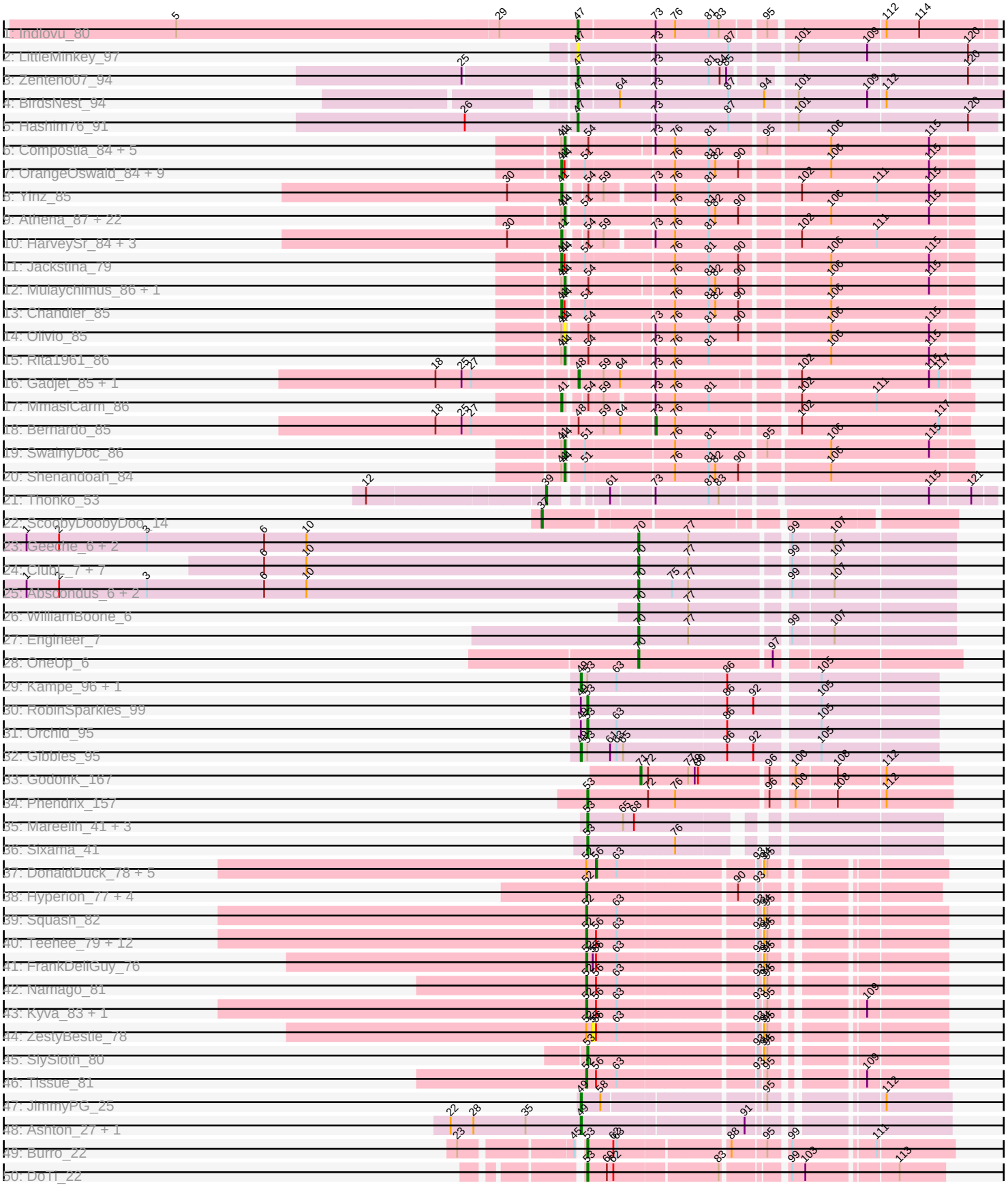
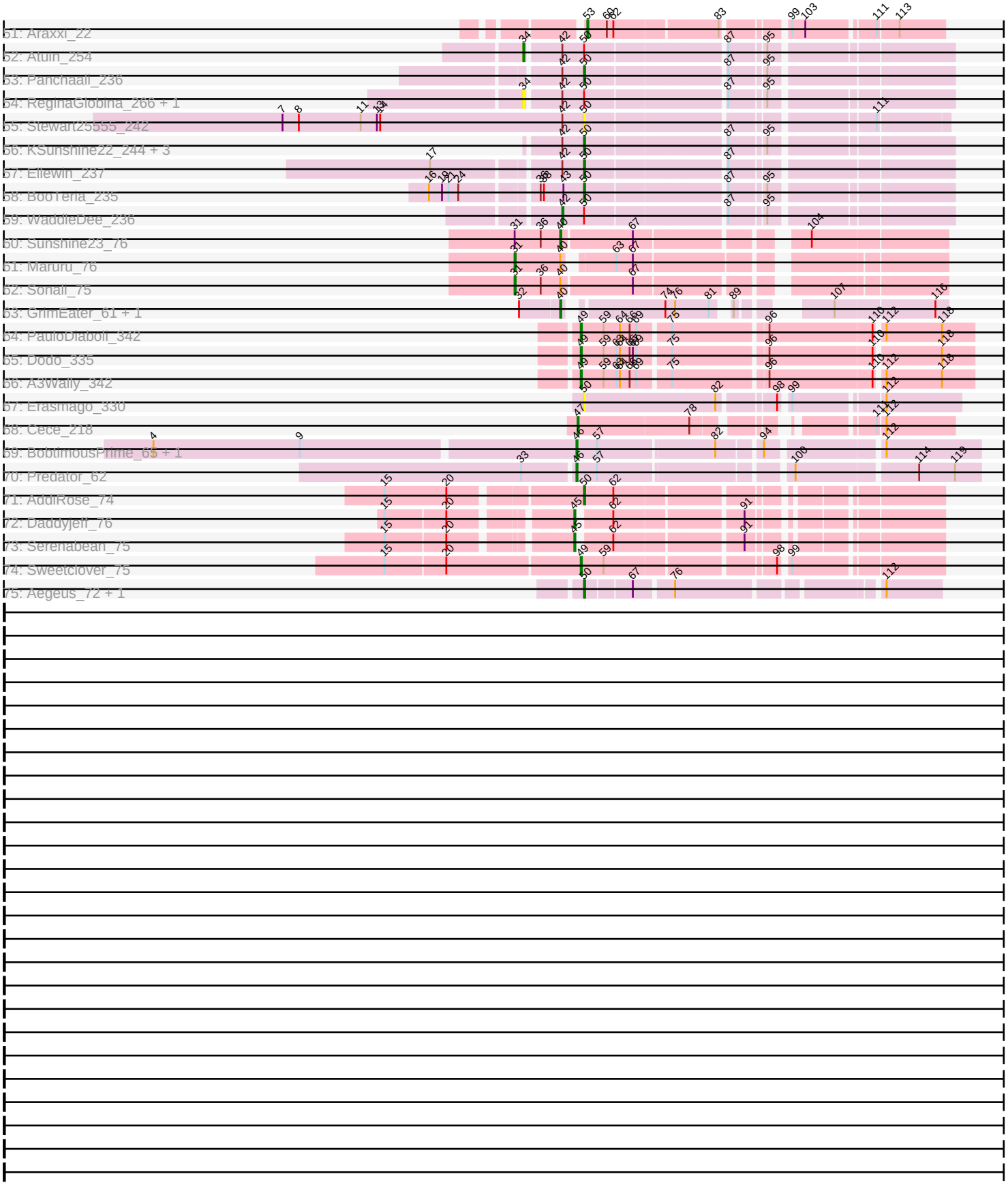
Pham 345372



Pham 345372


51: Araxxi_22
52: Atuin_254
53: Panchaali_236
54: ReginaGlobina_266 + 1
55: Stewart25555_242
56: KSunshine22_244 + 3
57: Ellewin_237
58: BooTeria_235
59: WaddleDee_236
60: Sunshine23_76
61: Maruru_76
62: Sonali_75
63: GrimEater_61 + 1
64: PaulioDiaboli_342
65: Dodo_335
66: A3Wally_342
67: Erasmago_330
68: Cece_218
69: BobtimousPrime_65 + 1
70: Predator_62
71: AddiRose_74
72: Daddyjeff_76
73: Serenabean_75
74: Sweetclover_75
75: Aegeus_72 + 1

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 345372 Report

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

Pham number 345372 has 161 members, 12 are drafts.

Phages represented in each track:
- Track 1 : Indlovu_80
- Track 2 : LittleMinkey_97
- Track 3 : Zenteno07_94
- Track 4 : BirdsNest_94
- Track 5 : Hashim76_91
- Track 6 : Compostia_84, ChaChing_85, Philly_84, GlenHope_86, Halfpint_84, Marlia_86
- Track 7 : OrangeOswald_84, Ben11_85, Corofin_85, Kronus_85, Audrey_85, LestyG_83, Phayeta_88, Mortcellus_85, Baloo_84, RomaT_85
- Track 8 : Yinz_85
- Track 9 : Athena_87, TinyTerror_86, Tydolla_81, RagingRooster_84, Phlyer_85, Abinghost_85, Heathcliff_85, SynergyX_85, Akoma_85, Yahalom_83, Chentzyk_87, Glubnar_86, SlippinJimmy_88, Nozo_85, Briakila_85, Devonte_83, Deenasa_85, Daisy_84, Phaedrus_80, Kamiyu_85, Chalmers_84, Casbah_85, Obutu_87
- Track 10 : HarveySr_84, Marley1013_86, Morty007_84, Neos5_85
- Track 11 : Jackstina_79
- Track 12 : Mulaychimus_86, Gervas_86
- Track 13 : Chandler_85
- Track 14 : Olivio_85
- Track 15 : Rita1961_86
- Track 16 : Gadjet_85, Pipefish_86
- Track 17 : MmasiCarm_86
- Track 18 : Bernardo_85
- Track 19 : SwainyDoc_86
- Track 20 : Shenandoah_84
- Track 21 : Thonko_53
- Track 22 : ScoobyDoobyDoo_14
- Track 23 : Geeche_6, Bachita_8, PhinkBoden_8
- Track 24 : ClubL_7, Toniann_7, Norvs_7, Aphelion_7, Smoothie_7, Miskis_6, Lozinak_7, Cucurbita_7
- Track 25 : Abscondus_6, Dusty_6, Culver_6
- Track 26 : WilliamBoone_6
- Track 27 : Engineer_7
- Track 28 : OneUp_6
- Track 29 : Kampe_96, PatrickStar_96
- Track 30 : RobinSparkles_99
- Track 31 : Orchid_95

• Track 32 : Gibbles_95
• Track 33 : GodonK_167
• Track 34 : Phendrix_157
• Track 35 : Mareelih_41, Boopy_43, Forza_42, BlueNGold_41
• Track 36 : Sixama_41
• Track 37 : DonaldDuck_78, Judebell_78, Wayne3_80, Rudy_76, BabyDotz_77, Zagie_80
• Track 38 : Hyperion_77, Blab_75, AluminumJesus_75, Gazebo_79, Mashley_79
• Track 39 : Squash_82
• Track 40 : Teehee_79, Jehoshaphat_80, Mentos_80, Zhafia_81, Viceroy_77, Sillytadpoles_79, StrawberryJamm_84, Lonelysoil_76, Quammi_77, Wheelie_78, Casend_79, Phabia_78, Llemily_78
• Track 41 : FrankDeliGuy_76
• Track 42 : Namago_81
• Track 43 : Kyva_83, Grassboy_83
• Track 44 : ZestyBestie_78
• Track 45 : SlySloth_80
• Track 46 : Tissue_81
• Track 47 : JimmyPG_25
• Track 48 : Ashton_27, ShyRosie_26
• Track 49 : Burro_22
• Track 50 : DoTi_22
• Track 51 : Araxxi_22
• Track 52 : Atuin_254
• Track 53 : Panchaali_236
• Track 54 : ReginaGlobina_266, LeoJr_264
• Track 55 : Stewart25555_242
• Track 56 : KSunshine22_244, Artu_238, DunneganBoMo_238, Emmetator_238
• Track 57 : Ellewin_237
• Track 58 : BooTeria_235
• Track 59 : WaddleDee_236
• Track 60 : Sunshine23_76
• Track 61 : Maruru_76
• Track 62 : Sonali_75
• Track 63 : GrimEater_61, Jankie_62
• Track 64 : PauloDiaboli_342
• Track 65 : Dodo_335
• Track 66 : A3Wally_342
• Track 67 : Erasmago_330
• Track 68 : Cece_218
• Track 69 : BobtimousPrime_65, Oaker_62
• Track 70 : Predator_62
• Track 71 : AddiRose_74
• Track 72 : Daddyjeff_76
• Track 73 : Serenabean_75
• Track 74 : Sweetclover_75
• Track 75 : Aegeus_72, Baudelaire_72

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

The start number called the most often in the published annotations is 44, it was called in 32 of the 149 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abinghost_85, Akoma_85, Athena_87, Briakila_85, Casbah_85, ChaChing_85, Chalmers_84, Chentzyk_87, Compostia_84, Daisy_84, Deenasa_85, Devonte_83, Gervas_86, GlenHope_86, Glubnar_86, Halfpint_84, Heathcliff_85, Kamiyu_85, Marlia_86, Mulaychimus_86, Nozo_85, Obutu_87, Olivio_85, Phaedrus_80, Philly_84, Phlyer_85, RagingRooster_84, Rita1961_86, Shenandoah_84, SlippinJimmy_88, SwainyDoc_86, SynergyX_85, TinyTerror_86, Tydolla_81, Yahalom_83,

Genes that have the "Most Annotated" start but do not call it:
• Audrey_85, Baloo_84, Ben11_85, Chandler_85, Corofin_85, Jackstina_79, Kronus_85, LestyG_83, Mortcellus_85, OrangeOswald_84, Phayeta_88, RomaT_85,

Genes that do not have the "Most Annotated" start:
• A3Wally_342, Abscondus_6, AddiRose_74, Aegeus_72, AluminumJesus_75, Aphelion_7, Araxxi_22, Artu_238, Ashton_27, Atuin_254, BabyDotz_77, Bachita_8, Baudelaire_72, Bernardo_85, BirdsNest_94, Blab_75, BlueNGold_41, BobtimousPrime_65, BooTeria_235, Boopy_43, Burro_22, Casend_79, Cece_218, ClubL_7, Cucurbita_7, Culver_6, Daddyjeff_76, DoTi_22, Dodo_335, DonaldDuck_78, DunneganBoMo_238, Dusty_6, Ellewin_237, Emmetator_238, Engineer_7, Erasmago_330, Forza_42, FrankDeliGuy_76, Gadjet_85, Gazebo_79, Geeche_6, Gibbles_95, GodonK_167, Grassboy_83, GrimEater_61, HarveySr_84, Hashim76_91, Hyperion_77, Indlovu_80, Jankie_62, Jehoshaphat_80, JimmyPG_25, Judebell_78, KSunshine22_244, Kampe_96, Kyva_83, LeoJr_264, LittleMinkey_97, Llemily_78, Lonelysoil_76, Lozinak_7, Mareelih_41, Marley1013_86, Maruru_76, Mashley_79, Mentos_80, Miskis_6, MmasiCarm_86, Morty007_84, Namago_81, Neos5_85, Norvs_7, Oaker_62, OneUp_6, Orchid_95, Panchaali_236, PatrickStar_96, PauloDiaboli_342, Phabia_78, Phendrix_157, PhinkBoden_8, Pipefish_86, Predator_62, Quammi_77, ReginaGlobina_266, RobinSparkles_99, Rudy_76, ScoobyDoobyDoo_14, Serenabean_75, ShyRosie_26, Sillytadpoles_79, Sixama_41, SlySloth_80, Smoothie_7, Sonali_75, Squash_82, Stewart25555_242, StrawberryJamm_84, Sunshine23_76, Sweetclover_75, Teehee_79, Thonko_53, Tissue_81, Toniann_7, Viceroy_77, WaddleDee_236, Wayne3_80, Wheelie_78, WilliamBoone_6, Yinz_85, Zagie_80, Zenteno07_94, ZestyBestie_78, Zhafia_81,

Summary by start number:

Start 31:
• Found in 3 of 161 (1.9%) of genes in pham
• Manual Annotations of this start: 2 of 149
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Maruru_76 (FG), Sonali_75 (FG),

Start 34:
• Found in 3 of 161 (1.9%) of genes in pham
• Manual Annotations of this start: 1 of 149
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Atuin_254 (FC), LeoJr_264 (FC), ReginaGlobina_266 (FC),

Start 37:
• Found in 1 of 161 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 149
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ScoobyDoobyDoo_14 (C2),

Start 39:
• Found in 1 of 161 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 149
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Thonko_53 (B8),

Start 40:
• Found in 5 of 161 (3.1%) of genes in pham
• Manual Annotations of this start: 3 of 149
• Called 60.0% of time when present
• Phage (with cluster) where this start called: GrimEater_61 (FP), Jankie_62 (FP), Sunshine23_76 (FG),

Start 41:
• Found in 53 of 161 (32.9%) of genes in pham
• Manual Annotations of this start: 18 of 149
• Called 34.0% of time when present
• Phage (with cluster) where this start called: Audrey_85 (B3), Baloo_84 (B3), Ben11_85 (B3), Chandler_85 (B3), Corofin_85 (B3), HarveySr_84 (B3), Jackstina_79 (B3), Kronus_85 (B3), LestyG_83 (B3), Marley1013_86 (B3), MmasiCarm_86 (B3), Mortcellus_85 (B3), Morty007_84 (B3), Neos5_85 (B3), OrangeOswald_84 (B3), Phayeta_88 (B3), RomaT_85 (B3), Yinz_85 (B3),

Start 42:
• Found in 11 of 161 (6.8%) of genes in pham
• Manual Annotations of this start: 1 of 149
• Called 9.1% of time when present
• Phage (with cluster) where this start called: WaddleDee_236 (FC),

Start 44:
• Found in 47 of 161 (29.2%) of genes in pham
• Manual Annotations of this start: 32 of 149
• Called 74.5% of time when present
• Phage (with cluster) where this start called: Abinghost_85 (B3), Akoma_85 (B3), Athena_87 (B3), Briakila_85 (B3), Casbah_85 (B3), ChaChing_85 (B3), Chalmers_84 (B3), Chentzyk_87 (B3), Compostia_84 (B3), Daisy_84 (B3), Deenasa_85 (B3), Devonte_83 (B3), Gervas_86 (B3), GlenHope_86 (B3), Glubnar_86 (B3), Halfpint_84 (B3), Heathcliff_85 (B3), Kamiyu_85 (B3), Marlia_86 (B3), Mulaychimus_86 (B3), Nozo_85 (B3), Obutu_87 (B3), Olivio_85 (B3), Phaedrus_80 (B3), Philly_84 (B3), Phlyer_85 (B3), RagingRooster_84 (B3), Rita1961_86 (B3), Shenandoah_84 (B3), SlippinJimmy_88 (B3), SwainyDoc_86 (B3), SynergyX_85 (B3), TinyTerror_86 (B3), Tydolla_81 (B3), Yahalom_83 (B3),

Start 45:
• Found in 3 of 161 (1.9%) of genes in pham
• Manual Annotations of this start: 2 of 149
• Called 66.7% of time when present

• Phage (with cluster) where this start called: Daddyjeff_76 (JA), Serenabean_75 (JA),

Start 46:
• Found in 3 of 161 (1.9%) of genes in pham
• Manual Annotations of this start: 3 of 149
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BobtimousPrime_65 (H1), Oaker_62 (H1), Predator_62 (H1),

Start 47:
• Found in 6 of 161 (3.7%) of genes in pham
• Manual Annotations of this start: 5 of 149
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BirdsNest_94 (B13), Cece_218 (GD3), Hashim76_91 (B13), Indlovu_80 (B11), LittleMinkey_97 (B13), Zenteno07_94 (B13),

Start 48:
• Found in 3 of 161 (1.9%) of genes in pham
• Manual Annotations of this start: 2 of 149
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Gadjet_85 (B3), Pipefish_86 (B3),

Start 49:
• Found in 12 of 161 (7.5%) of genes in pham
• Manual Annotations of this start: 10 of 149
• Called 83.3% of time when present
• Phage (with cluster) where this start called: A3Wally_342 (GD1), Ashton_27 (EK2), Dodo_335 (GD1), Gibbles_95 (CX), JimmyPG_25 (EK2), Kampe_96 (CX), PatrickStar_96 (CX), PauloDiaboli_342 (GD1), ShyRosie_26 (EK2), Sweetclover_75 (JA),

Start 50:
• Found in 16 of 161 (9.9%) of genes in pham
• Manual Annotations of this start: 8 of 149
• Called 75.0% of time when present
• Phage (with cluster) where this start called: AddiRose_74 (JA), Aegeus_72 (L5), Artu_238 (FC), Baudelaire_72 (L5), BooTeria_235 (FC), DunneganBoMo_238 (FC), Ellewin_237 (FC), Emmetator_238 (FC), Erasmago_330 (GD2), KSunshine22_244 (FC), Panchaali_236 (FC), Stewart25555_242 (FC),

Start 52:
• Found in 31 of 161 (19.3%) of genes in pham
• Manual Annotations of this start: 24 of 149
• Called 77.4% of time when present
• Phage (with cluster) where this start called: AluminumJesus_75 (EG), Blab_75 (EG), Casend_79 (EG), FrankDeliGuy_76 (EG), Gazebo_79 (EG), Grassboy_83 (EG), Hyperion_77 (EG), Jehoshaphat_80 (EG), Kyva_83 (EG), Llemily_78 (EG), Lonelysoil_76 (EG), Mashley_79 (EG), Mentos_80 (EG), Namago_81 (EG), Phabia_78 (EG), Quammi_77 (EG), Sillytadpoles_79 (EG), Squash_82 (EG), StrawberryJamm_84 (EG), Teehee_79 (EG), Tissue_81 (EG), Viceroy_77 (EG), Wheelie_78 (EG), Zhafia_81 (EG),

Start 53:

• Found in 15 of 161 (9.3%) of genes in pham
• Manual Annotations of this start: 12 of 149
• Called 80.0% of time when present
• Phage (with cluster) where this start called: Araxxi_22 (EM1), BlueNGold_41 (DS), Boopy_43 (DS), Burro_22 (EM1), DoTi_22 (EM1), Forza_42 (DS), Mareelih_41 (DS), Orchid_95 (CX), Phendrix_157 (DK), RobinSparkles_99 (CX), Sixama_41 (DS), SlySloth_80 (EG),

Start 55:
• Found in 2 of 161 (1.2%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: ZestyBestie_78 (EG),

Start 56:
• Found in 25 of 161 (15.5%) of genes in pham
• Manual Annotations of this start: 6 of 149
• Called 24.0% of time when present
• Phage (with cluster) where this start called: BabyDotz_77 (EG), DonaldDuck_78 (EG), Judebell_78 (EG), Rudy_76 (EG), Wayne3_80 (EG), Zagie_80 (EG),

Start 70:
• Found in 17 of 161 (10.6%) of genes in pham
• Manual Annotations of this start: 16 of 149
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abscondus_6 (CQ1), Aphelion_7 (CQ1), Bachita_8 (CQ1), ClubL_7 (CQ1), Cucurbita_7 (CQ1), Culver_6 (CQ1), Dusty_6 (CQ1), Engineer_7 (CQ1), Geeche_6 (CQ1), Lozinak_7 (CQ1), Miskis_6 (CQ1), Norvs_7 (CQ1), OneUp_6 (CQ2), PhinkBoden_8 (CQ1), Smoothie_7 (CQ1), Toniann_7 (CQ1), WilliamBoone_6 (CQ1),

Start 71:
• Found in 1 of 161 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 149
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GodonK_167 (DK),

Start 73:
• Found in 23 of 161 (14.3%) of genes in pham
• Manual Annotations of this start: 1 of 149
• Called 4.3% of time when present
• Phage (with cluster) where this start called: Bernardo_85 (B3),

Summary by clusters:

There are 22 clusters represented in this pham: FP, GD1, GD2, GD3, DK, B11, FC, B13, FG, DS, JA, CQ2, CQ1, EG, CX, C2, H1, L5, EM1, B3, B8, EK2,

Info for manual annotations of cluster B11:
•Start number 47 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B13:
•Start number 47 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B3:
•Start number 41 was manually annotated 18 times for cluster B3.
•Start number 44 was manually annotated 32 times for cluster B3.
•Start number 48 was manually annotated 2 times for cluster B3.
•Start number 73 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster B8:
•Start number 39 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster C2:
•Start number 37 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CQ1:
•Start number 70 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 70 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster CX:
•Start number 49 was manually annotated 3 times for cluster CX.
•Start number 53 was manually annotated 2 times for cluster CX.

Info for manual annotations of cluster DK:
•Start number 53 was manually annotated 1 time for cluster DK.
•Start number 71 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster DS:
•Start number 53 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster EG:
•Start number 52 was manually annotated 24 times for cluster EG.
•Start number 53 was manually annotated 1 time for cluster EG.
•Start number 56 was manually annotated 6 times for cluster EG.

Info for manual annotations of cluster EK2:
•Start number 49 was manually annotated 3 times for cluster EK2.

Info for manual annotations of cluster EM1:
•Start number 53 was manually annotated 3 times for cluster EM1.

Info for manual annotations of cluster FC:
•Start number 34 was manually annotated 1 time for cluster FC.
•Start number 42 was manually annotated 1 time for cluster FC.
•Start number 50 was manually annotated 5 times for cluster FC.

Info for manual annotations of cluster FG:
•Start number 31 was manually annotated 2 times for cluster FG.
•Start number 40 was manually annotated 1 time for cluster FG.

Info for manual annotations of cluster FP:
•Start number 40 was manually annotated 2 times for cluster FP.

Info for manual annotations of cluster GD1:
•Start number 49 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD3:
•Start number 47 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster H1:
•Start number 46 was manually annotated 3 times for cluster H1.

Info for manual annotations of cluster JA:
•Start number 45 was manually annotated 2 times for cluster JA.
•Start number 49 was manually annotated 1 time for cluster JA.
•Start number 50 was manually annotated 1 time for cluster JA.

Info for manual annotations of cluster L5:
•Start number 50 was manually annotated 2 times for cluster L5.

Gene Information:

Gene: A3Wally_342 Start: 176311, Stop: 176649, Start Num: 49
Candidate Starts for A3Wally_342:
(Start: 49 @176311 has 10 MA's), (59, 176332), (63, 176344), (64, 176347), (66, 176356), (69, 176362), (75, 176389), (96, 176470), (110, 176563), (112, 176569), (118, 176620),

Gene: Abinghost_85 Start: 62155, Stop: 61802, Start Num: 44
Candidate Starts for Abinghost_85:
(Start: 41 @62158 has 18 MA's), (Start: 44 @62155 has 32 MA's), (51, 62140), (76, 62062), (81, 62032), (82, 62026), (90, 62005), (106, 61930), (115, 61840),

Gene: Abscondus_6 Start: 1603, Stop: 1334, Start Num: 70
Candidate Starts for Abscondus_6:
(1, 2167), (2, 2137), (3, 2056), (6, 1948), (10, 1909), (Start: 70 @1603 has 16 MA's), (75, 1573), (77, 1558), (99, 1477), (107, 1441),

Gene: AddiRose_74 Start: 47344, Stop: 47628, Start Num: 50
Candidate Starts for AddiRose_74:
(15, 47176), (20, 47233), (Start: 50 @47344 has 8 MA's), (62, 47371),

Gene: Aegeus_72 Start: 46824, Stop: 47111, Start Num: 50
Candidate Starts for Aegeus_72:
(Start: 50 @46824 has 8 MA's), (67, 46863), (76, 46896), (112, 47061),

Gene: Akoma_85 Start: 62195, Stop: 61842, Start Num: 44
Candidate Starts for Akoma_85:
(Start: 41 @62198 has 18 MA's), (Start: 44 @62195 has 32 MA's), (51, 62180), (76, 62102), (81, 62072), (82, 62066), (90, 62045), (106, 61970), (115, 61880),

Gene: AluminumJesus_75 Start: 51316, Stop: 51035, Start Num: 52
Candidate Starts for AluminumJesus_75:
(Start: 52 @51316 has 24 MA's), (90, 51187), (93, 51172),

Gene: Aphelion_7 Start: 1779, Stop: 1510, Start Num: 70
Candidate Starts for Aphelion_7:
(6, 2124), (10, 2085), (Start: 70 @1779 has 16 MA's), (77, 1734), (99, 1653), (107, 1617),

Gene: Araxxi_22 Start: 16801, Stop: 16511, Start Num: 53
Candidate Starts for Araxxi_22:
(Start: 53 @16801 has 12 MA's), (60, 16783), (62, 16777), (83, 16687), (99, 16639), (103, 16627), (111, 16570), (113, 16552),

Gene: Artu_238 Start: 160801, Stop: 161106, Start Num: 50
Candidate Starts for Artu_238:
(Start: 42 @160783 has 1 MA's), (Start: 50 @160801 has 8 MA's), (87, 160921), (95, 160951),

Gene: Ashton_27 Start: 15701, Stop: 15408, Start Num: 49
Candidate Starts for Ashton_27:
(22, 15821), (28, 15800), (35, 15752), (Start: 49 @15701 has 10 MA's), (91, 15563),

Gene: Athena_87 Start: 62930, Stop: 62577, Start Num: 44
Candidate Starts for Athena_87:
(Start: 41 @62933 has 18 MA's), (Start: 44 @62930 has 32 MA's), (51, 62915), (76, 62837), (81, 62807), (82, 62801), (90, 62780), (106, 62705), (115, 62615),

Gene: Atuin_254 Start: 161281, Stop: 161634, Start Num: 34
Candidate Starts for Atuin_254:
(Start: 34 @161281 has 1 MA's), (Start: 42 @161311 has 1 MA's), (Start: 50 @161329 has 8 MA's), (87, 161449), (95, 161479),

Gene: Audrey_85 Start: 62187, Stop: 61831, Start Num: 41
Candidate Starts for Audrey_85:
(Start: 41 @62187 has 18 MA's), (Start: 44 @62184 has 32 MA's), (51, 62169), (76, 62091), (81, 62061), (82, 62055), (90, 62034), (106, 61959), (115, 61869),

Gene: BabyDotz_77 Start: 52957, Stop: 52679, Start Num: 56
Candidate Starts for BabyDotz_77:
(Start: 52 @52966 has 24 MA's), (Start: 56 @52957 has 6 MA's), (63, 52939), (93, 52822), (94, 52819), (95, 52816),

Gene: Bachita_8 Start: 2279, Stop: 2010, Start Num: 70
Candidate Starts for Bachita_8:
(1, 2843), (2, 2813), (3, 2732), (6, 2624), (10, 2585), (Start: 70 @2279 has 16 MA's), (77, 2234), (99, 2153), (107, 2117),

Gene: Baloo_84 Start: 62039, Stop: 61683, Start Num: 41
Candidate Starts for Baloo_84:
(Start: 41 @62039 has 18 MA's), (Start: 44 @62036 has 32 MA's), (51, 62021), (76, 61943), (81, 61913), (82, 61907), (90, 61886), (106, 61811), (115, 61721),

Gene: Baudelaire_72 Start: 46824, Stop: 47111, Start Num: 50
Candidate Starts for Baudelaire_72:
(Start: 50 @46824 has 8 MA's), (67, 46863), (76, 46896), (112, 47061),

Gene: Ben11_85 Start: 62414, Stop: 62058, Start Num: 41

Candidate Starts for Ben11_85:
(Start: 41 @62414 has 18 MA's), (Start: 44 @62411 has 32 MA's), (51, 62396), (76, 62318), (81, 62288), (82, 62282), (90, 62261), (106, 62186), (115, 62096),

Gene: Bernardo_85 Start: 62136, Stop: 61870, Start Num: 73
Candidate Starts for Bernardo_85:
(18, 62325), (25, 62301), (27, 62292), (Start: 48 @62202 has 2 MA's), (59, 62181), (64, 62166), (Start: 73 @62136 has 1 MA's), (76, 62118), (102, 62019), (117, 61893),

Gene: BirdsNest_94 Start: 66955, Stop: 66563, Start Num: 47
Candidate Starts for BirdsNest_94:
(Start: 47 @66955 has 5 MA's), (64, 66919), (Start: 73 @66886 has 1 MA's), (87, 66820), (94, 66787), (101, 66760), (109, 66697), (112, 66682),

Gene: Blab_75 Start: 51607, Stop: 51326, Start Num: 52
Candidate Starts for Blab_75:
(Start: 52 @51607 has 24 MA's), (90, 51478), (93, 51463),

Gene: BlueNGold_41 Start: 14735, Stop: 14454, Start Num: 53
Candidate Starts for BlueNGold_41:
(Start: 53 @14735 has 12 MA's), (65, 14702), (68, 14693),

Gene: BobtimousPrime_65 Start: 48847, Stop: 49185, Start Num: 46
Candidate Starts for BobtimousPrime_65:
(4, 48466), (9, 48601), (Start: 46 @48847 has 3 MA's), (57, 48865), (82, 48967), (94, 49003), (112, 49099),

Gene: BooTeria_235 Start: 159303, Stop: 159608, Start Num: 50
Candidate Starts for BooTeria_235:
(16, 159174), (19, 159186), (21, 159192), (24, 159201), (36, 159264), (38, 159267), (43, 159285), (Start: 50 @159303 has 8 MA's), (87, 159423), (95, 159453),

Gene: Boopy_43 Start: 14747, Stop: 14466, Start Num: 53
Candidate Starts for Boopy_43:
(Start: 53 @14747 has 12 MA's), (65, 14714), (68, 14705),

Gene: Briakila_85 Start: 62382, Stop: 62029, Start Num: 44
Candidate Starts for Briakila_85:
(Start: 41 @62385 has 18 MA's), (Start: 44 @62382 has 32 MA's), (51, 62367), (76, 62289), (81, 62259), (82, 62253), (90, 62232), (106, 62157), (115, 62067),

Gene: Burro_22 Start: 15917, Stop: 15615, Start Num: 53
Candidate Starts for Burro_22:
(23, 16013), (Start: 45 @15920 has 2 MA's), (Start: 53 @15917 has 12 MA's), (62, 15893), (63, 15890), (88, 15797), (95, 15767), (99, 15752), (111, 15683),

Gene: Casbah_85 Start: 62495, Stop: 62142, Start Num: 44
Candidate Starts for Casbah_85:
(Start: 41 @62498 has 18 MA's), (Start: 44 @62495 has 32 MA's), (51, 62480), (76, 62402), (81, 62372), (82, 62366), (90, 62345), (106, 62270), (115, 62180),

Gene: Casend_79 Start: 52248, Stop: 51961, Start Num: 52
Candidate Starts for Casend_79:

(Start: 52 @52248 has 24 MA's), (Start: 56 @52239 has 6 MA's), (63, 52221), (93, 52104), (94, 52101), (95, 52098),

Gene: Cece_218 Start: 133451, Stop: 133741, Start Num: 47
Candidate Starts for Cece_218:
(Start: 47 @133451 has 5 MA's), (78, 133550), (111, 133673), (112, 133679),

Gene: ChaChing_85 Start: 62197, Stop: 61847, Start Num: 44
Candidate Starts for ChaChing_85:
(Start: 41 @62200 has 18 MA's), (Start: 44 @62197 has 32 MA's), (54, 62179), (Start: 73 @62125 has 1 MA's), (76, 62107), (81, 62077), (95, 62029), (106, 61975), (115, 61885),

Gene: Chalmers_84 Start: 62630, Stop: 62277, Start Num: 44
Candidate Starts for Chalmers_84:
(Start: 41 @62633 has 18 MA's), (Start: 44 @62630 has 32 MA's), (51, 62615), (76, 62537), (81, 62507), (82, 62501), (90, 62480), (106, 62405), (115, 62315),

Gene: Chandler_85 Start: 62974, Stop: 62618, Start Num: 41
Candidate Starts for Chandler_85:
(Start: 41 @62974 has 18 MA's), (Start: 44 @62971 has 32 MA's), (51, 62956), (76, 62878), (81, 62848), (82, 62842), (90, 62821), (106, 62746),

Gene: Chentzyk_87 Start: 63129, Stop: 62776, Start Num: 44
Candidate Starts for Chentzyk_87:
(Start: 41 @63132 has 18 MA's), (Start: 44 @63129 has 32 MA's), (51, 63114), (76, 63036), (81, 63006), (82, 63000), (90, 62979), (106, 62904), (115, 62814),

Gene: ClubL_7 Start: 1779, Stop: 1510, Start Num: 70
Candidate Starts for ClubL_7:
(6, 2124), (10, 2085), (Start: 70 @1779 has 16 MA's), (77, 1734), (99, 1653), (107, 1617),

Gene: Compostia_84 Start: 62637, Stop: 62287, Start Num: 44
Candidate Starts for Compostia_84:
(Start: 41 @62640 has 18 MA's), (Start: 44 @62637 has 32 MA's), (54, 62619), (Start: 73 @62565 has 1 MA's), (76, 62547), (81, 62517), (95, 62469), (106, 62415), (115, 62325),

Gene: Corofin_85 Start: 62209, Stop: 61853, Start Num: 41
Candidate Starts for Corofin_85:
(Start: 41 @62209 has 18 MA's), (Start: 44 @62206 has 32 MA's), (51, 62191), (76, 62113), (81, 62083), (82, 62077), (90, 62056), (106, 61981), (115, 61891),

Gene: Cucurbita_7 Start: 1779, Stop: 1510, Start Num: 70
Candidate Starts for Cucurbita_7:
(6, 2124), (10, 2085), (Start: 70 @1779 has 16 MA's), (77, 1734), (99, 1653), (107, 1617),

Gene: Culver_6 Start: 1603, Stop: 1334, Start Num: 70
Candidate Starts for Culver_6:
(1, 2167), (2, 2137), (3, 2056), (6, 1948), (10, 1909), (Start: 70 @1603 has 16 MA's), (75, 1573), (77, 1558), (99, 1477), (107, 1441),

Gene: Daddyjeff_76 Start: 47745, Stop: 48029, Start Num: 45
Candidate Starts for Daddyjeff_76:
(15, 47595), (20, 47649), (Start: 45 @47745 has 2 MA's), (62, 47772), (91, 47880),

Gene: Daisy_84 Start: 61757, Stop: 61404, Start Num: 44
Candidate Starts for Daisy_84:
(Start: 41 @61760 has 18 MA's), (Start: 44 @61757 has 32 MA's), (51, 61742), (76, 61664), (81, 61634), (82, 61628), (90, 61607), (106, 61532), (115, 61442),

Gene: Deenasa_85 Start: 63106, Stop: 62753, Start Num: 44
Candidate Starts for Deenasa_85:
(Start: 41 @63109 has 18 MA's), (Start: 44 @63106 has 32 MA's), (51, 63091), (76, 63013), (81, 62983), (82, 62977), (90, 62956), (106, 62881), (115, 62791),

Gene: Devonte_83 Start: 61823, Stop: 61470, Start Num: 44
Candidate Starts for Devonte_83:
(Start: 41 @61826 has 18 MA's), (Start: 44 @61823 has 32 MA's), (51, 61808), (76, 61730), (81, 61700), (82, 61694), (90, 61673), (106, 61598), (115, 61508),

Gene: DoTi_22 Start: 16882, Stop: 16592, Start Num: 53
Candidate Starts for DoTi_22:
(Start: 53 @16882 has 12 MA's), (60, 16864), (62, 16858), (83, 16768), (99, 16720), (103, 16708), (113, 16633),

Gene: Dodo_335 Start: 175376, Stop: 175714, Start Num: 49
Candidate Starts for Dodo_335:
(Start: 49 @175376 has 10 MA's), (59, 175397), (63, 175409), (64, 175412), (66, 175421), (67, 175424), (69, 175427), (75, 175454), (96, 175535), (110, 175628), (118, 175685),

Gene: DonaldDuck_78 Start: 51591, Stop: 51313, Start Num: 56
Candidate Starts for DonaldDuck_78:
(Start: 52 @51600 has 24 MA's), (Start: 56 @51591 has 6 MA's), (63, 51573), (93, 51456), (94, 51453), (95, 51450),

Gene: DunneganBoMo_238 Start: 159407, Stop: 159712, Start Num: 50
Candidate Starts for DunneganBoMo_238:
(Start: 42 @159389 has 1 MA's), (Start: 50 @159407 has 8 MA's), (87, 159527), (95, 159557),

Gene: Dusty_6 Start: 1603, Stop: 1334, Start Num: 70
Candidate Starts for Dusty_6:
(1, 2167), (2, 2137), (3, 2056), (6, 1948), (10, 1909), (Start: 70 @1603 has 16 MA's), (75, 1573), (77, 1558), (99, 1477), (107, 1441),

Gene: Ellewin_237 Start: 158948, Stop: 159256, Start Num: 50
Candidate Starts for Ellewin_237:
(17, 158822), (Start: 42 @158930 has 1 MA's), (Start: 50 @158948 has 8 MA's), (87, 159068),

Gene: Emmetator_238 Start: 158182, Stop: 158487, Start Num: 50
Candidate Starts for Emmetator_238:
(Start: 42 @158164 has 1 MA's), (Start: 50 @158182 has 8 MA's), (87, 158302), (95, 158332),

Gene: Engineer_7 Start: 1779, Stop: 1510, Start Num: 70
Candidate Starts for Engineer_7:
(Start: 70 @1779 has 16 MA's), (77, 1734), (99, 1653), (107, 1617),

Gene: Erasmago_330 Start: 171755, Stop: 172069, Start Num: 50

Candidate Starts for Erasmago_330:
(Start: 50 @171755 has 8 MA's), (82, 171875), (98, 171920), (99, 171926), (112, 172001),

Gene: Forza_42 Start: 14663, Stop: 14382, Start Num: 53
Candidate Starts for Forza_42:
(Start: 53 @14663 has 12 MA's), (65, 14630), (68, 14621),

Gene: FrankDeliGuy_76 Start: 51968, Stop: 51681, Start Num: 52
Candidate Starts for FrankDeliGuy_76:
(Start: 52 @51968 has 24 MA's), (55, 51962), (Start: 56 @51959 has 6 MA's), (63, 51941), (93, 51824), (94, 51821), (95, 51818),

Gene: Gadjet_85 Start: 62385, Stop: 62053, Start Num: 48
Candidate Starts for Gadjet_85:
(18, 62508), (25, 62484), (27, 62475), (Start: 48 @62385 has 2 MA's), (59, 62364), (64, 62349), (Start: 73 @62319 has 1 MA's), (76, 62301), (102, 62202), (115, 62085), (117, 62076),

Gene: Gazebo_79 Start: 52534, Stop: 52253, Start Num: 52
Candidate Starts for Gazebo_79:
(Start: 52 @52534 has 24 MA's), (90, 52405), (93, 52390),

Gene: Geeche_6 Start: 1598, Stop: 1329, Start Num: 70
Candidate Starts for Geeche_6:
(1, 2162), (2, 2132), (3, 2051), (6, 1943), (10, 1904), (Start: 70 @1598 has 16 MA's), (77, 1553), (99, 1472), (107, 1436),

Gene: Gervas_86 Start: 62651, Stop: 62298, Start Num: 44
Candidate Starts for Gervas_86:
(Start: 41 @62654 has 18 MA's), (Start: 44 @62651 has 32 MA's), (54, 62633), (76, 62558), (81, 62528), (82, 62522), (90, 62501), (106, 62426), (115, 62336),

Gene: Gibbles_95 Start: 69566, Stop: 69255, Start Num: 49
Candidate Starts for Gibbles_95:
(Start: 49 @69566 has 10 MA's), (Start: 53 @69560 has 12 MA's), (61, 69539), (63, 69533), (65, 69527), (86, 69437), (92, 69413), (105, 69359),

Gene: GlenHope_86 Start: 62227, Stop: 61877, Start Num: 44
Candidate Starts for GlenHope_86:
(Start: 41 @62230 has 18 MA's), (Start: 44 @62227 has 32 MA's), (54, 62209), (Start: 73 @62155 has 1 MA's), (76, 62137), (81, 62107), (95, 62059), (106, 62005), (115, 61915),

Gene: Glubnar_86 Start: 62089, Stop: 61736, Start Num: 44
Candidate Starts for Glubnar_86:
(Start: 41 @62092 has 18 MA's), (Start: 44 @62089 has 32 MA's), (51, 62074), (76, 61996), (81, 61966), (82, 61960), (90, 61939), (106, 61864), (115, 61774),

Gene: GodonK_167 Start: 85677, Stop: 85414, Start Num: 71
Candidate Starts for GodonK_167:
(Start: 71 @85677 has 1 MA's), (72, 85671), (77, 85635), (79, 85629), (80, 85626), (96, 85566), (100, 85551), (108, 85515), (112, 85473),

Gene: Grassboy_83 Start: 52649, Stop: 52362, Start Num: 52
Candidate Starts for Grassboy_83:

(Start: 52 @52649 has 24 MA's), (Start: 56 @52640 has 6 MA's), (63, 52622), (93, 52505), (95, 52499), (109, 52433),

Gene: GrimEater_61 Start: 40064, Stop: 40342, Start Num: 40
Candidate Starts for GrimEater_61:
(32, 40028), (Start: 40 @40064 has 3 MA's), (74, 40142), (76, 40151), (81, 40181), (89, 40190), (107, 40244), (116, 40331),

Gene: Halfpint_84 Start: 61969, Stop: 61619, Start Num: 44
Candidate Starts for Halfpint_84:
(Start: 41 @61972 has 18 MA's), (Start: 44 @61969 has 32 MA's), (54, 61951), (Start: 73 @61897 has 1 MA's), (76, 61879), (81, 61849), (95, 61801), (106, 61747), (115, 61657),

Gene: HarveySr_84 Start: 61732, Stop: 61388, Start Num: 41
Candidate Starts for HarveySr_84:
(30, 61780), (Start: 41 @61732 has 18 MA's), (54, 61717), (59, 61705), (Start: 73 @61666 has 1 MA's), (76, 61648), (81, 61618), (102, 61543), (111, 61474),

Gene: Hashim76_91 Start: 66420, Stop: 66052, Start Num: 47
Candidate Starts for Hashim76_91:
(26, 66519), (Start: 47 @66420 has 5 MA's), (Start: 73 @66351 has 1 MA's), (87, 66285), (101, 66231), (120, 66078),

Gene: Heathcliff_85 Start: 62151, Stop: 61798, Start Num: 44
Candidate Starts for Heathcliff_85:
(Start: 41 @62154 has 18 MA's), (Start: 44 @62151 has 32 MA's), (51, 62136), (76, 62058), (81, 62028), (82, 62022), (90, 62001), (106, 61926), (115, 61836),

Gene: Hyperion_77 Start: 51797, Stop: 51516, Start Num: 52
Candidate Starts for Hyperion_77:
(Start: 52 @51797 has 24 MA's), (90, 51668), (93, 51653),

Gene: Indlovu_80 Start: 64701, Stop: 64342, Start Num: 47
Candidate Starts for Indlovu_80:
(5, 65067), (29, 64773), (Start: 47 @64701 has 5 MA's), (Start: 73 @64632 has 1 MA's), (76, 64614), (81, 64584), (83, 64575), (95, 64539), (112, 64440), (114, 64410),

Gene: Jackstina_79 Start: 62068, Stop: 61712, Start Num: 41
Candidate Starts for Jackstina_79:
(Start: 41 @62068 has 18 MA's), (Start: 44 @62065 has 32 MA's), (51, 62050), (76, 61972), (81, 61942), (90, 61915), (106, 61840), (115, 61750),

Gene: Jankie_62 Start: 40246, Stop: 40524, Start Num: 40
Candidate Starts for Jankie_62:
(32, 40210), (Start: 40 @40246 has 3 MA's), (74, 40324), (76, 40333), (81, 40363), (89, 40372), (107, 40426), (116, 40513),

Gene: Jehoshaphat_80 Start: 52516, Stop: 52229, Start Num: 52
Candidate Starts for Jehoshaphat_80:
(Start: 52 @52516 has 24 MA's), (Start: 56 @52507 has 6 MA's), (63, 52489), (93, 52372), (94, 52369), (95, 52366),

Gene: JimmyPG_25 Start: 15562, Stop: 15272, Start Num: 49

Candidate Starts for JimmyPG_25:
(Start: 49 @15562 has 10 MA's), (58, 15544), (95, 15412), (112, 15331),

Gene: Judebell_78 Start: 51731, Stop: 51453, Start Num: 56
Candidate Starts for Judebell_78:
(Start: 52 @51740 has 24 MA's), (Start: 56 @51731 has 6 MA's), (63, 51713), (93, 51596), (94, 51593), (95, 51590),

Gene: KSunshine22_244 Start: 158806, Stop: 159111, Start Num: 50
Candidate Starts for KSunshine22_244:
(Start: 42 @158788 has 1 MA's), (Start: 50 @158806 has 8 MA's), (87, 158926), (95, 158956),

Gene: Kamiyu_85 Start: 62154, Stop: 61801, Start Num: 44
Candidate Starts for Kamiyu_85:
(Start: 41 @62157 has 18 MA's), (Start: 44 @62154 has 32 MA's), (51, 62139), (76, 62061), (81, 62031), (82, 62025), (90, 62004), (106, 61929), (115, 61839),

Gene: Kampe_96 Start: 69516, Stop: 69205, Start Num: 49
Candidate Starts for Kampe_96:
(Start: 49 @69516 has 10 MA's), (Start: 53 @69510 has 12 MA's), (63, 69483), (86, 69387), (105, 69309),

Gene: Kronus_85 Start: 63241, Stop: 62885, Start Num: 41
Candidate Starts for Kronus_85:
(Start: 41 @63241 has 18 MA's), (Start: 44 @63238 has 32 MA's), (51, 63223), (76, 63145), (81, 63115), (82, 63109), (90, 63088), (106, 63013), (115, 62923),

Gene: Kyva_83 Start: 52673, Stop: 52386, Start Num: 52
Candidate Starts for Kyva_83:
(Start: 52 @52673 has 24 MA's), (Start: 56 @52664 has 6 MA's), (63, 52646), (93, 52529), (95, 52523), (109, 52457),

Gene: LeoJr_264 Start: 160668, Stop: 161021, Start Num: 34
Candidate Starts for LeoJr_264:
(Start: 34 @160668 has 1 MA's), (Start: 42 @160698 has 1 MA's), (Start: 50 @160716 has 8 MA's), (87, 160836), (95, 160866),

Gene: LestyG_83 Start: 61727, Stop: 61371, Start Num: 41
Candidate Starts for LestyG_83:
(Start: 41 @61727 has 18 MA's), (Start: 44 @61724 has 32 MA's), (51, 61709), (76, 61631), (81, 61601), (82, 61595), (90, 61574), (106, 61499), (115, 61409),

Gene: LittleMinkey_97 Start: 66895, Stop: 66527, Start Num: 47
Candidate Starts for LittleMinkey_97:
(Start: 47 @66895 has 5 MA's), (Start: 73 @66826 has 1 MA's), (87, 66760), (101, 66706), (109, 66643), (120, 66553),

Gene: Llemily_78 Start: 51295, Stop: 51008, Start Num: 52
Candidate Starts for Llemily_78:
(Start: 52 @51295 has 24 MA's), (Start: 56 @51286 has 6 MA's), (63, 51268), (93, 51151), (94, 51148), (95, 51145),

Gene: Lonelysoil_76 Start: 51052, Stop: 50765, Start Num: 52

Candidate Starts for Lonelysoil_76:
(Start: 52 @51052 has 24 MA's), (Start: 56 @51043 has 6 MA's), (63, 51025), (93, 50908), (94, 50905), (95, 50902),

Gene: Lozinak_7 Start: 1779, Stop: 1510, Start Num: 70
Candidate Starts for Lozinak_7:
(6, 2124), (10, 2085), (Start: 70 @1779 has 16 MA's), (77, 1734), (99, 1653), (107, 1617),

Gene: Mareelih_41 Start: 14165, Stop: 13884, Start Num: 53
Candidate Starts for Mareelih_41:
(Start: 53 @14165 has 12 MA's), (65, 14132), (68, 14123),

Gene: Marley1013_86 Start: 63081, Stop: 62737, Start Num: 41
Candidate Starts for Marley1013_86:
(30, 63129), (Start: 41 @63081 has 18 MA's), (54, 63066), (59, 63054), (Start: 73 @63015 has 1 MA's), (76, 62997), (81, 62967), (102, 62892), (111, 62823),

Gene: Marlia_86 Start: 62620, Stop: 62270, Start Num: 44
Candidate Starts for Marlia_86:
(Start: 41 @62623 has 18 MA's), (Start: 44 @62620 has 32 MA's), (54, 62602), (Start: 73 @62548 has 1 MA's), (76, 62530), (81, 62500), (95, 62452), (106, 62398), (115, 62308),

Gene: Maruru_76 Start: 48335, Stop: 48679, Start Num: 31
Candidate Starts for Maruru_76:
(Start: 31 @48335 has 2 MA's), (Start: 40 @48377 has 3 MA's), (63, 48413), (67, 48428),

Gene: Mashley_79 Start: 52319, Stop: 52038, Start Num: 52
Candidate Starts for Mashley_79:
(Start: 52 @52319 has 24 MA's), (90, 52190), (93, 52175),

Gene: Mentos_80 Start: 52971, Stop: 52684, Start Num: 52
Candidate Starts for Mentos_80:
(Start: 52 @52971 has 24 MA's), (Start: 56 @52962 has 6 MA's), (63, 52944), (93, 52827), (94, 52824), (95, 52821),

Gene: Miskis_6 Start: 1779, Stop: 1510, Start Num: 70
Candidate Starts for Miskis_6:
(6, 2124), (10, 2085), (Start: 70 @1779 has 16 MA's), (77, 1734), (99, 1653), (107, 1617),

Gene: MmasiCarm_86 Start: 62584, Stop: 62240, Start Num: 41
Candidate Starts for MmasiCarm_86:
(Start: 41 @62584 has 18 MA's), (54, 62569), (59, 62557), (Start: 73 @62518 has 1 MA's), (76, 62500), (81, 62470), (102, 62395), (111, 62326),

Gene: Mortcellus_85 Start: 63322, Stop: 62966, Start Num: 41
Candidate Starts for Mortcellus_85:
(Start: 41 @63322 has 18 MA's), (Start: 44 @63319 has 32 MA's), (51, 63304), (76, 63226), (81, 63196), (82, 63190), (90, 63169), (106, 63094), (115, 63004),

Gene: Morty007_84 Start: 63081, Stop: 62737, Start Num: 41
Candidate Starts for Morty007_84:
(30, 63129), (Start: 41 @63081 has 18 MA's), (54, 63066), (59, 63054), (Start: 73 @63015 has 1 MA's), (76, 62997), (81, 62967), (102, 62892), (111, 62823),

Gene: Mulaychimus_86 Start: 62600, Stop: 62250, Start Num: 44
Candidate Starts for Mulaychimus_86:
(Start: 41 @62603 has 18 MA's), (Start: 44 @62600 has 32 MA's), (54, 62582), (76, 62510), (81, 62480), (82, 62474), (90, 62453), (106, 62378), (115, 62288),

Gene: Namago_81 Start: 52020, Stop: 51733, Start Num: 52
Candidate Starts for Namago_81:
(Start: 52 @52020 has 24 MA's), (Start: 56 @52011 has 6 MA's), (63, 51993), (93, 51876), (94, 51873), (95, 51870),

Gene: Neos5_85 Start: 62543, Stop: 62199, Start Num: 41
Candidate Starts for Neos5_85:
(30, 62591), (Start: 41 @62543 has 18 MA's), (54, 62528), (59, 62516), (Start: 73 @62477 has 1 MA's), (76, 62459), (81, 62429), (102, 62354), (111, 62285),

Gene: Norvs_7 Start: 1779, Stop: 1510, Start Num: 70
Candidate Starts for Norvs_7:
(6, 2124), (10, 2085), (Start: 70 @1779 has 16 MA's), (77, 1734), (99, 1653), (107, 1617),

Gene: Nozo_85 Start: 62961, Stop: 62608, Start Num: 44
Candidate Starts for Nozo_85:
(Start: 41 @62964 has 18 MA's), (Start: 44 @62961 has 32 MA's), (51, 62946), (76, 62868), (81, 62838), (82, 62832), (90, 62811), (106, 62736), (115, 62646),

Gene: Oaker_62 Start: 48655, Stop: 48993, Start Num: 46
Candidate Starts for Oaker_62:
(4, 48274), (9, 48409), (Start: 46 @48655 has 3 MA's), (57, 48673), (82, 48775), (94, 48811), (112, 48907),

Gene: Obutu_87 Start: 62764, Stop: 62411, Start Num: 44
Candidate Starts for Obutu_87:
(Start: 41 @62767 has 18 MA's), (Start: 44 @62764 has 32 MA's), (51, 62749), (76, 62671), (81, 62641), (82, 62635), (90, 62614), (106, 62539), (115, 62449),

Gene: Olivio_85 Start: 62402, Stop: 62052, Start Num: 44
Candidate Starts for Olivio_85:
(Start: 41 @62405 has 18 MA's), (Start: 44 @62402 has 32 MA's), (54, 62384), (Start: 73 @62330 has 1 MA's), (76, 62312), (81, 62282), (90, 62255), (106, 62180), (115, 62090),

Gene: OneUp_6 Start: 1509, Stop: 1234, Start Num: 70
Candidate Starts for OneUp_6:
(Start: 70 @1509 has 16 MA's), (97, 1392),

Gene: OrangeOswald_84 Start: 62199, Stop: 61843, Start Num: 41
Candidate Starts for OrangeOswald_84:
(Start: 41 @62199 has 18 MA's), (Start: 44 @62196 has 32 MA's), (51, 62181), (76, 62103), (81, 62073), (82, 62067), (90, 62046), (106, 61971), (115, 61881),

Gene: Orchid_95 Start: 69511, Stop: 69206, Start Num: 53
Candidate Starts for Orchid_95:
(Start: 49 @69517 has 10 MA's), (Start: 53 @69511 has 12 MA's), (63, 69484), (86, 69388), (105, 69310),

Gene: Panchaali_236 Start: 159103, Stop: 159411, Start Num: 50
Candidate Starts for Panchaali_236:
(Start: 42 @159085 has 1 MA's), (Start: 50 @159103 has 8 MA's), (87, 159223), (95, 159253),

Gene: PatrickStar_96 Start: 69516, Stop: 69205, Start Num: 49
Candidate Starts for PatrickStar_96:
(Start: 49 @69516 has 10 MA's), (Start: 53 @69510 has 12 MA's), (63, 69483), (86, 69387), (105, 69309),

Gene: PauloDiaboli_342 Start: 173467, Stop: 173805, Start Num: 49
Candidate Starts for PauloDiaboli_342:
(Start: 49 @173467 has 10 MA's), (59, 173488), (64, 173503), (66, 173512), (69, 173518), (75, 173545), (96, 173626), (110, 173719), (112, 173725), (118, 173776),

Gene: Phabia_78 Start: 51707, Stop: 51420, Start Num: 52
Candidate Starts for Phabia_78:
(Start: 52 @51707 has 24 MA's), (Start: 56 @51698 has 6 MA's), (63, 51680), (93, 51563), (94, 51560), (95, 51557),

Gene: Phaedrus_80 Start: 61612, Stop: 61259, Start Num: 44
Candidate Starts for Phaedrus_80:
(Start: 41 @61615 has 18 MA's), (Start: 44 @61612 has 32 MA's), (51, 61597), (76, 61519), (81, 61489), (82, 61483), (90, 61462), (106, 61387), (115, 61297),

Gene: Phayeta_88 Start: 62684, Stop: 62328, Start Num: 41
Candidate Starts for Phayeta_88:
(Start: 41 @62684 has 18 MA's), (Start: 44 @62681 has 32 MA's), (51, 62666), (76, 62588), (81, 62558), (82, 62552), (90, 62531), (106, 62456), (115, 62366),

Gene: Phendrix_157 Start: 84630, Stop: 84319, Start Num: 53
Candidate Starts for Phendrix_157:
(Start: 53 @84630 has 12 MA's), (72, 84576), (76, 84552), (96, 84471), (100, 84456), (108, 84420), (112, 84378),

Gene: Philly_84 Start: 62041, Stop: 61691, Start Num: 44
Candidate Starts for Philly_84:
(Start: 41 @62044 has 18 MA's), (Start: 44 @62041 has 32 MA's), (54, 62023), (Start: 73 @61969 has 1 MA's), (76, 61951), (81, 61921), (95, 61873), (106, 61819), (115, 61729),

Gene: PhinkBoden_8 Start: 2279, Stop: 2010, Start Num: 70
Candidate Starts for PhinkBoden_8:
(1, 2843), (2, 2813), (3, 2732), (6, 2624), (10, 2585), (Start: 70 @2279 has 16 MA's), (77, 2234), (99, 2153), (107, 2117),

Gene: Phlyer_85 Start: 62907, Stop: 62554, Start Num: 44
Candidate Starts for Phlyer_85:
(Start: 41 @62910 has 18 MA's), (Start: 44 @62907 has 32 MA's), (51, 62892), (76, 62814), (81, 62784), (82, 62778), (90, 62757), (106, 62682), (115, 62592),

Gene: Pipefish_86 Start: 63131, Stop: 62799, Start Num: 48
Candidate Starts for Pipefish_86:

(18, 63254), (25, 63230), (27, 63221), (Start: 48 @63131 has 2 MA's), (59, 63110), (64, 63095), (Start: 73 @63065 has 1 MA's), (76, 63047), (102, 62948), (115, 62831), (117, 62822),

Gene: Predator_62 Start: 46573, Stop: 46911, Start Num: 46
Candidate Starts for Predator_62:
(33, 46528), (Start: 46 @46573 has 3 MA's), (57, 46591), (100, 46750), (114, 46855), (119, 46888),

Gene: Quammi_77 Start: 51407, Stop: 51120, Start Num: 52
Candidate Starts for Quammi_77:
(Start: 52 @51407 has 24 MA's), (Start: 56 @51398 has 6 MA's), (63, 51380), (93, 51263), (94, 51260), (95, 51257),

Gene: RagingRooster_84 Start: 61887, Stop: 61534, Start Num: 44
Candidate Starts for RagingRooster_84:
(Start: 41 @61890 has 18 MA's), (Start: 44 @61887 has 32 MA's), (51, 61872), (76, 61794), (81, 61764), (82, 61758), (90, 61737), (106, 61662), (115, 61572),

Gene: ReginaGlobina_266 Start: 161874, Stop: 162227, Start Num: 34
Candidate Starts for ReginaGlobina_266:
(Start: 34 @161874 has 1 MA's), (Start: 42 @161904 has 1 MA's), (Start: 50 @161922 has 8 MA's), (87, 162042), (95, 162072),

Gene: Rita1961_86 Start: 62538, Stop: 62188, Start Num: 44
Candidate Starts for Rita1961_86:
(Start: 41 @62541 has 18 MA's), (Start: 44 @62538 has 32 MA's), (54, 62520), (Start: 73 @62466 has 1 MA's), (76, 62448), (81, 62418), (106, 62316), (115, 62226),

Gene: RobinSparkles_99 Start: 69573, Stop: 69268, Start Num: 53
Candidate Starts for RobinSparkles_99:
(Start: 49 @69579 has 10 MA's), (Start: 53 @69573 has 12 MA's), (86, 69450), (92, 69426), (105, 69372),

Gene: RomaT_85 Start: 62764, Stop: 62408, Start Num: 41
Candidate Starts for RomaT_85:
(Start: 41 @62764 has 18 MA's), (Start: 44 @62761 has 32 MA's), (51, 62746), (76, 62668), (81, 62638), (82, 62632), (90, 62611), (106, 62536), (115, 62446),

Gene: Rudy_76 Start: 51434, Stop: 51156, Start Num: 56
Candidate Starts for Rudy_76:
(Start: 52 @51443 has 24 MA's), (Start: 56 @51434 has 6 MA's), (63, 51416), (93, 51299), (94, 51296), (95, 51293),

Gene: ScoobyDoobyDoo_14 Start: 4522, Stop: 4866, Start Num: 37
Candidate Starts for ScoobyDoobyDoo_14:
(Start: 37 @4522 has 1 MA's),

Gene: Serenabean_75 Start: 47658, Stop: 47942, Start Num: 45
Candidate Starts for Serenabean_75:
(15, 47508), (20, 47562), (Start: 45 @47658 has 2 MA's), (62, 47685), (91, 47793),

Gene: Shenandoah_84 Start: 61807, Stop: 61454, Start Num: 44
Candidate Starts for Shenandoah_84:

(Start: 41 @61810 has 18 MA's), (Start: 44 @61807 has 32 MA's), (51, 61792), (76, 61714), (81, 61684), (82, 61678), (90, 61657), (106, 61582),

Gene: ShyRosie_26 Start: 15707, Stop: 15414, Start Num: 49
Candidate Starts for ShyRosie_26:
(22, 15827), (28, 15806), (35, 15758), (Start: 49 @15707 has 10 MA's), (91, 15569),

Gene: Sillytadpoles_79 Start: 51283, Stop: 50996, Start Num: 52
Candidate Starts for Sillytadpoles_79:
(Start: 52 @51283 has 24 MA's), (Start: 56 @51274 has 6 MA's), (63, 51256), (93, 51139), (94, 51136), (95, 51133),

Gene: Sixama_41 Start: 13852, Stop: 13571, Start Num: 53
Candidate Starts for Sixama_41:
(Start: 53 @13852 has 12 MA's), (76, 13774),

Gene: SlippinJimmy_88 Start: 63571, Stop: 63218, Start Num: 44
Candidate Starts for SlippinJimmy_88:
(Start: 41 @63574 has 18 MA's), (Start: 44 @63571 has 32 MA's), (51, 63556), (76, 63478), (81, 63448), (82, 63442), (90, 63421), (106, 63346), (115, 63256),

Gene: SlySloth_80 Start: 52256, Stop: 51969, Start Num: 53
Candidate Starts for SlySloth_80:
(Start: 53 @52256 has 12 MA's), (93, 52112), (94, 52109), (95, 52106),

Gene: Smoothie_7 Start: 1779, Stop: 1510, Start Num: 70
Candidate Starts for Smoothie_7:
(6, 2124), (10, 2085), (Start: 70 @1779 has 16 MA's), (77, 1734), (99, 1653), (107, 1617),

Gene: Sonali_75 Start: 48306, Stop: 48659, Start Num: 31
Candidate Starts for Sonali_75:
(Start: 31 @48306 has 2 MA's), (36, 48330), (Start: 40 @48348 has 3 MA's), (67, 48411),

Gene: Squash_82 Start: 52656, Stop: 52369, Start Num: 52
Candidate Starts for Squash_82:
(Start: 52 @52656 has 24 MA's), (63, 52629), (93, 52512), (94, 52509), (95, 52506),

Gene: Stewart25555_242 Start: 158516, Stop: 158815, Start Num: 50
Candidate Starts for Stewart25555_242:
(7, 158240), (8, 158255), (11, 158312), (13, 158327), (14, 158330), (Start: 42 @158498 has 1 MA's), (Start: 50 @158516 has 8 MA's), (111, 158753),

Gene: StrawberryJamm_84 Start: 51823, Stop: 51536, Start Num: 52
Candidate Starts for StrawberryJamm_84:
(Start: 52 @51823 has 24 MA's), (Start: 56 @51814 has 6 MA's), (63, 51796), (93, 51679), (94, 51676), (95, 51673),

Gene: Sunshine23_76 Start: 48481, Stop: 48795, Start Num: 40
Candidate Starts for Sunshine23_76:
(Start: 31 @48439 has 2 MA's), (36, 48463), (Start: 40 @48481 has 3 MA's), (67, 48544), (104, 48676),

Gene: SwainyDoc_86 Start: 62570, Stop: 62217, Start Num: 44
Candidate Starts for SwainyDoc_86:

(Start: 41 @62573 has 18 MA's), (Start: 44 @62570 has 32 MA's), (51, 62555), (76, 62477), (81, 62447), (95, 62399), (106, 62345), (115, 62255),

Gene: Sweetclover_75 Start: 46977, Stop: 47273, Start Num: 49
Candidate Starts for Sweetclover_75:
(15, 46803), (20, 46857), (Start: 49 @46977 has 10 MA's), (59, 46998), (98, 47139), (99, 47145),

Gene: SynergyX_85 Start: 62198, Stop: 61845, Start Num: 44
Candidate Starts for SynergyX_85:
(Start: 41 @62201 has 18 MA's), (Start: 44 @62198 has 32 MA's), (51, 62183), (76, 62105), (81, 62075), (82, 62069), (90, 62048), (106, 61973), (115, 61883),

Gene: Teehee_79 Start: 52513, Stop: 52226, Start Num: 52
Candidate Starts for Teehee_79:
(Start: 52 @52513 has 24 MA's), (Start: 56 @52504 has 6 MA's), (63, 52486), (93, 52369), (94, 52366), (95, 52363),

Gene: Thonko_53 Start: 44732, Stop: 44370, Start Num: 39
Candidate Starts for Thonko_53:
(12, 44885), (Start: 39 @44732 has 1 MA's), (61, 44693), (Start: 73 @44657 has 1 MA's), (81, 44609), (83, 44600), (115, 44426), (121, 44390),

Gene: TinyTerror_86 Start: 62621, Stop: 62268, Start Num: 44
Candidate Starts for TinyTerror_86:
(Start: 41 @62624 has 18 MA's), (Start: 44 @62621 has 32 MA's), (51, 62606), (76, 62528), (81, 62498), (82, 62492), (90, 62471), (106, 62396), (115, 62306),

Gene: Tissue_81 Start: 52280, Stop: 51993, Start Num: 52
Candidate Starts for Tissue_81:
(Start: 52 @52280 has 24 MA's), (Start: 56 @52271 has 6 MA's), (63, 52253), (93, 52136), (95, 52130), (109, 52064),

Gene: Toniann_7 Start: 1779, Stop: 1510, Start Num: 70
Candidate Starts for Toniann_7:
(6, 2124), (10, 2085), (Start: 70 @1779 has 16 MA's), (77, 1734), (99, 1653), (107, 1617),

Gene: Tydolla_81 Start: 62177, Stop: 61824, Start Num: 44
Candidate Starts for Tydolla_81:
(Start: 41 @62180 has 18 MA's), (Start: 44 @62177 has 32 MA's), (51, 62162), (76, 62084), (81, 62054), (82, 62048), (90, 62027), (106, 61952), (115, 61862),

Gene: Viceroy_77 Start: 51416, Stop: 51129, Start Num: 52
Candidate Starts for Viceroy_77:
(Start: 52 @51416 has 24 MA's), (Start: 56 @51407 has 6 MA's), (63, 51389), (93, 51272), (94, 51269), (95, 51266),

Gene: WaddleDee_236 Start: 158922, Stop: 159245, Start Num: 42
Candidate Starts for WaddleDee_236:
(Start: 42 @158922 has 1 MA's), (Start: 50 @158940 has 8 MA's), (87, 159060), (95, 159090),

Gene: Wayne3_80 Start: 52267, Stop: 51989, Start Num: 56
Candidate Starts for Wayne3_80:

(Start: 52 @52276 has 24 MA's), (Start: 56 @52267 has 6 MA's), (63, 52249), (93, 52132), (94, 52129), (95, 52126),

Gene: Wheelie_78 Start: 51597, Stop: 51310, Start Num: 52
Candidate Starts for Wheelie_78:
(Start: 52 @51597 has 24 MA's), (Start: 56 @51588 has 6 MA's), (63, 51570), (93, 51453), (94, 51450), (95, 51447),

Gene: WilliamBoone_6 Start: 1630, Stop: 1361, Start Num: 70
Candidate Starts for WilliamBoone_6:
(Start: 70 @1630 has 16 MA's), (77, 1585),

Gene: Yahalom_83 Start: 62004, Stop: 61651, Start Num: 44
Candidate Starts for Yahalom_83:
(Start: 41 @62007 has 18 MA's), (Start: 44 @62004 has 32 MA's), (51, 61989), (76, 61911), (81, 61881), (82, 61875), (90, 61854), (106, 61779), (115, 61689),

Gene: Yinz_85 Start: 62060, Stop: 61716, Start Num: 41
Candidate Starts for Yinz_85:
(30, 62108), (Start: 41 @62060 has 18 MA's), (54, 62045), (59, 62033), (Start: 73 @61994 has 1 MA's), (76, 61976), (81, 61946), (102, 61871), (111, 61802), (115, 61754),

Gene: Zagie_80 Start: 52091, Stop: 51813, Start Num: 56
Candidate Starts for Zagie_80:
(Start: 52 @52100 has 24 MA's), (Start: 56 @52091 has 6 MA's), (63, 52073), (93, 51956), (94, 51953), (95, 51950),

Gene: Zenteno07_94 Start: 66543, Stop: 66193, Start Num: 47
Candidate Starts for Zenteno07_94:
(25, 66642), (Start: 47 @66543 has 5 MA's), (Start: 73 @66477 has 1 MA's), (81, 66429), (84, 66420), (85, 66414), (120, 66216),

Gene: ZestyBestie_78 Start: 51957, Stop: 51676, Start Num: 55
Candidate Starts for ZestyBestie_78:
(Start: 52 @51963 has 24 MA's), (55, 51957), (Start: 56 @51954 has 6 MA's), (63, 51936), (93, 51819), (94, 51816), (95, 51813),

Gene: Zhafia_81 Start: 52077, Stop: 51790, Start Num: 52
Candidate Starts for Zhafia_81:
(Start: 52 @52077 has 24 MA's), (Start: 56 @52068 has 6 MA's), (63, 52050), (93, 51933), (94, 51930), (95, 51927),