : DeluluLabubu_83
- Track 7 : Annadreamy_81, Limpid_80
- Track 8 : Comrade_83
- Track 9 : Francob_82
- Track 10 : Faust_83
- Track 11 : Emma1919_85
- Track 12 : Stigma_82
- Track 13 : Moab_83, Patelgo_83
- Track 14 : SeresaTree_83
- Track 15 : Beuffert_80
- Track 16 : Blueeyedbeauty_82
- Track 17 : Sham_77
- Track 18 : PHTowN_54, ShakeNBake_54
- Track 19 : Rooney_54
- Track 20 : Lizz_54
- Track 21 : Greenbelt_52
- Track 22 : Wilkos_57
- Track 23 : SassyC_60
- Track 24 : Dryad_59
- Track 25 : Virizion_59, Gibson_54
- Track 26 : Wentworth_55
- Track 27 : Yara_49
- Track 28 : Dusty_142, Geeche_145, Abscondus_143
- Track 29 : Engineer_146
- Track 30 : ClubL_144, Toniann_144, Bachita_147, Lozinak_144
- Track 31 : Culver_144
- Track 32 : PhinkBoden_142, Miskis_138, Aphelion_143, Smoothie_145
- Track 33 : WilliamBoone_145
- Track 34 : Norvs_142
- Track 35 : Cucurbita_143
- Track 36 : BrutonGaster_119
- Track 37 : OneUp_127

• Track 38 : Prager_63, Helpful_66, SuperheroCarly_63, Gumball_62, Penelope2018_63, PBI1_59, Butterscotch_61, WaldoWhy_65, Nova_62, Visconti_64, Erk16_62, BigMama_61, Thoth_63, SirHarley_65, Chill_65, KandZ_61, Adjutor_61, Troll4_62, Giuseppe_64, Mopey_64, Delton_63
• Track 39 : PLot_62
• Track 40 : Phalaborwa_66
• Track 41 : Hawkeye_71
• Track 42 : Daredevil_112, Towmatter_112
• Track 43 : Bantam_117
• Track 44 : DatBoi_115
• Track 45 : SpeedDemon_1200
• Track 46 : LuckyLeo_67, Apeppi_65, Aaravos_64
• Track 47 : Avian_68, Charminar_69, RazorC_70, Genamy16_73, Jamemuya19_69, Stormer_70, Riduram_69, Astralis_70, Alyssamiracle_73
• Track 48 : Patos_74, GOATification_70, Mima20_70, DoobyDoo_69, Rota_67, NorManre_74, Lambo_68, Fulcrum_70, Gibbin_72
• Track 49 : GretelLyn_70, Rukungu_72, LavAbarElk_70, Pywacket_67, Zany_68, Yikes_72, DaviePasture_70, Nettle_71, Sadboi_71, MoiGyank_73, ParvusTarda_69, Lila22_71
• Track 50 : Erutan_70, Ranch_70, BirthdayBoy_72, Alephilan_71, OtterstedtS21_70
• Track 51 : Wojtek_66
• Track 52 : Jalebi_70, Sampudon_71
• Track 53 : Tillicus_65
• Track 54 : NovaSharks_72
• Track 55 : DumpTruck_70
• Track 56 : Xenia2_70
• Track 57 : Rumi_71
• Track 58 : Kors_56, Sparcetus_56
• Track 59 : RikSengupta_56
• Track 60 : LordBart_56, Bramble_56
• Track 61 : Ajin_56, TinyMiny_56
• Track 62 : PauloDiaboli_239
• Track 63 : Dodo_234, A3Wally_239
• Track 64 : Erasmago_228
• Track 65 : Zooman_205
• Track 66 : Big4_221
• Track 67 : Cece_208
• Track 68 : Pumpernickel_223
• Track 69 : Kumao_70
• Track 70 : Magritte_243
• Track 71 : Wollypog_54

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

The start number called the most often in the published annotations is 28, it was called in 48 of the 138 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adjutor_61, Annadreamy_81, Belfort_85, Beuffert_80, BigMama_61, Blueeyedbeauty_82, Butterscotch_61, Chill_65, Comrade_83, Delton_63,

DeluluLabubu_83, Emma1919_85, Erk16_62, Faust_83, Forrest_86, Francob_82, Gilson_84, Giuseppe_64, Gumball_62, Helpful_66, Jada_84, KandZ_61, Karp_81, Kenrey_85, Kumao_70, Limpid_80, Maupel_83, MeganTheeKilla_82, Moab_83, Mopey_64, Nova_62, PBI1_59, PLot_62, Patelgo_83, Penelope2018_63, Phalaborwa_66, Phredrick_83, Prager_63, SeresaTree_83, Sham_77, SirHarley_65, SparkleGoddess_83, Stigma_82, SuperheroCarly_63, Thoth_63, Troll4_62, TunaTartare_82, Visconti_64, WaldoWhy_65, Westy_84, WilliamBoone_145,

Genes that have the "Most Annotated" start but do not call it:
• Hawkeye_71,

Genes that do not have the "Most Annotated" start:
• A3Wally_239, Aaravos_64, Abscondus_143, Aikoy_80, Ajin_56, Alephilan_71, Alyssamiracle_73, Apeppi_65, Aphelion_143, Astralis_70, Avian_68, Bachita_147, Bantam_117, Big4_221, BirthdayBoy_72, Bramble_56, BrutonGaster_119, Cece_208, Charminar_69, ClubL_144, Cucurbita_143, Culver_144, Daredevil_112, DatBoi_115, DaviePasture_70, Dodo_234, DoobyDoo_69, Dryad_59, DumpTruck_70, Dusty_142, Engineer_146, Erasmago_228, Erutan_70, Fulcrum_70, GOATification_70, Geeche_145, Genamy16_73, Gibbin_72, Gibson_54, Greenbelt_52, GretelLyn_70, Jalebi_70, Jamemuya19_69, Kors_56, Lambo_68, LavAbarElk_70, Leopard_79, Lila22_71, Lizz_54, LordBart_56, Lozinak_144, LuckyLeo_67, Magritte_243, Mima20_70, Miskis_138, MoiGyank_73, Nettle_71, NorManre_74, Norvs_142, NovaSharks_72, OneUp_127, Onyinye_80, OtterstedtS21_70, PHTowN_54, ParvusTarda_69, Patos_74, PauloDiaboli_239, PhinkBoden_142, Pumpernickel_223, Pywacket_67, Ranch_70, RazorC_70, Riduram_69, RikSengupta_56, Rooney_54, Rota_67, Rukungu_72, Rumi_71, Sadboi_71, Sampudon_71, SassyC_60, ShakeNBake_54, Smoothie_145, Sparcetus_56, SpeedDemon_1200, Stormer_70, Tillicus_65, TinyMiny_56, Toniann_144, Towmatter_112, Virizion_59, Wentworth_55, Wilkos_57, Wojtek_66, Wollypog_54, Xenia2_70, Yara_49, Yikes_72, Zany_68, Zooman_205,

Summary by start number:

Start 16:
• Found in 12 of 152 (7.9%) of genes in pham
• Manual Annotations of this start: 1 of 138
• Called 8.3% of time when present
• Phage (with cluster) where this start called: Cucurbita_143 (CQ1),

Start 18:
• Found in 42 of 152 (27.6%) of genes in pham
• Manual Annotations of this start: 1 of 138
• Called 2.4% of time when present
• Phage (with cluster) where this start called: Rumi_71 (DV),

Start 19:
• Found in 46 of 152 (30.3%) of genes in pham
• Manual Annotations of this start: 39 of 138
• Called 97.8% of time when present
• Phage (with cluster) where this start called: Aaravos_64 (DV), Alephilan_71 (DV), Alyssamiracle_73 (DV), Apeppi_65 (DV), Astralis_70 (DV), Avian_68 (DV), BirthdayBoy_72 (DV), Charminar_69 (DV), DaviePasture_70 (DV), DoobyDoo_69 (DV), DumpTruck_70 (DV), Erutan_70 (DV), Fulcrum_70 (DV), GOATification_70

(DV), Genamy16_73 (DV), Gibbin_72 (DV), GretelLyn_70 (DV), Jalebi_70 (DV), Jamemuya19_69 (DV), Lambo_68 (DV), LavAbarElk_70 (DV), Lila22_71 (DV), LuckyLeo_67 (DV), Mima20_70 (DV), MoiGyank_73 (DV), Nettle_71 (DV), NorManre_74 (DV), NovaSharks_72 (DV), OtterstedtS21_70 (DV), ParvusTarda_69 (DV), Patos_74 (DV), Pywacket_67 (DV), Ranch_70 (DV), RazorC_70 (DV), Riduram_69 (DV), Rota_67 (DV), Rukungu_72 (DV), Sadboi_71 (DV), Sampudon_71 (DV), Stormer_70 (DV), Tillicus_65 (DV), Wojtek_66 (DV), Xenia2_70 (DV), Yikes_72 (DV), Zany_68 (DV),

Start 22:
• Found in 11 of 152 (7.2%) of genes in pham
• Manual Annotations of this start: 8 of 138
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dryad_59 (BN), Gibson_54 (BN), Lizz_54 (BN), PHTowN_54 (BN), Rooney_54 (BN), SassyC_60 (BN), ShakeNBake_54 (BN), Virizion_59 (BN), Wentworth_55 (BN), Wilkos_57 (BN), Zooman_205 (GD2),

Start 23:
• Found in 1 of 152 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 138
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Greenbelt_52 (BN),

Start 25:
• Found in 1 of 152 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 138
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yara_49 (BN),

Start 26:
• Found in 11 of 152 (7.2%) of genes in pham
• Manual Annotations of this start: 10 of 138
• Called 90.9% of time when present
• Phage (with cluster) where this start called: Ajin_56 (EF), Bramble_56 (EF), BrutonGaster_119 (CQ2), Kors_56 (EF), LordBart_56 (EF), OneUp_127 (CQ2), RikSengupta_56 (EF), Sparcetus_56 (EF), TinyMiny_56 (EF), Wollypog_54 (singleton),

Start 27:
• Found in 20 of 152 (13.2%) of genes in pham
• Manual Annotations of this start: 17 of 138
• Called 90.0% of time when present
• Phage (with cluster) where this start called: Abscondus_143 (CQ1), Aikoy_80 (AE), Aphelion_143 (CQ1), Bachita_147 (CQ1), ClubL_144 (CQ1), Culver_144 (CQ1), Dusty_142 (CQ1), Engineer_146 (CQ1), Geeche_145 (CQ1), Hawkeye_71 (D2), Leopard_79 (AE), Lozinak_144 (CQ1), Miskis_138 (CQ1), Norvs_142 (CQ1), Onyinye_80 (AE), PhinkBoden_142 (CQ1), Smoothie_145 (CQ1), Toniann_144 (CQ1),

Start 28:
• Found in 52 of 152 (34.2%) of genes in pham
• Manual Annotations of this start: 48 of 138

• Called 98.1% of time when present
• Phage (with cluster) where this start called: Adjutor_61 (D1), Annadreamy_81 (BK1), Belfort_85 (BK1), Beuffert_80 (BK1), BigMama_61 (D1), Blueeyedbeauty_82 (BK1), Butterscotch_61 (D1), Chill_65 (D1), Comrade_83 (BK1), Delton_63 (D1), DeluluLabubu_83 (BK1), Emma1919_85 (BK1), Erk16_62 (D1), Faust_83 (BK1), Forrest_86 (BK1), Francob_82 (BK1), Gilson_84 (BK1), Giuseppe_64 (D1), Gumball_62 (D1), Helpful_66 (D1), Jada_84 (BK1), KandZ_61 (D1), Karp_81 (BK1), Kenrey_85 (BK1), Kumao_70 (singleton), Limpid_80 (BK1), Maupel_83 (BK1), MeganTheeKilla_82 (BK1), Moab_83 (BK1), Mopey_64 (D1), Nova_62 (D1), PBI1_59 (D1), PLot_62 (D1), Patelgo_83 (BK1), Penelope2018_63 (D1), Phalaborwa_66 (D1), Phredrick_83 (BK1), Prager_63 (D1), SeresaTree_83 (BK1), Sham_77 (BK1), SirHarley_65 (D1), SparkleGoddess_83 (BK1), Stigma_82 (BK1), SuperheroCarly_63 (D1), Thoth_63 (D1), Troll4_62 (D1), TunaTartare_82 (BK1), Visconti_64 (D1), WaldoWhy_65 (D1), Westy_84 (BK1), WilliamBoone_145 (CQ1),

Start 30:
• Found in 1 of 152 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 138
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cece_208 (GD3),

Start 31:
• Found in 5 of 152 (3.3%) of genes in pham
• Manual Annotations of this start: 5 of 138
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bantam_117 (DL), Daredevil_112 (DL), DatBoi_115 (DL), SpeedDemon_1200 (DL), Towmatter_112 (DL),

Start 32:
• Found in 8 of 152 (5.3%) of genes in pham
• Manual Annotations of this start: 6 of 138
• Called 87.5% of time when present
• Phage (with cluster) where this start called: A3Wally_239 (GD1), Big4_221 (GD2), Dodo_234 (GD1), Erasmago_228 (GD2), Magritte_243 (singleton), PauloDiaboli_239 (GD1), Pumpernickel_223 (GD4),

Summary by clusters:

There are 15 clusters represented in this pham: GD1, GD2, GD3, AE, BN, EF, DL, singleton, BK1, GD4, DV, CQ2, CQ1, D2, D1,

Info for manual annotations of cluster AE:
•Start number 27 was manually annotated 3 times for cluster AE.

Info for manual annotations of cluster BK1:
•Start number 28 was manually annotated 24 times for cluster BK1.

Info for manual annotations of cluster BN:
•Start number 22 was manually annotated 7 times for cluster BN.
•Start number 23 was manually annotated 1 time for cluster BN.
•Start number 25 was manually annotated 1 time for cluster BN.

Info for manual annotations of cluster CQ1:

•Start number 16 was manually annotated 1 time for cluster CQ1.
•Start number 27 was manually annotated 13 times for cluster CQ1.
•Start number 28 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 26 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster D1:
•Start number 28 was manually annotated 22 times for cluster D1.

Info for manual annotations of cluster D2:
•Start number 27 was manually annotated 1 time for cluster D2.

Info for manual annotations of cluster DL:
•Start number 31 was manually annotated 5 times for cluster DL.

Info for manual annotations of cluster DV:
•Start number 18 was manually annotated 1 time for cluster DV.
•Start number 19 was manually annotated 39 times for cluster DV.

Info for manual annotations of cluster EF:
•Start number 26 was manually annotated 7 times for cluster EF.

Info for manual annotations of cluster GD1:
•Start number 32 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 22 was manually annotated 1 time for cluster GD2.
•Start number 32 was manually annotated 1 time for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 30 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 32 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_239 Start: 131004, Stop: 131639, Start Num: 32
Candidate Starts for A3Wally_239:
(Start: 32 @131004 has 6 MA's), (63, 131175), (69, 131202), (145, 131586), (148, 131607), (151, 131625),

Gene: Aaravos_64 Start: 47449, Stop: 48159, Start Num: 19
Candidate Starts for Aaravos_64:
(Start: 18 @47446 has 1 MA's), (Start: 19 @47449 has 39 MA's), (47, 47575), (55, 47623), (69, 47692), (99, 47854), (146, 48103),

Gene: Abscondus_143 Start: 77584, Stop: 78210, Start Num: 27
Candidate Starts for Abscondus_143:

(Start: 27 @77584 has 17 MA's), (33, 77599), (37, 77620), (50, 77686), (60, 77752), (68, 77794), (72, 77821), (82, 77863), (88, 77905), (96, 77947), (104, 78004), (126, 78094), (131, 78121),

Gene: Adjutor_61 Start: 47250, Stop: 47867, Start Num: 28
Candidate Starts for Adjutor_61:
(Start: 28 @47250 has 48 MA's), (29, 47253), (40, 47316), (47, 47349), (55, 47397), (69, 47466), (70, 47472), (83, 47526), (92, 47589), (93, 47592), (98, 47622), (102, 47655), (104, 47664), (108, 47688), (111, 47709), (115, 47727), (116, 47730), (141, 47838),

Gene: Aikoy_80 Start: 54899, Stop: 55516, Start Num: 27
Candidate Starts for Aikoy_80:
(14, 54848), (Start: 27 @54899 has 17 MA's), (40, 54968), (47, 55001), (55, 55049), (62, 55085), (69, 55118), (102, 55307), (108, 55340), (109, 55343), (111, 55361), (120, 55388), (136, 55472), (141, 55484),

Gene: Ajin_56 Start: 38629, Stop: 39285, Start Num: 26
Candidate Starts for Ajin_56:
(Start: 26 @38629 has 10 MA's), (39, 38701), (47, 38737), (67, 38842), (70, 38860), (71, 38863), (75, 38881), (97, 39001), (98, 39010), (100, 39034), (113, 39112), (138, 39220),

Gene: Alephilan_71 Start: 48365, Stop: 49063, Start Num: 19
Candidate Starts for Alephilan_71:
(Start: 18 @48362 has 1 MA's), (Start: 19 @48365 has 39 MA's), (35, 48416), (47, 48491), (55, 48539), (69, 48608), (99, 48770), (107, 48827), (133, 48956), (146, 49004), (150, 49031), (152, 49058),

Gene: Alyssamiracle_73 Start: 47362, Stop: 48060, Start Num: 19
Candidate Starts for Alyssamiracle_73:
(Start: 18 @47359 has 1 MA's), (Start: 19 @47362 has 39 MA's), (47, 47488), (55, 47536), (69, 47605), (99, 47767), (107, 47824), (133, 47953), (146, 48001), (150, 48028),

Gene: Annadreamy_81 Start: 60434, Stop: 61003, Start Num: 28
Candidate Starts for Annadreamy_81:
(Start: 28 @60434 has 48 MA's), (56, 60578), (65, 60626), (79, 60683), (84, 60713), (106, 60860), (113, 60893), (143, 60992),

Gene: Apeppi_65 Start: 47510, Stop: 48220, Start Num: 19
Candidate Starts for Apeppi_65:
(Start: 18 @47507 has 1 MA's), (Start: 19 @47510 has 39 MA's), (47, 47636), (55, 47684), (69, 47753), (99, 47915), (146, 48164),

Gene: Aphelion_143 Start: 78509, Stop: 79135, Start Num: 27
Candidate Starts for Aphelion_143:
(Start: 16 @78470 has 1 MA's), (17, 78473), (20, 78482), (Start: 27 @78509 has 17 MA's), (33, 78524), (37, 78545), (50, 78611), (60, 78677), (68, 78719), (72, 78746), (82, 78788), (88, 78830), (96, 78872), (104, 78929), (126, 79019), (131, 79046),

Gene: Astralis_70 Start: 46941, Stop: 47639, Start Num: 19
Candidate Starts for Astralis_70:
(Start: 18 @46938 has 1 MA's), (Start: 19 @46941 has 39 MA's), (47, 47067), (55, 47115), (69, 47184), (99, 47346), (107, 47403), (133, 47532), (146, 47580), (150, 47607),

Gene: Avian_68 Start: 47090, Stop: 47788, Start Num: 19
Candidate Starts for Avian_68:

(Start: 18 @47087 has 1 MA's), (Start: 19 @47090 has 39 MA's), (47, 47216), (55, 47264), (69, 47333), (99, 47495), (107, 47552), (133, 47681), (146, 47729), (150, 47756),

Gene: Bachita_147 Start: 78386, Stop: 79000, Start Num: 27
Candidate Starts for Bachita_147:
(5, 78233), (11, 78299), (14, 78335), (Start: 16 @78347 has 1 MA's), (17, 78350), (20, 78359), (Start: 27 @78386 has 17 MA's), (33, 78404), (37, 78425), (50, 78491), (60, 78557), (68, 78599), (72, 78626), (82, 78668), (88, 78710), (96, 78752), (104, 78809), (127, 78899), (135, 78938),

Gene: Bantam_117 Start: 73236, Stop: 73817, Start Num: 31
Candidate Starts for Bantam_117:
(6, 73083), (Start: 31 @73236 has 5 MA's), (34, 73248), (43, 73302), (51, 73335), (60, 73398), (69, 73443), (73, 73464), (85, 73527), (88, 73545), (93, 73572), (135, 73770),

Gene: Belfort_85 Start: 62258, Stop: 62827, Start Num: 28
Candidate Starts for Belfort_85:
(Start: 28 @62258 has 48 MA's), (37, 62285), (56, 62402), (79, 62507), (80, 62516), (106, 62684), (141, 62807), (143, 62816),

Gene: Beuffert_80 Start: 60984, Stop: 61553, Start Num: 28
Candidate Starts for Beuffert_80:
(Start: 28 @60984 has 48 MA's), (52, 61095), (56, 61128), (59, 61146), (65, 61176), (79, 61233), (106, 61410), (113, 61443), (140, 61530), (143, 61542),

Gene: Big4_221 Start: 125415, Stop: 126029, Start Num: 32
Candidate Starts for Big4_221:
(Start: 32 @125415 has 6 MA's), (63, 125586), (73, 125634), (80, 125661), (91, 125736), (101, 125799), (149, 126009),

Gene: BigMama_61 Start: 47323, Stop: 47940, Start Num: 28
Candidate Starts for BigMama_61:
(Start: 28 @47323 has 48 MA's), (29, 47326), (40, 47389), (47, 47422), (55, 47470), (69, 47539), (70, 47545), (83, 47599), (92, 47662), (93, 47665), (98, 47695), (102, 47728), (104, 47737), (108, 47761), (111, 47782), (115, 47800), (116, 47803), (141, 47911),

Gene: BirthdayBoy_72 Start: 48687, Stop: 49385, Start Num: 19
Candidate Starts for BirthdayBoy_72:
(Start: 18 @48684 has 1 MA's), (Start: 19 @48687 has 39 MA's), (35, 48738), (47, 48813), (55, 48861), (69, 48930), (99, 49092), (107, 49149), (133, 49278), (146, 49326), (150, 49353), (152, 49380),

Gene: Blueeyedbeauty_82 Start: 60386, Stop: 60955, Start Num: 28
Candidate Starts for Blueeyedbeauty_82:
(Start: 28 @60386 has 48 MA's), (52, 60497), (56, 60530), (59, 60548), (65, 60578), (79, 60635), (84, 60665), (106, 60812), (143, 60944),

Gene: Bramble_56 Start: 38675, Stop: 39331, Start Num: 26
Candidate Starts for Bramble_56:
(10, 38585), (Start: 26 @38675 has 10 MA's), (39, 38747), (67, 38888), (75, 38927), (83, 38960), (98, 39056), (100, 39080), (113, 39158), (129, 39218), (130, 39227), (138, 39266),

Gene: BrutonGaster_119 Start: 71796, Stop: 72416, Start Num: 26
Candidate Starts for BrutonGaster_119:
(Start: 26 @71796 has 10 MA's), (38, 71841), (44, 71877), (50, 71904), (61, 71973), (88, 72123),

Gene: Butterscotch_61 Start: 47301, Stop: 47918, Start Num: 28
Candidate Starts for Butterscotch_61:
(Start: 28 @47301 has 48 MA's), (29, 47304), (40, 47367), (47, 47400), (55, 47448), (69, 47517), (70, 47523), (83, 47577), (92, 47640), (93, 47643), (98, 47673), (102, 47706), (104, 47715), (108, 47739), (111, 47760), (115, 47778), (116, 47781), (141, 47889),

Gene: Cece_208 Start: 125535, Stop: 126164, Start Num: 30
Candidate Starts for Cece_208:
(Start: 30 @125535 has 1 MA's), (41, 125598), (63, 125715), (82, 125802), (91, 125865), (122, 126003), (141, 126105),

Gene: Charminar_69 Start: 46598, Stop: 47296, Start Num: 19
Candidate Starts for Charminar_69:
(Start: 18 @46595 has 1 MA's), (Start: 19 @46598 has 39 MA's), (47, 46724), (55, 46772), (69, 46841), (99, 47003), (107, 47060), (133, 47189), (146, 47237), (150, 47264),

Gene: Chill_65 Start: 47334, Stop: 47951, Start Num: 28
Candidate Starts for Chill_65:
(Start: 28 @47334 has 48 MA's), (29, 47337), (40, 47400), (47, 47433), (55, 47481), (69, 47550), (70, 47556), (83, 47610), (92, 47673), (93, 47676), (98, 47706), (102, 47739), (104, 47748), (108, 47772), (111, 47793), (115, 47811), (116, 47814), (141, 47922),

Gene: ClubL_144 Start: 76960, Stop: 77574, Start Num: 27
Candidate Starts for ClubL_144:
(5, 76807), (11, 76873), (14, 76909), (Start: 16 @76921 has 1 MA's), (17, 76924), (20, 76933), (Start: 27 @76960 has 17 MA's), (33, 76978), (37, 76999), (50, 77065), (60, 77131), (68, 77173), (72, 77200), (82, 77242), (88, 77284), (96, 77326), (104, 77383), (127, 77473), (135, 77512),

Gene: Comrade_83 Start: 61874, Stop: 62443, Start Num: 28
Candidate Starts for Comrade_83:
(Start: 28 @61874 has 48 MA's), (37, 61901), (79, 62123), (80, 62132), (106, 62300), (141, 62423), (143, 62432),

Gene: Cucurbita_143 Start: 78660, Stop: 79313, Start Num: 16
Candidate Starts for Cucurbita_143:
(5, 78546), (11, 78612), (14, 78648), (Start: 16 @78660 has 1 MA's), (17, 78663), (20, 78672), (Start: 27 @78699 has 17 MA's), (33, 78717), (37, 78738), (50, 78804), (60, 78870), (68, 78912), (72, 78939), (82, 78981), (88, 79023), (96, 79065), (104, 79122), (127, 79212), (135, 79251),

Gene: Culver_144 Start: 76963, Stop: 77577, Start Num: 27
Candidate Starts for Culver_144:
(Start: 16 @76924 has 1 MA's), (17, 76927), (20, 76936), (Start: 27 @76963 has 17 MA's), (33, 76981), (37, 77002), (50, 77068), (60, 77134), (68, 77176), (72, 77203), (82, 77245), (88, 77287), (96, 77329), (104, 77386), (127, 77476), (135, 77515),

Gene: Daredevil_112 Start: 70223, Stop: 70789, Start Num: 31
Candidate Starts for Daredevil_112:
(Start: 31 @70223 has 5 MA's), (33, 70232), (37, 70253), (43, 70289), (48, 70310), (51, 70319), (60, 70382), (73, 70448), (101, 70613), (104, 70628), (117, 70685), (119, 70688), (135, 70739), (144, 70778),

Gene: DatBoi_115 Start: 72970, Stop: 73548, Start Num: 31

Candidate Starts for DatBoi_115:
(12, 72880), (21, 72937), (Start: 31 @72970 has 5 MA's), (33, 72979), (34, 72982), (60, 73129), (85, 73258),

Gene: DaviePasture_70 Start: 48274, Stop: 48972, Start Num: 19
Candidate Starts for DaviePasture_70:
(Start: 18 @48271 has 1 MA's), (Start: 19 @48274 has 39 MA's), (47, 48400), (55, 48448), (69, 48517), (99, 48679), (107, 48736), (133, 48865), (146, 48913), (150, 48940), (152, 48967),

Gene: Delton_63 Start: 47699, Stop: 48316, Start Num: 28
Candidate Starts for Delton_63:
(Start: 28 @47699 has 48 MA's), (29, 47702), (40, 47765), (47, 47798), (55, 47846), (69, 47915), (70, 47921), (83, 47975), (92, 48038), (93, 48041), (98, 48071), (102, 48104), (104, 48113), (108, 48137), (111, 48158), (115, 48176), (116, 48179), (141, 48287),

Gene: DeluluLababu_83 Start: 59937, Stop: 60506, Start Num: 28
Candidate Starts for DeluluLababu_83:
(Start: 28 @59937 has 48 MA's), (38, 59967), (43, 60000), (51, 60033), (56, 60081), (63, 60120), (76, 60177), (103, 60345), (106, 60363), (125, 60429),

Gene: Dodo_234 Start: 130688, Stop: 131323, Start Num: 32
Candidate Starts for Dodo_234:
(Start: 32 @130688 has 6 MA's), (63, 130859), (69, 130886), (145, 131270), (148, 131291), (151, 131309),

Gene: DoobyDoo_69 Start: 47148, Stop: 47843, Start Num: 19
Candidate Starts for DoobyDoo_69:
(Start: 18 @47145 has 1 MA's), (Start: 19 @47148 has 39 MA's), (47, 47274), (55, 47322), (69, 47391), (99, 47553), (107, 47610), (133, 47739), (146, 47787), (147, 47796), (150, 47814),

Gene: Dryad_59 Start: 42007, Stop: 41372, Start Num: 22
Candidate Starts for Dryad_59:
(15, 42022), (Start: 22 @42007 has 8 MA's), (45, 41905), (49, 41884), (57, 41839), (58, 41827), (64, 41797), (67, 41788), (70, 41770), (74, 41752), (81, 41722), (87, 41683), (106, 41563), (113, 41518), (132, 41440),

Gene: DumpTruck_70 Start: 47315, Stop: 48031, Start Num: 19
Candidate Starts for DumpTruck_70:
(Start: 19 @47315 has 39 MA's), (35, 47372), (47, 47447), (55, 47495), (69, 47564), (99, 47726), (107, 47783), (133, 47912), (136, 47927), (146, 47960), (152, 48014),

Gene: Dusty_142 Start: 77411, Stop: 78037, Start Num: 27
Candidate Starts for Dusty_142:
(Start: 27 @77411 has 17 MA's), (33, 77426), (37, 77447), (50, 77513), (60, 77579), (68, 77621), (72, 77648), (82, 77690), (88, 77732), (96, 77774), (104, 77831), (126, 77921), (131, 77948),

Gene: Emma1919_85 Start: 60597, Stop: 61166, Start Num: 28
Candidate Starts for Emma1919_85:
(Start: 28 @60597 has 48 MA's), (38, 60627), (43, 60660), (51, 60693), (56, 60741), (76, 60837), (79, 60846), (103, 61005), (106, 61023), (125, 61089),

Gene: Engineer_146 Start: 78423, Stop: 79049, Start Num: 27
Candidate Starts for Engineer_146:

(Start: 16 @78384 has 1 MA's), (17, 78387), (20, 78396), (Start: 27 @78423 has 17 MA's), (33, 78438), (37, 78459), (50, 78525), (60, 78591), (68, 78633), (72, 78660), (82, 78702), (88, 78744), (96, 78786), (104, 78843),

Gene: Erasmago_228 Start: 125430, Stop: 126044, Start Num: 32
Candidate Starts for Erasmago_228:
(Start: 32 @125430 has 6 MA's), (63, 125601), (73, 125649), (80, 125676), (85, 125712), (101, 125814), (122, 125889), (149, 126024),

Gene: Erk16_62 Start: 47365, Stop: 47982, Start Num: 28
Candidate Starts for Erk16_62:
(Start: 28 @47365 has 48 MA's), (29, 47368), (40, 47431), (47, 47464), (55, 47512), (69, 47581), (70, 47587), (83, 47641), (92, 47704), (93, 47707), (98, 47737), (102, 47770), (104, 47779), (108, 47803), (111, 47824), (115, 47842), (116, 47845), (141, 47953),

Gene: Erutan_70 Start: 47787, Stop: 48485, Start Num: 19
Candidate Starts for Erutan_70:
(Start: 18 @47784 has 1 MA's), (Start: 19 @47787 has 39 MA's), (35, 47838), (47, 47913), (55, 47961), (69, 48030), (99, 48192), (107, 48249), (133, 48378), (146, 48426), (150, 48453), (152, 48480),

Gene: Faust_83 Start: 61809, Stop: 62378, Start Num: 28
Candidate Starts for Faust_83:
(Start: 28 @61809 has 48 MA's), (43, 61872), (52, 61920), (56, 61953), (59, 61971), (65, 62001), (79, 62058), (84, 62088), (106, 62235), (134, 62328), (140, 62355), (143, 62367),

Gene: Forrest_86 Start: 61890, Stop: 62459, Start Num: 28
Candidate Starts for Forrest_86:
(Start: 28 @61890 has 48 MA's), (38, 61920), (43, 61953), (51, 61986), (56, 62034), (63, 62073), (76, 62130), (79, 62139), (103, 62298), (106, 62316), (125, 62382),

Gene: Francob_82 Start: 60636, Stop: 61205, Start Num: 28
Candidate Starts for Francob_82:
(Start: 28 @60636 has 48 MA's), (38, 60666), (43, 60699), (51, 60732), (56, 60780), (76, 60876), (95, 60981), (103, 61044), (106, 61062), (121, 61110),

Gene: Fulcrum_70 Start: 47995, Stop: 48690, Start Num: 19
Candidate Starts for Fulcrum_70:
(Start: 18 @47992 has 1 MA's), (Start: 19 @47995 has 39 MA's), (47, 48121), (55, 48169), (69, 48238), (99, 48400), (107, 48457), (133, 48586), (146, 48634), (147, 48643), (150, 48661),

Gene: GOATification_70 Start: 47995, Stop: 48690, Start Num: 19
Candidate Starts for GOATification_70:
(Start: 18 @47992 has 1 MA's), (Start: 19 @47995 has 39 MA's), (47, 48121), (55, 48169), (69, 48238), (99, 48400), (107, 48457), (133, 48586), (146, 48634), (147, 48643), (150, 48661),

Gene: Geeche_145 Start: 77837, Stop: 78463, Start Num: 27
Candidate Starts for Geeche_145:
(Start: 27 @77837 has 17 MA's), (33, 77852), (37, 77873), (50, 77939), (60, 78005), (68, 78047), (72, 78074), (82, 78116), (88, 78158), (96, 78200), (104, 78257), (126, 78347), (131, 78374),

Gene: Genamy16_73 Start: 47348, Stop: 48046, Start Num: 19
Candidate Starts for Genamy16_73:

(Start: 18 @47345 has 1 MA's), (Start: 19 @47348 has 39 MA's), (47, 47474), (55, 47522), (69, 47591), (99, 47753), (107, 47810), (133, 47939), (146, 47987), (150, 48014),

Gene: Gibbin_72 Start: 48800, Stop: 49495, Start Num: 19
Candidate Starts for Gibbin_72:
(Start: 18 @48797 has 1 MA's), (Start: 19 @48800 has 39 MA's), (47, 48926), (55, 48974), (69, 49043), (99, 49205), (107, 49262), (133, 49391), (146, 49439), (147, 49448), (150, 49466),

Gene: Gibson_54 Start: 41040, Stop: 40387, Start Num: 22
Candidate Starts for Gibson_54:
(Start: 22 @41040 has 8 MA's), (45, 40938), (49, 40917), (57, 40872), (58, 40860), (64, 40830), (67, 40821), (70, 40803), (75, 40782), (81, 40755), (87, 40716), (106, 40596), (119, 40539), (123, 40527), (131, 40479), (137, 40446), (142, 40425),

Gene: Gilson_84 Start: 60559, Stop: 61128, Start Num: 28
Candidate Starts for Gilson_84:
(Start: 28 @60559 has 48 MA's), (38, 60589), (43, 60622), (51, 60655), (56, 60703), (63, 60742), (76, 60799), (79, 60808), (103, 60967), (106, 60985), (125, 61051),

Gene: Giuseppe_64 Start: 47249, Stop: 47866, Start Num: 28
Candidate Starts for Giuseppe_64:
(Start: 28 @47249 has 48 MA's), (29, 47252), (40, 47315), (47, 47348), (55, 47396), (69, 47465), (70, 47471), (83, 47525), (92, 47588), (93, 47591), (98, 47621), (102, 47654), (104, 47663), (108, 47687), (111, 47708), (115, 47726), (116, 47729), (141, 47837),

Gene: Greenbelt_52 Start: 37356, Stop: 36727, Start Num: 23
Candidate Starts for Greenbelt_52:
(Start: 23 @37356 has 1 MA's), (45, 37263), (57, 37197), (62, 37167), (64, 37155), (67, 37146), (69, 37134), (70, 37128), (81, 37080), (83, 37074), (87, 37041), (93, 37008), (108, 36912), (109, 36909), (123, 36852),

Gene: GretelLyn_70 Start: 48662, Stop: 49360, Start Num: 19
Candidate Starts for GretelLyn_70:
(Start: 18 @48659 has 1 MA's), (Start: 19 @48662 has 39 MA's), (47, 48788), (55, 48836), (69, 48905), (99, 49067), (107, 49124), (133, 49253), (146, 49301), (150, 49328), (152, 49355),

Gene: Gumball_62 Start: 47770, Stop: 48387, Start Num: 28
Candidate Starts for Gumball_62:
(Start: 28 @47770 has 48 MA's), (29, 47773), (40, 47836), (47, 47869), (55, 47917), (69, 47986), (70, 47992), (83, 48046), (92, 48109), (93, 48112), (98, 48142), (102, 48175), (104, 48184), (108, 48208), (111, 48229), (115, 48247), (116, 48250), (141, 48358),

Gene: Hawkeye_71 Start: 48356, Stop: 48979, Start Num: 27
Candidate Starts for Hawkeye_71:
(Start: 27 @48356 has 17 MA's), (Start: 28 @48359 has 48 MA's), (47, 48458), (55, 48506), (62, 48542), (69, 48575), (90, 48692), (93, 48701), (102, 48764), (111, 48818), (131, 48899),

Gene: Helpful_66 Start: 47610, Stop: 48227, Start Num: 28
Candidate Starts for Helpful_66:
(Start: 28 @47610 has 48 MA's), (29, 47613), (40, 47676), (47, 47709), (55, 47757), (69, 47826), (70, 47832), (83, 47886), (92, 47949), (93, 47952), (98, 47982), (102, 48015), (104, 48024), (108, 48048), (111, 48069), (115, 48087), (116, 48090), (141, 48198),

Gene: Jada_84 Start: 61072, Stop: 61641, Start Num: 28
Candidate Starts for Jada_84:
(Start: 28 @61072 has 48 MA's), (38, 61102), (43, 61135), (51, 61168), (56, 61216), (63, 61255), (76, 61312), (79, 61321), (103, 61480), (106, 61498), (125, 61564),

Gene: Jalebi_70 Start: 49389, Stop: 50084, Start Num: 19
Candidate Starts for Jalebi_70:
(Start: 19 @49389 has 39 MA's), (35, 49440), (47, 49515), (55, 49563), (69, 49632), (99, 49794), (107, 49851), (133, 49980), (146, 50028), (147, 50037), (150, 50055),

Gene: Jamemuya19_69 Start: 46953, Stop: 47651, Start Num: 19
Candidate Starts for Jamemuya19_69:
(Start: 18 @46950 has 1 MA's), (Start: 19 @46953 has 39 MA's), (47, 47079), (55, 47127), (69, 47196), (99, 47358), (107, 47415), (133, 47544), (146, 47592), (150, 47619),

Gene: KandZ_61 Start: 47394, Stop: 48011, Start Num: 28
Candidate Starts for KandZ_61:
(Start: 28 @47394 has 48 MA's), (29, 47397), (40, 47460), (47, 47493), (55, 47541), (69, 47610), (70, 47616), (83, 47670), (92, 47733), (93, 47736), (98, 47766), (102, 47799), (104, 47808), (108, 47832), (111, 47853), (115, 47871), (116, 47874), (141, 47982),

Gene: Karp_81 Start: 61467, Stop: 62036, Start Num: 28
Candidate Starts for Karp_81:
(Start: 28 @61467 has 48 MA's), (37, 61494), (56, 61611), (79, 61716), (80, 61725), (106, 61893), (141, 62016), (143, 62025),

Gene: Kenrey_85 Start: 60773, Stop: 61342, Start Num: 28
Candidate Starts for Kenrey_85:
(Start: 28 @60773 has 48 MA's), (38, 60803), (43, 60836), (51, 60869), (56, 60917), (63, 60956), (67, 60971), (79, 61022), (82, 61043), (106, 61199), (110, 61220), (113, 61232), (125, 61265),

Gene: Kors_56 Start: 38715, Stop: 39371, Start Num: 26
Candidate Starts for Kors_56:
(10, 38625), (Start: 26 @38715 has 10 MA's), (39, 38787), (67, 38928), (75, 38967), (83, 39000), (97, 39087), (98, 39096), (100, 39120), (113, 39198), (129, 39258), (130, 39267), (138, 39306),

Gene: Kumao_70 Start: 48601, Stop: 49152, Start Num: 28
Candidate Starts for Kumao_70:
(Start: 28 @48601 has 48 MA's), (37, 48640), (38, 48643), (53, 48715), (54, 48721), (56, 48733), (66, 48784), (78, 48838), (86, 48886), (98, 48946), (114, 49039), (121, 49051), (128, 49090),

Gene: Lambo_68 Start: 47792, Stop: 48487, Start Num: 19
Candidate Starts for Lambo_68:
(Start: 18 @47789 has 1 MA's), (Start: 19 @47792 has 39 MA's), (47, 47918), (55, 47966), (69, 48035), (99, 48197), (107, 48254), (133, 48383), (146, 48431), (147, 48440), (150, 48458),

Gene: LavAbarElk_70 Start: 47602, Stop: 48300, Start Num: 19
Candidate Starts for LavAbarElk_70:
(Start: 18 @47599 has 1 MA's), (Start: 19 @47602 has 39 MA's), (47, 47728), (55, 47776), (69, 47845), (99, 48007), (107, 48064), (133, 48193), (146, 48241), (150, 48268), (152, 48295),

Gene: Leopard_79 Start: 55205, Stop: 55822, Start Num: 27
Candidate Starts for Leopard_79:

(14, 55154), (Start: 27 @55205 has 17 MA's), (40, 55274), (47, 55307), (55, 55355), (62, 55391), (69, 55424), (102, 55613), (108, 55646), (109, 55649), (111, 55667), (120, 55694), (136, 55778), (141, 55790),

Gene: Lila22_71 Start: 48745, Stop: 49443, Start Num: 19
Candidate Starts for Lila22_71:
(Start: 18 @48742 has 1 MA's), (Start: 19 @48745 has 39 MA's), (47, 48871), (55, 48919), (69, 48988), (99, 49150), (107, 49207), (133, 49336), (146, 49384), (150, 49411), (152, 49438),

Gene: Limpid_80 Start: 60433, Stop: 61002, Start Num: 28
Candidate Starts for Limpid_80:
(Start: 28 @60433 has 48 MA's), (56, 60577), (65, 60625), (79, 60682), (84, 60712), (106, 60859), (113, 60892), (143, 60991),

Gene: Lizz_54 Start: 40880, Stop: 40245, Start Num: 22
Candidate Starts for Lizz_54:
(Start: 22 @40880 has 8 MA's), (45, 40778), (49, 40757), (57, 40712), (58, 40700), (64, 40670), (67, 40661), (70, 40643), (75, 40622), (81, 40595), (87, 40556), (106, 40436), (112, 40397), (132, 40313),

Gene: LordBart_56 Start: 38612, Stop: 39268, Start Num: 26
Candidate Starts for LordBart_56:
(10, 38522), (Start: 26 @38612 has 10 MA's), (39, 38684), (67, 38825), (75, 38864), (83, 38897), (98, 38993), (100, 39017), (113, 39095), (129, 39155), (130, 39164), (138, 39203),

Gene: Lozinak_144 Start: 78227, Stop: 78841, Start Num: 27
Candidate Starts for Lozinak_144:
(5, 78074), (11, 78140), (14, 78176), (Start: 16 @78188 has 1 MA's), (17, 78191), (20, 78200), (Start: 27 @78227 has 17 MA's), (33, 78245), (37, 78266), (50, 78332), (60, 78398), (68, 78440), (72, 78467), (82, 78509), (88, 78551), (96, 78593), (104, 78650), (127, 78740), (135, 78779),

Gene: LuckyLeo_67 Start: 47510, Stop: 48220, Start Num: 19
Candidate Starts for LuckyLeo_67:
(Start: 18 @47507 has 1 MA's), (Start: 19 @47510 has 39 MA's), (47, 47636), (55, 47684), (69, 47753), (99, 47915), (146, 48164),

Gene: Magritte_243 Start: 125770, Stop: 126348, Start Num: 32
Candidate Starts for Magritte_243:
(Start: 32 @125770 has 6 MA's), (36, 125788), (37, 125797), (79, 126004), (84, 126034), (87, 126061), (92, 126091), (100, 126148), (103, 126163), (105, 126169), (118, 126241), (139, 126343),

Gene: Maupel_83 Start: 60559, Stop: 61128, Start Num: 28
Candidate Starts for Maupel_83:
(Start: 28 @60559 has 48 MA's), (38, 60589), (43, 60622), (51, 60655), (56, 60703), (63, 60742), (76, 60799), (79, 60808), (103, 60967), (106, 60985), (125, 61051),

Gene: MeganTheeKilla_82 Start: 59920, Stop: 60489, Start Num: 28
Candidate Starts for MeganTheeKilla_82:
(Start: 28 @59920 has 48 MA's), (38, 59950), (43, 59983), (51, 60016), (56, 60064), (63, 60103), (76, 60160), (79, 60169), (103, 60328), (106, 60346), (125, 60412),

Gene: Mima20_70 Start: 48178, Stop: 48873, Start Num: 19
Candidate Starts for Mima20_70:

(Start: 18 @48175 has 1 MA's), (Start: 19 @48178 has 39 MA's), (47, 48304), (55, 48352), (69, 48421), (99, 48583), (107, 48640), (133, 48769), (146, 48817), (147, 48826), (150, 48844),

Gene: Miskis_138 Start: 77258, Stop: 77884, Start Num: 27
Candidate Starts for Miskis_138:
(Start: 16 @77219 has 1 MA's), (17, 77222), (20, 77231), (Start: 27 @77258 has 17 MA's), (33, 77273), (37, 77294), (50, 77360), (60, 77426), (68, 77468), (72, 77495), (82, 77537), (88, 77579), (96, 77621), (104, 77678), (126, 77768), (131, 77795),

Gene: Moab_83 Start: 61823, Stop: 62401, Start Num: 28
Candidate Starts for Moab_83:
(Start: 28 @61823 has 48 MA's), (37, 61859), (38, 61862), (56, 61976), (106, 62258), (113, 62291),

Gene: MoiGyank_73 Start: 48943, Stop: 49641, Start Num: 19
Candidate Starts for MoiGyank_73:
(Start: 18 @48940 has 1 MA's), (Start: 19 @48943 has 39 MA's), (47, 49069), (55, 49117), (69, 49186), (99, 49348), (107, 49405), (133, 49534), (146, 49582), (150, 49609), (152, 49636),

Gene: Mopey_64 Start: 47254, Stop: 47871, Start Num: 28
Candidate Starts for Mopey_64:
(Start: 28 @47254 has 48 MA's), (29, 47257), (40, 47320), (47, 47353), (55, 47401), (69, 47470), (70, 47476), (83, 47530), (92, 47593), (93, 47596), (98, 47626), (102, 47659), (104, 47668), (108, 47692), (111, 47713), (115, 47731), (116, 47734), (141, 47842),

Gene: Nettle_71 Start: 48698, Stop: 49396, Start Num: 19
Candidate Starts for Nettle_71:
(Start: 18 @48695 has 1 MA's), (Start: 19 @48698 has 39 MA's), (47, 48824), (55, 48872), (69, 48941), (99, 49103), (107, 49160), (133, 49289), (146, 49337), (150, 49364), (152, 49391),

Gene: NorManre_74 Start: 49192, Stop: 49887, Start Num: 19
Candidate Starts for NorManre_74:
(Start: 18 @49189 has 1 MA's), (Start: 19 @49192 has 39 MA's), (47, 49318), (55, 49366), (69, 49435), (99, 49597), (107, 49654), (133, 49783), (146, 49831), (147, 49840), (150, 49858),

Gene: Norvs_142 Start: 77418, Stop: 78032, Start Num: 27
Candidate Starts for Norvs_142:
(11, 77331), (14, 77367), (Start: 16 @77379 has 1 MA's), (17, 77382), (20, 77391), (Start: 27 @77418 has 17 MA's), (33, 77436), (37, 77457), (50, 77523), (60, 77589), (68, 77631), (72, 77658), (82, 77700), (88, 77742), (96, 77784), (104, 77841), (127, 77931), (135, 77970),

Gene: Nova_62 Start: 47742, Stop: 48359, Start Num: 28
Candidate Starts for Nova_62:
(Start: 28 @47742 has 48 MA's), (29, 47745), (40, 47808), (47, 47841), (55, 47889), (69, 47958), (70, 47964), (83, 48018), (92, 48081), (93, 48084), (98, 48114), (102, 48147), (104, 48156), (108, 48180), (111, 48201), (115, 48219), (116, 48222), (141, 48330),

Gene: NovaSharks_72 Start: 46939, Stop: 47637, Start Num: 19
Candidate Starts for NovaSharks_72:
(Start: 18 @46936 has 1 MA's), (Start: 19 @46939 has 39 MA's), (35, 46990), (47, 47065), (55, 47113), (69, 47182), (99, 47344), (107, 47401), (133, 47530), (146, 47578), (150, 47605),

Gene: OneUp_127 Start: 75778, Stop: 76401, Start Num: 26
Candidate Starts for OneUp_127:

(Start: 26 @75778 has 10 MA's), (33, 75799), (36, 75811), (37, 75820), (66, 75982), (88, 76105), (101, 76186), (104, 76201), (126, 76291), (141, 76366),

Gene: Onyinye_80 Start: 55075, Stop: 55692, Start Num: 27
Candidate Starts for Onyinye_80:
(14, 55024), (Start: 27 @55075 has 17 MA's), (40, 55144), (47, 55177), (55, 55225), (62, 55261), (69, 55294), (102, 55483), (108, 55516), (109, 55519), (111, 55537), (120, 55564), (136, 55648), (141, 55660),

Gene: OtterstedtS21_70 Start: 48126, Stop: 48824, Start Num: 19
Candidate Starts for OtterstedtS21_70:
(Start: 18 @48123 has 1 MA's), (Start: 19 @48126 has 39 MA's), (35, 48177), (47, 48252), (55, 48300), (69, 48369), (99, 48531), (107, 48588), (133, 48717), (146, 48765), (150, 48792), (152, 48819),

Gene: PBI1_59 Start: 47232, Stop: 47849, Start Num: 28
Candidate Starts for PBI1_59:
(Start: 28 @47232 has 48 MA's), (29, 47235), (40, 47298), (47, 47331), (55, 47379), (69, 47448), (70, 47454), (83, 47508), (92, 47571), (93, 47574), (98, 47604), (102, 47637), (104, 47646), (108, 47670), (111, 47691), (115, 47709), (116, 47712), (141, 47820),

Gene: PHTowN_54 Start: 40878, Stop: 40243, Start Num: 22
Candidate Starts for PHTowN_54:
(Start: 22 @40878 has 8 MA's), (45, 40776), (49, 40755), (57, 40710), (58, 40698), (64, 40668), (67, 40659), (70, 40641), (75, 40620), (81, 40593), (87, 40554), (97, 40500), (106, 40434), (112, 40395), (132, 40311),

Gene: PLot_62 Start: 47260, Stop: 47877, Start Num: 28
Candidate Starts for PLot_62:
(Start: 28 @47260 has 48 MA's), (29, 47263), (40, 47326), (47, 47359), (55, 47407), (69, 47476), (70, 47482), (83, 47536), (93, 47602), (98, 47632), (102, 47665), (104, 47674), (108, 47698), (111, 47719), (115, 47737), (116, 47740), (141, 47848),

Gene: ParvusTarda_69 Start: 47498, Stop: 48196, Start Num: 19
Candidate Starts for ParvusTarda_69:
(Start: 18 @47495 has 1 MA's), (Start: 19 @47498 has 39 MA's), (47, 47624), (55, 47672), (69, 47741), (99, 47903), (107, 47960), (133, 48089), (146, 48137), (150, 48164), (152, 48191),

Gene: Patelgo_83 Start: 61986, Stop: 62564, Start Num: 28
Candidate Starts for Patelgo_83:
(Start: 28 @61986 has 48 MA's), (37, 62022), (38, 62025), (56, 62139), (106, 62421), (113, 62454),

Gene: Patos_74 Start: 49191, Stop: 49886, Start Num: 19
Candidate Starts for Patos_74:
(Start: 18 @49188 has 1 MA's), (Start: 19 @49191 has 39 MA's), (47, 49317), (55, 49365), (69, 49434), (99, 49596), (107, 49653), (133, 49782), (146, 49830), (147, 49839), (150, 49857),

Gene: PauloDiaboli_239 Start: 128204, Stop: 128839, Start Num: 32
Candidate Starts for PauloDiaboli_239:
(Start: 32 @128204 has 6 MA's), (63, 128375), (69, 128402), (115, 128651), (148, 128807), (151, 128825),

Gene: Penelope2018_63 Start: 47288, Stop: 47905, Start Num: 28
Candidate Starts for Penelope2018_63:

(Start: 28 @47288 has 48 MA's), (29, 47291), (40, 47354), (47, 47387), (55, 47435), (69, 47504), (70, 47510), (83, 47564), (92, 47627), (93, 47630), (98, 47660), (102, 47693), (104, 47702), (108, 47726), (111, 47747), (115, 47765), (116, 47768), (141, 47876),

Gene: Phalaborwa_66 Start: 47691, Stop: 48308, Start Num: 28
Candidate Starts for Phalaborwa_66:
(Start: 28 @47691 has 48 MA's), (33, 47709), (40, 47757), (47, 47790), (55, 47838), (69, 47907), (70, 47913), (83, 47967), (92, 48030), (98, 48063), (102, 48096), (108, 48129), (111, 48150), (116, 48171), (141, 48279),

Gene: PhinkBoden_142 Start: 78086, Stop: 78712, Start Num: 27
Candidate Starts for PhinkBoden_142:
(Start: 16 @78047 has 1 MA's), (17, 78050), (20, 78059), (Start: 27 @78086 has 17 MA's), (33, 78101), (37, 78122), (50, 78188), (60, 78254), (68, 78296), (72, 78323), (82, 78365), (88, 78407), (96, 78449), (104, 78506), (126, 78596), (131, 78623),

Gene: Phredrick_83 Start: 59853, Stop: 60422, Start Num: 28
Candidate Starts for Phredrick_83:
(Start: 28 @59853 has 48 MA's), (38, 59883), (43, 59916), (51, 59949), (56, 59997), (63, 60036), (67, 60051), (79, 60102), (82, 60123), (106, 60279), (110, 60300), (113, 60312), (125, 60345),

Gene: Prager_63 Start: 47348, Stop: 47965, Start Num: 28
Candidate Starts for Prager_63:
(Start: 28 @47348 has 48 MA's), (29, 47351), (40, 47414), (47, 47447), (55, 47495), (69, 47564), (70, 47570), (83, 47624), (92, 47687), (93, 47690), (98, 47720), (102, 47753), (104, 47762), (108, 47786), (111, 47807), (115, 47825), (116, 47828), (141, 47936),

Gene: Pumpernickel_223 Start: 129874, Stop: 130482, Start Num: 32
Candidate Starts for Pumpernickel_223:
(Start: 26 @129853 has 10 MA's), (Start: 32 @129874 has 6 MA's), (36, 129892), (46, 129946), (63, 130048), (70, 130081), (71, 130084), (79, 130114), (82, 130135), (85, 130159), (94, 130207),

Gene: Pywacket_67 Start: 48787, Stop: 49485, Start Num: 19
Candidate Starts for Pywacket_67:
(Start: 18 @48784 has 1 MA's), (Start: 19 @48787 has 39 MA's), (47, 48913), (55, 48961), (69, 49030), (99, 49192), (107, 49249), (133, 49378), (146, 49426), (150, 49453), (152, 49480),

Gene: Ranch_70 Start: 46970, Stop: 47668, Start Num: 19
Candidate Starts for Ranch_70:
(Start: 18 @46967 has 1 MA's), (Start: 19 @46970 has 39 MA's), (35, 47021), (47, 47096), (55, 47144), (69, 47213), (99, 47375), (107, 47432), (133, 47561), (146, 47609), (150, 47636), (152, 47663),

Gene: RazorC_70 Start: 47093, Stop: 47791, Start Num: 19
Candidate Starts for RazorC_70:
(Start: 18 @47090 has 1 MA's), (Start: 19 @47093 has 39 MA's), (47, 47219), (55, 47267), (69, 47336), (99, 47498), (107, 47555), (133, 47684), (146, 47732), (150, 47759),

Gene: Riduram_69 Start: 46668, Stop: 47366, Start Num: 19
Candidate Starts for Riduram_69:
(Start: 18 @46665 has 1 MA's), (Start: 19 @46668 has 39 MA's), (47, 46794), (55, 46842), (69, 46911), (99, 47073), (107, 47130), (133, 47259), (146, 47307), (150, 47334),

Gene: RikSengupta_56 Start: 38740, Stop: 39396, Start Num: 26

Candidate Starts for RikSengupta_56:
(2, 38491), (10, 38650), (Start: 26 @38740 has 10 MA's), (39, 38812), (67, 38953), (75, 38992), (83, 39025), (97, 39112), (98, 39121), (100, 39145), (113, 39223), (129, 39283), (130, 39292), (138, 39331),

Gene: Rooney_54 Start: 41037, Stop: 40384, Start Num: 22
Candidate Starts for Rooney_54:
(Start: 22 @41037 has 8 MA's), (45, 40935), (49, 40914), (57, 40869), (58, 40857), (64, 40827), (67, 40818), (70, 40800), (75, 40779), (81, 40752), (87, 40713), (106, 40593), (119, 40536), (123, 40524), (131, 40476), (137, 40443), (142, 40422),

Gene: Rota_67 Start: 47861, Stop: 48556, Start Num: 19
Candidate Starts for Rota_67:
(Start: 18 @47858 has 1 MA's), (Start: 19 @47861 has 39 MA's), (47, 47987), (55, 48035), (69, 48104), (99, 48266), (107, 48323), (133, 48452), (146, 48500), (147, 48509), (150, 48527),

Gene: Rukungu_72 Start: 49083, Stop: 49781, Start Num: 19
Candidate Starts for Rukungu_72:
(Start: 18 @49080 has 1 MA's), (Start: 19 @49083 has 39 MA's), (47, 49209), (55, 49257), (69, 49326), (99, 49488), (107, 49545), (133, 49674), (146, 49722), (150, 49749), (152, 49776),

Gene: Rumi_71 Start: 46633, Stop: 47334, Start Num: 18
Candidate Starts for Rumi_71:
(Start: 18 @46633 has 1 MA's), (Start: 19 @46636 has 39 MA's), (47, 46762), (55, 46810), (69, 46879), (99, 47041), (107, 47098), (133, 47227), (146, 47275), (150, 47302),

Gene: Sadboi_71 Start: 48663, Stop: 49361, Start Num: 19
Candidate Starts for Sadboi_71:
(Start: 18 @48660 has 1 MA's), (Start: 19 @48663 has 39 MA's), (47, 48789), (55, 48837), (69, 48906), (99, 49068), (107, 49125), (133, 49254), (146, 49302), (150, 49329), (152, 49356),

Gene: Sampudon_71 Start: 49389, Stop: 50084, Start Num: 19
Candidate Starts for Sampudon_71:
(Start: 19 @49389 has 39 MA's), (35, 49440), (47, 49515), (55, 49563), (69, 49632), (99, 49794), (107, 49851), (133, 49980), (146, 50028), (147, 50037), (150, 50055),

Gene: SassyC_60 Start: 42227, Stop: 41580, Start Num: 22
Candidate Starts for SassyC_60:
(Start: 22 @42227 has 8 MA's), (45, 42125), (57, 42059), (58, 42047), (64, 42017), (67, 42008), (70, 41990), (75, 41969), (81, 41942), (87, 41903), (106, 41783), (132, 41660),

Gene: SeresaTree_83 Start: 61199, Stop: 61768, Start Num: 28
Candidate Starts for SeresaTree_83:
(Start: 28 @61199 has 48 MA's), (43, 61262), (56, 61343), (59, 61361), (65, 61391), (79, 61448), (84, 61478), (106, 61625), (134, 61718), (140, 61745), (143, 61757),

Gene: ShakeNBake_54 Start: 40896, Stop: 40261, Start Num: 22
Candidate Starts for ShakeNBake_54:
(Start: 22 @40896 has 8 MA's), (45, 40794), (49, 40773), (57, 40728), (58, 40716), (64, 40686), (67, 40677), (70, 40659), (75, 40638), (81, 40611), (87, 40572), (97, 40518), (106, 40452), (112, 40413), (132, 40329),

Gene: Sham_77 Start: 60954, Stop: 61520, Start Num: 28

Candidate Starts for Sham_77:
(Start: 28 @60954 has 48 MA's), (42, 61011), (56, 61095), (106, 61377), (110, 61398), (143, 61509),

Gene: SirHarley_65 Start: 47753, Stop: 48370, Start Num: 28
Candidate Starts for SirHarley_65:
(Start: 28 @47753 has 48 MA's), (29, 47756), (40, 47819), (47, 47852), (55, 47900), (69, 47969), (70, 47975), (83, 48029), (92, 48092), (93, 48095), (98, 48125), (102, 48158), (104, 48167), (108, 48191), (111, 48212), (115, 48230), (116, 48233), (141, 48341),

Gene: Smoothie_145 Start: 78227, Stop: 78853, Start Num: 27
Candidate Starts for Smoothie_145:
(Start: 16 @78188 has 1 MA's), (17, 78191), (20, 78200), (Start: 27 @78227 has 17 MA's), (33, 78242), (37, 78263), (50, 78329), (60, 78395), (68, 78437), (72, 78464), (82, 78506), (88, 78548), (96, 78590), (104, 78647), (126, 78737), (131, 78764),

Gene: Sparcetus_56 Start: 38617, Stop: 39273, Start Num: 26
Candidate Starts for Sparcetus_56:
(10, 38527), (Start: 26 @38617 has 10 MA's), (39, 38689), (67, 38830), (75, 38869), (83, 38902), (97, 38989), (98, 38998), (100, 39022), (113, 39100), (129, 39160), (130, 39169), (138, 39208),

Gene: SparkleGoddess_83 Start: 61875, Stop: 62444, Start Num: 28
Candidate Starts for SparkleGoddess_83:
(Start: 28 @61875 has 48 MA's), (37, 61902), (56, 62019), (79, 62124), (80, 62133), (106, 62301), (141, 62424), (143, 62433),

Gene: SpeedDemon_1200 Start: 76790, Stop: 77374, Start Num: 31
Candidate Starts for SpeedDemon_1200:
(Start: 31 @76790 has 5 MA's), (33, 76799), (34, 76802), (39, 76844), (43, 76856), (60, 76949), (84, 77063), (85, 77078),

Gene: Stigma_82 Start: 61883, Stop: 62452, Start Num: 28
Candidate Starts for Stigma_82:
(Start: 28 @61883 has 48 MA's), (37, 61910), (63, 62066), (79, 62132), (80, 62141), (89, 62207), (106, 62309), (141, 62432), (143, 62441),

Gene: Stormer_70 Start: 46640, Stop: 47338, Start Num: 19
Candidate Starts for Stormer_70:
(Start: 18 @46637 has 1 MA's), (Start: 19 @46640 has 39 MA's), (47, 46766), (55, 46814), (69, 46883), (99, 47045), (107, 47102), (133, 47231), (146, 47279), (150, 47306),

Gene: SuperheroCarly_63 Start: 47436, Stop: 48053, Start Num: 28
Candidate Starts for SuperheroCarly_63:
(Start: 28 @47436 has 48 MA's), (29, 47439), (40, 47502), (47, 47535), (55, 47583), (69, 47652), (70, 47658), (83, 47712), (92, 47775), (93, 47778), (98, 47808), (102, 47841), (104, 47850), (108, 47874), (111, 47895), (115, 47913), (116, 47916), (141, 48024),

Gene: Thoth_63 Start: 47342, Stop: 47959, Start Num: 28
Candidate Starts for Thoth_63:
(Start: 28 @47342 has 48 MA's), (29, 47345), (40, 47408), (47, 47441), (55, 47489), (69, 47558), (70, 47564), (83, 47618), (92, 47681), (93, 47684), (98, 47714), (102, 47747), (104, 47756), (108, 47780), (111, 47801), (115, 47819), (116, 47822), (141, 47930),

Gene: Tillicus_65 Start: 47452, Stop: 48162, Start Num: 19

Candidate Starts for Tillicus_65:
(Start: 18 @47449 has 1 MA's), (Start: 19 @47452 has 39 MA's), (47, 47578), (55, 47626), (69, 47695), (99, 47857), (146, 48106), (150, 48133),

Gene: TinyMiny_56 Start: 38641, Stop: 39297, Start Num: 26
Candidate Starts for TinyMiny_56:
(Start: 26 @38641 has 10 MA's), (39, 38713), (47, 38749), (67, 38854), (70, 38872), (71, 38875), (75, 38893), (97, 39013), (98, 39022), (100, 39046), (113, 39124), (138, 39232),

Gene: Toniann_144 Start: 77559, Stop: 78173, Start Num: 27
Candidate Starts for Toniann_144:
(5, 77406), (11, 77472), (14, 77508), (Start: 16 @77520 has 1 MA's), (17, 77523), (20, 77532), (Start: 27 @77559 has 17 MA's), (33, 77577), (37, 77598), (50, 77664), (60, 77730), (68, 77772), (72, 77799), (82, 77841), (88, 77883), (96, 77925), (104, 77982), (127, 78072), (135, 78111),

Gene: Towmatter_112 Start: 70304, Stop: 70870, Start Num: 31
Candidate Starts for Towmatter_112:
(Start: 31 @70304 has 5 MA's), (33, 70313), (37, 70334), (43, 70370), (48, 70391), (51, 70400), (60, 70463), (73, 70529), (101, 70694), (104, 70709), (117, 70766), (119, 70769), (135, 70820), (144, 70859),

Gene: Troll4_62 Start: 47410, Stop: 48027, Start Num: 28
Candidate Starts for Troll4_62:
(Start: 28 @47410 has 48 MA's), (29, 47413), (40, 47476), (47, 47509), (55, 47557), (69, 47626), (70, 47632), (83, 47686), (92, 47749), (93, 47752), (98, 47782), (102, 47815), (104, 47824), (108, 47848), (111, 47869), (115, 47887), (116, 47890), (141, 47998),

Gene: TunaTartare_82 Start: 62365, Stop: 62934, Start Num: 28
Candidate Starts for TunaTartare_82:
(Start: 28 @62365 has 48 MA's), (43, 62428), (52, 62476), (56, 62509), (59, 62527), (65, 62557), (79, 62614), (84, 62644), (106, 62791), (140, 62911), (143, 62923),

Gene: Virizion_59 Start: 41236, Stop: 40583, Start Num: 22
Candidate Starts for Virizion_59:
(Start: 22 @41236 has 8 MA's), (45, 41134), (49, 41113), (57, 41068), (58, 41056), (64, 41026), (67, 41017), (70, 40999), (75, 40978), (81, 40951), (87, 40912), (106, 40792), (119, 40735), (123, 40723), (131, 40675), (137, 40642), (142, 40621),

Gene: Visconti_64 Start: 47318, Stop: 47935, Start Num: 28
Candidate Starts for Visconti_64:
(Start: 28 @47318 has 48 MA's), (29, 47321), (40, 47384), (47, 47417), (55, 47465), (69, 47534), (70, 47540), (83, 47594), (92, 47657), (93, 47660), (98, 47690), (102, 47723), (104, 47732), (108, 47756), (111, 47777), (115, 47795), (116, 47798), (141, 47906),

Gene: WaldoWhy_65 Start: 47334, Stop: 47951, Start Num: 28
Candidate Starts for WaldoWhy_65:
(Start: 28 @47334 has 48 MA's), (29, 47337), (40, 47400), (47, 47433), (55, 47481), (69, 47550), (70, 47556), (83, 47610), (92, 47673), (93, 47676), (98, 47706), (102, 47739), (104, 47748), (108, 47772), (111, 47793), (115, 47811), (116, 47814), (141, 47922),

Gene: Wentworth_55 Start: 41269, Stop: 40613, Start Num: 22
Candidate Starts for Wentworth_55:

(1, 41644), (7, 41371), (Start: 22 @41269 has 8 MA's), (45, 41167), (57, 41101), (64, 41059), (67, 41050), (70, 41032), (75, 41011), (81, 40984), (87, 40945), (106, 40825), (107, 40822), (123, 40756), (131, 40708), (137, 40675), (142, 40654),

Gene: Westy_84 Start: 61875, Stop: 62444, Start Num: 28
Candidate Starts for Westy_84:
(Start: 28 @61875 has 48 MA's), (37, 61902), (56, 62019), (79, 62124), (80, 62133), (106, 62301), (141, 62424), (143, 62433),

Gene: Wilkos_57 Start: 41210, Stop: 40554, Start Num: 22
Candidate Starts for Wilkos_57:
(Start: 22 @41210 has 8 MA's), (45, 41108), (49, 41087), (57, 41042), (58, 41030), (64, 41000), (67, 40991), (70, 40973), (75, 40952), (81, 40925), (83, 40919), (87, 40886), (107, 40763), (119, 40709), (123, 40697), (131, 40649), (137, 40616), (142, 40595),

Gene: WilliamBoone_145 Start: 76271, Stop: 76891, Start Num: 28
Candidate Starts for WilliamBoone_145:
(Start: 28 @76271 has 48 MA's), (60, 76439), (61, 76442), (82, 76550), (88, 76592), (96, 76634), (104, 76691), (132, 76808), (135, 76829),

Gene: Wojtek_66 Start: 47217, Stop: 47927, Start Num: 19
Candidate Starts for Wojtek_66:
(Start: 18 @47214 has 1 MA's), (Start: 19 @47217 has 39 MA's), (35, 47268), (47, 47343), (55, 47391), (69, 47460), (99, 47622), (107, 47679), (146, 47871),

Gene: Wollypog_54 Start: 41322, Stop: 41963, Start Num: 26
Candidate Starts for Wollypog_54:
(3, 41112), (4, 41130), (8, 41202), (9, 41220), (15, 41283), (Start: 26 @41322 has 10 MA's), (Start: 27 @41328 has 17 MA's), (67, 41535), (81, 41601), (98, 41703), (104, 41745),

Gene: Xenia2_70 Start: 47199, Stop: 47915, Start Num: 19
Candidate Starts for Xenia2_70:
(Start: 19 @47199 has 39 MA's), (47, 47331), (55, 47379), (62, 47415), (69, 47448), (99, 47610), (107, 47667), (133, 47796), (136, 47811), (146, 47844), (152, 47898),

Gene: Yara_49 Start: 39548, Stop: 38907, Start Num: 25
Candidate Starts for Yara_49:
(10, 39632), (13, 39602), (Start: 25 @39548 has 1 MA's), (45, 39455), (49, 39434), (57, 39389), (64, 39347), (67, 39338), (69, 39326), (70, 39320), (77, 39293), (81, 39272), (83, 39266), (87, 39233), (106, 39113), (123, 39044), (124, 39038), (140, 38951),

Gene: Yikes_72 Start: 49109, Stop: 49807, Start Num: 19
Candidate Starts for Yikes_72:
(Start: 18 @49106 has 1 MA's), (Start: 19 @49109 has 39 MA's), (47, 49235), (55, 49283), (69, 49352), (99, 49514), (107, 49571), (133, 49700), (146, 49748), (150, 49775), (152, 49802),

Gene: Zany_68 Start: 48703, Stop: 49401, Start Num: 19
Candidate Starts for Zany_68:
(Start: 18 @48700 has 1 MA's), (Start: 19 @48703 has 39 MA's), (47, 48829), (55, 48877), (69, 48946), (99, 49108), (107, 49165), (133, 49294), (146, 49342), (150, 49369), (152, 49396),

Gene: Zooman_205 Start: 124244, Stop: 124897, Start Num: 22
Candidate Starts for Zooman_205:

(Start: 22 @124244 has 8 MA's), (24, 124250), (Start: 32 @124280 has 6 MA's), (63, 124454), (73, 124502), (80, 124529), (91, 124604), (101, 124667), (149, 124877),