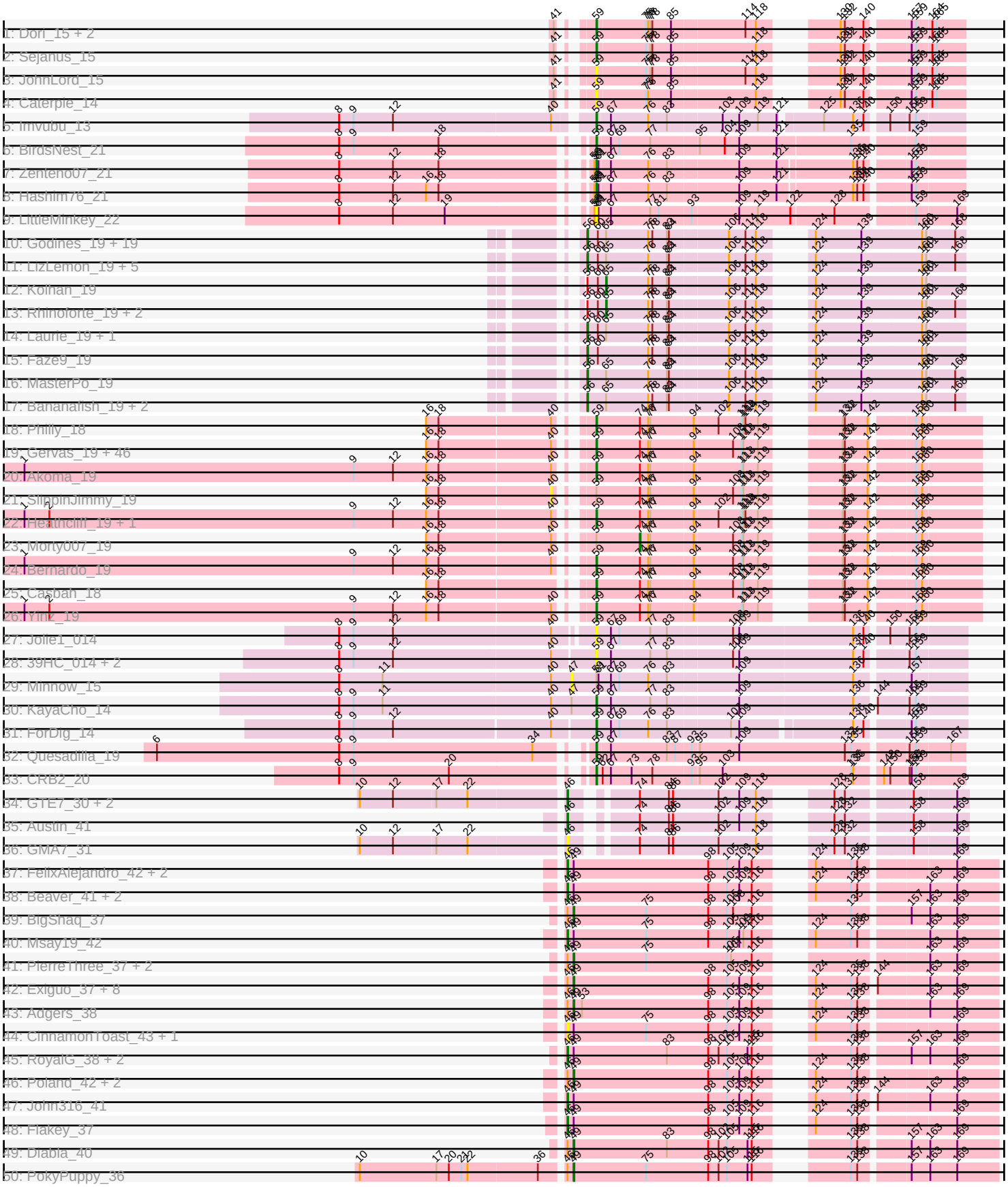
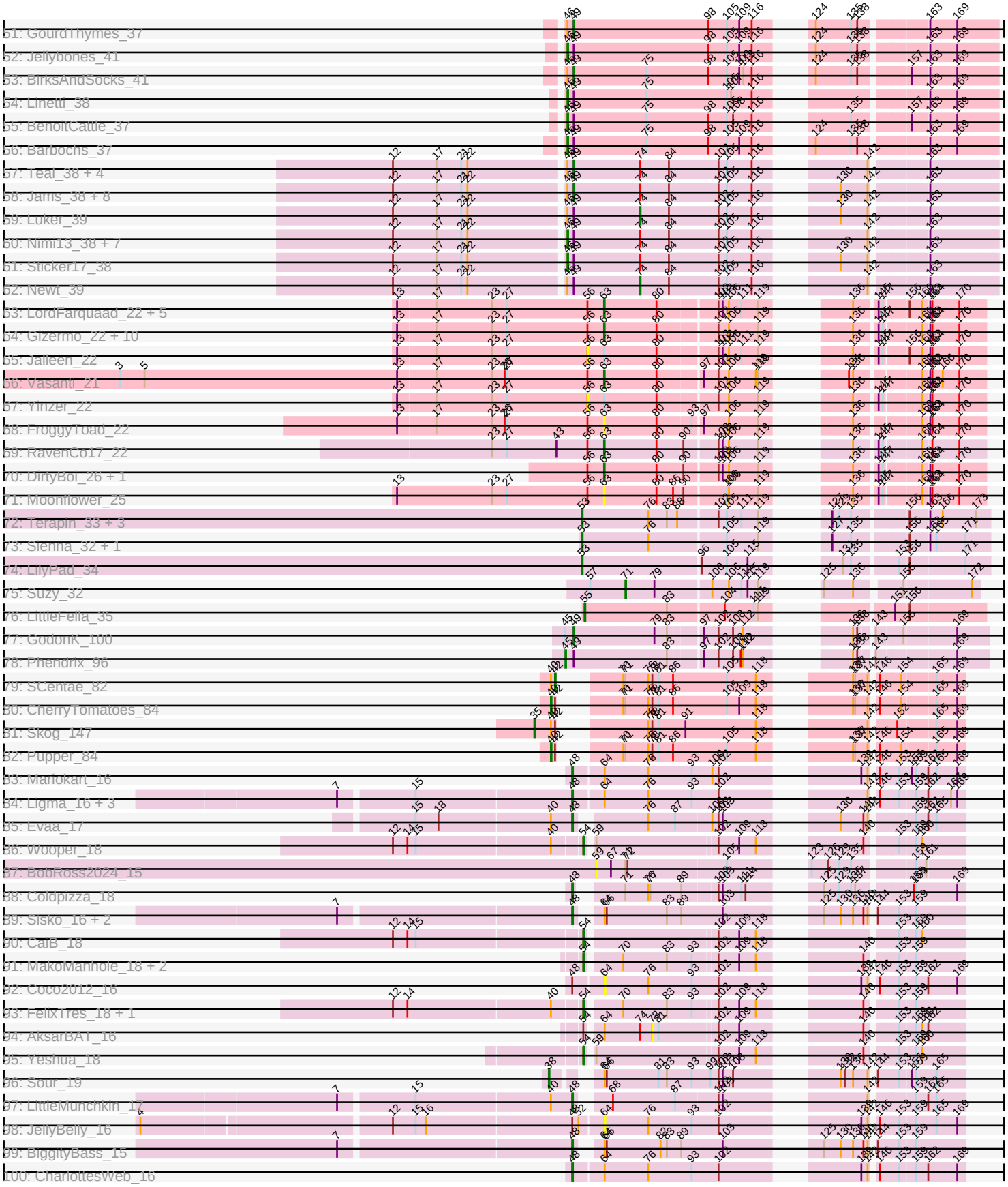
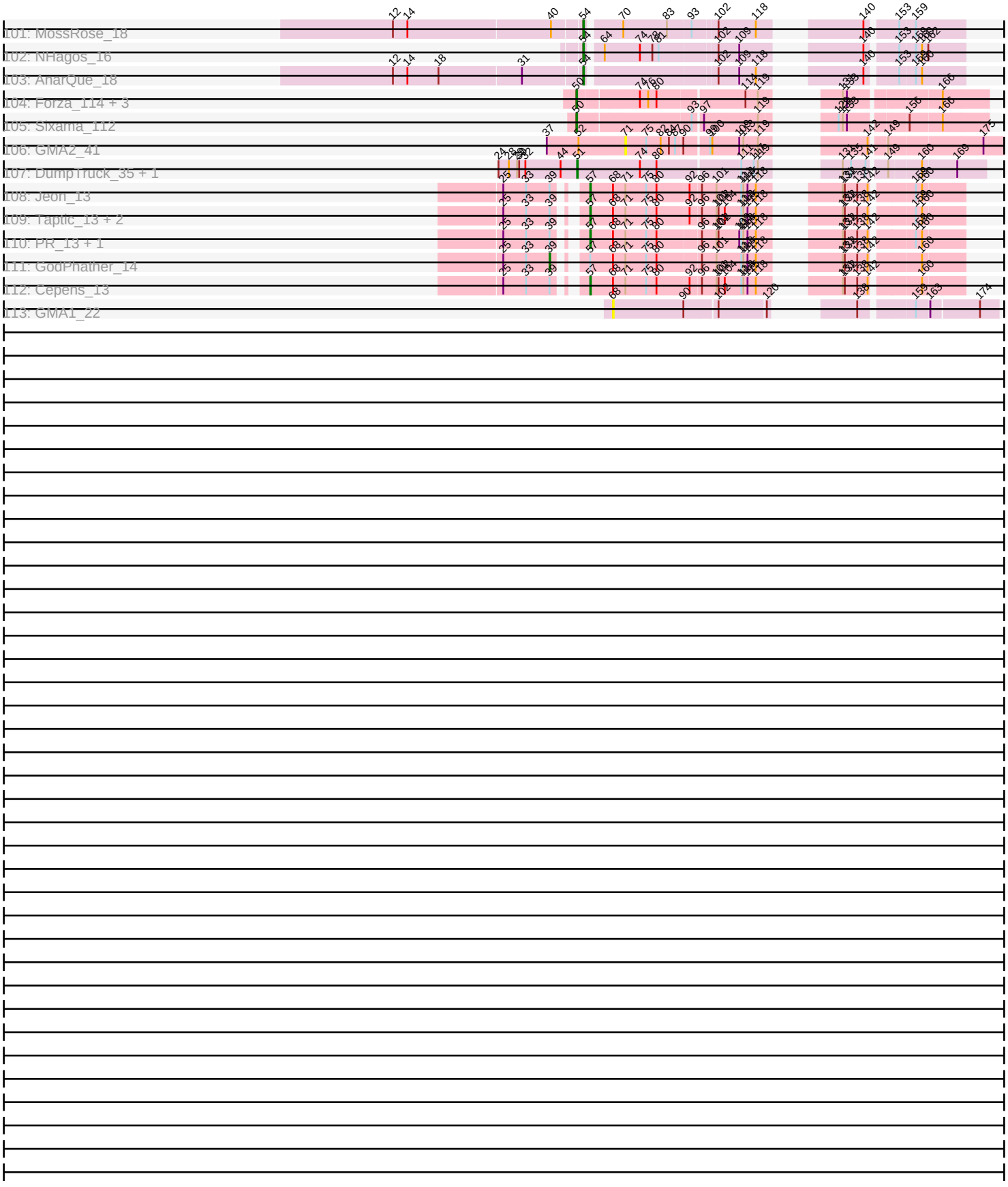
Pham 347199


1: Dori_15 + 2
2: Sejanus_15
3: JohnLord_15
4: Caterpie_14
5: Imvubu_13
6: BirdsNest_21
7: Zenteno07_21
8: Hashim76_21
9: LittleMinkey_22
10: Godines_19 + 19
11: LizLemon_19 + 5
12: Kolhan_19
13: Rhinoforte_19 + 2
14: Laurie_19 + 1
15: Faze9_19
16: MasterPo_19
17: Bananafish_19 + 2
18: Philly_18
19: Gervas_19 + 46
20: Akoma_19
21: SlippinJimmy_19
22: Heathcliff_19 + 1
23: Monty007_19
24: Bernardo_19
25: Caspan_18
26: Yinz_19
27: Jolie1_014
28: 39HC_014 + 2
29: Minnow_15
30: KayaCho_14
31: ForDig_14
32: Quesadilla_19
33: CRB2_20
34: GTE7_30 + 2
35: Austin_41
36: GMA7_31
37: FelixAlejandro_42 + 2
38: Beaver_41 + 2
39: BigShaq_37
40: Msay19_42
41: PierreThree_37 + 2
42: Exiguo_37 + 8
43: Adgers_38
44: CinnamonToast_43 + 1
45: RoyalG_38 + 2
46: Poland_42 + 2
47: John316_41
48: Flakey_37
49: Diabla_40
50: PokyPuppy_36

Pham 347199


51: GourdThymes_37
52: Jellybones_41
53: BirksAndSocks_41
54: Linetti_38
55: BenoitCattle_37
56: Barbochs_37
57: Teal_38 + 4
58: Jams_38 + 8
59: Luker_39
60: Nimi13_38 + 7
61: Sticker17_38
62: Newt_39
63: LordFarquaad_22 + 5
64: Gizermo_22 + 10
65: Jalleen_22
66: Vasanti_21
67: Yinzer_22
68: FroggyToad_22
69: RavenC017_22
70: DirtyBoi_26 + 1
71: Moonflower_25
72: Terapin_33 + 3
73: Sienna_32 + 1
74: LilyPad_34
75: Suzy_32
76: LittleFella_35
77: GodonK_100
78: Phendrix_96
79: SCentae_82
80: CherryTomatoes_84
81: Skog_147
82: Pupper_84
83: Manokart_16
84: Ligma_16 + 3
85: Evaa_17
86: Wooper_18
87: BobRoss2024_15
88: Coldpizza_18
89: Sisko_16 + 2
90: CalB_18
91: MakoManhole_18 + 2
92: Coco2012_16
93: FelixTres_18 + 1
94: AksarBAT_16
95: Yeshua_18
96: Sour_19
97: LittleMunchkin_17
98: JellyBelly_16
99: BiggityBass_15
100: CharlottesWeb_16

Pham 347199


101: MossRose_18
102: NHagos_16
103: AnarQue_18
104: Forza_114 + 3
105: Sixama_112
106: GMA2_41
107: DumpTruck_35 + 1
108: Jeon_13
109: Taptic_13 + 2
110: PR_13 + 1
111: GodPhather_14
112: Cepens_13
113: GMA1_22

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 347199 Report

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

Pham number 347199 has 268 members, 27 are drafts.

Phages represented in each track:
• Track 1 : Dori_15, Mask_15, Mao1_14
• Track 2 : Sejanus_15
• Track 3 : JohnLord_15
• Track 4 : Caterpie_14
• Track 5 : Imvubu_13
• Track 6 : BirdsNest_21
• Track 7 : Zenteno07_21
• Track 8 : Hashim76_21
• Track 9 : LittleMinkey_22
• Track 10 : Godines_19, Boyle_19, Brownie5_19, Arbiter_19, Kheth_19, Ares_19, Qyrzula_18, PrinceCharming_19, Rosebush_19, Eaglehorse_19, Glass_19, Sabella_19, Allegro_19, Tres_19, FrenchFry_19, West99_19, Lars_19, Hedgerow_19, Kaleb_19, Tinciduntsolum_20
• Track 11 : LizLemon_19, ItsyBitsy1_19, Holeinone_19, Lephleur_19, Calamitous_19, Phantasmagoria_19
• Track 12 : Kolhan_19
• Track 13 : Rhinoforte_19, Opia_19, Coffee_19
• Track 14 : Laurie_19, Vic9_00019
• Track 15 : Faze9_19
• Track 16 : MasterPo_19
• Track 17 : Bananafish_19, Blocker23_19, TA17A_19
• Track 18 : Philly_18
• Track 19 : Gervas_19, OrangeOswald_19, Abinghost_19, Ben11_18, Jackstina_18, HarveySr_19, GlenHope_20, Neos5_19, Marlia_19, Nozo_19, Athena_20, ChaChing_19, Mortcellus_18, Tydolla_19, Corofin_19, LestyG_19, SynergyX_19, Olivio_18, Yahalom_19, Rita1961_19, Glubnar_20, Marley1013_19, Baloo_19, RagingRooster_19, Chandler_19, Briakila_19, Chalmers_19, MmasiCarm_19, SwainyDoc_19, Kronus_18, Audrey_19, Deenasa_19, Chentzyk_18, Daisy_19, Obutu_19, Pipefish_19, Mulaychimus_19, Phaedrus_18, Shenandoah_19, Halfpint_18, RomaT_19, Phlyer_19, Phayeta_19, Kamiyu_19, Compostia_20, Gadjet_20, TinyTerror_19
• Track 20 : Akoma_19
• Track 21 : SlippinJimmy_19
• Track 22 : Heathcliff_19, Devonte_19
• Track 23 : Morty007_19
• Track 24 : Bernardo_19
• Track 25 : Casbah_18

• Track 26 : Yinz_19
• Track 27 : Jolie1_014
• Track 28 : 39HC_014, Hosp_012, 40BC_014
• Track 29 : Minnow_15
• Track 30 : KayaCho_14
• Track 31 : ForDig_14
• Track 32 : Quesadilla_19
• Track 33 : CRB2_20
• Track 34 : GTE7_30, HayZem_40, Amore2_41
• Track 35 : Austin_41
• Track 36 : GMA7_31
• Track 37 : FelixAlejandro_42, Butterball_41, Sombrero_37
• Track 38 : Beaver_41, Ekhein_38, Hotorobo_37
• Track 39 : BigShaq_37
• Track 40 : Msay19_42
• Track 41 : PierreThree_37, Chelms_37, Dakiti_37
• Track 42 : Exiguo_37, Worcestershire_37, Lizzo_37, Breezic_37, Squibbles_37, CathyBurgh_37, Sam12_37, RemRem_38, Monty_36
• Track 43 : Adgers_38
• Track 44 : CinnamonToast_43, BillyBobJr_43
• Track 45 : RoyalG_38, SteveFrench_37, Eggsie_37
• Track 46 : Poland_42, Gorko_37, Boneham_41
• Track 47 : John316_41
• Track 48 : Flakey_37
• Track 49 : Diabla_40
• Track 50 : PokyPuppy_36
• Track 51 : GourdThymes_37
• Track 52 : Jellybones_41
• Track 53 : BirksAndSocks_41
• Track 54 : Linetti_38
• Track 55 : BenoitCattle_37
• Track 56 : Barbochs_37
• Track 57 : Teal_38, Woes_38, Hail2Pitt_38, GalacticEye_38, Damp_38
• Track 58 : Jams_38, Berries_38, Lidong_38, Minos_39, Shelley_38, Charianelly_38, Bianmat_38, MrWormie_38, Kaseim_38
• Track 59 : Luker_39
• Track 60 : Nimi13_38, Anamika_38, Harambe_38, Lahirium_38, Guillaume_38, Hello_38, Neoevie_38, Jormungandr_38
• Track 61 : Sticker17_38
• Track 62 : Newt_39
• Track 63 : LordFarquaad_22, Yeet412_22, Bjanes7_22, Attis_22, SoilAssassin_22, Sahara_21
• Track 64 : Gizermo_22, Savage_22, Haley23_22, GemG_22, Ebert_22, Cynthia_22, Sproutie_22, Whiteclaw_22, Mocha12_22, Clap_22, TuertoX_22
• Track 65 : Jalleen_22
• Track 66 : Vasanti_21
• Track 67 : Yinzer_22
• Track 68 : FroggyToad_22
• Track 69 : RavenCo17_22
• Track 70 : DirtyBoi_26, Hedwig_26
• Track 71 : Moonflower_25
• Track 72 : Terapin_33, BiteSize_32, Djokovic_32, Beyoncage_32
• Track 73 : Sienna_32, Madi_32

• Track 74 : LilyPad_34
• Track 75 : Suzy_32
• Track 76 : LittleFella_35
• Track 77 : GodonK_100
• Track 78 : Phendrix_96
• Track 79 : SCentae_82
• Track 80 : CherryTomatoes_84
• Track 81 : Skog_147
• Track 82 : Pupper_84
• Track 83 : Mariokart_16
• Track 84 : Ligma_16, Fresco_16, Axumite_16, Shatter_16
• Track 85 : Evaa_17
• Track 86 : Wooper_18
• Track 87 : BobRoss2024_15
• Track 88 : Coldpizza_18
• Track 89 : Sisko_16, Yago84_16, AnClar_16
• Track 90 : CaiB_18
• Track 91 : MakoManhole_18, CloverMinnie_18, Blackpen_18
• Track 92 : Coco2012_16
• Track 93 : FelixTres_18, TraderJ_18
• Track 94 : AksarBAT_16
• Track 95 : Yeshua_18
• Track 96 : Sour_19
• Track 97 : LittleMunchkin_17
• Track 98 : JellyBelly_16
• Track 99 : BiggityBass_15
• Track 100 : CharlottesWeb_16
• Track 101 : MossRose_18
• Track 102 : NHagos_16
• Track 103 : AnarQue_18
• Track 104 : Forza_114, BlueNGold_113, Boopy_114, Mareelih_112
• Track 105 : Sixama_112
• Track 106 : GMA2_41
• Track 107 : DumpTruck_35, Xenia2_36
• Track 108 : Jeon_13
• Track 109 : Taptic_13, Argie_14, Megabear_13
• Track 110 : PR_13, D12_13
• Track 111 : GodPhather_14
• Track 112 : Cepens_13
• Track 113 : GMA1_22

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

The start number called the most often in the published annotations is 59, it was called in 64 of the 241 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 39HC_014, 40BC_014, Abinghost_19, Akoma_19, Athena_20, Audrey_19, Baloo_19, Ben11_18, Bernardo_19, BirdsNest_21, BobRoss2024_15, Briakila_19, CRB2_20, Casbah_18, Caterpie_14, ChaChing_19, Chalmers_19, Chandler_19,

Chentzyk_18, Compostia_20, Corofin_19, Daisy_19, Deenasa_19, Devonte_19, Dori_15, ForDig_14, Gadjet_20, Gervas_19, GlenHope_20, Glubnar_20, Halfpint_18, HarveySr_19, Hashim76_21, Heathcliff_19, Hosp_012, Imvubu_13, Jackstina_18, JohnLord_15, Jolie1_014, Kamiyu_19, KayaCho_14, Kronus_18, LestyG_19, LittleMinkey_22, Mao1_14, Marley1013_19, Marlia_19, Mask_15, MmasiCarm_19, Mortcellus_18, Mulaychimus_19, Neos5_19, Nozo_19, Obutu_19, Olivio_18, OrangeOswald_19, Phaedrus_18, Phayeta_19, Philly_18, Phlyer_19, Pipefish_19, Quesadilla_19, RagingRooster_19, Rita1961_19, RomaT_19, Sejanus_15, Shenandoah_19, SwainyDoc_19, SynergyX_19, TinyTerror_19, Tydolla_19, Yahalom_19, Yinz_19, Zenteno07_21,

Genes that have the "Most Annotated" start but do not call it:
• Minnow_15, Morty007_19, SlippinJimmy_19, Wooper_18, Yeshua_18,

Genes that do not have the "Most Annotated" start:
• Adgers_38, AksarBAT_16, Allegro_19, Amore2_41, AnClar_16, Anamika_38, AnarQue_18, Arbiter_19, Ares_19, Argie_14, Attis_22, Austin_41, Axumite_16, Bananafish_19, Barbochs_37, Beaver_41, BenoitCattle_37, Berries_38, Beyoncage_32, Bianmat_38, BigShaq_37, BiggityBass_15, BillyBobJr_43, BirksAndSocks_41, BiteSize_32, Bjanes7_22, Blackpen_18, Blocker23_19, BlueNGold_113, Boneham_41, Boopy_114, Boyle_19, Breezic_37, Brownie5_19, Butterball_41, CaiB_18, Calamitous_19, CathyBurgh_37, Cepens_13, Charianelly_38, CharlottesWeb_16, Chelms_37, CherryTomatoes_84, CinnamonToast_43, Clap_22, CloverMinnie_18, Coco2012_16, Coffee_19, Coldpizza_18, Cynthia_22, D12_13, Dakiti_37, Damp_38, Diabla_40, DirtyBoi_26, Djokovic_32, DumpTruck_35, Eaglehorse_19, Ebert_22, Eggsie_37, Ekhein_38, Evaa_17, Exiguo_37, Faze9_19, FelixAlejandro_42, FelixTres_18, Flakey_37, Forza_114, FrenchFry_19, Fresco_16, FroggyToad_22, GMA1_22, GMA2_41, GMA7_31, GTE7_30, GalacticEye_38, GemG_22, Gizermo_22, Glass_19, GodPhather_14, Godines_19, GodonK_100, Gorko_37, GourdThymes_37, Guillaume_38, Hail2Pitt_38, Haley23_22, Harambe_38, HayZem_40, Hedgerow_19, Hedwig_26, Hello_38, Holeinone_19, Hotorobo_37, ItsyBitsy1_19, Jalleen_22, Jams_38, JellyBelly_16, Jellybones_41, Jeon_13, John316_41, Jormungandr_38, Kaleb_19, Kaseim_38, Kheth_19, Kolhan_19, Lahirium_38, Lars_19, Laurie_19, Lephleur_19, Lidong_38, Ligma_16, LilyPad_34, Linetti_38, LittleFella_35, LittleMunchkin_17, LizLemon_19, Lizzo_37, LordFarquaad_22, Luker_39, Madi_32, MakoManhole_18, Mareelih_112, Mariokart_16, MasterPo_19, Megabear_13, Minos_39, Mocha12_22, Monty_36, Moonflower_25, MossRose_18, MrWormie_38, Msay19_42, NHagos_16, Neoevie_38, Newt_39, Nimi13_38, Opia_19, PR_13, Phantasmagoria_19, Phendrix_96, PierreThree_37, PokyPuppy_36, Poland_42, PrinceCharming_19, Pupper_84, Qyrzula_18, RavenCo17_22, RemRem_38, Rhinoforte_19, Rosebush_19, RoyalG_38, SCentae_82, Sabella_19, Sahara_21, Sam12_37, Savage_22, Shatter_16, Shelley_38, Sienna_32, Sisko_16, Sixama_112, Skog_147, SoilAssassin_22, Sombrero_37, Sour_19, Sproutie_22, Squibbles_37, SteveFrench_37, Sticker17_38, Suzy_32, TA17A_19, Taptic_13, Teal_38, Terapin_33, Tinciduntsolum_20, TraderJ_18, Tres_19, TuertoX_22, Vasanti_21, Vic9_00019, West99_19, Whiteclaw_22, Woes_38, Worcestershire_37, Xenia2_36, Yago84_16, Yeet412_22, Yinzer_22,

Summary by start number:

Start 35:
• Found in 1 of 268 (0.4%) of genes in pham

• Manual Annotations of this start: 1 of 241
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Skog_147 (DO),

Start 38:
• Found in 1 of 268 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 241
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sour_19 (DR),

Start 39:
• Found in 8 of 268 (3.0%) of genes in pham
• Manual Annotations of this start: 1 of 241
• Called 12.5% of time when present
• Phage (with cluster) where this start called: GodPhather_14 (W),

Start 40:
• Found in 73 of 268 (27.2%) of genes in pham
• Manual Annotations of this start: 2 of 241
• Called 4.1% of time when present
• Phage (with cluster) where this start called: CherryTomatoes_84 (DO), Pupper_84 (DO), SlippinJimmy_19 (B3),

Start 42:
• Found in 4 of 268 (1.5%) of genes in pham
• Manual Annotations of this start: 1 of 241
• Called 25.0% of time when present
• Phage (with cluster) where this start called: SCentae_82 (DO),

Start 45:
• Found in 2 of 268 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 241
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Phendrix_96 (DK),

Start 46:
• Found in 69 of 268 (25.7%) of genes in pham
• Manual Annotations of this start: 28 of 241
• Called 46.4% of time when present
• Phage (with cluster) where this start called: Amore2_41 (CS1), Anamika_38 (CS3), Austin_41 (CS1), Barbochs_37 (CS2), Beaver_41 (CS2), BenoitCattle_37 (CS2), BillyBobJr_43 (CS2), Butterball_41 (CS2), CinnamonToast_43 (CS2), Eggsie_37 (CS2), Ekhein_38 (CS2), FelixAlejandro_42 (CS2), Flakey_37 (CS2), GMA7_31 (CS1), GTE7_30 (CS1), Guillaume_38 (CS3), Harambe_38 (CS3), HayZem_40 (CS1), Hello_38 (CS3), Hotorobo_37 (CS2), Jellybones_41 (CS2), John316_41 (CS2), Jormungandr_38 (CS3), Lahirium_38 (CS3), Linetti_38 (CS2), Msay19_42 (CS2), Neoevie_38 (CS3), Nimi13_38 (CS3), RoyalG_38 (CS2), Sombrero_37 (CS2), SteveFrench_37 (CS2), Sticker17_38 (CS3),

Start 47:
• Found in 2 of 268 (0.7%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present

• Phage (with cluster) where this start called: Minnow_15 (B6),

Start 48:
• Found in 15 of 268 (5.6%) of genes in pham
• Manual Annotations of this start: 13 of 241
• Called 86.7% of time when present
• Phage (with cluster) where this start called: AnClar_16 (DR), Axumite_16 (DR), BiggityBass_15 (DR), CharlottesWeb_16 (DR), Coldpizza_18 (DR), Evaa_17 (DR), Fresco_16 (DR), Ligma_16 (DR), LittleMunchkin_17 (DR), Mariokart_16 (DR), Shatter_16 (DR), Sisko_16 (DR), Yago84_16 (DR),

Start 49:
• Found in 66 of 268 (24.6%) of genes in pham
• Manual Annotations of this start: 36 of 241
• Called 54.5% of time when present
• Phage (with cluster) where this start called: Adgers_38 (CS2), Berries_38 (CS3), Bianmat_38 (CS3), BigShaq_37 (CS2), BirksAndSocks_41 (CS2), Boneham_41 (CS2), Breezic_37 (CS2), CathyBurgh_37 (CS2), Charianelly_38 (CS3), Chelms_37 (CS2), Dakiti_37 (CS2), Damp_38 (CS3), Diabla_40 (CS2), Exiguo_37 (CS2), GalacticEye_38 (CS3), GodonK_100 (DK), Gorko_37 (CS2), GourdThymes_37 (CS2), Hail2Pitt_38 (CS3), Jams_38 (CS3), Kaseim_38 (CS3), Lidong_38 (CS3), Lizzo_37 (CS2), Minos_39 (CS3), Monty_36 (CS2), MrWormie_38 (CS3), PierreThree_37 (CS2), PokyPuppy_36 (CS2), Poland_42 (CS2), RemRem_38 (CS2), Sam12_37 (CS2), Shelley_38 (CS3), Squibbles_37 (CS2), Teal_38 (CS3), Woes_38 (CS3), Worcestershire_37 (CS2),

Start 50:
• Found in 5 of 268 (1.9%) of genes in pham
• Manual Annotations of this start: 5 of 241
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlueNGold_113 (DS), Boopy_114 (DS), Forza_114 (DS), Mareelih_112 (DS), Sixama_112 (DS),

Start 51:
• Found in 2 of 268 (0.7%) of genes in pham
• Manual Annotations of this start: 2 of 241
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DumpTruck_35 (DV), Xenia2_36 (DV),

Start 53:
• Found in 8 of 268 (3.0%) of genes in pham
• Manual Annotations of this start: 7 of 241
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Beyoncage_32 (DG1), BiteSize_32 (DG1), Djokovic_32 (DG1), LilyPad_34 (DG1), Madi_32 (DG1), Sienna_32 (DG1), Terapin_33 (DG1),

Start 54:
• Found in 12 of 268 (4.5%) of genes in pham
• Manual Annotations of this start: 9 of 241
• Called 91.7% of time when present
• Phage (with cluster) where this start called: AnarQue_18 (DR), Blackpen_18 (DR), CaiB_18 (DR), CloverMinnie_18 (DR), FelixTres_18 (DR), MakoManhole_18 (DR),

MossRose_18 (DR), NHagos_16 (DR), TraderJ_18 (DR), Wooper_18 (DR), Yeshua_18 (DR),

Start 55:
• Found in 1 of 268 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 241
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LittleFella_35 (DG2),

Start 56:
• Found in 62 of 268 (23.1%) of genes in pham
• Manual Annotations of this start: 33 of 241
• Called 56.5% of time when present
• Phage (with cluster) where this start called: Allegro_19 (B2), Arbiter_19 (B2), Ares_19 (B2), Bananafish_19 (B2), Blocker23_19 (B2), Boyle_19 (B2), Brownie5_19 (B2), Calamitous_19 (B2), Eaglehorse_19 (B2), Faze9_19 (B2), FrenchFry_19 (B2), Glass_19 (B2), Godines_19 (B2), Hedgerow_19 (B2), Holeinone_19 (B2), ItsyBitsy1_19 (B2), Jalleen_22 (CZ2), Kaleb_19 (B2), Kheth_19 (B2), Lars_19 (B2), Laurie_19 (B2), Lephleur_19 (B2), LizLemon_19 (B2), MasterPo_19 (B2), Phantasmagoria_19 (B2), PrinceCharming_19 (B2), Qyrzula_18 (B2), Rosebush_19 (B2), Sabella_19 (B2), TA17A_19 (B2), Tinciduntsolum_20 (B2), Tres_19 (B2), Vic9_00019 (B2), West99_19 (B2), Yinzer_22 (CZ2),

Start 57:
• Found in 9 of 268 (3.4%) of genes in pham
• Manual Annotations of this start: 7 of 241
• Called 77.8% of time when present
• Phage (with cluster) where this start called: Argie_14 (W), Cepens_13 (W), D12_13 (W), Jeon_13 (W), Megabear_13 (W), PR_13 (W), Taptic_13 (W),

Start 59:
• Found in 79 of 268 (29.5%) of genes in pham
• Manual Annotations of this start: 64 of 241
• Called 93.7% of time when present
• Phage (with cluster) where this start called: 39HC_014 (B6), 40BC_014 (B6), Abinghost_19 (B3), Akoma_19 (B3), Athena_20 (B3), Audrey_19 (B3), Baloo_19 (B3), Ben11_18 (B3), Bernardo_19 (B3), BirdsNest_21 (B13), BobRoss2024_15 (DR), Briakila_19 (B3), CRB2_20 (B9), Casbah_18 (B3), Caterpie_14 (AD), ChaChing_19 (B3), Chalmers_19 (B3), Chandler_19 (B3), Chentzyk_18 (B3), Compostia_20 (B3), Corofin_19 (B3), Daisy_19 (B3), Deenasa_19 (B3), Devonte_19 (B3), Dori_15 (AD), ForDig_14 (B6), Gadjet_20 (B3), Gervas_19 (B3), GlenHope_20 (B3), Glubnar_20 (B3), Halfpint_18 (B3), HarveySr_19 (B3), Hashim76_21 (B13), Heathcliff_19 (B3), Hosp_012 (B6), Imvubu_13 (B10), Jackstina_18 (B3), JohnLord_15 (AD), Jolie1_014 (B6), Kamiyu_19 (B3), KayaCho_14 (B6), Kronus_18 (B3), LestyG_19 (B3), LittleMinkey_22 (B13), Mao1_14 (AD), Marley1013_19 (B3), Marlia_19 (B3), Mask_15 (AD), MmasiCarm_19 (B3), Mortcellus_18 (B3), Mulaychimus_19 (B3), Neos5_19 (B3), Nozo_19 (B3), Obutu_19 (B3), Olivio_18 (B3), OrangeOswald_19 (B3), Phaedrus_18 (B3), Phayeta_19 (B3), Philly_18 (B3), Phlyer_19 (B3), Pipefish_19 (B3), Quesadilla_19 (B9), RagingRooster_19 (B3), Rita1961_19 (B3), RomaT_19 (B3), Sejanus_15 (AD), Shenandoah_19 (B3), SwainyDoc_19 (B3), SynergyX_19 (B3), TinyTerror_19 (B3), Tydolla_19 (B3), Yahalom_19 (B3), Yinz_19 (B3), Zenteno07_21 (B13),

Start 63:
• Found in 25 of 268 (9.3%) of genes in pham
• Manual Annotations of this start: 21 of 241
• Called 92.0% of time when present
• Phage (with cluster) where this start called: Attis_22 (CZ2), Bjanes7_22 (CZ2), Clap_22 (CZ2), Cynthia_22 (CZ2), DirtyBoi_26 (DB), Ebert_22 (CZ2), FroggyToad_22 (CZ2), GemG_22 (CZ2), Gizermo_22 (CZ2), Haley23_22 (CZ2), Hedwig_26 (DB), LordFarquaad_22 (CZ2), Mocha12_22 (CZ2), Moonflower_25 (DB), RavenCo17_22 (CZ8), Sahara_21 (CZ2), Savage_22 (CZ2), SoilAssassin_22 (CZ2), Sproutie_22 (CZ2), TuertoX_22 (CZ2), Vasanti_21 (CZ2), Whiteclaw_22 (CZ2), Yeet412_22 (CZ2),

Start 64:
• Found in 15 of 268 (5.6%) of genes in pham
• No Manual Annotations of this start.
• Called 13.3% of time when present
• Phage (with cluster) where this start called: Coco2012_16 (DR), JellyBelly_16 (DR),

Start 65:
• Found in 36 of 268 (13.4%) of genes in pham
• Manual Annotations of this start: 4 of 241
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Coffee_19 (B2), Kolhan_19 (B2), Opia_19 (B2), Rhinoforte_19 (B2),

Start 68:
• Found in 10 of 268 (3.7%) of genes in pham
• No Manual Annotations of this start.
• Called 10.0% of time when present
• Phage (with cluster) where this start called: GMA1_22 (singleton),

Start 71:
• Found in 15 of 268 (5.6%) of genes in pham
• Manual Annotations of this start: 1 of 241
• Called 13.3% of time when present
• Phage (with cluster) where this start called: GMA2_41 (DS), Suzy_32 (DG1),

Start 74:
• Found in 94 of 268 (35.1%) of genes in pham
• Manual Annotations of this start: 3 of 241
• Called 3.2% of time when present
• Phage (with cluster) where this start called: Luker_39 (CS3), Morty007_19 (B3), Newt_39 (CS3),

Start 78:
• Found in 42 of 268 (15.7%) of genes in pham
• No Manual Annotations of this start.
• Called 2.4% of time when present
• Phage (with cluster) where this start called: AksarBAT_16 (DR),

Summary by clusters:

There are 22 clusters represented in this pham: DO, CZ8, DK, CZ2, DB, singleton, B13, B10, DV, DR, DS, CS1, CS3, CS2, AD, DG2, DG1, W, B6, B2, B3, B9,

Info for manual annotations of cluster AD:
•Start number 59 was manually annotated 4 times for cluster AD.

Info for manual annotations of cluster B10:
•Start number 59 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B13:
•Start number 59 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B2:
•Start number 56 was manually annotated 33 times for cluster B2.
•Start number 65 was manually annotated 4 times for cluster B2.

Info for manual annotations of cluster B3:
•Start number 59 was manually annotated 52 times for cluster B3.
•Start number 74 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster B6:
•Start number 59 was manually annotated 2 times for cluster B6.

Info for manual annotations of cluster B9:
•Start number 59 was manually annotated 2 times for cluster B9.

Info for manual annotations of cluster CS1:
•Start number 46 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:
•Start number 46 was manually annotated 16 times for cluster CS2.
•Start number 49 was manually annotated 21 times for cluster CS2.

Info for manual annotations of cluster CS3:
•Start number 46 was manually annotated 9 times for cluster CS3.
•Start number 49 was manually annotated 14 times for cluster CS3.
•Start number 74 was manually annotated 2 times for cluster CS3.

Info for manual annotations of cluster CZ2:
•Start number 63 was manually annotated 18 times for cluster CZ2.

Info for manual annotations of cluster CZ8:
•Start number 63 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DB:
•Start number 63 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster DG1:
•Start number 53 was manually annotated 7 times for cluster DG1.
•Start number 71 was manually annotated 1 time for cluster DG1.

Info for manual annotations of cluster DG2:
•Start number 55 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster DK:
•Start number 45 was manually annotated 1 time for cluster DK.
•Start number 49 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster DO:
•Start number 35 was manually annotated 1 time for cluster DO.
•Start number 40 was manually annotated 2 times for cluster DO.
•Start number 42 was manually annotated 1 time for cluster DO.

Info for manual annotations of cluster DR:
•Start number 38 was manually annotated 1 time for cluster DR.
•Start number 48 was manually annotated 13 times for cluster DR.
•Start number 54 was manually annotated 9 times for cluster DR.

Info for manual annotations of cluster DS:
•Start number 50 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster DV:
•Start number 51 was manually annotated 2 times for cluster DV.

Info for manual annotations of cluster W:
•Start number 39 was manually annotated 1 time for cluster W.
•Start number 57 was manually annotated 7 times for cluster W.

Gene Information:

Gene: 39HC_014 Start: 14058, Stop: 14567, Start Num: 59
Candidate Starts for 39HC_014:
(8, 13695), (9, 13716), (12, 13773), (Start: 40 @13998 has 2 MA's), (Start: 59 @14058 has 64 MA's), (67, 14079), (77, 14136), (83, 14160), (108, 14250), (109, 14259), (136, 14421), (140, 14436), (156, 14487), (159, 14496),

Gene: 40BC_014 Start: 14058, Stop: 14567, Start Num: 59
Candidate Starts for 40BC_014:
(8, 13695), (9, 13716), (12, 13773), (Start: 40 @13998 has 2 MA's), (Start: 59 @14058 has 64 MA's), (67, 14079), (77, 14136), (83, 14160), (108, 14250), (109, 14259), (136, 14421), (140, 14436), (156, 14487), (159, 14496),

Gene: Abinghost_19 Start: 15461, Stop: 15940, Start Num: 59
Candidate Starts for Abinghost_19:
(16, 15254), (18, 15272), (Start: 40 @15431 has 2 MA's), (Start: 59 @15461 has 64 MA's), (Start: 74 @15524 has 3 MA's), (76, 15536), (77, 15539), (94, 15599), (108, 15653), (111, 15665), (113, 15668), (119, 15689), (131, 15758), (132, 15761), (142, 15794), (159, 15848), (160, 15857),

Gene: Adgers_38 Start: 40339, Stop: 40881, Start Num: 49
Candidate Starts for Adgers_38:
(Start: 46 @40330 has 28 MA's), (Start: 49 @40339 has 36 MA's), (Start: 53 @40351 has 7 MA's), (98, 40534), (105, 40561), (109, 40579), (116, 40597), (124, 40636), (135, 40687), (138, 40696), (163, 40783), (169, 40822),

Gene: Akoma_19 Start: 15461, Stop: 15940, Start Num: 59
Candidate Starts for Akoma_19:
(1, 14672), (9, 15149), (12, 15206), (16, 15254), (18, 15272), (Start: 40 @15431 has 2 MA's), (Start: 59 @15461 has 64 MA's), (Start: 74 @15524 has 3 MA's), (76, 15536), (77, 15539), (94, 15599), (111, 15665), (113, 15668), (119, 15689), (131, 15758), (132, 15761), (142, 15794), (159, 15848), (160, 15857),

Gene: AksarBAT_16 Start: 13812, Stop: 14186, Start Num: 78
Candidate Starts for AksarBAT_16:
(Start: 54 @13725 has 9 MA's), (64, 13743), (Start: 74 @13794 has 3 MA's), (78, 13812), (81, 13821), (102, 13899), (109, 13929), (140, 14055), (153, 14094), (159, 14115), (160, 14124), (162, 14133),

Gene: Allegro_19 Start: 16678, Stop: 17160, Start Num: 56
Candidate Starts for Allegro_19:
(Start: 56 @16678 has 33 MA's), (60, 16693), (Start: 65 @16705 has 4 MA's), (76, 16765), (78, 16771), (83, 16792), (84, 16795), (106, 16876), (114, 16900), (118, 16915), (124, 16948), (139, 17014), (160, 17101), (161, 17107), (168, 17146),

Gene: Amore2_41 Start: 40831, Stop: 41301, Start Num: 46
Candidate Starts for Amore2_41:
(10, 40549), (12, 40597), (17, 40657), (22, 40702), (Start: 46 @40831 has 28 MA's), (Start: 74 @40903 has 3 MA's), (84, 40945), (86, 40951), (102, 41014), (109, 41044), (118, 41068), (128, 41128), (132, 41143), (158, 41227), (169, 41287),

Gene: AnClar_16 Start: 14634, Stop: 15104, Start Num: 48
Candidate Starts for AnClar_16:
(7, 14310), (Start: 48 @14634 has 13 MA's), (64, 14655), (66, 14658), (83, 14745), (89, 14766), (103, 14823), (125, 14916), (130, 14940), (136, 14958), (140, 14973), (142, 14979), (144, 14982), (153, 15012), (159, 15033),

Gene: Anamika_38 Start: 42711, Stop: 43259, Start Num: 46
Candidate Starts for Anamika_38:
(12, 42471), (17, 42534), (21, 42570), (22, 42579), (Start: 46 @42711 has 28 MA's), (Start: 49 @42720 has 36 MA's), (Start: 74 @42816 has 3 MA's), (84, 42858), (102, 42930), (105, 42942), (116, 42978), (142, 43092), (163, 43164),

Gene: AnarQue_18 Start: 15267, Stop: 15728, Start Num: 54
Candidate Starts for AnarQue_18:
(12, 15003), (14, 15024), (18, 15069), (31, 15186), (Start: 54 @15267 has 9 MA's), (102, 15441), (109, 15471), (118, 15495), (140, 15597), (153, 15636), (159, 15657), (160, 15666),

Gene: Arbiter_19 Start: 16765, Stop: 17247, Start Num: 56
Candidate Starts for Arbiter_19:
(Start: 56 @16765 has 33 MA's), (60, 16780), (Start: 65 @16792 has 4 MA's), (76, 16852), (78, 16858), (83, 16879), (84, 16882), (106, 16963), (114, 16987), (118, 17002), (124, 17035), (139, 17101), (160, 17188), (161, 17194), (168, 17233),

Gene: Ares_19 Start: 16678, Stop: 17160, Start Num: 56
Candidate Starts for Ares_19:
(Start: 56 @16678 has 33 MA's), (60, 16693), (Start: 65 @16705 has 4 MA's), (76, 16765), (78, 16771), (83, 16792), (84, 16795), (106, 16876), (114, 16900), (118, 16915), (124, 16948), (139, 17014), (160, 17101), (161, 17107), (168, 17146),

Gene: Argie_14 Start: 14794, Stop: 15258, Start Num: 57
Candidate Starts for Argie_14:
(25, 14704), (33, 14737), (Start: 39 @14770 has 1 MA's), (Start: 57 @14794 has 7 MA's), (68, 14827), (Start: 71 @14845 has 1 MA's), (75, 14875), (80, 14890), (92, 14935), (96, 14950), (101, 14971), (102, 14974), (104, 14983), (111, 15007), (113, 15010), (115, 15016), (118, 15028), (131, 15100), (132, 15103), (138, 15121), (142, 15136), (159, 15190), (160, 15199),

Gene: Athena_20 Start: 16224, Stop: 16703, Start Num: 59
Candidate Starts for Athena_20:
(16, 16017), (18, 16035), (Start: 40 @16194 has 2 MA's), (Start: 59 @16224 has 64 MA's), (Start: 74 @16287 has 3 MA's), (76, 16299), (77, 16302), (94, 16362), (108, 16416), (111, 16428), (113, 16431), (119, 16452), (131, 16521), (132, 16524), (142, 16557), (159, 16611), (160, 16620),

Gene: Attis_22 Start: 18967, Stop: 19413, Start Num: 63
Candidate Starts for Attis_22:
(13, 18670), (17, 18724), (23, 18805), (27, 18826), (Start: 56 @18943 has 33 MA's), (Start: 63 @18967 has 21 MA's), (80, 19042), (102, 19123), (103, 19129), (106, 19138), (111, 19156), (119, 19180), (136, 19243), (145, 19270), (147, 19276), (156, 19306), (160, 19324), (163, 19333), (164, 19336), (170, 19375),

Gene: Audrey_19 Start: 15461, Stop: 15940, Start Num: 59
Candidate Starts for Audrey_19:
(16, 15254), (18, 15272), (Start: 40 @15431 has 2 MA's), (Start: 59 @15461 has 64 MA's), (Start: 74 @15524 has 3 MA's), (76, 15536), (77, 15539), (94, 15599), (108, 15653), (111, 15665), (113, 15668), (119, 15689), (131, 15758), (132, 15761), (142, 15794), (159, 15848), (160, 15857),

Gene: Austin_41 Start: 40831, Stop: 41301, Start Num: 46
Candidate Starts for Austin_41:
(Start: 46 @40831 has 28 MA's), (Start: 74 @40903 has 3 MA's), (84, 40945), (86, 40951), (102, 41014), (109, 41044), (118, 41068), (128, 41128), (132, 41143), (158, 41227), (169, 41287),

Gene: Axumite_16 Start: 13799, Stop: 14290, Start Num: 48
Candidate Starts for Axumite_16:
(7, 13475), (15, 13577), (Start: 48 @13799 has 13 MA's), (64, 13841), (76, 13904), (93, 13964), (102, 14003), (142, 14165), (146, 14171), (153, 14198), (159, 14219), (162, 14237), (167, 14270), (169, 14279),

Gene: Baloo_19 Start: 15458, Stop: 15937, Start Num: 59
Candidate Starts for Baloo_19:
(16, 15251), (18, 15269), (Start: 40 @15428 has 2 MA's), (Start: 59 @15458 has 64 MA's), (Start: 74 @15521 has 3 MA's), (76, 15533), (77, 15536), (94, 15596), (108, 15650), (111, 15662), (113, 15665), (119, 15686), (131, 15755), (132, 15758), (142, 15791), (159, 15845), (160, 15854),

Gene: Bananafish_19 Start: 16675, Stop: 17157, Start Num: 56
Candidate Starts for Bananafish_19:
(Start: 56 @16675 has 33 MA's), (Start: 65 @16702 has 4 MA's), (76, 16762), (78, 16768), (83, 16789), (84, 16792), (106, 16873), (114, 16897), (118, 16912), (124, 16945), (139, 17011), (160, 17098), (161, 17104), (168, 17143),

Gene: Barbochs_37 Start: 40169, Stop: 40720, Start Num: 46
Candidate Starts for Barbochs_37:
(Start: 46 @40169 has 28 MA's), (Start: 49 @40178 has 36 MA's), (75, 40283), (98, 40373), (105, 40400), (109, 40418), (116, 40436), (124, 40475), (135, 40526), (138, 40535), (163, 40622), (169,

40661),

Gene: Beaver_41 Start: 42216, Stop: 42767, Start Num: 46
Candidate Starts for Beaver_41:
(Start: 46 @42216 has 28 MA's), (Start: 49 @42225 has 36 MA's), (98, 42420), (105, 42447), (109, 42465), (116, 42483), (124, 42522), (135, 42573), (138, 42582), (163, 42669), (169, 42708),

Gene: Ben11_18 Start: 15285, Stop: 15764, Start Num: 59
Candidate Starts for Ben11_18:
(16, 15078), (18, 15096), (Start: 40 @15255 has 2 MA's), (Start: 59 @15285 has 64 MA's), (Start: 74 @15348 has 3 MA's), (76, 15360), (77, 15363), (94, 15423), (108, 15477), (111, 15489), (113, 15492), (119, 15513), (131, 15582), (132, 15585), (142, 15618), (159, 15672), (160, 15681),

Gene: BenoitCattle_37 Start: 40274, Stop: 40825, Start Num: 46
Candidate Starts for BenoitCattle_37:
(Start: 46 @40274 has 28 MA's), (Start: 49 @40283 has 36 MA's), (75, 40388), (98, 40478), (105, 40505), (108, 40514), (116, 40541), (135, 40631), (157, 40703), (163, 40727), (169, 40766),

Gene: Bernardo_19 Start: 15460, Stop: 15939, Start Num: 59
Candidate Starts for Bernardo_19:
(1, 14671), (9, 15148), (12, 15205), (16, 15253), (18, 15271), (Start: 40 @15430 has 2 MA's), (Start: 59 @15460 has 64 MA's), (Start: 74 @15523 has 3 MA's), (76, 15535), (77, 15538), (94, 15598), (108, 15652), (111, 15664), (113, 15667), (119, 15688), (131, 15757), (132, 15760), (142, 15793), (159, 15847), (160, 15856),

Gene: Berries_38 Start: 42691, Stop: 43230, Start Num: 49
Candidate Starts for Berries_38:
(12, 42442), (17, 42505), (21, 42541), (22, 42550), (Start: 46 @42682 has 28 MA's), (Start: 49 @42691 has 36 MA's), (Start: 74 @42787 has 3 MA's), (84, 42829), (102, 42901), (105, 42913), (116, 42949), (130, 43024), (142, 43063), (163, 43135),

Gene: Beyoncage_32 Start: 27977, Stop: 28465, Start Num: 53
Candidate Starts for Beyoncage_32:
(Start: 53 @27977 has 7 MA's), (76, 28073), (83, 28100), (88, 28115), (102, 28169), (105, 28181), (111, 28199), (119, 28223), (127, 28256), (129, 28265), (135, 28283), (156, 28355), (163, 28382), (166, 28400), (173, 28445),

Gene: Bianmat_38 Start: 42731, Stop: 43270, Start Num: 49
Candidate Starts for Bianmat_38:
(12, 42482), (17, 42545), (21, 42581), (22, 42590), (Start: 46 @42722 has 28 MA's), (Start: 49 @42731 has 36 MA's), (Start: 74 @42827 has 3 MA's), (84, 42869), (102, 42941), (105, 42953), (116, 42989), (130, 43064), (142, 43103), (163, 43175),

Gene: BigShaq_37 Start: 40288, Stop: 40830, Start Num: 49
Candidate Starts for BigShaq_37:
(Start: 46 @40279 has 28 MA's), (Start: 49 @40288 has 36 MA's), (75, 40393), (98, 40483), (105, 40510), (108, 40519), (116, 40546), (135, 40636), (157, 40708), (163, 40732), (169, 40771),

Gene: BiggityBass_15 Start: 13731, Stop: 14201, Start Num: 48
Candidate Starts for BiggityBass_15:
(7, 13407), (Start: 48 @13731 has 13 MA's), (64, 13752), (66, 13755), (82, 13833), (83, 13842), (89, 13863), (103, 13920), (125, 14013), (130, 14037), (136, 14055), (140, 14070), (142, 14076), (144, 14079), (153, 14109), (159, 14130),

Gene: BillyBobJr_43 Start: 42247, Stop: 42798, Start Num: 46
Candidate Starts for BillyBobJr_43:
(Start: 46 @42247 has 28 MA's), (Start: 49 @42256 has 36 MA's), (75, 42361), (98, 42451), (105, 42478), (109, 42496), (116, 42514), (124, 42553), (135, 42604), (138, 42613), (169, 42739),

Gene: BirdsNest_21 Start: 14755, Stop: 15255, Start Num: 59
Candidate Starts for BirdsNest_21:
(8, 14425), (9, 14446), (18, 14569), (Start: 59 @14755 has 64 MA's), (67, 14773), (69, 14785), (77, 14830), (95, 14896), (104, 14932), (109, 14953), (121, 15007), (135, 15109), (159, 15187),

Gene: BirksAndSocks_41 Start: 42203, Stop: 42745, Start Num: 49
Candidate Starts for BirksAndSocks_41:
(Start: 46 @42194 has 28 MA's), (Start: 49 @42203 has 36 MA's), (75, 42308), (98, 42398), (105, 42425), (109, 42443), (113, 42449), (116, 42461), (124, 42500), (135, 42551), (138, 42560), (157, 42623), (163, 42647), (169, 42686),

Gene: BiteSize_32 Start: 27977, Stop: 28465, Start Num: 53
Candidate Starts for BiteSize_32:
(Start: 53 @27977 has 7 MA's), (76, 28073), (83, 28100), (88, 28115), (102, 28169), (105, 28181), (111, 28199), (119, 28223), (127, 28256), (129, 28265), (135, 28283), (156, 28355), (163, 28382), (166, 28400), (173, 28445),

Gene: Bjanes7_22 Start: 18967, Stop: 19413, Start Num: 63
Candidate Starts for Bjanes7_22:
(13, 18670), (17, 18724), (23, 18805), (27, 18826), (Start: 56 @18943 has 33 MA's), (Start: 63 @18967 has 21 MA's), (80, 19042), (102, 19123), (103, 19129), (106, 19138), (111, 19156), (119, 19180), (136, 19243), (145, 19270), (147, 19276), (156, 19306), (160, 19324), (163, 19333), (164, 19336), (170, 19375),

Gene: Blackpen_18 Start: 14684, Stop: 15145, Start Num: 54
Candidate Starts for Blackpen_18:
(Start: 54 @14684 has 9 MA's), (70, 14729), (83, 14792), (93, 14825), (102, 14858), (109, 14888), (118, 14912), (140, 15014), (153, 15053), (159, 15074),

Gene: Blocker23_19 Start: 16795, Stop: 17277, Start Num: 56
Candidate Starts for Blocker23_19:
(Start: 56 @16795 has 33 MA's), (Start: 65 @16822 has 4 MA's), (76, 16882), (78, 16888), (83, 16909), (84, 16912), (106, 16993), (114, 17017), (118, 17032), (124, 17065), (139, 17131), (160, 17218), (161, 17224), (168, 17263),

Gene: BlueNGold_113 Start: 70121, Stop: 70600, Start Num: 50
Candidate Starts for BlueNGold_113:
(Start: 50 @70121 has 5 MA's), (Start: 74 @70202 has 3 MA's), (76, 70214), (80, 70226), (114, 70346), (119, 70364), (131, 70412), (133, 70418), (166, 70538),

Gene: BobRoss2024_15 Start: 13617, Stop: 14072, Start Num: 59
Candidate Starts for BobRoss2024_15:
(Start: 59 @13617 has 64 MA's), (67, 13638), (Start: 71 @13659 has 1 MA's), (72, 13662), (105, 13800), (123, 13869), (126, 13893), (129, 13908), (135, 13926), (159, 14004), (161, 14019),

Gene: Boneham_41 Start: 42202, Stop: 42744, Start Num: 49
Candidate Starts for Boneham_41:

(Start: 46 @42193 has 28 MA's), (Start: 49 @42202 has 36 MA's), (98, 42397), (105, 42424), (109, 42442), (116, 42460), (124, 42499), (135, 42550), (138, 42559), (169, 42685),

Gene: Boopy_114 Start: 70133, Stop: 70612, Start Num: 50
Candidate Starts for Boopy_114:
(Start: 50 @70133 has 5 MA's), (Start: 74 @70214 has 3 MA's), (76, 70226), (80, 70238), (114, 70358), (119, 70376), (131, 70424), (133, 70430), (166, 70550),

Gene: Boyle_19 Start: 16796, Stop: 17278, Start Num: 56
Candidate Starts for Boyle_19:
(Start: 56 @16796 has 33 MA's), (60, 16811), (Start: 65 @16823 has 4 MA's), (76, 16883), (78, 16889), (83, 16910), (84, 16913), (106, 16994), (114, 17018), (118, 17033), (124, 17066), (139, 17132), (160, 17219), (161, 17225), (168, 17264),

Gene: Breezic_37 Start: 40191, Stop: 40733, Start Num: 49
Candidate Starts for Breezic_37:
(Start: 46 @40182 has 28 MA's), (Start: 49 @40191 has 36 MA's), (98, 40386), (105, 40413), (109, 40431), (116, 40449), (124, 40488), (135, 40539), (138, 40548), (144, 40566), (163, 40635), (169, 40674),

Gene: Briakila_19 Start: 16226, Stop: 16705, Start Num: 59
Candidate Starts for Briakila_19:
(16, 16019), (18, 16037), (Start: 40 @16196 has 2 MA's), (Start: 59 @16226 has 64 MA's), (Start: 74 @16289 has 3 MA's), (76, 16301), (77, 16304), (94, 16364), (108, 16418), (111, 16430), (113, 16433), (119, 16454), (131, 16523), (132, 16526), (142, 16559), (159, 16613), (160, 16622),

Gene: Brownie5_19 Start: 16795, Stop: 17277, Start Num: 56
Candidate Starts for Brownie5_19:
(Start: 56 @16795 has 33 MA's), (60, 16810), (Start: 65 @16822 has 4 MA's), (76, 16882), (78, 16888), (83, 16909), (84, 16912), (106, 16993), (114, 17017), (118, 17032), (124, 17065), (139, 17131), (160, 17218), (161, 17224), (168, 17263),

Gene: Butterball_41 Start: 42193, Stop: 42744, Start Num: 46
Candidate Starts for Butterball_41:
(Start: 46 @42193 has 28 MA's), (Start: 49 @42202 has 36 MA's), (98, 42397), (105, 42424), (109, 42442), (116, 42460), (124, 42499), (135, 42550), (138, 42559), (169, 42685),

Gene: CRB2_20 Start: 17008, Stop: 17514, Start Num: 59
Candidate Starts for CRB2_20:
(8, 16678), (9, 16699), (20, 16837), (Start: 59 @17008 has 64 MA's), (62, 17014), (67, 17026), (73, 17056), (78, 17086), (93, 17140), (95, 17149), (103, 17182), (135, 17368), (136, 17371), (148, 17404), (150, 17413), (156, 17437), (157, 17440), (159, 17446),

Gene: CaiB_18 Start: 15252, Stop: 15713, Start Num: 54
Candidate Starts for CaiB_18:
(12, 14988), (14, 15009), (15, 15021), (Start: 54 @15252 has 9 MA's), (102, 15426), (109, 15456), (118, 15480), (153, 15621), (159, 15642), (160, 15651),

Gene: Calamitous_19 Start: 16675, Stop: 17157, Start Num: 56
Candidate Starts for Calamitous_19:
(Start: 56 @16675 has 33 MA's), (60, 16690), (Start: 65 @16702 has 4 MA's), (76, 16762), (83, 16789), (84, 16792), (106, 16873), (114, 16897), (118, 16912), (124, 16945), (139, 17011), (160, 17098), (161, 17104), (168, 17143),

Gene: Casbah_18 Start: 15313, Stop: 15792, Start Num: 59
Candidate Starts for Casbah_18:
(16, 15106), (18, 15124), (Start: 59 @15313 has 64 MA's), (Start: 74 @15376 has 3 MA's), (76, 15388), (77, 15391), (94, 15451), (108, 15505), (111, 15517), (113, 15520), (119, 15541), (131, 15610), (132, 15613), (142, 15646), (159, 15700), (160, 15709),

Gene: Caterpie_14 Start: 12643, Stop: 13095, Start Num: 59
Candidate Starts for Caterpie_14:
(41, 12619), (Start: 59 @12643 has 64 MA's), (75, 12712), (76, 12715), (85, 12748), (118, 12865), (130, 12934), (132, 12940), (140, 12967), (157, 13021), (159, 13027), (164, 13048), (165, 13054),

Gene: CathyBurgh_37 Start: 41045, Stop: 41587, Start Num: 49
Candidate Starts for CathyBurgh_37:
(Start: 46 @41036 has 28 MA's), (Start: 49 @41045 has 36 MA's), (98, 41240), (105, 41267), (109, 41285), (116, 41303), (124, 41342), (135, 41393), (138, 41402), (144, 41420), (163, 41489), (169, 41528),

Gene: Cepens_13 Start: 14518, Stop: 14982, Start Num: 57
Candidate Starts for Cepens_13:
(25, 14428), (33, 14461), (Start: 39 @14494 has 1 MA's), (Start: 57 @14518 has 7 MA's), (68, 14551), (Start: 71 @14569 has 1 MA's), (75, 14599), (80, 14614), (92, 14659), (96, 14674), (101, 14695), (102, 14698), (104, 14707), (111, 14731), (113, 14734), (115, 14740), (118, 14752), (131, 14824), (132, 14827), (138, 14845), (142, 14860), (160, 14923),

Gene: ChaChing_19 Start: 15476, Stop: 15955, Start Num: 59
Candidate Starts for ChaChing_19:
(16, 15269), (18, 15287), (Start: 40 @15446 has 2 MA's), (Start: 59 @15476 has 64 MA's), (Start: 74 @15539 has 3 MA's), (76, 15551), (77, 15554), (94, 15614), (108, 15668), (111, 15680), (113, 15683), (119, 15704), (131, 15773), (132, 15776), (142, 15809), (159, 15863), (160, 15872),

Gene: Chalmers_19 Start: 16269, Stop: 16748, Start Num: 59
Candidate Starts for Chalmers_19:
(16, 16062), (18, 16080), (Start: 40 @16239 has 2 MA's), (Start: 59 @16269 has 64 MA's), (Start: 74 @16332 has 3 MA's), (76, 16344), (77, 16347), (94, 16407), (108, 16461), (111, 16473), (113, 16476), (119, 16497), (131, 16566), (132, 16569), (142, 16602), (159, 16656), (160, 16665),

Gene: Chandler_19 Start: 16235, Stop: 16714, Start Num: 59
Candidate Starts for Chandler_19:
(16, 16028), (18, 16046), (Start: 40 @16205 has 2 MA's), (Start: 59 @16235 has 64 MA's), (Start: 74 @16298 has 3 MA's), (76, 16310), (77, 16313), (94, 16373), (108, 16427), (111, 16439), (113, 16442), (119, 16463), (131, 16532), (132, 16535), (142, 16568), (159, 16622), (160, 16631),

Gene: Charianelly_38 Start: 42441, Stop: 42980, Start Num: 49
Candidate Starts for Charianelly_38:
(12, 42192), (17, 42255), (21, 42291), (22, 42300), (Start: 46 @42432 has 28 MA's), (Start: 49 @42441 has 36 MA's), (Start: 74 @42537 has 3 MA's), (84, 42579), (102, 42651), (105, 42663), (116, 42699), (130, 42774), (142, 42813), (163, 42885),

Gene: CharlottesWeb_16 Start: 13709, Stop: 14200, Start Num: 48
Candidate Starts for CharlottesWeb_16:
(Start: 48 @13709 has 13 MA's), (64, 13751), (76, 13814), (93, 13874), (102, 13913), (139, 14066), (142, 14075), (146, 14081), (153, 14108), (159, 14129), (162, 14147), (169, 14189),

Gene: Chelms_37 Start: 40291, Stop: 40833, Start Num: 49
Candidate Starts for Chelms_37:
(Start: 46 @40282 has 28 MA's), (Start: 49 @40291 has 36 MA's), (75, 40396), (105, 40513), (107, 40519), (116, 40549), (163, 40735), (169, 40774),

Gene: Chentzyk_18 Start: 15331, Stop: 15810, Start Num: 59
Candidate Starts for Chentzyk_18:
(16, 15124), (18, 15142), (Start: 40 @15301 has 2 MA's), (Start: 59 @15331 has 64 MA's), (Start: 74 @15394 has 3 MA's), (76, 15406), (77, 15409), (94, 15469), (108, 15523), (111, 15535), (113, 15538), (119, 15559), (131, 15628), (132, 15631), (142, 15664), (159, 15718), (160, 15727),

Gene: CherryTomatoes_84 Start: 32399, Stop: 32872, Start Num: 40
Candidate Starts for CherryTomatoes_84:
(Start: 40 @32399 has 2 MA's), (Start: 42 @32405 has 1 MA's), (70, 32453), (Start: 71 @32456 has 1 MA's), (76, 32489), (78, 32495), (81, 32504), (86, 32525), (105, 32600), (109, 32618), (118, 32642), (136, 32729), (137, 32732), (142, 32750), (146, 32756), (154, 32786), (165, 32831), (169, 32861),

Gene: CinnamonToast_43 Start: 42247, Stop: 42798, Start Num: 46
Candidate Starts for CinnamonToast_43:
(Start: 46 @42247 has 28 MA's), (Start: 49 @42256 has 36 MA's), (75, 42361), (98, 42451), (105, 42478), (109, 42496), (116, 42514), (124, 42553), (135, 42604), (138, 42613), (169, 42739),

Gene: Clap_22 Start: 18974, Stop: 19420, Start Num: 63
Candidate Starts for Clap_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: CloverMinnie_18 Start: 15192, Stop: 15653, Start Num: 54
Candidate Starts for CloverMinnie_18:
(Start: 54 @15192 has 9 MA's), (70, 15237), (83, 15300), (93, 15333), (102, 15366), (109, 15396), (118, 15420), (140, 15522), (153, 15561), (159, 15582),

Gene: Coco2012_16 Start: 13748, Stop: 14197, Start Num: 64
Candidate Starts for Coco2012_16:
(Start: 48 @13706 has 13 MA's), (64, 13748), (76, 13811), (93, 13871), (102, 13910), (139, 14063), (142, 14072), (146, 14078), (153, 14105), (159, 14126), (162, 14144), (169, 14186),

Gene: Coffee_19 Start: 16819, Stop: 17274, Start Num: 65
Candidate Starts for Coffee_19:
(Start: 56 @16792 has 33 MA's), (60, 16807), (Start: 65 @16819 has 4 MA's), (76, 16879), (78, 16885), (83, 16906), (84, 16909), (106, 16990), (114, 17014), (118, 17029), (124, 17062), (139, 17128), (160, 17215), (161, 17221), (168, 17260),

Gene: Coldpizza_18 Start: 15775, Stop: 16236, Start Num: 48
Candidate Starts for Coldpizza_18:
(Start: 48 @15775 has 13 MA's), (Start: 71 @15823 has 1 MA's), (76, 15856), (77, 15859), (89, 15904), (102, 15949), (103, 15955), (111, 15982), (114, 15988), (125, 16048), (129, 16069), (135, 16087), (137, 16093), (158, 16162), (159, 16165), (169, 16225),

Gene: Compostia_20 Start: 15894, Stop: 16373, Start Num: 59
Candidate Starts for Compostia_20:

(16, 15687), (18, 15705), (Start: 40 @15864 has 2 MA's), (Start: 59 @15894 has 64 MA's), (Start: 74 @15957 has 3 MA's), (76, 15969), (77, 15972), (94, 16032), (108, 16086), (111, 16098), (113, 16101), (119, 16122), (131, 16191), (132, 16194), (142, 16227), (159, 16281), (160, 16290),

Gene: Corofin_19 Start: 15486, Stop: 15965, Start Num: 59
Candidate Starts for Corofin_19:
(16, 15279), (18, 15297), (Start: 40 @15456 has 2 MA's), (Start: 59 @15486 has 64 MA's), (Start: 74 @15549 has 3 MA's), (76, 15561), (77, 15564), (94, 15624), (108, 15678), (111, 15690), (113, 15693), (119, 15714), (131, 15783), (132, 15786), (142, 15819), (159, 15873), (160, 15882),

Gene: Cynthia_22 Start: 18974, Stop: 19420, Start Num: 63
Candidate Starts for Cynthia_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: D12_13 Start: 14511, Stop: 14975, Start Num: 57
Candidate Starts for D12_13:
(25, 14421), (33, 14454), (Start: 39 @14487 has 1 MA's), (Start: 57 @14511 has 7 MA's), (68, 14544), (Start: 71 @14562 has 1 MA's), (75, 14592), (80, 14607), (96, 14667), (101, 14688), (102, 14691), (109, 14721), (111, 14724), (113, 14727), (115, 14733), (118, 14745), (131, 14817), (132, 14820), (138, 14838), (142, 14853), (159, 14907), (160, 14916),

Gene: Daisy_19 Start: 15482, Stop: 15961, Start Num: 59
Candidate Starts for Daisy_19:
(16, 15275), (18, 15293), (Start: 40 @15452 has 2 MA's), (Start: 59 @15482 has 64 MA's), (Start: 74 @15545 has 3 MA's), (76, 15557), (77, 15560), (94, 15620), (108, 15674), (111, 15686), (113, 15689), (119, 15710), (131, 15779), (132, 15782), (142, 15815), (159, 15869), (160, 15878),

Gene: Dakiti_37 Start: 41159, Stop: 41701, Start Num: 49
Candidate Starts for Dakiti_37:
(Start: 46 @41150 has 28 MA's), (Start: 49 @41159 has 36 MA's), (75, 41264), (105, 41381), (107, 41387), (116, 41417), (163, 41603), (169, 41642),

Gene: Damp_38 Start: 41605, Stop: 42144, Start Num: 49
Candidate Starts for Damp_38:
(12, 41356), (17, 41419), (21, 41455), (22, 41464), (Start: 46 @41596 has 28 MA's), (Start: 49 @41605 has 36 MA's), (Start: 74 @41701 has 3 MA's), (84, 41743), (102, 41815), (105, 41827), (116, 41863), (142, 41977), (163, 42049),

Gene: Deenasa_19 Start: 16224, Stop: 16703, Start Num: 59
Candidate Starts for Deenasa_19:
(16, 16017), (18, 16035), (Start: 40 @16194 has 2 MA's), (Start: 59 @16224 has 64 MA's), (Start: 74 @16287 has 3 MA's), (76, 16299), (77, 16302), (94, 16362), (108, 16416), (111, 16428), (113, 16431), (119, 16452), (131, 16521), (132, 16524), (142, 16557), (159, 16611), (160, 16620),

Gene: Devonte_19 Start: 15461, Stop: 15940, Start Num: 59
Candidate Starts for Devonte_19:
(1, 14672), (2, 14708), (9, 15149), (12, 15206), (16, 15254), (18, 15272), (Start: 40 @15431 has 2 MA's), (Start: 59 @15461 has 64 MA's), (Start: 74 @15524 has 3 MA's), (76, 15536), (77, 15539), (94, 15599), (102, 15632), (111, 15665), (113, 15668), (114, 15671), (119, 15689), (131, 15758), (132, 15761), (142, 15794), (159, 15848), (160, 15857),

Gene: Diabla_40 Start: 42040, Stop: 42582, Start Num: 49
Candidate Starts for Diabla_40:
(Start: 46 @42031 has 28 MA's), (Start: 49 @42040 has 36 MA's), (83, 42175), (98, 42235), (102, 42250), (105, 42262), (115, 42292), (116, 42298), (135, 42388), (138, 42397), (157, 42460), (163, 42484), (169, 42523),

Gene: DirtyBoi_26 Start: 21617, Stop: 22063, Start Num: 63
Candidate Starts for DirtyBoi_26:
(Start: 56 @21593 has 33 MA's), (Start: 63 @21617 has 21 MA's), (80, 21692), (90, 21728), (102, 21773), (103, 21779), (106, 21788), (119, 21830), (136, 21893), (145, 21920), (147, 21926), (160, 21974), (163, 21983), (164, 21986), (170, 22025),

Gene: Djokovic_32 Start: 27976, Stop: 28464, Start Num: 53
Candidate Starts for Djokovic_32:
(Start: 53 @27976 has 7 MA's), (76, 28072), (83, 28099), (88, 28114), (102, 28168), (105, 28180), (111, 28198), (119, 28222), (127, 28255), (129, 28264), (135, 28282), (156, 28354), (163, 28381), (166, 28399), (173, 28444),

Gene: Dori_15 Start: 12459, Stop: 12911, Start Num: 59
Candidate Starts for Dori_15:
(41, 12435), (Start: 59 @12459 has 64 MA's), (75, 12528), (76, 12531), (77, 12534), (78, 12537), (85, 12564), (114, 12666), (118, 12681), (130, 12750), (132, 12756), (140, 12783), (157, 12837), (159, 12843), (164, 12864), (165, 12870),

Gene: DumpTruck_35 Start: 30398, Stop: 30886, Start Num: 51
Candidate Starts for DumpTruck_35:
(24, 30284), (28, 30299), (29, 30311), (30, 30314), (32, 30323), (44, 30374), (Start: 51 @30398 has 2 MA's), (Start: 74 @30488 has 3 MA's), (80, 30512), (111, 30626), (117, 30644), (119, 30650), (131, 30698), (135, 30710), (141, 30731), (149, 30755), (160, 30797), (169, 30845),

Gene: Eaglehorse_19 Start: 16699, Stop: 17181, Start Num: 56
Candidate Starts for Eaglehorse_19:
(Start: 56 @16699 has 33 MA's), (60, 16714), (Start: 65 @16726 has 4 MA's), (76, 16786), (78, 16792), (83, 16813), (84, 16816), (106, 16897), (114, 16921), (118, 16936), (124, 16969), (139, 17035), (160, 17122), (161, 17128), (168, 17167),

Gene: Ebert_22 Start: 18974, Stop: 19420, Start Num: 63
Candidate Starts for Ebert_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: Eggsie_37 Start: 40300, Stop: 40851, Start Num: 46
Candidate Starts for Eggsie_37:
(Start: 46 @40300 has 28 MA's), (Start: 49 @40309 has 36 MA's), (83, 40444), (98, 40504), (102, 40519), (105, 40531), (115, 40561), (116, 40567), (135, 40657), (138, 40666), (157, 40729), (163, 40753), (169, 40792),

Gene: Ekhein_38 Start: 40164, Stop: 40715, Start Num: 46
Candidate Starts for Ekhein_38:
(Start: 46 @40164 has 28 MA's), (Start: 49 @40173 has 36 MA's), (98, 40368), (105, 40395), (109, 40413), (116, 40431), (124, 40470), (135, 40521), (138, 40530), (163, 40617), (169, 40656),

Gene: Evaa_17 Start: 15092, Stop: 15559, Start Num: 48
Candidate Starts for Evaa_17:
(15, 14870), (18, 14903), (Start: 40 @15062 has 2 MA's), (Start: 48 @15092 has 13 MA's), (76, 15176), (87, 15215), (100, 15263), (102, 15272), (103, 15278), (130, 15395), (140, 15428), (142, 15434), (159, 15488), (162, 15506), (165, 15518),

Gene: Exiguo_37 Start: 40185, Stop: 40727, Start Num: 49
Candidate Starts for Exiguo_37:
(Start: 46 @40176 has 28 MA's), (Start: 49 @40185 has 36 MA's), (98, 40380), (105, 40407), (109, 40425), (116, 40443), (124, 40482), (135, 40533), (138, 40542), (144, 40560), (163, 40629), (169, 40668),

Gene: Faze9_19 Start: 16792, Stop: 17274, Start Num: 56
Candidate Starts for Faze9_19:
(Start: 56 @16792 has 33 MA's), (60, 16807), (76, 16879), (78, 16885), (83, 16906), (84, 16909), (106, 16990), (114, 17014), (118, 17029), (124, 17062), (139, 17128), (160, 17215), (161, 17221),

Gene: FelixAlejandro_42 Start: 42391, Stop: 42942, Start Num: 46
Candidate Starts for FelixAlejandro_42:
(Start: 46 @42391 has 28 MA's), (Start: 49 @42400 has 36 MA's), (98, 42595), (105, 42622), (109, 42640), (116, 42658), (124, 42697), (135, 42748), (138, 42757), (169, 42883),

Gene: FelixTres_18 Start: 15255, Stop: 15716, Start Num: 54
Candidate Starts for FelixTres_18:
(12, 14991), (14, 15012), (Start: 40 @15216 has 2 MA's), (Start: 54 @15255 has 9 MA's), (70, 15300), (83, 15363), (93, 15396), (102, 15429), (109, 15459), (118, 15483), (140, 15585), (153, 15624), (159, 15645),

Gene: Flakey_37 Start: 41040, Stop: 41591, Start Num: 46
Candidate Starts for Flakey_37:
(Start: 46 @41040 has 28 MA's), (Start: 49 @41049 has 36 MA's), (98, 41244), (105, 41271), (109, 41289), (116, 41307), (124, 41346), (135, 41397), (138, 41406), (169, 41532),

Gene: ForDig_14 Start: 14057, Stop: 14554, Start Num: 59
Candidate Starts for ForDig_14:
(8, 13697), (9, 13718), (12, 13775), (Start: 40 @13997 has 2 MA's), (Start: 59 @14057 has 64 MA's), (67, 14078), (69, 14090), (76, 14132), (83, 14159), (107, 14246), (109, 14258), (136, 14408), (140, 14423), (157, 14477), (159, 14483),

Gene: Forza_114 Start: 70049, Stop: 70528, Start Num: 50
Candidate Starts for Forza_114:
(Start: 50 @70049 has 5 MA's), (Start: 74 @70130 has 3 MA's), (76, 70142), (80, 70154), (114, 70274), (119, 70292), (131, 70340), (133, 70346), (166, 70466),

Gene: FrenchFry_19 Start: 16795, Stop: 17277, Start Num: 56
Candidate Starts for FrenchFry_19:
(Start: 56 @16795 has 33 MA's), (60, 16810), (Start: 65 @16822 has 4 MA's), (76, 16882), (78, 16888), (83, 16909), (84, 16912), (106, 16993), (114, 17017), (118, 17032), (124, 17065), (139, 17131), (160, 17218), (161, 17224), (168, 17263),

Gene: Fresco_16 Start: 13799, Stop: 14290, Start Num: 48
Candidate Starts for Fresco_16:

(7, 13475), (15, 13577), (Start: 48 @13799 has 13 MA's), (64, 13841), (76, 13904), (93, 13964), (102, 14003), (142, 14165), (146, 14171), (153, 14198), (159, 14219), (162, 14237), (167, 14270), (169, 14279),

Gene: FroggyToad_22 Start: 19039, Stop: 19485, Start Num: 63
Candidate Starts for FroggyToad_22:
(13, 18742), (17, 18796), (23, 18877), (26, 18895), (27, 18898), (Start: 56 @19015 has 33 MA's), (Start: 63 @19039 has 21 MA's), (80, 19114), (93, 19162), (97, 19174), (106, 19210), (119, 19252), (136, 19315), (160, 19396), (163, 19405), (164, 19408), (170, 19447),

Gene: GMA1_22 Start: 18858, Stop: 19307, Start Num: 68
Candidate Starts for GMA1_22:
(68, 18858), (90, 18960), (102, 19005), (120, 19071), (138, 19128), (159, 19197), (163, 19215), (174, 19281),

Gene: GMA2_41 Start: 42741, Stop: 43205, Start Num: 71
Candidate Starts for GMA2_41:
(37, 42633), (52, 42678), (Start: 71 @42741 has 1 MA's), (75, 42771), (82, 42792), (84, 42804), (87, 42813), (90, 42822), (99, 42855), (100, 42858), (109, 42897), (113, 42903), (119, 42924), (142, 43008), (149, 43026), (175, 43155),

Gene: GMA7_31 Start: 35045, Stop: 35515, Start Num: 46
Candidate Starts for GMA7_31:
(10, 34763), (12, 34811), (17, 34871), (22, 34916), (Start: 46 @35045 has 28 MA's), (Start: 74 @35117 has 3 MA's), (84, 35159), (86, 35165), (102, 35228), (118, 35282), (128, 35342), (132, 35357), (158, 35441), (169, 35501),

Gene: GTE7_30 Start: 35076, Stop: 35546, Start Num: 46
Candidate Starts for GTE7_30:
(10, 34794), (12, 34842), (17, 34902), (22, 34947), (Start: 46 @35076 has 28 MA's), (Start: 74 @35148 has 3 MA's), (84, 35190), (86, 35196), (102, 35259), (109, 35289), (118, 35313), (128, 35373), (132, 35388), (158, 35472), (169, 35532),

Gene: Gadjet_20 Start: 15465, Stop: 15944, Start Num: 59
Candidate Starts for Gadjet_20:
(16, 15258), (18, 15276), (Start: 40 @15435 has 2 MA's), (Start: 59 @15465 has 64 MA's), (Start: 74 @15528 has 3 MA's), (76, 15540), (77, 15543), (94, 15603), (108, 15657), (111, 15669), (113, 15672), (119, 15693), (131, 15762), (132, 15765), (142, 15798), (159, 15852), (160, 15861),

Gene: GalacticEye_38 Start: 42403, Stop: 42942, Start Num: 49
Candidate Starts for GalacticEye_38:
(12, 42154), (17, 42217), (21, 42253), (22, 42262), (Start: 46 @42394 has 28 MA's), (Start: 49 @42403 has 36 MA's), (Start: 74 @42499 has 3 MA's), (84, 42541), (102, 42613), (105, 42625), (116, 42661), (142, 42775), (163, 42847),

Gene: GemG_22 Start: 18974, Stop: 19420, Start Num: 63
Candidate Starts for GemG_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: Gervas_19 Start: 15444, Stop: 15923, Start Num: 59
Candidate Starts for Gervas_19:

(16, 15237), (18, 15255), (Start: 40 @15414 has 2 MA's), (Start: 59 @15444 has 64 MA's), (Start: 74 @15507 has 3 MA's), (76, 15519), (77, 15522), (94, 15582), (108, 15636), (111, 15648), (113, 15651), (119, 15672), (131, 15741), (132, 15744), (142, 15777), (159, 15831), (160, 15840),

Gene: Gizermo_22 Start: 18974, Stop: 19420, Start Num: 63
Candidate Starts for Gizermo_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: Glass_19 Start: 16795, Stop: 17277, Start Num: 56
Candidate Starts for Glass_19:
(Start: 56 @16795 has 33 MA's), (60, 16810), (Start: 65 @16822 has 4 MA's), (76, 16882), (78, 16888), (83, 16909), (84, 16912), (106, 16993), (114, 17017), (118, 17032), (124, 17065), (139, 17131), (160, 17218), (161, 17224), (168, 17263),

Gene: GlenHope_20 Start: 15451, Stop: 15930, Start Num: 59
Candidate Starts for GlenHope_20:
(16, 15244), (18, 15262), (Start: 40 @15421 has 2 MA's), (Start: 59 @15451 has 64 MA's), (Start: 74 @15514 has 3 MA's), (76, 15526), (77, 15529), (94, 15589), (108, 15643), (111, 15655), (113, 15658), (119, 15679), (131, 15748), (132, 15751), (142, 15784), (159, 15838), (160, 15847),

Gene: Glubnar_20 Start: 15466, Stop: 15945, Start Num: 59
Candidate Starts for Glubnar_20:
(16, 15259), (18, 15277), (Start: 40 @15436 has 2 MA's), (Start: 59 @15466 has 64 MA's), (Start: 74 @15529 has 3 MA's), (76, 15541), (77, 15544), (94, 15604), (108, 15658), (111, 15670), (113, 15673), (119, 15694), (131, 15763), (132, 15766), (142, 15799), (159, 15853), (160, 15862),

Gene: GodPhather_14 Start: 14752, Stop: 15240, Start Num: 39
Candidate Starts for GodPhather_14:
(25, 14686), (33, 14719), (Start: 39 @14752 has 1 MA's), (Start: 57 @14776 has 7 MA's), (68, 14809), (Start: 71 @14827 has 1 MA's), (75, 14857), (80, 14872), (96, 14932), (101, 14953), (111, 14989), (113, 14992), (115, 14998), (118, 15010), (131, 15082), (132, 15085), (138, 15103), (142, 15118), (160, 15181),

Gene: Godines_19 Start: 16690, Stop: 17172, Start Num: 56
Candidate Starts for Godines_19:
(Start: 56 @16690 has 33 MA's), (60, 16705), (Start: 65 @16717 has 4 MA's), (76, 16777), (78, 16783), (83, 16804), (84, 16807), (106, 16888), (114, 16912), (118, 16927), (124, 16960), (139, 17026), (160, 17113), (161, 17119), (168, 17158),

Gene: GodonK_100 Start: 60673, Stop: 61158, Start Num: 49
Candidate Starts for GodonK_100:
(Start: 45 @60661 has 1 MA's), (Start: 49 @60673 has 36 MA's), (79, 60787), (83, 60805), (97, 60847), (102, 60868), (108, 60889), (112, 60901), (136, 60985), (138, 60991), (143, 61006), (155, 61042), (169, 61114),

Gene: Gorko_37 Start: 40177, Stop: 40719, Start Num: 49
Candidate Starts for Gorko_37:
(Start: 46 @40168 has 28 MA's), (Start: 49 @40177 has 36 MA's), (98, 40372), (105, 40399), (109, 40417), (116, 40435), (124, 40474), (135, 40525), (138, 40534), (169, 40660),

Gene: GourdThymes_37 Start: 41051, Stop: 41593, Start Num: 49

Candidate Starts for GourdThymes_37:
(Start: 46 @41042 has 28 MA's), (Start: 49 @41051 has 36 MA's), (98, 41246), (105, 41273), (109, 41291), (116, 41309), (124, 41348), (135, 41399), (138, 41408), (163, 41495), (169, 41534),

Gene: Guillaume_38 Start: 42444, Stop: 42992, Start Num: 46
Candidate Starts for Guillaume_38:
(12, 42204), (17, 42267), (21, 42303), (22, 42312), (Start: 46 @42444 has 28 MA's), (Start: 49 @42453 has 36 MA's), (Start: 74 @42549 has 3 MA's), (84, 42591), (102, 42663), (105, 42675), (116, 42711), (142, 42825), (163, 42897),

Gene: Hail2Pitt_38 Start: 42929, Stop: 43468, Start Num: 49
Candidate Starts for Hail2Pitt_38:
(12, 42680), (17, 42743), (21, 42779), (22, 42788), (Start: 46 @42920 has 28 MA's), (Start: 49 @42929 has 36 MA's), (Start: 74 @43025 has 3 MA's), (84, 43067), (102, 43139), (105, 43151), (116, 43187), (142, 43301), (163, 43373),

Gene: Haley23_22 Start: 18974, Stop: 19420, Start Num: 63
Candidate Starts for Haley23_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: Halfpint_18 Start: 15286, Stop: 15765, Start Num: 59
Candidate Starts for Halfpint_18:
(16, 15079), (18, 15097), (Start: 40 @15256 has 2 MA's), (Start: 59 @15286 has 64 MA's), (Start: 74 @15349 has 3 MA's), (76, 15361), (77, 15364), (94, 15424), (108, 15478), (111, 15490), (113, 15493), (119, 15514), (131, 15583), (132, 15586), (142, 15619), (159, 15673), (160, 15682),

Gene: Harambe_38 Start: 42711, Stop: 43259, Start Num: 46
Candidate Starts for Harambe_38:
(12, 42471), (17, 42534), (21, 42570), (22, 42579), (Start: 46 @42711 has 28 MA's), (Start: 49 @42720 has 36 MA's), (Start: 74 @42816 has 3 MA's), (84, 42858), (102, 42930), (105, 42942), (116, 42978), (142, 43092), (163, 43164),

Gene: HarveySr_19 Start: 15438, Stop: 15917, Start Num: 59
Candidate Starts for HarveySr_19:
(16, 15231), (18, 15249), (Start: 40 @15408 has 2 MA's), (Start: 59 @15438 has 64 MA's), (Start: 74 @15501 has 3 MA's), (76, 15513), (77, 15516), (94, 15576), (108, 15630), (111, 15642), (113, 15645), (119, 15666), (131, 15735), (132, 15738), (142, 15771), (159, 15825), (160, 15834),

Gene: Hashim76_21 Start: 14998, Stop: 15492, Start Num: 59
Candidate Starts for Hashim76_21:
(8, 14668), (12, 14746), (16, 14794), (18, 14812), (58, 14995), (Start: 59 @14998 has 64 MA's), (61, 15001), (67, 15016), (76, 15070), (83, 15097), (109, 15196), (121, 15250), (136, 15349), (138, 15355), (140, 15364), (157, 15418), (159, 15424),

Gene: HayZem_40 Start: 40828, Stop: 41298, Start Num: 46
Candidate Starts for HayZem_40:
(10, 40546), (12, 40594), (17, 40654), (22, 40699), (Start: 46 @40828 has 28 MA's), (Start: 74 @40900 has 3 MA's), (84, 40942), (86, 40948), (102, 41011), (109, 41041), (118, 41065), (128, 41125), (132, 41140), (158, 41224), (169, 41284),

Gene: Heathcliff_19 Start: 15423, Stop: 15902, Start Num: 59

Candidate Starts for Heathcliff_19:
(1, 14634), (2, 14670), (9, 15111), (12, 15168), (16, 15216), (18, 15234), (Start: 40 @15393 has 2 MA's), (Start: 59 @15423 has 64 MA's), (Start: 74 @15486 has 3 MA's), (76, 15498), (77, 15501), (94, 15561), (102, 15594), (111, 15627), (113, 15630), (114, 15633), (119, 15651), (131, 15720), (132, 15723), (142, 15756), (159, 15810), (160, 15819),

Gene: Hedgerow_19 Start: 16777, Stop: 17259, Start Num: 56
Candidate Starts for Hedgerow_19:
(Start: 56 @16777 has 33 MA's), (60, 16792), (Start: 65 @16804 has 4 MA's), (76, 16864), (78, 16870), (83, 16891), (84, 16894), (106, 16975), (114, 16999), (118, 17014), (124, 17047), (139, 17113), (160, 17200), (161, 17206), (168, 17245),

Gene: Hedwig_26 Start: 21613, Stop: 22059, Start Num: 63
Candidate Starts for Hedwig_26:
(Start: 56 @21589 has 33 MA's), (Start: 63 @21613 has 21 MA's), (80, 21688), (90, 21724), (102, 21769), (103, 21775), (106, 21784), (119, 21826), (136, 21889), (145, 21916), (147, 21922), (160, 21970), (163, 21979), (164, 21982), (170, 22021),

Gene: Hello_38 Start: 42673, Stop: 43221, Start Num: 46
Candidate Starts for Hello_38:
(12, 42433), (17, 42496), (21, 42532), (22, 42541), (Start: 46 @42673 has 28 MA's), (Start: 49 @42682 has 36 MA's), (Start: 74 @42778 has 3 MA's), (84, 42820), (102, 42892), (105, 42904), (116, 42940), (142, 43054), (163, 43126),

Gene: Holeinone_19 Start: 16677, Stop: 17159, Start Num: 56
Candidate Starts for Holeinone_19:
(Start: 56 @16677 has 33 MA's), (60, 16692), (Start: 65 @16704 has 4 MA's), (76, 16764), (83, 16791), (84, 16794), (106, 16875), (114, 16899), (118, 16914), (124, 16947), (139, 17013), (160, 17100), (161, 17106), (168, 17145),

Gene: Hosp_012 Start: 12260, Stop: 12769, Start Num: 59
Candidate Starts for Hosp_012:
(8, 11897), (9, 11918), (12, 11975), (Start: 40 @12200 has 2 MA's), (Start: 59 @12260 has 64 MA's), (67, 12281), (77, 12338), (83, 12362), (108, 12452), (109, 12461), (136, 12623), (140, 12638), (156, 12689), (159, 12698),

Gene: Hotorobo_37 Start: 41047, Stop: 41598, Start Num: 46
Candidate Starts for Hotorobo_37:
(Start: 46 @41047 has 28 MA's), (Start: 49 @41056 has 36 MA's), (98, 41251), (105, 41278), (109, 41296), (116, 41314), (124, 41353), (135, 41404), (138, 41413), (163, 41500), (169, 41539),

Gene: Imvubu_13 Start: 13034, Stop: 13525, Start Num: 59
Candidate Starts for Imvubu_13:
(8, 12686), (9, 12707), (12, 12764), (Start: 40 @12989 has 2 MA's), (Start: 59 @13034 has 64 MA's), (67, 13052), (76, 13106), (83, 13133), (103, 13208), (109, 13232), (119, 13259), (121, 13286), (125, 13340), (136, 13382), (140, 13397), (150, 13424), (156, 13448), (159, 13457),

Gene: ItsyBitsy1_19 Start: 16669, Stop: 17151, Start Num: 56
Candidate Starts for ItsyBitsy1_19:
(Start: 56 @16669 has 33 MA's), (60, 16684), (Start: 65 @16696 has 4 MA's), (76, 16756), (83, 16783), (84, 16786), (106, 16867), (114, 16891), (118, 16906), (124, 16939), (139, 17005), (160, 17092), (161, 17098), (168, 17137),

Gene: Jackstina_18 Start: 15387, Stop: 15866, Start Num: 59
Candidate Starts for Jackstina_18:
(16, 15180), (18, 15198), (Start: 40 @15357 has 2 MA's), (Start: 59 @15387 has 64 MA's), (Start: 74 @15450 has 3 MA's), (76, 15462), (77, 15465), (94, 15525), (108, 15579), (111, 15591), (113, 15594), (119, 15615), (131, 15684), (132, 15687), (142, 15720), (159, 15774), (160, 15783),

Gene: Jalleen_22 Start: 18589, Stop: 19059, Start Num: 56
Candidate Starts for Jalleen_22:
(13, 18316), (17, 18370), (23, 18451), (27, 18472), (Start: 56 @18589 has 33 MA's), (Start: 63 @18613 has 21 MA's), (80, 18688), (102, 18769), (103, 18775), (106, 18784), (111, 18802), (119, 18826), (136, 18889), (145, 18916), (147, 18922), (156, 18952), (160, 18970), (163, 18979), (164, 18982), (170, 19021),

Gene: Jams_38 Start: 41891, Stop: 42430, Start Num: 49
Candidate Starts for Jams_38:
(12, 41642), (17, 41705), (21, 41741), (22, 41750), (Start: 46 @41882 has 28 MA's), (Start: 49 @41891 has 36 MA's), (Start: 74 @41987 has 3 MA's), (84, 42029), (102, 42101), (105, 42113), (116, 42149), (130, 42224), (142, 42263), (163, 42335),

Gene: JellyBelly_16 Start: 13751, Stop: 14200, Start Num: 64
Candidate Starts for JellyBelly_16:
(4, 13112), (12, 13454), (15, 13487), (16, 13502), (Start: 48 @13709 has 13 MA's), (52, 13718), (64, 13751), (76, 13814), (93, 13874), (102, 13913), (139, 14066), (142, 14075), (146, 14081), (153, 14108), (159, 14129), (165, 14159), (169, 14189),

Gene: Jellybones_41 Start: 42252, Stop: 42803, Start Num: 46
Candidate Starts for Jellybones_41:
(Start: 46 @42252 has 28 MA's), (Start: 49 @42261 has 36 MA's), (98, 42456), (105, 42483), (109, 42501), (116, 42519), (124, 42558), (135, 42609), (138, 42618), (163, 42705), (169, 42744),

Gene: Jeon_13 Start: 14518, Stop: 14982, Start Num: 57
Candidate Starts for Jeon_13:
(25, 14428), (33, 14461), (Start: 39 @14494 has 1 MA's), (Start: 57 @14518 has 7 MA's), (68, 14551), (Start: 71 @14569 has 1 MA's), (75, 14599), (80, 14614), (92, 14659), (96, 14674), (101, 14695), (111, 14731), (113, 14734), (115, 14740), (118, 14752), (131, 14824), (132, 14827), (138, 14845), (142, 14860), (159, 14914), (160, 14923),

Gene: John316_41 Start: 42205, Stop: 42756, Start Num: 46
Candidate Starts for John316_41:
(Start: 46 @42205 has 28 MA's), (Start: 49 @42214 has 36 MA's), (98, 42409), (105, 42436), (109, 42454), (116, 42472), (124, 42511), (135, 42562), (138, 42571), (144, 42589), (163, 42658), (169, 42697),

Gene: JohnLord_15 Start: 12162, Stop: 12614, Start Num: 59
Candidate Starts for JohnLord_15:
(41, 12138), (Start: 59 @12162 has 64 MA's), (75, 12231), (77, 12237), (78, 12240), (85, 12267), (114, 12369), (118, 12384), (130, 12453), (132, 12459), (140, 12486), (157, 12540), (159, 12546), (164, 12567), (165, 12573),

Gene: Jolie1_014 Start: 14030, Stop: 14539, Start Num: 59
Candidate Starts for Jolie1_014:
(8, 13676), (9, 13697), (12, 13754), (Start: 40 @13979 has 2 MA's), (Start: 59 @14030 has 64 MA's), (67, 14051), (69, 14063), (77, 14108), (83, 14132), (108, 14222), (109, 14231), (136, 14393), (140,

14408), (150, 14435), (156, 14459), (159, 14468),

Gene: Jormungandr_38 Start: 42426, Stop: 42974, Start Num: 46
Candidate Starts for Jormungandr_38:
(12, 42186), (17, 42249), (21, 42285), (22, 42294), (Start: 46 @42426 has 28 MA's), (Start: 49 @42435 has 36 MA's), (Start: 74 @42531 has 3 MA's), (84, 42573), (102, 42645), (105, 42657), (116, 42693), (142, 42807), (163, 42879),

Gene: Kaleb_19 Start: 16795, Stop: 17277, Start Num: 56
Candidate Starts for Kaleb_19:
(Start: 56 @16795 has 33 MA's), (60, 16810), (Start: 65 @16822 has 4 MA's), (76, 16882), (78, 16888), (83, 16909), (84, 16912), (106, 16993), (114, 17017), (118, 17032), (124, 17065), (139, 17131), (160, 17218), (161, 17224), (168, 17263),

Gene: Kamiyu_19 Start: 15432, Stop: 15911, Start Num: 59
Candidate Starts for Kamiyu_19:
(16, 15225), (18, 15243), (Start: 40 @15402 has 2 MA's), (Start: 59 @15432 has 64 MA's), (Start: 74 @15495 has 3 MA's), (76, 15507), (77, 15510), (94, 15570), (108, 15624), (111, 15636), (113, 15639), (119, 15660), (131, 15729), (132, 15732), (142, 15765), (159, 15819), (160, 15828),

Gene: Kaseim_38 Start: 41876, Stop: 42415, Start Num: 49
Candidate Starts for Kaseim_38:
(12, 41627), (17, 41690), (21, 41726), (22, 41735), (Start: 46 @41867 has 28 MA's), (Start: 49 @41876 has 36 MA's), (Start: 74 @41972 has 3 MA's), (84, 42014), (102, 42086), (105, 42098), (116, 42134), (130, 42209), (142, 42248), (163, 42320),

Gene: KayaCho_14 Start: 14048, Stop: 14557, Start Num: 59
Candidate Starts for KayaCho_14:
(8, 13679), (9, 13700), (11, 13742), (Start: 40 @13982 has 2 MA's), (47, 14012), (Start: 59 @14048 has 64 MA's), (67, 14069), (77, 14126), (83, 14150), (109, 14249), (136, 14411), (144, 14435), (156, 14477), (159, 14486),

Gene: Kheth_19 Start: 16678, Stop: 17160, Start Num: 56
Candidate Starts for Kheth_19:
(Start: 56 @16678 has 33 MA's), (60, 16693), (Start: 65 @16705 has 4 MA's), (76, 16765), (78, 16771), (83, 16792), (84, 16795), (106, 16876), (114, 16900), (118, 16915), (124, 16948), (139, 17014), (160, 17101), (161, 17107), (168, 17146),

Gene: Kolhan_19 Start: 16702, Stop: 17157, Start Num: 65
Candidate Starts for Kolhan_19:
(Start: 56 @16675 has 33 MA's), (60, 16690), (Start: 65 @16702 has 4 MA's), (76, 16762), (78, 16768), (83, 16789), (84, 16792), (106, 16873), (114, 16897), (118, 16912), (124, 16945), (139, 17011), (160, 17098), (161, 17104),

Gene: Kronus_18 Start: 16044, Stop: 16523, Start Num: 59
Candidate Starts for Kronus_18:
(16, 15837), (18, 15855), (Start: 40 @16014 has 2 MA's), (Start: 59 @16044 has 64 MA's), (Start: 74 @16107 has 3 MA's), (76, 16119), (77, 16122), (94, 16182), (108, 16236), (111, 16248), (113, 16251), (119, 16272), (131, 16341), (132, 16344), (142, 16377), (159, 16431), (160, 16440),

Gene: Lahirium_38 Start: 42948, Stop: 43496, Start Num: 46
Candidate Starts for Lahirium_38:

(12, 42708), (17, 42771), (21, 42807), (22, 42816), (Start: 46 @42948 has 28 MA's), (Start: 49 @42957 has 36 MA's), (Start: 74 @43053 has 3 MA's), (84, 43095), (102, 43167), (105, 43179), (116, 43215), (142, 43329), (163, 43401),

Gene: Lars_19 Start: 16795, Stop: 17277, Start Num: 56
Candidate Starts for Lars_19:
(Start: 56 @16795 has 33 MA's), (60, 16810), (Start: 65 @16822 has 4 MA's), (76, 16882), (78, 16888), (83, 16909), (84, 16912), (106, 16993), (114, 17017), (118, 17032), (124, 17065), (139, 17131), (160, 17218), (161, 17224), (168, 17263),

Gene: Laurie_19 Start: 16673, Stop: 17155, Start Num: 56
Candidate Starts for Laurie_19:
(Start: 56 @16673 has 33 MA's), (60, 16688), (Start: 65 @16700 has 4 MA's), (76, 16760), (78, 16766), (83, 16787), (84, 16790), (106, 16871), (114, 16895), (118, 16910), (124, 16943), (139, 17009), (160, 17096), (161, 17102),

Gene: Lephleur_19 Start: 16675, Stop: 17157, Start Num: 56
Candidate Starts for Lephleur_19:
(Start: 56 @16675 has 33 MA's), (60, 16690), (Start: 65 @16702 has 4 MA's), (76, 16762), (83, 16789), (84, 16792), (106, 16873), (114, 16897), (118, 16912), (124, 16945), (139, 17011), (160, 17098), (161, 17104), (168, 17143),

Gene: LestyG_19 Start: 15465, Stop: 15944, Start Num: 59
Candidate Starts for LestyG_19:
(16, 15258), (18, 15276), (Start: 40 @15435 has 2 MA's), (Start: 59 @15465 has 64 MA's), (Start: 74 @15528 has 3 MA's), (76, 15540), (77, 15543), (94, 15603), (108, 15657), (111, 15669), (113, 15672), (119, 15693), (131, 15762), (132, 15765), (142, 15798), (159, 15852), (160, 15861),

Gene: Lidong_38 Start: 42691, Stop: 43230, Start Num: 49
Candidate Starts for Lidong_38:
(12, 42442), (17, 42505), (21, 42541), (22, 42550), (Start: 46 @42682 has 28 MA's), (Start: 49 @42691 has 36 MA's), (Start: 74 @42787 has 3 MA's), (84, 42829), (102, 42901), (105, 42913), (116, 42949), (130, 43024), (142, 43063), (163, 43135),

Gene: Ligma_16 Start: 13799, Stop: 14290, Start Num: 48
Candidate Starts for Ligma_16:
(7, 13475), (15, 13577), (Start: 48 @13799 has 13 MA's), (64, 13841), (76, 13904), (93, 13964), (102, 14003), (142, 14165), (146, 14171), (153, 14198), (159, 14219), (162, 14237), (167, 14270), (169, 14279),

Gene: LilyPad_34 Start: 28783, Stop: 29271, Start Num: 53
Candidate Starts for LilyPad_34:
(Start: 53 @28783 has 7 MA's), (96, 28951), (105, 28987), (115, 29014), (131, 29077), (135, 29089), (153, 29149), (156, 29161), (171, 29239),

Gene: Linetti_38 Start: 41276, Stop: 41827, Start Num: 46
Candidate Starts for Linetti_38:
(Start: 46 @41276 has 28 MA's), (Start: 49 @41285 has 36 MA's), (75, 41390), (105, 41507), (107, 41513), (116, 41543), (163, 41729), (169, 41768),

Gene: LittleFella_35 Start: 30587, Stop: 31063, Start Num: 55
Candidate Starts for LittleFella_35:

(Start: 55 @30587 has 1 MA's), (83, 30704), (104, 30782), (117, 30821), (119, 30827), (151, 30941), (156, 30959),

Gene: LittleMinkey_22 Start: 15177, Stop: 15677, Start Num: 59
Candidate Starts for LittleMinkey_22:
(8, 14847), (12, 14925), (19, 15000), (58, 15174), (Start: 59 @15177 has 64 MA's), (61, 15180), (67, 15195), (77, 15252), (81, 15264), (93, 15309), (109, 15375), (119, 15402), (122, 15447), (128, 15507), (159, 15609), (169, 15666),

Gene: LittleMunchkin_17 Start: 15243, Stop: 15710, Start Num: 48
Candidate Starts for LittleMunchkin_17:
(7, 14919), (15, 15021), (Start: 40 @15213 has 2 MA's), (Start: 48 @15243 has 13 MA's), (68, 15276), (87, 15366), (102, 15423), (103, 15429), (142, 15585), (159, 15639), (162, 15657), (165, 15669),

Gene: LizLemon_19 Start: 16795, Stop: 17277, Start Num: 56
Candidate Starts for LizLemon_19:
(Start: 56 @16795 has 33 MA's), (60, 16810), (Start: 65 @16822 has 4 MA's), (76, 16882), (83, 16909), (84, 16912), (106, 16993), (114, 17017), (118, 17032), (124, 17065), (139, 17131), (160, 17218), (161, 17224), (168, 17263),

Gene: Lizzo_37 Start: 41045, Stop: 41587, Start Num: 49
Candidate Starts for Lizzo_37:
(Start: 46 @41036 has 28 MA's), (Start: 49 @41045 has 36 MA's), (98, 41240), (105, 41267), (109, 41285), (116, 41303), (124, 41342), (135, 41393), (138, 41402), (144, 41420), (163, 41489), (169, 41528),

Gene: LordFarquaad_22 Start: 18967, Stop: 19413, Start Num: 63
Candidate Starts for LordFarquaad_22:
(13, 18670), (17, 18724), (23, 18805), (27, 18826), (Start: 56 @18943 has 33 MA's), (Start: 63 @18967 has 21 MA's), (80, 19042), (102, 19123), (103, 19129), (106, 19138), (111, 19156), (119, 19180), (136, 19243), (145, 19270), (147, 19276), (156, 19306), (160, 19324), (163, 19333), (164, 19336), (170, 19375),

Gene: Luker_39 Start: 43006, Stop: 43449, Start Num: 74
Candidate Starts for Luker_39:
(12, 42661), (17, 42724), (21, 42760), (22, 42769), (Start: 46 @42901 has 28 MA's), (Start: 49 @42910 has 36 MA's), (Start: 74 @43006 has 3 MA's), (84, 43048), (102, 43120), (105, 43132), (116, 43168), (130, 43243), (142, 43282), (163, 43354),

Gene: Madi_32 Start: 27977, Stop: 28465, Start Num: 53
Candidate Starts for Madi_32:
(Start: 53 @27977 has 7 MA's), (76, 28073), (105, 28181), (119, 28223), (127, 28256), (135, 28283), (156, 28355), (163, 28382), (165, 28391), (171, 28433),

Gene: MakoManhole_18 Start: 15270, Stop: 15731, Start Num: 54
Candidate Starts for MakoManhole_18:
(Start: 54 @15270 has 9 MA's), (70, 15315), (83, 15378), (93, 15411), (102, 15444), (109, 15474), (118, 15498), (140, 15600), (153, 15639), (159, 15660),

Gene: Mao1_14 Start: 12855, Stop: 13307, Start Num: 59
Candidate Starts for Mao1_14:
(41, 12831), (Start: 59 @12855 has 64 MA's), (75, 12924), (76, 12927), (77, 12930), (78, 12933), (85, 12960), (114, 13062), (118, 13077), (130, 13146), (132, 13152), (140, 13179), (157, 13233), (159,

13239), (164, 13260), (165, 13266),

Gene: Mareelih_112 Start: 69551, Stop: 70030, Start Num: 50
Candidate Starts for Mareelih_112:
(Start: 50 @69551 has 5 MA's), (Start: 74 @69632 has 3 MA's), (76, 69644), (80, 69656), (114, 69776), (119, 69794), (131, 69842), (133, 69848), (166, 69968),

Gene: Mariokart_16 Start: 13708, Stop: 14199, Start Num: 48
Candidate Starts for Mariokart_16:
(Start: 48 @13708 has 13 MA's), (64, 13750), (76, 13813), (93, 13873), (100, 13903), (102, 13912), (139, 14065), (142, 14074), (146, 14080), (153, 14107), (157, 14122), (159, 14128), (162, 14146), (165, 14158), (169, 14188),

Gene: Marley1013_19 Start: 16245, Stop: 16724, Start Num: 59
Candidate Starts for Marley1013_19:
(16, 16038), (18, 16056), (Start: 40 @16215 has 2 MA's), (Start: 59 @16245 has 64 MA's), (Start: 74 @16308 has 3 MA's), (76, 16320), (77, 16323), (94, 16383), (108, 16437), (111, 16449), (113, 16452), (119, 16473), (131, 16542), (132, 16545), (142, 16578), (159, 16632), (160, 16641),

Gene: Marlia_19 Start: 15447, Stop: 15926, Start Num: 59
Candidate Starts for Marlia_19:
(16, 15240), (18, 15258), (Start: 40 @15417 has 2 MA's), (Start: 59 @15447 has 64 MA's), (Start: 74 @15510 has 3 MA's), (76, 15522), (77, 15525), (94, 15585), (108, 15639), (111, 15651), (113, 15654), (119, 15675), (131, 15744), (132, 15747), (142, 15780), (159, 15834), (160, 15843),

Gene: Mask_15 Start: 12856, Stop: 13308, Start Num: 59
Candidate Starts for Mask_15:
(41, 12832), (Start: 59 @12856 has 64 MA's), (75, 12925), (76, 12928), (77, 12931), (78, 12934), (85, 12961), (114, 13063), (118, 13078), (130, 13147), (132, 13153), (140, 13180), (157, 13234), (159, 13240), (164, 13261), (165, 13267),

Gene: MasterPo_19 Start: 16675, Stop: 17157, Start Num: 56
Candidate Starts for MasterPo_19:
(Start: 56 @16675 has 33 MA's), (Start: 65 @16702 has 4 MA's), (76, 16762), (83, 16789), (84, 16792), (106, 16873), (114, 16897), (118, 16912), (124, 16945), (139, 17011), (160, 17098), (161, 17104), (168, 17143),

Gene: Megabear_13 Start: 14461, Stop: 14925, Start Num: 57
Candidate Starts for Megabear_13:
(25, 14371), (33, 14404), (Start: 39 @14437 has 1 MA's), (Start: 57 @14461 has 7 MA's), (68, 14494), (Start: 71 @14512 has 1 MA's), (75, 14542), (80, 14557), (92, 14602), (96, 14617), (101, 14638), (102, 14641), (104, 14650), (111, 14674), (113, 14677), (115, 14683), (118, 14695), (131, 14767), (132, 14770), (138, 14788), (142, 14803), (159, 14857), (160, 14866),

Gene: Minnow_15 Start: 14020, Stop: 14565, Start Num: 47
Candidate Starts for Minnow_15:
(8, 13687), (11, 13750), (Start: 40 @13990 has 2 MA's), (47, 14020), (Start: 59 @14056 has 64 MA's), (61, 14059), (67, 14077), (69, 14089), (76, 14131), (83, 14158), (109, 14257), (136, 14419), (157, 14488),

Gene: Minos_39 Start: 42433, Stop: 42972, Start Num: 49
Candidate Starts for Minos_39:

(12, 42184), (17, 42247), (21, 42283), (22, 42292), (Start: 46 @42424 has 28 MA's), (Start: 49 @42433 has 36 MA's), (Start: 74 @42529 has 3 MA's), (84, 42571), (102, 42643), (105, 42655), (116, 42691), (130, 42766), (142, 42805), (163, 42877),

Gene: MmasiCarm_19 Start: 15458, Stop: 15937, Start Num: 59
Candidate Starts for MmasiCarm_19:
(16, 15251), (18, 15269), (Start: 40 @15428 has 2 MA's), (Start: 59 @15458 has 64 MA's), (Start: 74 @15521 has 3 MA's), (76, 15533), (77, 15536), (94, 15596), (108, 15650), (111, 15662), (113, 15665), (119, 15686), (131, 15755), (132, 15758), (142, 15791), (159, 15845), (160, 15854),

Gene: Mocha12_22 Start: 18974, Stop: 19420, Start Num: 63
Candidate Starts for Mocha12_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: Monty_36 Start: 40195, Stop: 40737, Start Num: 49
Candidate Starts for Monty_36:
(Start: 46 @40186 has 28 MA's), (Start: 49 @40195 has 36 MA's), (98, 40390), (105, 40417), (109, 40435), (116, 40453), (124, 40492), (135, 40543), (138, 40552), (144, 40570), (163, 40639), (169, 40678),

Gene: Moonflower_25 Start: 21714, Stop: 22160, Start Num: 63
Candidate Starts for Moonflower_25:
(13, 21414), (23, 21552), (27, 21573), (Start: 56 @21690 has 33 MA's), (Start: 63 @21714 has 21 MA's), (80, 21789), (86, 21813), (90, 21825), (105, 21882), (106, 21885), (119, 21927), (136, 21990), (145, 22017), (147, 22023), (160, 22071), (163, 22080), (164, 22083), (170, 22122),

Gene: Mortcellus_18 Start: 16099, Stop: 16578, Start Num: 59
Candidate Starts for Mortcellus_18:
(16, 15892), (18, 15910), (Start: 40 @16069 has 2 MA's), (Start: 59 @16099 has 64 MA's), (Start: 74 @16162 has 3 MA's), (76, 16174), (77, 16177), (94, 16237), (108, 16291), (111, 16303), (113, 16306), (119, 16327), (131, 16396), (132, 16399), (142, 16432), (159, 16486), (160, 16495),

Gene: Morty007_19 Start: 16308, Stop: 16724, Start Num: 74
Candidate Starts for Morty007_19:
(16, 16038), (18, 16056), (Start: 40 @16215 has 2 MA's), (Start: 59 @16245 has 64 MA's), (Start: 74 @16308 has 3 MA's), (76, 16320), (77, 16323), (94, 16383), (108, 16437), (111, 16449), (113, 16452), (119, 16473), (131, 16542), (132, 16545), (142, 16578), (159, 16632), (160, 16641),

Gene: MossRose_18 Start: 15249, Stop: 15710, Start Num: 54
Candidate Starts for MossRose_18:
(12, 14985), (14, 15006), (Start: 40 @15210 has 2 MA's), (Start: 54 @15249 has 9 MA's), (70, 15294), (83, 15357), (93, 15390), (102, 15423), (118, 15477), (140, 15579), (153, 15618), (159, 15639),

Gene: MrWormie_38 Start: 41594, Stop: 42133, Start Num: 49
Candidate Starts for MrWormie_38:
(12, 41345), (17, 41408), (21, 41444), (22, 41453), (Start: 46 @41585 has 28 MA's), (Start: 49 @41594 has 36 MA's), (Start: 74 @41690 has 3 MA's), (84, 41732), (102, 41804), (105, 41816), (116, 41852), (130, 41927), (142, 41966), (163, 42038),

Gene: Msay19_42 Start: 42382, Stop: 42933, Start Num: 46
Candidate Starts for Msay19_42:

(Start: 46 @42382 has 28 MA's), (Start: 49 @42391 has 36 MA's), (75, 42496), (98, 42586), (105, 42613), (109, 42631), (113, 42637), (116, 42649), (124, 42688), (135, 42739), (138, 42748), (163, 42835), (169, 42874),

Gene: Mulaychimus_19 Start: 15438, Stop: 15917, Start Num: 59
Candidate Starts for Mulaychimus_19:
(16, 15231), (18, 15249), (Start: 40 @15408 has 2 MA's), (Start: 59 @15438 has 64 MA's), (Start: 74 @15501 has 3 MA's), (76, 15513), (77, 15516), (94, 15576), (108, 15630), (111, 15642), (113, 15645), (119, 15666), (131, 15735), (132, 15738), (142, 15771), (159, 15825), (160, 15834),

Gene: NHagos_16 Start: 13728, Stop: 14189, Start Num: 54
Candidate Starts for NHagos_16:
(Start: 54 @13728 has 9 MA's), (64, 13746), (Start: 74 @13797 has 3 MA's), (78, 13815), (81, 13824), (102, 13902), (109, 13932), (140, 14058), (153, 14097), (159, 14118), (160, 14127), (162, 14136),

Gene: Neoevie_38 Start: 42687, Stop: 43235, Start Num: 46
Candidate Starts for Neoevie_38:
(12, 42447), (17, 42510), (21, 42546), (22, 42555), (Start: 46 @42687 has 28 MA's), (Start: 49 @42696 has 36 MA's), (Start: 74 @42792 has 3 MA's), (84, 42834), (102, 42906), (105, 42918), (116, 42954), (142, 43068), (163, 43140),

Gene: Neos5_19 Start: 16253, Stop: 16732, Start Num: 59
Candidate Starts for Neos5_19:
(16, 16046), (18, 16064), (Start: 40 @16223 has 2 MA's), (Start: 59 @16253 has 64 MA's), (Start: 74 @16316 has 3 MA's), (76, 16328), (77, 16331), (94, 16391), (108, 16445), (111, 16457), (113, 16460), (119, 16481), (131, 16550), (132, 16553), (142, 16586), (159, 16640), (160, 16649),

Gene: Newt_39 Start: 43020, Stop: 43463, Start Num: 74
Candidate Starts for Newt_39:
(12, 42675), (17, 42738), (21, 42774), (22, 42783), (Start: 46 @42915 has 28 MA's), (Start: 49 @42924 has 36 MA's), (Start: 74 @43020 has 3 MA's), (84, 43062), (102, 43134), (105, 43146), (116, 43182), (142, 43296), (163, 43368),

Gene: Nimi13_38 Start: 42433, Stop: 42981, Start Num: 46
Candidate Starts for Nimi13_38:
(12, 42193), (17, 42256), (21, 42292), (22, 42301), (Start: 46 @42433 has 28 MA's), (Start: 49 @42442 has 36 MA's), (Start: 74 @42538 has 3 MA's), (84, 42580), (102, 42652), (105, 42664), (116, 42700), (142, 42814), (163, 42886),

Gene: Nozo_19 Start: 16223, Stop: 16702, Start Num: 59
Candidate Starts for Nozo_19:
(16, 16016), (18, 16034), (Start: 40 @16193 has 2 MA's), (Start: 59 @16223 has 64 MA's), (Start: 74 @16286 has 3 MA's), (76, 16298), (77, 16301), (94, 16361), (108, 16415), (111, 16427), (113, 16430), (119, 16451), (131, 16520), (132, 16523), (142, 16556), (159, 16610), (160, 16619),

Gene: Obutu_19 Start: 15456, Stop: 15935, Start Num: 59
Candidate Starts for Obutu_19:
(16, 15249), (18, 15267), (Start: 40 @15426 has 2 MA's), (Start: 59 @15456 has 64 MA's), (Start: 74 @15519 has 3 MA's), (76, 15531), (77, 15534), (94, 15594), (108, 15648), (111, 15660), (113, 15663), (119, 15684), (131, 15753), (132, 15756), (142, 15789), (159, 15843), (160, 15852),

Gene: Olivio_18 Start: 15310, Stop: 15789, Start Num: 59
Candidate Starts for Olivio_18:

(16, 15103), (18, 15121), (Start: 40 @15280 has 2 MA's), (Start: 59 @15310 has 64 MA's), (Start: 74 @15373 has 3 MA's), (76, 15385), (77, 15388), (94, 15448), (108, 15502), (111, 15514), (113, 15517), (119, 15538), (131, 15607), (132, 15610), (142, 15643), (159, 15697), (160, 15706),

Gene: Opia_19 Start: 16702, Stop: 17157, Start Num: 65
Candidate Starts for Opia_19:
(Start: 56 @16675 has 33 MA's), (60, 16690), (Start: 65 @16702 has 4 MA's), (76, 16762), (78, 16768), (83, 16789), (84, 16792), (106, 16873), (114, 16897), (118, 16912), (124, 16945), (139, 17011), (160, 17098), (161, 17104), (168, 17143),

Gene: OrangeOswald_19 Start: 15461, Stop: 15940, Start Num: 59
Candidate Starts for OrangeOswald_19:
(16, 15254), (18, 15272), (Start: 40 @15431 has 2 MA's), (Start: 59 @15461 has 64 MA's), (Start: 74 @15524 has 3 MA's), (76, 15536), (77, 15539), (94, 15599), (108, 15653), (111, 15665), (113, 15668), (119, 15689), (131, 15758), (132, 15761), (142, 15794), (159, 15848), (160, 15857),

Gene: PR_13 Start: 14488, Stop: 14952, Start Num: 57
Candidate Starts for PR_13:
(25, 14398), (33, 14431), (Start: 39 @14464 has 1 MA's), (Start: 57 @14488 has 7 MA's), (68, 14521), (Start: 71 @14539 has 1 MA's), (75, 14569), (80, 14584), (96, 14644), (101, 14665), (102, 14668), (109, 14698), (111, 14701), (113, 14704), (115, 14710), (118, 14722), (131, 14794), (132, 14797), (138, 14815), (142, 14830), (159, 14884), (160, 14893),

Gene: Phaedrus_18 Start: 15379, Stop: 15858, Start Num: 59
Candidate Starts for Phaedrus_18:
(16, 15172), (18, 15190), (Start: 40 @15349 has 2 MA's), (Start: 59 @15379 has 64 MA's), (Start: 74 @15442 has 3 MA's), (76, 15454), (77, 15457), (94, 15517), (108, 15571), (111, 15583), (113, 15586), (119, 15607), (131, 15676), (132, 15679), (142, 15712), (159, 15766), (160, 15775),

Gene: Phantasmagoria_19 Start: 16675, Stop: 17157, Start Num: 56
Candidate Starts for Phantasmagoria_19:
(Start: 56 @16675 has 33 MA's), (60, 16690), (Start: 65 @16702 has 4 MA's), (76, 16762), (83, 16789), (84, 16792), (106, 16873), (114, 16897), (118, 16912), (124, 16945), (139, 17011), (160, 17098), (161, 17104), (168, 17143),

Gene: Phayeta_19 Start: 15337, Stop: 15816, Start Num: 59
Candidate Starts for Phayeta_19:
(16, 15130), (18, 15148), (Start: 40 @15307 has 2 MA's), (Start: 59 @15337 has 64 MA's), (Start: 74 @15400 has 3 MA's), (76, 15412), (77, 15415), (94, 15475), (108, 15529), (111, 15541), (113, 15544), (119, 15565), (131, 15634), (132, 15637), (142, 15670), (159, 15724), (160, 15733),

Gene: Phendrix_96 Start: 60904, Stop: 61401, Start Num: 45
Candidate Starts for Phendrix_96:
(Start: 45 @60904 has 1 MA's), (Start: 49 @60916 has 36 MA's), (83, 61048), (97, 61090), (102, 61111), (108, 61132), (110, 61141), (112, 61144), (136, 61228), (138, 61234), (143, 61249), (169, 61357),

Gene: Philly_18 Start: 15327, Stop: 15806, Start Num: 59
Candidate Starts for Philly_18:
(16, 15120), (18, 15138), (Start: 40 @15297 has 2 MA's), (Start: 59 @15327 has 64 MA's), (Start: 74 @15390 has 3 MA's), (76, 15402), (77, 15405), (94, 15465), (102, 15498), (111, 15531), (113, 15534), (114, 15537), (119, 15555), (131, 15624), (132, 15627), (142, 15660), (159, 15714), (160, 15723),

Gene: Phlyer_19 Start: 16196, Stop: 16675, Start Num: 59
Candidate Starts for Phlyer_19:
(16, 15989), (18, 16007), (Start: 40 @16166 has 2 MA's), (Start: 59 @16196 has 64 MA's), (Start: 74 @16259 has 3 MA's), (76, 16271), (77, 16274), (94, 16334), (108, 16388), (111, 16400), (113, 16403), (119, 16424), (131, 16493), (132, 16496), (142, 16529), (159, 16583), (160, 16592),

Gene: PierreThree_37 Start: 41156, Stop: 41698, Start Num: 49
Candidate Starts for PierreThree_37:
(Start: 46 @41147 has 28 MA's), (Start: 49 @41156 has 36 MA's), (75, 41261), (105, 41378), (107, 41384), (116, 41414), (163, 41600), (169, 41639),

Gene: Pipefish_19 Start: 16345, Stop: 16824, Start Num: 59
Candidate Starts for Pipefish_19:
(16, 16138), (18, 16156), (Start: 40 @16315 has 2 MA's), (Start: 59 @16345 has 64 MA's), (Start: 74 @16408 has 3 MA's), (76, 16420), (77, 16423), (94, 16483), (108, 16537), (111, 16549), (113, 16552), (119, 16573), (131, 16642), (132, 16645), (142, 16678), (159, 16732), (160, 16741),

Gene: PokyPuppy_36 Start: 41099, Stop: 41641, Start Num: 49
Candidate Starts for PokyPuppy_36:
(10, 40805), (17, 40916), (20, 40934), (21, 40952), (22, 40961), (36, 41060), (Start: 46 @41090 has 28 MA's), (Start: 49 @41099 has 36 MA's), (75, 41204), (98, 41294), (102, 41309), (105, 41321), (115, 41351), (116, 41357), (135, 41447), (138, 41456), (157, 41519), (163, 41543), (169, 41582),

Gene: Poland_42 Start: 42370, Stop: 42912, Start Num: 49
Candidate Starts for Poland_42:
(Start: 46 @42361 has 28 MA's), (Start: 49 @42370 has 36 MA's), (98, 42565), (105, 42592), (109, 42610), (116, 42628), (124, 42667), (135, 42718), (138, 42727), (169, 42853),

Gene: PrinceCharming_19 Start: 16795, Stop: 17277, Start Num: 56
Candidate Starts for PrinceCharming_19:
(Start: 56 @16795 has 33 MA's), (60, 16810), (Start: 65 @16822 has 4 MA's), (76, 16882), (78, 16888), (83, 16909), (84, 16912), (106, 16993), (114, 17017), (118, 17032), (124, 17065), (139, 17131), (160, 17218), (161, 17224), (168, 17263),

Gene: Pupper_84 Start: 32583, Stop: 33056, Start Num: 40
Candidate Starts for Pupper_84:
(Start: 40 @32583 has 2 MA's), (Start: 42 @32589 has 1 MA's), (70, 32637), (Start: 71 @32640 has 1 MA's), (76, 32673), (78, 32679), (81, 32688), (86, 32709), (105, 32784), (118, 32826), (136, 32913), (137, 32916), (142, 32934), (146, 32940), (154, 32970), (165, 33015), (169, 33045),

Gene: Quesadilla_19 Start: 16834, Stop: 17340, Start Num: 59
Candidate Starts for Quesadilla_19:
(6, 16240), (8, 16504), (9, 16525), (34, 16783), (Start: 59 @16834 has 64 MA's), (67, 16852), (83, 16933), (87, 16945), (93, 16966), (95, 16975), (109, 17032), (132, 17185), (135, 17194), (156, 17263), (159, 17272), (167, 17320),

Gene: Qyrzula_18 Start: 16765, Stop: 17247, Start Num: 56
Candidate Starts for Qyrzula_18:
(Start: 56 @16765 has 33 MA's), (60, 16780), (Start: 65 @16792 has 4 MA's), (76, 16852), (78, 16858), (83, 16879), (84, 16882), (106, 16963), (114, 16987), (118, 17002), (124, 17035), (139, 17101), (160, 17188), (161, 17194), (168, 17233),

Gene: RagingRooster_19 Start: 15462, Stop: 15941, Start Num: 59

Candidate Starts for RagingRooster_19:
(16, 15255), (18, 15273), (Start: 40 @15432 has 2 MA's), (Start: 59 @15462 has 64 MA's), (Start: 74 @15525 has 3 MA's), (76, 15537), (77, 15540), (94, 15600), (108, 15654), (111, 15666), (113, 15669), (119, 15690), (131, 15759), (132, 15762), (142, 15795), (159, 15849), (160, 15858),

Gene: RavenCo17_22 Start: 19866, Stop: 20312, Start Num: 63
Candidate Starts for RavenCo17_22:
(23, 19707), (27, 19728), (43, 19800), (Start: 56 @19845 has 33 MA's), (Start: 63 @19866 has 21 MA's), (80, 19941), (90, 19977), (102, 20022), (103, 20028), (106, 20037), (119, 20079), (136, 20142), (145, 20169), (147, 20175), (160, 20223), (164, 20235), (170, 20274),

Gene: RemRem_38 Start: 40185, Stop: 40727, Start Num: 49
Candidate Starts for RemRem_38:
(Start: 46 @40176 has 28 MA's), (Start: 49 @40185 has 36 MA's), (98, 40380), (105, 40407), (109, 40425), (116, 40443), (124, 40482), (135, 40533), (138, 40542), (144, 40560), (163, 40629), (169, 40668),

Gene: Rhinoforte_19 Start: 16819, Stop: 17274, Start Num: 65
Candidate Starts for Rhinoforte_19:
(Start: 56 @16792 has 33 MA's), (60, 16807), (Start: 65 @16819 has 4 MA's), (76, 16879), (78, 16885), (83, 16906), (84, 16909), (106, 16990), (114, 17014), (118, 17029), (124, 17062), (139, 17128), (160, 17215), (161, 17221), (168, 17260),

Gene: Rita1961_19 Start: 15457, Stop: 15936, Start Num: 59
Candidate Starts for Rita1961_19:
(16, 15250), (18, 15268), (Start: 40 @15427 has 2 MA's), (Start: 59 @15457 has 64 MA's), (Start: 74 @15520 has 3 MA's), (76, 15532), (77, 15535), (94, 15595), (108, 15649), (111, 15661), (113, 15664), (119, 15685), (131, 15754), (132, 15757), (142, 15790), (159, 15844), (160, 15853),

Gene: RomaT_19 Start: 16243, Stop: 16722, Start Num: 59
Candidate Starts for RomaT_19:
(16, 16036), (18, 16054), (Start: 40 @16213 has 2 MA's), (Start: 59 @16243 has 64 MA's), (Start: 74 @16306 has 3 MA's), (76, 16318), (77, 16321), (94, 16381), (108, 16435), (111, 16447), (113, 16450), (119, 16471), (131, 16540), (132, 16543), (142, 16576), (159, 16630), (160, 16639),

Gene: Rosebush_19 Start: 16792, Stop: 17274, Start Num: 56
Candidate Starts for Rosebush_19:
(Start: 56 @16792 has 33 MA's), (60, 16807), (Start: 65 @16819 has 4 MA's), (76, 16879), (78, 16885), (83, 16906), (84, 16909), (106, 16990), (114, 17014), (118, 17029), (124, 17062), (139, 17128), (160, 17215), (161, 17221), (168, 17260),

Gene: RoyalG_38 Start: 40643, Stop: 41194, Start Num: 46
Candidate Starts for RoyalG_38:
(Start: 46 @40643 has 28 MA's), (Start: 49 @40652 has 36 MA's), (83, 40787), (98, 40847), (102, 40862), (105, 40874), (115, 40904), (116, 40910), (135, 41000), (138, 41009), (157, 41072), (163, 41096), (169, 41135),

Gene: SCentae_82 Start: 32263, Stop: 32730, Start Num: 42
Candidate Starts for SCentae_82:
(Start: 40 @32257 has 2 MA's), (Start: 42 @32263 has 1 MA's), (70, 32311), (Start: 71 @32314 has 1 MA's), (76, 32347), (78, 32353), (81, 32362), (86, 32383), (105, 32458), (118, 32500), (136, 32587), (137, 32590), (142, 32608), (146, 32614), (154, 32644), (165, 32689), (169, 32719),

Gene: Sabella_19 Start: 16678, Stop: 17160, Start Num: 56
Candidate Starts for Sabella_19:
(Start: 56 @16678 has 33 MA's), (60, 16693), (Start: 65 @16705 has 4 MA's), (76, 16765), (78, 16771), (83, 16792), (84, 16795), (106, 16876), (114, 16900), (118, 16915), (124, 16948), (139, 17014), (160, 17101), (161, 17107), (168, 17146),

Gene: Sahara_21 Start: 18646, Stop: 19092, Start Num: 63
Candidate Starts for Sahara_21:
(13, 18349), (17, 18403), (23, 18484), (27, 18505), (Start: 56 @18622 has 33 MA's), (Start: 63 @18646 has 21 MA's), (80, 18721), (102, 18802), (103, 18808), (106, 18817), (111, 18835), (119, 18859), (136, 18922), (145, 18949), (147, 18955), (156, 18985), (160, 19003), (163, 19012), (164, 19015), (170, 19054),

Gene: Sam12_37 Start: 40185, Stop: 40727, Start Num: 49
Candidate Starts for Sam12_37:
(Start: 46 @40176 has 28 MA's), (Start: 49 @40185 has 36 MA's), (98, 40380), (105, 40407), (109, 40425), (116, 40443), (124, 40482), (135, 40533), (138, 40542), (144, 40560), (163, 40629), (169, 40668),

Gene: Savage_22 Start: 18974, Stop: 19420, Start Num: 63
Candidate Starts for Savage_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: Sejanus_15 Start: 13789, Stop: 14241, Start Num: 59
Candidate Starts for Sejanus_15:
(41, 13765), (Start: 59 @13789 has 64 MA's), (75, 13858), (77, 13864), (78, 13867), (85, 13894), (118, 14011), (130, 14080), (132, 14086), (140, 14113), (157, 14167), (159, 14173), (164, 14194), (165, 14200),

Gene: Shatter_16 Start: 13799, Stop: 14290, Start Num: 48
Candidate Starts for Shatter_16:
(7, 13475), (15, 13577), (Start: 48 @13799 has 13 MA's), (64, 13841), (76, 13904), (93, 13964), (102, 14003), (142, 14165), (146, 14171), (153, 14198), (159, 14219), (162, 14237), (167, 14270), (169, 14279),

Gene: Shelley_38 Start: 41918, Stop: 42457, Start Num: 49
Candidate Starts for Shelley_38:
(12, 41669), (17, 41732), (21, 41768), (22, 41777), (Start: 46 @41909 has 28 MA's), (Start: 49 @41918 has 36 MA's), (Start: 74 @42014 has 3 MA's), (84, 42056), (102, 42128), (105, 42140), (116, 42176), (130, 42251), (142, 42290), (163, 42362),

Gene: Shenandoah_19 Start: 15440, Stop: 15919, Start Num: 59
Candidate Starts for Shenandoah_19:
(16, 15233), (18, 15251), (Start: 40 @15410 has 2 MA's), (Start: 59 @15440 has 64 MA's), (Start: 74 @15503 has 3 MA's), (76, 15515), (77, 15518), (94, 15578), (108, 15632), (111, 15644), (113, 15647), (119, 15668), (131, 15737), (132, 15740), (142, 15773), (159, 15827), (160, 15836),

Gene: Sienna_32 Start: 27977, Stop: 28465, Start Num: 53
Candidate Starts for Sienna_32:
(Start: 53 @27977 has 7 MA's), (76, 28073), (105, 28181), (119, 28223), (127, 28256), (135, 28283), (156, 28355), (163, 28382), (165, 28391), (171, 28433),

Gene: Sisko_16 Start: 14142, Stop: 14612, Start Num: 48
Candidate Starts for Sisko_16:
(7, 13818), (Start: 48 @14142 has 13 MA's), (64, 14163), (66, 14166), (83, 14253), (89, 14274), (103, 14331), (125, 14424), (130, 14448), (136, 14466), (140, 14481), (142, 14487), (144, 14490), (153, 14520), (159, 14541),

Gene: Sixama_112 Start: 69586, Stop: 70068, Start Num: 50
Candidate Starts for Sixama_112:
(Start: 50 @69586 has 5 MA's), (93, 69742), (97, 69754), (119, 69832), (129, 69874), (131, 69880), (133, 69886), (156, 69961), (166, 70006),

Gene: Skog_147 Start: 61646, Stop: 62143, Start Num: 35
Candidate Starts for Skog_147:
(Start: 35 @61646 has 1 MA's), (Start: 40 @61670 has 2 MA's), (Start: 42 @61676 has 1 MA's), (76, 61760), (78, 61766), (81, 61775), (91, 61811), (118, 61913), (142, 62021), (152, 62051), (165, 62102), (169, 62132),

Gene: SlippinJimmy_19 Start: 16196, Stop: 16705, Start Num: 40
Candidate Starts for SlippinJimmy_19:
(16, 16019), (18, 16037), (Start: 40 @16196 has 2 MA's), (Start: 59 @16226 has 64 MA's), (Start: 74 @16289 has 3 MA's), (76, 16301), (77, 16304), (94, 16364), (108, 16418), (111, 16430), (113, 16433), (119, 16454), (131, 16523), (132, 16526), (142, 16559), (159, 16613), (160, 16622),

Gene: SoilAssassin_22 Start: 18967, Stop: 19413, Start Num: 63
Candidate Starts for SoilAssassin_22:
(13, 18670), (17, 18724), (23, 18805), (27, 18826), (Start: 56 @18943 has 33 MA's), (Start: 63 @18967 has 21 MA's), (80, 19042), (102, 19123), (103, 19129), (106, 19138), (111, 19156), (119, 19180), (136, 19243), (145, 19270), (147, 19276), (156, 19306), (160, 19324), (163, 19333), (164, 19336), (170, 19375),

Gene: Sombrero_37 Start: 40178, Stop: 40729, Start Num: 46
Candidate Starts for Sombrero_37:
(Start: 46 @40178 has 28 MA's), (Start: 49 @40187 has 36 MA's), (98, 40382), (105, 40409), (109, 40427), (116, 40445), (124, 40484), (135, 40535), (138, 40544), (169, 40670),

Gene: Sour_19 Start: 15570, Stop: 16061, Start Num: 38
Candidate Starts for Sour_19:
(Start: 38 @15570 has 1 MA's), (64, 15612), (66, 15615), (81, 15690), (83, 15702), (93, 15735), (99, 15762), (102, 15774), (103, 15780), (108, 15795), (130, 15897), (132, 15903), (136, 15915), (142, 15936), (144, 15939), (153, 15969), (157, 15984), (159, 15990), (165, 16020),

Gene: Sproutie_22 Start: 18974, Stop: 19420, Start Num: 63
Candidate Starts for Sproutie_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: Squibbles_37 Start: 41048, Stop: 41590, Start Num: 49
Candidate Starts for Squibbles_37:
(Start: 46 @41039 has 28 MA's), (Start: 49 @41048 has 36 MA's), (98, 41243), (105, 41270), (109, 41288), (116, 41306), (124, 41345), (135, 41396), (138, 41405), (144, 41423), (163, 41492), (169, 41531),

Gene: SteveFrench_37 Start: 40883, Stop: 41434, Start Num: 46
Candidate Starts for SteveFrench_37:
(Start: 46 @40883 has 28 MA's), (Start: 49 @40892 has 36 MA's), (83, 41027), (98, 41087), (102, 41102), (105, 41114), (115, 41144), (116, 41150), (135, 41240), (138, 41249), (157, 41312), (163, 41336), (169, 41375),

Gene: Sticker17_38 Start: 42424, Stop: 42972, Start Num: 46
Candidate Starts for Sticker17_38:
(12, 42184), (17, 42247), (21, 42283), (22, 42292), (Start: 46 @42424 has 28 MA's), (Start: 49 @42433 has 36 MA's), (Start: 74 @42529 has 3 MA's), (84, 42571), (102, 42643), (105, 42655), (116, 42691), (130, 42766), (142, 42805), (163, 42877),

Gene: Suzy_32 Start: 29154, Stop: 29561, Start Num: 71
Candidate Starts for Suzy_32:
(Start: 57 @29103 has 7 MA's), (Start: 71 @29154 has 1 MA's), (79, 29196), (100, 29271), (106, 29295), (111, 29313), (115, 29322), (119, 29337), (125, 29358), (136, 29400), (155, 29457), (172, 29550),

Gene: SwainyDoc_19 Start: 15459, Stop: 15938, Start Num: 59
Candidate Starts for SwainyDoc_19:
(16, 15252), (18, 15270), (Start: 40 @15429 has 2 MA's), (Start: 59 @15459 has 64 MA's), (Start: 74 @15522 has 3 MA's), (76, 15534), (77, 15537), (94, 15597), (108, 15651), (111, 15663), (113, 15666), (119, 15687), (131, 15756), (132, 15759), (142, 15792), (159, 15846), (160, 15855),

Gene: SynergyX_19 Start: 15462, Stop: 15941, Start Num: 59
Candidate Starts for SynergyX_19:
(16, 15255), (18, 15273), (Start: 40 @15432 has 2 MA's), (Start: 59 @15462 has 64 MA's), (Start: 74 @15525 has 3 MA's), (76, 15537), (77, 15540), (94, 15600), (108, 15654), (111, 15666), (113, 15669), (119, 15690), (131, 15759), (132, 15762), (142, 15795), (159, 15849), (160, 15858),

Gene: TA17A_19 Start: 16675, Stop: 17157, Start Num: 56
Candidate Starts for TA17A_19:
(Start: 56 @16675 has 33 MA's), (Start: 65 @16702 has 4 MA's), (76, 16762), (78, 16768), (83, 16789), (84, 16792), (106, 16873), (114, 16897), (118, 16912), (124, 16945), (139, 17011), (160, 17098), (161, 17104), (168, 17143),

Gene: Taptic_13 Start: 14461, Stop: 14925, Start Num: 57
Candidate Starts for Taptic_13:
(25, 14371), (33, 14404), (Start: 39 @14437 has 1 MA's), (Start: 57 @14461 has 7 MA's), (68, 14494), (Start: 71 @14512 has 1 MA's), (75, 14542), (80, 14557), (92, 14602), (96, 14617), (101, 14638), (102, 14641), (104, 14650), (111, 14674), (113, 14677), (115, 14683), (118, 14695), (131, 14767), (132, 14770), (138, 14788), (142, 14803), (159, 14857), (160, 14866),

Gene: Teal_38 Start: 42901, Stop: 43440, Start Num: 49
Candidate Starts for Teal_38:
(12, 42652), (17, 42715), (21, 42751), (22, 42760), (Start: 46 @42892 has 28 MA's), (Start: 49 @42901 has 36 MA's), (Start: 74 @42997 has 3 MA's), (84, 43039), (102, 43111), (105, 43123), (116, 43159), (142, 43273), (163, 43345),

Gene: Terapin_33 Start: 27978, Stop: 28466, Start Num: 53
Candidate Starts for Terapin_33:

(Start: 53 @27978 has 7 MA's), (76, 28074), (83, 28101), (88, 28116), (102, 28170), (105, 28182), (111, 28200), (119, 28224), (127, 28257), (129, 28266), (135, 28284), (156, 28356), (163, 28383), (166, 28401), (173, 28446),

Gene: Tinciduntsolum_20 Start: 16794, Stop: 17276, Start Num: 56
Candidate Starts for Tinciduntsolum_20:
(Start: 56 @16794 has 33 MA's), (60, 16809), (Start: 65 @16821 has 4 MA's), (76, 16881), (78, 16887), (83, 16908), (84, 16911), (106, 16992), (114, 17016), (118, 17031), (124, 17064), (139, 17130), (160, 17217), (161, 17223), (168, 17262),

Gene: TinyTerror_19 Start: 15461, Stop: 15940, Start Num: 59
Candidate Starts for TinyTerror_19:
(16, 15254), (18, 15272), (Start: 40 @15431 has 2 MA's), (Start: 59 @15461 has 64 MA's), (Start: 74 @15524 has 3 MA's), (76, 15536), (77, 15539), (94, 15599), (108, 15653), (111, 15665), (113, 15668), (119, 15689), (131, 15758), (132, 15761), (142, 15794), (159, 15848), (160, 15857),

Gene: TraderJ_18 Start: 15252, Stop: 15713, Start Num: 54
Candidate Starts for TraderJ_18:
(12, 14988), (14, 15009), (Start: 40 @15213 has 2 MA's), (Start: 54 @15252 has 9 MA's), (70, 15297), (83, 15360), (93, 15393), (102, 15426), (109, 15456), (118, 15480), (140, 15582), (153, 15621), (159, 15642),

Gene: Tres_19 Start: 16675, Stop: 17157, Start Num: 56
Candidate Starts for Tres_19:
(Start: 56 @16675 has 33 MA's), (60, 16690), (Start: 65 @16702 has 4 MA's), (76, 16762), (78, 16768), (83, 16789), (84, 16792), (106, 16873), (114, 16897), (118, 16912), (124, 16945), (139, 17011), (160, 17098), (161, 17104), (168, 17143),

Gene: TuertoX_22 Start: 18974, Stop: 19420, Start Num: 63
Candidate Starts for TuertoX_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: Tydolla_19 Start: 16199, Stop: 16678, Start Num: 59
Candidate Starts for Tydolla_19:
(16, 15992), (18, 16010), (Start: 40 @16169 has 2 MA's), (Start: 59 @16199 has 64 MA's), (Start: 74 @16262 has 3 MA's), (76, 16274), (77, 16277), (94, 16337), (108, 16391), (111, 16403), (113, 16406), (119, 16427), (131, 16496), (132, 16499), (142, 16532), (159, 16586), (160, 16595),

Gene: Vasanti_21 Start: 18528, Stop: 18974, Start Num: 63
Candidate Starts for Vasanti_21:
(3, 17829), (5, 17865), (13, 18231), (17, 18285), (23, 18366), (26, 18384), (27, 18387), (Start: 56 @18504 has 33 MA's), (Start: 63 @18528 has 21 MA's), (80, 18603), (97, 18663), (102, 18684), (106, 18699), (118, 18738), (119, 18741), (134, 18798), (136, 18804), (160, 18885), (163, 18894), (164, 18897), (166, 18912), (170, 18936),

Gene: Vic9_00019 Start: 17115, Stop: 17597, Start Num: 56
Candidate Starts for Vic9_00019:
(Start: 56 @17115 has 33 MA's), (60, 17130), (Start: 65 @17142 has 4 MA's), (76, 17202), (78, 17208), (83, 17229), (84, 17232), (106, 17313), (114, 17337), (118, 17352), (124, 17385), (139, 17451), (160, 17538), (161, 17544),

Gene: West99_19 Start: 16795, Stop: 17277, Start Num: 56
Candidate Starts for West99_19:
(Start: 56 @16795 has 33 MA's), (60, 16810), (Start: 65 @16822 has 4 MA's), (76, 16882), (78, 16888), (83, 16909), (84, 16912), (106, 16993), (114, 17017), (118, 17032), (124, 17065), (139, 17131), (160, 17218), (161, 17224), (168, 17263),

Gene: Whiteclaw_22 Start: 18974, Stop: 19420, Start Num: 63
Candidate Starts for Whiteclaw_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: Woes_38 Start: 42952, Stop: 43491, Start Num: 49
Candidate Starts for Woes_38:
(12, 42703), (17, 42766), (21, 42802), (22, 42811), (Start: 46 @42943 has 28 MA's), (Start: 49 @42952 has 36 MA's), (Start: 74 @43048 has 3 MA's), (84, 43090), (102, 43162), (105, 43174), (116, 43210), (142, 43324), (163, 43396),

Gene: Wooper_18 Start: 15258, Stop: 15719, Start Num: 54
Candidate Starts for Wooper_18:
(12, 14994), (14, 15015), (15, 15027), (Start: 40 @15219 has 2 MA's), (Start: 54 @15258 has 9 MA's), (Start: 59 @15264 has 64 MA's), (102, 15432), (109, 15462), (118, 15486), (140, 15588), (153, 15627), (159, 15648), (160, 15657),

Gene: Worcestershire_37 Start: 40187, Stop: 40729, Start Num: 49
Candidate Starts for Worcestershire_37:
(Start: 46 @40178 has 28 MA's), (Start: 49 @40187 has 36 MA's), (98, 40382), (105, 40409), (109, 40427), (116, 40445), (124, 40484), (135, 40535), (138, 40544), (144, 40562), (163, 40631), (169, 40670),

Gene: Xenia2_36 Start: 30443, Stop: 30931, Start Num: 51
Candidate Starts for Xenia2_36:
(24, 30329), (28, 30344), (29, 30356), (30, 30359), (32, 30368), (44, 30419), (Start: 51 @30443 has 2 MA's), (Start: 74 @30533 has 3 MA's), (80, 30557), (111, 30671), (117, 30689), (119, 30695), (131, 30743), (135, 30755), (141, 30776), (149, 30800), (160, 30842), (169, 30890),

Gene: Yago84_16 Start: 14151, Stop: 14621, Start Num: 48
Candidate Starts for Yago84_16:
(7, 13827), (Start: 48 @14151 has 13 MA's), (64, 14172), (66, 14175), (83, 14262), (89, 14283), (103, 14340), (125, 14433), (130, 14457), (136, 14475), (140, 14490), (142, 14496), (144, 14499), (153, 14529), (159, 14550),

Gene: Yahalom_19 Start: 15473, Stop: 15952, Start Num: 59
Candidate Starts for Yahalom_19:
(16, 15266), (18, 15284), (Start: 40 @15443 has 2 MA's), (Start: 59 @15473 has 64 MA's), (Start: 74 @15536 has 3 MA's), (76, 15548), (77, 15551), (94, 15611), (108, 15665), (111, 15677), (113, 15680), (119, 15701), (131, 15770), (132, 15773), (142, 15806), (159, 15860), (160, 15869),

Gene: Yeet412_22 Start: 18967, Stop: 19413, Start Num: 63
Candidate Starts for Yeet412_22:
(13, 18670), (17, 18724), (23, 18805), (27, 18826), (Start: 56 @18943 has 33 MA's), (Start: 63 @18967 has 21 MA's), (80, 19042), (102, 19123), (103, 19129), (106, 19138), (111, 19156), (119, 19180), (136, 19243), (145, 19270), (147, 19276), (156, 19306), (160, 19324), (163, 19333), (164, 19336), (170,

19375),

Gene: Yeshua_18 Start: 15235, Stop: 15696, Start Num: 54
Candidate Starts for Yeshua_18:
(Start: 54 @15235 has 9 MA's), (Start: 59 @15241 has 64 MA's), (102, 15409), (109, 15439), (118, 15463), (140, 15565), (153, 15604), (159, 15625), (160, 15634),

Gene: Yinz_19 Start: 15500, Stop: 15979, Start Num: 59
Candidate Starts for Yinz_19:
(1, 14711), (2, 14747), (9, 15188), (12, 15245), (16, 15293), (18, 15311), (Start: 40 @15470 has 2 MA's), (Start: 59 @15500 has 64 MA's), (Start: 74 @15563 has 3 MA's), (76, 15575), (77, 15578), (94, 15638), (111, 15704), (113, 15707), (119, 15728), (131, 15797), (132, 15800), (142, 15833), (159, 15887), (160, 15896),

Gene: Yinzer_22 Start: 18950, Stop: 19420, Start Num: 56
Candidate Starts for Yinzer_22:
(13, 18677), (17, 18731), (23, 18812), (27, 18833), (Start: 56 @18950 has 33 MA's), (Start: 63 @18974 has 21 MA's), (80, 19049), (102, 19130), (106, 19145), (119, 19187), (136, 19250), (145, 19277), (147, 19283), (160, 19331), (163, 19340), (164, 19343), (170, 19382),

Gene: Zenteno07_21 Start: 14952, Stop: 15446, Start Num: 59
Candidate Starts for Zenteno07_21:
(8, 14622), (12, 14700), (18, 14766), (58, 14949), (Start: 59 @14952 has 64 MA's), (61, 14955), (67, 14970), (76, 15024), (83, 15051), (109, 15150), (121, 15204), (136, 15303), (138, 15309), (140, 15318), (157, 15372), (159, 15378),