Pham 347355


1: Kenuha5_73 + 7
2: IrishSherpFalk_76 + 13
3: Jennelsea_72 + 23
4: Ochi17_80 + 8
5: OldBen_74 + 22
6: GUmbie_70
7: Cerasum_69 + 3
8: Yorick_73 + 17
9: Kingsley_79 + 7
10: Fastidio_70
11: MadMen_73
12: MilanaBonita_69 + 1
13: Minnie_73 + 1
14: Taj_82 + 2
15: DeadP_77
16: Ardmore_61 + 1
17: Aubs_77 + 1
18: DillTech15_77 + 1
19: Quico_85 + 2
20: Zerg_74 + 1
21: Jant_77
22: Dante_75
23: Juice456_72
24: Filuzino_77
25: Mozy_82
26: PopTart_66 + 1
27: IMpilo_66
28: Brushbloom_79
29: Yoshi_89
30: Avani_83
31: SilverChicken_85
32: ThetaBob_79
33: Cornie_71
34: Okabe_71
35: Whack_65

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 347355 Report

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

Pham number 347355 has 146 members, 10 are drafts.

Phages represented in each track:
• Track 1 : Kenuha5_73, Gandalph_74, DotProduct_72, Vivum_76, Totinger_72, GigiOuiOui_70, SuperGrey_76, Tchotchke_72
• Track 2 : IrishSherpFalk_76, Latretium_72, Squirty_77, Byougenkin_74, Bubbles123_71, Marker_76, XFactor_71, DoRead_77, Rita_82, MinionDave_71, Ibhubesi_73, Whouxphf_72, Tweety_76, WillSterrel_76
• Track 3 : Jennelsea_72, QuickMath_74, DRBy19_79, Soul22_79, Kimberlium_75, Zizzle_78, Jarcob_75, Mattes_77, Saal_75, Clifton_68, Lizziana_80, IbOuu_70, MulchExplorer_74, Blarby_84, Clank_77, Spoonbill_73, Philus_78, Veteran_68, OlympiaSaint_75, Gorge_77, James_76, Firehouse51_72, Jabbawokkie_85, Zapner_84
• Track 4 : Ochi17_80, Seabastian_82, AlpineSix_81, Llama_81, OfUltron_82, Wachhund_75, Jinglebell_81, Nichirin_76, Modragons_79
• Track 5 : OldBen_74, JoeyJr_77, JalFarm20_84, KingMidas_76, PHappiness_77, Harley_75, Polka14_81, Nimbo_69, Geralt_70, Leperchaun_75, Daenerys_76, Doomphist_80, KristaRAM_74, Inventum_75, RedBird_78, Seagreen_77, Dorothy_78, Poenanya_80, Empress_75, RitaG_77, Deb65_70, Scottish_75, Sassafras_78
• Track 6 : GUmbie_70
• Track 7 : Cerasum_69, Brookers_70, BigPhil_69, Coco12_72
• Track 8 : Yorick_73, DirtMcgirt_73, UncleRicky_73, EleanorGeorge_78, Burwell21_72, Llij_70, Lorde_74, Flathead_75, Blexus_72, Leozinho_75, Martik_77, Pippy_72, Drago_71, Lucia_73, Enby_75, Maravista_77, ShroomBoi_76, Phatniss_71
• Track 9 : Kingsley_79, SiSi_72, SG4_73, Doomslug_92, Shauna1_75, LittleShirley_76, Phanphagia_74, Whatsapiecost_70
• Track 10 : Fastidio_70
• Track 11 : MadMen_73
• Track 12 : MilanaBonita_69, Akhila_70
• Track 13 : Minnie_73, Sandalphon_71
• Track 14 : Taj_82, Wee_81, Ms6_74
• Track 15 : DeadP_77
• Track 16 : Ardmore_61, Chuckly_73
• Track 17 : Aubs_77, Guppsters_70
• Track 18 : DillTech15_77, Ogopogo_81
• Track 19 : Quico_85, Girafales_85, Florinda_88
• Track 20 : Zerg_74, Mwanjiwa_79
• Track 21 : Jant_77
• Track 22 : Dante_75

• Track 23 : Juice456_72
• Track 24 : Filuzino_77
• Track 25 : Mozy_82
• Track 26 : PopTart_66, SassyB_66
• Track 27 : IMpilo_66
• Track 28 : Brushbloom_79
• Track 29 : Yoshi_89
• Track 30 : Avani_83
• Track 31 : SilverChicken_85
• Track 32 : ThetaBob_79
• Track 33 : Cornie_71
• Track 34 : Okabe_71
• Track 35 : Whack_65

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

The start number called the most often in the published annotations is 16, it was called in 104 of the 136 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Akhila_70, AlpineSix_81, Ardmore_61, Avani_83, Blexus_72, Brushbloom_79, Bubbles123_71, Burwell21_72, Byougenkin_74, Chuckly_73, Cornie_71, Daenerys_76, Dante_75, DeadP_77, Deb65_70, DirtMcgirt_73, DoRead_77, Doomphist_80, Doomslug_92, Dorothy_78, DotProduct_72, Drago_71, EleanorGeorge_78, Empress_75, Enby_75, Fastidio_70, Filuzino_77, Flathead_75, Florinda_88, Gandalph_74, Geralt_70, GigiOuiOui_70, Girafales_85, Harley_75, IMpilo_66, Ibhubesi_73, Inventum_75, IrishSherpFalk_76, JalFarm20_84, Jant_77, Jinglebell_81, JoeyJr_77, Kenuha5_73, KingMidas_76, Kingsley_79, KristaRAM_74, Latretium_72, Leozinho_75, Leperchaun_75, LittleShirley_76, Llama_81, Llij_70, Lorde_74, Lucia_73, MadMen_73, Maravista_77, Marker_76, Martik_77, MilanaBonita_69, MinionDave_71, Minnie_73, Modragons_79, Mozy_82, Ms6_74, Mwanjiwa_79, Nichirin_76, Nimbo_69, Ochi17_80, OfUltron_82, OldBen_74, PHappiness_77, Phanphagia_74, Phatniss_71, Pippy_72, Poenanya_80, Polka14_81, PopTart_66, Quico_85, RedBird_78, RitaG_77, Rita_82, SG4_73, Sandalphon_71, Sassafras_78, SassyB_66, Scottish_75, Seabastian_82, Seagreen_77, Shauna1_75, ShroomBoi_76, SiSi_72, Squirty_77, SuperGrey_76, Taj_82, Tchotchke_72, ThetaBob_79, Totinger_72, Tweety_76, UncleRicky_73, Vivum_76, Wachhund_75, Wee_81, Whack_65, Whatsapiecost_70, Whouxphf_72, WillSterrel_76, XFactor_71, Yorick_73, Yoshi_89, Zerg_74,

Genes that have the "Most Annotated" start but do not call it:
• Juice456_72, Okabe_71, SilverChicken_85,

Genes that do not have the "Most Annotated" start:
• Aubs_77, BigPhil_69, Blarby_84, Brookers_70, Cerasum_69, Clank_77, Clifton_68, Coco12_72, DRBy19_79, DillTech15_77, Firehouse51_72, GUmbie_70, Gorge_77, Guppsters_70, IbOuu_70, Jabbawokkie_85, James_76, Jarcob_75, Jennelsea_72, Kimberlium_75, Lizziana_80, Mattes_77, MulchExplorer_74, Ogopogo_81, OlympiaSaint_75, Philus_78, QuickMath_74, Saal_75, Soul22_79, Spoonbill_73, Veteran_68, Zapner_84, Zizzle_78,

Summary by start number:

Start 16:
• Found in 113 of 146 (77.4%) of genes in pham
• Manual Annotations of this start: 104 of 136
• Called 97.3% of time when present
• Phage (with cluster) where this start called: Akhila_70 (F1), AlpineSix_81 (F1), Ardmore_61 (F1), Avani_83 (F2), Blexus_72 (F1), Brushbloom_79 (F1), Bubbles123_71 (F1), Burwell21_72 (F1), Byougenkin_74 (F1), Chuckly_73 (F1), Cornie_71 (F5), Daenerys_76 (F1), Dante_75 (F1), DeadP_77 (F1), Deb65_70 (F1), DirtMcgirt_73 (F1), DoRead_77 (F1), Doomphist_80 (F1), Doomslug_92 (F), Dorothy_78 (F1), DotProduct_72 (F1), Drago_71 (F1), EleanorGeorge_78 (F1), Empress_75 (F1), Enby_75 (F1), Fastidio_70 (F1), Filuzino_77 (F1), Flathead_75 (F1), Florinda_88 (F1), Gandalph_74 (F1), Geralt_70 (F1), GigiOuiOui_70 (F1), Girafales_85 (F1), Harley_75 (F1), IMpilo_66 (F1), Ibhubesi_73 (F1), Inventum_75 (F1), IrishSherpFalk_76 (F1), JalFarm20_84 (F1), Jant_77 (F1), Jinglebell_81 (F1), JoeyJr_77 (F1), Kenuha5_73 (F1), KingMidas_76 (F1), Kingsley_79 (F1), KristaRAM_74 (F1), Latretium_72 (F1), Leozinho_75 (F1), Leperchaun_75 (F1), LittleShirley_76 (F1), Llama_81 (F1), Llij_70 (F1), Lorde_74 (F1), Lucia_73 (F1), MadMen_73 (F1), Maravista_77 (F1), Marker_76 (F1), Martik_77 (F1), MilanaBonita_69 (F1), MinionDave_71 (F1), Minnie_73 (F1), Modragons_79 (F1), Mozy_82 (F1), Ms6_74 (F1), Mwanjiwa_79 (F1), Nichirin_76 (F1), Nimbo_69 (F1), Ochi17_80 (F1), OfUltron_82 (F1), OldBen_74 (F1), PHappiness_77 (F1), Phanphagia_74 (F1), Phatniss_71 (F1), Pippy_72 (F1), Poenanya_80 (F1), Polka14_81 (F1), PopTart_66 (F1), Quico_85 (F1), RedBird_78 (F1), RitaG_77 (F1), Rita_82 (F1), SG4_73 (F1), Sandalphon_71 (F1), Sassafras_78 (F1), SassyB_66 (F1), Scottish_75 (F1), Seabastian_82 (F1), Seagreen_77 (F1), Shauna1_75 (F1), ShroomBoi_76 (F1), SiSi_72 (F1), Squirty_77 (F3), SuperGrey_76 (F1), Taj_82 (F1), Tchotchke_72 (F1), ThetaBob_79 (F4), Totinger_72 (F1), Tweety_76 (F1), UncleRicky_73 (F1), Vivum_76 (F1), Wachhund_75 (F1), Wee_81 (F1), Whack_65 (singleton), Whatsapiecost_70 (F1), Whouxphf_72 (F1), WillSterrel_76 (F1), XFactor_71 (F1), Yorick_73 (F1), Yoshi_89 (F2), Zerg_74 (F1),

Start 17:
• Found in 31 of 146 (21.2%) of genes in pham
• Manual Annotations of this start: 29 of 136
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aubs_77 (F1), BigPhil_69 (F1), Blarby_84 (F), Brookers_70 (F1), Cerasum_69 (F1), Clank_77 (F), Clifton_68 (F1), Coco12_72 (F1), DRBy19_79 (F1), Firehouse51_72 (F1), GUmbie_70 (F1), Gorge_77 (F1), Guppsters_70 (F1), IbOuu_70 (F1), Jabbawokkie_85 (F2), James_76 (F1), Jarcob_75 (F1), Jennelsea_72 (F1), Kimberlium_75 (F1), Lizziana_80 (F1), Mattes_77 (F1), MulchExplorer_74 (F1), OlympiaSaint_75 (F1), Philus_78 (F1), QuickMath_74 (F1), Saal_75 (F1), Soul22_79 (F2), Spoonbill_73 (F1), Veteran_68 (F1), Zapner_84 (F2), Zizzle_78 (F1),

Start 18:
• Found in 2 of 146 (1.4%) of genes in pham
• Manual Annotations of this start: 2 of 136
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DillTech15_77 (F1), Ogopogo_81 (F1),

Start 24:
• Found in 114 of 146 (78.1%) of genes in pham
• Manual Annotations of this start: 1 of 136
• Called 2.6% of time when present
• Phage (with cluster) where this start called: Juice456_72 (F1), Okabe_71 (F8), SilverChicken_85 (F2),

Summary by clusters:

There are 8 clusters represented in this pham: F1, F2, F3, F4, F5, F, F8, singleton,

Info for manual annotations of cluster F1:
•Start number 16 was manually annotated 98 times for cluster F1.
•Start number 17 was manually annotated 26 times for cluster F1.
•Start number 18 was manually annotated 2 times for cluster F1.
•Start number 24 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:
•Start number 16 was manually annotated 2 times for cluster F2.
•Start number 17 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster F3:
•Start number 16 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:
•Start number 16 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster F5:
•Start number 16 was manually annotated 1 time for cluster F5.

Gene Information:

Gene: Akhila_70 Start: 45997, Stop: 46260, Start Num: 16
Candidate Starts for Akhila_70:
(Start: 16 @45997 has 104 MA's), (23, 46036), (Start: 24 @46042 has 1 MA's), (25, 46060), (27, 46084), (28, 46087), (30, 46108), (31, 46111), (33, 46120),

Gene: AlpineSix_81 Start: 48210, Stop: 48473, Start Num: 16
Candidate Starts for AlpineSix_81:
(Start: 16 @48210 has 104 MA's), (23, 48249), (26, 48282), (27, 48297), (30, 48321), (31, 48324), (32, 48330), (33, 48333),

Gene: Ardmore_61 Start: 42203, Stop: 42466, Start Num: 16
Candidate Starts for Ardmore_61:
(Start: 16 @42203 has 104 MA's), (23, 42242), (Start: 24 @42248 has 1 MA's), (25, 42266), (27, 42290), (28, 42293), (30, 42314), (31, 42317), (32, 42323), (33, 42326),

Gene: Aubs_77 Start: 48345, Stop: 48608, Start Num: 17
Candidate Starts for Aubs_77:

(15, 48309), (Start: 17 @48345 has 29 MA's), (23, 48384), (Start: 24 @48390 has 1 MA's), (27, 48432), (28, 48435), (30, 48456), (31, 48459), (32, 48465), (33, 48468),

Gene: Avani_83 Start: 45436, Stop: 45696, Start Num: 16
Candidate Starts for Avani_83:
(Start: 16 @45436 has 104 MA's), (23, 45475), (27, 45523), (28, 45526), (30, 45547), (31, 45550), (32, 45556), (33, 45559), (36, 45640),

Gene: BigPhil_69 Start: 43418, Stop: 43681, Start Num: 17
Candidate Starts for BigPhil_69:
(15, 43382), (Start: 17 @43418 has 29 MA's), (21, 43448), (23, 43457), (Start: 24 @43463 has 1 MA's), (26, 43490), (27, 43505), (30, 43529), (31, 43532), (32, 43538), (33, 43541),

Gene: Blarby_84 Start: 46350, Stop: 46613, Start Num: 17
Candidate Starts for Blarby_84:
(15, 46314), (Start: 17 @46350 has 29 MA's), (23, 46389), (Start: 24 @46395 has 1 MA's), (27, 46437), (28, 46440), (30, 46461), (31, 46464), (32, 46470), (33, 46473),

Gene: Blexus_72 Start: 47780, Stop: 48040, Start Num: 16
Candidate Starts for Blexus_72:
(Start: 16 @47780 has 104 MA's), (21, 47810), (23, 47819), (Start: 24 @47825 has 1 MA's), (27, 47867), (28, 47870), (30, 47891), (31, 47894), (32, 47900), (33, 47903),

Gene: Brookers_70 Start: 46369, Stop: 46632, Start Num: 17
Candidate Starts for Brookers_70:
(15, 46333), (Start: 17 @46369 has 29 MA's), (21, 46399), (23, 46408), (Start: 24 @46414 has 1 MA's), (26, 46441), (27, 46456), (30, 46480), (31, 46483), (32, 46489), (33, 46492),

Gene: Brushbloom_79 Start: 49136, Stop: 49399, Start Num: 16
Candidate Starts for Brushbloom_79:
(Start: 16 @49136 has 104 MA's), (21, 49166), (23, 49175), (Start: 24 @49181 has 1 MA's), (25, 49199), (27, 49223), (28, 49226), (30, 49247), (31, 49250), (32, 49256), (33, 49259),

Gene: Bubbles123_71 Start: 47407, Stop: 47667, Start Num: 16
Candidate Starts for Bubbles123_71:
(Start: 16 @47407 has 104 MA's), (23, 47446), (26, 47479), (27, 47494), (30, 47518), (31, 47521), (32, 47527), (33, 47530),

Gene: Burwell21_72 Start: 47228, Stop: 47491, Start Num: 16
Candidate Starts for Burwell21_72:
(Start: 16 @47228 has 104 MA's), (21, 47258), (23, 47267), (Start: 24 @47273 has 1 MA's), (27, 47315), (28, 47318), (30, 47339), (31, 47342), (32, 47348), (33, 47351),

Gene: Byougenkin_74 Start: 45276, Stop: 45536, Start Num: 16
Candidate Starts for Byougenkin_74:
(Start: 16 @45276 has 104 MA's), (23, 45315), (26, 45348), (27, 45363), (30, 45387), (31, 45390), (32, 45396), (33, 45399),

Gene: Cerasum_69 Start: 43436, Stop: 43699, Start Num: 17
Candidate Starts for Cerasum_69:
(15, 43400), (Start: 17 @43436 has 29 MA's), (21, 43466), (23, 43475), (Start: 24 @43481 has 1 MA's), (26, 43508), (27, 43523), (30, 43547), (31, 43550), (32, 43556), (33, 43559),

Gene: Chuckly_73 Start: 44774, Stop: 45043, Start Num: 16
Candidate Starts for Chuckly_73:
(Start: 16 @44774 has 104 MA's), (23, 44813), (Start: 24 @44819 has 1 MA's), (25, 44837), (27, 44861), (28, 44864), (30, 44885), (31, 44888), (32, 44894), (33, 44897),

Gene: Clank_77 Start: 45681, Stop: 45944, Start Num: 17
Candidate Starts for Clank_77:
(15, 45645), (Start: 17 @45681 has 29 MA's), (23, 45720), (Start: 24 @45726 has 1 MA's), (27, 45768), (28, 45771), (30, 45792), (31, 45795), (32, 45801), (33, 45804),

Gene: Clifton_68 Start: 45729, Stop: 45998, Start Num: 17
Candidate Starts for Clifton_68:
(15, 45693), (Start: 17 @45729 has 29 MA's), (23, 45768), (Start: 24 @45774 has 1 MA's), (27, 45816), (28, 45819), (30, 45840), (31, 45843), (32, 45849), (33, 45852),

Gene: Coco12_72 Start: 47493, Stop: 47756, Start Num: 17
Candidate Starts for Coco12_72:
(15, 47457), (Start: 17 @47493 has 29 MA's), (21, 47523), (23, 47532), (Start: 24 @47538 has 1 MA's), (26, 47565), (27, 47580), (30, 47604), (31, 47607), (32, 47613), (33, 47616),

Gene: Cornie_71 Start: 45997, Stop: 46260, Start Num: 16
Candidate Starts for Cornie_71:
(Start: 16 @45997 has 104 MA's), (21, 46027), (23, 46036), (26, 46069), (27, 46084), (30, 46108), (31, 46111), (32, 46117), (33, 46120),

Gene: DRBy19_79 Start: 49458, Stop: 49727, Start Num: 17
Candidate Starts for DRBy19_79:
(15, 49422), (Start: 17 @49458 has 29 MA's), (23, 49497), (Start: 24 @49503 has 1 MA's), (27, 49545), (28, 49548), (30, 49569), (31, 49572), (32, 49578), (33, 49581),

Gene: Daenerys_76 Start: 48942, Stop: 49205, Start Num: 16
Candidate Starts for Daenerys_76:
(Start: 16 @48942 has 104 MA's), (23, 48981), (Start: 24 @48987 has 1 MA's), (25, 49005), (27, 49029), (28, 49032), (30, 49053), (31, 49056), (32, 49062), (33, 49065),

Gene: Dante_75 Start: 49464, Stop: 49727, Start Num: 16
Candidate Starts for Dante_75:
(1, 49134), (2, 49152), (3, 49173), (4, 49218), (5, 49233), (6, 49278), (7, 49281), (8, 49293), (13, 49407), (14, 49410), (Start: 16 @49464 has 104 MA's), (21, 49494), (23, 49503), (Start: 24 @49509 has 1 MA's), (27, 49551), (28, 49554), (30, 49575), (31, 49578), (32, 49584), (33, 49587),

Gene: DeadP_77 Start: 46561, Stop: 46824, Start Num: 16
Candidate Starts for DeadP_77:
(Start: 16 @46561 has 104 MA's), (23, 46600), (Start: 24 @46606 has 1 MA's), (27, 46648), (28, 46651), (30, 46672), (32, 46681), (33, 46684),

Gene: Deb65_70 Start: 46664, Stop: 46927, Start Num: 16
Candidate Starts for Deb65_70:
(Start: 16 @46664 has 104 MA's), (23, 46703), (Start: 24 @46709 has 1 MA's), (25, 46727), (27, 46751), (28, 46754), (30, 46775), (31, 46778), (32, 46784), (33, 46787),

Gene: DillTech15_77 Start: 46271, Stop: 46519, Start Num: 18
Candidate Starts for DillTech15_77:

(Start: 18 @46271 has 2 MA's), (23, 46295), (Start: 24 @46301 has 1 MA's), (25, 46319), (27, 46343), (28, 46346), (30, 46367), (31, 46370), (32, 46376), (33, 46379),

Gene: DirtMcgirt_73 Start: 44667, Stop: 44927, Start Num: 16
Candidate Starts for DirtMcgirt_73:
(Start: 16 @44667 has 104 MA's), (21, 44697), (23, 44706), (Start: 24 @44712 has 1 MA's), (27, 44754), (28, 44757), (30, 44778), (31, 44781), (32, 44787), (33, 44790),

Gene: DoRead_77 Start: 46011, Stop: 46274, Start Num: 16
Candidate Starts for DoRead_77:
(Start: 16 @46011 has 104 MA's), (23, 46050), (26, 46083), (27, 46098), (30, 46122), (31, 46125), (32, 46131), (33, 46134),

Gene: Doomphist_80 Start: 48755, Stop: 49015, Start Num: 16
Candidate Starts for Doomphist_80:
(Start: 16 @48755 has 104 MA's), (23, 48794), (Start: 24 @48800 has 1 MA's), (25, 48818), (27, 48842), (28, 48845), (30, 48866), (31, 48869), (32, 48875), (33, 48878),

Gene: Doomslug_92 Start: 50173, Stop: 50436, Start Num: 16
Candidate Starts for Doomslug_92:
(Start: 16 @50173 has 104 MA's), (23, 50212), (Start: 24 @50218 has 1 MA's), (27, 50260), (28, 50263), (30, 50284), (31, 50287), (32, 50293), (33, 50296),

Gene: Dorothy_78 Start: 49393, Stop: 49656, Start Num: 16
Candidate Starts for Dorothy_78:
(Start: 16 @49393 has 104 MA's), (23, 49432), (Start: 24 @49438 has 1 MA's), (25, 49456), (27, 49480), (28, 49483), (30, 49504), (31, 49507), (32, 49513), (33, 49516),

Gene: DotProduct_72 Start: 46308, Stop: 46571, Start Num: 16
Candidate Starts for DotProduct_72:
(Start: 16 @46308 has 104 MA's), (21, 46338), (23, 46347), (Start: 24 @46353 has 1 MA's), (26, 46380), (27, 46395), (30, 46419), (31, 46422), (32, 46428), (33, 46431),

Gene: Drago_71 Start: 44670, Stop: 44930, Start Num: 16
Candidate Starts for Drago_71:
(Start: 16 @44670 has 104 MA's), (21, 44700), (23, 44709), (Start: 24 @44715 has 1 MA's), (27, 44757), (28, 44760), (30, 44781), (31, 44784), (32, 44790), (33, 44793),

Gene: EleanorGeorge_78 Start: 48348, Stop: 48611, Start Num: 16
Candidate Starts for EleanorGeorge_78:
(Start: 16 @48348 has 104 MA's), (21, 48378), (23, 48387), (Start: 24 @48393 has 1 MA's), (27, 48435), (28, 48438), (30, 48459), (31, 48462), (32, 48468), (33, 48471),

Gene: Empress_75 Start: 47566, Stop: 47826, Start Num: 16
Candidate Starts for Empress_75:
(Start: 16 @47566 has 104 MA's), (23, 47605), (Start: 24 @47611 has 1 MA's), (25, 47629), (27, 47653), (28, 47656), (30, 47677), (31, 47680), (32, 47686), (33, 47689),

Gene: Enby_75 Start: 44946, Stop: 45206, Start Num: 16
Candidate Starts for Enby_75:
(Start: 16 @44946 has 104 MA's), (21, 44976), (23, 44985), (Start: 24 @44991 has 1 MA's), (27, 45033), (28, 45036), (30, 45057), (31, 45060), (32, 45066), (33, 45069),

Gene: Fastidio_70 Start: 43064, Stop: 43327, Start Num: 16
Candidate Starts for Fastidio_70:
(Start: 16 @43064 has 104 MA's), (23, 43103), (Start: 24 @43109 has 1 MA's), (26, 43136), (27, 43151), (28, 43154), (30, 43175), (31, 43178), (32, 43184), (33, 43187),

Gene: Filuzino_77 Start: 49292, Stop: 49555, Start Num: 16
Candidate Starts for Filuzino_77:
(Start: 16 @49292 has 104 MA's), (23, 49331), (Start: 24 @49337 has 1 MA's), (25, 49355), (27, 49379), (28, 49382), (31, 49406), (32, 49412), (33, 49415),

Gene: Firehouse51_72 Start: 48557, Stop: 48820, Start Num: 17
Candidate Starts for Firehouse51_72:
(15, 48521), (Start: 17 @48557 has 29 MA's), (23, 48596), (Start: 24 @48602 has 1 MA's), (27, 48644), (28, 48647), (30, 48668), (31, 48671), (32, 48677), (33, 48680),

Gene: Flathead_75 Start: 47006, Stop: 47269, Start Num: 16
Candidate Starts for Flathead_75:
(Start: 16 @47006 has 104 MA's), (21, 47036), (23, 47045), (Start: 24 @47051 has 1 MA's), (27, 47093), (28, 47096), (30, 47117), (31, 47120), (32, 47126), (33, 47129),

Gene: Florinda_88 Start: 50208, Stop: 50471, Start Num: 16
Candidate Starts for Florinda_88:
(Start: 16 @50208 has 104 MA's), (23, 50247), (Start: 24 @50253 has 1 MA's), (27, 50295), (28, 50298), (30, 50319), (31, 50322), (32, 50328), (33, 50331), (35, 50382),

Gene: GUmbie_70 Start: 46728, Stop: 46991, Start Num: 17
Candidate Starts for GUmbie_70:
(15, 46692), (Start: 17 @46728 has 29 MA's), (23, 46767), (Start: 24 @46773 has 1 MA's), (27, 46815), (28, 46818), (30, 46839), (31, 46842), (32, 46848),

Gene: Gandalph_74 Start: 44756, Stop: 45019, Start Num: 16
Candidate Starts for Gandalph_74:
(Start: 16 @44756 has 104 MA's), (21, 44786), (23, 44795), (Start: 24 @44801 has 1 MA's), (26, 44828), (27, 44843), (30, 44867), (31, 44870), (32, 44876), (33, 44879),

Gene: Geralt_70 Start: 46662, Stop: 46925, Start Num: 16
Candidate Starts for Geralt_70:
(Start: 16 @46662 has 104 MA's), (23, 46701), (Start: 24 @46707 has 1 MA's), (25, 46725), (27, 46749), (28, 46752), (30, 46773), (31, 46776), (32, 46782), (33, 46785),

Gene: GigiOuiOui_70 Start: 46399, Stop: 46662, Start Num: 16
Candidate Starts for GigiOuiOui_70:
(Start: 16 @46399 has 104 MA's), (21, 46429), (23, 46438), (Start: 24 @46444 has 1 MA's), (26, 46471), (27, 46486), (30, 46510), (31, 46513), (32, 46519), (33, 46522),

Gene: Girafales_85 Start: 49813, Stop: 50076, Start Num: 16
Candidate Starts for Girafales_85:
(Start: 16 @49813 has 104 MA's), (23, 49852), (Start: 24 @49858 has 1 MA's), (27, 49900), (28, 49903), (30, 49924), (31, 49927), (32, 49933), (33, 49936), (35, 49987),

Gene: Gorge_77 Start: 48668, Stop: 48937, Start Num: 17
Candidate Starts for Gorge_77:

(15, 48632), (Start: 17 @48668 has 29 MA's), (23, 48707), (Start: 24 @48713 has 1 MA's), (27, 48755), (28, 48758), (30, 48779), (31, 48782), (32, 48788), (33, 48791),

Gene: Guppsters_70 Start: 45099, Stop: 45362, Start Num: 17
Candidate Starts for Guppsters_70:
(15, 45063), (Start: 17 @45099 has 29 MA's), (23, 45138), (Start: 24 @45144 has 1 MA's), (27, 45186), (28, 45189), (30, 45210), (31, 45213), (32, 45219), (33, 45222),

Gene: Harley_75 Start: 46896, Stop: 47156, Start Num: 16
Candidate Starts for Harley_75:
(Start: 16 @46896 has 104 MA's), (23, 46935), (Start: 24 @46941 has 1 MA's), (25, 46959), (27, 46983), (28, 46986), (30, 47007), (31, 47010), (32, 47016), (33, 47019),

Gene: IMpilo_66 Start: 43421, Stop: 43684, Start Num: 16
Candidate Starts for IMpilo_66:
(Start: 16 @43421 has 104 MA's), (22, 43454), (23, 43460), (Start: 24 @43466 has 1 MA's), (25, 43484), (27, 43508), (28, 43511), (30, 43532), (31, 43535), (32, 43541), (33, 43544),

Gene: IbOuu_70 Start: 45535, Stop: 45804, Start Num: 17
Candidate Starts for IbOuu_70:
(15, 45499), (Start: 17 @45535 has 29 MA's), (23, 45574), (Start: 24 @45580 has 1 MA's), (27, 45622), (28, 45625), (30, 45646), (31, 45649), (32, 45655), (33, 45658),

Gene: Ibhubesi_73 Start: 45070, Stop: 45330, Start Num: 16
Candidate Starts for Ibhubesi_73:
(Start: 16 @45070 has 104 MA's), (23, 45109), (26, 45142), (27, 45157), (30, 45181), (31, 45184), (32, 45190), (33, 45193),

Gene: Inventum_75 Start: 47578, Stop: 47841, Start Num: 16
Candidate Starts for Inventum_75:
(Start: 16 @47578 has 104 MA's), (23, 47617), (Start: 24 @47623 has 1 MA's), (25, 47641), (27, 47665), (28, 47668), (30, 47689), (31, 47692), (32, 47698), (33, 47701),

Gene: IrishSherpFalk_76 Start: 48130, Stop: 48390, Start Num: 16
Candidate Starts for IrishSherpFalk_76:
(Start: 16 @48130 has 104 MA's), (23, 48169), (26, 48202), (27, 48217), (30, 48241), (31, 48244), (32, 48250), (33, 48253),

Gene: Jabbawokkie_85 Start: 46270, Stop: 46533, Start Num: 17
Candidate Starts for Jabbawokkie_85:
(15, 46234), (Start: 17 @46270 has 29 MA's), (23, 46309), (Start: 24 @46315 has 1 MA's), (27, 46357), (28, 46360), (30, 46381), (31, 46384), (32, 46390), (33, 46393),

Gene: JalFarm20_84 Start: 48356, Stop: 48619, Start Num: 16
Candidate Starts for JalFarm20_84:
(Start: 16 @48356 has 104 MA's), (23, 48395), (Start: 24 @48401 has 1 MA's), (25, 48419), (27, 48443), (28, 48446), (30, 48467), (31, 48470), (32, 48476), (33, 48479),

Gene: James_76 Start: 48793, Stop: 49062, Start Num: 17
Candidate Starts for James_76:
(15, 48757), (Start: 17 @48793 has 29 MA's), (23, 48832), (Start: 24 @48838 has 1 MA's), (27, 48880), (28, 48883), (30, 48904), (31, 48907), (32, 48913), (33, 48916),

Gene: Jant_77 Start: 46286, Stop: 46549, Start Num: 16
Candidate Starts for Jant_77:
(Start: 16 @46286 has 104 MA's), (23, 46325), (Start: 24 @46331 has 1 MA's), (27, 46373), (28, 46376), (30, 46397), (31, 46400), (32, 46406), (33, 46409),

Gene: Jarcob_75 Start: 48390, Stop: 48659, Start Num: 17
Candidate Starts for Jarcob_75:
(15, 48354), (Start: 17 @48390 has 29 MA's), (23, 48429), (Start: 24 @48435 has 1 MA's), (27, 48477), (28, 48480), (30, 48501), (31, 48504), (32, 48510), (33, 48513),

Gene: Jennelsea_72 Start: 45951, Stop: 46214, Start Num: 17
Candidate Starts for Jennelsea_72:
(15, 45915), (Start: 17 @45951 has 29 MA's), (23, 45990), (Start: 24 @45996 has 1 MA's), (27, 46038), (28, 46041), (30, 46062), (31, 46065), (32, 46071), (33, 46074),

Gene: Jinglebell_81 Start: 48209, Stop: 48472, Start Num: 16
Candidate Starts for Jinglebell_81:
(Start: 16 @48209 has 104 MA's), (23, 48248), (26, 48281), (27, 48296), (30, 48320), (31, 48323), (32, 48329), (33, 48332),

Gene: JoeyJr_77 Start: 48567, Stop: 48830, Start Num: 16
Candidate Starts for JoeyJr_77:
(Start: 16 @48567 has 104 MA's), (23, 48606), (Start: 24 @48612 has 1 MA's), (25, 48630), (27, 48654), (28, 48657), (30, 48678), (31, 48681), (32, 48687), (33, 48690),

Gene: Juice456_72 Start: 46357, Stop: 46575, Start Num: 24
Candidate Starts for Juice456_72:
(Start: 16 @46312 has 104 MA's), (23, 46351), (Start: 24 @46357 has 1 MA's), (25, 46375), (27, 46399), (28, 46402), (30, 46423), (31, 46426), (32, 46432), (33, 46435),

Gene: Kenuha5_73 Start: 48117, Stop: 48380, Start Num: 16
Candidate Starts for Kenuha5_73:
(Start: 16 @48117 has 104 MA's), (21, 48147), (23, 48156), (Start: 24 @48162 has 1 MA's), (26, 48189), (27, 48204), (30, 48228), (31, 48231), (32, 48237), (33, 48240),

Gene: Kimberlium_75 Start: 46441, Stop: 46704, Start Num: 17
Candidate Starts for Kimberlium_75:
(15, 46405), (Start: 17 @46441 has 29 MA's), (23, 46480), (Start: 24 @46486 has 1 MA's), (27, 46528), (28, 46531), (30, 46552), (31, 46555), (32, 46561), (33, 46564),

Gene: KingMidas_76 Start: 47981, Stop: 48241, Start Num: 16
Candidate Starts for KingMidas_76:
(Start: 16 @47981 has 104 MA's), (23, 48020), (Start: 24 @48026 has 1 MA's), (25, 48044), (27, 48068), (28, 48071), (30, 48092), (31, 48095), (32, 48101), (33, 48104),

Gene: Kingsley_79 Start: 49818, Stop: 50081, Start Num: 16
Candidate Starts for Kingsley_79:
(Start: 16 @49818 has 104 MA's), (23, 49857), (Start: 24 @49863 has 1 MA's), (27, 49905), (28, 49908), (30, 49929), (31, 49932), (32, 49938), (33, 49941),

Gene: KristaRAM_74 Start: 46681, Stop: 46944, Start Num: 16
Candidate Starts for KristaRAM_74:

(Start: 16 @46681 has 104 MA's), (23, 46720), (Start: 24 @46726 has 1 MA's), (25, 46744), (27, 46768), (28, 46771), (30, 46792), (31, 46795), (32, 46801), (33, 46804),

Gene: Latretium_72 Start: 45212, Stop: 45475, Start Num: 16
Candidate Starts for Latretium_72:
(Start: 16 @45212 has 104 MA's), (23, 45251), (26, 45284), (27, 45299), (30, 45323), (31, 45326), (32, 45332), (33, 45335),

Gene: Leozinho_75 Start: 45465, Stop: 45725, Start Num: 16
Candidate Starts for Leozinho_75:
(Start: 16 @45465 has 104 MA's), (21, 45495), (23, 45504), (Start: 24 @45510 has 1 MA's), (27, 45552), (28, 45555), (30, 45576), (31, 45579), (32, 45585), (33, 45588),

Gene: Leperchaun_75 Start: 47801, Stop: 48064, Start Num: 16
Candidate Starts for Leperchaun_75:
(Start: 16 @47801 has 104 MA's), (23, 47840), (Start: 24 @47846 has 1 MA's), (25, 47864), (27, 47888), (28, 47891), (30, 47912), (31, 47915), (32, 47921), (33, 47924),

Gene: LittleShirley_76 Start: 46737, Stop: 47000, Start Num: 16
Candidate Starts for LittleShirley_76:
(Start: 16 @46737 has 104 MA's), (23, 46776), (Start: 24 @46782 has 1 MA's), (27, 46824), (28, 46827), (30, 46848), (31, 46851), (32, 46857), (33, 46860),

Gene: Lizziana_80 Start: 49116, Stop: 49385, Start Num: 17
Candidate Starts for Lizziana_80:
(15, 49080), (Start: 17 @49116 has 29 MA's), (23, 49155), (Start: 24 @49161 has 1 MA's), (27, 49203), (28, 49206), (30, 49227), (31, 49230), (32, 49236), (33, 49239),

Gene: Llama_81 Start: 48065, Stop: 48328, Start Num: 16
Candidate Starts for Llama_81:
(Start: 16 @48065 has 104 MA's), (23, 48104), (26, 48137), (27, 48152), (30, 48176), (31, 48179), (32, 48185), (33, 48188),

Gene: Llij_70 Start: 44824, Stop: 45084, Start Num: 16
Candidate Starts for Llij_70:
(Start: 16 @44824 has 104 MA's), (21, 44854), (23, 44863), (Start: 24 @44869 has 1 MA's), (27, 44911), (28, 44914), (30, 44935), (31, 44938), (32, 44944), (33, 44947),

Gene: Lorde_74 Start: 44111, Stop: 44371, Start Num: 16
Candidate Starts for Lorde_74:
(Start: 16 @44111 has 104 MA's), (21, 44141), (23, 44150), (Start: 24 @44156 has 1 MA's), (27, 44198), (28, 44201), (30, 44222), (31, 44225), (32, 44231), (33, 44234),

Gene: Lucia_73 Start: 44959, Stop: 45219, Start Num: 16
Candidate Starts for Lucia_73:
(Start: 16 @44959 has 104 MA's), (21, 44989), (23, 44998), (Start: 24 @45004 has 1 MA's), (27, 45046), (28, 45049), (30, 45070), (31, 45073), (32, 45079), (33, 45082),

Gene: MadMen_73 Start: 46044, Stop: 46307, Start Num: 16
Candidate Starts for MadMen_73:
(10, 45888), (12, 45975), (Start: 16 @46044 has 104 MA's), (23, 46083), (26, 46116), (27, 46131), (30, 46155), (31, 46158), (32, 46164), (33, 46167),

Gene: Maravista_77 Start: 50144, Stop: 50407, Start Num: 16
Candidate Starts for Maravista_77:
(Start: 16 @50144 has 104 MA's), (21, 50174), (23, 50183), (Start: 24 @50189 has 1 MA's), (27, 50231), (28, 50234), (30, 50255), (31, 50258), (32, 50264), (33, 50267),

Gene: Marker_76 Start: 46631, Stop: 46891, Start Num: 16
Candidate Starts for Marker_76:
(Start: 16 @46631 has 104 MA's), (23, 46670), (26, 46703), (27, 46718), (30, 46742), (31, 46745), (32, 46751), (33, 46754),

Gene: Martik_77 Start: 49625, Stop: 49885, Start Num: 16
Candidate Starts for Martik_77:
(Start: 16 @49625 has 104 MA's), (21, 49655), (23, 49664), (Start: 24 @49670 has 1 MA's), (27, 49712), (28, 49715), (30, 49736), (31, 49739), (32, 49745), (33, 49748),

Gene: Mattes_77 Start: 48793, Stop: 49062, Start Num: 17
Candidate Starts for Mattes_77:
(15, 48757), (Start: 17 @48793 has 29 MA's), (23, 48832), (Start: 24 @48838 has 1 MA's), (27, 48880), (28, 48883), (30, 48904), (31, 48907), (32, 48913), (33, 48916),

Gene: MilanaBonita_69 Start: 45997, Stop: 46260, Start Num: 16
Candidate Starts for MilanaBonita_69:
(Start: 16 @45997 has 104 MA's), (23, 46036), (Start: 24 @46042 has 1 MA's), (25, 46060), (27, 46084), (28, 46087), (30, 46108), (31, 46111), (33, 46120),

Gene: MinionDave_71 Start: 47066, Stop: 47329, Start Num: 16
Candidate Starts for MinionDave_71:
(Start: 16 @47066 has 104 MA's), (23, 47105), (26, 47138), (27, 47153), (30, 47177), (31, 47180), (32, 47186), (33, 47189),

Gene: Minnie_73 Start: 49177, Stop: 49440, Start Num: 16
Candidate Starts for Minnie_73:
(Start: 16 @49177 has 104 MA's), (21, 49207), (23, 49216), (Start: 24 @49222 has 1 MA's), (25, 49240), (27, 49264), (30, 49288), (31, 49291), (32, 49297), (33, 49300),

Gene: Modragons_79 Start: 48053, Stop: 48316, Start Num: 16
Candidate Starts for Modragons_79:
(Start: 16 @48053 has 104 MA's), (23, 48092), (26, 48125), (27, 48140), (30, 48164), (31, 48167), (32, 48173), (33, 48176),

Gene: Mozy_82 Start: 46888, Stop: 47151, Start Num: 16
Candidate Starts for Mozy_82:
(Start: 16 @46888 has 104 MA's), (23, 46927), (Start: 24 @46933 has 1 MA's), (26, 46960), (27, 46975), (30, 46999), (33, 47011),

Gene: Ms6_74 Start: 43560, Stop: 43823, Start Num: 16
Candidate Starts for Ms6_74:
(Start: 16 @43560 has 104 MA's), (23, 43599), (Start: 24 @43605 has 1 MA's), (25, 43623), (27, 43647), (28, 43650), (30, 43671), (31, 43674), (32, 43680), (33, 43683), (35, 43734),

Gene: MulchExplorer_74 Start: 46440, Stop: 46703, Start Num: 17
Candidate Starts for MulchExplorer_74:

(15, 46404), (Start: 17 @46440 has 29 MA's), (23, 46479), (Start: 24 @46485 has 1 MA's), (27, 46527), (28, 46530), (30, 46551), (31, 46554), (32, 46560), (33, 46563),

Gene: Mwanjiwa_79 Start: 48590, Stop: 48853, Start Num: 16
Candidate Starts for Mwanjiwa_79:
(Start: 16 @48590 has 104 MA's), (23, 48629), (26, 48662), (27, 48677), (30, 48701), (31, 48704), (32, 48710), (33, 48713), (36, 48794),

Gene: Nichirin_76 Start: 47427, Stop: 47690, Start Num: 16
Candidate Starts for Nichirin_76:
(Start: 16 @47427 has 104 MA's), (23, 47466), (26, 47499), (27, 47514), (30, 47538), (31, 47541), (32, 47547), (33, 47550),

Gene: Nimbo_69 Start: 46665, Stop: 46928, Start Num: 16
Candidate Starts for Nimbo_69:
(Start: 16 @46665 has 104 MA's), (23, 46704), (Start: 24 @46710 has 1 MA's), (25, 46728), (27, 46752), (28, 46755), (30, 46776), (31, 46779), (32, 46785), (33, 46788),

Gene: Ochi17_80 Start: 47660, Stop: 47923, Start Num: 16
Candidate Starts for Ochi17_80:
(Start: 16 @47660 has 104 MA's), (23, 47699), (26, 47732), (27, 47747), (30, 47771), (31, 47774), (32, 47780), (33, 47783),

Gene: OfUltron_82 Start: 48209, Stop: 48472, Start Num: 16
Candidate Starts for OfUltron_82:
(Start: 16 @48209 has 104 MA's), (23, 48248), (26, 48281), (27, 48296), (30, 48320), (31, 48323), (32, 48329), (33, 48332),

Gene: Ogopogo_81 Start: 47195, Stop: 47443, Start Num: 18
Candidate Starts for Ogopogo_81:
(Start: 18 @47195 has 2 MA's), (23, 47219), (Start: 24 @47225 has 1 MA's), (25, 47243), (27, 47267), (28, 47270), (30, 47291), (31, 47294), (32, 47300), (33, 47303),

Gene: Okabe_71 Start: 44636, Stop: 44854, Start Num: 24
Candidate Starts for Okabe_71:
(Start: 16 @44591 has 104 MA's), (23, 44630), (Start: 24 @44636 has 1 MA's), (27, 44678), (28, 44681), (30, 44702), (31, 44705), (32, 44711), (33, 44714), (36, 44795),

Gene: OldBen_74 Start: 48057, Stop: 48320, Start Num: 16
Candidate Starts for OldBen_74:
(Start: 16 @48057 has 104 MA's), (23, 48096), (Start: 24 @48102 has 1 MA's), (25, 48120), (27, 48144), (28, 48147), (30, 48168), (31, 48171), (32, 48177), (33, 48180),

Gene: OlympiaSaint_75 Start: 47735, Stop: 48004, Start Num: 17
Candidate Starts for OlympiaSaint_75:
(15, 47699), (Start: 17 @47735 has 29 MA's), (23, 47774), (Start: 24 @47780 has 1 MA's), (27, 47822), (28, 47825), (30, 47846), (31, 47849), (32, 47855), (33, 47858),

Gene: PHappiness_77 Start: 48886, Stop: 49149, Start Num: 16
Candidate Starts for PHappiness_77:
(Start: 16 @48886 has 104 MA's), (23, 48925), (Start: 24 @48931 has 1 MA's), (25, 48949), (27, 48973), (28, 48976), (30, 48997), (31, 49000), (32, 49006), (33, 49009),

Gene: Phanphagia_74 Start: 47614, Stop: 47877, Start Num: 16
Candidate Starts for Phanphagia_74:
(Start: 16 @47614 has 104 MA's), (23, 47653), (Start: 24 @47659 has 1 MA's), (27, 47701), (28, 47704), (30, 47725), (31, 47728), (32, 47734), (33, 47737),

Gene: Phatniss_71 Start: 45919, Stop: 46179, Start Num: 16
Candidate Starts for Phatniss_71:
(Start: 16 @45919 has 104 MA's), (21, 45949), (23, 45958), (Start: 24 @45964 has 1 MA's), (27, 46006), (28, 46009), (30, 46030), (31, 46033), (32, 46039), (33, 46042),

Gene: Philus_78 Start: 49434, Stop: 49703, Start Num: 17
Candidate Starts for Philus_78:
(15, 49398), (Start: 17 @49434 has 29 MA's), (23, 49473), (Start: 24 @49479 has 1 MA's), (27, 49521), (28, 49524), (30, 49545), (31, 49548), (32, 49554), (33, 49557),

Gene: Pippy_72 Start: 46520, Stop: 46780, Start Num: 16
Candidate Starts for Pippy_72:
(Start: 16 @46520 has 104 MA's), (21, 46550), (23, 46559), (Start: 24 @46565 has 1 MA's), (27, 46607), (28, 46610), (30, 46631), (31, 46634), (32, 46640), (33, 46643),

Gene: Poenanya_80 Start: 48755, Stop: 49015, Start Num: 16
Candidate Starts for Poenanya_80:
(Start: 16 @48755 has 104 MA's), (23, 48794), (Start: 24 @48800 has 1 MA's), (25, 48818), (27, 48842), (28, 48845), (30, 48866), (31, 48869), (32, 48875), (33, 48878),

Gene: Polka14_81 Start: 49545, Stop: 49805, Start Num: 16
Candidate Starts for Polka14_81:
(Start: 16 @49545 has 104 MA's), (23, 49584), (Start: 24 @49590 has 1 MA's), (25, 49608), (27, 49632), (28, 49635), (30, 49656), (31, 49659), (32, 49665), (33, 49668),

Gene: PopTart_66 Start: 44400, Stop: 44669, Start Num: 16
Candidate Starts for PopTart_66:
(Start: 16 @44400 has 104 MA's), (23, 44439), (27, 44487), (28, 44490), (30, 44511), (31, 44514), (32, 44520), (33, 44523),

Gene: QuickMath_74 Start: 46664, Stop: 46927, Start Num: 17
Candidate Starts for QuickMath_74:
(15, 46628), (Start: 17 @46664 has 29 MA's), (23, 46703), (Start: 24 @46709 has 1 MA's), (27, 46751), (28, 46754), (30, 46775), (31, 46778), (32, 46784), (33, 46787),

Gene: Quico_85 Start: 50028, Stop: 50291, Start Num: 16
Candidate Starts for Quico_85:
(Start: 16 @50028 has 104 MA's), (23, 50067), (Start: 24 @50073 has 1 MA's), (27, 50115), (28, 50118), (30, 50139), (31, 50142), (32, 50148), (33, 50151), (35, 50202),

Gene: RedBird_78 Start: 49260, Stop: 49523, Start Num: 16
Candidate Starts for RedBird_78:
(Start: 16 @49260 has 104 MA's), (23, 49299), (Start: 24 @49305 has 1 MA's), (25, 49323), (27, 49347), (28, 49350), (30, 49371), (31, 49374), (32, 49380), (33, 49383),

Gene: Rita_82 Start: 49678, Stop: 49941, Start Num: 16
Candidate Starts for Rita_82:

(Start: 16 @49678 has 104 MA's), (23, 49717), (26, 49750), (27, 49765), (30, 49789), (31, 49792), (32, 49798), (33, 49801),

Gene: RitaG_77 Start: 48688, Stop: 48951, Start Num: 16
Candidate Starts for RitaG_77:
(Start: 16 @48688 has 104 MA's), (23, 48727), (Start: 24 @48733 has 1 MA's), (25, 48751), (27, 48775), (28, 48778), (30, 48799), (31, 48802), (32, 48808), (33, 48811),

Gene: SG4_73 Start: 46463, Stop: 46726, Start Num: 16
Candidate Starts for SG4_73:
(Start: 16 @46463 has 104 MA's), (23, 46502), (Start: 24 @46508 has 1 MA's), (27, 46550), (28, 46553), (30, 46574), (31, 46577), (32, 46583), (33, 46586),

Gene: Saal_75 Start: 48487, Stop: 48756, Start Num: 17
Candidate Starts for Saal_75:
(15, 48451), (Start: 17 @48487 has 29 MA's), (23, 48526), (Start: 24 @48532 has 1 MA's), (27, 48574), (28, 48577), (30, 48598), (31, 48601), (32, 48607), (33, 48610),

Gene: Sandalphon_71 Start: 47162, Stop: 47425, Start Num: 16
Candidate Starts for Sandalphon_71:
(Start: 16 @47162 has 104 MA's), (21, 47192), (23, 47201), (Start: 24 @47207 has 1 MA's), (25, 47225), (27, 47249), (30, 47273), (31, 47276), (32, 47282), (33, 47285),

Gene: Sassafras_78 Start: 47577, Stop: 47840, Start Num: 16
Candidate Starts for Sassafras_78:
(Start: 16 @47577 has 104 MA's), (23, 47616), (Start: 24 @47622 has 1 MA's), (25, 47640), (27, 47664), (28, 47667), (30, 47688), (31, 47691), (32, 47697), (33, 47700),

Gene: SassyB_66 Start: 44400, Stop: 44669, Start Num: 16
Candidate Starts for SassyB_66:
(Start: 16 @44400 has 104 MA's), (23, 44439), (27, 44487), (28, 44490), (30, 44511), (31, 44514), (32, 44520), (33, 44523),

Gene: Scottish_75 Start: 47236, Stop: 47496, Start Num: 16
Candidate Starts for Scottish_75:
(Start: 16 @47236 has 104 MA's), (23, 47275), (Start: 24 @47281 has 1 MA's), (25, 47299), (27, 47323), (28, 47326), (30, 47347), (31, 47350), (32, 47356), (33, 47359),

Gene: Seabastian_82 Start: 48210, Stop: 48473, Start Num: 16
Candidate Starts for Seabastian_82:
(Start: 16 @48210 has 104 MA's), (23, 48249), (26, 48282), (27, 48297), (30, 48321), (31, 48324), (32, 48330), (33, 48333),

Gene: Seagreen_77 Start: 48510, Stop: 48773, Start Num: 16
Candidate Starts for Seagreen_77:
(Start: 16 @48510 has 104 MA's), (23, 48549), (Start: 24 @48555 has 1 MA's), (25, 48573), (27, 48597), (28, 48600), (30, 48621), (31, 48624), (32, 48630), (33, 48633),

Gene: Shauna1_75 Start: 47864, Stop: 48127, Start Num: 16
Candidate Starts for Shauna1_75:
(Start: 16 @47864 has 104 MA's), (23, 47903), (Start: 24 @47909 has 1 MA's), (27, 47951), (28, 47954), (30, 47975), (31, 47978), (32, 47984), (33, 47987),

Gene: ShroomBoi_76 Start: 47619, Stop: 47882, Start Num: 16
Candidate Starts for ShroomBoi_76:
(Start: 16 @47619 has 104 MA's), (21, 47649), (23, 47658), (Start: 24 @47664 has 1 MA's), (27, 47706), (28, 47709), (30, 47730), (31, 47733), (32, 47739), (33, 47742),

Gene: SiSi_72 Start: 46694, Stop: 46957, Start Num: 16
Candidate Starts for SiSi_72:
(Start: 16 @46694 has 104 MA's), (23, 46733), (Start: 24 @46739 has 1 MA's), (27, 46781), (28, 46784), (30, 46805), (31, 46808), (32, 46814), (33, 46817),

Gene: SilverChicken_85 Start: 47600, Stop: 47818, Start Num: 24
Candidate Starts for SilverChicken_85:
(Start: 16 @47555 has 104 MA's), (21, 47585), (23, 47594), (Start: 24 @47600 has 1 MA's), (27, 47642), (28, 47645), (30, 47666), (31, 47669), (32, 47675), (33, 47678),

Gene: Soul22_79 Start: 46222, Stop: 46485, Start Num: 17
Candidate Starts for Soul22_79:
(15, 46186), (Start: 17 @46222 has 29 MA's), (23, 46261), (Start: 24 @46267 has 1 MA's), (27, 46309), (28, 46312), (30, 46333), (31, 46336), (32, 46342), (33, 46345),

Gene: Spoonbill_73 Start: 45779, Stop: 46048, Start Num: 17
Candidate Starts for Spoonbill_73:
(15, 45743), (Start: 17 @45779 has 29 MA's), (23, 45818), (Start: 24 @45824 has 1 MA's), (27, 45866), (28, 45869), (30, 45890), (31, 45893), (32, 45899), (33, 45902),

Gene: Squirty_77 Start: 50791, Stop: 51054, Start Num: 16
Candidate Starts for Squirty_77:
(Start: 16 @50791 has 104 MA's), (23, 50830), (26, 50863), (27, 50878), (30, 50902), (31, 50905), (32, 50911), (33, 50914),

Gene: SuperGrey_76 Start: 49600, Stop: 49863, Start Num: 16
Candidate Starts for SuperGrey_76:
(Start: 16 @49600 has 104 MA's), (21, 49630), (23, 49639), (Start: 24 @49645 has 1 MA's), (26, 49672), (27, 49687), (30, 49711), (31, 49714), (32, 49720), (33, 49723),

Gene: Taj_82 Start: 49318, Stop: 49581, Start Num: 16
Candidate Starts for Taj_82:
(Start: 16 @49318 has 104 MA's), (23, 49357), (Start: 24 @49363 has 1 MA's), (25, 49381), (27, 49405), (28, 49408), (30, 49429), (31, 49432), (32, 49438), (33, 49441), (35, 49492),

Gene: Tchotchke_72 Start: 46207, Stop: 46467, Start Num: 16
Candidate Starts for Tchotchke_72:
(Start: 16 @46207 has 104 MA's), (21, 46237), (23, 46246), (Start: 24 @46252 has 1 MA's), (26, 46279), (27, 46294), (30, 46318), (31, 46321), (32, 46327), (33, 46330),

Gene: ThetaBob_79 Start: 47510, Stop: 47773, Start Num: 16
Candidate Starts for ThetaBob_79:
(Start: 16 @47510 has 104 MA's), (21, 47540), (23, 47549), (Start: 24 @47555 has 1 MA's), (25, 47573), (27, 47597), (28, 47600), (30, 47621), (31, 47624), (32, 47630), (33, 47633),

Gene: Totinger_72 Start: 45814, Stop: 46077, Start Num: 16
Candidate Starts for Totinger_72:

(Start: 16 @45814 has 104 MA's), (21, 45844), (23, 45853), (Start: 24 @45859 has 1 MA's), (26, 45886), (27, 45901), (30, 45925), (31, 45928), (32, 45934), (33, 45937),

Gene: Tweety_76 Start: 48310, Stop: 48573, Start Num: 16
Candidate Starts for Tweety_76:
(Start: 16 @48310 has 104 MA's), (23, 48349), (26, 48382), (27, 48397), (30, 48421), (31, 48424), (32, 48430), (33, 48433),

Gene: UncleRicky_73 Start: 46167, Stop: 46427, Start Num: 16
Candidate Starts for UncleRicky_73:
(Start: 16 @46167 has 104 MA's), (21, 46197), (23, 46206), (Start: 24 @46212 has 1 MA's), (27, 46254), (28, 46257), (30, 46278), (31, 46281), (32, 46287), (33, 46290),

Gene: Veteran_68 Start: 46574, Stop: 46837, Start Num: 17
Candidate Starts for Veteran_68:
(15, 46538), (Start: 17 @46574 has 29 MA's), (23, 46613), (Start: 24 @46619 has 1 MA's), (27, 46661), (28, 46664), (30, 46685), (31, 46688), (32, 46694), (33, 46697),

Gene: Vivum_76 Start: 49443, Stop: 49706, Start Num: 16
Candidate Starts for Vivum_76:
(Start: 16 @49443 has 104 MA's), (21, 49473), (23, 49482), (Start: 24 @49488 has 1 MA's), (26, 49515), (27, 49530), (30, 49554), (31, 49557), (32, 49563), (33, 49566),

Gene: Wachhund_75 Start: 45262, Stop: 45531, Start Num: 16
Candidate Starts for Wachhund_75:
(Start: 16 @45262 has 104 MA's), (23, 45301), (26, 45334), (27, 45349), (30, 45373), (31, 45376), (32, 45382), (33, 45385),

Gene: Wee_81 Start: 49394, Stop: 49657, Start Num: 16
Candidate Starts for Wee_81:
(Start: 16 @49394 has 104 MA's), (23, 49433), (Start: 24 @49439 has 1 MA's), (25, 49457), (27, 49481), (28, 49484), (30, 49505), (31, 49508), (32, 49514), (33, 49517), (35, 49568),

Gene: Whack_65 Start: 43306, Stop: 43608, Start Num: 16
Candidate Starts for Whack_65:
(9, 43141), (11, 43198), (Start: 16 @43306 has 104 MA's), (19, 43324), (20, 43327), (29, 43399), (34, 43483),

Gene: Whatsapiecost_70 Start: 43202, Stop: 43465, Start Num: 16
Candidate Starts for Whatsapiecost_70:
(Start: 16 @43202 has 104 MA's), (23, 43241), (Start: 24 @43247 has 1 MA's), (27, 43289), (28, 43292), (30, 43313), (31, 43316), (32, 43322), (33, 43325),

Gene: Whouxphf_72 Start: 47287, Stop: 47550, Start Num: 16
Candidate Starts for Whouxphf_72:
(Start: 16 @47287 has 104 MA's), (23, 47326), (26, 47359), (27, 47374), (30, 47398), (31, 47401), (32, 47407), (33, 47410),

Gene: WillSterrel_76 Start: 48163, Stop: 48423, Start Num: 16
Candidate Starts for WillSterrel_76:
(Start: 16 @48163 has 104 MA's), (23, 48202), (26, 48235), (27, 48250), (30, 48274), (31, 48277), (32, 48283), (33, 48286),

Gene: XFactor_71 Start: 46580, Stop: 46843, Start Num: 16
Candidate Starts for XFactor_71:
(Start: 16 @46580 has 104 MA's), (23, 46619), (26, 46652), (27, 46667), (30, 46691), (31, 46694), (32, 46700), (33, 46703),

Gene: Yorick_73 Start: 48700, Stop: 48960, Start Num: 16
Candidate Starts for Yorick_73:
(Start: 16 @48700 has 104 MA's), (21, 48730), (23, 48739), (Start: 24 @48745 has 1 MA's), (27, 48787), (28, 48790), (30, 48811), (31, 48814), (32, 48820), (33, 48823),

Gene: Yoshi_89 Start: 48568, Stop: 48831, Start Num: 16
Candidate Starts for Yoshi_89:
(Start: 16 @48568 has 104 MA's), (23, 48607), (26, 48640), (27, 48655), (30, 48679), (31, 48682), (32, 48688), (33, 48691),

Gene: Zapner_84 Start: 46364, Stop: 46627, Start Num: 17
Candidate Starts for Zapner_84:
(15, 46328), (Start: 17 @46364 has 29 MA's), (23, 46403), (Start: 24 @46409 has 1 MA's), (27, 46451), (28, 46454), (30, 46475), (31, 46478), (32, 46484), (33, 46487),

Gene: Zerg_74 Start: 47425, Stop: 47688, Start Num: 16
Candidate Starts for Zerg_74:
(Start: 16 @47425 has 104 MA's), (23, 47464), (26, 47497), (27, 47512), (30, 47536), (31, 47539), (32, 47545), (33, 47548), (36, 47629),

Gene: Zizzle_78 Start: 48816, Stop: 49079, Start Num: 17
Candidate Starts for Zizzle_78:
(15, 48780), (Start: 17 @48816 has 29 MA's), (23, 48855), (Start: 24 @48861 has 1 MA's), (27, 48903), (28, 48906), (30, 48927), (31, 48930), (32, 48936), (33, 48939),