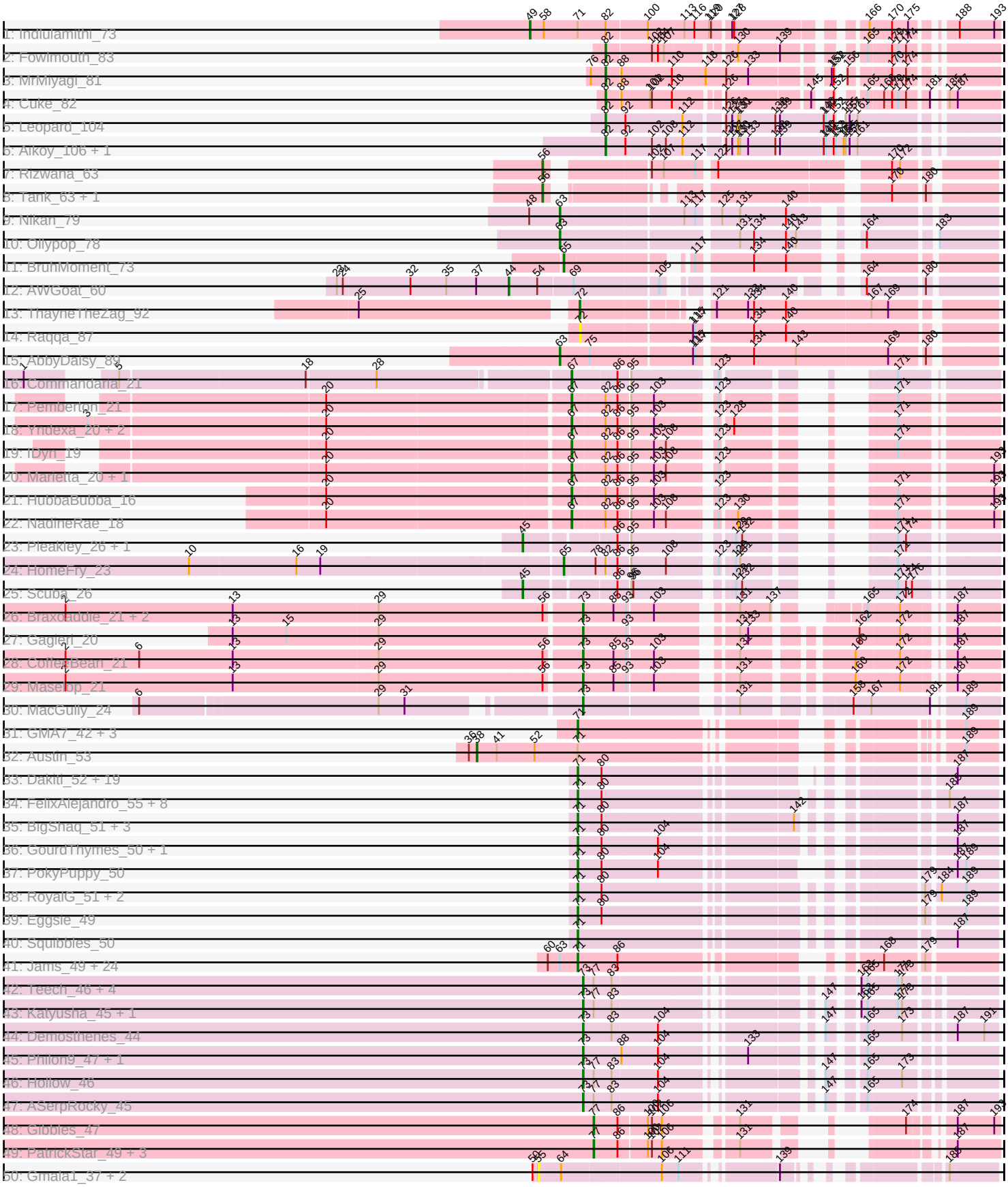
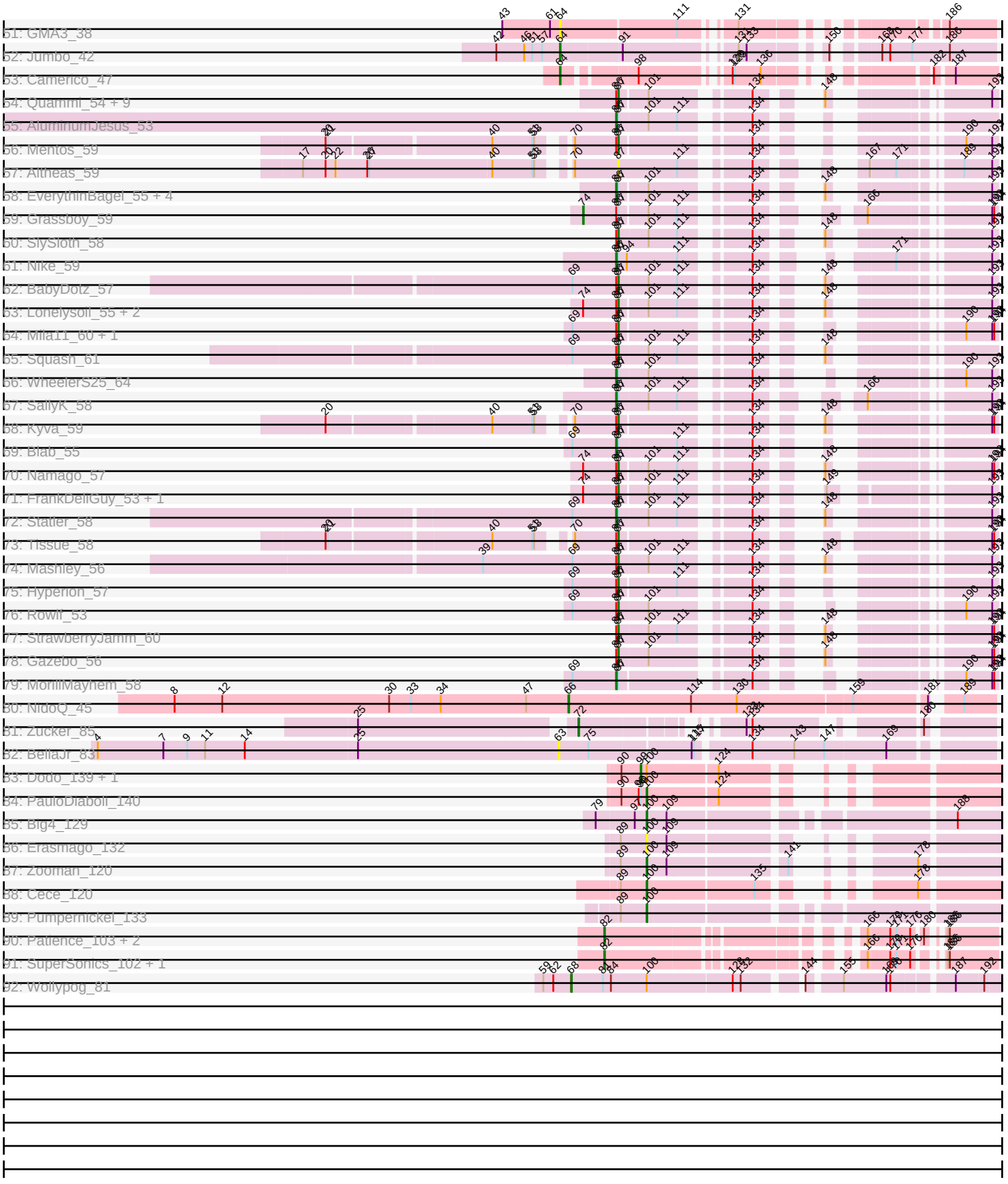
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1: Indulamithi_73
2: Fowlmouth_83
3: MrMiyagi_81
4: Cuke_82
5: Leopard_104
6: Alkoy_106 + 1
7: Rizwana_63
8: Tank_63 + 1
9: Nikan_79
10: Ollypop_78
11: BrunMoment_73
12: AWGoat_60
13: ThayneTheZag_92
14: Raqqa_87
15: AbbyDaisy_83
16: Commandania_21
17: Pemberton_21
18: Yndexa_20 + 2
19: IDyn_19
20: Marietta_20 + 1
21: HubbaBubba_16
22: NadineRae_18
23: Pleakley_26 + 1
24: HomeFry_23
25: Scuba_26
26: Braxdaddie_21 + 2
27: Gaglen_20
28: CoffeeBean_21
29: Maselop_21
30: MacGully_24
31: GMA7_42 + 3
32: Austin_53
33: Dakiti_52 + 19
34: FelixAlejandro_55 + 8
35: BigShaq_51 + 3
36: GourdThymes_50 + 1
37: PokyPuppy_50
38: RoyalG_51 + 2
39: Eggsie_49
40: Squibbles_50
41: Jams_49 + 24
42: Teech_46 + 4
43: Katyusha_45 + 1
44: Demosthenes_44
45: Phillon9_47 + 1
46: Hollow_46
47: ASerpRocky_45
48: Gibbles_47
49: PatrickStar_49 + 3
50: Gmaia1_37 + 2

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51: GMA3_38
52: Jumbo_42
53: Camerico_47
54: Quammi_54 + 9
55: AluminumJesus_53
56: Mentos_59
57: Atheas_59
58: EverythinBagel_55 + 4
59: Grassboy_59
60: SlySloth_58
61: Nike_59
62: BabyDotz_57
63: Lonelysoil_55 + 2
64: Mila11_60 + 1
65: Squash_61
66: WheelerS25_64
67: SallyK_58
68: Kyva_59
69: Blab_55
70: Namago_57
71: FrankDellGuy_53 + 1
72: Statler_58
73: Tissue_58
74: Mashley_56
75: Hyperion_57
76: Rowii_53
77: StrawberryJamm_60
78: Gazebo_56
79: MorrillMayhem_58
80: NiddQ_45
81: Zucker_85
82: BellaJr_83
83: Dodo_139 + 1
84: PauloDiaboli_140
85: Big4_129
86: Erasmago_132
87: Zooman_120
88: Cece_120
89: Pumpernickel_133
90: Patience_103 + 2
91: SuperSonics_102 + 1
92: Wollypog_81

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 347285 Report

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

Pham number 347285 has 192 members, 16 are drafts.

Phages represented in each track:
- Track 1 : Indlulamithi_73
- Track 2 : Fowlmouth_83
- Track 3 : MrMiyagi_81
- Track 4 : Cuke_82
- Track 5 : Leopard_104
- Track 6 : Aikoy_106, Onyinye_105
- Track 7 : Rizwana_63
- Track 8 : Tank_63, Wilde_65
- Track 9 : Nikan_79
- Track 10 : Ollypop_78
- Track 11 : BruhMoment_73
- Track 12 : AWGoat_60
- Track 13 : ThayneTheZag_92
- Track 14 : Raqqa_87
- Track 15 : AbbyDaisy_89
- Track 16 : Commandaria_21
- Track 17 : Pemberton_21
- Track 18 : Yndexa_20, Sukkupi_20, BiPauneto_21
- Track 19 : IDyn_19
- Track 20 : Marietta_20, WhoseManz_20
- Track 21 : HubbaBubba_16
- Track 22 : NadineRae_18
- Track 23 : Pleakley_26, Fury_26
- Track 24 : HomeFry_23
- Track 25 : Scuba_26
- Track 26 : Braxoaddie_21, Polyyuki_21, Apiary_21
- Track 27 : Gagieri_20
- Track 28 : CoffeeBean_21
- Track 29 : Maselop_21
- Track 30 : MacGully_24
- Track 31 : GMA7_42, HayZem_52, GTE7_41, Amore2_53
- Track 32 : Austin_53
- Track 33 : Dakiti_52, Lizzo_50, CathyBurgh_50, Adgers_52, Chelms_51, Gorko_50, RemRem_51, BirksAndSocks_55, Hotorobo_50, Barbochs_49, Flakey_50, Linetti_52, Ekhein_51, Breezic_50, John316_54, Monty_49, Sam12_50, Kelzog_52, Beaver_54, Exiguo_50

• Track 34 : FelixAlejandro_55, Jellybones_53, Msay19_55, Butterball_54, CinnamonToast_56, Boneham_54, BillyBobJr_56, Poland_55, Sombrero_51
• Track 35 : BigShaq_51, BenoitCattle_52, PierreThree_51, Crete_52
• Track 36 : GourdThymes_50, Worcestershire_50
• Track 37 : PokyPuppy_50
• Track 38 : RoyalG_51, Diabla_54, SteveFrench_50
• Track 39 : Eggsie_49
• Track 40 : Squibbles_50
• Track 41 : Jams_49, Anamika_49, Hail2Pitt_48, Charianelly_49, Jormungandr_49, Shelley_49, GalacticEye_49, MrWormie_49, Harambe_49, Luker_50, Kaseim_49, Newt_50, Damp_49, Nimi13_49, Sticker17_49, Teal_49, Hello_49, Berries_49, Lahirium_49, Neoevie_49, Woes_49, Minos_50, Lidong_49, Bianmat_49, Guillaume_49
• Track 42 : Teech_46, Tredge_46, Niagara_45, Kvothe_45, Teatealatte_46
• Track 43 : Katyusha_45, Benczkowski14_45
• Track 44 : Demosthenes_44
• Track 45 : Philon9_47, Vitaenoii_47
• Track 46 : Hollow_46
• Track 47 : ASerpRocky_45
• Track 48 : Gibbles_47
• Track 49 : PatrickStar_49, RobinSparkles_52, Orchid_48, Kampe_49
• Track 50 : Gmala1_37, GordDuk1_37, GordTnk2_37
• Track 51 : GMA3_38
• Track 52 : Jumbo_42
• Track 53 : Camerico_47
• Track 54 : Quammi_54, Wheelie_56, Casend_57, Llemily_56, Sillytadpoles_57, DonaldDuck_56, Viceroy_55, Zhafia_59, Wayne3_58, Teehee_57
• Track 55 : AluminumJesus_53
• Track 56 : Mentos_59
• Track 57 : Altheas_59
• Track 58 : EverythinBagel_55, LilCahh_55, Jehoshaphat_58, Rudy_54, Phabia_56
• Track 59 : Grassboy_59
• Track 60 : SlySloth_58
• Track 61 : Nike_59
• Track 62 : BabyDotz_57
• Track 63 : Lonelysoil_55, Zagie_57, Judebell_58
• Track 64 : Mila11_60, BaconCheese_59
• Track 65 : Squash_61
• Track 66 : WheelerS25_64
• Track 67 : SallyK_58
• Track 68 : Kyva_59
• Track 69 : Blab_55
• Track 70 : Namago_57
• Track 71 : FrankDeliGuy_53, ZestyBestie_54
• Track 72 : Statler_58
• Track 73 : Tissue_58
• Track 74 : Mashley_56
• Track 75 : Hyperion_57
• Track 76 : Rowlf_53
• Track 77 : StrawberryJamm_60
• Track 78 : Gazebo_56
• Track 79 : MorillMayhem_58
• Track 80 : NidoQ_45

• Track 81 : Zucker_85
• Track 82 : BellaJr_83
• Track 83 : Dodo_139, A3Wally_136
• Track 84 : PauloDiaboli_140
• Track 85 : Big4_129
• Track 86 : Erasmago_132
• Track 87 : Zooman_120
• Track 88 : Cece_120
• Track 89 : Pumpernickel_133
• Track 90 : Patience_103, Madruga_101, Demikore_104
• Track 91 : SuperSonics_102, Labelle_102
• Track 92 : Wollypog_81

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

The start number called the most often in the published annotations is 71, it was called in 65 of the 176 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adgers_52, Amore2_53, Anamika_49, Barbochs_49, Beaver_54, BenoitCattle_52, Berries_49, Bianmat_49, BigShaq_51, BillyBobJr_56, BirksAndSocks_55, Boneham_54, Breezic_50, Butterball_54, CathyBurgh_50, Charianelly_49, Chelms_51, CinnamonToast_56, Crete_52, Dakiti_52, Damp_49, Diabla_54, Eggsie_49, Ekhein_51, Exiguo_50, FelixAlejandro_55, Flakey_50, GMA7_42, GTE7_41, GalacticEye_49, Gorko_50, GourdThymes_50, Guillaume_49, Hail2Pitt_48, Harambe_49, HayZem_52, Hello_49, Hotorobo_50, Jams_49, Jellybones_53, John316_54, Jormungandr_49, Kaseim_49, Kelzog_52, Lahirium_49, Lidong_49, Linetti_52, Lizzo_50, Luker_50, Minos_50, Monty_49, MrWormie_49, Msay19_55, Neoevie_49, Newt_50, Nimi13_49, PierreThree_51, PokyPuppy_50, Poland_55, RemRem_51, RoyalG_51, Sam12_50, Shelley_49, Sombrero_51, Squibbles_50, SteveFrench_50, Sticker17_49, Teal_49, Woes_49, Worcestershire_50,

Genes that have the "Most Annotated" start but do not call it:
• Austin_53, Indlulamithi_73,

Genes that do not have the "Most Annotated" start:
• A3Wally_136, ASerpRocky_45, AWGoat_60, AbbyDaisy_89, Aikoy_106, Altheas_59, AluminumJesus_53, Apiary_21, BabyDotz_57, BaconCheese_59, BellaJr_83, Benczkowski14_45, BiPauneto_21, Big4_129, Blab_55, Braxoaddie_21, BruhMoment_73, Camerico_47, Casend_57, Cece_120, CoffeeBean_21, Commandaria_21, Cuke_82, Demikore_104, Demosthenes_44, Dodo_139, DonaldDuck_56, Erasmago_132, EverythinBagel_55, Fowlmouth_83, FrankDeliGuy_53, Fury_26, GMA3_38, Gagieri_20, Gazebo_56, Gibbles_47, Gmala1_37, GordDuk1_37, GordTnk2_37, Grassboy_59, Hollow_46, HomeFry_23, HubbaBubba_16, Hyperion_57, IDyn_19, Jehoshaphat_58, Judebell_58, Jumbo_42, Kampe_49, Katyusha_45, Kvothe_45, Kyva_59, Labelle_102, Leopard_104, LilCahh_55, Llemily_56, Lonelysoil_55, MacGully_24, Madruga_101, Marietta_20, Maselop_21, Mashley_56, Mentos_59, Mila11_60, MorillMayhem_58, MrMiyagi_81, NadineRae_18, Namago_57, Niagara_45, NidoQ_45, Nikan_79, Nike_59,

Ollypop_78, Onyinye_105, Orchid_48, Patience_103, PatrickStar_49, PauloDiaboli_140, Pemberton_21, Phabia_56, Philon9_47, Pleakley_26, Polyyuki_21, Pumpernickel_133, Quammi_54, Raqqa_87, Rizwana_63, RobinSparkles_52, Rowlf_53, Rudy_54, SallyK_58, Scuba_26, Sillytadpoles_57, SlySloth_58, Squash_61, Statler_58, StrawberryJamm_60, Sukkupi_20, SuperSonics_102, Tank_63, Teatealatte_46, Teech_46, Teehee_57, ThayneTheZag_92, Tissue_58, Tredge_46, Viceroy_55, Vitaenoii_47, Wayne3_58, WheelerS25_64, Wheelie_56, WhoseManz_20, Wilde_65, Wollypog_81, Yndexa_20, Zagie_57, ZestyBestie_54, Zhafia_59, Zooman_120, Zucker_85,

Summary by start number:

Start 38:
• Found in 1 of 192 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 176
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Austin_53 (CS1),

Start 44:
• Found in 1 of 192 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 176
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AWGoat_60 (AP4),

Start 45:
• Found in 3 of 192 (1.6%) of genes in pham
• Manual Annotations of this start: 3 of 176
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fury_26 (CR5), Pleakley_26 (CR5), Scuba_26 (CR5),

Start 49:
• Found in 1 of 192 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 176
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Indlulamithi_73 (AC),

Start 55:
• Found in 3 of 192 (1.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gmala1_37 (DF1), GordDuk1_37 (DF1), GordTnk2_37 (DF1),

Start 56:
• Found in 8 of 192 (4.2%) of genes in pham
• Manual Annotations of this start: 3 of 176
• Called 37.5% of time when present
• Phage (with cluster) where this start called: Rizwana_63 (AP1), Tank_63 (AP1), Wilde_65 (AP1),

Start 63:
• Found in 29 of 192 (15.1%) of genes in pham

• Manual Annotations of this start: 3 of 176
• Called 13.8% of time when present
• Phage (with cluster) where this start called: AbbyDaisy_89 (AY), BellaJr_83 (FN), Nikan_79 (AP2), Ollypop_78 (AP2),

Start 64:
• Found in 6 of 192 (3.1%) of genes in pham
• Manual Annotations of this start: 2 of 176
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Camerico_47 (DF4), GMA3_38 (DF2), Jumbo_42 (DF3),

Start 65:
• Found in 2 of 192 (1.0%) of genes in pham
• Manual Annotations of this start: 2 of 176
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BruhMoment_73 (AP3), HomeFry_23 (CR5),

Start 66:
• Found in 1 of 192 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 176
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NidoQ_45 (FA),

Start 67:
• Found in 10 of 192 (5.2%) of genes in pham
• Manual Annotations of this start: 10 of 176
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BiPauneto_21 (CR4), Commandaria_21 (CR2), HubbaBubba_16 (CR4), IDyn_19 (CR4), Marietta_20 (CR4), NadineRae_18 (CR4), Pemberton_21 (CR4), Sukkupi_20 (CR4), WhoseManz_20 (CR4), Yndexa_20 (CR4),

Start 68:
• Found in 1 of 192 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 176
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Wollypog_81 (singleton),

Start 71:
• Found in 72 of 192 (37.5%) of genes in pham
• Manual Annotations of this start: 65 of 176
• Called 97.2% of time when present
• Phage (with cluster) where this start called: Adgers_52 (CS2), Amore2_53 (CS1), Anamika_49 (CS3), Barbochs_49 (CS2), Beaver_54 (CS2), BenoitCattle_52 (CS2), Berries_49 (CS3), Bianmat_49 (CS3), BigShaq_51 (CS2), BillyBobJr_56 (CS2), BirksAndSocks_55 (CS2), Boneham_54 (CS2), Breezic_50 (CS2), Butterball_54 (CS2), CathyBurgh_50 (CS2), Charianelly_49 (CS3), Chelms_51 (CS2), CinnamonToast_56 (CS2), Crete_52 (CS2), Dakiti_52 (CS2), Damp_49 (CS3), Diabla_54 (CS2), Eggsie_49 (CS2), Ekhein_51 (CS2), Exiguo_50 (CS2), FelixAlejandro_55 (CS2), Flakey_50 (CS2), GMA7_42 (CS1), GTE7_41 (CS1), GalacticEye_49 (CS3), Gorko_50 (CS2), GourdThymes_50 (CS2), Guillaume_49

(CS3), Hail2Pitt_48 (CS3), Harambe_49 (CS3), HayZem_52 (CS1), Hello_49 (CS3), Hotorobo_50 (CS2), Jams_49 (CS3), Jellybones_53 (CS2), John316_54 (CS2), Jormungandr_49 (CS3), Kaseim_49 (CS3), Kelzog_52 (CS2), Lahirium_49 (CS3), Lidong_49 (CS3), Linetti_52 (CS2), Lizzo_50 (CS2), Luker_50 (CS3), Minos_50 (CS3), Monty_49 (CS2), MrWormie_49 (CS3), Msay19_55 (CS2), Neoevie_49 (CS3), Newt_50 (CS3), Nimi13_49 (CS3), PierreThree_51 (CS2), PokyPuppy_50 (CS2), Poland_55 (CS2), RemRem_51 (CS2), RoyalG_51 (CS2), Sam12_50 (CS2), Shelley_49 (CS3), Sombrero_51 (CS2), Squibbles_50 (CS2), SteveFrench_50 (CS2), Sticker17_49 (CS3), Teal_49 (CS3), Woes_49 (CS3), Worcestershire_50 (CS2),

Start 72:
• Found in 3 of 192 (1.6%) of genes in pham
• Manual Annotations of this start: 2 of 176
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Raqqa_87 (AY), ThayneTheZag_92 (AY), Zucker_85 (FN),

Start 73:
• Found in 19 of 192 (9.9%) of genes in pham
• Manual Annotations of this start: 19 of 176
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ASerpRocky_45 (CS4), Apiary_21 (CR6), Benczkowski14_45 (CS4), Braxoaddie_21 (CR6), CoffeeBean_21 (CR6), Demosthenes_44 (CS4), Gagieri_20 (CR6), Hollow_46 (CS4), Katyusha_45 (CS4), Kvothe_45 (CS4), MacGully_24 (CR7), Maselop_21 (CR6), Niagara_45 (CS4), Philon9_47 (CS4), Polyyuki_21 (CR6), Teatealatte_46 (CS4), Teech_46 (CS4), Tredge_46 (CS4), Vitaenoii_47 (CS4),

Start 74:
• Found in 7 of 192 (3.6%) of genes in pham
• Manual Annotations of this start: 1 of 176
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Grassboy_59 (EG),

Start 77:
• Found in 14 of 192 (7.3%) of genes in pham
• Manual Annotations of this start: 5 of 176
• Called 35.7% of time when present
• Phage (with cluster) where this start called: Gibbles_47 (CX), Kampe_49 (CX), Orchid_48 (CX), PatrickStar_49 (CX), RobinSparkles_52 (CX),

Start 82:
• Found in 22 of 192 (11.5%) of genes in pham
• Manual Annotations of this start: 10 of 176
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Aikoy_106 (AE), Cuke_82 (AC), Demikore_104 (U), Fowlmouth_83 (AC), Labelle_102 (U), Leopard_104 (AE), Madruga_101 (U), MrMiyagi_81 (AC), Onyinye_105 (AE), Patience_103 (U), SuperSonics_102 (U),

Start 86:
• Found in 86 of 192 (44.8%) of genes in pham
• Manual Annotations of this start: 11 of 176

• Called 14.0% of time when present
• Phage (with cluster) where this start called: AluminumJesus_53 (EG), Blab_55 (EG), EverythinBagel_55 (EG), Jehoshaphat_58 (EG), LilCahh_55 (EG), MorillMayhem_58 (EG), Nike_59 (EG), Phabia_56 (EG), Rudy_54 (EG), SallyK_58 (EG), Statler_58 (EG), WheelerS25_64 (EG),

Start 87:
• Found in 43 of 192 (22.4%) of genes in pham
• Manual Annotations of this start: 28 of 176
• Called 69.8% of time when present
• Phage (with cluster) where this start called: Altheas_59 (EG), BabyDotz_57 (EG), BaconCheese_59 (EG), Casend_57 (EG), DonaldDuck_56 (EG), FrankDeliGuy_53 (EG), Gazebo_56 (EG), Hyperion_57 (EG), Judebell_58 (EG), Kyva_59 (EG), Llemily_56 (EG), Lonelysoil_55 (EG), Mashley_56 (EG), Mentos_59 (EG), Mila11_60 (EG), Namago_57 (EG), Quammi_54 (EG), Rowlf_53 (EG), Sillytadpoles_57 (EG), SlySloth_58 (EG), Squash_61 (EG), StrawberryJamm_60 (EG), Teehee_57 (EG), Tissue_58 (EG), Viceroy_55 (EG), Wayne3_58 (EG), Wheelie_56 (EG), Zagie_57 (EG), ZestyBestie_54 (EG), Zhafia_59 (EG),

Start 99:
• Found in 3 of 192 (1.6%) of genes in pham
• Manual Annotations of this start: 2 of 176
• Called 66.7% of time when present
• Phage (with cluster) where this start called: A3Wally_136 (GD1), Dodo_139 (GD1),

Start 100:
• Found in 15 of 192 (7.8%) of genes in pham
• Manual Annotations of this start: 5 of 176
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Big4_129 (GD2), Cece_120 (GD3), Erasmago_132 (GD2), PauloDiaboli_140 (GD1), Pumpernickel_133 (GD4), Zooman_120 (GD2),

Summary by clusters:

There are 30 clusters represented in this pham: GD1, GD2, GD3, GD4, AP2, AP3, AP1, singleton, AP4, FA, FN, DF4, DF1, DF3, DF2, CS4, CS1, CS3, CS2, AC, AE, EG, CX, U, AY, CR2, CR6, CR7, CR4, CR5,

Info for manual annotations of cluster AC:
•Start number 49 was manually annotated 1 time for cluster AC.
•Start number 82 was manually annotated 3 times for cluster AC.

Info for manual annotations of cluster AE:
•Start number 82 was manually annotated 3 times for cluster AE.

Info for manual annotations of cluster AP1:
•Start number 56 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:
•Start number 63 was manually annotated 2 times for cluster AP2.

Info for manual annotations of cluster AP3:

•Start number 65 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:
•Start number 44 was manually annotated 1 time for cluster AP4.

Info for manual annotations of cluster AY:
•Start number 63 was manually annotated 1 time for cluster AY.
•Start number 72 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CR2:
•Start number 67 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR4:
•Start number 67 was manually annotated 9 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 45 was manually annotated 3 times for cluster CR5.
•Start number 65 was manually annotated 1 time for cluster CR5.

Info for manual annotations of cluster CR6:
•Start number 73 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster CR7:
•Start number 73 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster CS1:
•Start number 38 was manually annotated 1 time for cluster CS1.
•Start number 71 was manually annotated 2 times for cluster CS1.

Info for manual annotations of cluster CS2:
•Start number 71 was manually annotated 38 times for cluster CS2.

Info for manual annotations of cluster CS3:
•Start number 71 was manually annotated 25 times for cluster CS3.

Info for manual annotations of cluster CS4:
•Start number 73 was manually annotated 12 times for cluster CS4.

Info for manual annotations of cluster CX:
•Start number 77 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster DF3:
•Start number 64 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster DF4:
•Start number 64 was manually annotated 1 time for cluster DF4.

Info for manual annotations of cluster EG:
•Start number 74 was manually annotated 1 time for cluster EG.
•Start number 86 was manually annotated 11 times for cluster EG.
•Start number 87 was manually annotated 28 times for cluster EG.

Info for manual annotations of cluster FA:
•Start number 66 was manually annotated 1 time for cluster FA.

Info for manual annotations of cluster FN:
•Start number 72 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster GD1:
•Start number 99 was manually annotated 2 times for cluster GD1.
•Start number 100 was manually annotated 1 time for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 100 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 100 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 100 was manually annotated 1 time for cluster GD4.

Info for manual annotations of cluster U:
•Start number 82 was manually annotated 4 times for cluster U.

Gene Information:

Gene: A3Wally_136 Start: 86849, Stop: 87247, Start Num: 99
Candidate Starts for A3Wally_136:
(90, 86822), (Start: 99 @86849 has 2 MA's), (Start: 100 @86858 has 5 MA's), (124, 86957),

Gene: ASerpRocky_45 Start: 46949, Stop: 46455, Start Num: 73
Candidate Starts for ASerpRocky_45:
(Start: 73 @46949 has 19 MA's), (Start: 77 @46934 has 5 MA's), (83, 46907), (104, 46841), (147, 46658), (165, 46619),

Gene: AWGoat_60 Start: 44171, Stop: 43587, Start Num: 44
Candidate Starts for AWGoat_60:
(23, 44426), (24, 44417), (32, 44318), (35, 44264), (37, 44219), (Start: 44 @44171 has 1 MA's), (54, 44129), (69, 44078), (105, 43961), (164, 43760), (180, 43682),

Gene: AbbyDaisy_89 Start: 50820, Stop: 51422, Start Num: 63
Candidate Starts for AbbyDaisy_89:
(Start: 63 @50820 has 3 MA's), (75, 50865), (115, 51009), (117, 51012), (134, 51087), (143, 51150), (169, 51285), (180, 51333),

Gene: Adgers_52 Start: 46769, Stop: 46248, Start Num: 71
Candidate Starts for Adgers_52:
(Start: 71 @46769 has 65 MA's), (80, 46733), (187, 46307),

Gene: Aikoy_106 Start: 67335, Stop: 67865, Start Num: 82
Candidate Starts for Aikoy_106:

(Start: 82 @67335 has 10 MA's), (92, 67362), (102, 67401), (108, 67422), (112, 67443), (126, 67494), (127, 67503), (130, 67512), (131, 67515), (133, 67527), (138, 67566), (139, 67569), (146, 67635), (147, 67638), (152, 67650), (153, 67653), (154, 67665), (155, 67668), (157, 67674), (161, 67686),

Gene: Altheas_59 Start: 43024, Stop: 42620, Start Num: 87
Candidate Starts for Altheas_59:
(17, 43459), (20, 43426), (22, 43411), (26, 43366), (27, 43363), (40, 43180), (51, 43120), (53, 43117), (70, 43087), (Start: 87 @43024 has 28 MA's), (111, 42937), (134, 42856), (167, 42775), (171, 42739), (189, 42670), (193, 42628),

Gene: AluminumJesus_53 Start: 41962, Stop: 41567, Start Num: 86
Candidate Starts for AluminumJesus_53:
(Start: 86 @41962 has 11 MA's), (Start: 87 @41959 has 28 MA's), (101, 41917), (111, 41875), (134, 41794),

Gene: Amore2_53 Start: 47169, Stop: 46684, Start Num: 71
Candidate Starts for Amore2_53:
(Start: 71 @47169 has 65 MA's), (189, 46731),

Gene: Anamika_49 Start: 47821, Stop: 47318, Start Num: 71
Candidate Starts for Anamika_49:
(60, 47866), (Start: 63 @47848 has 3 MA's), (Start: 71 @47821 has 65 MA's), (Start: 86 @47761 has 11 MA's), (168, 47470), (179, 47416),

Gene: Apiary_21 Start: 10881, Stop: 11363, Start Num: 73
Candidate Starts for Apiary_21:
(2, 10119), (13, 10371), (29, 10587), (Start: 56 @10830 has 3 MA's), (Start: 73 @10881 has 19 MA's), (85, 10926), (93, 10944), (103, 10980), (131, 11076), (137, 11121), (165, 11196), (172, 11241), (187, 11301),

Gene: Austin_53 Start: 47319, Stop: 46684, Start Num: 38
Candidate Starts for Austin_53:
(36, 47331), (Start: 38 @47319 has 1 MA's), (41, 47289), (52, 47232), (Start: 71 @47169 has 65 MA's), (189, 46731),

Gene: BabyDotz_57 Start: 43429, Stop: 43037, Start Num: 87
Candidate Starts for BabyDotz_57:
(69, 43498), (Start: 86 @43432 has 11 MA's), (Start: 87 @43429 has 28 MA's), (101, 43387), (111, 43345), (134, 43264), (148, 43219), (193, 43045),

Gene: BaconCheese_59 Start: 43894, Stop: 43499, Start Num: 87
Candidate Starts for BaconCheese_59:
(69, 43963), (Start: 86 @43897 has 11 MA's), (Start: 87 @43894 has 28 MA's), (134, 43732), (190, 43546), (193, 43507), (194, 43504),

Gene: Barbochs_49 Start: 46513, Stop: 45992, Start Num: 71
Candidate Starts for Barbochs_49:
(Start: 71 @46513 has 65 MA's), (80, 46477), (187, 46051),

Gene: Beaver_54 Start: 48283, Stop: 47762, Start Num: 71
Candidate Starts for Beaver_54:
(Start: 71 @48283 has 65 MA's), (80, 48247), (187, 47821),

Gene: BellaJr_83 Start: 47858, Stop: 48460, Start Num: 63
Candidate Starts for BellaJr_83:
(4, 47168), (7, 47267), (9, 47303), (11, 47330), (14, 47390), (25, 47558), (Start: 63 @47858 has 3 MA's), (75, 47903), (115, 48047), (117, 48050), (134, 48125), (143, 48188), (147, 48233), (169, 48323),

Gene: Benczkowski14_45 Start: 47238, Stop: 46744, Start Num: 73
Candidate Starts for Benczkowski14_45:
(Start: 73 @47238 has 19 MA's), (Start: 77 @47223 has 5 MA's), (83, 47196), (147, 46947), (163, 46917), (165, 46908), (171, 46866), (173, 46860),

Gene: BenoitCattle_52 Start: 47030, Stop: 46509, Start Num: 71
Candidate Starts for BenoitCattle_52:
(Start: 71 @47030 has 65 MA's), (80, 46994), (142, 46736), (187, 46568),

Gene: Berries_49 Start: 47793, Stop: 47290, Start Num: 71
Candidate Starts for Berries_49:
(60, 47838), (Start: 63 @47820 has 3 MA's), (Start: 71 @47793 has 65 MA's), (Start: 86 @47733 has 11 MA's), (168, 47442), (179, 47388),

Gene: BiPauneto_21 Start: 8586, Stop: 9044, Start Num: 67
Candidate Starts for BiPauneto_21:
(3, 7887), (20, 8232), (Start: 67 @8586 has 10 MA's), (Start: 82 @8634 has 10 MA's), (Start: 86 @8652 has 11 MA's), (95, 8667), (103, 8700), (123, 8775), (128, 8787), (171, 8916),

Gene: Bianmat_49 Start: 47833, Stop: 47330, Start Num: 71
Candidate Starts for Bianmat_49:
(60, 47878), (Start: 63 @47860 has 3 MA's), (Start: 71 @47833 has 65 MA's), (Start: 86 @47773 has 11 MA's), (168, 47482), (179, 47428),

Gene: Big4_129 Start: 85559, Stop: 86026, Start Num: 100
Candidate Starts for Big4_129:
(79, 85493), (97, 85544), (Start: 100 @85559 has 5 MA's), (109, 85589), (188, 85961),

Gene: BigShaq_51 Start: 47035, Stop: 46514, Start Num: 71
Candidate Starts for BigShaq_51:
(Start: 71 @47035 has 65 MA's), (80, 46999), (142, 46741), (187, 46573),

Gene: BillyBobJr_56 Start: 48593, Stop: 48072, Start Num: 71
Candidate Starts for BillyBobJr_56:
(Start: 71 @48593 has 65 MA's), (80, 48557), (185, 48143),

Gene: BirksAndSocks_55 Start: 48633, Stop: 48112, Start Num: 71
Candidate Starts for BirksAndSocks_55:
(Start: 71 @48633 has 65 MA's), (80, 48597), (187, 48171),

Gene: Blab_55 Start: 42584, Stop: 42189, Start Num: 86
Candidate Starts for Blab_55:
(69, 42650), (Start: 86 @42584 has 11 MA's), (Start: 87 @42581 has 28 MA's), (111, 42497), (134, 42416),

Gene: Boneham_54 Start: 48534, Stop: 48013, Start Num: 71
Candidate Starts for Boneham_54:

(Start: 71 @48534 has 65 MA's), (80, 48498), (185, 48084),

Gene: Braxoaddie_21 Start: 10869, Stop: 11351, Start Num: 73
Candidate Starts for Braxoaddie_21:
(2, 10107), (13, 10359), (29, 10575), (Start: 56 @10818 has 3 MA's), (Start: 73 @10869 has 19 MA's), (85, 10914), (93, 10932), (103, 10968), (131, 11064), (137, 11109), (165, 11184), (172, 11229), (187, 11289),

Gene: Breezic_50 Start: 46526, Stop: 46005, Start Num: 71
Candidate Starts for Breezic_50:
(Start: 71 @46526 has 65 MA's), (80, 46490), (187, 46064),

Gene: BruhMoment_73 Start: 49223, Stop: 48708, Start Num: 65
Candidate Starts for BruhMoment_73:
(Start: 65 @49223 has 2 MA's), (117, 49073), (134, 48998), (140, 48950),

Gene: Butterball_54 Start: 48539, Stop: 48018, Start Num: 71
Candidate Starts for Butterball_54:
(Start: 71 @48539 has 65 MA's), (80, 48503), (185, 48089),

Gene: Camerico_47 Start: 46654, Stop: 46154, Start Num: 64
Candidate Starts for Camerico_47:
(Start: 64 @46654 has 2 MA's), (98, 46561), (128, 46453), (129, 46450), (136, 46411), (182, 46240), (187, 46216),

Gene: Casend_57 Start: 42837, Stop: 42448, Start Num: 87
Candidate Starts for Casend_57:
(Start: 86 @42840 has 11 MA's), (Start: 87 @42837 has 28 MA's), (101, 42798), (134, 42675), (148, 42630), (193, 42456),

Gene: CathyBurgh_50 Start: 47103, Stop: 46582, Start Num: 71
Candidate Starts for CathyBurgh_50:
(Start: 71 @47103 has 65 MA's), (80, 47067), (187, 46641),

Gene: Cece_120 Start: 88234, Stop: 88626, Start Num: 100
Candidate Starts for Cece_120:
(89, 88198), (Start: 100 @88234 has 5 MA's), (135, 88387), (178, 88513),

Gene: Charianelly_49 Start: 47543, Stop: 47040, Start Num: 71
Candidate Starts for Charianelly_49:
(60, 47588), (Start: 63 @47570 has 3 MA's), (Start: 71 @47543 has 65 MA's), (Start: 86 @47483 has 11 MA's), (168, 47192), (179, 47138),

Gene: Chelms_51 Start: 47023, Stop: 46514, Start Num: 71
Candidate Starts for Chelms_51:
(Start: 71 @47023 has 65 MA's), (80, 46987), (187, 46573),

Gene: CinnamonToast_56 Start: 48593, Stop: 48072, Start Num: 71
Candidate Starts for CinnamonToast_56:
(Start: 71 @48593 has 65 MA's), (80, 48557), (185, 48143),

Gene: CoffeeBean_21 Start: 10806, Stop: 11321, Start Num: 73
Candidate Starts for CoffeeBean_21:

(2, 10044), (6, 10155), (13, 10296), (29, 10512), (Start: 56 @10755 has 3 MA's), (Start: 73 @10806 has 19 MA's), (85, 10851), (93, 10869), (103, 10905), (131, 11001), (160, 11136), (172, 11199), (187, 11259),

Gene: Commandaria_21 Start: 9793, Stop: 10248, Start Num: 67
Candidate Starts for Commandaria_21:
(1, 9061), (5, 9148), (18, 9418), (28, 9520), (Start: 67 @9793 has 10 MA's), (Start: 86 @9856 has 11 MA's), (95, 9871), (123, 9979), (171, 10120),

Gene: Crete_52 Start: 47301, Stop: 46780, Start Num: 71
Candidate Starts for Crete_52:
(Start: 71 @47301 has 65 MA's), (80, 47265), (142, 47007), (187, 46839),

Gene: Cuke_82 Start: 48535, Stop: 49002, Start Num: 82
Candidate Starts for Cuke_82:
(Start: 82 @48535 has 10 MA's), (88, 48553), (101, 48595), (102, 48598), (110, 48628), (126, 48685), (145, 48799), (152, 48817), (165, 48841), (168, 48862), (170, 48874), (171, 48883), (174, 48895), (181, 48922), (185, 48928), (187, 48940),

Gene: Dakiti_52 Start: 47891, Stop: 47382, Start Num: 71
Candidate Starts for Dakiti_52:
(Start: 71 @47891 has 65 MA's), (80, 47855), (187, 47441),

Gene: Damp_49 Start: 46707, Stop: 46204, Start Num: 71
Candidate Starts for Damp_49:
(60, 46752), (Start: 63 @46734 has 3 MA's), (Start: 71 @46707 has 65 MA's), (Start: 86 @46647 has 11 MA's), (168, 46356), (179, 46302),

Gene: Demikore_104 Start: 64612, Stop: 65076, Start Num: 82
Candidate Starts for Demikore_104:
(Start: 82 @64612 has 10 MA's), (166, 64918), (170, 64948), (171, 64957), (176, 64978), (180, 64990), (185, 65002), (186, 65005),

Gene: Demosthenes_44 Start: 46925, Stop: 46431, Start Num: 73
Candidate Starts for Demosthenes_44:
(Start: 73 @46925 has 19 MA's), (83, 46883), (104, 46817), (147, 46634), (165, 46595), (173, 46547), (187, 46490), (191, 46451),

Gene: Diabla_54 Start: 48464, Stop: 47943, Start Num: 71
Candidate Starts for Diabla_54:
(Start: 71 @48464 has 65 MA's), (80, 48428), (179, 48041), (184, 48026), (189, 47990),

Gene: Dodo_139 Start: 87192, Stop: 87590, Start Num: 99
Candidate Starts for Dodo_139:
(90, 87165), (Start: 99 @87192 has 2 MA's), (Start: 100 @87201 has 5 MA's), (124, 87300),

Gene: DonaldDuck_56 Start: 42186, Stop: 41797, Start Num: 87
Candidate Starts for DonaldDuck_56:
(Start: 86 @42189 has 11 MA's), (Start: 87 @42186 has 28 MA's), (101, 42147), (134, 42024), (148, 41979), (193, 41805),

Gene: Eggsie_49 Start: 46426, Stop: 45905, Start Num: 71
Candidate Starts for Eggsie_49:

(Start: 71 @46426 has 65 MA's), (80, 46390), (179, 46003), (189, 45952),

Gene: Ekhein_51 Start: 46231, Stop: 45710, Start Num: 71
Candidate Starts for Ekhein_51:
(Start: 71 @46231 has 65 MA's), (80, 46195), (187, 45769),

Gene: Erasmago_132 Start: 83948, Stop: 84340, Start Num: 100
Candidate Starts for Erasmago_132:
(89, 83912), (Start: 100 @83948 has 5 MA's), (109, 83978),

Gene: EverythinBagel_55 Start: 42550, Stop: 42158, Start Num: 86
Candidate Starts for EverythinBagel_55:
(Start: 86 @42550 has 11 MA's), (Start: 87 @42547 has 28 MA's), (101, 42508), (134, 42385), (148, 42340), (193, 42166),

Gene: Exiguo_50 Start: 46243, Stop: 45722, Start Num: 71
Candidate Starts for Exiguo_50:
(Start: 71 @46243 has 65 MA's), (80, 46207), (187, 45781),

Gene: FelixAlejandro_55 Start: 48737, Stop: 48216, Start Num: 71
Candidate Starts for FelixAlejandro_55:
(Start: 71 @48737 has 65 MA's), (80, 48701), (185, 48287),

Gene: Flakey_50 Start: 47107, Stop: 46586, Start Num: 71
Candidate Starts for Flakey_50:
(Start: 71 @47107 has 65 MA's), (80, 47071), (187, 46645),

Gene: Fowlmouth_83 Start: 51110, Stop: 51577, Start Num: 82
Candidate Starts for Fowlmouth_83:
(Start: 82 @51110 has 10 MA's), (102, 51173), (104, 51182), (107, 51191), (130, 51278), (139, 51335), (165, 51416), (170, 51449), (171, 51458), (174, 51470),

Gene: FrankDeliGuy_53 Start: 42165, Stop: 41773, Start Num: 87
Candidate Starts for FrankDeliGuy_53:
(Start: 74 @42216 has 1 MA's), (Start: 86 @42168 has 11 MA's), (Start: 87 @42165 has 28 MA's), (101, 42126), (111, 42084), (134, 42003), (149, 41958), (193, 41781),

Gene: Fury_26 Start: 10463, Stop: 10972, Start Num: 45
Candidate Starts for Fury_26:
(Start: 45 @10463 has 3 MA's), (Start: 86 @10580 has 11 MA's), (95, 10595), (129, 10718), (132, 10727), (171, 10844), (174, 10856),

Gene: GMA3_38 Start: 40837, Stop: 40325, Start Num: 64
Candidate Starts for GMA3_38:
(43, 40918), (61, 40849), (Start: 64 @40837 has 2 MA's), (111, 40669), (131, 40609), (186, 40390),

Gene: GMA7_42 Start: 41383, Stop: 40898, Start Num: 71
Candidate Starts for GMA7_42:
(Start: 71 @41383 has 65 MA's), (189, 40945),

Gene: GTE7_41 Start: 41414, Stop: 40929, Start Num: 71
Candidate Starts for GTE7_41:
(Start: 71 @41414 has 65 MA's), (189, 40976),

Gene: Gagieri_20 Start: 10423, Stop: 10938, Start Num: 73
Candidate Starts for Gagieri_20:
(13, 9913), (15, 9994), (29, 10129), (Start: 73 @10423 has 19 MA's), (93, 10486), (131, 10618), (133, 10630), (162, 10759), (172, 10816), (187, 10876),

Gene: GalacticEye_49 Start: 47504, Stop: 47001, Start Num: 71
Candidate Starts for GalacticEye_49:
(60, 47549), (Start: 63 @47531 has 3 MA's), (Start: 71 @47504 has 65 MA's), (Start: 86 @47444 has 11 MA's), (168, 47153), (179, 47099),

Gene: Gazebo_56 Start: 42670, Stop: 42278, Start Num: 87
Candidate Starts for Gazebo_56:
(Start: 86 @42673 has 11 MA's), (Start: 87 @42670 has 28 MA's), (101, 42628), (134, 42505), (148, 42460), (193, 42286), (194, 42283),

Gene: Gibbles_47 Start: 45170, Stop: 44748, Start Num: 77
Candidate Starts for Gibbles_47:
(Start: 77 @45170 has 5 MA's), (Start: 86 @45134 has 11 MA's), (Start: 100 @45095 has 5 MA's), (102, 45089), (106, 45074), (131, 44984), (174, 44855), (187, 44810), (193, 44756),

Gene: Gmala1_37 Start: 39458, Stop: 38919, Start Num: 55
Candidate Starts for Gmala1_37:
(50, 39467), (55, 39458), (Start: 64 @39425 has 2 MA's), (106, 39281), (111, 39257), (139, 39143), (185, 38987),

Gene: GordDuk1_37 Start: 39399, Stop: 38860, Start Num: 55
Candidate Starts for GordDuk1_37:
(50, 39408), (55, 39399), (Start: 64 @39366 has 2 MA's), (106, 39222), (111, 39198), (139, 39084), (185, 38928),

Gene: GordTnk2_37 Start: 39365, Stop: 38826, Start Num: 55
Candidate Starts for GordTnk2_37:
(50, 39374), (55, 39365), (Start: 64 @39332 has 2 MA's), (106, 39188), (111, 39164), (139, 39050), (185, 38894),

Gene: Gorko_50 Start: 46235, Stop: 45714, Start Num: 71
Candidate Starts for Gorko_50:
(Start: 71 @46235 has 65 MA's), (80, 46199), (187, 45773),

Gene: GourdThymes_50 Start: 47109, Stop: 46588, Start Num: 71
Candidate Starts for GourdThymes_50:
(Start: 71 @47109 has 65 MA's), (80, 47073), (104, 46989), (187, 46647),

Gene: Grassboy_59 Start: 43110, Stop: 42643, Start Num: 74
Candidate Starts for Grassboy_59:
(Start: 74 @43110 has 1 MA's), (Start: 86 @43062 has 11 MA's), (Start: 87 @43059 has 28 MA's), (101, 43020), (111, 42978), (134, 42897), (166, 42801), (193, 42651), (194, 42648),

Gene: Guillaume_49 Start: 47554, Stop: 47051, Start Num: 71
Candidate Starts for Guillaume_49:
(60, 47599), (Start: 63 @47581 has 3 MA's), (Start: 71 @47554 has 65 MA's), (Start: 86 @47494 has 11 MA's), (168, 47203), (179, 47149),

Gene: Hail2Pitt_48 Start: 48030, Stop: 47527, Start Num: 71
Candidate Starts for Hail2Pitt_48:
(60, 48075), (Start: 63 @48057 has 3 MA's), (Start: 71 @48030 has 65 MA's), (Start: 86 @47970 has 11 MA's), (168, 47679), (179, 47625),

Gene: Harambe_49 Start: 47821, Stop: 47318, Start Num: 71
Candidate Starts for Harambe_49:
(60, 47866), (Start: 63 @47848 has 3 MA's), (Start: 71 @47821 has 65 MA's), (Start: 86 @47761 has 11 MA's), (168, 47470), (179, 47416),

Gene: HayZem_52 Start: 47166, Stop: 46681, Start Num: 71
Candidate Starts for HayZem_52:
(Start: 71 @47166 has 65 MA's), (189, 46728),

Gene: Hello_49 Start: 47783, Stop: 47280, Start Num: 71
Candidate Starts for Hello_49:
(60, 47828), (Start: 63 @47810 has 3 MA's), (Start: 71 @47783 has 65 MA's), (Start: 86 @47723 has 11 MA's), (168, 47432), (179, 47378),

Gene: Hollow_46 Start: 47574, Stop: 47080, Start Num: 73
Candidate Starts for Hollow_46:
(Start: 73 @47574 has 19 MA's), (Start: 77 @47559 has 5 MA's), (83, 47532), (104, 47466), (147, 47283), (165, 47244), (173, 47196),

Gene: HomeFry_23 Start: 9368, Stop: 9835, Start Num: 65
Candidate Starts for HomeFry_23:
(10, 8822), (16, 8981), (19, 9017), (Start: 65 @9368 has 2 MA's), (78, 9413), (Start: 82 @9428 has 10 MA's), (Start: 86 @9443 has 11 MA's), (95, 9458), (108, 9509), (123, 9566), (129, 9581), (131, 9587), (171, 9707),

Gene: Hotorobo_50 Start: 47114, Stop: 46593, Start Num: 71
Candidate Starts for Hotorobo_50:
(Start: 71 @47114 has 65 MA's), (80, 47078), (187, 46652),

Gene: HubbaBubba_16 Start: 7112, Stop: 7570, Start Num: 67
Candidate Starts for HubbaBubba_16:
(20, 6758), (Start: 67 @7112 has 10 MA's), (Start: 82 @7160 has 10 MA's), (Start: 86 @7178 has 11 MA's), (95, 7193), (103, 7226), (123, 7301), (171, 7442), (193, 7562),

Gene: Hyperion_57 Start: 42845, Stop: 42456, Start Num: 87
Candidate Starts for Hyperion_57:
(69, 42914), (Start: 86 @42848 has 11 MA's), (Start: 87 @42845 has 28 MA's), (111, 42764), (134, 42683), (193, 42464),

Gene: IDyn_19 Start: 8503, Stop: 8961, Start Num: 67
Candidate Starts for IDyn_19:
(20, 8149), (Start: 67 @8503 has 10 MA's), (Start: 82 @8551 has 10 MA's), (Start: 86 @8569 has 11 MA's), (95, 8584), (103, 8617), (108, 8635), (123, 8692), (171, 8833),

Gene: Indlulamithi_73 Start: 51686, Stop: 52294, Start Num: 49
Candidate Starts for Indlulamithi_73:

(Start: 49 @51686 has 1 MA's), (58, 51707), (Start: 71 @51758 has 65 MA's), (Start: 82 @51800 has 10 MA's), (Start: 100 @51857 has 5 MA's), (113, 51911), (116, 51926), (119, 51947), (120, 51950), (127, 51974), (128, 51977), (166, 52136), (170, 52166), (175, 52190), (188, 52235), (193, 52286),

Gene: Jams_49 Start: 46993, Stop: 46490, Start Num: 71
Candidate Starts for Jams_49:
(60, 47038), (Start: 63 @47020 has 3 MA's), (Start: 71 @46993 has 65 MA's), (Start: 86 @46933 has 11 MA's), (168, 46642), (179, 46588),

Gene: Jehoshaphat_58 Start: 43108, Stop: 42716, Start Num: 86
Candidate Starts for Jehoshaphat_58:
(Start: 86 @43108 has 11 MA's), (Start: 87 @43105 has 28 MA's), (101, 43066), (134, 42943), (148, 42898), (193, 42724),

Gene: Jellybones_53 Start: 48215, Stop: 47694, Start Num: 71
Candidate Starts for Jellybones_53:
(Start: 71 @48215 has 65 MA's), (80, 48179), (185, 47765),

Gene: John316_54 Start: 48272, Stop: 47751, Start Num: 71
Candidate Starts for John316_54:
(Start: 71 @48272 has 65 MA's), (80, 48236), (187, 47810),

Gene: Jormungandr_49 Start: 47536, Stop: 47033, Start Num: 71
Candidate Starts for Jormungandr_49:
(60, 47581), (Start: 63 @47563 has 3 MA's), (Start: 71 @47536 has 65 MA's), (Start: 86 @47476 has 11 MA's), (168, 47185), (179, 47131),

Gene: Judebell_58 Start: 42554, Stop: 42165, Start Num: 87
Candidate Starts for Judebell_58:
(Start: 74 @42605 has 1 MA's), (Start: 86 @42557 has 11 MA's), (Start: 87 @42554 has 28 MA's), (101, 42515), (111, 42473), (134, 42392), (148, 42347), (193, 42173),

Gene: Jumbo_42 Start: 45467, Stop: 44925, Start Num: 64
Candidate Starts for Jumbo_42:
(42, 45563), (46, 45521), (51, 45509), (57, 45494), (Start: 64 @45467 has 2 MA's), (91, 45380), (131, 45239), (133, 45227), (150, 45140), (168, 45095), (170, 45083), (177, 45050), (186, 44993),

Gene: Kampe_49 Start: 45153, Stop: 44731, Start Num: 77
Candidate Starts for Kampe_49:
(Start: 77 @45153 has 5 MA's), (Start: 86 @45117 has 11 MA's), (Start: 100 @45078 has 5 MA's), (102, 45072), (106, 45057), (131, 44967), (187, 44793),

Gene: Kaseim_49 Start: 46978, Stop: 46475, Start Num: 71
Candidate Starts for Kaseim_49:
(60, 47023), (Start: 63 @47005 has 3 MA's), (Start: 71 @46978 has 65 MA's), (Start: 86 @46918 has 11 MA's), (168, 46627), (179, 46573),

Gene: Katyusha_45 Start: 47238, Stop: 46744, Start Num: 73
Candidate Starts for Katyusha_45:
(Start: 73 @47238 has 19 MA's), (Start: 77 @47223 has 5 MA's), (83, 47196), (147, 46947), (163, 46917), (165, 46908), (171, 46866), (173, 46860),

Gene: Kelzog_52 Start: 47121, Stop: 46600, Start Num: 71

Candidate Starts for Kelzog_52:
(Start: 71 @47121 has 65 MA's), (80, 47085), (187, 46659),

Gene: Kvothe_45 Start: 47137, Stop: 46643, Start Num: 73
Candidate Starts for Kvothe_45:
(Start: 73 @47137 has 19 MA's), (Start: 77 @47122 has 5 MA's), (83, 47095), (163, 46816), (165, 46807), (171, 46765), (173, 46759),

Gene: Kyva_59 Start: 43089, Stop: 42700, Start Num: 87
Candidate Starts for Kyva_59:
(20, 43476), (40, 43245), (51, 43185), (53, 43182), (70, 43152), (Start: 86 @43092 has 11 MA's), (Start: 87 @43089 has 28 MA's), (134, 42927), (148, 42882), (193, 42708), (194, 42705),

Gene: Labelle_102 Start: 64800, Stop: 65264, Start Num: 82
Candidate Starts for Labelle_102:
(Start: 82 @64800 has 10 MA's), (166, 65106), (170, 65136), (171, 65145), (176, 65166), (185, 65190), (186, 65193),

Gene: Lahirium_49 Start: 48058, Stop: 47555, Start Num: 71
Candidate Starts for Lahirium_49:
(60, 48103), (Start: 63 @48085 has 3 MA's), (Start: 71 @48058 has 65 MA's), (Start: 86 @47998 has 11 MA's), (168, 47707), (179, 47653),

Gene: Leopard_104 Start: 67266, Stop: 67778, Start Num: 82
Candidate Starts for Leopard_104:
(Start: 82 @67266 has 10 MA's), (92, 67293), (112, 67374), (126, 67425), (127, 67434), (130, 67443), (131, 67446), (138, 67497), (139, 67500), (146, 67566), (147, 67569), (152, 67581), (155, 67584), (157, 67590), (161, 67599),

Gene: Lidong_49 Start: 47793, Stop: 47290, Start Num: 71
Candidate Starts for Lidong_49:
(60, 47838), (Start: 63 @47820 has 3 MA's), (Start: 71 @47793 has 65 MA's), (Start: 86 @47733 has 11 MA's), (168, 47442), (179, 47388),

Gene: LilCahh_55 Start: 42178, Stop: 41786, Start Num: 86
Candidate Starts for LilCahh_55:
(Start: 86 @42178 has 11 MA's), (Start: 87 @42175 has 28 MA's), (101, 42136), (134, 42013), (148, 41968), (193, 41794),

Gene: Linetti_52 Start: 48032, Stop: 47523, Start Num: 71
Candidate Starts for Linetti_52:
(Start: 71 @48032 has 65 MA's), (80, 47996), (187, 47582),

Gene: Lizzo_50 Start: 47103, Stop: 46582, Start Num: 71
Candidate Starts for Lizzo_50:
(Start: 71 @47103 has 65 MA's), (80, 47067), (187, 46641),

Gene: Llemily_56 Start: 41881, Stop: 41492, Start Num: 87
Candidate Starts for Llemily_56:
(Start: 86 @41884 has 11 MA's), (Start: 87 @41881 has 28 MA's), (101, 41842), (134, 41719), (148, 41674), (193, 41500),

Gene: Lonelysoil_55 Start: 42037, Stop: 41648, Start Num: 87

Candidate Starts for Lonelysoil_55:
(Start: 74 @42088 has 1 MA's), (Start: 86 @42040 has 11 MA's), (Start: 87 @42037 has 28 MA's), (101, 41998), (111, 41956), (134, 41875), (148, 41830), (193, 41656),

Gene: Luker_50 Start: 48011, Stop: 47508, Start Num: 71
Candidate Starts for Luker_50:
(60, 48056), (Start: 63 @48038 has 3 MA's), (Start: 71 @48011 has 65 MA's), (Start: 86 @47951 has 11 MA's), (168, 47660), (179, 47606),

Gene: MacGully_24 Start: 10356, Stop: 10865, Start Num: 73
Candidate Starts for MacGully_24:
(6, 9750), (29, 10098), (31, 10137), (Start: 73 @10356 has 19 MA's), (131, 10551), (158, 10677), (167, 10704), (181, 10785), (189, 10815),

Gene: Madruga_101 Start: 64424, Stop: 64888, Start Num: 82
Candidate Starts for Madruga_101:
(Start: 82 @64424 has 10 MA's), (166, 64730), (170, 64760), (171, 64769), (176, 64790), (180, 64802), (185, 64814), (186, 64817),

Gene: Marietta_20 Start: 8429, Stop: 8887, Start Num: 67
Candidate Starts for Marietta_20:
(20, 8075), (Start: 67 @8429 has 10 MA's), (Start: 82 @8477 has 10 MA's), (Start: 86 @8495 has 11 MA's), (95, 8510), (103, 8543), (108, 8561), (123, 8618), (193, 8879),

Gene: Maselop_21 Start: 10882, Stop: 11397, Start Num: 73
Candidate Starts for Maselop_21:
(2, 10120), (13, 10372), (29, 10588), (Start: 56 @10831 has 3 MA's), (Start: 73 @10882 has 19 MA's), (85, 10927), (93, 10945), (103, 10981), (131, 11077), (160, 11212), (172, 11275), (187, 11335),

Gene: Mashley_56 Start: 42624, Stop: 42232, Start Num: 87
Candidate Starts for Mashley_56:
(39, 42828), (69, 42693), (Start: 86 @42627 has 11 MA's), (Start: 87 @42624 has 28 MA's), (101, 42582), (111, 42540), (134, 42459), (148, 42414), (193, 42240),

Gene: Mentos_59 Start: 43855, Stop: 43466, Start Num: 87
Candidate Starts for Mentos_59:
(20, 44245), (21, 44242), (40, 44011), (51, 43951), (53, 43948), (70, 43918), (Start: 86 @43858 has 11 MA's), (Start: 87 @43855 has 28 MA's), (134, 43693), (190, 43513), (193, 43474),

Gene: Mila11_60 Start: 44083, Stop: 43688, Start Num: 87
Candidate Starts for Mila11_60:
(69, 44152), (Start: 86 @44086 has 11 MA's), (Start: 87 @44083 has 28 MA's), (134, 43921), (190, 43735), (193, 43696), (194, 43693),

Gene: Minos_50 Start: 47535, Stop: 47032, Start Num: 71
Candidate Starts for Minos_50:
(60, 47580), (Start: 63 @47562 has 3 MA's), (Start: 71 @47535 has 65 MA's), (Start: 86 @47475 has 11 MA's), (168, 47184), (179, 47130),

Gene: Monty_49 Start: 46253, Stop: 45732, Start Num: 71
Candidate Starts for Monty_49:
(Start: 71 @46253 has 65 MA's), (80, 46217), (187, 45791),

Gene: MorillMayhem_58 Start: 42963, Stop: 42565, Start Num: 86
Candidate Starts for MorillMayhem_58:
(69, 43029), (Start: 86 @42963 has 11 MA's), (Start: 87 @42960 has 28 MA's), (134, 42798), (190, 42612), (193, 42573), (194, 42570),

Gene: MrMiyagi_81 Start: 51354, Stop: 51842, Start Num: 82
Candidate Starts for MrMiyagi_81:
(76, 51333), (Start: 82 @51354 has 10 MA's), (88, 51372), (110, 51447), (118, 51495), (126, 51525), (133, 51558), (151, 51654), (152, 51657), (156, 51660), (170, 51714), (174, 51735),

Gene: MrWormie_49 Start: 46696, Stop: 46193, Start Num: 71
Candidate Starts for MrWormie_49:
(60, 46741), (Start: 63 @46723 has 3 MA's), (Start: 71 @46696 has 65 MA's), (Start: 86 @46636 has 11 MA's), (168, 46345), (179, 46291),

Gene: Msay19_55 Start: 48726, Stop: 48205, Start Num: 71
Candidate Starts for Msay19_55:
(Start: 71 @48726 has 65 MA's), (80, 48690), (185, 48276),

Gene: NadineRae_18 Start: 7679, Stop: 8137, Start Num: 67
Candidate Starts for NadineRae_18:
(20, 7325), (Start: 67 @7679 has 10 MA's), (Start: 82 @7727 has 10 MA's), (Start: 86 @7745 has 11 MA's), (95, 7760), (103, 7793), (108, 7811), (123, 7868), (130, 7886), (171, 8009), (193, 8129),

Gene: Namago_57 Start: 42027, Stop: 41638, Start Num: 87
Candidate Starts for Namago_57:
(Start: 74 @42078 has 1 MA's), (Start: 86 @42030 has 11 MA's), (Start: 87 @42027 has 28 MA's), (101, 41988), (111, 41946), (134, 41865), (148, 41820), (193, 41646), (194, 41643),

Gene: Neoevie_49 Start: 47797, Stop: 47294, Start Num: 71
Candidate Starts for Neoevie_49:
(60, 47842), (Start: 63 @47824 has 3 MA's), (Start: 71 @47797 has 65 MA's), (Start: 86 @47737 has 11 MA's), (168, 47446), (179, 47392),

Gene: Newt_50 Start: 48025, Stop: 47522, Start Num: 71
Candidate Starts for Newt_50:
(60, 48070), (Start: 63 @48052 has 3 MA's), (Start: 71 @48025 has 65 MA's), (Start: 86 @47965 has 11 MA's), (168, 47674), (179, 47620),

Gene: Niagara_45 Start: 47216, Stop: 46722, Start Num: 73
Candidate Starts for Niagara_45:
(Start: 73 @47216 has 19 MA's), (Start: 77 @47201 has 5 MA's), (83, 47174), (163, 46895), (165, 46886), (171, 46844), (173, 46838),

Gene: NidoQ_45 Start: 31660, Stop: 32259, Start Num: 66
Candidate Starts for NidoQ_45:
(8, 31066), (12, 31138), (30, 31390), (33, 31423), (34, 31468), (47, 31597), (Start: 66 @31660 has 1 MA's), (114, 31843), (130, 31912), (159, 32080), (181, 32182), (189, 32212),

Gene: Nikan_79 Start: 49613, Stop: 49059, Start Num: 63
Candidate Starts for Nikan_79:
(48, 49658), (Start: 63 @49613 has 3 MA's), (113, 49439), (117, 49424), (125, 49397), (131, 49370), (140, 49301),

Gene: Nike_59 Start: 43351, Stop: 42950, Start Num: 86
Candidate Starts for Nike_59:
(Start: 86 @43351 has 11 MA's), (Start: 87 @43348 has 28 MA's), (94, 43336), (111, 43264), (134, 43183), (171, 43069), (193, 42958),

Gene: Nimi13_49 Start: 47544, Stop: 47041, Start Num: 71
Candidate Starts for Nimi13_49:
(60, 47589), (Start: 63 @47571 has 3 MA's), (Start: 71 @47544 has 65 MA's), (Start: 86 @47484 has 11 MA's), (168, 47193), (179, 47139),

Gene: Ollypop_78 Start: 50399, Stop: 49848, Start Num: 63
Candidate Starts for Ollypop_78:
(Start: 63 @50399 has 3 MA's), (131, 50156), (134, 50135), (140, 50087), (143, 50072), (164, 50021), (183, 49934),

Gene: Onyinye_105 Start: 67128, Stop: 67658, Start Num: 82
Candidate Starts for Onyinye_105:
(Start: 82 @67128 has 10 MA's), (92, 67155), (102, 67194), (108, 67215), (112, 67236), (126, 67287), (127, 67296), (130, 67305), (131, 67308), (133, 67320), (138, 67359), (139, 67362), (146, 67428), (147, 67431), (152, 67443), (153, 67446), (154, 67458), (155, 67461), (157, 67467), (161, 67479),

Gene: Orchid_48 Start: 45154, Stop: 44732, Start Num: 77
Candidate Starts for Orchid_48:
(Start: 77 @45154 has 5 MA's), (Start: 86 @45118 has 11 MA's), (Start: 100 @45079 has 5 MA's), (102, 45073), (106, 45058), (131, 44968), (187, 44794),

Gene: Patience_103 Start: 65328, Stop: 65792, Start Num: 82
Candidate Starts for Patience_103:
(Start: 82 @65328 has 10 MA's), (166, 65634), (170, 65664), (171, 65673), (176, 65694), (180, 65706), (185, 65718), (186, 65721),

Gene: PatrickStar_49 Start: 45153, Stop: 44731, Start Num: 77
Candidate Starts for PatrickStar_49:
(Start: 77 @45153 has 5 MA's), (Start: 86 @45117 has 11 MA's), (Start: 100 @45078 has 5 MA's), (102, 45072), (106, 45057), (131, 44967), (187, 44793),

Gene: PauloDiaboli_140 Start: 86201, Stop: 86590, Start Num: 100
Candidate Starts for PauloDiaboli_140:
(90, 86165), (98, 86189), (Start: 99 @86192 has 2 MA's), (Start: 100 @86201 has 5 MA's), (124, 86300),

Gene: Pemberton_21 Start: 8397, Stop: 8855, Start Num: 67
Candidate Starts for Pemberton_21:
(20, 8043), (Start: 67 @8397 has 10 MA's), (Start: 82 @8445 has 10 MA's), (Start: 86 @8463 has 11 MA's), (95, 8478), (103, 8511), (123, 8586), (171, 8727),

Gene: Phabia_56 Start: 42299, Stop: 41907, Start Num: 86
Candidate Starts for Phabia_56:
(Start: 86 @42299 has 11 MA's), (Start: 87 @42296 has 28 MA's), (101, 42257), (134, 42134), (148, 42089), (193, 41915),

Gene: Philon9_47 Start: 48247, Stop: 47753, Start Num: 73

Candidate Starts for Philon9_47:
(Start: 73 @48247 has 19 MA's), (88, 48193), (104, 48139), (133, 48037), (165, 47917),

Gene: PierreThree_51 Start: 47781, Stop: 47260, Start Num: 71
Candidate Starts for PierreThree_51:
(Start: 71 @47781 has 65 MA's), (80, 47745), (142, 47487), (187, 47319),

Gene: Pleakley_26 Start: 10464, Stop: 10973, Start Num: 45
Candidate Starts for Pleakley_26:
(Start: 45 @10464 has 3 MA's), (Start: 86 @10581 has 11 MA's), (95, 10596), (129, 10719), (132, 10728), (171, 10845), (174, 10857),

Gene: PokyPuppy_50 Start: 47715, Stop: 47209, Start Num: 71
Candidate Starts for PokyPuppy_50:
(Start: 71 @47715 has 65 MA's), (80, 47679), (104, 47595), (187, 47268), (189, 47256),

Gene: Poland_55 Start: 48705, Stop: 48184, Start Num: 71
Candidate Starts for Poland_55:
(Start: 71 @48705 has 65 MA's), (80, 48669), (185, 48255),

Gene: Polyyuki_21 Start: 10892, Stop: 11374, Start Num: 73
Candidate Starts for Polyyuki_21:
(2, 10130), (13, 10382), (29, 10598), (Start: 56 @10841 has 3 MA's), (Start: 73 @10892 has 19 MA's), (85, 10937), (93, 10955), (103, 10991), (131, 11087), (137, 11132), (165, 11207), (172, 11252), (187, 11312),

Gene: Pumpernickel_133 Start: 86998, Stop: 87462, Start Num: 100
Candidate Starts for Pumpernickel_133:
(89, 86962), (Start: 100 @86998 has 5 MA's),

Gene: Quammi_54 Start: 41996, Stop: 41607, Start Num: 87
Candidate Starts for Quammi_54:
(Start: 86 @41999 has 11 MA's), (Start: 87 @41996 has 28 MA's), (101, 41957), (134, 41834), (148, 41789), (193, 41615),

Gene: Raqqa_87 Start: 48508, Stop: 49080, Start Num: 72
Candidate Starts for Raqqa_87:
(Start: 72 @48508 has 2 MA's), (115, 48667), (117, 48670), (134, 48745), (140, 48793),

Gene: RemRem_51 Start: 46243, Stop: 45722, Start Num: 71
Candidate Starts for RemRem_51:
(Start: 71 @46243 has 65 MA's), (80, 46207), (187, 45781),

Gene: Rizwana_63 Start: 46128, Stop: 45559, Start Num: 56
Candidate Starts for Rizwana_63:
(Start: 56 @46128 has 3 MA's), (102, 46002), (107, 45984), (117, 45939), (122, 45918), (170, 45690), (172, 45678),

Gene: RobinSparkles_52 Start: 45706, Stop: 45284, Start Num: 77
Candidate Starts for RobinSparkles_52:
(Start: 77 @45706 has 5 MA's), (Start: 86 @45670 has 11 MA's), (Start: 100 @45631 has 5 MA's), (102, 45625), (106, 45610), (131, 45520), (187, 45346),

Gene: Rowlf_53 Start: 41900, Stop: 41508, Start Num: 87
Candidate Starts for Rowlf_53:
(69, 41969), (Start: 86 @41903 has 11 MA's), (Start: 87 @41900 has 28 MA's), (101, 41858), (134, 41735), (190, 41555), (193, 41516),

Gene: RoyalG_51 Start: 47075, Stop: 46554, Start Num: 71
Candidate Starts for RoyalG_51:
(Start: 71 @47075 has 65 MA's), (80, 47039), (179, 46652), (184, 46637), (189, 46601),

Gene: Rudy_54 Start: 42035, Stop: 41643, Start Num: 86
Candidate Starts for Rudy_54:
(Start: 86 @42035 has 11 MA's), (Start: 87 @42032 has 28 MA's), (101, 41993), (134, 41870), (148, 41825), (193, 41651),

Gene: SallyK_58 Start: 43182, Stop: 42760, Start Num: 86
Candidate Starts for SallyK_58:
(Start: 86 @43182 has 11 MA's), (Start: 87 @43179 has 28 MA's), (101, 43137), (111, 43095), (134, 43014), (166, 42918), (193, 42768),

Gene: Sam12_50 Start: 46243, Stop: 45722, Start Num: 71
Candidate Starts for Sam12_50:
(Start: 71 @46243 has 65 MA's), (80, 46207), (187, 45781),

Gene: Scuba_26 Start: 10550, Stop: 11059, Start Num: 45
Candidate Starts for Scuba_26:
(Start: 45 @10550 has 3 MA's), (Start: 86 @10667 has 11 MA's), (95, 10682), (96, 10685), (129, 10805), (132, 10814), (171, 10931), (174, 10943), (176, 10952),

Gene: Shelley_49 Start: 47020, Stop: 46517, Start Num: 71
Candidate Starts for Shelley_49:
(60, 47065), (Start: 63 @47047 has 3 MA's), (Start: 71 @47020 has 65 MA's), (Start: 86 @46960 has 11 MA's), (168, 46669), (179, 46615),

Gene: Sillytadpoles_57 Start: 41869, Stop: 41480, Start Num: 87
Candidate Starts for Sillytadpoles_57:
(Start: 86 @41872 has 11 MA's), (Start: 87 @41869 has 28 MA's), (101, 41830), (134, 41707), (148, 41662), (193, 41488),

Gene: SlySloth_58 Start: 42544, Stop: 42152, Start Num: 87
Candidate Starts for SlySloth_58:
(Start: 86 @42547 has 11 MA's), (Start: 87 @42544 has 28 MA's), (101, 42502), (111, 42460), (134, 42379), (148, 42334), (193, 42160),

Gene: Sombrero_51 Start: 46616, Stop: 46095, Start Num: 71
Candidate Starts for Sombrero_51:
(Start: 71 @46616 has 65 MA's), (80, 46580), (185, 46166),

Gene: Squash_61 Start: 43540, Stop: 43148, Start Num: 87
Candidate Starts for Squash_61:
(69, 43609), (Start: 86 @43543 has 11 MA's), (Start: 87 @43540 has 28 MA's), (101, 43498), (111, 43456), (134, 43375), (148, 43330),

Gene: Squibbles_50 Start: 47106, Stop: 46585, Start Num: 71

Candidate Starts for Squibbles_50:
(Start: 71 @47106 has 65 MA's), (187, 46644),

Gene: Statler_58 Start: 42622, Stop: 42227, Start Num: 86
Candidate Starts for Statler_58:
(69, 42688), (Start: 86 @42622 has 11 MA's), (Start: 87 @42619 has 28 MA's), (101, 42577), (111, 42535), (134, 42454), (148, 42409), (193, 42235),

Gene: SteveFrench_50 Start: 47315, Stop: 46794, Start Num: 71
Candidate Starts for SteveFrench_50:
(Start: 71 @47315 has 65 MA's), (80, 47279), (179, 46892), (184, 46877), (189, 46841),

Gene: Sticker17_49 Start: 47535, Stop: 47032, Start Num: 71
Candidate Starts for Sticker17_49:
(60, 47580), (Start: 63 @47562 has 3 MA's), (Start: 71 @47535 has 65 MA's), (Start: 86 @47475 has 11 MA's), (168, 47184), (179, 47130),

Gene: StrawberryJamm_60 Start: 42333, Stop: 41941, Start Num: 87
Candidate Starts for StrawberryJamm_60:
(Start: 86 @42336 has 11 MA's), (Start: 87 @42333 has 28 MA's), (101, 42291), (111, 42249), (134, 42168), (148, 42123), (193, 41949), (194, 41946),

Gene: Sukkupi_20 Start: 8477, Stop: 8935, Start Num: 67
Candidate Starts for Sukkupi_20:
(3, 7778), (20, 8123), (Start: 67 @8477 has 10 MA's), (Start: 82 @8525 has 10 MA's), (Start: 86 @8543 has 11 MA's), (95, 8558), (103, 8591), (123, 8666), (128, 8678), (171, 8807),

Gene: SuperSonics_102 Start: 64383, Stop: 64847, Start Num: 82
Candidate Starts for SuperSonics_102:
(Start: 82 @64383 has 10 MA's), (166, 64689), (170, 64719), (171, 64728), (176, 64749), (185, 64773), (186, 64776),

Gene: Tank_63 Start: 46124, Stop: 45591, Start Num: 56
Candidate Starts for Tank_63:
(Start: 56 @46124 has 3 MA's), (170, 45722), (180, 45680),

Gene: Teal_49 Start: 48002, Stop: 47499, Start Num: 71
Candidate Starts for Teal_49:
(60, 48047), (Start: 63 @48029 has 3 MA's), (Start: 71 @48002 has 65 MA's), (Start: 86 @47942 has 11 MA's), (168, 47651), (179, 47597),

Gene: Teatealatte_46 Start: 47140, Stop: 46646, Start Num: 73
Candidate Starts for Teatealatte_46:
(Start: 73 @47140 has 19 MA's), (Start: 77 @47125 has 5 MA's), (83, 47098), (163, 46819), (165, 46810), (171, 46768), (173, 46762),

Gene: Teech_46 Start: 46941, Stop: 46447, Start Num: 73
Candidate Starts for Teech_46:
(Start: 73 @46941 has 19 MA's), (Start: 77 @46926 has 5 MA's), (83, 46899), (163, 46620), (165, 46611), (171, 46569), (173, 46563),

Gene: Teehee_57 Start: 43102, Stop: 42713, Start Num: 87
Candidate Starts for Teehee_57:

(Start: 86 @43105 has 11 MA's), (Start: 87 @43102 has 28 MA's), (101, 43063), (134, 42940), (148, 42895), (193, 42721),

Gene: ThayneTheZag_92 Start: 49112, Stop: 49648, Start Num: 72
Candidate Starts for ThayneTheZag_92:
(25, 48812), (Start: 72 @49112 has 2 MA's), (121, 49262), (133, 49307), (134, 49316), (140, 49364), (167, 49487), (169, 49511),

Gene: Tissue_58 Start: 42946, Stop: 42539, Start Num: 87
Candidate Starts for Tissue_58:
(20, 43333), (21, 43330), (40, 43102), (51, 43042), (53, 43039), (70, 43009), (Start: 86 @42949 has 11 MA's), (Start: 87 @42946 has 28 MA's), (134, 42784), (193, 42547), (194, 42544),

Gene: Tredge_46 Start: 47140, Stop: 46646, Start Num: 73
Candidate Starts for Tredge_46:
(Start: 73 @47140 has 19 MA's), (Start: 77 @47125 has 5 MA's), (83, 47098), (163, 46819), (165, 46810), (171, 46768), (173, 46762),

Gene: Viceroy_55 Start: 42002, Stop: 41613, Start Num: 87
Candidate Starts for Viceroy_55:
(Start: 86 @42005 has 11 MA's), (Start: 87 @42002 has 28 MA's), (101, 41963), (134, 41840), (148, 41795), (193, 41621),

Gene: Vitaenoii_47 Start: 48246, Stop: 47752, Start Num: 73
Candidate Starts for Vitaenoii_47:
(Start: 73 @48246 has 19 MA's), (88, 48192), (104, 48138), (133, 48036), (165, 47916),

Gene: Wayne3_58 Start: 42865, Stop: 42476, Start Num: 87
Candidate Starts for Wayne3_58:
(Start: 86 @42868 has 11 MA's), (Start: 87 @42865 has 28 MA's), (101, 42826), (134, 42703), (148, 42658), (193, 42484),

Gene: WheelerS25_64 Start: 44030, Stop: 43635, Start Num: 86
Candidate Starts for WheelerS25_64:
(Start: 86 @44030 has 11 MA's), (Start: 87 @44027 has 28 MA's), (101, 43985), (134, 43862), (190, 43682), (193, 43643),

Gene: Wheelie_56 Start: 42186, Stop: 41797, Start Num: 87
Candidate Starts for Wheelie_56:
(Start: 86 @42189 has 11 MA's), (Start: 87 @42186 has 28 MA's), (101, 42147), (134, 42024), (148, 41979), (193, 41805),

Gene: WhoseManz_20 Start: 8040, Stop: 8498, Start Num: 67
Candidate Starts for WhoseManz_20:
(20, 7686), (Start: 67 @8040 has 10 MA's), (Start: 82 @8088 has 10 MA's), (Start: 86 @8106 has 11 MA's), (95, 8121), (103, 8154), (108, 8172), (123, 8229), (193, 8490),

Gene: Wilde_65 Start: 46423, Stop: 45890, Start Num: 56
Candidate Starts for Wilde_65:
(Start: 56 @46423 has 3 MA's), (170, 46021), (180, 45979),

Gene: Woes_49 Start: 48053, Stop: 47550, Start Num: 71
Candidate Starts for Woes_49:

(60, 48098), (Start: 63 @48080 has 3 MA's), (Start: 71 @48053 has 65 MA's), (Start: 86 @47993 has 11 MA's), (168, 47702), (179, 47648),

Gene: Wollypog_81 Start: 56236, Stop: 56814, Start Num: 68
Candidate Starts for Wollypog_81:
(59, 56194), (62, 56209), (Start: 68 @56236 has 1 MA's), (81, 56284), (84, 56296), (Start: 100 @56350 has 5 MA's), (128, 56476), (132, 56488), (144, 56560), (155, 56605), (169, 56668), (170, 56674), (187, 56752), (192, 56791),

Gene: Worcestershire_50 Start: 46245, Stop: 45724, Start Num: 71
Candidate Starts for Worcestershire_50:
(Start: 71 @46245 has 65 MA's), (80, 46209), (104, 46125), (187, 45783),

Gene: Yndexa_20 Start: 8477, Stop: 8935, Start Num: 67
Candidate Starts for Yndexa_20:
(3, 7778), (20, 8123), (Start: 67 @8477 has 10 MA's), (Start: 82 @8525 has 10 MA's), (Start: 86 @8543 has 11 MA's), (95, 8558), (103, 8591), (123, 8666), (128, 8678), (171, 8807),

Gene: Zagie_57 Start: 42527, Stop: 42138, Start Num: 87
Candidate Starts for Zagie_57:
(Start: 74 @42578 has 1 MA's), (Start: 86 @42530 has 11 MA's), (Start: 87 @42527 has 28 MA's), (101, 42488), (111, 42446), (134, 42365), (148, 42320), (193, 42146),

Gene: ZestyBestie_54 Start: 42160, Stop: 41768, Start Num: 87
Candidate Starts for ZestyBestie_54:
(Start: 74 @42211 has 1 MA's), (Start: 86 @42163 has 11 MA's), (Start: 87 @42160 has 28 MA's), (101, 42121), (111, 42079), (134, 41998), (149, 41953), (193, 41776),

Gene: Zhafia_59 Start: 42666, Stop: 42277, Start Num: 87
Candidate Starts for Zhafia_59:
(Start: 86 @42669 has 11 MA's), (Start: 87 @42666 has 28 MA's), (101, 42627), (134, 42504), (148, 42459), (193, 42285),

Gene: Zooman_120 Start: 82979, Stop: 83374, Start Num: 100
Candidate Starts for Zooman_120:
(89, 82943), (Start: 100 @82979 has 5 MA's), (109, 83009), (141, 83171), (178, 83261),

Gene: Zucker_85 Start: 49487, Stop: 49963, Start Num: 72
Candidate Starts for Zucker_85:
(25, 49187), (Start: 72 @49487 has 2 MA's), (133, 49670), (134, 49679), (180, 49874),