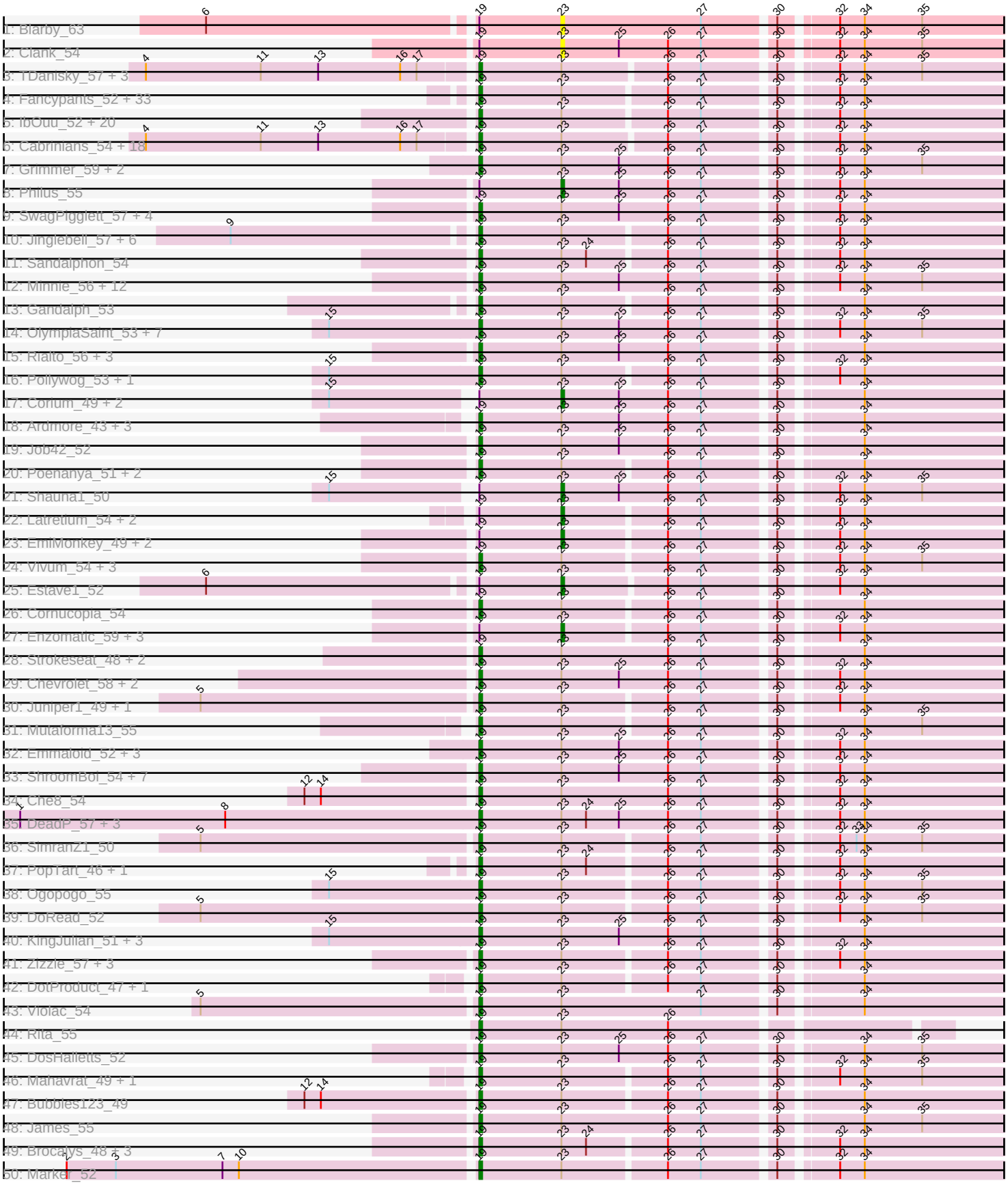
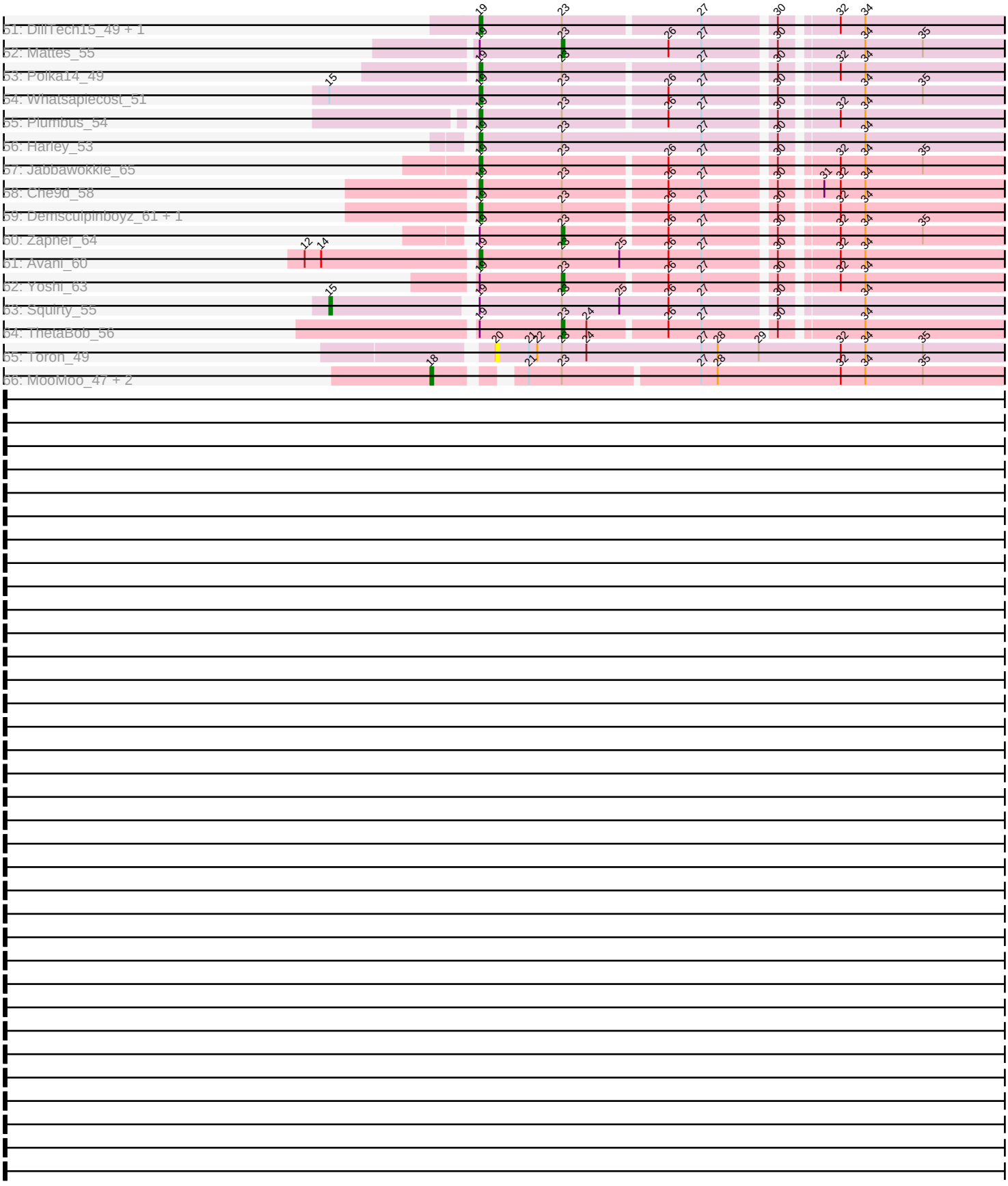
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1: Blarby_63
2: Clank_54
3: TDanisky_57 + 3
4: Fancypants_52 + 33
5: IbOuu_52 + 20
6: Cabrinians_54 + 18
7: Grimmer_59 + 2
8: Philus_55
9: SwagPiggiett_57 + 4
10: Jinglebell_57 + 6
11: Sandalphon_54
12: Minnie_56 + 12
13: Gandalph_53
14: OlympiaSaint_53 + 7
15: Rialto_56 + 3
16: Pollywog_53 + 1
17: Corium_49 + 2
18: Ardmore_43 + 3
19: Job42_52
20: Poenanya_51 + 2
21: Shauna1_50
22: Latretium_54 + 2
23: EmiMonkey_49 + 2
24: Vivum_54 + 3
25: Estave1_52
26: Cornucopia_54
27: Enzomatic_59 + 3
28: Strokeseat_48 + 2
29: Chevrolet_58 + 2
30: Juniper1_49 + 1
31: Mutaforma13_55
32: Emmaloid_52 + 3
33: ShroomBoi_54 + 7
34: Che8_54
35: DeadP_57 + 3
36: Simran21_50
37: PopTart_46 + 1
38: Ogopogo_55
39: DoRead_52
40: KingJulian_51 + 3
41: Zizzie_57 + 3
42: DotProduct_47 + 1
43: Violac_54
44: Rita_55
45: DosHalletts_52
46: Mahavrat_49 + 1
47: Bubbles123_49
48: James_55
49: Brocalys_48 + 3
50: Marker_52

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51: DilTech15_49 + 1
52: Mattes_55
53: Polka14_49
54: Whatsaplecost_51
55: Plumbus_54
56: Harley_53
57: Jabbawokkie_65
58: Che9d_58
59: Demsculpinboyz_61 + 1
60: Zapher_64
61: Avani_60
62: Yoshi_63
63: Squirty_55
64: MetaBob_56
65: Toron_49
66: MooMoo_47 + 2

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 347239 Report

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

Pham number 347239 has 226 members, 13 are drafts.

Phages represented in each track:
• Track 1 : Blarby_63
• Track 2 : Clank_54
• Track 3 : TDanisky_57, MadMen_47, Chuckly_52, Sparkdehlily_57
• Track 4 : Fancypants_52, Mwanjiwa_57, Dorothy_48, Phatniss_50, Starcevich_51, LilMoolah_50, Karhdo_50, Firehouse51_52, Llij_48, SiSi_50, Girr_51, RedBird_48, Kersh_54, Leozinho_52, Kimberlium_54, Girafales_61, QuickMath_53, Sassafras_49, Whouxphf_50, Veteran_48, Drago_50, Maravista_53, Sabbb_57, MisterCuddles_51, Seagreen_52, Nivrat_48, DaddyRickover_51, UncleRicky_51, Tootsieroll_54, Hamulus_52, MulchExplorer_54, Lucia_51, Ruby_49, Nichirin_55
• Track 5 : IbOuu_52, Deb65_48, Quico_61, Scottish_51, Topiatin_57, Nimbo_47, Leperchaun_45, BlueCrab_49, Stap_51, OldBen_50, RitaG_48, Geralt_48, JoeyJr_48, Empress_51, Ramsey_53, Pacc40_47, Blexus_50, PHappiness_48, Spoonbill_50, KingMidas_52, Daenerys_47
• Track 6 : Cabrinians_54, Burwell21_51, Jarcob_53, Ibhubesi_51, Koella_47, BuzzLyseyear_58, Lizziana_59, Martik_53, Dante_52, GUmbie_50, Nitzel_48, ShowerHandel_56, NormanBulbieJr_53, Priscilla_53, ShiLan_52, Madiba_49, Crumble_48, FreddyB_54, Yorick_52
• Track 7 : Grimmer_59, Eradicator_44, Tchotchke_53
• Track 8 : Philus_55
• Track 9 : SwagPigglett_57, DRBy19_55, Wachhund_53, BobaPhett_55, Jennelsea_50
• Track 10 : Jinglebell_57, Ochi17_55, AlpineSix_57, Llama_57, Modragons_56, Seabastian_57, OfUltron_57
• Track 11 : Sandalphon_54
• Track 12 : Minnie_56, Alexphander_56, IrishSherpFalk_52, Kingsley_48, Spartacus_53, Velveteen_46, BigPhil_47, Coco12_50, Brookers_48, WillSterrel_52, Cerasum_47, Cheesepuff_57, Sarma624_49
• Track 13 : Gandalph_53
• Track 14 : OlympiaSaint_53, Cornie_46, Donkeykong_56, Phanphagia_49, SuperGrey_55, Bipolar_51, JalFarm20_63, Flathead_51
• Track 15 : Rialto_56, MilanaBonita_99, Akhila_43, Brushbloom_53
• Track 16 : Pollywog_53, OwlsT2W_52
• Track 17 : Corium_49, PatoPoderoso_49, Soul22_55
• Track 18 : Ardmore_43, Mova_52, Okabe_46, Bobi_54
• Track 19 : Job42_52
• Track 20 : Poenanya_51, Doomphist_51, Eish_53
• Track 21 : Shauna1_50

• Track 22 : Latretium_54, Inventum_46, DirtMcgirt_51
• Track 23 : EmiMonkey_49, Florinda_64, PhlipPhlop_51
• Track 24 : Vivum_54, Radiance_52, Spikelee_58, BodEinwohner17_53
• Track 25 : Estave1_52
• Track 26 : Cornucopia_54
• Track 27 : Enzomatic_59, Polo2Bam_58, SeaLumen_57, NewHope4_54
• Track 28 : Strokeseat_48, Hlubikazi_48, Mandlovu_48
• Track 29 : Chevrolet_58, Royals2015_54, ArcusAngelus_55
• Track 30 : Juniper1_49, Byougenkin_49
• Track 31 : Mutaforma13_55
• Track 32 : Emmaloid_52, Totinger_51, Slim_52, LittleShirley_51
• Track 33 : ShroomBoi_54, DaWorst_53, RockyHorror_52, PMC_46, Rockne_50, Zerg_51, Boomer_54, Doug_54
• Track 34 : Che8_54
• Track 35 : DeadP_57, Renaud18_57, Taj_55, Wee_54
• Track 36 : SimranZ1_50
• Track 37 : PopTart_46, SassyB_46
• Track 38 : Ogopogo_55
• Track 39 : DoRead_52
• Track 40 : KingJulian_51, Juice456_53, KristaRAM_54, EleanorGeorge_50
• Track 41 : Zizzle_57, LunaBlu_55, Galactic_52, Mozy_61
• Track 42 : DotProduct_47, GigiOuiOui_48
• Track 43 : Violac_54
• Track 44 : Rita_55
• Track 45 : DosHalletts_52
• Track 46 : Mahavrat_49, Aubs_50
• Track 47 : Bubbles123_49
• Track 48 : James_55
• Track 49 : Brocalys_48, Clifton_48, LastJedi_47, Pippy_51
• Track 50 : Marker_52
• Track 51 : DillTech15_49, Fastidio_52
• Track 52 : Mattes_55
• Track 53 : Polka14_49
• Track 54 : Whatsapiecost_51
• Track 55 : Plumbus_54
• Track 56 : Harley_53
• Track 57 : Jabbawokkie_65
• Track 58 : Che9d_58
• Track 59 : Demsculpinboyz_61, Tweety_51
• Track 60 : Zapner_64
• Track 61 : Avani_60
• Track 62 : Yoshi_63
• Track 63 : Squirty_55
• Track 64 : ThetaBob_56
• Track 65 : Toron_49
• Track 66 : MooMoo_47, TChen_51, LunaStella_49

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

The start number called the most often in the published annotations is 19, it was called in 195 of the 213 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Akhila_43, Alexphander_56, AlpineSix_57, ArcusAngelus_55, Ardmore_43, Aubs_50, Avani_60, BigPhil_47, Bipolar_51, Blexus_50, BlueCrab_49, BobaPhett_55, Bobi_54, BodEinwohner17_53, Boomer_54, Brocalys_48, Brookers_48, Brushbloom_53, Bubbles123_49, Burwell21_51, BuzzLyseyear_58, Byougenkin_49, Cabrinians_54, Cerasum_47, Che8_54, Che9d_58, Cheesepuff_57, Chevrolet_58, Chuckly_52, Clifton_48, Coco12_50, Cornie_46, Cornucopia_54, Crumble_48, DRBy19_55, DaWorst_53, DaddyRickover_51, Daenerys_47, Dante_52, DeadP_57, Deb65_48, Demsculpinboyz_61, DillTech15_49, DoRead_52, Donkeykong_56, Doomphist_51, Dorothy_48, DosHalletts_52, DotProduct_47, Doug_54, Drago_50, Eish_53, EleanorGeorge_50, Emmaloid_52, Empress_51, Eradicator_44, Fancypants_52, Fastidio_52, Firehouse51_52, Flathead_51, FreddyB_54, GUmbie_50, Galactic_52, Gandalph_53, Geralt_48, GigiOuiOui_48, Girafales_61, Girr_51, Grimmer_59, Hamulus_52, Harley_53, Hlubikazi_48, IbOuu_52, Ibhubesi_51, IrishSherpFalk_52, Jabbawokkie_65, JalFarm20_63, James_55, Jarcob_53, Jennelsea_50, Jinglebell_57, Job42_52, JoeyJr_48, Juice456_53, Juniper1_49, Karhdo_50, Kersh_54, Kimberlium_54, KingJulian_51, KingMidas_52, Kingsley_48, Koella_47, KristaRAM_54, LastJedi_47, Leozinho_52, Leperchaun_45, LilMoolah_50, LittleShirley_51, Lizziana_59, Llama_57, Llij_48, Lucia_51, LunaBlu_55, MadMen_47, Madiba_49, Mahavrat_49, Mandlovu_48, Maravista_53, Marker_52, Martik_53, MilanaBonita_99, Minnie_56, MisterCuddles_51, Modragons_56, Mova_52, Mozy_61, MulchExplorer_54, Mutaforma13_55, Mwanjiwa_57, Nichirin_55, Nimbo_47, Nitzel_48, Nivrat_48, NormanBulbieJr_53, Ochi17_55, OfUltron_57, Ogopogo_55, Okabe_46, OldBen_50, OlympiaSaint_53, OwlsT2W_52, PHappiness_48, PMC_46, Pacc40_47, Phanphagia_49, Phatniss_50, Pippy_51, Plumbus_54, Poenanya_51, Polka14_49, Pollywog_53, PopTart_46, Priscilla_53, QuickMath_53, Quico_61, Radiance_52, Ramsey_53, RedBird_48, Renaud18_57, Rialto_56, RitaG_48, Rita_55, Rockne_50, RockyHorror_52, Royals2015_54, Ruby_49, Sabbb_57, Sandalphon_54, Sarma624_49, Sassafras_49, SassyB_46, Scottish_51, Seabastian_57, Seagreen_52, ShiLan_52, ShowerHandel_56, ShroomBoi_54, SiSi_50, SimranZ1_50, Slim_52, Sparkdehlily_57, Spartacus_53, Spikelee_58, Spoonbill_50, Stap_51, Starcevich_51, Strokeseat_48, SuperGrey_55, SwagPigglett_57, TDanisky_57, Taj_55, Tchotchke_53, Tootsieroll_54, Topiatin_57, Totinger_51, Tweety_51, UncleRicky_51, Velveteen_46, Veteran_48, Violac_54, Vivum_54, Wachhund_53, Wee_54, Whatsapiecost_51, Whouxphf_50, WillSterrel_52, Yorick_52, Zerg_51, Zizzle_57,

Genes that have the "Most Annotated" start but do not call it:
• Blarby_63, Clank_54, Corium_49, DirtMcgirt_51, EmiMonkey_49, Enzomatic_59, Estave1_52, Florinda_64, Inventum_46, Latretium_54, Mattes_55, NewHope4_54, PatoPoderoso_49, Philus_55, PhlipPhlop_51, Polo2Bam_58, SeaLumen_57, Shauna1_50, Soul22_55, Squirty_55, ThetaBob_56, Yoshi_63, Zapner_64,

Genes that do not have the "Most Annotated" start:
• LunaStella_49, MooMoo_47, TChen_51, Toron_49,

Summary by start number:

Start 15:

• Found in 21 of 226 (9.3%) of genes in pham
• Manual Annotations of this start: 1 of 213
• Called 4.8% of time when present
• Phage (with cluster) where this start called: Squirty_55 (F3),

Start 18:
• Found in 3 of 226 (1.3%) of genes in pham
• Manual Annotations of this start: 3 of 213
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LunaStella_49 (F4), MooMoo_47 (singleton), TChen_51 (F4),

Start 19:
• Found in 222 of 226 (98.2%) of genes in pham
• Manual Annotations of this start: 195 of 213
• Called 89.6% of time when present
• Phage (with cluster) where this start called: Akhila_43 (F1), Alexphander_56 (F1), AlpineSix_57 (F1), ArcusAngelus_55 (F1), Ardmore_43 (F1), Aubs_50 (F1), Avani_60 (F2), BigPhil_47 (F1), Bipolar_51 (F1), Blexus_50 (F1), BlueCrab_49 (F1), BobaPhett_55 (F1), Bobi_54 (F1), BodEinwohner17_53 (F1), Boomer_54 (F1), Brocalys_48 (F1), Brookers_48 (F1), Brushbloom_53 (F1), Bubbles123_49 (F1), Burwell21_51 (F1), BuzzLyseyear_58 (F1), Byougenkin_49 (F1), Cabrinians_54 (F1), Cerasum_47 (F1), Che8_54 (F1), Che9d_58 (F2), Cheesepuff_57 (F1), Chevrolet_58 (F1), Chuckly_52 (F1), Clifton_48 (F1), Coco12_50 (F1), Cornie_46 (F5), Cornucopia_54 (F1), Crumble_48 (F1), DRBy19_55 (F1), DaWorst_53 (F1), DaddyRickover_51 (F1), Daenerys_47 (F1), Dante_52 (F1), DeadP_57 (F1), Deb65_48 (F1), Demsculpinboyz_61 (F2), DillTech15_49 (F1), DoRead_52 (F1), Donkeykong_56 (F1), Doomphist_51 (F1), Dorothy_48 (F1), DosHalletts_52 (F1), DotProduct_47 (F1), Doug_54 (F1), Drago_50 (F1), Eish_53 (F1), EleanorGeorge_50 (F1), Emmaloid_52 (F1), Empress_51 (F1), Eradicator_44 (F1), Fancypants_52 (F1), Fastidio_52 (F1), Firehouse51_52 (F1), Flathead_51 (F1), FreddyB_54 (F1), GUmbie_50 (F1), Galactic_52 (F1), Gandalph_53 (F1), Geralt_48 (F1), GigiOuiOui_48 (F1), Girafales_61 (F1), Girr_51 (F1), Grimmer_59 (F1), Hamulus_52 (F1), Harley_53 (F1), Hlubikazi_48 (F1), IbOuu_52 (F1), Ibhubesi_51 (F1), IrishSherpFalk_52 (F1), Jabbawokkie_65 (F2), JalFarm20_63 (F1), James_55 (F1), Jarcob_53 (F1), Jennelsea_50 (F1), Jinglebell_57 (F1), Job42_52 (F1), JoeyJr_48 (F1), Juice456_53 (F1), Juniper1_49 (F1), Karhdo_50 (F1), Kersh_54 (F1), Kimberlium_54 (F1), KingJulian_51 (F1), KingMidas_52 (F1), Kingsley_48 (F1), Koella_47 (F1), KristaRAM_54 (F1), LastJedi_47 (F1), Leozinho_52 (F1), Leperchaun_45 (F1), LilMoolah_50 (F1), LittleShirley_51 (F1), Lizziana_59 (F1), Llama_57 (F1), Llij_48 (F1), Lucia_51 (F1), LunaBlu_55 (F1), MadMen_47 (F1), Madiba_49 (F1), Mahavrat_49 (F1), Mandlovu_48 (F1), Maravista_53 (F1), Marker_52 (F1), Martik_53 (F1), MilanaBonita_99 (F1), Minnie_56 (F1), MisterCuddles_51 (F1), Modragons_56 (F1), Mova_52 (F1), Mozy_61 (F1), MulchExplorer_54 (F1), Mutaforma13_55 (F1), Mwanjiwa_57 (F1), Nichirin_55 (F1), Nimbo_47 (F1), Nitzel_48 (F1), Nivrat_48 (F1), NormanBulbieJr_53 (F1), Ochi17_55 (F1), OfUltron_57 (F1), Ogopogo_55 (F1), Okabe_46 (F8), OldBen_50 (F1), OlympiaSaint_53 (F1), OwlsT2W_52 (F1), PHappiness_48 (F1), PMC_46 (F1), Pacc40_47 (F1), Phanphagia_49 (F1), Phatniss_50 (F1), Pippy_51 (F1), Plumbus_54 (F1), Poenanya_51 (F1), Polka14_49 (F1), Pollywog_53 (F1), PopTart_46 (F1), Priscilla_53 (F1), QuickMath_53 (F1), Quico_61 (F1), Radiance_52 (F1), Ramsey_53 (F1), RedBird_48 (F1), Renaud18_57 (F4), Rialto_56 (F1), RitaG_48 (F1), Rita_55 (F1), Rockne_50 (F1), RockyHorror_52 (F1), Royals2015_54 (F1), Ruby_49 (F1),

Sabbb_57 (F1), Sandalphon_54 (F1), Sarma624_49 (F1), Sassafras_49 (F1), SassyB_46 (F1), Scottish_51 (F1), Seabastian_57 (F1), Seagreen_52 (F1), ShiLan_52 (F1), ShowerHandel_56 (F1), ShroomBoi_54 (F1), SiSi_50 (F1), SimranZ1_50 (F1), Slim_52 (F1), Sparkdehlily_57 (F1), Spartacus_53 (F1), Spikelee_58 (F1), Spoonbill_50 (F1), Stap_51 (F1), Starcevich_51 (F1), Strokeseat_48 (F1), SuperGrey_55 (F1), SwagPigglett_57 (F1), TDanisky_57 (F1), Taj_55 (F1), Tchotchke_53 (F1), Tootsieroll_54 (F1), Topiatin_57 (F1), Totinger_51 (F1), Tweety_51 (F1), UncleRicky_51 (F1), Velveteen_46 (F1), Veteran_48 (F1), Violac_54 (F1), Vivum_54 (F1), Wachhund_53 (F1), Wee_54 (F1), Whatsapiecost_51 (F1), Whouxphf_50 (F1), WillSterrel_52 (F1), Yorick_52 (F1), Zerg_51 (F1), Zizzle_57 (F1),

Start 20:
• Found in 1 of 226 (0.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Toron_49 (F6),

Start 23:
• Found in 226 of 226 (100.0%) of genes in pham
• Manual Annotations of this start: 14 of 213
• Called 9.7% of time when present
• Phage (with cluster) where this start called: Blarby_63 (F), Clank_54 (F), Corium_49 (F1), DirtMcgirt_51 (F1), EmiMonkey_49 (F1), Enzomatic_59 (F1), Estave1_52 (F1), Florinda_64 (F1), Inventum_46 (F1), Latretium_54 (F1), Mattes_55 (F1), NewHope4_54 (F1), PatoPoderoso_49 (F1), Philus_55 (F1), PhlipPhlop_51 (F1), Polo2Bam_58 (F1), SeaLumen_57 (F1), Shauna1_50 (F1), Soul22_55 (F2), ThetaBob_56 (F4), Yoshi_63 (F2), Zapner_64 (F2),

Summary by clusters:

There are 9 clusters represented in this pham: F1, singleton, F3, F4, F5, F6, F, F8, F2,

Info for manual annotations of cluster F1:
•Start number 19 was manually annotated 189 times for cluster F1.
•Start number 23 was manually annotated 10 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 19 was manually annotated 4 times for cluster F2.
•Start number 23 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster F3:
•Start number 15 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:
•Start number 18 was manually annotated 2 times for cluster F4.
•Start number 19 was manually annotated 1 time for cluster F4.
•Start number 23 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster F5:
•Start number 19 was manually annotated 1 time for cluster F5.

Gene Information:

Gene: Akhila_43 Start: 32688, Stop: 32879, Start Num: 19
Candidate Starts for Akhila_43:
(Start: 19 @32688 has 195 MA's), (Start: 23 @32718 has 14 MA's), (25, 32739), (26, 32757), (27, 32769), (30, 32793), (34, 32820),

Gene: Alexphander_56 Start: 37735, Stop: 37926, Start Num: 19
Candidate Starts for Alexphander_56:
(Start: 19 @37735 has 195 MA's), (Start: 23 @37765 has 14 MA's), (25, 37786), (26, 37804), (27, 37816), (30, 37840), (32, 37858), (34, 37867), (35, 37888),

Gene: AlpineSix_57 Start: 39232, Stop: 39420, Start Num: 19
Candidate Starts for AlpineSix_57:
(9, 39148), (Start: 19 @39232 has 195 MA's), (Start: 23 @39262 has 14 MA's), (26, 39298), (27, 39310), (30, 39334), (32, 39352), (34, 39361),

Gene: ArcusAngelus_55 Start: 38253, Stop: 38444, Start Num: 19
Candidate Starts for ArcusAngelus_55:
(Start: 19 @38253 has 195 MA's), (Start: 23 @38283 has 14 MA's), (25, 38304), (26, 38322), (27, 38334), (30, 38358), (32, 38376), (34, 38385),

Gene: Ardmore_43 Start: 35029, Stop: 35220, Start Num: 19
Candidate Starts for Ardmore_43:
(Start: 19 @35029 has 195 MA's), (Start: 23 @35059 has 14 MA's), (25, 35080), (26, 35098), (27, 35110), (30, 35134), (34, 35161),

Gene: Aubs_50 Start: 36540, Stop: 36731, Start Num: 19
Candidate Starts for Aubs_50:
(Start: 19 @36540 has 195 MA's), (Start: 23 @36570 has 14 MA's), (26, 36609), (27, 36621), (30, 36645), (32, 36663), (34, 36672), (35, 36693),

Gene: Avani_60 Start: 37393, Stop: 37584, Start Num: 19
Candidate Starts for Avani_60:
(12, 37333), (14, 37339), (Start: 19 @37393 has 195 MA's), (Start: 23 @37423 has 14 MA's), (25, 37444), (26, 37462), (27, 37474), (30, 37498), (32, 37516), (34, 37525),

Gene: BigPhil_47 Start: 33177, Stop: 33368, Start Num: 19
Candidate Starts for BigPhil_47:
(Start: 19 @33177 has 195 MA's), (Start: 23 @33207 has 14 MA's), (25, 33228), (26, 33246), (27, 33258), (30, 33282), (32, 33300), (34, 33309), (35, 33330),

Gene: Bipolar_51 Start: 37677, Stop: 37868, Start Num: 19
Candidate Starts for Bipolar_51:
(Start: 15 @37629 has 1 MA's), (Start: 19 @37677 has 195 MA's), (Start: 23 @37707 has 14 MA's), (25, 37728), (26, 37746), (27, 37758), (30, 37782), (32, 37800), (34, 37809), (35, 37830),

Gene: Blarby_63 Start: 38118, Stop: 38279, Start Num: 23

Candidate Starts for Blarby_63:
(6, 37995), (Start: 19 @38088 has 195 MA's), (Start: 23 @38118 has 14 MA's), (27, 38169), (30, 38193), (32, 38211), (34, 38220), (35, 38241),

Gene: Blexus_50 Start: 37054, Stop: 37242, Start Num: 19
Candidate Starts for Blexus_50:
(Start: 19 @37054 has 195 MA's), (Start: 23 @37084 has 14 MA's), (26, 37120), (27, 37132), (30, 37156), (32, 37174), (34, 37183),

Gene: BlueCrab_49 Start: 36780, Stop: 36968, Start Num: 19
Candidate Starts for BlueCrab_49:
(Start: 19 @36780 has 195 MA's), (Start: 23 @36810 has 14 MA's), (26, 36846), (27, 36858), (30, 36882), (32, 36900), (34, 36909),

Gene: BobaPhett_55 Start: 39668, Stop: 39859, Start Num: 19
Candidate Starts for BobaPhett_55:
(Start: 19 @39668 has 195 MA's), (Start: 23 @39698 has 14 MA's), (25, 39719), (26, 39737), (27, 39749), (30, 39773), (32, 39791), (34, 39800),

Gene: Bobi_54 Start: 38032, Stop: 38223, Start Num: 19
Candidate Starts for Bobi_54:
(Start: 19 @38032 has 195 MA's), (Start: 23 @38062 has 14 MA's), (25, 38083), (26, 38101), (27, 38113), (30, 38137), (34, 38164),

Gene: BodEinwohner17_53 Start: 36996, Stop: 37184, Start Num: 19
Candidate Starts for BodEinwohner17_53:
(Start: 19 @36996 has 195 MA's), (Start: 23 @37026 has 14 MA's), (26, 37062), (27, 37074), (30, 37098), (32, 37116), (34, 37125), (35, 37146),

Gene: Boomer_54 Start: 38229, Stop: 38420, Start Num: 19
Candidate Starts for Boomer_54:
(Start: 19 @38229 has 195 MA's), (Start: 23 @38259 has 14 MA's), (25, 38280), (26, 38298), (27, 38310), (30, 38334), (32, 38352), (34, 38361),

Gene: Brocalys_48 Start: 34329, Stop: 34517, Start Num: 19
Candidate Starts for Brocalys_48:
(Start: 19 @34329 has 195 MA's), (Start: 23 @34359 has 14 MA's), (24, 34368), (26, 34395), (27, 34407), (30, 34431), (32, 34449), (34, 34458),

Gene: Brookers_48 Start: 36128, Stop: 36319, Start Num: 19
Candidate Starts for Brookers_48:
(Start: 19 @36128 has 195 MA's), (Start: 23 @36158 has 14 MA's), (25, 36179), (26, 36197), (27, 36209), (30, 36233), (32, 36251), (34, 36260), (35, 36281),

Gene: Brushbloom_53 Start: 37336, Stop: 37527, Start Num: 19
Candidate Starts for Brushbloom_53:
(Start: 19 @37336 has 195 MA's), (Start: 23 @37366 has 14 MA's), (25, 37387), (26, 37405), (27, 37417), (30, 37441), (34, 37468),

Gene: Bubbles123_49 Start: 37521, Stop: 37709, Start Num: 19
Candidate Starts for Bubbles123_49:
(12, 37461), (14, 37467), (Start: 19 @37521 has 195 MA's), (Start: 23 @37551 has 14 MA's), (26, 37587), (27, 37599), (30, 37623), (34, 37650),

Gene: Burwell21_51 Start: 37427, Stop: 37615, Start Num: 19
Candidate Starts for Burwell21_51:
(4, 37310), (11, 37352), (13, 37373), (16, 37403), (17, 37409), (Start: 19 @37427 has 195 MA's), (Start: 23 @37457 has 14 MA's), (26, 37493), (27, 37505), (30, 37529), (32, 37547), (34, 37556),

Gene: BuzzLyseyear_58 Start: 38698, Stop: 38886, Start Num: 19
Candidate Starts for BuzzLyseyear_58:
(4, 38581), (11, 38623), (13, 38644), (16, 38674), (17, 38680), (Start: 19 @38698 has 195 MA's), (Start: 23 @38728 has 14 MA's), (26, 38764), (27, 38776), (30, 38800), (32, 38818), (34, 38827),

Gene: Byougenkin_49 Start: 36715, Stop: 36903, Start Num: 19
Candidate Starts for Byougenkin_49:
(5, 36616), (Start: 19 @36715 has 195 MA's), (Start: 23 @36745 has 14 MA's), (26, 36781), (27, 36793), (30, 36817), (32, 36835), (34, 36844),

Gene: Cabrinians_54 Start: 37505, Stop: 37693, Start Num: 19
Candidate Starts for Cabrinians_54:
(4, 37388), (11, 37430), (13, 37451), (16, 37481), (17, 37487), (Start: 19 @37505 has 195 MA's), (Start: 23 @37535 has 14 MA's), (26, 37571), (27, 37583), (30, 37607), (32, 37625), (34, 37634),

Gene: Cerasum_47 Start: 33195, Stop: 33386, Start Num: 19
Candidate Starts for Cerasum_47:
(Start: 19 @33195 has 195 MA's), (Start: 23 @33225 has 14 MA's), (25, 33246), (26, 33264), (27, 33276), (30, 33300), (32, 33318), (34, 33327), (35, 33348),

Gene: Che8_54 Start: 38120, Stop: 38311, Start Num: 19
Candidate Starts for Che8_54:
(12, 38060), (14, 38066), (Start: 19 @38120 has 195 MA's), (Start: 23 @38150 has 14 MA's), (26, 38189), (27, 38201), (30, 38225), (32, 38243), (34, 38252),

Gene: Che9d_58 Start: 36580, Stop: 36768, Start Num: 19
Candidate Starts for Che9d_58:
(Start: 19 @36580 has 195 MA's), (Start: 23 @36610 has 14 MA's), (26, 36646), (27, 36658), (30, 36682), (31, 36694), (32, 36700), (34, 36709),

Gene: Cheesepuff_57 Start: 38853, Stop: 39044, Start Num: 19
Candidate Starts for Cheesepuff_57:
(Start: 19 @38853 has 195 MA's), (Start: 23 @38883 has 14 MA's), (25, 38904), (26, 38922), (27, 38934), (30, 38958), (32, 38976), (34, 38985), (35, 39006),

Gene: Chevrolet_58 Start: 38254, Stop: 38445, Start Num: 19
Candidate Starts for Chevrolet_58:
(Start: 19 @38254 has 195 MA's), (Start: 23 @38284 has 14 MA's), (25, 38305), (26, 38323), (27, 38335), (30, 38359), (32, 38377), (34, 38386),

Gene: Chuckly_52 Start: 37120, Stop: 37308, Start Num: 19
Candidate Starts for Chuckly_52:
(4, 37003), (11, 37045), (13, 37066), (16, 37096), (17, 37102), (Start: 19 @37120 has 195 MA's), (Start: 23 @37150 has 14 MA's), (26, 37186), (27, 37198), (30, 37222), (32, 37240), (34, 37249), (35, 37270),

Gene: Clank_54 Start: 37477, Stop: 37638, Start Num: 23

Candidate Starts for Clank_54:
(Start: 19 @37447 has 195 MA's), (Start: 23 @37477 has 14 MA's), (25, 37498), (26, 37516), (27, 37528), (30, 37552), (32, 37570), (34, 37579), (35, 37600),

Gene: Clifton_48 Start: 34680, Stop: 34868, Start Num: 19
Candidate Starts for Clifton_48:
(Start: 19 @34680 has 195 MA's), (Start: 23 @34710 has 14 MA's), (24, 34719), (26, 34746), (27, 34758), (30, 34782), (32, 34800), (34, 34809),

Gene: Coco12_50 Start: 37252, Stop: 37443, Start Num: 19
Candidate Starts for Coco12_50:
(Start: 19 @37252 has 195 MA's), (Start: 23 @37282 has 14 MA's), (25, 37303), (26, 37321), (27, 37333), (30, 37357), (32, 37375), (34, 37384), (35, 37405),

Gene: Corium_49 Start: 36238, Stop: 36399, Start Num: 23
Candidate Starts for Corium_49:
(Start: 15 @36160 has 1 MA's), (Start: 19 @36208 has 195 MA's), (Start: 23 @36238 has 14 MA's), (25, 36259), (26, 36277), (27, 36289), (30, 36313), (34, 36340),

Gene: Cornie_46 Start: 35312, Stop: 35503, Start Num: 19
Candidate Starts for Cornie_46:
(Start: 15 @35264 has 1 MA's), (Start: 19 @35312 has 195 MA's), (Start: 23 @35342 has 14 MA's), (25, 35363), (26, 35381), (27, 35393), (30, 35417), (32, 35435), (34, 35444), (35, 35465),

Gene: Cornucopia_54 Start: 37959, Stop: 38147, Start Num: 19
Candidate Starts for Cornucopia_54:
(Start: 19 @37959 has 195 MA's), (Start: 23 @37989 has 14 MA's), (26, 38025), (27, 38037), (30, 38061), (34, 38088),

Gene: Crumble_48 Start: 33441, Stop: 33629, Start Num: 19
Candidate Starts for Crumble_48:
(4, 33324), (11, 33366), (13, 33387), (16, 33417), (17, 33423), (Start: 19 @33441 has 195 MA's), (Start: 23 @33471 has 14 MA's), (26, 33507), (27, 33519), (30, 33543), (32, 33561), (34, 33570),

Gene: DRBy19_55 Start: 38456, Stop: 38647, Start Num: 19
Candidate Starts for DRBy19_55:
(Start: 19 @38456 has 195 MA's), (Start: 23 @38486 has 14 MA's), (25, 38507), (26, 38525), (27, 38537), (30, 38561), (32, 38579), (34, 38588),

Gene: DaWorst_53 Start: 37855, Stop: 38046, Start Num: 19
Candidate Starts for DaWorst_53:
(Start: 19 @37855 has 195 MA's), (Start: 23 @37885 has 14 MA's), (25, 37906), (26, 37924), (27, 37936), (30, 37960), (32, 37978), (34, 37987),

Gene: DaddyRickover_51 Start: 37485, Stop: 37673, Start Num: 19
Candidate Starts for DaddyRickover_51:
(Start: 19 @37485 has 195 MA's), (Start: 23 @37515 has 14 MA's), (26, 37551), (27, 37563), (30, 37587), (32, 37605), (34, 37614),

Gene: Daenerys_47 Start: 35723, Stop: 35911, Start Num: 19
Candidate Starts for Daenerys_47:
(Start: 19 @35723 has 195 MA's), (Start: 23 @35753 has 14 MA's), (26, 35789), (27, 35801), (30, 35825), (32, 35843), (34, 35852),

Gene: Dante_52 Start: 36848, Stop: 37039, Start Num: 19
Candidate Starts for Dante_52:
(4, 36731), (11, 36773), (13, 36794), (16, 36824), (17, 36830), (Start: 19 @36848 has 195 MA's), (Start: 23 @36878 has 14 MA's), (26, 36917), (27, 36929), (30, 36953), (32, 36971), (34, 36980),

Gene: DeadP_57 Start: 38744, Stop: 38935, Start Num: 19
Candidate Starts for DeadP_57:
(1, 38582), (8, 38657), (Start: 19 @38744 has 195 MA's), (Start: 23 @38774 has 14 MA's), (24, 38783), (25, 38795), (26, 38813), (27, 38825), (30, 38849), (32, 38867), (34, 38876),

Gene: Deb65_48 Start: 35692, Stop: 35880, Start Num: 19
Candidate Starts for Deb65_48:
(Start: 19 @35692 has 195 MA's), (Start: 23 @35722 has 14 MA's), (26, 35758), (27, 35770), (30, 35794), (32, 35812), (34, 35821),

Gene: Demsculpinboyz_61 Start: 36689, Stop: 36877, Start Num: 19
Candidate Starts for Demsculpinboyz_61:
(Start: 19 @36689 has 195 MA's), (Start: 23 @36719 has 14 MA's), (26, 36755), (27, 36767), (30, 36791), (32, 36809), (34, 36818),

Gene: DillTech15_49 Start: 35843, Stop: 36031, Start Num: 19
Candidate Starts for DillTech15_49:
(Start: 19 @35843 has 195 MA's), (Start: 23 @35873 has 14 MA's), (27, 35921), (30, 35945), (32, 35963), (34, 35972),

Gene: DirtMcgirt_51 Start: 36060, Stop: 36221, Start Num: 23
Candidate Starts for DirtMcgirt_51:
(Start: 19 @36030 has 195 MA's), (Start: 23 @36060 has 14 MA's), (26, 36099), (27, 36111), (30, 36135), (32, 36153), (34, 36162),

Gene: DoRead_52 Start: 35734, Stop: 35922, Start Num: 19
Candidate Starts for DoRead_52:
(5, 35632), (Start: 19 @35734 has 195 MA's), (Start: 23 @35764 has 14 MA's), (26, 35800), (27, 35812), (30, 35836), (32, 35854), (34, 35863), (35, 35884),

Gene: Donkeykong_56 Start: 39923, Stop: 40114, Start Num: 19
Candidate Starts for Donkeykong_56:
(Start: 15 @39875 has 1 MA's), (Start: 19 @39923 has 195 MA's), (Start: 23 @39953 has 14 MA's), (25, 39974), (26, 39992), (27, 40004), (30, 40028), (32, 40046), (34, 40055), (35, 40076),

Gene: Doomphist_51 Start: 37994, Stop: 38182, Start Num: 19
Candidate Starts for Doomphist_51:
(Start: 19 @37994 has 195 MA's), (Start: 23 @38024 has 14 MA's), (26, 38060), (27, 38072), (30, 38096), (34, 38123),

Gene: Dorothy_48 Start: 36366, Stop: 36557, Start Num: 19
Candidate Starts for Dorothy_48:
(Start: 19 @36366 has 195 MA's), (Start: 23 @36396 has 14 MA's), (26, 36435), (27, 36447), (30, 36471), (32, 36489), (34, 36498),

Gene: DosHalletts_52 Start: 38153, Stop: 38344, Start Num: 19
Candidate Starts for DosHalletts_52:

(Start: 19 @38153 has 195 MA's), (Start: 23 @38183 has 14 MA's), (25, 38204), (26, 38222), (27, 38234), (30, 38258), (34, 38285), (35, 38306),

Gene: DotProduct_47 Start: 36024, Stop: 36212, Start Num: 19
Candidate Starts for DotProduct_47:
(Start: 19 @36024 has 195 MA's), (Start: 23 @36054 has 14 MA's), (26, 36090), (27, 36102), (30, 36126), (34, 36153),

Gene: Doug_54 Start: 38112, Stop: 38303, Start Num: 19
Candidate Starts for Doug_54:
(Start: 19 @38112 has 195 MA's), (Start: 23 @38142 has 14 MA's), (25, 38163), (26, 38181), (27, 38193), (30, 38217), (32, 38235), (34, 38244),

Gene: Drago_50 Start: 36033, Stop: 36224, Start Num: 19
Candidate Starts for Drago_50:
(Start: 19 @36033 has 195 MA's), (Start: 23 @36063 has 14 MA's), (26, 36102), (27, 36114), (30, 36138), (32, 36156), (34, 36165),

Gene: Eish_53 Start: 37562, Stop: 37753, Start Num: 19
Candidate Starts for Eish_53:
(Start: 19 @37562 has 195 MA's), (Start: 23 @37592 has 14 MA's), (26, 37631), (27, 37643), (30, 37667), (34, 37694),

Gene: EleanorGeorge_50 Start: 36491, Stop: 36682, Start Num: 19
Candidate Starts for EleanorGeorge_50:
(Start: 15 @36443 has 1 MA's), (Start: 19 @36491 has 195 MA's), (Start: 23 @36521 has 14 MA's), (25, 36542), (26, 36560), (27, 36572), (30, 36596), (34, 36623),

Gene: EmiMonkey_49 Start: 38301, Stop: 38459, Start Num: 23
Candidate Starts for EmiMonkey_49:
(Start: 19 @38271 has 195 MA's), (Start: 23 @38301 has 14 MA's), (26, 38337), (27, 38349), (30, 38373), (32, 38391), (34, 38400),

Gene: Emmaloid_52 Start: 37757, Stop: 37948, Start Num: 19
Candidate Starts for Emmaloid_52:
(Start: 19 @37757 has 195 MA's), (Start: 23 @37787 has 14 MA's), (25, 37808), (26, 37826), (27, 37838), (30, 37862), (32, 37880), (34, 37889),

Gene: Empress_51 Start: 37137, Stop: 37325, Start Num: 19
Candidate Starts for Empress_51:
(Start: 19 @37137 has 195 MA's), (Start: 23 @37167 has 14 MA's), (26, 37203), (27, 37215), (30, 37239), (32, 37257), (34, 37266),

Gene: Enzomatic_59 Start: 37342, Stop: 37500, Start Num: 23
Candidate Starts for Enzomatic_59:
(Start: 19 @37312 has 195 MA's), (Start: 23 @37342 has 14 MA's), (26, 37378), (27, 37390), (30, 37414), (32, 37432), (34, 37441),

Gene: Eradicator_44 Start: 35249, Stop: 35440, Start Num: 19
Candidate Starts for Eradicator_44:
(Start: 19 @35249 has 195 MA's), (Start: 23 @35279 has 14 MA's), (25, 35300), (26, 35318), (27, 35330), (30, 35354), (32, 35372), (34, 35381), (35, 35402),

Gene: Estave1_52 Start: 36959, Stop: 37117, Start Num: 23
Candidate Starts for Estave1_52:
(6, 36836), (Start: 19 @36929 has 195 MA's), (Start: 23 @36959 has 14 MA's), (26, 36995), (27, 37007), (30, 37031), (32, 37049), (34, 37058),

Gene: Fancypants_52 Start: 37522, Stop: 37710, Start Num: 19
Candidate Starts for Fancypants_52:
(Start: 19 @37522 has 195 MA's), (Start: 23 @37552 has 14 MA's), (26, 37588), (27, 37600), (30, 37624), (32, 37642), (34, 37651),

Gene: Fastidio_52 Start: 35990, Stop: 36178, Start Num: 19
Candidate Starts for Fastidio_52:
(Start: 19 @35990 has 195 MA's), (Start: 23 @36020 has 14 MA's), (27, 36068), (30, 36092), (32, 36110), (34, 36119),

Gene: Firehouse51_52 Start: 39773, Stop: 39961, Start Num: 19
Candidate Starts for Firehouse51_52:
(Start: 19 @39773 has 195 MA's), (Start: 23 @39803 has 14 MA's), (26, 39839), (27, 39851), (30, 39875), (32, 39893), (34, 39902),

Gene: Flathead_51 Start: 37388, Stop: 37579, Start Num: 19
Candidate Starts for Flathead_51:
(Start: 15 @37340 has 1 MA's), (Start: 19 @37388 has 195 MA's), (Start: 23 @37418 has 14 MA's), (25, 37439), (26, 37457), (27, 37469), (30, 37493), (32, 37511), (34, 37520), (35, 37541),

Gene: Florinda_64 Start: 39732, Stop: 39890, Start Num: 23
Candidate Starts for Florinda_64:
(Start: 19 @39702 has 195 MA's), (Start: 23 @39732 has 14 MA's), (26, 39768), (27, 39780), (30, 39804), (32, 39822), (34, 39831),

Gene: FreddyB_54 Start: 36353, Stop: 36541, Start Num: 19
Candidate Starts for FreddyB_54:
(4, 36236), (11, 36278), (13, 36299), (16, 36329), (17, 36335), (Start: 19 @36353 has 195 MA's), (Start: 23 @36383 has 14 MA's), (26, 36419), (27, 36431), (30, 36455), (32, 36473), (34, 36482),

Gene: GUmbie_50 Start: 36775, Stop: 36963, Start Num: 19
Candidate Starts for GUmbie_50:
(4, 36658), (11, 36700), (13, 36721), (16, 36751), (17, 36757), (Start: 19 @36775 has 195 MA's), (Start: 23 @36805 has 14 MA's), (26, 36841), (27, 36853), (30, 36877), (32, 36895), (34, 36904),

Gene: Galactic_52 Start: 37428, Stop: 37616, Start Num: 19
Candidate Starts for Galactic_52:
(Start: 19 @37428 has 195 MA's), (Start: 23 @37458 has 14 MA's), (26, 37494), (27, 37506), (30, 37530), (32, 37548), (34, 37557),

Gene: Gandalph_53 Start: 36977, Stop: 37165, Start Num: 19
Candidate Starts for Gandalph_53:
(Start: 19 @36977 has 195 MA's), (Start: 23 @37007 has 14 MA's), (26, 37043), (27, 37055), (30, 37079), (34, 37106),

Gene: Geralt_48 Start: 35691, Stop: 35879, Start Num: 19
Candidate Starts for Geralt_48:

(Start: 19 @35691 has 195 MA's), (Start: 23 @35721 has 14 MA's), (26, 35757), (27, 35769), (30, 35793), (32, 35811), (34, 35820),

Gene: GigiOuiOui_48 Start: 36169, Stop: 36357, Start Num: 19
Candidate Starts for GigiOuiOui_48:
(Start: 19 @36169 has 195 MA's), (Start: 23 @36199 has 14 MA's), (26, 36235), (27, 36247), (30, 36271), (34, 36298),

Gene: Girafales_61 Start: 39245, Stop: 39433, Start Num: 19
Candidate Starts for Girafales_61:
(Start: 19 @39245 has 195 MA's), (Start: 23 @39275 has 14 MA's), (26, 39311), (27, 39323), (30, 39347), (32, 39365), (34, 39374),

Gene: Girr_51 Start: 37228, Stop: 37419, Start Num: 19
Candidate Starts for Girr_51:
(Start: 19 @37228 has 195 MA's), (Start: 23 @37258 has 14 MA's), (26, 37297), (27, 37309), (30, 37333), (32, 37351), (34, 37360),

Gene: Grimmer_59 Start: 38743, Stop: 38934, Start Num: 19
Candidate Starts for Grimmer_59:
(Start: 19 @38743 has 195 MA's), (Start: 23 @38773 has 14 MA's), (25, 38794), (26, 38812), (27, 38824), (30, 38848), (32, 38866), (34, 38875), (35, 38896),

Gene: Hamulus_52 Start: 37611, Stop: 37799, Start Num: 19
Candidate Starts for Hamulus_52:
(Start: 19 @37611 has 195 MA's), (Start: 23 @37641 has 14 MA's), (26, 37677), (27, 37689), (30, 37713), (32, 37731), (34, 37740),

Gene: Harley_53 Start: 36964, Stop: 37155, Start Num: 19
Candidate Starts for Harley_53:
(Start: 19 @36964 has 195 MA's), (Start: 23 @36994 has 14 MA's), (27, 37045), (30, 37069), (34, 37096),

Gene: Hlubikazi_48 Start: 35369, Stop: 35560, Start Num: 19
Candidate Starts for Hlubikazi_48:
(Start: 19 @35369 has 195 MA's), (Start: 23 @35399 has 14 MA's), (26, 35438), (27, 35450), (30, 35474), (34, 35501),

Gene: IbOuu_52 Start: 37973, Stop: 38161, Start Num: 19
Candidate Starts for IbOuu_52:
(Start: 19 @37973 has 195 MA's), (Start: 23 @38003 has 14 MA's), (26, 38039), (27, 38051), (30, 38075), (32, 38093), (34, 38102),

Gene: Ibhubesi_51 Start: 36568, Stop: 36756, Start Num: 19
Candidate Starts for Ibhubesi_51:
(4, 36451), (11, 36493), (13, 36514), (16, 36544), (17, 36550), (Start: 19 @36568 has 195 MA's), (Start: 23 @36598 has 14 MA's), (26, 36634), (27, 36646), (30, 36670), (32, 36688), (34, 36697),

Gene: Inventum_46 Start: 36007, Stop: 36165, Start Num: 23
Candidate Starts for Inventum_46:
(Start: 19 @35977 has 195 MA's), (Start: 23 @36007 has 14 MA's), (26, 36043), (27, 36055), (30, 36079), (32, 36097), (34, 36106),

Gene: IrishSherpFalk_52 Start: 38345, Stop: 38536, Start Num: 19
Candidate Starts for IrishSherpFalk_52:
(Start: 19 @38345 has 195 MA's), (Start: 23 @38375 has 14 MA's), (25, 38396), (26, 38414), (27, 38426), (30, 38450), (32, 38468), (34, 38477), (35, 38498),

Gene: Jabbawokkie_65 Start: 38101, Stop: 38289, Start Num: 19
Candidate Starts for Jabbawokkie_65:
(Start: 19 @38101 has 195 MA's), (Start: 23 @38131 has 14 MA's), (26, 38167), (27, 38179), (30, 38203), (32, 38221), (34, 38230), (35, 38251),

Gene: JalFarm20_63 Start: 40418, Stop: 40609, Start Num: 19
Candidate Starts for JalFarm20_63:
(Start: 15 @40370 has 1 MA's), (Start: 19 @40418 has 195 MA's), (Start: 23 @40448 has 14 MA's), (25, 40469), (26, 40487), (27, 40499), (30, 40523), (32, 40541), (34, 40550), (35, 40571),

Gene: James_55 Start: 38546, Stop: 38737, Start Num: 19
Candidate Starts for James_55:
(Start: 19 @38546 has 195 MA's), (Start: 23 @38576 has 14 MA's), (26, 38615), (27, 38627), (30, 38651), (34, 38678), (35, 38699),

Gene: Jarcob_53 Start: 37473, Stop: 37661, Start Num: 19
Candidate Starts for Jarcob_53:
(4, 37356), (11, 37398), (13, 37419), (16, 37449), (17, 37455), (Start: 19 @37473 has 195 MA's), (Start: 23 @37503 has 14 MA's), (26, 37539), (27, 37551), (30, 37575), (32, 37593), (34, 37602),

Gene: Jennelsea_50 Start: 35976, Stop: 36167, Start Num: 19
Candidate Starts for Jennelsea_50:
(Start: 19 @35976 has 195 MA's), (Start: 23 @36006 has 14 MA's), (25, 36027), (26, 36045), (27, 36057), (30, 36081), (32, 36099), (34, 36108),

Gene: Jinglebell_57 Start: 39231, Stop: 39419, Start Num: 19
Candidate Starts for Jinglebell_57:
(9, 39147), (Start: 19 @39231 has 195 MA's), (Start: 23 @39261 has 14 MA's), (26, 39297), (27, 39309), (30, 39333), (32, 39351), (34, 39360),

Gene: Job42_52 Start: 38645, Stop: 38836, Start Num: 19
Candidate Starts for Job42_52:
(Start: 19 @38645 has 195 MA's), (Start: 23 @38675 has 14 MA's), (25, 38696), (26, 38714), (27, 38726), (30, 38750), (34, 38777),

Gene: JoeyJr_48 Start: 35891, Stop: 36079, Start Num: 19
Candidate Starts for JoeyJr_48:
(Start: 19 @35891 has 195 MA's), (Start: 23 @35921 has 14 MA's), (26, 35957), (27, 35969), (30, 35993), (32, 36011), (34, 36020),

Gene: Juice456_53 Start: 38393, Stop: 38584, Start Num: 19
Candidate Starts for Juice456_53:
(Start: 15 @38345 has 1 MA's), (Start: 19 @38393 has 195 MA's), (Start: 23 @38423 has 14 MA's), (25, 38444), (26, 38462), (27, 38474), (30, 38498), (34, 38525),

Gene: Juniper1_49 Start: 36403, Stop: 36591, Start Num: 19
Candidate Starts for Juniper1_49:

(5, 36304), (Start: 19 @36403 has 195 MA's), (Start: 23 @36433 has 14 MA's), (26, 36469), (27, 36481), (30, 36505), (32, 36523), (34, 36532),

Gene: Karhdo_50 Start: 37051, Stop: 37239, Start Num: 19
Candidate Starts for Karhdo_50:
(Start: 19 @37051 has 195 MA's), (Start: 23 @37081 has 14 MA's), (26, 37117), (27, 37129), (30, 37153), (32, 37171), (34, 37180),

Gene: Kersh_54 Start: 39001, Stop: 39192, Start Num: 19
Candidate Starts for Kersh_54:
(Start: 19 @39001 has 195 MA's), (Start: 23 @39031 has 14 MA's), (26, 39070), (27, 39082), (30, 39106), (32, 39124), (34, 39133),

Gene: Kimberlium_54 Start: 38863, Stop: 39051, Start Num: 19
Candidate Starts for Kimberlium_54:
(Start: 19 @38863 has 195 MA's), (Start: 23 @38893 has 14 MA's), (26, 38929), (27, 38941), (30, 38965), (32, 38983), (34, 38992),

Gene: KingJulian_51 Start: 36208, Stop: 36399, Start Num: 19
Candidate Starts for KingJulian_51:
(Start: 15 @36160 has 1 MA's), (Start: 19 @36208 has 195 MA's), (Start: 23 @36238 has 14 MA's), (25, 36259), (26, 36277), (27, 36289), (30, 36313), (34, 36340),

Gene: KingMidas_52 Start: 37553, Stop: 37741, Start Num: 19
Candidate Starts for KingMidas_52:
(Start: 19 @37553 has 195 MA's), (Start: 23 @37583 has 14 MA's), (26, 37619), (27, 37631), (30, 37655), (32, 37673), (34, 37682),

Gene: Kingsley_48 Start: 35985, Stop: 36176, Start Num: 19
Candidate Starts for Kingsley_48:
(Start: 19 @35985 has 195 MA's), (Start: 23 @36015 has 14 MA's), (25, 36036), (26, 36054), (27, 36066), (30, 36090), (32, 36108), (34, 36117), (35, 36138),

Gene: Koella_47 Start: 33403, Stop: 33591, Start Num: 19
Candidate Starts for Koella_47:
(4, 33286), (11, 33328), (13, 33349), (16, 33379), (17, 33385), (Start: 19 @33403 has 195 MA's), (Start: 23 @33433 has 14 MA's), (26, 33469), (27, 33481), (30, 33505), (32, 33523), (34, 33532),

Gene: KristaRAM_54 Start: 39046, Stop: 39237, Start Num: 19
Candidate Starts for KristaRAM_54:
(Start: 15 @38998 has 1 MA's), (Start: 19 @39046 has 195 MA's), (Start: 23 @39076 has 14 MA's), (25, 39097), (26, 39115), (27, 39127), (30, 39151), (34, 39178),

Gene: LastJedi_47 Start: 34723, Stop: 34911, Start Num: 19
Candidate Starts for LastJedi_47:
(Start: 19 @34723 has 195 MA's), (Start: 23 @34753 has 14 MA's), (24, 34762), (26, 34789), (27, 34801), (30, 34825), (32, 34843), (34, 34852),

Gene: Latretium_54 Start: 37870, Stop: 38028, Start Num: 23
Candidate Starts for Latretium_54:
(Start: 19 @37840 has 195 MA's), (Start: 23 @37870 has 14 MA's), (26, 37906), (27, 37918), (30, 37942), (32, 37960), (34, 37969),

Gene: Leozinho_52 Start: 36801, Stop: 36992, Start Num: 19
Candidate Starts for Leozinho_52:
(Start: 19 @36801 has 195 MA's), (Start: 23 @36831 has 14 MA's), (26, 36870), (27, 36882), (30, 36906), (32, 36924), (34, 36933),

Gene: Leperchaun_45 Start: 35121, Stop: 35309, Start Num: 19
Candidate Starts for Leperchaun_45:
(Start: 19 @35121 has 195 MA's), (Start: 23 @35151 has 14 MA's), (26, 35187), (27, 35199), (30, 35223), (32, 35241), (34, 35250),

Gene: LilMoolah_50 Start: 36618, Stop: 36809, Start Num: 19
Candidate Starts for LilMoolah_50:
(Start: 19 @36618 has 195 MA's), (Start: 23 @36648 has 14 MA's), (26, 36687), (27, 36699), (30, 36723), (32, 36741), (34, 36750),

Gene: LittleShirley_51 Start: 37649, Stop: 37840, Start Num: 19
Candidate Starts for LittleShirley_51:
(Start: 19 @37649 has 195 MA's), (Start: 23 @37679 has 14 MA's), (25, 37700), (26, 37718), (27, 37730), (30, 37754), (32, 37772), (34, 37781),

Gene: Lizziana_59 Start: 38476, Stop: 38664, Start Num: 19
Candidate Starts for Lizziana_59:
(4, 38359), (11, 38401), (13, 38422), (16, 38452), (17, 38458), (Start: 19 @38476 has 195 MA's), (Start: 23 @38506 has 14 MA's), (26, 38542), (27, 38554), (30, 38578), (32, 38596), (34, 38605),

Gene: Llama_57 Start: 39229, Stop: 39417, Start Num: 19
Candidate Starts for Llama_57:
(9, 39145), (Start: 19 @39229 has 195 MA's), (Start: 23 @39259 has 14 MA's), (26, 39295), (27, 39307), (30, 39331), (32, 39349), (34, 39358),

Gene: Llij_48 Start: 36187, Stop: 36378, Start Num: 19
Candidate Starts for Llij_48:
(Start: 19 @36187 has 195 MA's), (Start: 23 @36217 has 14 MA's), (26, 36256), (27, 36268), (30, 36292), (32, 36310), (34, 36319),

Gene: Lucia_51 Start: 36331, Stop: 36522, Start Num: 19
Candidate Starts for Lucia_51:
(Start: 19 @36331 has 195 MA's), (Start: 23 @36361 has 14 MA's), (26, 36400), (27, 36412), (30, 36436), (32, 36454), (34, 36463),

Gene: LunaBlu_55 Start: 38087, Stop: 38275, Start Num: 19
Candidate Starts for LunaBlu_55:
(Start: 19 @38087 has 195 MA's), (Start: 23 @38117 has 14 MA's), (26, 38153), (27, 38165), (30, 38189), (32, 38207), (34, 38216),

Gene: LunaStella_49 Start: 35554, Stop: 35757, Start Num: 18
Candidate Starts for LunaStella_49:
(Start: 18 @35554 has 3 MA's), (21, 35578), (Start: 23 @35590 has 14 MA's), (27, 35638), (28, 35644), (32, 35689), (34, 35698), (35, 35719),

Gene: MadMen_47 Start: 36190, Stop: 36378, Start Num: 19
Candidate Starts for MadMen_47:

(4, 36073), (11, 36115), (13, 36136), (16, 36166), (17, 36172), (Start: 19 @36190 has 195 MA's), (Start: 23 @36220 has 14 MA's), (26, 36256), (27, 36268), (30, 36292), (32, 36310), (34, 36319), (35, 36340),

Gene: Madiba_49 Start: 35479, Stop: 35667, Start Num: 19
Candidate Starts for Madiba_49:
(4, 35362), (11, 35404), (13, 35425), (16, 35455), (17, 35461), (Start: 19 @35479 has 195 MA's), (Start: 23 @35509 has 14 MA's), (26, 35545), (27, 35557), (30, 35581), (32, 35599), (34, 35608),

Gene: Mahavrat_49 Start: 36148, Stop: 36336, Start Num: 19
Candidate Starts for Mahavrat_49:
(Start: 19 @36148 has 195 MA's), (Start: 23 @36178 has 14 MA's), (26, 36214), (27, 36226), (30, 36250), (32, 36268), (34, 36277), (35, 36298),

Gene: Mandlovu_48 Start: 35311, Stop: 35502, Start Num: 19
Candidate Starts for Mandlovu_48:
(Start: 19 @35311 has 195 MA's), (Start: 23 @35341 has 14 MA's), (26, 35380), (27, 35392), (30, 35416), (34, 35443),

Gene: Maravista_53 Start: 38622, Stop: 38810, Start Num: 19
Candidate Starts for Maravista_53:
(Start: 19 @38622 has 195 MA's), (Start: 23 @38652 has 14 MA's), (26, 38688), (27, 38700), (30, 38724), (32, 38742), (34, 38751),

Gene: Marker_52 Start: 36968, Stop: 37156, Start Num: 19
Candidate Starts for Marker_52:
(2, 36821), (3, 36839), (7, 36878), (10, 36884), (Start: 19 @36968 has 195 MA's), (Start: 23 @36998 has 14 MA's), (26, 37034), (27, 37046), (30, 37070), (32, 37088), (34, 37097),

Gene: Martik_53 Start: 37429, Stop: 37617, Start Num: 19
Candidate Starts for Martik_53:
(4, 37312), (11, 37354), (13, 37375), (16, 37405), (17, 37411), (Start: 19 @37429 has 195 MA's), (Start: 23 @37459 has 14 MA's), (26, 37495), (27, 37507), (30, 37531), (32, 37549), (34, 37558),

Gene: Mattes_55 Start: 38576, Stop: 38737, Start Num: 23
Candidate Starts for Mattes_55:
(Start: 19 @38546 has 195 MA's), (Start: 23 @38576 has 14 MA's), (26, 38615), (27, 38627), (30, 38651), (34, 38678), (35, 38699),

Gene: MilanaBonita_99 Start: 32688, Stop: 32879, Start Num: 19
Candidate Starts for MilanaBonita_99:
(Start: 19 @32688 has 195 MA's), (Start: 23 @32718 has 14 MA's), (25, 32739), (26, 32757), (27, 32769), (30, 32793), (34, 32820),

Gene: Minnie_56 Start: 39031, Stop: 39222, Start Num: 19
Candidate Starts for Minnie_56:
(Start: 19 @39031 has 195 MA's), (Start: 23 @39061 has 14 MA's), (25, 39082), (26, 39100), (27, 39112), (30, 39136), (32, 39154), (34, 39163), (35, 39184),

Gene: MisterCuddles_51 Start: 37228, Stop: 37419, Start Num: 19
Candidate Starts for MisterCuddles_51:
(Start: 19 @37228 has 195 MA's), (Start: 23 @37258 has 14 MA's), (26, 37297), (27, 37309), (30, 37333), (32, 37351), (34, 37360),

Gene: Modragons_56 Start: 39075, Stop: 39263, Start Num: 19
Candidate Starts for Modragons_56:
(9, 38991), (Start: 19 @39075 has 195 MA's), (Start: 23 @39105 has 14 MA's), (26, 39141), (27, 39153), (30, 39177), (32, 39195), (34, 39204),

Gene: MooMoo_47 Start: 35830, Stop: 36033, Start Num: 18
Candidate Starts for MooMoo_47:
(Start: 18 @35830 has 3 MA's), (21, 35854), (Start: 23 @35866 has 14 MA's), (27, 35914), (28, 35920), (32, 35965), (34, 35974), (35, 35995),

Gene: Mova_52 Start: 36496, Stop: 36687, Start Num: 19
Candidate Starts for Mova_52:
(Start: 19 @36496 has 195 MA's), (Start: 23 @36526 has 14 MA's), (25, 36547), (26, 36565), (27, 36577), (30, 36601), (34, 36628),

Gene: Mozy_61 Start: 39761, Stop: 39949, Start Num: 19
Candidate Starts for Mozy_61:
(Start: 19 @39761 has 195 MA's), (Start: 23 @39791 has 14 MA's), (26, 39827), (27, 39839), (30, 39863), (32, 39881), (34, 39890),

Gene: MulchExplorer_54 Start: 38862, Stop: 39050, Start Num: 19
Candidate Starts for MulchExplorer_54:
(Start: 19 @38862 has 195 MA's), (Start: 23 @38892 has 14 MA's), (26, 38928), (27, 38940), (30, 38964), (32, 38982), (34, 38991),

Gene: Mutaforma13_55 Start: 39287, Stop: 39475, Start Num: 19
Candidate Starts for Mutaforma13_55:
(Start: 19 @39287 has 195 MA's), (Start: 23 @39317 has 14 MA's), (26, 39353), (27, 39365), (30, 39389), (34, 39416), (35, 39437),

Gene: Mwanjiwa_57 Start: 37600, Stop: 37788, Start Num: 19
Candidate Starts for Mwanjiwa_57:
(Start: 19 @37600 has 195 MA's), (Start: 23 @37630 has 14 MA's), (26, 37666), (27, 37678), (30, 37702), (32, 37720), (34, 37729),

Gene: NewHope4_54 Start: 37488, Stop: 37646, Start Num: 23
Candidate Starts for NewHope4_54:
(Start: 19 @37458 has 195 MA's), (Start: 23 @37488 has 14 MA's), (26, 37524), (27, 37536), (30, 37560), (32, 37578), (34, 37587),

Gene: Nichirin_55 Start: 38492, Stop: 38683, Start Num: 19
Candidate Starts for Nichirin_55:
(Start: 19 @38492 has 195 MA's), (Start: 23 @38522 has 14 MA's), (26, 38561), (27, 38573), (30, 38597), (32, 38615), (34, 38624),

Gene: Nimbo_47 Start: 35694, Stop: 35882, Start Num: 19
Candidate Starts for Nimbo_47:
(Start: 19 @35694 has 195 MA's), (Start: 23 @35724 has 14 MA's), (26, 35760), (27, 35772), (30, 35796), (32, 35814), (34, 35823),

Gene: Nitzel_48 Start: 35903, Stop: 36091, Start Num: 19
Candidate Starts for Nitzel_48:

(4, 35786), (11, 35828), (13, 35849), (16, 35879), (17, 35885), (Start: 19 @35903 has 195 MA's), (Start: 23 @35933 has 14 MA's), (26, 35969), (27, 35981), (30, 36005), (32, 36023), (34, 36032),

Gene: Nivrat_48 Start: 36491, Stop: 36682, Start Num: 19
Candidate Starts for Nivrat_48:
(Start: 19 @36491 has 195 MA's), (Start: 23 @36521 has 14 MA's), (26, 36560), (27, 36572), (30, 36596), (32, 36614), (34, 36623),

Gene: NormanBulbieJr_53 Start: 37416, Stop: 37604, Start Num: 19
Candidate Starts for NormanBulbieJr_53:
(4, 37299), (11, 37341), (13, 37362), (16, 37392), (17, 37398), (Start: 19 @37416 has 195 MA's), (Start: 23 @37446 has 14 MA's), (26, 37482), (27, 37494), (30, 37518), (32, 37536), (34, 37545),

Gene: Ochi17_55 Start: 38682, Stop: 38870, Start Num: 19
Candidate Starts for Ochi17_55:
(9, 38598), (Start: 19 @38682 has 195 MA's), (Start: 23 @38712 has 14 MA's), (26, 38748), (27, 38760), (30, 38784), (32, 38802), (34, 38811),

Gene: OfUltron_57 Start: 39231, Stop: 39419, Start Num: 19
Candidate Starts for OfUltron_57:
(9, 39147), (Start: 19 @39231 has 195 MA's), (Start: 23 @39261 has 14 MA's), (26, 39297), (27, 39309), (30, 39333), (32, 39351), (34, 39360),

Gene: Ogopogo_55 Start: 37249, Stop: 37437, Start Num: 19
Candidate Starts for Ogopogo_55:
(Start: 15 @37201 has 1 MA's), (Start: 19 @37249 has 195 MA's), (Start: 23 @37279 has 14 MA's), (26, 37315), (27, 37327), (30, 37351), (32, 37369), (34, 37378), (35, 37399),

Gene: Okabe_46 Start: 33092, Stop: 33283, Start Num: 19
Candidate Starts for Okabe_46:
(Start: 19 @33092 has 195 MA's), (Start: 23 @33122 has 14 MA's), (25, 33143), (26, 33161), (27, 33173), (30, 33197), (34, 33224),

Gene: OldBen_50 Start: 37409, Stop: 37597, Start Num: 19
Candidate Starts for OldBen_50:
(Start: 19 @37409 has 195 MA's), (Start: 23 @37439 has 14 MA's), (26, 37475), (27, 37487), (30, 37511), (32, 37529), (34, 37538),

Gene: OlympiaSaint_53 Start: 37453, Stop: 37644, Start Num: 19
Candidate Starts for OlympiaSaint_53:
(Start: 15 @37405 has 1 MA's), (Start: 19 @37453 has 195 MA's), (Start: 23 @37483 has 14 MA's), (25, 37504), (26, 37522), (27, 37534), (30, 37558), (32, 37576), (34, 37585), (35, 37606),

Gene: OwlsT2W_52 Start: 37458, Stop: 37649, Start Num: 19
Candidate Starts for OwlsT2W_52:
(Start: 15 @37410 has 1 MA's), (Start: 19 @37458 has 195 MA's), (Start: 23 @37488 has 14 MA's), (26, 37527), (27, 37539), (30, 37563), (32, 37581), (34, 37590),

Gene: PHappiness_48 Start: 35667, Stop: 35855, Start Num: 19
Candidate Starts for PHappiness_48:
(Start: 19 @35667 has 195 MA's), (Start: 23 @35697 has 14 MA's), (26, 35733), (27, 35745), (30, 35769), (32, 35787), (34, 35796),

Gene: PMC_46 Start: 36465, Stop: 36656, Start Num: 19
Candidate Starts for PMC_46:
(Start: 19 @36465 has 195 MA's), (Start: 23 @36495 has 14 MA's), (25, 36516), (26, 36534), (27, 36546), (30, 36570), (32, 36588), (34, 36597),

Gene: Pacc40_47 Start: 35741, Stop: 35929, Start Num: 19
Candidate Starts for Pacc40_47:
(Start: 19 @35741 has 195 MA's), (Start: 23 @35771 has 14 MA's), (26, 35807), (27, 35819), (30, 35843), (32, 35861), (34, 35870),

Gene: PatoPoderoso_49 Start: 36238, Stop: 36399, Start Num: 23
Candidate Starts for PatoPoderoso_49:
(Start: 15 @36160 has 1 MA's), (Start: 19 @36208 has 195 MA's), (Start: 23 @36238 has 14 MA's), (25, 36259), (26, 36277), (27, 36289), (30, 36313), (34, 36340),

Gene: Phanphagia_49 Start: 37378, Stop: 37569, Start Num: 19
Candidate Starts for Phanphagia_49:
(Start: 15 @37330 has 1 MA's), (Start: 19 @37378 has 195 MA's), (Start: 23 @37408 has 14 MA's), (25, 37429), (26, 37447), (27, 37459), (30, 37483), (32, 37501), (34, 37510), (35, 37531),

Gene: Phatniss_50 Start: 37282, Stop: 37473, Start Num: 19
Candidate Starts for Phatniss_50:
(Start: 19 @37282 has 195 MA's), (Start: 23 @37312 has 14 MA's), (26, 37351), (27, 37363), (30, 37387), (32, 37405), (34, 37414),

Gene: Philus_55 Start: 38462, Stop: 38623, Start Num: 23
Candidate Starts for Philus_55:
(Start: 19 @38432 has 195 MA's), (Start: 23 @38462 has 14 MA's), (25, 38483), (26, 38501), (27, 38513), (30, 38537), (32, 38555), (34, 38564),

Gene: PhlipPhlop_51 Start: 38301, Stop: 38459, Start Num: 23
Candidate Starts for PhlipPhlop_51:
(Start: 19 @38271 has 195 MA's), (Start: 23 @38301 has 14 MA's), (26, 38337), (27, 38349), (30, 38373), (32, 38391), (34, 38400),

Gene: Pippy_51 Start: 36287, Stop: 36475, Start Num: 19
Candidate Starts for Pippy_51:
(Start: 19 @36287 has 195 MA's), (Start: 23 @36317 has 14 MA's), (24, 36326), (26, 36353), (27, 36365), (30, 36389), (32, 36407), (34, 36416),

Gene: Plumbus_54 Start: 37516, Stop: 37704, Start Num: 19
Candidate Starts for Plumbus_54:
(Start: 19 @37516 has 195 MA's), (Start: 23 @37546 has 14 MA's), (26, 37582), (27, 37594), (30, 37618), (32, 37636), (34, 37645),

Gene: Poenanya_51 Start: 37994, Stop: 38182, Start Num: 19
Candidate Starts for Poenanya_51:
(Start: 19 @37994 has 195 MA's), (Start: 23 @38024 has 14 MA's), (26, 38060), (27, 38072), (30, 38096), (34, 38123),

Gene: Polka14_49 Start: 36344, Stop: 36532, Start Num: 19
Candidate Starts for Polka14_49:

(Start: 19 @36344 has 195 MA's), (Start: 23 @36374 has 14 MA's), (27, 36422), (30, 36446), (32, 36464), (34, 36473),

Gene: Pollywog_53 Start: 37900, Stop: 38088, Start Num: 19
Candidate Starts for Pollywog_53:
(Start: 15 @37852 has 1 MA's), (Start: 19 @37900 has 195 MA's), (Start: 23 @37930 has 14 MA's), (26, 37966), (27, 37978), (30, 38002), (32, 38020), (34, 38029),

Gene: Polo2Bam_58 Start: 37342, Stop: 37500, Start Num: 23
Candidate Starts for Polo2Bam_58:
(Start: 19 @37312 has 195 MA's), (Start: 23 @37342 has 14 MA's), (26, 37378), (27, 37390), (30, 37414), (32, 37432), (34, 37441),

Gene: PopTart_46 Start: 36053, Stop: 36241, Start Num: 19
Candidate Starts for PopTart_46:
(Start: 19 @36053 has 195 MA's), (Start: 23 @36083 has 14 MA's), (24, 36092), (26, 36119), (27, 36131), (30, 36155), (32, 36173), (34, 36182),

Gene: Priscilla_53 Start: 37515, Stop: 37703, Start Num: 19
Candidate Starts for Priscilla_53:
(4, 37398), (11, 37440), (13, 37461), (16, 37491), (17, 37497), (Start: 19 @37515 has 195 MA's), (Start: 23 @37545 has 14 MA's), (26, 37581), (27, 37593), (30, 37617), (32, 37635), (34, 37644),

Gene: QuickMath_53 Start: 39086, Stop: 39274, Start Num: 19
Candidate Starts for QuickMath_53:
(Start: 19 @39086 has 195 MA's), (Start: 23 @39116 has 14 MA's), (26, 39152), (27, 39164), (30, 39188), (32, 39206), (34, 39215),

Gene: Quico_61 Start: 39522, Stop: 39710, Start Num: 19
Candidate Starts for Quico_61:
(Start: 19 @39522 has 195 MA's), (Start: 23 @39552 has 14 MA's), (26, 39588), (27, 39600), (30, 39624), (32, 39642), (34, 39651),

Gene: Radiance_52 Start: 37581, Stop: 37769, Start Num: 19
Candidate Starts for Radiance_52:
(Start: 19 @37581 has 195 MA's), (Start: 23 @37611 has 14 MA's), (26, 37647), (27, 37659), (30, 37683), (32, 37701), (34, 37710), (35, 37731),

Gene: Ramsey_53 Start: 38235, Stop: 38426, Start Num: 19
Candidate Starts for Ramsey_53:
(Start: 19 @38235 has 195 MA's), (Start: 23 @38265 has 14 MA's), (26, 38304), (27, 38316), (30, 38340), (32, 38358), (34, 38367),

Gene: RedBird_48 Start: 36378, Stop: 36569, Start Num: 19
Candidate Starts for RedBird_48:
(Start: 19 @36378 has 195 MA's), (Start: 23 @36408 has 14 MA's), (26, 36447), (27, 36459), (30, 36483), (32, 36501), (34, 36510),

Gene: Renaud18_57 Start: 38033, Stop: 38224, Start Num: 19
Candidate Starts for Renaud18_57:
(1, 37871), (8, 37946), (Start: 19 @38033 has 195 MA's), (Start: 23 @38063 has 14 MA's), (24, 38072), (25, 38084), (26, 38102), (27, 38114), (30, 38138), (32, 38156), (34, 38165),

Gene: Rialto_56 Start: 39673, Stop: 39864, Start Num: 19
Candidate Starts for Rialto_56:
(Start: 19 @39673 has 195 MA's), (Start: 23 @39703 has 14 MA's), (25, 39724), (26, 39742), (27, 39754), (30, 39778), (34, 39805),

Gene: Rita_55 Start: 36903, Stop: 37064, Start Num: 19
Candidate Starts for Rita_55:
(Start: 19 @36903 has 195 MA's), (Start: 23 @36933 has 14 MA's), (26, 36972),

Gene: RitaG_48 Start: 36012, Stop: 36200, Start Num: 19
Candidate Starts for RitaG_48:
(Start: 19 @36012 has 195 MA's), (Start: 23 @36042 has 14 MA's), (26, 36078), (27, 36090), (30, 36114), (32, 36132), (34, 36141),

Gene: Rockne_50 Start: 36465, Stop: 36656, Start Num: 19
Candidate Starts for Rockne_50:
(Start: 19 @36465 has 195 MA's), (Start: 23 @36495 has 14 MA's), (25, 36516), (26, 36534), (27, 36546), (30, 36570), (32, 36588), (34, 36597),

Gene: RockyHorror_52 Start: 36869, Stop: 37060, Start Num: 19
Candidate Starts for RockyHorror_52:
(Start: 19 @36869 has 195 MA's), (Start: 23 @36899 has 14 MA's), (25, 36920), (26, 36938), (27, 36950), (30, 36974), (32, 36992), (34, 37001),

Gene: Royals2015_54 Start: 37127, Stop: 37318, Start Num: 19
Candidate Starts for Royals2015_54:
(Start: 19 @37127 has 195 MA's), (Start: 23 @37157 has 14 MA's), (25, 37178), (26, 37196), (27, 37208), (30, 37232), (32, 37250), (34, 37259),

Gene: Ruby_49 Start: 37229, Stop: 37420, Start Num: 19
Candidate Starts for Ruby_49:
(Start: 19 @37229 has 195 MA's), (Start: 23 @37259 has 14 MA's), (26, 37298), (27, 37310), (30, 37334), (32, 37352), (34, 37361),

Gene: Sabbb_57 Start: 38277, Stop: 38468, Start Num: 19
Candidate Starts for Sabbb_57:
(Start: 19 @38277 has 195 MA's), (Start: 23 @38307 has 14 MA's), (26, 38346), (27, 38358), (30, 38382), (32, 38400), (34, 38409),

Gene: Sandalphon_54 Start: 38188, Stop: 38376, Start Num: 19
Candidate Starts for Sandalphon_54:
(Start: 19 @38188 has 195 MA's), (Start: 23 @38218 has 14 MA's), (24, 38227), (26, 38254), (27, 38266), (30, 38290), (32, 38308), (34, 38317),

Gene: Sarma624_49 Start: 33177, Stop: 33368, Start Num: 19
Candidate Starts for Sarma624_49:
(Start: 19 @33177 has 195 MA's), (Start: 23 @33207 has 14 MA's), (25, 33228), (26, 33246), (27, 33258), (30, 33282), (32, 33300), (34, 33309), (35, 33330),

Gene: Sassafras_49 Start: 35976, Stop: 36164, Start Num: 19
Candidate Starts for Sassafras_49:
(Start: 19 @35976 has 195 MA's), (Start: 23 @36006 has 14 MA's), (26, 36042), (27, 36054), (30, 36078), (32, 36096), (34, 36105),

Gene: SassyB_46 Start: 36053, Stop: 36241, Start Num: 19
Candidate Starts for SassyB_46:
(Start: 19 @36053 has 195 MA's), (Start: 23 @36083 has 14 MA's), (24, 36092), (26, 36119), (27, 36131), (30, 36155), (32, 36173), (34, 36182),

Gene: Scottish_51 Start: 37024, Stop: 37212, Start Num: 19
Candidate Starts for Scottish_51:
(Start: 19 @37024 has 195 MA's), (Start: 23 @37054 has 14 MA's), (26, 37090), (27, 37102), (30, 37126), (32, 37144), (34, 37153),

Gene: SeaLumen_57 Start: 37342, Stop: 37500, Start Num: 23
Candidate Starts for SeaLumen_57:
(Start: 19 @37312 has 195 MA's), (Start: 23 @37342 has 14 MA's), (26, 37378), (27, 37390), (30, 37414), (32, 37432), (34, 37441),

Gene: Seabastian_57 Start: 39232, Stop: 39420, Start Num: 19
Candidate Starts for Seabastian_57:
(9, 39148), (Start: 19 @39232 has 195 MA's), (Start: 23 @39262 has 14 MA's), (26, 39298), (27, 39310), (30, 39334), (32, 39352), (34, 39361),

Gene: Seagreen_52 Start: 36781, Stop: 36969, Start Num: 19
Candidate Starts for Seagreen_52:
(Start: 19 @36781 has 195 MA's), (Start: 23 @36811 has 14 MA's), (26, 36847), (27, 36859), (30, 36883), (32, 36901), (34, 36910),

Gene: Shauna1_50 Start: 37389, Stop: 37550, Start Num: 23
Candidate Starts for Shauna1_50:
(Start: 15 @37311 has 1 MA's), (Start: 19 @37359 has 195 MA's), (Start: 23 @37389 has 14 MA's), (25, 37410), (26, 37428), (27, 37440), (30, 37464), (32, 37482), (34, 37491), (35, 37512),

Gene: ShiLan_52 Start: 37462, Stop: 37650, Start Num: 19
Candidate Starts for ShiLan_52:
(4, 37345), (11, 37387), (13, 37408), (16, 37438), (17, 37444), (Start: 19 @37462 has 195 MA's), (Start: 23 @37492 has 14 MA's), (26, 37528), (27, 37540), (30, 37564), (32, 37582), (34, 37591),

Gene: ShowerHandel_56 Start: 37429, Stop: 37617, Start Num: 19
Candidate Starts for ShowerHandel_56:
(4, 37312), (11, 37354), (13, 37375), (16, 37405), (17, 37411), (Start: 19 @37429 has 195 MA's), (Start: 23 @37459 has 14 MA's), (26, 37495), (27, 37507), (30, 37531), (32, 37549), (34, 37558),

Gene: ShroomBoi_54 Start: 37646, Stop: 37837, Start Num: 19
Candidate Starts for ShroomBoi_54:
(Start: 19 @37646 has 195 MA's), (Start: 23 @37676 has 14 MA's), (25, 37697), (26, 37715), (27, 37727), (30, 37751), (32, 37769), (34, 37778),

Gene: SiSi_50 Start: 36603, Stop: 36791, Start Num: 19
Candidate Starts for SiSi_50:
(Start: 19 @36603 has 195 MA's), (Start: 23 @36633 has 14 MA's), (26, 36669), (27, 36681), (30, 36705), (32, 36723), (34, 36732),

Gene: SimranZ1_50 Start: 36116, Stop: 36304, Start Num: 19
Candidate Starts for SimranZ1_50:

(5, 36017), (Start: 19 @36116 has 195 MA's), (Start: 23 @36146 has 14 MA's), (26, 36182), (27, 36194), (30, 36218), (32, 36236), (33, 36242), (34, 36245), (35, 36266),

Gene: Slim_52 Start: 37748, Stop: 37939, Start Num: 19
Candidate Starts for Slim_52:
(Start: 19 @37748 has 195 MA's), (Start: 23 @37778 has 14 MA's), (25, 37799), (26, 37817), (27, 37829), (30, 37853), (32, 37871), (34, 37880),

Gene: Soul22_55 Start: 37253, Stop: 37414, Start Num: 23
Candidate Starts for Soul22_55:
(Start: 15 @37175 has 1 MA's), (Start: 19 @37223 has 195 MA's), (Start: 23 @37253 has 14 MA's), (25, 37274), (26, 37292), (27, 37304), (30, 37328), (34, 37355),

Gene: Sparkdehlily_57 Start: 38118, Stop: 38306, Start Num: 19
Candidate Starts for Sparkdehlily_57:
(4, 38001), (11, 38043), (13, 38064), (16, 38094), (17, 38100), (Start: 19 @38118 has 195 MA's), (Start: 23 @38148 has 14 MA's), (26, 38184), (27, 38196), (30, 38220), (32, 38238), (34, 38247), (35, 38268),

Gene: Spartacus_53 Start: 37262, Stop: 37453, Start Num: 19
Candidate Starts for Spartacus_53:
(Start: 19 @37262 has 195 MA's), (Start: 23 @37292 has 14 MA's), (25, 37313), (26, 37331), (27, 37343), (30, 37367), (32, 37385), (34, 37394), (35, 37415),

Gene: Spikelee_58 Start: 38764, Stop: 38955, Start Num: 19
Candidate Starts for Spikelee_58:
(Start: 19 @38764 has 195 MA's), (Start: 23 @38794 has 14 MA's), (26, 38833), (27, 38845), (30, 38869), (32, 38887), (34, 38896), (35, 38917),

Gene: Spoonbill_50 Start: 35966, Stop: 36154, Start Num: 19
Candidate Starts for Spoonbill_50:
(Start: 19 @35966 has 195 MA's), (Start: 23 @35996 has 14 MA's), (26, 36032), (27, 36044), (30, 36068), (32, 36086), (34, 36095),

Gene: Squirty_55 Start: 38391, Stop: 38630, Start Num: 15
Candidate Starts for Squirty_55:
(Start: 15 @38391 has 1 MA's), (Start: 19 @38439 has 195 MA's), (Start: 23 @38469 has 14 MA's), (25, 38490), (26, 38508), (27, 38520), (30, 38544), (34, 38571),

Gene: Stap_51 Start: 36767, Stop: 36955, Start Num: 19
Candidate Starts for Stap_51:
(Start: 19 @36767 has 195 MA's), (Start: 23 @36797 has 14 MA's), (26, 36833), (27, 36845), (30, 36869), (32, 36887), (34, 36896),

Gene: Starcevich_51 Start: 37233, Stop: 37421, Start Num: 19
Candidate Starts for Starcevich_51:
(Start: 19 @37233 has 195 MA's), (Start: 23 @37263 has 14 MA's), (26, 37299), (27, 37311), (30, 37335), (32, 37353), (34, 37362),

Gene: Strokeseat_48 Start: 35368, Stop: 35559, Start Num: 19
Candidate Starts for Strokeseat_48:
(Start: 19 @35368 has 195 MA's), (Start: 23 @35398 has 14 MA's), (26, 35437), (27, 35449), (30, 35473), (34, 35500),

Gene: SuperGrey_55 Start: 38785, Stop: 38976, Start Num: 19
Candidate Starts for SuperGrey_55:
(Start: 15 @38737 has 1 MA's), (Start: 19 @38785 has 195 MA's), (Start: 23 @38815 has 14 MA's), (25, 38836), (26, 38854), (27, 38866), (30, 38890), (32, 38908), (34, 38917), (35, 38938),

Gene: SwagPigglett_57 Start: 39437, Stop: 39628, Start Num: 19
Candidate Starts for SwagPigglett_57:
(Start: 19 @39437 has 195 MA's), (Start: 23 @39467 has 14 MA's), (25, 39488), (26, 39506), (27, 39518), (30, 39542), (32, 39560), (34, 39569),

Gene: TChen_51 Start: 37505, Stop: 37708, Start Num: 18
Candidate Starts for TChen_51:
(Start: 18 @37505 has 3 MA's), (21, 37529), (Start: 23 @37541 has 14 MA's), (27, 37589), (28, 37595), (32, 37640), (34, 37649), (35, 37670),

Gene: TDanisky_57 Start: 38118, Stop: 38306, Start Num: 19
Candidate Starts for TDanisky_57:
(4, 38001), (11, 38043), (13, 38064), (16, 38094), (17, 38100), (Start: 19 @38118 has 195 MA's), (Start: 23 @38148 has 14 MA's), (26, 38184), (27, 38196), (30, 38220), (32, 38238), (34, 38247), (35, 38268),

Gene: Taj_55 Start: 37954, Stop: 38145, Start Num: 19
Candidate Starts for Taj_55:
(1, 37792), (8, 37867), (Start: 19 @37954 has 195 MA's), (Start: 23 @37984 has 14 MA's), (24, 37993), (25, 38005), (26, 38023), (27, 38035), (30, 38059), (32, 38077), (34, 38086),

Gene: Tchotchke_53 Start: 36498, Stop: 36689, Start Num: 19
Candidate Starts for Tchotchke_53:
(Start: 19 @36498 has 195 MA's), (Start: 23 @36528 has 14 MA's), (25, 36549), (26, 36567), (27, 36579), (30, 36603), (32, 36621), (34, 36630), (35, 36651),

Gene: ThetaBob_56 Start: 37454, Stop: 37612, Start Num: 23
Candidate Starts for ThetaBob_56:
(Start: 19 @37424 has 195 MA's), (Start: 23 @37454 has 14 MA's), (24, 37463), (26, 37490), (27, 37502), (30, 37526), (34, 37553),

Gene: Tootsieroll_54 Start: 36790, Stop: 36981, Start Num: 19
Candidate Starts for Tootsieroll_54:
(Start: 19 @36790 has 195 MA's), (Start: 23 @36820 has 14 MA's), (26, 36859), (27, 36871), (30, 36895), (32, 36913), (34, 36922),

Gene: Topiatin_57 Start: 38640, Stop: 38828, Start Num: 19
Candidate Starts for Topiatin_57:
(Start: 19 @38640 has 195 MA's), (Start: 23 @38670 has 14 MA's), (26, 38706), (27, 38718), (30, 38742), (32, 38760), (34, 38769),

Gene: Toron_49 Start: 36813, Stop: 37007, Start Num: 20
Candidate Starts for Toron_49:
(20, 36813), (21, 36825), (22, 36828), (Start: 23 @36837 has 14 MA's), (24, 36846), (27, 36888), (28, 36894), (29, 36909), (32, 36939), (34, 36948), (35, 36969),

Gene: Totinger_51 Start: 36375, Stop: 36566, Start Num: 19

Candidate Starts for Totinger_51:
(Start: 19 @36375 has 195 MA's), (Start: 23 @36405 has 14 MA's), (25, 36426), (26, 36444), (27, 36456), (30, 36480), (32, 36498), (34, 36507),

Gene: Tweety_51 Start: 37589, Stop: 37777, Start Num: 19
Candidate Starts for Tweety_51:
(Start: 19 @37589 has 195 MA's), (Start: 23 @37619 has 14 MA's), (26, 37655), (27, 37667), (30, 37691), (32, 37709), (34, 37718),

Gene: UncleRicky_51 Start: 37530, Stop: 37721, Start Num: 19
Candidate Starts for UncleRicky_51:
(Start: 19 @37530 has 195 MA's), (Start: 23 @37560 has 14 MA's), (26, 37599), (27, 37611), (30, 37635), (32, 37653), (34, 37662),

Gene: Velveteen_46 Start: 33177, Stop: 33368, Start Num: 19
Candidate Starts for Velveteen_46:
(Start: 19 @33177 has 195 MA's), (Start: 23 @33207 has 14 MA's), (25, 33228), (26, 33246), (27, 33258), (30, 33282), (32, 33300), (34, 33309), (35, 33330),

Gene: Veteran_48 Start: 36247, Stop: 36435, Start Num: 19
Candidate Starts for Veteran_48:
(Start: 19 @36247 has 195 MA's), (Start: 23 @36277 has 14 MA's), (26, 36313), (27, 36325), (30, 36349), (32, 36367), (34, 36376),

Gene: Violac_54 Start: 38477, Stop: 38668, Start Num: 19
Candidate Starts for Violac_54:
(5, 38378), (Start: 19 @38477 has 195 MA's), (Start: 23 @38507 has 14 MA's), (27, 38558), (30, 38582), (34, 38609),

Gene: Vivum_54 Start: 37788, Stop: 37976, Start Num: 19
Candidate Starts for Vivum_54:
(Start: 19 @37788 has 195 MA's), (Start: 23 @37818 has 14 MA's), (26, 37854), (27, 37866), (30, 37890), (32, 37908), (34, 37917), (35, 37938),

Gene: Wachhund_53 Start: 36783, Stop: 36974, Start Num: 19
Candidate Starts for Wachhund_53:
(Start: 19 @36783 has 195 MA's), (Start: 23 @36813 has 14 MA's), (25, 36834), (26, 36852), (27, 36864), (30, 36888), (32, 36906), (34, 36915),

Gene: Wee_54 Start: 38226, Stop: 38417, Start Num: 19
Candidate Starts for Wee_54:
(1, 38064), (8, 38139), (Start: 19 @38226 has 195 MA's), (Start: 23 @38256 has 14 MA's), (24, 38265), (25, 38277), (26, 38295), (27, 38307), (30, 38331), (32, 38349), (34, 38358),

Gene: Whatsapiecost_51 Start: 36251, Stop: 36439, Start Num: 19
Candidate Starts for Whatsapiecost_51:
(Start: 15 @36203 has 1 MA's), (Start: 19 @36251 has 195 MA's), (Start: 23 @36281 has 14 MA's), (26, 36317), (27, 36329), (30, 36353), (34, 36380), (35, 36401),

Gene: Whouxphf_50 Start: 37267, Stop: 37455, Start Num: 19
Candidate Starts for Whouxphf_50:
(Start: 19 @37267 has 195 MA's), (Start: 23 @37297 has 14 MA's), (26, 37333), (27, 37345), (30, 37369), (32, 37387), (34, 37396),

Gene: WillSterrel_52 Start: 38378, Stop: 38569, Start Num: 19
Candidate Starts for WillSterrel_52:
(Start: 19 @38378 has 195 MA's), (Start: 23 @38408 has 14 MA's), (25, 38429), (26, 38447), (27, 38459), (30, 38483), (32, 38501), (34, 38510), (35, 38531),

Gene: Yorick_52 Start: 37803, Stop: 37991, Start Num: 19
Candidate Starts for Yorick_52:
(4, 37686), (11, 37728), (13, 37749), (16, 37779), (17, 37785), (Start: 19 @37803 has 195 MA's), (Start: 23 @37833 has 14 MA's), (26, 37869), (27, 37881), (30, 37905), (32, 37923), (34, 37932),

Gene: Yoshi_63 Start: 38592, Stop: 38750, Start Num: 23
Candidate Starts for Yoshi_63:
(Start: 19 @38562 has 195 MA's), (Start: 23 @38592 has 14 MA's), (26, 38628), (27, 38640), (30, 38664), (32, 38682), (34, 38691),

Gene: Zapner_64 Start: 38132, Stop: 38290, Start Num: 23
Candidate Starts for Zapner_64:
(Start: 19 @38102 has 195 MA's), (Start: 23 @38132 has 14 MA's), (26, 38168), (27, 38180), (30, 38204), (32, 38222), (34, 38231), (35, 38252),

Gene: Zerg_51 Start: 36978, Stop: 37169, Start Num: 19
Candidate Starts for Zerg_51:
(Start: 19 @36978 has 195 MA's), (Start: 23 @37008 has 14 MA's), (25, 37029), (26, 37047), (27, 37059), (30, 37083), (32, 37101), (34, 37110),

Gene: Zizzle_57 Start: 39121, Stop: 39309, Start Num: 19
Candidate Starts for Zizzle_57:
(Start: 19 @39121 has 195 MA's), (Start: 23 @39151 has 14 MA's), (26, 39187), (27, 39199), (30, 39223), (32, 39241), (34, 39250),