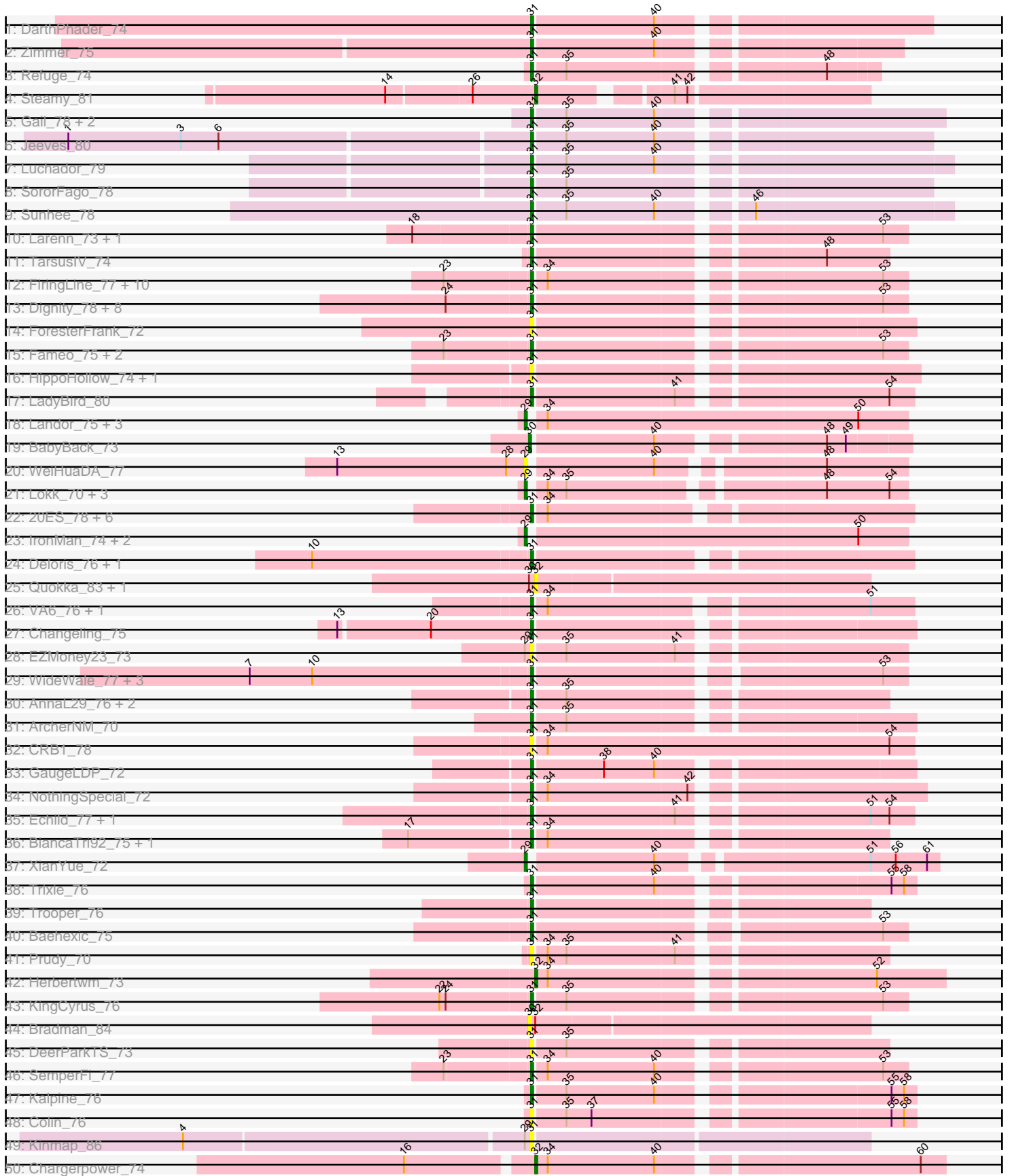
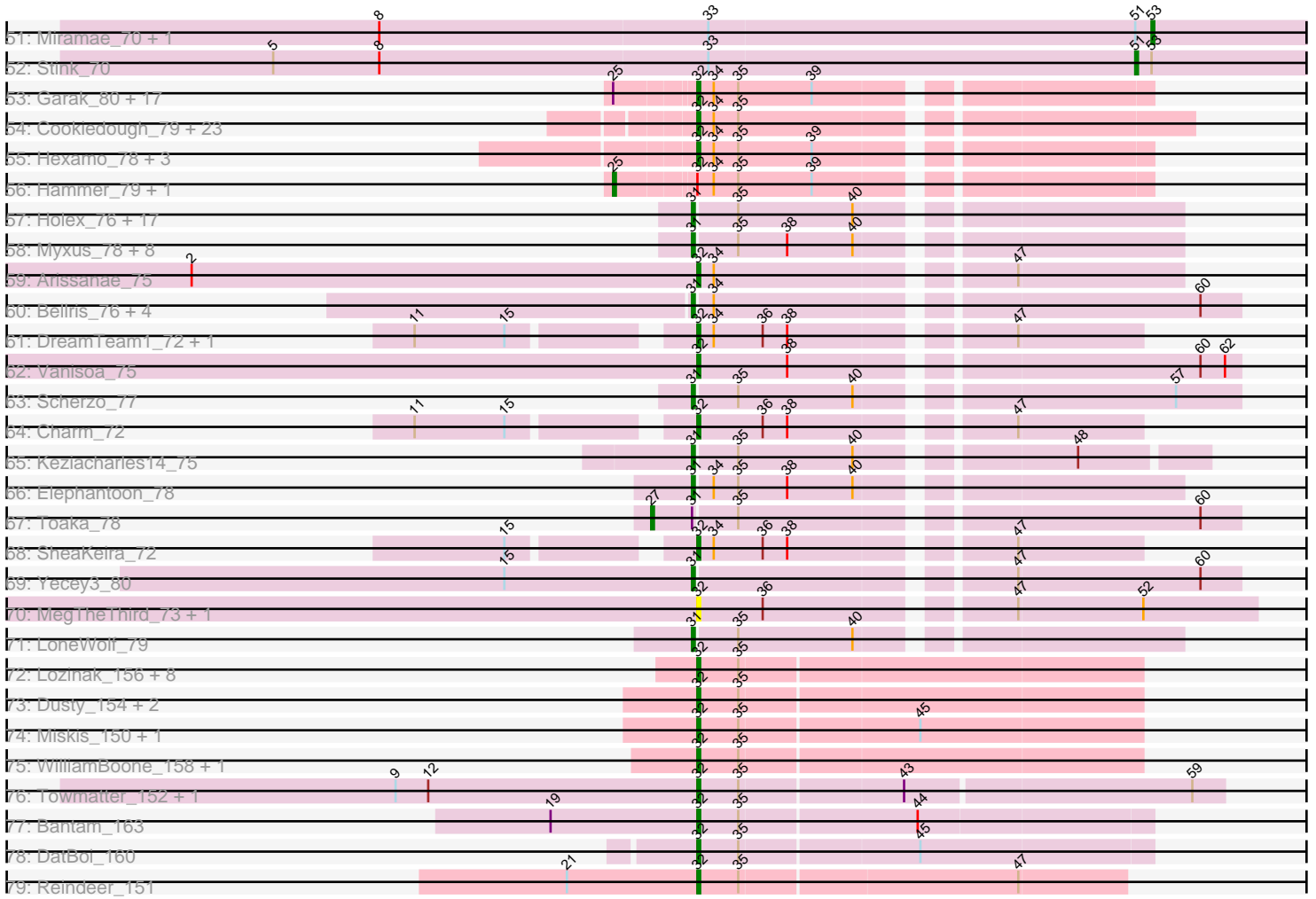


Pham 304718



Pham 304718



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 304718 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304718 has 216 members, 36 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 : Gail_78, BogosyJay_78, Maminiaina_78
- Track 6 : Jeeves_80
- 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_72
- Track 15 : Fameo_75, QueenB2_74, Heffalump_74
- Track 16 : HippoHollow_74, LionsBait_76
- Track 17 : LadyBird_80
- Track 18 : Landor_75, Tristan_73, Bactobuster_69, Phaded_72
- Track 19 : BabyBack_73
- Track 20 : WeiHuaDA_77
- Track 21 : Lolk_70, Rachaly_72, Miko_70, BobSwaget_69
- Track 22 : 20ES_78, Piro94_76, JoshKayV_77, First_0077, HarryHoudini_77, lwokeuplikedis_78, Drake55_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 : Changeling_75
- Track 28 : EZMoney23_73
- Track 29 : WideWale_77, Gratitude_74, Updawg_77, Equemioh13_76
- Track 30 : AnnaL29_76, Loser_78, RedRock_75
- Track 31 : ArcherNM_70
- Track 32 : CRB1_78
- Track 33 : GaugeLDP_72

- 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 : Prudy_70
- Track 42 : Herbertwm_73
- Track 43 : KingCyrus_76
- Track 44 : Bradman_84
- Track 45 : DeerParkTS_73
- Track 46 : SemperFi_77
- Track 47 : Kalpine_76
- Track 48 : Colin_76
- Track 49 : Kinmap_86
- Track 50 : Chargerpower_74
- Track 51 : Miramae_70, AvatarAhPeg_70
- Track 52 : Stink_70
- Track 53 : Garak_80, Zaka_79, Rifter_79, Tucker_79, ToneTone_76, BennyP_79, Yokurt_78, WunderPhul_79, Zulu_80, Helmet_81, BlessJoy_79, Gruunaga_78, CloudWang3_79, Blue7_80, Lilbunny_78, Temprado_80, Wiks_78, Indra_82
- Track 54 : Cookiedough_79, DaVinci_77, DelvinSonDorr_75, Hoot_74, EricB_78, Kazan_80, Jordennis_77, VohminGhazi_79, Candra_77, Kipper29_79, Isiphiwo_76, SmellyB_79, Blinn1_83, SuperCallie99_76, BABullseye_72, GreedyLawyer_74, Neeharika16_78, Priamo_81, Newrala_78, Dorothea_79, Pmask_78, McFly_80, SuperAwesome_79, Chartreuse_78
- Track 55 : Hexamo_78, Artemis2UCLA_78, Koko_80, Roksolana_79
- Track 56 : Hammer_79, Gladiator_76
- Track 57 : Holes_76, Conquerage_76, Alma_76, Fayely_76, Spouty_76, Ayanochan_76, Priya_76, Qobbit_76, ExplosioNervosa_76, Beemo_78, EmyBug_75, Phonnegut_78, Jiawan_75, Pioneer_78, Hanray_76, RyeScarlet_79, Onglai_76, Eidsmoe_76
- Track 58 : Myxus_78, Tubs_78, Sachima_74, HortumSL17_79, PackMan_77, Catalina_80, EdogawaKiddo_76, Phaeder_78, Lilleskat_75
- Track 59 : Arissanae_75
- Track 60 : Bellris_76, CogOmlette_76, WorldCup_76, Rahalelujah_78, Minispark_76
- Track 61 : DreamTeam1_72, Klodlith_73
- Track 62 : Vanisoa_75
- Track 63 : Scherzo_77
- Track 64 : Charm_72
- Track 65 : Keziacharles14_75
- Track 66 : Elephantoon_78
- Track 67 : Toaka_78
- Track 68 : SheaKeira_72
- Track 69 : Yecey3_80
- Track 70 : MegTheThird_73, Celestiallunch_73
- Track 71 : LoneWolf_79
- Track 72 : Lozinak_156, Cucurbita_155, Bachita_159, Toniann_156, Norvs_154, Smoothie_157, Abscondus_154, PhinkBoden_154, ClubL_157
- Track 73 : Dusty_154, Engineer_158, Geeche_156
- Track 74 : Miskis_150, Aphelion_156
- Track 75 : WilliamBoone_158, Culver_156

- Track 76 : Towmatter_152, Daredevil_154
- Track 77 : Bantam_163
- Track 78 : DatBoi_160
- 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 31, it was called in 90 of the 180 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_76, Baehexic_75, Beemo_78, Bellris_76, BengiVuitton_76, Benvolio_74, BiancaTri92_75, BogosyJay_78, Buggy_78, CRB1_78, Catalina_80, Changeling_75, CogOmlette_76, Colin_76, Conquerage_76, Crucio_77, Dalmatian_77, DarthPhader_74, DeerParkTS_73, Deloris_76, Dignity_78, Drake55_78, DudeLittle_75, EZMoney23_73, Echild_77, EdogawaKiddo_76, Eidsmoe_76, Elephantoon_78, EmyBug_75, Equemioh13_76, ExplosioNervosa_76, Fameo_75, Fayely_76, FiringLine_77, First_0077, ForesterFrank_72, Gail_78, GaugeLDP_72, Georgie2_78, Gratitude_74, Hanray_76, HarryHoudini_77, Heffalump_74, HippoHollow_74, Horex_76, HortumSL17_79, Iwokeuplikedis_78, Jeeves_80, Jerm_78, Jiawan_75, JoshKayV_77, Kalpine_76, Keziacharles14_75, KingCyrus_76, Kinmap_86, LadyBird_80, Larenn_73, Leogania_75, Leviathan_78, LilTurb_77, Lilleskat_75, LionsBait_76, LoneWolf_79, Loser_78, Luchador_79, Malec_74, Maminiaina_78, Minispark_76, Myxus_78, NothingSpecial_72, Onglai_76, PackMan_77, Phaeder_78, Phonnegut_78, Pioneer_78, Piro94_76, Power_76, Priya_76, Prudy_70, Qobbit_76, QueenB2_74, QueenBeesly_77, Rahalelujah_78, RedRock_75, Refuge_74, Retro23_77, RyeScarlet_79, Sachima_74, 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, AvatarAhPeg_70, BABullseye_72, BabyBack_73, Bachita_159, Bactobuster_69, Bantam_163, BennyP_79, BlessJoy_79, Blinn1_83, Blue7_80, BobSwaget_69, Bradman_84, Candra_77, Celestialunch_73, Chargerpower_74, Charm_72, Chartreuse_78, CloudWang3_79, 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, Gladiator_76, GreedyLawyer_74, Gruunaga_78, Hammer_79, Helmet_81, Herbertwm_73, Hexamo_78, Hoot_74, Indra_82, IronMan_74, Isiphiwo_76, Jaan_75, Jordennis_77, Kazan_80, Kipper29_79, Klodlith_73, Koko_80, Landor_75, Lilbunny_78, Lokk_70, Lozinak_156, MajorMajor_78, McFly_80, MegTheThird_73, Miko_70, Miramae_70, Miskis_150, Neeharika16_78, Newrala_78, Norvs_154, Phaded_72, PhinkBoden_154, Pmask_78, Priamo_81, Pukovnik_73, Quokka_83, Rachaly_72, Reindeer_151, Rifter_79, Roksolana_79, SheaKeira_72,

SmellyB_79, Smoothie_157, Steamy_81, Stink_70, 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 25:

- Found in 20 of 216 (9.3%) of genes in pham
- Manual Annotations of this start: 2 of 180
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Gladiator_76 (A6), Hammer_79 (A6),

Start 27:

- Found in 1 of 216 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 180
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Toaka_78 (A9),

Start 29:

- Found in 15 of 216 (6.9%) of genes in pham
- Manual Annotations of this start: 12 of 180
- 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 30:

- Found in 4 of 216 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 180
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BabyBack_73 (A2), Bradman_84 (A2),

Start 31:

- Found in 116 of 216 (53.7%) of genes in pham
- Manual Annotations of this start: 90 of 180
- 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_76 (A9), Baehexic_75 (A2), Beemo_78 (A9), Bellris_76 (A9), BengiVuitton_76 (A2), Benvolio_74 (A2), BiancaTri92_75 (A2), BogosyJay_78 (A9), Buggy_78 (A2), CRB1_78 (A2), Catalina_80 (A9), Changeling_75 (A2), CogOmlette_76 (A9), Colin_76 (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_73 (A2), Echild_77 (A2), EdogawaKiddo_76 (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_72 (A2), Gail_78 (A14), GaugeLDP_72 (A2), Georgie2_78 (A2), Gratitude_74 (A2), Hanray_76 (A9), HarryHoudini_77 (A2), Heffalump_74 (A2), HippoHollow_74 (A2), Horex_76 (A9), HortumSL17_79 (A9), Iwokeuplikedis_78 (A2), Jeeves_80 (A14), Jerm_78 (A2), Jiawan_75 (A9), JoshKayV_77 (A2), Kalpine_76

(A2), Keziacharles14_75 (A9), KingCyrus_76 (A2), Kinmap_86 (A21), LadyBird_80 (A2), Larenn_73 (A2), Leogania_75 (A2), Leviathan_78 (A2), LiITurb_77 (A2), Lilleskat_75 (A9), LionsBait_76 (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_76 (A9), PackMan_77 (A9), Phaeder_78 (A9), Phonnegut_78 (A9), Pioneer_78 (A9), Piro94_76 (A2), Power_76 (A2), Priya_76 (A9), Prudy_70 (A2), Qobbit_76 (A9), QueenB2_74 (A2), QueenBeesly_77 (A2), Rahalelujah_78 (A9), RedRock_75 (A2), Refuge_74 (A12), Retro23_77 (A2), RyeScarlet_79 (A9), Sachima_74 (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 32:

- Found in 83 of 216 (38.4%) of genes in pham
- Manual Annotations of this start: 71 of 180
- Called 96.4% 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_77 (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), GreedyLawyer_74 (A6), Gruunaga_78 (A6), Helmet_81 (A6), Herbertwm_73 (A2), Hexamo_78 (A6), Hoot_74 (A6), Indra_82 (A6), Isiphiwo_76 (A6), Jordennis_77 (A6), Kazan_80 (A6), Kipper29_79 (A6), Klodlith_73 (A9), Koko_80 (A6), Lilbunny_78 (A6), Lozinak_156 (CQ1), MajorMajor_78 (A2), McFly_80 (A6), MegTheThird_73 (A9), Miskis_150 (CQ1), Neeharika16_78 (A6), Newrala_78 (A6), Norvs_154 (CQ1), PhinkBoden_154 (CQ1), Pmask_78 (A6), Priamo_81 (A6), Quokka_83 (A2), 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),

Start 51:

- Found in 8 of 216 (3.7%) of genes in pham
- Manual Annotations of this start: 1 of 180
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Stink_70 (A4),

Start 53:

- Found in 35 of 216 (16.2%) of genes in pham
- Manual Annotations of this start: 2 of 180
- Called 5.7% of time when present
- Phage (with cluster) where this start called: AvatarAhPeg_70 (A4), Miramae_70 (A4),

Summary by clusters:

There are 11 clusters represented in this pham: A14, A22, A12, DL, A21, A2, M1, A4, A6, A9, CQ1,

Info for manual annotations of cluster A12:

- Start number 31 was manually annotated 3 times for cluster A12.
- Start number 32 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A14:

- Start number 31 was manually annotated 5 times for cluster A14.

Info for manual annotations of cluster A2:

- Start number 29 was manually annotated 12 times for cluster A2.
- Start number 30 was manually annotated 1 time for cluster A2.
- Start number 31 was manually annotated 56 times for cluster A2.
- Start number 32 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A22:

- Start number 32 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A4:

- Start number 51 was manually annotated 1 time for cluster A4.
- Start number 53 was manually annotated 2 times for cluster A4.

Info for manual annotations of cluster A6:

- Start number 25 was manually annotated 2 times for cluster A6.
- Start number 32 was manually annotated 43 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 27 was manually annotated 1 time for cluster A9.
- Start number 31 was manually annotated 26 times for cluster A9.
- Start number 32 was manually annotated 5 times for cluster A9.

Info for manual annotations of cluster CQ1:

- Start number 32 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster DL:

- Start number 32 was manually annotated 4 times for cluster DL.

Info for manual annotations of cluster M1:

- Start number 32 was manually annotated 1 time for cluster M1.

Gene Information:

Gene: 20ES_78 Start: 45905, Stop: 45738, Start Num: 31

Candidate Starts for 20ES_78:

(Start: 31 @45905 has 90 MA's), (34, 45899),

Gene: AN3_78 Start: 44672, Stop: 44505, Start Num: 31

Candidate Starts for AN3_78:

(Start: 31 @44672 has 90 MA's), (34, 44666), (Start: 51 @44525 has 1 MA's),

Gene: AbbyPaige_78 Start: 46176, Stop: 46012, Start Num: 31

Candidate Starts for AbbyPaige_78:

(24, 46215), (Start: 31 @46176 has 90 MA's), (Start: 53 @46023 has 2 MA's),

Gene: Abscondus_154 Start: 82793, Stop: 82635, Start Num: 32

Candidate Starts for Abscondus_154:

(Start: 32 @82793 has 71 MA's), (35, 82778),

Gene: Agape74_78 Start: 46171, Stop: 46007, Start Num: 31

Candidate Starts for Agape74_78:

(24, 46210), (Start: 31 @46171 has 90 MA's), (Start: 53 @46018 has 2 MA's),

Gene: Alma_76 Start: 45089, Stop: 44925, Start Num: 31

Candidate Starts for Alma_76:

(Start: 31 @45089 has 90 MA's), (35, 45074), (40, 45032),

Gene: AnnaL29_76 Start: 46109, Stop: 45954, Start Num: 31

Candidate Starts for AnnaL29_76:

(Start: 31 @46109 has 90 MA's), (35, 46094),

Gene: Anselm_78 Start: 46243, Stop: 46079, Start Num: 31

Candidate Starts for Anselm_78:

(23, 46282), (Start: 31 @46243 has 90 MA's), (34, 46237), (Start: 53 @46090 has 2 MA's),

Gene: Aphelion_156 Start: 83954, Stop: 83796, Start Num: 32

Candidate Starts for Aphelion_156:

(Start: 32 @83954 has 71 MA's), (35, 83939), (45, 83876),

Gene: ArcherNM_70 Start: 45375, Stop: 45208, Start Num: 31

Candidate Starts for ArcherNM_70:

(Start: 31 @45375 has 90 MA's), (35, 45360),

Gene: Arissanae_75 Start: 45413, Stop: 45249, Start Num: 32

Candidate Starts for Arissanae_75:

(2, 45599), (Start: 32 @45413 has 71 MA's), (34, 45407), (47, 45308),

Gene: Artemis2UCLA_78 Start: 44266, Stop: 44114, Start Num: 32

Candidate Starts for Artemis2UCLA_78:

(Start: 32 @44266 has 71 MA's), (34, 44260), (35, 44251), (39, 44224),

Gene: AvatarAhPeg_70 Start: 44568, Stop: 44446, Start Num: 53

Candidate Starts for AvatarAhPeg_70:

(8, 44850), (33, 44730), (Start: 51 @44574 has 1 MA's), (Start: 53 @44568 has 2 MA's),

Gene: Ayanochan_76 Start: 44872, Stop: 44708, Start Num: 31

Candidate Starts for Ayanochan_76:

(Start: 31 @44872 has 90 MA's), (35, 44857), (40, 44815),

Gene: BABullseye_72 Start: 42895, Stop: 42728, Start Num: 32

Candidate Starts for BABullseye_72:

(Start: 32 @42895 has 71 MA's), (34, 42889), (35, 42880),

Gene: BabyBack_73 Start: 45797, Stop: 45633, Start Num: 30

Candidate Starts for BabyBack_73:

(Start: 30 @45797 has 1 MA's), (40, 45740), (48, 45671), (49, 45662),

Gene: Bachita_159 Start: 83833, Stop: 83675, Start Num: 32

Candidate Starts for Bachita_159:

(Start: 32 @83833 has 71 MA's), (35, 83818),

Gene: Bactobuster_69 Start: 45446, Stop: 45270, Start Num: 29

Candidate Starts for Bactobuster_69:

(Start: 29 @45446 has 12 MA's), (34, 45440), (50, 45293),

Gene: Baehexic_75 Start: 45567, Stop: 45403, Start Num: 31

Candidate Starts for Baehexic_75:

(Start: 31 @45567 has 90 MA's), (Start: 53 @45414 has 2 MA's),

Gene: Bantam_163 Start: 88026, Stop: 87865, Start Num: 32

Candidate Starts for Bantam_163:

(19, 88080), (Start: 32 @88026 has 71 MA's), (35, 88011), (44, 87948),

Gene: Beemo_78 Start: 45129, Stop: 44965, Start Num: 31

Candidate Starts for Beemo_78:

(Start: 31 @45129 has 90 MA's), (35, 45114), (40, 45072),

Gene: Bellris_76 Start: 44983, Stop: 44798, Start Num: 31

Candidate Starts for Bellris_76:

(Start: 31 @44983 has 90 MA's), (34, 44977), (60, 44812),

Gene: BengiVuitton_76 Start: 45866, Stop: 45699, Start Num: 31

Candidate Starts for BengiVuitton_76:

(10, 45968), (Start: 31 @45866 has 90 MA's),

Gene: BennyP_79 Start: 44432, Stop: 44280, Start Num: 32

Candidate Starts for BennyP_79:

(Start: 25 @44459 has 2 MA's), (Start: 32 @44432 has 71 MA's), (34, 44426), (35, 44417), (39, 44390),

Gene: Benvolio_74 Start: 45472, Stop: 45305, Start Num: 31

Candidate Starts for Benvolio_74:

(Start: 31 @45472 has 90 MA's), (41, 45406), (Start: 51 @45325 has 1 MA's), (54, 45316),

Gene: BiancaTri92_75 Start: 45806, Stop: 45651, Start Num: 31

Candidate Starts for BiancaTri92_75:

(17, 45863), (Start: 31 @45806 has 90 MA's), (34, 45800),

Gene: BlessJoy_79 Start: 44788, Stop: 44636, Start Num: 32

Candidate Starts for BlessJoy_79:

(Start: 25 @44815 has 2 MA's), (Start: 32 @44788 has 71 MA's), (34, 44782), (35, 44773), (39, 44746),

Gene: Blinn1_83 Start: 45509, Stop: 45342, Start Num: 32

Candidate Starts for Blinn1_83:

(Start: 32 @45509 has 71 MA's), (34, 45503), (35, 45494),

Gene: Blue7_80 Start: 44486, Stop: 44334, Start Num: 32
Candidate Starts for Blue7_80:
(Start: 25 @44513 has 2 MA's), (Start: 32 @44486 has 71 MA's), (34, 44480), (35, 44471), (39, 44444),

Gene: BobSwaget_69 Start: 43679, Stop: 43515, Start Num: 29
Candidate Starts for BobSwaget_69:
(Start: 29 @43679 has 12 MA's), (34, 43673), (35, 43664), (48, 43553), (54, 43523),

Gene: BogosyJay_78 Start: 45362, Stop: 45198, Start Num: 31
Candidate Starts for BogosyJay_78:
(Start: 31 @45362 has 90 MA's), (35, 45347), (40, 45305),

Gene: Bradman_84 Start: 46414, Stop: 46256, Start Num: 30
Candidate Starts for Bradman_84:
(Start: 30 @46414 has 1 MA's), (Start: 32 @46411 has 71 MA's),

Gene: Buggy_78 Start: 46221, Stop: 46057, Start Num: 31
Candidate Starts for Buggy_78:
(24, 46260), (Start: 31 @46221 has 90 MA's), (Start: 53 @46068 has 2 MA's),

Gene: CRB1_78 Start: 46424, Stop: 46245, Start Num: 31
Candidate Starts for CRB1_78:
(Start: 31 @46424 has 90 MA's), (34, 46418), (54, 46256),

Gene: Candra_77 Start: 44590, Stop: 44423, Start Num: 32
Candidate Starts for Candra_77:
(Start: 32 @44590 has 71 MA's), (34, 44584), (35, 44575),

Gene: Catalina_80 Start: 45183, Stop: 45019, Start Num: 31
Candidate Starts for Catalina_80:
(Start: 31 @45183 has 90 MA's), (35, 45168), (38, 45150), (40, 45126),

Gene: Celestiallunch_73 Start: 44364, Stop: 44173, Start Num: 32
Candidate Starts for Celestiallunch_73:
(Start: 32 @44364 has 71 MA's), (36, 44340), (47, 44259), (52, 44214),

Gene: Changeling_75 Start: 46099, Stop: 45932, Start Num: 31
Candidate Starts for Changeling_75:
(13, 46189), (20, 46147), (Start: 31 @46099 has 90 MA's),

Gene: Chargerpower_74 Start: 44306, Stop: 44124, Start Num: 32
Candidate Starts for Chargerpower_74:
(16, 44363), (Start: 32 @44306 has 71 MA's), (34, 44300), (40, 44249), (60, 44135),

Gene: Charm_72 Start: 44293, Stop: 44144, Start Num: 32
Candidate Starts for Charm_72:
(11, 44383), (15, 44350), (Start: 32 @44293 has 71 MA's), (36, 44269), (38, 44260), (47, 44188),

Gene: Chartreuse_78 Start: 43901, Stop: 43734, Start Num: 32
Candidate Starts for Chartreuse_78:
(Start: 32 @43901 has 71 MA's), (34, 43895), (35, 43886),

Gene: CloudWang3_79 Start: 44778, Stop: 44626, Start Num: 32
Candidate Starts for CloudWang3_79:
(Start: 25 @44805 has 2 MA's), (Start: 32 @44778 has 71 MA's), (34, 44772), (35, 44763), (39, 44736),

Gene: ClubL_157 Start: 83085, Stop: 82927, Start Num: 32
Candidate Starts for ClubL_157:
(Start: 32 @83085 has 71 MA's), (35, 83070),

Gene: CogOmlette_76 Start: 44980, Stop: 44795, Start Num: 31
Candidate Starts for CogOmlette_76:
(Start: 31 @44980 has 90 MA's), (34, 44974), (60, 44809),

Gene: Colin_76 Start: 46817, Stop: 46650, Start Num: 31
Candidate Starts for Colin_76:
(Start: 31 @46817 has 90 MA's), (35, 46802), (37, 46790), (55, 46661), (58, 46655),

Gene: Conquerage_76 Start: 44858, Stop: 44694, Start Num: 31
Candidate Starts for Conquerage_76:
(Start: 31 @44858 has 90 MA's), (35, 44843), (40, 44801),

Gene: Cookiedough_79 Start: 45205, Stop: 45038, Start Num: 32
Candidate Starts for Cookiedough_79:
(Start: 32 @45205 has 71 MA's), (34, 45199), (35, 45190),

Gene: Crucio_77 Start: 46142, Stop: 45978, Start Num: 31
Candidate Starts for Crucio_77:
(23, 46181), (Start: 31 @46142 has 90 MA's), (34, 46136), (Start: 53 @45989 has 2 MA's),

Gene: Cucurbita_155 Start: 84146, Stop: 83988, Start Num: 32
Candidate Starts for Cucurbita_155:
(Start: 32 @84146 has 71 MA's), (35, 84131),

Gene: Culver_156 Start: 82350, Stop: 82192, Start Num: 32
Candidate Starts for Culver_156:
(Start: 32 @82350 has 71 MA's), (35, 82335),

Gene: DaVinci_77 Start: 43955, Stop: 43788, Start Num: 32
Candidate Starts for DaVinci_77:
(Start: 32 @43955 has 71 MA's), (34, 43949), (35, 43940),

Gene: Dalmatian_77 Start: 45962, Stop: 45798, Start Num: 31
Candidate Starts for Dalmatian_77:
(23, 46001), (Start: 31 @45962 has 90 MA's), (34, 45956), (Start: 53 @45809 has 2 MA's),

Gene: Daredevil_154 Start: 84151, Stop: 83966, Start Num: 32
Candidate Starts for Daredevil_154:
(9, 84262), (12, 84250), (Start: 32 @84151 has 71 MA's), (35, 84136), (43, 84079), (59, 83977),

Gene: DarthPhader_74 Start: 46216, Stop: 46040, Start Num: 31
Candidate Starts for DarthPhader_74:
(Start: 31 @46216 has 90 MA's), (40, 46159),

Gene: DatBoi_160 Start: 87295, Stop: 87134, Start Num: 32

Candidate Starts for DatBoi_160:
(Start: 32 @87295 has 71 MA's), (35, 87280), (45, 87217),

Gene: DeerParkTS_73 Start: 44838, Stop: 44683, Start Num: 31
Candidate Starts for DeerParkTS_73:
(Start: 31 @44838 has 90 MA's), (35, 44823),

Gene: Deloris_76 Start: 45562, Stop: 45395, Start Num: 31
Candidate Starts for Deloris_76:
(10, 45664), (Start: 31 @45562 has 90 MA's),

Gene: DelvinSonDorr_75 Start: 44610, Stop: 44443, Start Num: 32
Candidate Starts for DelvinSonDorr_75:
(Start: 32 @44610 has 71 MA's), (34, 44604), (35, 44595),

Gene: Dignity_78 Start: 46259, Stop: 46095, Start Num: 31
Candidate Starts for Dignity_78:
(24, 46298), (Start: 31 @46259 has 90 MA's), (Start: 53 @46106 has 2 MA's),

Gene: Dorothea_79 Start: 45201, Stop: 45034, Start Num: 32
Candidate Starts for Dorothea_79:
(Start: 32 @45201 has 71 MA's), (34, 45195), (35, 45186),

Gene: Drake55_78 Start: 45846, Stop: 45691, Start Num: 31
Candidate Starts for Drake55_78:
(Start: 31 @45846 has 90 MA's), (34, 45840),

Gene: DreamTeam1_72 Start: 44140, Stop: 43991, Start Num: 32
Candidate Starts for DreamTeam1_72:
(11, 44230), (15, 44197), (Start: 32 @44140 has 71 MA's), (34, 44134), (36, 44116), (38, 44107), (47, 44035),

Gene: DudeLittle_75 Start: 45728, Stop: 45564, Start Num: 31
Candidate Starts for DudeLittle_75:
(23, 45767), (Start: 31 @45728 has 90 MA's), (34, 45722), (Start: 53 @45575 has 2 MA's),

Gene: Dusty_154 Start: 82822, Stop: 82664, Start Num: 32
Candidate Starts for Dusty_154:
(Start: 32 @82822 has 71 MA's), (35, 82807),

Gene: EZMoney23_73 Start: 45628, Stop: 45464, Start Num: 31
Candidate Starts for EZMoney23_73:
(Start: 29 @45631 has 12 MA's), (Start: 31 @45628 has 90 MA's), (35, 45613), (41, 45562),

Gene: Echild_77 Start: 45496, Stop: 45329, Start Num: 31
Candidate Starts for Echild_77:
(Start: 31 @45496 has 90 MA's), (41, 45430), (Start: 51 @45349 has 1 MA's), (54, 45340),

Gene: EdogawaKiddo_76 Start: 45151, Stop: 44987, Start Num: 31
Candidate Starts for EdogawaKiddo_76:
(Start: 31 @45151 has 90 MA's), (35, 45136), (38, 45118), (40, 45094),

Gene: Eidsmoe_76 Start: 44850, Stop: 44686, Start Num: 31

Candidate Starts for Eidsmoe_76:

(Start: 31 @44850 has 90 MA's), (35, 44835), (40, 44793),

Gene: Elephantoon_78 Start: 45016, Stop: 44852, Start Num: 31

Candidate Starts for Elephantoon_78:

(Start: 31 @45016 has 90 MA's), (34, 45010), (35, 45001), (38, 44983), (40, 44959),

Gene: EmyBug_75 Start: 44852, Stop: 44688, Start Num: 31

Candidate Starts for EmyBug_75:

(Start: 31 @44852 has 90 MA's), (35, 44837), (40, 44795),

Gene: Engineer_158 Start: 83672, Stop: 83514, Start Num: 32

Candidate Starts for Engineer_158:

(Start: 32 @83672 has 71 MA's), (35, 83657),

Gene: Equemioh13_76 Start: 45675, Stop: 45511, Start Num: 31

Candidate Starts for Equemioh13_76:

(7, 45807), (10, 45777), (Start: 31 @45675 has 90 MA's), (Start: 53 @45522 has 2 MA's),

Gene: EricB_78 Start: 44547, Stop: 44380, Start Num: 32

Candidate Starts for EricB_78:

(Start: 32 @44547 has 71 MA's), (34, 44541), (35, 44532),

Gene: ExplosioNervosa_76 Start: 44918, Stop: 44754, Start Num: 31

Candidate Starts for ExplosioNervosa_76:

(Start: 31 @44918 has 90 MA's), (35, 44903), (40, 44861),

Gene: Fameo_75 Start: 45770, Stop: 45606, Start Num: 31

Candidate Starts for Fameo_75:

(23, 45809), (Start: 31 @45770 has 90 MA's), (Start: 53 @45617 has 2 MA's),

Gene: Fayely_76 Start: 44819, Stop: 44655, Start Num: 31

Candidate Starts for Fayely_76:

(Start: 31 @44819 has 90 MA's), (35, 44804), (40, 44762),

Gene: FiringLine_77 Start: 46124, Stop: 45960, Start Num: 31

Candidate Starts for FiringLine_77:

(23, 46163), (Start: 31 @46124 has 90 MA's), (34, 46118), (Start: 53 @45971 has 2 MA's),

Gene: First_0077 Start: 45805, Stop: 45638, Start Num: 31

Candidate Starts for First_0077:

(Start: 31 @45805 has 90 MA's), (34, 45799),

Gene: ForesterFrank_72 Start: 45901, Stop: 45734, Start Num: 31

Candidate Starts for ForesterFrank_72:

(Start: 31 @45901 has 90 MA's),

Gene: Gail_78 Start: 46233, Stop: 46051, Start Num: 31

Candidate Starts for Gail_78:

(Start: 31 @46233 has 90 MA's), (35, 46218), (40, 46176),

Gene: Garak_80 Start: 44729, Stop: 44577, Start Num: 32

Candidate Starts for Garak_80:

(Start: 25 @44756 has 2 MA's), (Start: 32 @44729 has 71 MA's), (34, 44723), (35, 44714), (39, 44687),

Gene: GaugeLDP_72 Start: 45357, Stop: 45190, Start Num: 31

Candidate Starts for GaugeLDP_72:

(Start: 31 @45357 has 90 MA's), (38, 45324), (40, 45300),

Gene: Geeche_156 Start: 83046, Stop: 82888, Start Num: 32

Candidate Starts for Geeche_156:

(Start: 32 @83046 has 71 MA's), (35, 83031),

Gene: Georgie2_78 Start: 46168, Stop: 46004, Start Num: 31

Candidate Starts for Georgie2_78:

(23, 46207), (Start: 31 @46168 has 90 MA's), (34, 46162), (Start: 53 @46015 has 2 MA's),

Gene: Gladiator_76 Start: 44659, Stop: 44480, Start Num: 25

Candidate Starts for Gladiator_76:

(Start: 25 @44659 has 2 MA's), (Start: 32 @44632 has 71 MA's), (34, 44626), (35, 44617), (39, 44590),

Gene: Gratitude_74 Start: 45675, Stop: 45511, Start Num: 31

Candidate Starts for Gratitude_74:

(7, 45807), (10, 45777), (Start: 31 @45675 has 90 MA's), (Start: 53 @45522 has 2 MA's),

Gene: GreedyLawyer_74 Start: 44520, Stop: 44353, Start Num: 32

Candidate Starts for GreedyLawyer_74:

(Start: 32 @44520 has 71 MA's), (34, 44514), (35, 44505),

Gene: Gruunaga_78 Start: 44587, Stop: 44435, Start Num: 32

Candidate Starts for Gruunaga_78:

(Start: 25 @44614 has 2 MA's), (Start: 32 @44587 has 71 MA's), (34, 44581), (35, 44572), (39, 44545),

Gene: Hammer_79 Start: 44321, Stop: 44142, Start Num: 25

Candidate Starts for Hammer_79:

(Start: 25 @44321 has 2 MA's), (Start: 32 @44294 has 71 MA's), (34, 44288), (35, 44279), (39, 44252),

Gene: Hanray_76 Start: 45183, Stop: 45019, Start Num: 31

Candidate Starts for Hanray_76:

(Start: 31 @45183 has 90 MA's), (35, 45168), (40, 45126),

Gene: HarryHoudini_77 Start: 45843, Stop: 45688, Start Num: 31

Candidate Starts for HarryHoudini_77:

(Start: 31 @45843 has 90 MA's), (34, 45837),

Gene: Heffalump_74 Start: 46238, Stop: 46074, Start Num: 31

Candidate Starts for Heffalump_74:

(23, 46277), (Start: 31 @46238 has 90 MA's), (Start: 53 @46085 has 2 MA's),

Gene: Helmet_81 Start: 44729, Stop: 44577, Start Num: 32

Candidate Starts for Helmet_81:

(Start: 25 @44756 has 2 MA's), (Start: 32 @44729 has 71 MA's), (34, 44723), (35, 44714), (39, 44687),

Gene: Herbertwm_73 Start: 45474, Stop: 45292, Start Num: 32

Candidate Starts for Herbertwm_73:

(Start: 32 @45474 has 71 MA's), (34, 45468), (52, 45324),

Gene: Hexamo_78 Start: 44263, Stop: 44111, Start Num: 32
Candidate Starts for Hexamo_78:
(Start: 32 @44263 has 71 MA's), (34, 44257), (35, 44248), (39, 44221),

Gene: HippoHollow_74 Start: 46961, Stop: 46791, Start Num: 31
Candidate Starts for HippoHollow_74:
(Start: 31 @46961 has 90 MA's),

Gene: Holec_76 Start: 45199, Stop: 45035, Start Num: 31
Candidate Starts for Holec_76:
(Start: 31 @45199 has 90 MA's), (35, 45184), (40, 45142),

Gene: Hoot_74 Start: 42405, Stop: 42238, Start Num: 32
Candidate Starts for Hoot_74:
(Start: 32 @42405 has 71 MA's), (34, 42399), (35, 42390),

Gene: HortumSL17_79 Start: 45181, Stop: 45017, Start Num: 31
Candidate Starts for HortumSL17_79:
(Start: 31 @45181 has 90 MA's), (35, 45166), (38, 45148), (40, 45124),

Gene: Indra_82 Start: 44730, Stop: 44578, Start Num: 32
Candidate Starts for Indra_82:
(Start: 25 @44757 has 2 MA's), (Start: 32 @44730 has 71 MA's), (34, 44724), (35, 44715), (39, 44688),

Gene: IronMan_74 Start: 46915, Stop: 46739, Start Num: 29
Candidate Starts for IronMan_74:
(Start: 29 @46915 has 12 MA's), (50, 46762),

Gene: Isiphiwo_76 Start: 44572, Stop: 44405, Start Num: 32
Candidate Starts for Isiphiwo_76:
(Start: 32 @44572 has 71 MA's), (34, 44566), (35, 44557),

Gene: Iwokeuplikedis_78 Start: 46300, Stop: 46124, Start Num: 31
Candidate Starts for Iwokeuplikedis_78:
(Start: 31 @46300 has 90 MA's), (34, 46294),

Gene: Jaan_75 Start: 47076, Stop: 46900, Start Num: 29
Candidate Starts for Jaan_75:
(Start: 29 @47076 has 12 MA's), (50, 46923),

Gene: Jeeves_80 Start: 45143, Stop: 44967, Start Num: 31
Candidate Starts for Jeeves_80:
(1, 45359), (3, 45305), (6, 45287), (Start: 31 @45143 has 90 MA's), (35, 45128), (40, 45086),

Gene: Jerm_78 Start: 46242, Stop: 46078, Start Num: 31
Candidate Starts for Jerm_78:
(24, 46281), (Start: 31 @46242 has 90 MA's), (Start: 53 @46089 has 2 MA's),

Gene: Jiawan_75 Start: 45215, Stop: 45051, Start Num: 31
Candidate Starts for Jiawan_75:
(Start: 31 @45215 has 90 MA's), (35, 45200), (40, 45158),

Gene: Jordennis_77 Start: 44787, Stop: 44620, Start Num: 32
Candidate Starts for Jordennis_77:
(Start: 32 @44787 has 71 MA's), (34, 44781), (35, 44772),

Gene: JoshKayV_77 Start: 46282, Stop: 46115, Start Num: 31
Candidate Starts for JoshKayV_77:
(Start: 31 @46282 has 90 MA's), (34, 46276),

Gene: Kalpine_76 Start: 46163, Stop: 45996, Start Num: 31
Candidate Starts for Kalpine_76:
(Start: 31 @46163 has 90 MA's), (35, 46148), (40, 46106), (55, 46007), (58, 46001),

Gene: Kazan_80 Start: 44560, Stop: 44393, Start Num: 32
Candidate Starts for Kazan_80:
(Start: 32 @44560 has 71 MA's), (34, 44554), (35, 44545),

Gene: Keziacharles14_75 Start: 45797, Stop: 45627, Start Num: 31
Candidate Starts for Keziacharles14_75:
(Start: 31 @45797 has 90 MA's), (35, 45782), (40, 45740), (48, 45671),

Gene: KingCyrus_76 Start: 47256, Stop: 47092, Start Num: 31
Candidate Starts for KingCyrus_76:
(22, 47298), (24, 47295), (Start: 31 @47256 has 90 MA's), (35, 47241), (Start: 53 @47103 has 2 MA's),

Gene: Kinmap_86 Start: 46044, Stop: 45889, Start Num: 31
Candidate Starts for Kinmap_86:
(4, 46206), (Start: 29 @46047 has 12 MA's), (Start: 31 @46044 has 90 MA's),

Gene: Kipper29_79 Start: 44573, Stop: 44406, Start Num: 32
Candidate Starts for Kipper29_79:
(Start: 32 @44573 has 71 MA's), (34, 44567), (35, 44558),

Gene: Klodlith_73 Start: 44360, Stop: 44211, Start Num: 32
Candidate Starts for Klodlith_73:
(11, 44450), (15, 44417), (Start: 32 @44360 has 71 MA's), (34, 44354), (36, 44336), (38, 44327), (47, 44255),

Gene: Koko_80 Start: 45118, Stop: 44966, Start Num: 32
Candidate Starts for Koko_80:
(Start: 32 @45118 has 71 MA's), (34, 45112), (35, 45103), (39, 45076),

Gene: LadyBird_80 Start: 46485, Stop: 46318, Start Num: 31
Candidate Starts for LadyBird_80:
(Start: 31 @46485 has 90 MA's), (41, 46419), (54, 46329),

Gene: Landor_75 Start: 47003, Stop: 46827, Start Num: 29
Candidate Starts for Landor_75:
(Start: 29 @47003 has 12 MA's), (34, 46997), (50, 46850),

Gene: Larenn_73 Start: 45502, Stop: 45338, Start Num: 31
Candidate Starts for Larenn_73:
(18, 45556), (Start: 31 @45502 has 90 MA's), (Start: 53 @45349 has 2 MA's),

Gene: Leogania_75 Start: 46184, Stop: 46029, Start Num: 31
Candidate Starts for Leogania_75:
(17, 46241), (Start: 31 @46184 has 90 MA's), (34, 46178),

Gene: Leviathan_78 Start: 46308, Stop: 46144, Start Num: 31
Candidate Starts for Leviathan_78:
(24, 46347), (Start: 31 @46308 has 90 MA's), (Start: 53 @46155 has 2 MA's),

Gene: LilTurb_77 Start: 46122, Stop: 45958, Start Num: 31
Candidate Starts for LilTurb_77:
(24, 46161), (Start: 31 @46122 has 90 MA's), (Start: 53 @45969 has 2 MA's),

Gene: Lilbunny_78 Start: 44361, Stop: 44209, Start Num: 32
Candidate Starts for Lilbunny_78:
(Start: 25 @44388 has 2 MA's), (Start: 32 @44361 has 71 MA's), (34, 44355), (35, 44346), (39, 44319),

Gene: Lilleskat_75 Start: 45140, Stop: 44976, Start Num: 31
Candidate Starts for Lilleskat_75:
(Start: 31 @45140 has 90 MA's), (35, 45125), (38, 45107), (40, 45083),

Gene: LionsBait_76 Start: 46960, Stop: 46790, Start Num: 31
Candidate Starts for LionsBait_76:
(Start: 31 @46960 has 90 MA's),

Gene: Lokk_70 Start: 44303, Stop: 44139, Start Num: 29
Candidate Starts for Lokk_70:
(Start: 29 @44303 has 12 MA's), (34, 44297), (35, 44288), (48, 44177), (54, 44147),

Gene: LoneWolf_79 Start: 45428, Stop: 45264, Start Num: 31
Candidate Starts for LoneWolf_79:
(Start: 31 @45428 has 90 MA's), (35, 45413), (40, 45371),

Gene: Loser_78 Start: 46367, Stop: 46212, Start Num: 31
Candidate Starts for Loser_78:
(Start: 31 @46367 has 90 MA's), (35, 46352),

Gene: Lozinak_156 Start: 83674, Stop: 83516, Start Num: 32
Candidate Starts for Lozinak_156:
(Start: 32 @83674 has 71 MA's), (35, 83659),

Gene: Luchador_79 Start: 46628, Stop: 46443, Start Num: 31
Candidate Starts for Luchador_79:
(Start: 31 @46628 has 90 MA's), (35, 46613), (40, 46571),

Gene: MajorMajor_78 Start: 44703, Stop: 44548, Start Num: 32
Candidate Starts for MajorMajor_78:
(Start: 30 @44706 has 1 MA's), (Start: 32 @44703 has 71 MA's),

Gene: Malec_74 Start: 46069, Stop: 45905, Start Num: 31
Candidate Starts for Malec_74:
(18, 46123), (Start: 31 @46069 has 90 MA's), (Start: 53 @45916 has 2 MA's),

Gene: Maminiaina_78 Start: 45344, Stop: 45180, Start Num: 31

Candidate Starts for Maminaiaina_78:
(Start: 31 @45344 has 90 MA's), (35, 45329), (40, 45287),

Gene: McFly_80 Start: 45189, Stop: 45022, Start Num: 32
Candidate Starts for McFly_80:
(Start: 32 @45189 has 71 MA's), (34, 45183), (35, 45174),

Gene: MegTheThird_73 Start: 44364, Stop: 44173, Start Num: 32
Candidate Starts for MegTheThird_73:
(Start: 32 @44364 has 71 MA's), (36, 44340), (47, 44259), (52, 44214),

Gene: Miko_70 Start: 45080, Stop: 44916, Start Num: 29
Candidate Starts for Miko_70:
(Start: 29 @45080 has 12 MA's), (34, 45074), (35, 45065), (48, 44954), (54, 44924),

Gene: Minispark_76 Start: 44977, Stop: 44792, Start Num: 31
Candidate Starts for Minispark_76:
(Start: 31 @44977 has 90 MA's), (34, 44971), (60, 44806),

Gene: Miramae_70 Start: 44230, Stop: 44108, Start Num: 53
Candidate Starts for Miramae_70:
(8, 44512), (33, 44392), (Start: 51 @44236 has 1 MA's), (Start: 53 @44230 has 2 MA's),

Gene: Miskis_150 Start: 82703, Stop: 82545, Start Num: 32
Candidate Starts for Miskis_150:
(Start: 32 @82703 has 71 MA's), (35, 82688), (45, 82625),

Gene: Myxus_78 Start: 45181, Stop: 45017, Start Num: 31
Candidate Starts for Myxus_78:
(Start: 31 @45181 has 90 MA's), (35, 45166), (38, 45148), (40, 45124),

Gene: Neeharika16_78 Start: 44656, Stop: 44489, Start Num: 32
Candidate Starts for Neeharika16_78:
(Start: 32 @44656 has 71 MA's), (34, 44650), (35, 44641),

Gene: Newrala_78 Start: 44995, Stop: 44828, Start Num: 32
Candidate Starts for Newrala_78:
(Start: 32 @44995 has 71 MA's), (34, 44989), (35, 44980),

Gene: Norvs_154 Start: 82865, Stop: 82707, Start Num: 32
Candidate Starts for Norvs_154:
(Start: 32 @82865 has 71 MA's), (35, 82850),

Gene: NothingSpecial_72 Start: 45754, Stop: 45581, Start Num: 31
Candidate Starts for NothingSpecial_72:
(Start: 31 @45754 has 90 MA's), (34, 45748), (42, 45682),

Gene: Onglai_76 Start: 43387, Stop: 43223, Start Num: 31
Candidate Starts for Onglai_76:
(Start: 31 @43387 has 90 MA's), (35, 43372), (40, 43330),

Gene: PackMan_77 Start: 45056, Stop: 44892, Start Num: 31
Candidate Starts for PackMan_77:

(Start: 31 @45056 has 90 MA's), (35, 45041), (38, 45023), (40, 44999),

Gene: Phaded_72 Start: 46962, Stop: 46786, Start Num: 29

Candidate Starts for Phaded_72:

(Start: 29 @46962 has 12 MA's), (34, 46956), (50, 46809),

Gene: Phaeder_78 Start: 45056, Stop: 44892, Start Num: 31

Candidate Starts for Phaeder_78:

(Start: 31 @45056 has 90 MA's), (35, 45041), (38, 45023), (40, 44999),

Gene: PhinkBoden_154 Start: 83263, Stop: 83105, Start Num: 32

Candidate Starts for PhinkBoden_154:

(Start: 32 @83263 has 71 MA's), (35, 83248),

Gene: Phonnegut_78 Start: 45128, Stop: 44964, Start Num: 31

Candidate Starts for Phonnegut_78:

(Start: 31 @45128 has 90 MA's), (35, 45113), (40, 45071),

Gene: Pioneer_78 Start: 45128, Stop: 44964, Start Num: 31

Candidate Starts for Pioneer_78:

(Start: 31 @45128 has 90 MA's), (35, 45113), (40, 45071),

Gene: Piro94_76 Start: 45778, Stop: 45623, Start Num: 31

Candidate Starts for Piro94_76:

(Start: 31 @45778 has 90 MA's), (34, 45772),

Gene: Pmask_78 Start: 45193, Stop: 45026, Start Num: 32

Candidate Starts for Pmask_78:

(Start: 32 @45193 has 71 MA's), (34, 45187), (35, 45178),

Gene: Power_76 Start: 46167, Stop: 46003, Start Num: 31

Candidate Starts for Power_76:

(23, 46206), (Start: 31 @46167 has 90 MA's), (34, 46161), (Start: 53 @46014 has 2 MA's),

Gene: Priamo_81 Start: 44855, Stop: 44688, Start Num: 32

Candidate Starts for Priamo_81:

(Start: 32 @44855 has 71 MA's), (34, 44849), (35, 44840),

Gene: Priya_76 Start: 44853, Stop: 44689, Start Num: 31

Candidate Starts for Priya_76:

(Start: 31 @44853 has 90 MA's), (35, 44838), (40, 44796),

Gene: Prudy_70 Start: 45907, Stop: 45752, Start Num: 31

Candidate Starts for Prudy_70:

(Start: 31 @45907 has 90 MA's), (34, 45901), (35, 45892), (41, 45841),

Gene: Pukovnik_73 Start: 46577, Stop: 46401, Start Num: 29

Candidate Starts for Pukovnik_73:

(Start: 29 @46577 has 12 MA's), (50, 46424),

Gene: Qobbit_76 Start: 44815, Stop: 44651, Start Num: 31

Candidate Starts for Qobbit_76:

(Start: 31 @44815 has 90 MA's), (35, 44800), (40, 44758),

Gene: QueenB2_74 Start: 45451, Stop: 45287, Start Num: 31
Candidate Starts for QueenB2_74:
(23, 45490), (Start: 31 @45451 has 90 MA's), (Start: 53 @45298 has 2 MA's),

Gene: QueenBeesly_77 Start: 46124, Stop: 45960, Start Num: 31
Candidate Starts for QueenBeesly_77:
(23, 46163), (Start: 31 @46124 has 90 MA's), (34, 46118), (Start: 53 @45971 has 2 MA's),

Gene: Quokka_83 Start: 46412, Stop: 46257, Start Num: 32
Candidate Starts for Quokka_83:
(Start: 30 @46415 has 1 MA's), (Start: 32 @46412 has 71 MA's),

Gene: Rachaly_72 Start: 45226, Stop: 45062, Start Num: 29
Candidate Starts for Rachaly_72:
(Start: 29 @45226 has 12 MA's), (34, 45220), (35, 45211), (48, 45100), (54, 45070),

Gene: Rahalelujah_78 Start: 44992, Stop: 44807, Start Num: 31
Candidate Starts for Rahalelujah_78:
(Start: 31 @44992 has 90 MA's), (34, 44986), (60, 44821),

Gene: RedRock_75 Start: 46134, Stop: 45979, Start Num: 31
Candidate Starts for RedRock_75:
(Start: 31 @46134 has 90 MA's), (35, 46119),

Gene: Refuge_74 Start: 46251, Stop: 46102, Start Num: 31
Candidate Starts for Refuge_74:
(Start: 31 @46251 has 90 MA's), (35, 46236), (48, 46125),

Gene: Reindeer_151 Start: 77820, Stop: 77668, Start Num: 32
Candidate Starts for Reindeer_151:
(21, 77868), (Start: 32 @77820 has 71 MA's), (35, 77805), (47, 77706),

Gene: Retro23_77 Start: 45856, Stop: 45692, Start Num: 31
Candidate Starts for Retro23_77:
(23, 45895), (Start: 31 @45856 has 90 MA's), (34, 45850), (Start: 53 @45703 has 2 MA's),

Gene: Rifter_79 Start: 43891, Stop: 43739, Start Num: 32
Candidate Starts for Rifter_79:
(Start: 25 @43918 has 2 MA's), (Start: 32 @43891 has 71 MA's), (34, 43885), (35, 43876), (39, 43849),

Gene: Roksolana_79 Start: 44624, Stop: 44472, Start Num: 32
Candidate Starts for Roksolana_79:
(Start: 32 @44624 has 71 MA's), (34, 44618), (35, 44609), (39, 44582),

Gene: RyeScarlet_79 Start: 45103, Stop: 44939, Start Num: 31
Candidate Starts for RyeScarlet_79:
(Start: 31 @45103 has 90 MA's), (35, 45088), (40, 45046),

Gene: Sachima_74 Start: 45084, Stop: 44920, Start Num: 31
Candidate Starts for Sachima_74:
(Start: 31 @45084 has 90 MA's), (35, 45069), (38, 45051), (40, 45027),

Gene: Scherzo_77 Start: 45338, Stop: 45153, Start Num: 31
Candidate Starts for Scherzo_77:
(Start: 31 @45338 has 90 MA's), (35, 45323), (40, 45281), (57, 45176),

Gene: SemperFi_77 Start: 46012, Stop: 45848, Start Num: 31
Candidate Starts for SemperFi_77:
(23, 46051), (Start: 31 @46012 has 90 MA's), (34, 46006), (40, 45955), (Start: 53 @45859 has 2 MA's),

Gene: SheaKeira_72 Start: 44164, Stop: 44015, Start Num: 32
Candidate Starts for SheaKeira_72:
(15, 44221), (Start: 32 @44164 has 71 MA's), (34, 44158), (36, 44140), (38, 44131), (47, 44059),

Gene: Smeagan_79 Start: 46399, Stop: 46235, Start Num: 31
Candidate Starts for Smeagan_79:
(24, 46438), (Start: 31 @46399 has 90 MA's), (Start: 53 @46246 has 2 MA's),

Gene: SmellyB_79 Start: 44554, Stop: 44387, Start Num: 32
Candidate Starts for SmellyB_79:
(Start: 32 @44554 has 71 MA's), (34, 44548), (35, 44539),

Gene: Smoothie_157 Start: 83364, Stop: 83206, Start Num: 32
Candidate Starts for Smoothie_157:
(Start: 32 @83364 has 71 MA's), (35, 83349),

Gene: SnapTap_76 Start: 45823, Stop: 45659, Start Num: 31
Candidate Starts for SnapTap_76:
(23, 45862), (Start: 31 @45823 has 90 MA's), (34, 45817), (Start: 53 @45670 has 2 MA's),

Gene: SororFago_78 Start: 46342, Stop: 46166, Start Num: 31
Candidate Starts for SororFago_78:
(Start: 31 @46342 has 90 MA's), (35, 46327),

Gene: Spouty_76 Start: 44852, Stop: 44688, Start Num: 31
Candidate Starts for Spouty_76:
(Start: 31 @44852 has 90 MA's), (35, 44837), (40, 44795),

Gene: Steamy_81 Start: 48438, Stop: 48295, Start Num: 32
Candidate Starts for Steamy_81:
(14, 48507), (26, 48468), (Start: 32 @48438 has 71 MA's), (41, 48384), (42, 48378),

Gene: Stink_70 Start: 44516, Stop: 44388, Start Num: 51
Candidate Starts for Stink_70:
(5, 44831), (8, 44792), (33, 44672), (Start: 51 @44516 has 1 MA's), (Start: 53 @44510 has 2 MA's),

Gene: Sunhee_78 Start: 44429, Stop: 44244, Start Num: 31
Candidate Starts for Sunhee_78:
(Start: 31 @44429 has 90 MA's), (35, 44414), (40, 44372), (46, 44336),

Gene: SuperAwesome_79 Start: 45232, Stop: 45065, Start Num: 32
Candidate Starts for SuperAwesome_79:
(Start: 32 @45232 has 71 MA's), (34, 45226), (35, 45217),

Gene: SuperCallie99_76 Start: 45076, Stop: 44909, Start Num: 32

Candidate Starts for SuperCallie99_76:
(Start: 32 @45076 has 71 MA's), (34, 45070), (35, 45061),

Gene: SweetiePie_76 Start: 45955, Stop: 45791, Start Num: 31
Candidate Starts for SweetiePie_76:
(23, 45994), (Start: 31 @45955 has 90 MA's), (34, 45949), (Start: 53 @45802 has 2 MA's),

Gene: TarsusIV_74 Start: 45855, Stop: 45700, Start Num: 31
Candidate Starts for TarsusIV_74:
(Start: 31 @45855 has 90 MA's), (48, 45729),

Gene: Temprado_80 Start: 44729, Stop: 44577, Start Num: 32
Candidate Starts for Temprado_80:
(Start: 25 @44756 has 2 MA's), (Start: 32 @44729 has 71 MA's), (34, 44723), (35, 44714), (39, 44687),

Gene: Toaka_78 Start: 45406, Stop: 45206, Start Num: 27
Candidate Starts for Toaka_78:
(Start: 27 @45406 has 1 MA's), (Start: 31 @45391 has 90 MA's), (35, 45376), (60, 45220),

Gene: ToneTone_76 Start: 44289, Stop: 44137, Start Num: 32
Candidate Starts for ToneTone_76:
(Start: 25 @44316 has 2 MA's), (Start: 32 @44289 has 71 MA's), (34, 44283), (35, 44274), (39, 44247),

Gene: Toniann_156 Start: 83006, Stop: 82848, Start Num: 32
Candidate Starts for Toniann_156:
(Start: 32 @83006 has 71 MA's), (35, 82991),

Gene: Towmatter_152 Start: 84333, Stop: 84148, Start Num: 32
Candidate Starts for Towmatter_152:
(9, 84444), (12, 84432), (Start: 32 @84333 has 71 MA's), (35, 84318), (43, 84261), (59, 84159),

Gene: Tristan_73 Start: 46813, Stop: 46637, Start Num: 29
Candidate Starts for Tristan_73:
(Start: 29 @46813 has 12 MA's), (34, 46807), (50, 46660),

Gene: Trixie_76 Start: 46566, Stop: 46399, Start Num: 31
Candidate Starts for Trixie_76:
(Start: 31 @46566 has 90 MA's), (40, 46509), (55, 46410), (58, 46404),

Gene: Trooper_76 Start: 45821, Stop: 45675, Start Num: 31
Candidate Starts for Trooper_76:
(Start: 31 @45821 has 90 MA's),

Gene: Tubs_78 Start: 45056, Stop: 44892, Start Num: 31
Candidate Starts for Tubs_78:
(Start: 31 @45056 has 90 MA's), (35, 45041), (38, 45023), (40, 44999),

Gene: Tucker_79 Start: 44492, Stop: 44340, Start Num: 32
Candidate Starts for Tucker_79:
(Start: 25 @44519 has 2 MA's), (Start: 32 @44492 has 71 MA's), (34, 44486), (35, 44477), (39, 44450),

Gene: Turbido_77 Start: 46120, Stop: 45956, Start Num: 31
Candidate Starts for Turbido_77:

(24, 46159), (Start: 31 @46120 has 90 MA's), (Start: 53 @45967 has 2 MA's),

Gene: Updawg_77 Start: 45675, Stop: 45511, Start Num: 31

Candidate Starts for Updawg_77:

(7, 45807), (10, 45777), (Start: 31 @45675 has 90 MA's), (Start: 53 @45522 has 2 MA's),

Gene: VA6_76 Start: 45850, Stop: 45683, Start Num: 31

Candidate Starts for VA6_76:

(Start: 31 @45850 has 90 MA's), (34, 45844), (Start: 51 @45703 has 1 MA's),

Gene: Vanisoa_75 Start: 45726, Stop: 45541, Start Num: 32

Candidate Starts for Vanisoa_75:

(Start: 32 @45726 has 71 MA's), (38, 45693), (60, 45555), (62, 45546),

Gene: VohminGhazi_79 Start: 44555, Stop: 44388, Start Num: 32

Candidate Starts for VohminGhazi_79:

(Start: 32 @44555 has 71 MA's), (34, 44549), (35, 44540),

Gene: WeiHuaDA_77 Start: 46612, Stop: 46448, Start Num: 29

Candidate Starts for WeiHuaDA_77:

(13, 46702), (28, 46621), (Start: 29 @46612 has 12 MA's), (40, 46555), (48, 46486),

Gene: WideWale_77 Start: 45675, Stop: 45511, Start Num: 31

Candidate Starts for WideWale_77:

(7, 45807), (10, 45777), (Start: 31 @45675 has 90 MA's), (Start: 53 @45522 has 2 MA's),

Gene: Wiks_78 Start: 44360, Stop: 44208, Start Num: 32

Candidate Starts for Wiks_78:

(Start: 25 @44387 has 2 MA's), (Start: 32 @44360 has 71 MA's), (34, 44354), (35, 44345), (39, 44318),

Gene: WilliamBoone_158 Start: 81466, Stop: 81308, Start Num: 32

Candidate Starts for WilliamBoone_158:

(Start: 32 @81466 has 71 MA's), (35, 81451),

Gene: WorldCup_76 Start: 44990, Stop: 44805, Start Num: 31

Candidate Starts for WorldCup_76:

(Start: 31 @44990 has 90 MA's), (34, 44984), (60, 44819),

Gene: WunderPhul_79 Start: 44358, Stop: 44206, Start Num: 32

Candidate Starts for WunderPhul_79:

(Start: 25 @44385 has 2 MA's), (Start: 32 @44358 has 71 MA's), (34, 44352), (35, 44343), (39, 44316),

Gene: XianYue_72 Start: 45602, Stop: 45423, Start Num: 29

Candidate Starts for XianYue_72:

(Start: 29 @45602 has 12 MA's), (40, 45545), (Start: 51 @45455 has 1 MA's), (56, 45443), (61, 45428),

Gene: Yecey3_80 Start: 45152, Stop: 44967, Start Num: 31

Candidate Starts for Yecey3_80:

(15, 45221), (Start: 31 @45152 has 90 MA's), (47, 45047), (60, 44981),

Gene: Yokurt_78 Start: 44360, Stop: 44208, Start Num: 32

Candidate Starts for Yokurt_78:

(Start: 25 @44387 has 2 MA's), (Start: 32 @44360 has 71 MA's), (34, 44354), (35, 44345), (39, 44318),

Gene: Zaka_79 Start: 44360, Stop: 44208, Start Num: 32

Candidate Starts for Zaka_79:

(Start: 25 @44387 has 2 MA's), (Start: 32 @44360 has 71 MA's), (34, 44354), (35, 44345), (39, 44318),

Gene: Zimmer_75 Start: 46180, Stop: 46019, Start Num: 31

Candidate Starts for Zimmer_75:

(Start: 31 @46180 has 90 MA's), (40, 46123),

Gene: Zulu_80 Start: 44738, Stop: 44586, Start Num: 32

Candidate Starts for Zulu_80:

(Start: 25 @44765 has 2 MA's), (Start: 32 @44738 has 71 MA's), (34, 44732), (35, 44723), (39, 44696),