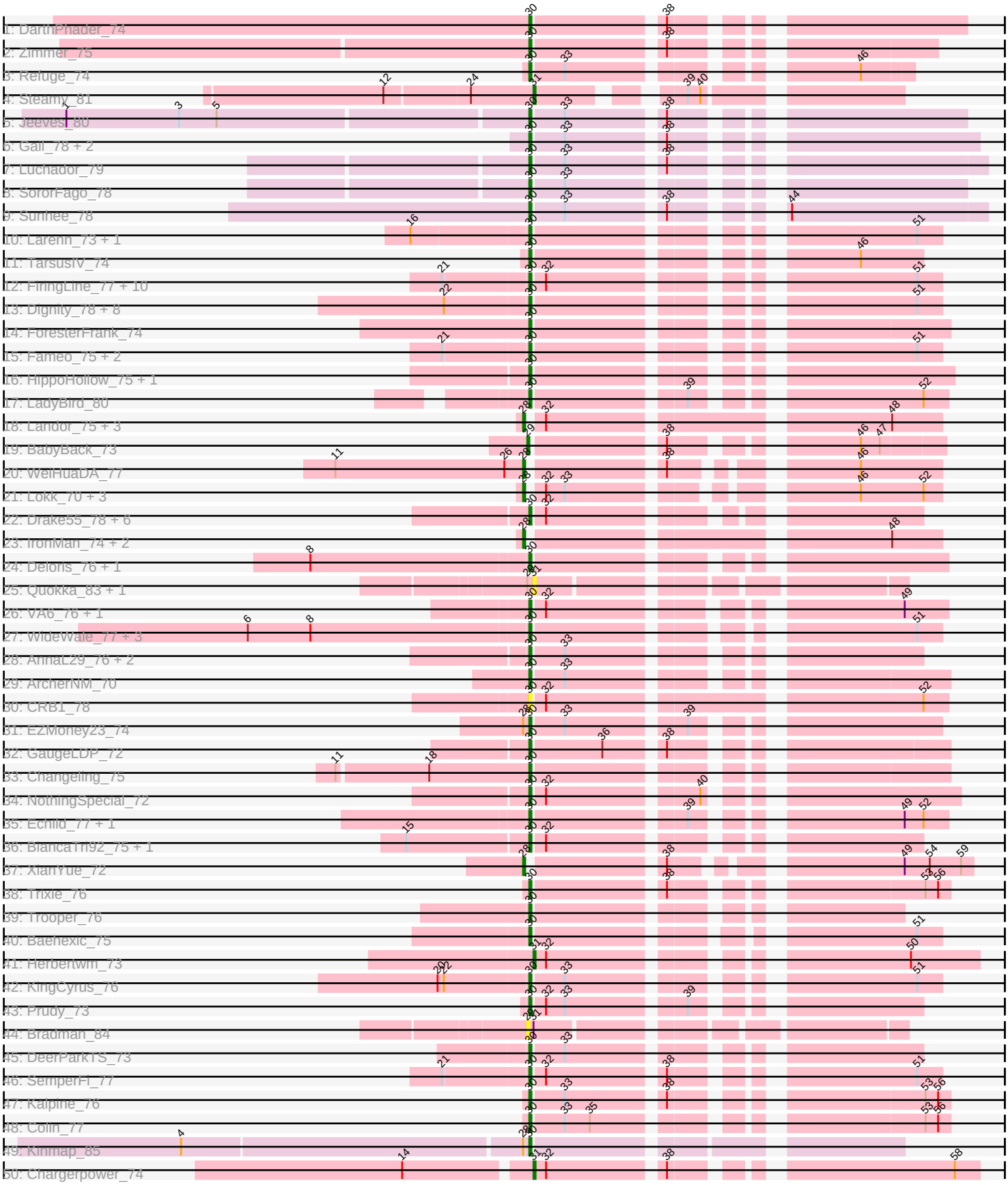
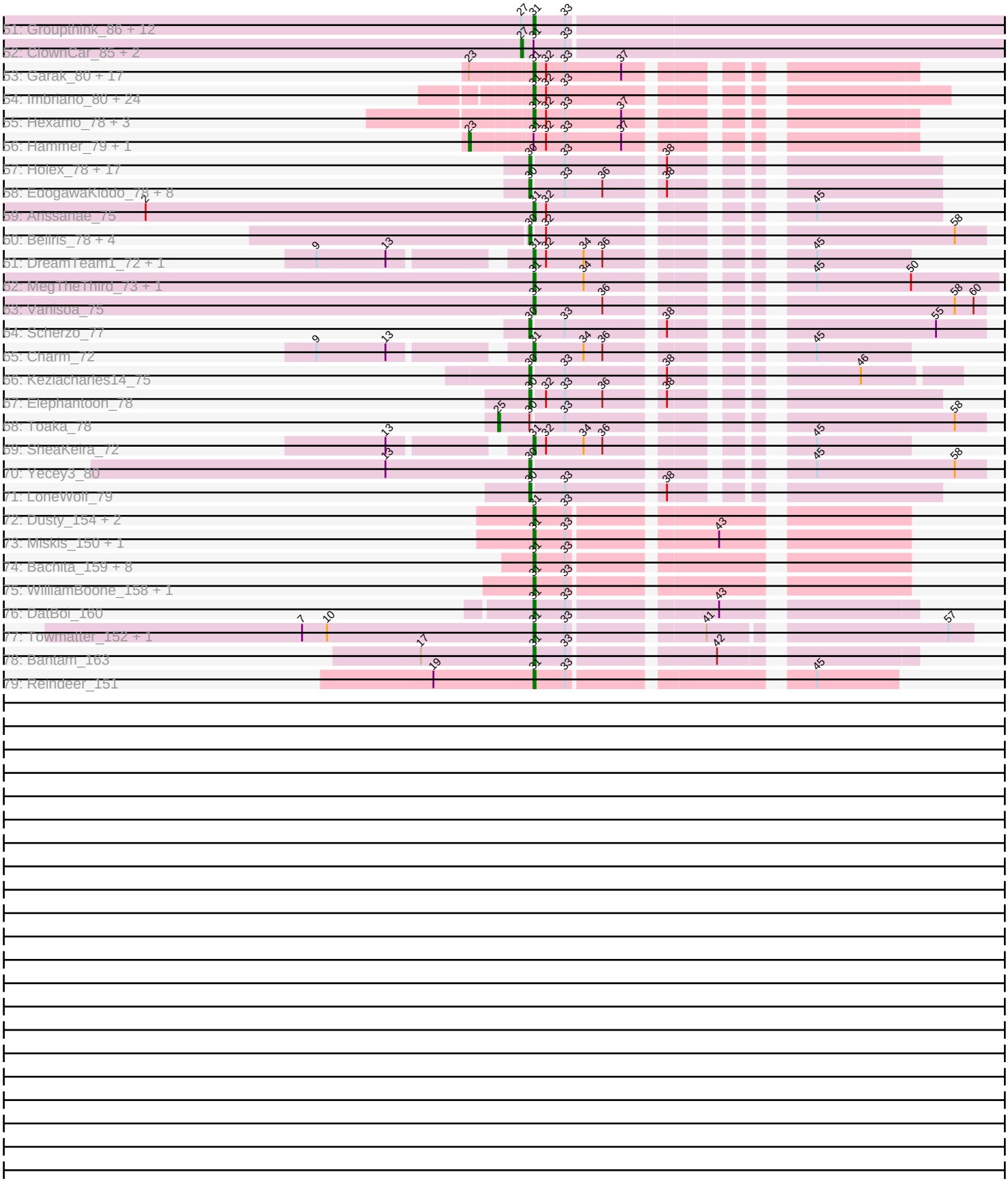
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1: DarthPhader_74
2: Zimmer_75
3: Refuge_74
4: Steamy_81
5: Jeeves_80
6: Gail_78 + 2
7: Luchador_79
8: SororFago_78
9: Sunnee_78
10: Larenn_73 + 1
11: TarsusIV_74
12: FiringLine_77 + 10
13: Dignity_78 + 8
14: ForesterFrank_74
15: Fameo_75 + 2
16: HippoHollow_75 + 1
17: LadyBird_80
18: Landor_75 + 3
19: BabyBack_73
20: WeiHuaDA_77
21: Lokk_70 + 3
22: Drake55_78 + 6
23: IronMan_74 + 2
24: Deloris_76 + 1
25: Quokka_83 + 1
26: VA6_76 + 1
27: WideWale_77 + 3
28: AnnaL29_76 + 2
29: ArcherNM_70
30: CRB1_78
31: EZMoney23_74
32: GaugeLDP_72
33: Changeling_75
34: NothingSpecial_72
35: Echild_77 + 1
36: BiancaTM92_75 + 1
37: XianYue_72
38: Trixie_76
39: Trooper_76
40: Baehexic_75
41: Herbertwm_73
42: KingCyrus_76
43: Prudy_73
44: Bradman_84
45: DeerParkTS_73
46: SemperFI_77
47: Kalpine_76
48: Colin_77
49: Kinmap_85
50: Chargerpower_74

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51: Groupthink_86 + 12
52: ClownCar_85 + 2
53: Garak_80 + 17
54: Imbriano_80 + 24
55: Hexamo_78 + 3
56: Hammer_79 + 1
57: Holex_78 + 17
58: EdogawaKiddo_78 + 8
59: Arissanae_75
60: Bellris_78 + 4
61: DreamTeam1_72 + 1
62: MegTheThird_73 + 1
63: Vanisoa_75
64: Scherzo_77
65: Charm_72
66: Keziacharles14_75
67: Elephantoon_78
68: Toaka_78
69: SheaKeira_72
70: Yecey3_80
71: LoneWolf_79
72: Dusty_154 + 2
73: Miskis_150 + 1
74: Bachita_159 + 8
75: WilliamBoone_158 + 1
76: DatBoi_160
77: Towmatter_152 + 1
78: Bantam_163
79: Reindeer_151

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 347234 Report

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

Pham number 347234 has 230 members, 14 are drafts.

Phages represented in each track:
• Track 1 : DarthPhader_74
• Track 2 : Zimmer_75
• Track 3 : Refuge_74
• Track 4 : Steamy_81
• Track 5 : Jeeves_80
• Track 6 : Gail_78, BogosyJay_78, Maminiaina_78
• Track 7 : Luchador_79
• Track 8 : SororFago_78
• Track 9 : Sunhee_78
• Track 10 : Larenn_73, Malec_74
• Track 11 : TarsusIV_74
• Track 12 : FiringLine_77, Retro23_77, Power_76, Dalmatian_77, DudeLittle_75, SweetiePie_76, QueenBeesly_77, Crucio_77, SnapTap_76, Georgie2_78, Anselm_78
• Track 13 : Dignity_78, Agape74_78, Jerm_78, Leviathan_78, Smeagan_79, AbbyPaige_78, Turbido_77, LilTurb_77, Bugsy_78
• Track 14 : ForesterFrank_74
• Track 15 : Fameo_75, QueenB2_74, Heffalump_74
• Track 16 : HippoHollow_75, LionsBait_75
• Track 17 : LadyBird_80
• Track 18 : Landor_75, Tristan_73, Phaded_72, Bactobuster_69
• Track 19 : BabyBack_73
• Track 20 : WeiHuaDA_77
• Track 21 : Lokk_70, Rachaly_72, Miko_70, BobSwaget_69
• Track 22 : Drake55_78, 20ES_78, Piro94_76, JoshKayV_77, HarryHoudini_77, First_0077, Iwokeuplikedis_78
• Track 23 : IronMan_74, Pukovnik_73, Jaan_75
• Track 24 : Deloris_76, BengiVuitton_76
• Track 25 : Quokka_83, MajorMajor_78
• Track 26 : VA6_76, AN3_78
• Track 27 : WideWale_77, Gratitude_76, Updawg_77, Equemioh13_76
• Track 28 : AnnaL29_76, Loser_78, RedRock_75
• Track 29 : ArcherNM_70
• Track 30 : CRB1_78
• Track 31 : EZMoney23_74
• Track 32 : GaugeLDP_72
• Track 33 : Changeling_75

• Track 34 : NothingSpecial_72
• Track 35 : Echild_77, Benvolio_74
• Track 36 : BiancaTri92_75, Leogania_75
• Track 37 : XianYue_72
• Track 38 : Trixie_76
• Track 39 : Trooper_76
• Track 40 : Baehexic_75
• Track 41 : Herbertwm_73
• Track 42 : KingCyrus_76
• Track 43 : Prudy_73
• Track 44 : Bradman_84
• Track 45 : DeerParkTS_73
• Track 46 : SemperFi_77
• Track 47 : Kalpine_76
• Track 48 : Colin_77
• Track 49 : Kinmap_85
• Track 50 : Chargerpower_74
• Track 51 : Groupthink_86, Gemma_83, Marius_86, Phranny_78, PhishRPhriends_82, Manu_85, Kalb97_86, JeppNRM_86, Heliosoles_83, Kalnoky_86, Reba_81, Pawn_84, HaveUMetTed_86
• Track 52 : ClownCar_85, OlanP_84, Calvinny_85
• Track 53 : Garak_80, Zaka_79, Lilbunny_78, Rifter_79, Tucker_79, ToneTone_76, BennyP_79, Yokurt_78, WunderPhul_79, Zulu_80, Helmet_81, BlessJoy_79, Gruunaga_78, CloudWang3_79, Blue7_80, Temprado_80, Wiks_78, Indra_82
• Track 54 : Imbriano_80, Cookiedough_79, DaVinci_77, DelvinSonDorr_75, Hoot_74, EricB_78, Kazan_80, Neeharika16_78, Chartreuse_78, Jordennis_77, VohminGhazi_79, Candra_80, Isiphiwo_76, SmellyB_79, Blinn1_83, SuperCallie99_76, BABullseye_72, GreedyLawyer_74, Priamo_81, Newrala_78, Kipper29_79, Dorothea_79, Pmask_78, McFly_80, SuperAwesome_79
• Track 55 : Hexamo_78, Artemis2UCLA_78, Koko_80, Roksolana_79
• Track 56 : Hammer_79, Gladiator_76
• Track 57 : Holex_78, Phonnegut_78, Ayanochan_75, Conquerage_76, Alma_76, Fayely_76, Spouty_76, Priya_76, EmyBug_75, Qobbit_76, ExplosioNervosa_76, Beemo_78, Jiawan_78, Pioneer_78, Hanray_78, RyeScarlet_78, Onglai_77, Eidsmoe_76
• Track 58 : EdogawaKiddo_78, Myxus_78, Tubs_78, Sachima_78, HortumSL17_79, PackMan_77, Catalina_80, Phaeder_78, Lilleskat_78
• Track 59 : Arissanae_75
• Track 60 : Bellris_78, CogOmlette_76, WorldCup_76, Rahalelujah_78, Minispark_76
• Track 61 : DreamTeam1_72, Klodlith_73
• Track 62 : MegTheThird_73, Celestialunch_73
• Track 63 : Vanisoa_75
• Track 64 : Scherzo_77
• Track 65 : Charm_72
• Track 66 : Keziacharles14_75
• Track 67 : Elephantoon_78
• Track 68 : Toaka_78
• Track 69 : SheaKeira_72
• Track 70 : Yecey3_80
• Track 71 : LoneWolf_79
• Track 72 : Dusty_154, Engineer_158, Geeche_156
• Track 73 : Miskis_150, Aphelion_156

• Track 74 : Bachita_159, Toniann_156, Norvs_154, Smoothie_157, Abscondus_154, Cucurbita_155, Lozinak_156, PhinkBoden_154, ClubL_157
• Track 75 : WilliamBoone_158, Culver_156
• Track 76 : DatBoi_160
• Track 77 : Towmatter_152, Daredevil_154
• Track 78 : Bantam_163
• Track 79 : Reindeer_151

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

The start number called the most often in the published annotations is 30, it was called in 109 of the 216 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 20ES_78, AN3_78, AbbyPaige_78, Agape74_78, Alma_76, AnnaL29_76, Anselm_78, ArcherNM_70, Ayanochan_75, Baehexic_75, Beemo_78, Bellris_78, BengiVuitton_76, Benvolio_74, BiancaTri92_75, BogosyJay_78, Bugsy_78, CRB1_78, Catalina_80, Changeling_75, CogOmlette_76, Colin_77, Conquerage_76, Crucio_77, Dalmatian_77, DarthPhader_74, DeerParkTS_73, Deloris_76, Dignity_78, Drake55_78, DudeLittle_75, EZMoney23_74, Echild_77, EdogawaKiddo_78, Eidsmoe_76, Elephantoon_78, EmyBug_75, Equemioh13_76, ExplosioNervosa_76, Fameo_75, Fayely_76, FiringLine_77, First_0077, ForesterFrank_74, Gail_78, GaugeLDP_72, Georgie2_78, Gratitude_76, Hanray_78, HarryHoudini_77, Heffalump_74, HippoHollow_75, Holex_78, HortumSL17_79, Iwokeuplikedis_78, Jeeves_80, Jerm_78, Jiawan_78, JoshKayV_77, Kalpine_76, Keziacharles14_75, KingCyrus_76, Kinmap_85, LadyBird_80, Larenn_73, Leogania_75, Leviathan_78, LilTurb_77, Lilleskat_78, LionsBait_75, LoneWolf_79, Loser_78, Luchador_79, Malec_74, Maminiaina_78, Minispark_76, Myxus_78, NothingSpecial_72, Onglai_77, PackMan_77, Phaeder_78, Phonnegut_78, Pioneer_78, Piro94_76, Power_76, Priya_76, Prudy_73, Qobbit_76, QueenB2_74, QueenBeesly_77, Rahalelujah_78, RedRock_75, Refuge_74, Retro23_77, RyeScarlet_78, Sachima_78, Scherzo_77, SemperFi_77, Smeagan_79, SnapTap_76, SororFago_78, Spouty_76, Sunhee_78, SweetiePie_76, TarsusIV_74, Trixie_76, Trooper_76, Tubs_78, Turbido_77, Updawg_77, VA6_76, WideWale_77, WorldCup_76, Yecey3_80, Zimmer_75,

Genes that have the "Most Annotated" start but do not call it:
• Toaka_78,

Genes that do not have the "Most Annotated" start:
• Abscondus_154, Aphelion_156, Arissanae_75, Artemis2UCLA_78, BABullseye_72, BabyBack_73, Bachita_159, Bactobuster_69, Bantam_163, BennyP_79, BlessJoy_79, Blinn1_83, Blue7_80, BobSwaget_69, Bradman_84, Calvinny_85, Candra_80, Celestialunch_73, Chargerpower_74, Charm_72, Chartreuse_78, CloudWang3_79, ClownCar_85, ClubL_157, Cookiedough_79, Cucurbita_155, Culver_156, DaVinci_77, Daredevil_154, DatBoi_160, DelvinSonDorr_75, Dorothea_79, DreamTeam1_72, Dusty_154, Engineer_158, EricB_78, Garak_80, Geeche_156, Gemma_83, Gladiator_76, GreedyLawyer_74, Groupthink_86, Gruunaga_78, Hammer_79, HaveUMetTed_86, Heliosoles_83, Helmet_81, Herbertwm_73, Hexamo_78, Hoot_74, Imbriano_80, Indra_82, IronMan_74, Isiphiwo_76, Jaan_75, JeppNRM_86, Jordennis_77, Kalb97_86, Kalnoky_86,

Kazan_80, Kipper29_79, Klodlith_73, Koko_80, Landor_75, Lilbunny_78, Lokk_70, Lozinak_156, MajorMajor_78, Manu_85, Marius_86, McFly_80, MegTheThird_73, Miko_70, Miskis_150, Neeharika16_78, Newrala_78, Norvs_154, OlanP_84, Pawn_84, Phaded_72, PhinkBoden_154, PhishRPhriends_82, Phranny_78, Pmask_78, Priamo_81, Pukovnik_73, Quokka_83, Rachaly_72, Reba_81, Reindeer_151, Rifter_79, Roksolana_79, SheaKeira_72, SmellyB_79, Smoothie_157, Steamy_81, SuperAwesome_79, SuperCallie99_76, Temprado_80, ToneTone_76, Toniann_156, Towmatter_152, Tristan_73, Tucker_79, Vanisoa_75, VohminGhazi_79, WeiHuaDA_77, Wiks_78, WilliamBoone_158, WunderPhul_79, XianYue_72, Yokurt_78, Zaka_79, Zulu_80,

Summary by start number:

Start 23:
• Found in 20 of 230 (8.7%) of genes in pham
• Manual Annotations of this start: 2 of 216
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Gladiator_76 (A6), Hammer_79 (A6),

Start 25:
• Found in 1 of 230 (0.4%) of genes in pham
• Manual Annotations of this start: 1 of 216
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Toaka_78 (A9),

Start 27:
• Found in 16 of 230 (7.0%) of genes in pham
• Manual Annotations of this start: 3 of 216
• Called 18.8% of time when present
• Phage (with cluster) where this start called: Calvinny_85 (A3), ClownCar_85 (A3), OlanP_84 (A3),

Start 28:
• Found in 15 of 230 (6.5%) of genes in pham
• Manual Annotations of this start: 13 of 216
• Called 86.7% of time when present
• Phage (with cluster) where this start called: Bactobuster_69 (A2), BobSwaget_69 (A2), IronMan_74 (A2), Jaan_75 (A2), Landor_75 (A2), Lokk_70 (A2), Miko_70 (A2), Phaded_72 (A2), Pukovnik_73 (A2), Rachaly_72 (A2), Tristan_73 (A2), WeiHuaDA_77 (A2), XianYue_72 (A2),

Start 29:
• Found in 4 of 230 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 216
• Called 50.0% of time when present
• Phage (with cluster) where this start called: BabyBack_73 (A2), Bradman_84 (A2),

Start 30:
• Found in 116 of 230 (50.4%) of genes in pham
• Manual Annotations of this start: 109 of 216
• Called 99.1% of time when present
• Phage (with cluster) where this start called: 20ES_78 (A2), AN3_78 (A2), AbbyPaige_78 (A2), Agape74_78 (A2), Alma_76 (A9), AnnaL29_76 (A2), Anselm_78

(A2), ArcherNM_70 (A2), Ayanochan_75 (A9), Baehexic_75 (A2), Beemo_78 (A9), Bellris_78 (A9), BengiVuitton_76 (A2), Benvolio_74 (A2), BiancaTri92_75 (A2), BogosyJay_78 (A9), Bugsy_78 (A2), CRB1_78 (A2), Catalina_80 (A9), Changeling_75 (A2), CogOmlette_76 (A9), Colin_77 (A2), Conquerage_76 (A9), Crucio_77 (A2), Dalmatian_77 (A2), DarthPhader_74 (A12), DeerParkTS_73 (A2), Deloris_76 (A2), Dignity_78 (A2), Drake55_78 (A2), DudeLittle_75 (A2), EZMoney23_74 (A2), Echild_77 (A2), EdogawaKiddo_78 (A9), Eidsmoe_76 (A9), Elephantoon_78 (A9), EmyBug_75 (A9), Equemioh13_76 (A2), ExplosioNervosa_76 (A9), Fameo_75 (A2), Fayely_76 (A9), FiringLine_77 (A2), First_0077 (A2), ForesterFrank_74 (A2), Gail_78 (A14), GaugeLDP_72 (A2), Georgie2_78 (A2), Gratitude_76 (A2), Hanray_78 (A9), HarryHoudini_77 (A2), Heffalump_74 (A2), HippoHollow_75 (A2), Holex_78 (A9), HortumSL17_79 (A9), Iwokeuplikedis_78 (A2), Jeeves_80 (A14), Jerm_78 (A2), Jiawan_78 (A9), JoshKayV_77 (A2), Kalpine_76 (A2), Keziacharles14_75 (A9), KingCyrus_76 (A2), Kinmap_85 (A21), LadyBird_80 (A2), Larenn_73 (A2), Leogania_75 (A2), Leviathan_78 (A2), LilTurb_77 (A2), Lilleskat_78 (A9), LionsBait_75 (A2), LoneWolf_79 (A9), Loser_78 (A2), Luchador_79 (A14), Malec_74 (A2), Maminiaina_78 (A9), Minispark_76 (A9), Myxus_78 (A9), NothingSpecial_72 (A2), Onglai_77 (A9), PackMan_77 (A9), Phaeder_78 (A9), Phonnegut_78 (A9), Pioneer_78 (A9), Piro94_76 (A2), Power_76 (A2), Priya_76 (A9), Prudy_73 (A2), Qobbit_76 (A9), QueenB2_74 (A2), QueenBeesly_77 (A2), Rahalelujah_78 (A9), RedRock_75 (A2), Refuge_74 (A12), Retro23_77 (A2), RyeScarlet_78 (A9), Sachima_78 (A9), Scherzo_77 (A9), SemperFi_77 (A2), Smeagan_79 (A2), SnapTap_76 (A2), SororFago_78 (A14), Spouty_76 (A9), Sunhee_78 (A14), SweetiePie_76 (A2), TarsusIV_74 (A2), Trixie_76 (A2), Trooper_76 (A2), Tubs_78 (A9), Turbido_77 (A2), Updawg_77 (A2), VA6_76 (A2), WideWale_77 (A2), WorldCup_76 (A9), Yecey3_80 (A9), Zimmer_75 (A12),

Start 31:
• Found in 100 of 230 (43.5%) of genes in pham
• Manual Annotations of this start: 87 of 216
• Called 94.0% of time when present
• Phage (with cluster) where this start called: Abscondus_154 (CQ1), Aphelion_156 (CQ1), Arissanae_75 (A9), Artemis2UCLA_78 (A6), BABullseye_72 (A6), Bachita_159 (CQ1), Bantam_163 (DL), BennyP_79 (A6), BlessJoy_79 (A6), Blinn1_83 (A6), Blue7_80 (A6), Candra_80 (A6), Celestialunch_73 (A9), Chargerpower_74 (A22), Charm_72 (A9), Chartreuse_78 (A6), CloudWang3_79 (A6), ClubL_157 (CQ1), Cookiedough_79 (A6), Cucurbita_155 (CQ1), Culver_156 (CQ1), DaVinci_77 (A6), Daredevil_154 (DL), DatBoi_160 (DL), DelvinSonDorr_75 (A6), Dorothea_79 (A6), DreamTeam1_72 (A9), Dusty_154 (CQ1), Engineer_158 (CQ1), EricB_78 (A6), Garak_80 (A6), Geeche_156 (CQ1), Gemma_83 (A3), GreedyLawyer_74 (A6), Groupthink_86 (A3), Gruunaga_78 (A6), HaveUMetTed_86 (A3), Heliosoles_83 (A3), Helmet_81 (A6), Herbertwm_73 (A2), Hexamo_78 (A6), Hoot_74 (A6), Imbriano_80 (A6), Indra_82 (A6), Isiphiwo_76 (A6), JeppNRM_86 (A3), Jordennis_77 (A6), Kalb97_86 (A3), Kalnoky_86 (A3), Kazan_80 (A6), Kipper29_79 (A6), Klodlith_73 (A9), Koko_80 (A6), Lilbunny_78 (A6), Lozinak_156 (CQ1), MajorMajor_78 (A2), Manu_85 (A3), Marius_86 (A3), McFly_80 (A6), MegTheThird_73 (A9), Miskis_150 (CQ1), Neeharika16_78 (A6), Newrala_78 (A6), Norvs_154 (CQ1), Pawn_84 (A3), PhinkBoden_154 (CQ1), PhishRPhriends_82 (A3), Phranny_78 (A3), Pmask_78 (A6), Priamo_81 (A6), Quokka_83 (A2), Reba_81 (A3), Reindeer_151 (M1), Rifter_79 (A6), Roksolana_79 (A6), SheaKeira_72 (A9), SmellyB_79 (A6), Smoothie_157 (CQ1), Steamy_81 (A12), SuperAwesome_79 (A6), SuperCallie99_76 (A6), Temprado_80 (A6), ToneTone_76 (A6), Toniann_156 (CQ1), Towmatter_152 (DL), Tucker_79 (A6), Vanisoa_75 (A9), VohminGhazi_79 (A6),

Wiks_78 (A6), WilliamBoone_158 (CQ1), WunderPhul_79 (A6), Yokurt_78 (A6), Zaka_79 (A6), Zulu_80 (A6),

Summary by clusters:

There are 11 clusters represented in this pham: A14, A22, A12, DL, A21, A3, A2, M1, A6, A9, CQ1,

Info for manual annotations of cluster A12:
•Start number 30 was manually annotated 3 times for cluster A12.
•Start number 31 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A14:
•Start number 30 was manually annotated 5 times for cluster A14.

Info for manual annotations of cluster A2:
•Start number 28 was manually annotated 13 times for cluster A2.
•Start number 29 was manually annotated 1 time for cluster A2.
•Start number 30 was manually annotated 64 times for cluster A2.
•Start number 31 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A21:
•Start number 30 was manually annotated 1 time for cluster A21.

Info for manual annotations of cluster A22:
•Start number 31 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A3:
•Start number 27 was manually annotated 3 times for cluster A3.
•Start number 31 was manually annotated 13 times for cluster A3.

Info for manual annotations of cluster A6:
•Start number 23 was manually annotated 2 times for cluster A6.
•Start number 31 was manually annotated 45 times for cluster A6.

Info for manual annotations of cluster A9:
•Start number 25 was manually annotated 1 time for cluster A9.
•Start number 30 was manually annotated 36 times for cluster A9.
•Start number 31 was manually annotated 6 times for cluster A9.

Info for manual annotations of cluster CQ1:
•Start number 31 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster DL:
•Start number 31 was manually annotated 4 times for cluster DL.

Info for manual annotations of cluster M1:
•Start number 31 was manually annotated 1 time for cluster M1.

Gene Information:

Gene: 20ES_78 Start: 45905, Stop: 45738, Start Num: 30
Candidate Starts for 20ES_78:
(Start: 30 @45905 has 109 MA's), (32, 45899),

Gene: AN3_78 Start: 44672, Stop: 44505, Start Num: 30
Candidate Starts for AN3_78:
(Start: 30 @44672 has 109 MA's), (32, 44666), (49, 44525),

Gene: AbbyPaige_78 Start: 46176, Stop: 46012, Start Num: 30
Candidate Starts for AbbyPaige_78:
(22, 46215), (Start: 30 @46176 has 109 MA's), (51, 46023),

Gene: Abscondus_154 Start: 82793, Stop: 82635, Start Num: 31
Candidate Starts for Abscondus_154:
(Start: 31 @82793 has 87 MA's), (33, 82778),

Gene: Agape74_78 Start: 46171, Stop: 46007, Start Num: 30
Candidate Starts for Agape74_78:
(22, 46210), (Start: 30 @46171 has 109 MA's), (51, 46018),

Gene: Alma_76 Start: 45089, Stop: 44925, Start Num: 30
Candidate Starts for Alma_76:
(Start: 30 @45089 has 109 MA's), (33, 45074), (38, 45032),

Gene: AnnaL29_76 Start: 46109, Stop: 45954, Start Num: 30
Candidate Starts for AnnaL29_76:
(Start: 30 @46109 has 109 MA's), (33, 46094),

Gene: Anselm_78 Start: 46243, Stop: 46079, Start Num: 30
Candidate Starts for Anselm_78:
(21, 46282), (Start: 30 @46243 has 109 MA's), (32, 46237), (51, 46090),

Gene: Aphelion_156 Start: 83954, Stop: 83796, Start Num: 31
Candidate Starts for Aphelion_156:
(Start: 31 @83954 has 87 MA's), (33, 83939), (43, 83876),

Gene: ArcherNM_70 Start: 45375, Stop: 45208, Start Num: 30
Candidate Starts for ArcherNM_70:
(Start: 30 @45375 has 109 MA's), (33, 45360),

Gene: Arissanae_75 Start: 45413, Stop: 45249, Start Num: 31
Candidate Starts for Arissanae_75:
(2, 45599), (Start: 31 @45413 has 87 MA's), (32, 45407), (45, 45308),

Gene: Artemis2UCLA_78 Start: 44266, Stop: 44114, Start Num: 31
Candidate Starts for Artemis2UCLA_78:
(Start: 31 @44266 has 87 MA's), (32, 44260), (33, 44251), (37, 44224),

Gene: Ayanochan_75 Start: 44872, Stop: 44708, Start Num: 30
Candidate Starts for Ayanochan_75:
(Start: 30 @44872 has 109 MA's), (33, 44857), (38, 44815),

Gene: BABullseye_72 Start: 42895, Stop: 42728, Start Num: 31

Candidate Starts for BABullseye_72:
(Start: 31 @42895 has 87 MA's), (32, 42889), (33, 42880),

Gene: BabyBack_73 Start: 45797, Stop: 45633, Start Num: 29
Candidate Starts for BabyBack_73:
(Start: 29 @45797 has 1 MA's), (38, 45740), (46, 45671), (47, 45662),

Gene: Bachita_159 Start: 83833, Stop: 83675, Start Num: 31
Candidate Starts for Bachita_159:
(Start: 31 @83833 has 87 MA's), (33, 83818),

Gene: Bactobuster_69 Start: 45446, Stop: 45270, Start Num: 28
Candidate Starts for Bactobuster_69:
(Start: 28 @45446 has 13 MA's), (32, 45440), (48, 45293),

Gene: Baehexic_75 Start: 45567, Stop: 45403, Start Num: 30
Candidate Starts for Baehexic_75:
(Start: 30 @45567 has 109 MA's), (51, 45414),

Gene: Bantam_163 Start: 88026, Stop: 87865, Start Num: 31
Candidate Starts for Bantam_163:
(17, 88080), (Start: 31 @88026 has 87 MA's), (33, 88011), (42, 87948),

Gene: Beemo_78 Start: 45129, Stop: 44965, Start Num: 30
Candidate Starts for Beemo_78:
(Start: 30 @45129 has 109 MA's), (33, 45114), (38, 45072),

Gene: Bellris_78 Start: 44983, Stop: 44798, Start Num: 30
Candidate Starts for Bellris_78:
(Start: 30 @44983 has 109 MA's), (32, 44977), (58, 44812),

Gene: BengiVuitton_76 Start: 45866, Stop: 45699, Start Num: 30
Candidate Starts for BengiVuitton_76:
(8, 45968), (Start: 30 @45866 has 109 MA's),

Gene: BennyP_79 Start: 44432, Stop: 44280, Start Num: 31
Candidate Starts for BennyP_79:
(Start: 23 @44459 has 2 MA's), (Start: 31 @44432 has 87 MA's), (32, 44426), (33, 44417), (37, 44390),

Gene: Benvolio_74 Start: 45472, Stop: 45305, Start Num: 30
Candidate Starts for Benvolio_74:
(Start: 30 @45472 has 109 MA's), (39, 45406), (49, 45325), (52, 45316),

Gene: BiancaTri92_75 Start: 45806, Stop: 45651, Start Num: 30
Candidate Starts for BiancaTri92_75:
(15, 45863), (Start: 30 @45806 has 109 MA's), (32, 45800),

Gene: BlessJoy_79 Start: 44788, Stop: 44636, Start Num: 31
Candidate Starts for BlessJoy_79:
(Start: 23 @44815 has 2 MA's), (Start: 31 @44788 has 87 MA's), (32, 44782), (33, 44773), (37, 44746),

Gene: Blinn1_83 Start: 45509, Stop: 45342, Start Num: 31
Candidate Starts for Blinn1_83:

(Start: 31 @45509 has 87 MA's), (32, 45503), (33, 45494),

Gene: Blue7_80 Start: 44486, Stop: 44334, Start Num: 31
Candidate Starts for Blue7_80:
(Start: 23 @44513 has 2 MA's), (Start: 31 @44486 has 87 MA's), (32, 44480), (33, 44471), (37, 44444),

Gene: BobSwaget_69 Start: 43679, Stop: 43515, Start Num: 28
Candidate Starts for BobSwaget_69:
(Start: 28 @43679 has 13 MA's), (32, 43673), (33, 43664), (46, 43553), (52, 43523),

Gene: BogosyJay_78 Start: 45362, Stop: 45198, Start Num: 30
Candidate Starts for BogosyJay_78:
(Start: 30 @45362 has 109 MA's), (33, 45347), (38, 45305),

Gene: Bradman_84 Start: 46414, Stop: 46256, Start Num: 29
Candidate Starts for Bradman_84:
(Start: 29 @46414 has 1 MA's), (Start: 31 @46411 has 87 MA's),

Gene: Bugsy_78 Start: 46221, Stop: 46057, Start Num: 30
Candidate Starts for Bugsy_78:
(22, 46260), (Start: 30 @46221 has 109 MA's), (51, 46068),

Gene: CRB1_78 Start: 46424, Stop: 46245, Start Num: 30
Candidate Starts for CRB1_78:
(Start: 30 @46424 has 109 MA's), (32, 46418), (52, 46256),

Gene: Calvinny_85 Start: 47442, Stop: 47215, Start Num: 27
Candidate Starts for Calvinny_85:
(Start: 27 @47442 has 3 MA's), (Start: 31 @47436 has 87 MA's), (33, 47421),

Gene: Candra_80 Start: 44590, Stop: 44423, Start Num: 31
Candidate Starts for Candra_80:
(Start: 31 @44590 has 87 MA's), (32, 44584), (33, 44575),

Gene: Catalina_80 Start: 45183, Stop: 45019, Start Num: 30
Candidate Starts for Catalina_80:
(Start: 30 @45183 has 109 MA's), (33, 45168), (36, 45150), (38, 45126),

Gene: Celestialunch_73 Start: 44364, Stop: 44173, Start Num: 31
Candidate Starts for Celestialunch_73:
(Start: 31 @44364 has 87 MA's), (34, 44340), (45, 44259), (50, 44214),

Gene: Changeling_75 Start: 46099, Stop: 45932, Start Num: 30
Candidate Starts for Changeling_75:
(11, 46189), (18, 46147), (Start: 30 @46099 has 109 MA's),

Gene: Chargerpower_74 Start: 44306, Stop: 44124, Start Num: 31
Candidate Starts for Chargerpower_74:
(14, 44363), (Start: 31 @44306 has 87 MA's), (32, 44300), (38, 44249), (58, 44135),

Gene: Charm_72 Start: 44293, Stop: 44144, Start Num: 31
Candidate Starts for Charm_72:
(9, 44383), (13, 44350), (Start: 31 @44293 has 87 MA's), (34, 44269), (36, 44260), (45, 44188),

Gene: Chartreuse_78 Start: 43901, Stop: 43734, Start Num: 31
Candidate Starts for Chartreuse_78:
(Start: 31 @43901 has 87 MA's), (32, 43895), (33, 43886),

Gene: CloudWang3_79 Start: 44778, Stop: 44626, Start Num: 31
Candidate Starts for CloudWang3_79:
(Start: 23 @44805 has 2 MA's), (Start: 31 @44778 has 87 MA's), (32, 44772), (33, 44763), (37, 44736),

Gene: ClownCar_85 Start: 47436, Stop: 47209, Start Num: 27
Candidate Starts for ClownCar_85:
(Start: 27 @47436 has 3 MA's), (Start: 31 @47430 has 87 MA's), (33, 47415),

Gene: ClubL_157 Start: 83085, Stop: 82927, Start Num: 31
Candidate Starts for ClubL_157:
(Start: 31 @83085 has 87 MA's), (33, 83070),

Gene: CogOmlette_76 Start: 44980, Stop: 44795, Start Num: 30
Candidate Starts for CogOmlette_76:
(Start: 30 @44980 has 109 MA's), (32, 44974), (58, 44809),

Gene: Colin_77 Start: 46817, Stop: 46650, Start Num: 30
Candidate Starts for Colin_77:
(Start: 30 @46817 has 109 MA's), (33, 46802), (35, 46790), (53, 46661), (56, 46655),

Gene: Conquerage_76 Start: 44858, Stop: 44694, Start Num: 30
Candidate Starts for Conquerage_76:
(Start: 30 @44858 has 109 MA's), (33, 44843), (38, 44801),

Gene: Cookiedough_79 Start: 45205, Stop: 45038, Start Num: 31
Candidate Starts for Cookiedough_79:
(Start: 31 @45205 has 87 MA's), (32, 45199), (33, 45190),

Gene: Crucio_77 Start: 46142, Stop: 45978, Start Num: 30
Candidate Starts for Crucio_77:
(21, 46181), (Start: 30 @46142 has 109 MA's), (32, 46136), (51, 45989),

Gene: Cucurbita_155 Start: 84146, Stop: 83988, Start Num: 31
Candidate Starts for Cucurbita_155:
(Start: 31 @84146 has 87 MA's), (33, 84131),

Gene: Culver_156 Start: 82350, Stop: 82192, Start Num: 31
Candidate Starts for Culver_156:
(Start: 31 @82350 has 87 MA's), (33, 82335),

Gene: DaVinci_77 Start: 43955, Stop: 43788, Start Num: 31
Candidate Starts for DaVinci_77:
(Start: 31 @43955 has 87 MA's), (32, 43949), (33, 43940),

Gene: Dalmatian_77 Start: 45962, Stop: 45798, Start Num: 30
Candidate Starts for Dalmatian_77:
(21, 46001), (Start: 30 @45962 has 109 MA's), (32, 45956), (51, 45809),

Gene: Daredevil_154 Start: 84151, Stop: 83966, Start Num: 31
Candidate Starts for Daredevil_154:
(7, 84262), (10, 84250), (Start: 31 @84151 has 87 MA's), (33, 84136), (41, 84079), (57, 83977),

Gene: DarthPhader_74 Start: 46216, Stop: 46040, Start Num: 30
Candidate Starts for DarthPhader_74:
(Start: 30 @46216 has 109 MA's), (38, 46159),

Gene: DatBoi_160 Start: 87295, Stop: 87134, Start Num: 31
Candidate Starts for DatBoi_160:
(Start: 31 @87295 has 87 MA's), (33, 87280), (43, 87217),

Gene: DeerParkTS_73 Start: 44838, Stop: 44683, Start Num: 30
Candidate Starts for DeerParkTS_73:
(Start: 30 @44838 has 109 MA's), (33, 44823),

Gene: Deloris_76 Start: 45562, Stop: 45395, Start Num: 30
Candidate Starts for Deloris_76:
(8, 45664), (Start: 30 @45562 has 109 MA's),

Gene: DelvinSonDorr_75 Start: 44610, Stop: 44443, Start Num: 31
Candidate Starts for DelvinSonDorr_75:
(Start: 31 @44610 has 87 MA's), (32, 44604), (33, 44595),

Gene: Dignity_78 Start: 46259, Stop: 46095, Start Num: 30
Candidate Starts for Dignity_78:
(22, 46298), (Start: 30 @46259 has 109 MA's), (51, 46106),

Gene: Dorothea_79 Start: 45201, Stop: 45034, Start Num: 31
Candidate Starts for Dorothea_79:
(Start: 31 @45201 has 87 MA's), (32, 45195), (33, 45186),

Gene: Drake55_78 Start: 45846, Stop: 45691, Start Num: 30
Candidate Starts for Drake55_78:
(Start: 30 @45846 has 109 MA's), (32, 45840),

Gene: DreamTeam1_72 Start: 44140, Stop: 43991, Start Num: 31
Candidate Starts for DreamTeam1_72:
(9, 44230), (13, 44197), (Start: 31 @44140 has 87 MA's), (32, 44134), (34, 44116), (36, 44107), (45, 44035),

Gene: DudeLittle_75 Start: 45728, Stop: 45564, Start Num: 30
Candidate Starts for DudeLittle_75:
(21, 45767), (Start: 30 @45728 has 109 MA's), (32, 45722), (51, 45575),

Gene: Dusty_154 Start: 82822, Stop: 82664, Start Num: 31
Candidate Starts for Dusty_154:
(Start: 31 @82822 has 87 MA's), (33, 82807),

Gene: EZMoney23_74 Start: 45628, Stop: 45464, Start Num: 30
Candidate Starts for EZMoney23_74:
(Start: 28 @45631 has 13 MA's), (Start: 30 @45628 has 109 MA's), (33, 45613), (39, 45562),

Gene: Echild_77 Start: 45496, Stop: 45329, Start Num: 30
Candidate Starts for Echild_77:
(Start: 30 @45496 has 109 MA's), (39, 45430), (49, 45349), (52, 45340),

Gene: EdogawaKiddo_78 Start: 45151, Stop: 44987, Start Num: 30
Candidate Starts for EdogawaKiddo_78:
(Start: 30 @45151 has 109 MA's), (33, 45136), (36, 45118), (38, 45094),

Gene: Eidsmoe_76 Start: 44850, Stop: 44686, Start Num: 30
Candidate Starts for Eidsmoe_76:
(Start: 30 @44850 has 109 MA's), (33, 44835), (38, 44793),

Gene: Elephantoon_78 Start: 45016, Stop: 44852, Start Num: 30
Candidate Starts for Elephantoon_78:
(Start: 30 @45016 has 109 MA's), (32, 45010), (33, 45001), (36, 44983), (38, 44959),

Gene: EmyBug_75 Start: 44852, Stop: 44688, Start Num: 30
Candidate Starts for EmyBug_75:
(Start: 30 @44852 has 109 MA's), (33, 44837), (38, 44795),

Gene: Engineer_158 Start: 83672, Stop: 83514, Start Num: 31
Candidate Starts for Engineer_158:
(Start: 31 @83672 has 87 MA's), (33, 83657),

Gene: Equemioh13_76 Start: 45675, Stop: 45511, Start Num: 30
Candidate Starts for Equemioh13_76:
(6, 45807), (8, 45777), (Start: 30 @45675 has 109 MA's), (51, 45522),

Gene: EricB_78 Start: 44547, Stop: 44380, Start Num: 31
Candidate Starts for EricB_78:
(Start: 31 @44547 has 87 MA's), (32, 44541), (33, 44532),

Gene: ExplosioNervosa_76 Start: 44918, Stop: 44754, Start Num: 30
Candidate Starts for ExplosioNervosa_76:
(Start: 30 @44918 has 109 MA's), (33, 44903), (38, 44861),

Gene: Fameo_75 Start: 45770, Stop: 45606, Start Num: 30
Candidate Starts for Fameo_75:
(21, 45809), (Start: 30 @45770 has 109 MA's), (51, 45617),

Gene: Fayely_76 Start: 44819, Stop: 44655, Start Num: 30
Candidate Starts for Fayely_76:
(Start: 30 @44819 has 109 MA's), (33, 44804), (38, 44762),

Gene: FiringLine_77 Start: 46124, Stop: 45960, Start Num: 30
Candidate Starts for FiringLine_77:
(21, 46163), (Start: 30 @46124 has 109 MA's), (32, 46118), (51, 45971),

Gene: First_0077 Start: 45805, Stop: 45638, Start Num: 30
Candidate Starts for First_0077:
(Start: 30 @45805 has 109 MA's), (32, 45799),

Gene: ForesterFrank_74 Start: 45901, Stop: 45734, Start Num: 30

Candidate Starts for ForesterFrank_74:
(Start: 30 @45901 has 109 MA's),

Gene: Gail_78 Start: 46233, Stop: 46051, Start Num: 30
Candidate Starts for Gail_78:
(Start: 30 @46233 has 109 MA's), (33, 46218), (38, 46176),

Gene: Garak_80 Start: 44729, Stop: 44577, Start Num: 31
Candidate Starts for Garak_80:
(Start: 23 @44756 has 2 MA's), (Start: 31 @44729 has 87 MA's), (32, 44723), (33, 44714), (37, 44687),

Gene: GaugeLDP_72 Start: 45357, Stop: 45190, Start Num: 30
Candidate Starts for GaugeLDP_72:
(Start: 30 @45357 has 109 MA's), (36, 45324), (38, 45300),

Gene: Geeche_156 Start: 83046, Stop: 82888, Start Num: 31
Candidate Starts for Geeche_156:
(Start: 31 @83046 has 87 MA's), (33, 83031),

Gene: Gemma_83 Start: 47433, Stop: 47212, Start Num: 31
Candidate Starts for Gemma_83:
(Start: 27 @47439 has 3 MA's), (Start: 31 @47433 has 87 MA's), (33, 47418),

Gene: Georgie2_78 Start: 46168, Stop: 46004, Start Num: 30
Candidate Starts for Georgie2_78:
(21, 46207), (Start: 30 @46168 has 109 MA's), (32, 46162), (51, 46015),

Gene: Gladiator_76 Start: 44659, Stop: 44480, Start Num: 23
Candidate Starts for Gladiator_76:
(Start: 23 @44659 has 2 MA's), (Start: 31 @44632 has 87 MA's), (32, 44626), (33, 44617), (37, 44590),

Gene: Gratitude_76 Start: 45675, Stop: 45511, Start Num: 30
Candidate Starts for Gratitude_76:
(6, 45807), (8, 45777), (Start: 30 @45675 has 109 MA's), (51, 45522),

Gene: GreedyLawyer_74 Start: 44520, Stop: 44353, Start Num: 31
Candidate Starts for GreedyLawyer_74:
(Start: 31 @44520 has 87 MA's), (32, 44514), (33, 44505),

Gene: Groupthink_86 Start: 47435, Stop: 47214, Start Num: 31
Candidate Starts for Groupthink_86:
(Start: 27 @47441 has 3 MA's), (Start: 31 @47435 has 87 MA's), (33, 47420),

Gene: Gruunaga_78 Start: 44587, Stop: 44435, Start Num: 31
Candidate Starts for Gruunaga_78:
(Start: 23 @44614 has 2 MA's), (Start: 31 @44587 has 87 MA's), (32, 44581), (33, 44572), (37, 44545),

Gene: Hammer_79 Start: 44321, Stop: 44142, Start Num: 23
Candidate Starts for Hammer_79:
(Start: 23 @44321 has 2 MA's), (Start: 31 @44294 has 87 MA's), (32, 44288), (33, 44279), (37, 44252),

Gene: Hanray_78 Start: 45183, Stop: 45019, Start Num: 30
Candidate Starts for Hanray_78:

(Start: 30 @45183 has 109 MA's), (33, 45168), (38, 45126),

Gene: HarryHoudini_77 Start: 45843, Stop: 45688, Start Num: 30
Candidate Starts for HarryHoudini_77:
(Start: 30 @45843 has 109 MA's), (32, 45837),

Gene: HaveUMetTed_86 Start: 47423, Stop: 47202, Start Num: 31
Candidate Starts for HaveUMetTed_86:
(Start: 27 @47429 has 3 MA's), (Start: 31 @47423 has 87 MA's), (33, 47408),

Gene: Heffalump_74 Start: 46238, Stop: 46074, Start Num: 30
Candidate Starts for Heffalump_74:
(21, 46277), (Start: 30 @46238 has 109 MA's), (51, 46085),

Gene: Heliosoles_83 Start: 47439, Stop: 47218, Start Num: 31
Candidate Starts for Heliosoles_83:
(Start: 27 @47445 has 3 MA's), (Start: 31 @47439 has 87 MA's), (33, 47424),

Gene: Helmet_81 Start: 44729, Stop: 44577, Start Num: 31
Candidate Starts for Helmet_81:
(Start: 23 @44756 has 2 MA's), (Start: 31 @44729 has 87 MA's), (32, 44723), (33, 44714), (37, 44687),

Gene: Herbertwm_73 Start: 45474, Stop: 45292, Start Num: 31
Candidate Starts for Herbertwm_73:
(Start: 31 @45474 has 87 MA's), (32, 45468), (50, 45324),

Gene: Hexamo_78 Start: 44263, Stop: 44111, Start Num: 31
Candidate Starts for Hexamo_78:
(Start: 31 @44263 has 87 MA's), (32, 44257), (33, 44248), (37, 44221),

Gene: HippoHollow_75 Start: 46961, Stop: 46791, Start Num: 30
Candidate Starts for HippoHollow_75:
(Start: 30 @46961 has 109 MA's),

Gene: Holex_78 Start: 45199, Stop: 45035, Start Num: 30
Candidate Starts for Holex_78:
(Start: 30 @45199 has 109 MA's), (33, 45184), (38, 45142),

Gene: Hoot_74 Start: 42405, Stop: 42238, Start Num: 31
Candidate Starts for Hoot_74:
(Start: 31 @42405 has 87 MA's), (32, 42399), (33, 42390),

Gene: HortumSL17_79 Start: 45181, Stop: 45017, Start Num: 30
Candidate Starts for HortumSL17_79:
(Start: 30 @45181 has 109 MA's), (33, 45166), (36, 45148), (38, 45124),

Gene: Imbriano_80 Start: 45393, Stop: 45226, Start Num: 31
Candidate Starts for Imbriano_80:
(Start: 31 @45393 has 87 MA's), (32, 45387), (33, 45378),

Gene: Indra_82 Start: 44730, Stop: 44578, Start Num: 31
Candidate Starts for Indra_82:
(Start: 23 @44757 has 2 MA's), (Start: 31 @44730 has 87 MA's), (32, 44724), (33, 44715), (37, 44688),

Gene: IronMan_74 Start: 46915, Stop: 46739, Start Num: 28
Candidate Starts for IronMan_74:
(Start: 28 @46915 has 13 MA's), (48, 46762),

Gene: Isiphiwo_76 Start: 44572, Stop: 44405, Start Num: 31
Candidate Starts for Isiphiwo_76:
(Start: 31 @44572 has 87 MA's), (32, 44566), (33, 44557),

Gene: Iwokeuplikedis_78 Start: 46300, Stop: 46124, Start Num: 30
Candidate Starts for Iwokeuplikedis_78:
(Start: 30 @46300 has 109 MA's), (32, 46294),

Gene: Jaan_75 Start: 47076, Stop: 46900, Start Num: 28
Candidate Starts for Jaan_75:
(Start: 28 @47076 has 13 MA's), (48, 46923),

Gene: Jeeves_80 Start: 45143, Stop: 44967, Start Num: 30
Candidate Starts for Jeeves_80:
(1, 45359), (3, 45305), (5, 45287), (Start: 30 @45143 has 109 MA's), (33, 45128), (38, 45086),

Gene: JeppNRM_86 Start: 47437, Stop: 47216, Start Num: 31
Candidate Starts for JeppNRM_86:
(Start: 27 @47443 has 3 MA's), (Start: 31 @47437 has 87 MA's), (33, 47422),

Gene: Jerm_78 Start: 46242, Stop: 46078, Start Num: 30
Candidate Starts for Jerm_78:
(22, 46281), (Start: 30 @46242 has 109 MA's), (51, 46089),

Gene: Jiawan_78 Start: 45215, Stop: 45051, Start Num: 30
Candidate Starts for Jiawan_78:
(Start: 30 @45215 has 109 MA's), (33, 45200), (38, 45158),

Gene: Jordennis_77 Start: 44787, Stop: 44620, Start Num: 31
Candidate Starts for Jordennis_77:
(Start: 31 @44787 has 87 MA's), (32, 44781), (33, 44772),

Gene: JoshKayV_77 Start: 46282, Stop: 46115, Start Num: 30
Candidate Starts for JoshKayV_77:
(Start: 30 @46282 has 109 MA's), (32, 46276),

Gene: Kalb97_86 Start: 46805, Stop: 46584, Start Num: 31
Candidate Starts for Kalb97_86:
(Start: 27 @46811 has 3 MA's), (Start: 31 @46805 has 87 MA's), (33, 46790),

Gene: Kalnoky_86 Start: 47432, Stop: 47211, Start Num: 31
Candidate Starts for Kalnoky_86:
(Start: 27 @47438 has 3 MA's), (Start: 31 @47432 has 87 MA's), (33, 47417),

Gene: Kalpine_76 Start: 46163, Stop: 45996, Start Num: 30
Candidate Starts for Kalpine_76:
(Start: 30 @46163 has 109 MA's), (33, 46148), (38, 46106), (53, 46007), (56, 46001),

Gene: Kazan_80 Start: 44560, Stop: 44393, Start Num: 31
Candidate Starts for Kazan_80:
(Start: 31 @44560 has 87 MA's), (32, 44554), (33, 44545),

Gene: Keziacharles14_75 Start: 45797, Stop: 45627, Start Num: 30
Candidate Starts for Keziacharles14_75:
(Start: 30 @45797 has 109 MA's), (33, 45782), (38, 45740), (46, 45671),

Gene: KingCyrus_76 Start: 47256, Stop: 47092, Start Num: 30
Candidate Starts for KingCyrus_76:
(20, 47298), (22, 47295), (Start: 30 @47256 has 109 MA's), (33, 47241), (51, 47103),

Gene: Kinmap_85 Start: 46044, Stop: 45889, Start Num: 30
Candidate Starts for Kinmap_85:
(4, 46206), (Start: 28 @46047 has 13 MA's), (Start: 30 @46044 has 109 MA's),

Gene: Kipper29_79 Start: 44573, Stop: 44406, Start Num: 31
Candidate Starts for Kipper29_79:
(Start: 31 @44573 has 87 MA's), (32, 44567), (33, 44558),

Gene: Klodlith_73 Start: 44360, Stop: 44211, Start Num: 31
Candidate Starts for Klodlith_73:
(9, 44450), (13, 44417), (Start: 31 @44360 has 87 MA's), (32, 44354), (34, 44336), (36, 44327), (45, 44255),

Gene: Koko_80 Start: 45118, Stop: 44966, Start Num: 31
Candidate Starts for Koko_80:
(Start: 31 @45118 has 87 MA's), (32, 45112), (33, 45103), (37, 45076),

Gene: LadyBird_80 Start: 46485, Stop: 46318, Start Num: 30
Candidate Starts for LadyBird_80:
(Start: 30 @46485 has 109 MA's), (39, 46419), (52, 46329),

Gene: Landor_75 Start: 47003, Stop: 46827, Start Num: 28
Candidate Starts for Landor_75:
(Start: 28 @47003 has 13 MA's), (32, 46997), (48, 46850),

Gene: Larenn_73 Start: 45502, Stop: 45338, Start Num: 30
Candidate Starts for Larenn_73:
(16, 45556), (Start: 30 @45502 has 109 MA's), (51, 45349),

Gene: Leogania_75 Start: 46184, Stop: 46029, Start Num: 30
Candidate Starts for Leogania_75:
(15, 46241), (Start: 30 @46184 has 109 MA's), (32, 46178),

Gene: Leviathan_78 Start: 46308, Stop: 46144, Start Num: 30
Candidate Starts for Leviathan_78:
(22, 46347), (Start: 30 @46308 has 109 MA's), (51, 46155),

Gene: LilTurb_77 Start: 46122, Stop: 45958, Start Num: 30
Candidate Starts for LilTurb_77:
(22, 46161), (Start: 30 @46122 has 109 MA's), (51, 45969),

Gene: Lilbunny_78 Start: 44361, Stop: 44209, Start Num: 31
Candidate Starts for Lilbunny_78:
(Start: 23 @44388 has 2 MA's), (Start: 31 @44361 has 87 MA's), (32, 44355), (33, 44346), (37, 44319),

Gene: Lilleskat_78 Start: 45140, Stop: 44976, Start Num: 30
Candidate Starts for Lilleskat_78:
(Start: 30 @45140 has 109 MA's), (33, 45125), (36, 45107), (38, 45083),

Gene: LionsBait_75 Start: 46960, Stop: 46790, Start Num: 30
Candidate Starts for LionsBait_75:
(Start: 30 @46960 has 109 MA's),

Gene: Lokk_70 Start: 44303, Stop: 44139, Start Num: 28
Candidate Starts for Lokk_70:
(Start: 28 @44303 has 13 MA's), (32, 44297), (33, 44288), (46, 44177), (52, 44147),

Gene: LoneWolf_79 Start: 45428, Stop: 45264, Start Num: 30
Candidate Starts for LoneWolf_79:
(Start: 30 @45428 has 109 MA's), (33, 45413), (38, 45371),

Gene: Loser_78 Start: 46367, Stop: 46212, Start Num: 30
Candidate Starts for Loser_78:
(Start: 30 @46367 has 109 MA's), (33, 46352),

Gene: Lozinak_156 Start: 83674, Stop: 83516, Start Num: 31
Candidate Starts for Lozinak_156:
(Start: 31 @83674 has 87 MA's), (33, 83659),

Gene: Luchador_79 Start: 46628, Stop: 46443, Start Num: 30
Candidate Starts for Luchador_79:
(Start: 30 @46628 has 109 MA's), (33, 46613), (38, 46571),

Gene: MajorMajor_78 Start: 44703, Stop: 44548, Start Num: 31
Candidate Starts for MajorMajor_78:
(Start: 29 @44706 has 1 MA's), (Start: 31 @44703 has 87 MA's),

Gene: Malec_74 Start: 46069, Stop: 45905, Start Num: 30
Candidate Starts for Malec_74:
(16, 46123), (Start: 30 @46069 has 109 MA's), (51, 45916),

Gene: Maminiaina_78 Start: 45344, Stop: 45180, Start Num: 30
Candidate Starts for Maminiaina_78:
(Start: 30 @45344 has 109 MA's), (33, 45329), (38, 45287),

Gene: Manu_85 Start: 47439, Stop: 47218, Start Num: 31
Candidate Starts for Manu_85:
(Start: 27 @47445 has 3 MA's), (Start: 31 @47439 has 87 MA's), (33, 47424),

Gene: Marius_86 Start: 47432, Stop: 47211, Start Num: 31
Candidate Starts for Marius_86:
(Start: 27 @47438 has 3 MA's), (Start: 31 @47432 has 87 MA's), (33, 47417),

Gene: McFly_80 Start: 45189, Stop: 45022, Start Num: 31

Candidate Starts for McFly_80:
(Start: 31 @45189 has 87 MA's), (32, 45183), (33, 45174),

Gene: MegTheThird_73 Start: 44364, Stop: 44173, Start Num: 31
Candidate Starts for MegTheThird_73:
(Start: 31 @44364 has 87 MA's), (34, 44340), (45, 44259), (50, 44214),

Gene: Miko_70 Start: 45080, Stop: 44916, Start Num: 28
Candidate Starts for Miko_70:
(Start: 28 @45080 has 13 MA's), (32, 45074), (33, 45065), (46, 44954), (52, 44924),

Gene: Minispark_76 Start: 44977, Stop: 44792, Start Num: 30
Candidate Starts for Minispark_76:
(Start: 30 @44977 has 109 MA's), (32, 44971), (58, 44806),

Gene: Miskis_150 Start: 82703, Stop: 82545, Start Num: 31
Candidate Starts for Miskis_150:
(Start: 31 @82703 has 87 MA's), (33, 82688), (43, 82625),

Gene: Myxus_78 Start: 45181, Stop: 45017, Start Num: 30
Candidate Starts for Myxus_78:
(Start: 30 @45181 has 109 MA's), (33, 45166), (36, 45148), (38, 45124),

Gene: Neeharika16_78 Start: 44656, Stop: 44489, Start Num: 31
Candidate Starts for Neeharika16_78:
(Start: 31 @44656 has 87 MA's), (32, 44650), (33, 44641),

Gene: Newrala_78 Start: 44995, Stop: 44828, Start Num: 31
Candidate Starts for Newrala_78:
(Start: 31 @44995 has 87 MA's), (32, 44989), (33, 44980),

Gene: Norvs_154 Start: 82865, Stop: 82707, Start Num: 31
Candidate Starts for Norvs_154:
(Start: 31 @82865 has 87 MA's), (33, 82850),

Gene: NothingSpecial_72 Start: 45754, Stop: 45581, Start Num: 30
Candidate Starts for NothingSpecial_72:
(Start: 30 @45754 has 109 MA's), (32, 45748), (40, 45682),

Gene: OlanP_84 Start: 47616, Stop: 47389, Start Num: 27
Candidate Starts for OlanP_84:
(Start: 27 @47616 has 3 MA's), (Start: 31 @47610 has 87 MA's), (33, 47595),

Gene: Onglai_77 Start: 43387, Stop: 43223, Start Num: 30
Candidate Starts for Onglai_77:
(Start: 30 @43387 has 109 MA's), (33, 43372), (38, 43330),

Gene: PackMan_77 Start: 45056, Stop: 44892, Start Num: 30
Candidate Starts for PackMan_77:
(Start: 30 @45056 has 109 MA's), (33, 45041), (36, 45023), (38, 44999),

Gene: Pawn_84 Start: 47439, Stop: 47218, Start Num: 31
Candidate Starts for Pawn_84:

(Start: 27 @47445 has 3 MA's), (Start: 31 @47439 has 87 MA's), (33, 47424),

Gene: Phaded_72 Start: 46962, Stop: 46786, Start Num: 28
Candidate Starts for Phaded_72:
(Start: 28 @46962 has 13 MA's), (32, 46956), (48, 46809),

Gene: Phaeder_78 Start: 45056, Stop: 44892, Start Num: 30
Candidate Starts for Phaeder_78:
(Start: 30 @45056 has 109 MA's), (33, 45041), (36, 45023), (38, 44999),

Gene: PhinkBoden_154 Start: 83263, Stop: 83105, Start Num: 31
Candidate Starts for PhinkBoden_154:
(Start: 31 @83263 has 87 MA's), (33, 83248),

Gene: PhishRPhriends_82 Start: 46619, Stop: 46398, Start Num: 31
Candidate Starts for PhishRPhriends_82:
(Start: 27 @46625 has 3 MA's), (Start: 31 @46619 has 87 MA's), (33, 46604),

Gene: Phonnegut_78 Start: 45128, Stop: 44964, Start Num: 30
Candidate Starts for Phonnegut_78:
(Start: 30 @45128 has 109 MA's), (33, 45113), (38, 45071),

Gene: Phranny_78 Start: 44887, Stop: 44666, Start Num: 31
Candidate Starts for Phranny_78:
(Start: 27 @44893 has 3 MA's), (Start: 31 @44887 has 87 MA's), (33, 44872),

Gene: Pioneer_78 Start: 45128, Stop: 44964, Start Num: 30
Candidate Starts for Pioneer_78:
(Start: 30 @45128 has 109 MA's), (33, 45113), (38, 45071),

Gene: Piro94_76 Start: 45778, Stop: 45623, Start Num: 30
Candidate Starts for Piro94_76:
(Start: 30 @45778 has 109 MA's), (32, 45772),

Gene: Pmask_78 Start: 45193, Stop: 45026, Start Num: 31
Candidate Starts for Pmask_78:
(Start: 31 @45193 has 87 MA's), (32, 45187), (33, 45178),

Gene: Power_76 Start: 46167, Stop: 46003, Start Num: 30
Candidate Starts for Power_76:
(21, 46206), (Start: 30 @46167 has 109 MA's), (32, 46161), (51, 46014),

Gene: Priamo_81 Start: 44855, Stop: 44688, Start Num: 31
Candidate Starts for Priamo_81:
(Start: 31 @44855 has 87 MA's), (32, 44849), (33, 44840),

Gene: Priya_76 Start: 44853, Stop: 44689, Start Num: 30
Candidate Starts for Priya_76:
(Start: 30 @44853 has 109 MA's), (33, 44838), (38, 44796),

Gene: Prudy_73 Start: 45907, Stop: 45752, Start Num: 30
Candidate Starts for Prudy_73:
(Start: 30 @45907 has 109 MA's), (32, 45901), (33, 45892), (39, 45841),

Gene: Pukovnik_73 Start: 46577, Stop: 46401, Start Num: 28
Candidate Starts for Pukovnik_73:
(Start: 28 @46577 has 13 MA's), (48, 46424),

Gene: Qobbit_76 Start: 44815, Stop: 44651, Start Num: 30
Candidate Starts for Qobbit_76:
(Start: 30 @44815 has 109 MA's), (33, 44800), (38, 44758),

Gene: QueenB2_74 Start: 45451, Stop: 45287, Start Num: 30
Candidate Starts for QueenB2_74:
(21, 45490), (Start: 30 @45451 has 109 MA's), (51, 45298),

Gene: QueenBeesly_77 Start: 46124, Stop: 45960, Start Num: 30
Candidate Starts for QueenBeesly_77:
(21, 46163), (Start: 30 @46124 has 109 MA's), (32, 46118), (51, 45971),

Gene: Quokka_83 Start: 46412, Stop: 46257, Start Num: 31
Candidate Starts for Quokka_83:
(Start: 29 @46415 has 1 MA's), (Start: 31 @46412 has 87 MA's),

Gene: Rachaly_72 Start: 45226, Stop: 45062, Start Num: 28
Candidate Starts for Rachaly_72:
(Start: 28 @45226 has 13 MA's), (32, 45220), (33, 45211), (46, 45100), (52, 45070),

Gene: Rahalelujah_78 Start: 44992, Stop: 44807, Start Num: 30
Candidate Starts for Rahalelujah_78:
(Start: 30 @44992 has 109 MA's), (32, 44986), (58, 44821),

Gene: Reba_81 Start: 46275, Stop: 46054, Start Num: 31
Candidate Starts for Reba_81:
(Start: 27 @46281 has 3 MA's), (Start: 31 @46275 has 87 MA's), (33, 46260),

Gene: RedRock_75 Start: 46134, Stop: 45979, Start Num: 30
Candidate Starts for RedRock_75:
(Start: 30 @46134 has 109 MA's), (33, 46119),

Gene: Refuge_74 Start: 46251, Stop: 46102, Start Num: 30
Candidate Starts for Refuge_74:
(Start: 30 @46251 has 109 MA's), (33, 46236), (46, 46125),

Gene: Reindeer_151 Start: 77820, Stop: 77668, Start Num: 31
Candidate Starts for Reindeer_151:
(19, 77868), (Start: 31 @77820 has 87 MA's), (33, 77805), (45, 77706),

Gene: Retro23_77 Start: 45856, Stop: 45692, Start Num: 30
Candidate Starts for Retro23_77:
(21, 45895), (Start: 30 @45856 has 109 MA's), (32, 45850), (51, 45703),

Gene: Rifter_79 Start: 43891, Stop: 43739, Start Num: 31
Candidate Starts for Rifter_79:
(Start: 23 @43918 has 2 MA's), (Start: 31 @43891 has 87 MA's), (32, 43885), (33, 43876), (37, 43849),

Gene: Roksolana_79 Start: 44624, Stop: 44472, Start Num: 31
Candidate Starts for Roksolana_79:
(Start: 31 @44624 has 87 MA's), (32, 44618), (33, 44609), (37, 44582),

Gene: RyeScarlet_78 Start: 45103, Stop: 44939, Start Num: 30
Candidate Starts for RyeScarlet_78:
(Start: 30 @45103 has 109 MA's), (33, 45088), (38, 45046),

Gene: Sachima_78 Start: 45084, Stop: 44920, Start Num: 30
Candidate Starts for Sachima_78:
(Start: 30 @45084 has 109 MA's), (33, 45069), (36, 45051), (38, 45027),

Gene: Scherzo_77 Start: 45338, Stop: 45153, Start Num: 30
Candidate Starts for Scherzo_77:
(Start: 30 @45338 has 109 MA's), (33, 45323), (38, 45281), (55, 45176),

Gene: SemperFi_77 Start: 46012, Stop: 45848, Start Num: 30
Candidate Starts for SemperFi_77:
(21, 46051), (Start: 30 @46012 has 109 MA's), (32, 46006), (38, 45955), (51, 45859),

Gene: SheaKeira_72 Start: 44164, Stop: 44015, Start Num: 31
Candidate Starts for SheaKeira_72:
(13, 44221), (Start: 31 @44164 has 87 MA's), (32, 44158), (34, 44140), (36, 44131), (45, 44059),

Gene: Smeagan_79 Start: 46399, Stop: 46235, Start Num: 30
Candidate Starts for Smeagan_79:
(22, 46438), (Start: 30 @46399 has 109 MA's), (51, 46246),

Gene: SmellyB_79 Start: 44554, Stop: 44387, Start Num: 31
Candidate Starts for SmellyB_79:
(Start: 31 @44554 has 87 MA's), (32, 44548), (33, 44539),

Gene: Smoothie_157 Start: 83364, Stop: 83206, Start Num: 31
Candidate Starts for Smoothie_157:
(Start: 31 @83364 has 87 MA's), (33, 83349),

Gene: SnapTap_76 Start: 45823, Stop: 45659, Start Num: 30
Candidate Starts for SnapTap_76:
(21, 45862), (Start: 30 @45823 has 109 MA's), (32, 45817), (51, 45670),

Gene: SororFago_78 Start: 46342, Stop: 46166, Start Num: 30
Candidate Starts for SororFago_78:
(Start: 30 @46342 has 109 MA's), (33, 46327),

Gene: Spouty_76 Start: 44852, Stop: 44688, Start Num: 30
Candidate Starts for Spouty_76:
(Start: 30 @44852 has 109 MA's), (33, 44837), (38, 44795),

Gene: Steamy_81 Start: 48438, Stop: 48295, Start Num: 31
Candidate Starts for Steamy_81:
(12, 48507), (24, 48468), (Start: 31 @48438 has 87 MA's), (39, 48384), (40, 48378),

Gene: Sunhee_78 Start: 44429, Stop: 44244, Start Num: 30

Candidate Starts for Sunhee_78:
(Start: 30 @44429 has 109 MA's), (33, 44414), (38, 44372), (44, 44336),

Gene: SuperAwesome_79 Start: 45232, Stop: 45065, Start Num: 31
Candidate Starts for SuperAwesome_79:
(Start: 31 @45232 has 87 MA's), (32, 45226), (33, 45217),

Gene: SuperCallie99_76 Start: 45076, Stop: 44909, Start Num: 31
Candidate Starts for SuperCallie99_76:
(Start: 31 @45076 has 87 MA's), (32, 45070), (33, 45061),

Gene: SweetiePie_76 Start: 45955, Stop: 45791, Start Num: 30
Candidate Starts for SweetiePie_76:
(21, 45994), (Start: 30 @45955 has 109 MA's), (32, 45949), (51, 45802),

Gene: TarsusIV_74 Start: 45855, Stop: 45700, Start Num: 30
Candidate Starts for TarsusIV_74:
(Start: 30 @45855 has 109 MA's), (46, 45729),

Gene: Temprado_80 Start: 44729, Stop: 44577, Start Num: 31
Candidate Starts for Temprado_80:
(Start: 23 @44756 has 2 MA's), (Start: 31 @44729 has 87 MA's), (32, 44723), (33, 44714), (37, 44687),

Gene: Toaka_78 Start: 45406, Stop: 45206, Start Num: 25
Candidate Starts for Toaka_78:
(Start: 25 @45406 has 1 MA's), (Start: 30 @45391 has 109 MA's), (33, 45376), (58, 45220),

Gene: ToneTone_76 Start: 44289, Stop: 44137, Start Num: 31
Candidate Starts for ToneTone_76:
(Start: 23 @44316 has 2 MA's), (Start: 31 @44289 has 87 MA's), (32, 44283), (33, 44274), (37, 44247),

Gene: Toniann_156 Start: 83006, Stop: 82848, Start Num: 31
Candidate Starts for Toniann_156:
(Start: 31 @83006 has 87 MA's), (33, 82991),

Gene: Towmatter_152 Start: 84333, Stop: 84148, Start Num: 31
Candidate Starts for Towmatter_152:
(7, 84444), (10, 84432), (Start: 31 @84333 has 87 MA's), (33, 84318), (41, 84261), (57, 84159),

Gene: Tristan_73 Start: 46813, Stop: 46637, Start Num: 28
Candidate Starts for Tristan_73:
(Start: 28 @46813 has 13 MA's), (32, 46807), (48, 46660),

Gene: Trixie_76 Start: 46566, Stop: 46399, Start Num: 30
Candidate Starts for Trixie_76:
(Start: 30 @46566 has 109 MA's), (38, 46509), (53, 46410), (56, 46404),

Gene: Trooper_76 Start: 45821, Stop: 45675, Start Num: 30
Candidate Starts for Trooper_76:
(Start: 30 @45821 has 109 MA's),

Gene: Tubs_78 Start: 45056, Stop: 44892, Start Num: 30
Candidate Starts for Tubs_78:

(Start: 30 @45056 has 109 MA's), (33, 45041), (36, 45023), (38, 44999),

Gene: Tucker_79 Start: 44492, Stop: 44340, Start Num: 31
Candidate Starts for Tucker_79:
(Start: 23 @44519 has 2 MA's), (Start: 31 @44492 has 87 MA's), (32, 44486), (33, 44477), (37, 44450),

Gene: Turbido_77 Start: 46120, Stop: 45956, Start Num: 30
Candidate Starts for Turbido_77:
(22, 46159), (Start: 30 @46120 has 109 MA's), (51, 45967),

Gene: Updawg_77 Start: 45675, Stop: 45511, Start Num: 30
Candidate Starts for Updawg_77:
(6, 45807), (8, 45777), (Start: 30 @45675 has 109 MA's), (51, 45522),

Gene: VA6_76 Start: 45850, Stop: 45683, Start Num: 30
Candidate Starts for VA6_76:
(Start: 30 @45850 has 109 MA's), (32, 45844), (49, 45703),

Gene: Vanisoa_75 Start: 45726, Stop: 45541, Start Num: 31
Candidate Starts for Vanisoa_75:
(Start: 31 @45726 has 87 MA's), (36, 45693), (58, 45555), (60, 45546),

Gene: VohminGhazi_79 Start: 44555, Stop: 44388, Start Num: 31
Candidate Starts for VohminGhazi_79:
(Start: 31 @44555 has 87 MA's), (32, 44549), (33, 44540),

Gene: WeiHuaDA_77 Start: 46612, Stop: 46448, Start Num: 28
Candidate Starts for WeiHuaDA_77:
(11, 46702), (26, 46621), (Start: 28 @46612 has 13 MA's), (38, 46555), (46, 46486),

Gene: WideWale_77 Start: 45675, Stop: 45511, Start Num: 30
Candidate Starts for WideWale_77:
(6, 45807), (8, 45777), (Start: 30 @45675 has 109 MA's), (51, 45522),

Gene: Wiks_78 Start: 44360, Stop: 44208, Start Num: 31
Candidate Starts for Wiks_78:
(Start: 23 @44387 has 2 MA's), (Start: 31 @44360 has 87 MA's), (32, 44354), (33, 44345), (37, 44318),

Gene: WilliamBoone_158 Start: 81466, Stop: 81308, Start Num: 31
Candidate Starts for WilliamBoone_158:
(Start: 31 @81466 has 87 MA's), (33, 81451),

Gene: WorldCup_76 Start: 44990, Stop: 44805, Start Num: 30
Candidate Starts for WorldCup_76:
(Start: 30 @44990 has 109 MA's), (32, 44984), (58, 44819),

Gene: WunderPhul_79 Start: 44358, Stop: 44206, Start Num: 31
Candidate Starts for WunderPhul_79:
(Start: 23 @44385 has 2 MA's), (Start: 31 @44358 has 87 MA's), (32, 44352), (33, 44343), (37, 44316),

Gene: XianYue_72 Start: 45602, Stop: 45423, Start Num: 28
Candidate Starts for XianYue_72:
(Start: 28 @45602 has 13 MA's), (38, 45545), (49, 45455), (54, 45443), (59, 45428),

Gene: Yecey3_80 Start: 45152, Stop: 44967, Start Num: 30
Candidate Starts for Yecey3_80:
(13, 45221), (Start: 30 @45152 has 109 MA's), (45, 45047), (58, 44981),

Gene: Yokurt_78 Start: 44360, Stop: 44208, Start Num: 31
Candidate Starts for Yokurt_78:
(Start: 23 @44387 has 2 MA's), (Start: 31 @44360 has 87 MA's), (32, 44354), (33, 44345), (37, 44318),

Gene: Zaka_79 Start: 44360, Stop: 44208, Start Num: 31
Candidate Starts for Zaka_79:
(Start: 23 @44387 has 2 MA's), (Start: 31 @44360 has 87 MA's), (32, 44354), (33, 44345), (37, 44318),

Gene: Zimmer_75 Start: 46180, Stop: 46019, Start Num: 30
Candidate Starts for Zimmer_75:
(Start: 30 @46180 has 109 MA's), (38, 46123),

Gene: Zulu_80 Start: 44738, Stop: 44586, Start Num: 31
Candidate Starts for Zulu_80:
(Start: 23 @44765 has 2 MA's), (Start: 31 @44738 has 87 MA's), (32, 44732), (33, 44723), (37, 44696),