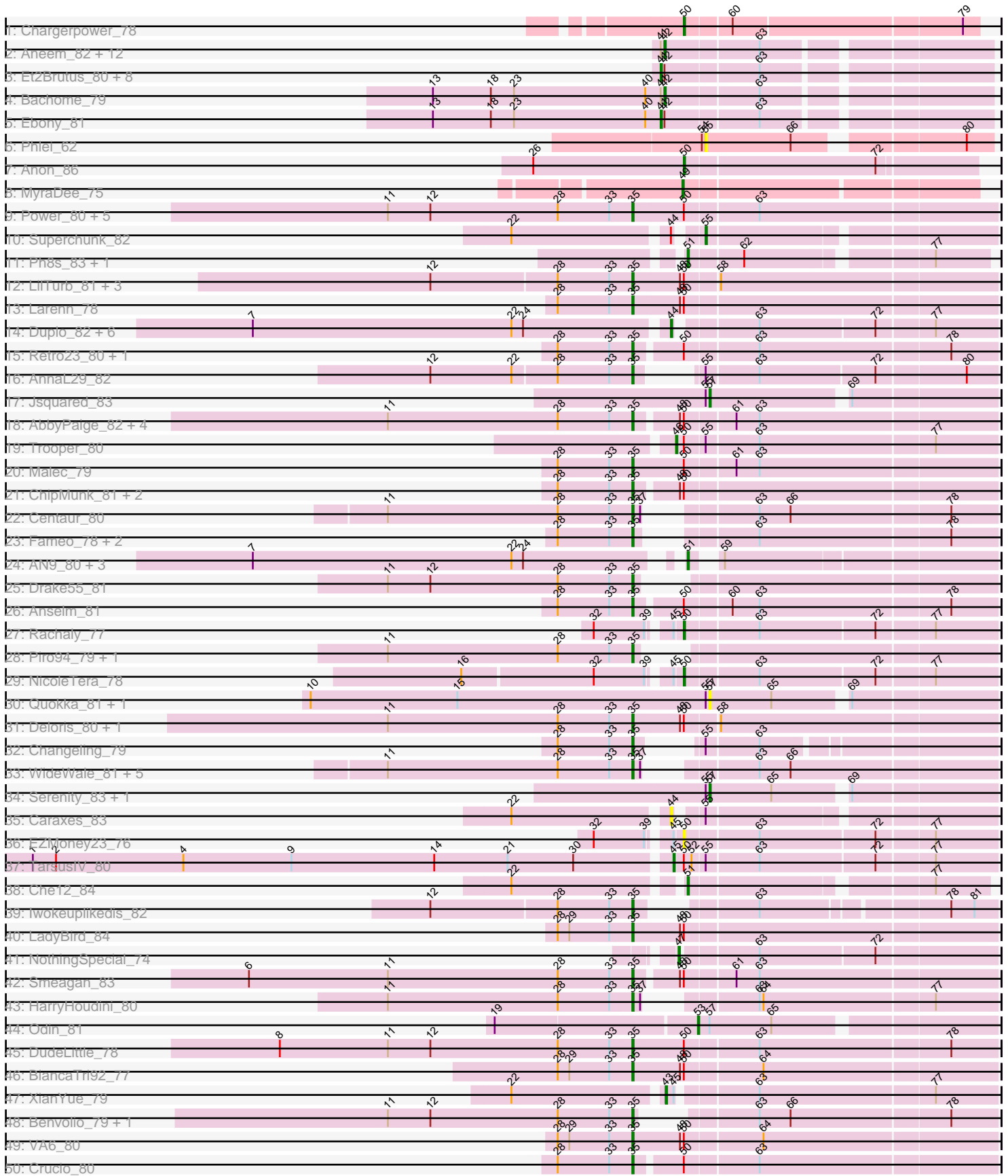
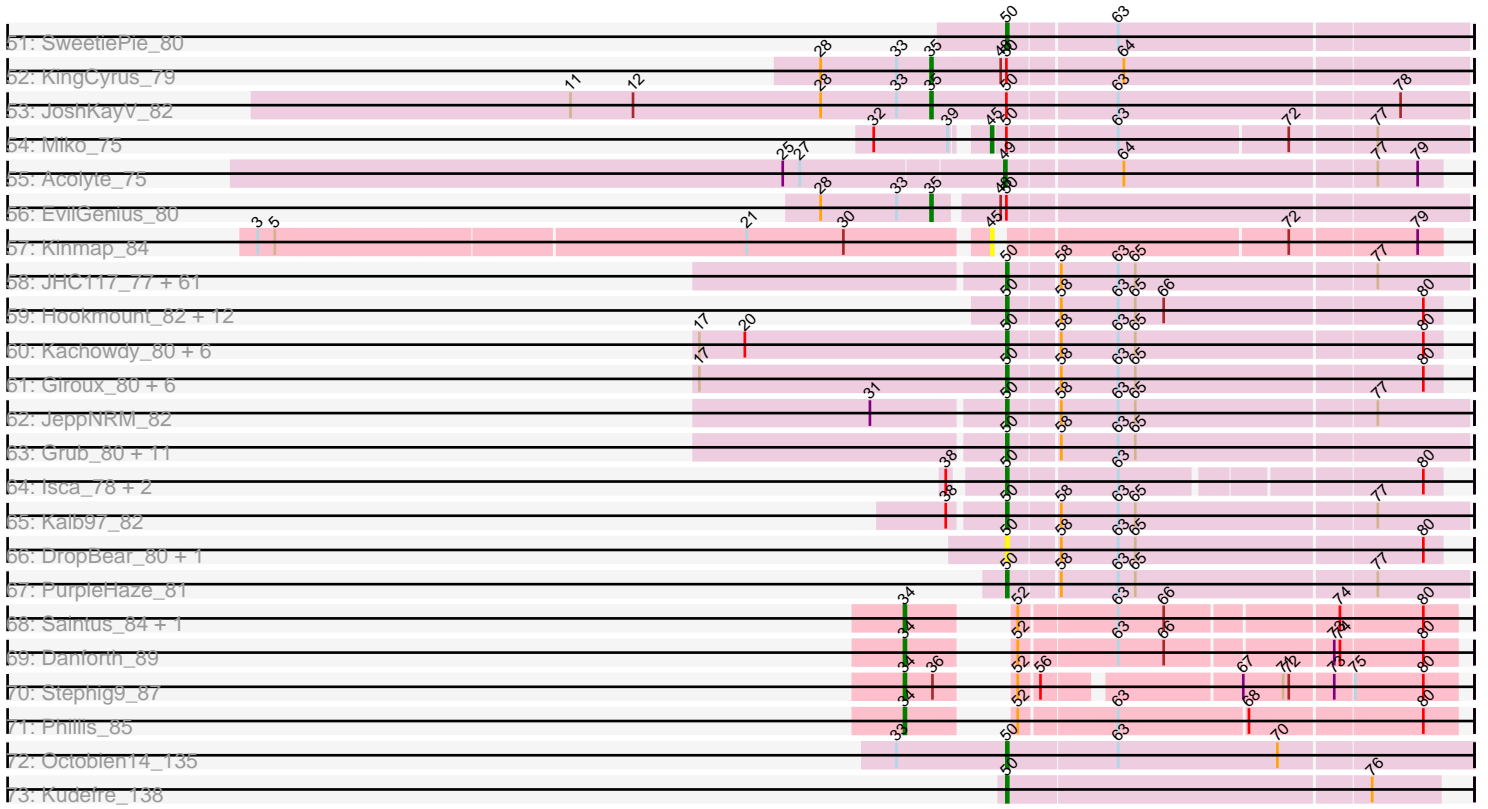


Pham 172623



Pham 172623



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 172623 Report

This analysis was run 11/02/24 on database version 579.

Pham number 172623 has 230 members, 18 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower_78
- Track 2 : Aneem_82, MaCh_81, Sham4_77, Bud_76, Gilberta_78, Mulciber_79, Petersenfast_75, Joselito_80, Orange_81, Flaverint_82, Mabel_81, Snape_81, Jabith_80
- Track 3 : Et2Brutus_80, Munch_81, Salz_76, Lucivia_82, TinyTimmy_80, Hutc2_77, Insomnia_80, Fibonacci_80, Timothy_81
- Track 4 : Bachome_79
- Track 5 : Ebony_81
- Track 6 : Phlei_62
- Track 7 : Anon_86
- Track 8 : MyraDee_75
- Track 9 : Power_80, SnapTap_80, SemperFi_80, Georgie2_82, FiringLine_80, QueenBeesly_80
- Track 10 : Superchunk_82
- Track 11 : Ph8s_83, Adzzy_83
- Track 12 : LilTurb_81, Jerm_82, Agape74_82, Bugsy_82
- Track 13 : Larenn_78
- Track 14 : Duplo_82, Travvers_81, Kerberos_81, DBQu4n_81, Pomar16_81, StarStuff_81, Tomathan_81
- Track 15 : Retro23_80, Dalmatian_80
- Track 16 : AnnaL29_82
- Track 17 : Jsquared_83
- Track 18 : AbbyPaige_82, Turbido_81, Dignity_82, Whabigail7_80, Leviathan_82
- Track 19 : Trooper_80
- Track 20 : Malec_79
- Track 21 : ChipMunk_81, First_0081, 20ES_82
- Track 22 : Centaur_80
- Track 23 : Fameo_78, QueenB2_77, Heffalump_77
- Track 24 : AN9_80, VC3_79, ANI8_80, C3_73
- Track 25 : Drake55_81
- Track 26 : Anselm_81
- Track 27 : Rachaly_77
- Track 28 : Piro94_79, NaSiaTalie_81
- Track 29 : NicoleTera_78
- Track 30 : Quokka_81, Bradman_82
- Track 31 : Deloris_80, BengiVuitton_80
- Track 32 : Changeling_79

- Track 33 : WideWale_81, Flare16_80, MiculUcigas_80, Updawg_81, Baehexic_79, Equemioh13_80
- Track 34 : Serenity_83, TipsytheTRex_79
- Track 35 : Caraxes_83
- Track 36 : EZMoney23_76
- Track 37 : TarsusIV_80
- Track 38 : Che12_84
- Track 39 : Iwokeuplikedis_82
- Track 40 : LadyBird_84
- Track 41 : NothingSpecial_74
- Track 42 : Smeagan_83
- Track 43 : HarryHoudini_80
- Track 44 : Odin_81
- Track 45 : DudeLittle_78
- Track 46 : BiancaTri92_77
- Track 47 : XianYue_79
- Track 48 : Benvolio_79, Echild_82
- Track 49 : VA6_80
- Track 50 : Crucio_80
- Track 51 : SweetiePie_80
- Track 52 : KingCyrus_79
- Track 53 : JoshKayV_82
- Track 54 : Miko_75
- Track 55 : Acolyte_75
- Track 56 : EvilGenius_80
- Track 57 : Kinmap_84
- Track 58 : JHC117_77, HashRod_83, LugYA_85, PhishRPhriends_78, Louie6_81, Gemma_79, EpicPhail_83, HaveUMetTed_82, Snickers_78, Mainiac_81, Daishi_81, Soshari_84, Pawn_80, Ollie_82, Aglet_83, Methuselah_75, Hercules11_82, GtownJaz_82, Beauxregard13_81, Cullens_83, Grif_80, Groupthink_82, JenCasNa_83, Sabinator_80, OlanP_80, Stagni_79, Sabia_80, Wooldri_84, Bxz2_77, PotatoSplit_83, Farber_82, Marius_82, Vix_78, SoYo_79, LarryKay_82, MadMarie_80, Penny1_82, StepMih_82, Grum1_82, Marie_80, Kalnoky_82, Taurus_83, Reba_77, KADY_79, Tiffany_81, Manu_81, Colbster_78, DaHudson_81, Fernando_83, Rummer_81, MoneyMay_82, P28Green_82, GingkoMaracino_82, Spike509_82, BuzzBuzz_76, Dieselweasel_83, MarQuardt_82, Phoxy_82, Phoebe_83, Heliosoles_79, LBerry_83, Anubis_86
- Track 59 : Hookmount_82, QuinnKiro_81, Popcicle_82, Panamaxus_79, Noella_83, Veracruz_79, ResDef_80, Texage_80, Todacoro_82, Margo_82, Norbert_78, Pocahontas_81, Lambert1_82
- Track 60 : Kachowdy_80, Fred313_79, HelDan_82, BabyRay_81, Puppy_83, Heathen_81, Scout_81
- Track 61 : Giroux_80, SaturnRing_83, TNguyen7_83, BlueBird_84, Idleandcovert_82, Bugatti_83, Pistachio_82
- Track 62 : JeppNRM_82
- Track 63 : Grub_80, BreSam8_82, SoilDragon_82, Pembroke_82, Malinsilva_85, Lilith_80, PGHhamlin_84, AugsMagnumOpus_85, Microwolf_78, Watson_81, MuchMore_85, Jobu08_78
- Track 64 : Isca_78, MA5_80, Phantastic_83
- Track 65 : Kalb97_82
- Track 66 : DropBear_80, Marchesa_81
- Track 67 : PurpleHaze_81
- Track 68 : Saintus_84, NearlyHeadless_89

- Track 69 : Danforth_89
- Track 70 : Stephig9_87
- Track 71 : Phillis_85
- Track 72 : Octobien14_135
- Track 73 : Kudrefre_138

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

The start number called the most often in the published annotations is 50, it was called in 108 of the 212 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aglet_83, Anon_86, Anubis_86, AugsMagnumOpus_85, BabyRay_81, Beauxregard13_81, BlueBird_84, BreSam8_82, Bugatti_83, BuzzBuzz_76, Bxz2_77, Chargerpower_78, Colbster_78, Cullens_83, DaHudson_81, Daishi_81, Dieselweasel_83, DropBear_80, EZMoney23_76, EpicPhail_83, Farber_82, Fernando_83, Fred313_79, Gemma_79, GingkoMaracino_82, Giroux_80, Grif_80, Groupthink_82, Grub_80, Grum1_82, GtownJaz_82, HashRod_83, HaveUMetTed_82, Heathen_81, HelDan_82, Heliosoles_79, Hercules11_82, Hookmount_82, Idleandcovert_82, Isca_78, JHC117_77, JenCasNa_83, JeppNRM_82, Jobu08_78, KADY_79, Kachowdy_80, Kalb97_82, Kalnoky_82, Kudrefre_138, LBerry_83, Lambert1_82, LarryKay_82, Lilith_80, Louie6_81, LugYA_85, MA5_80, MadMarie_80, Mainiac_81, Malinsilva_85, Manu_81, MarQuardt_82, Marchesa_81, Margo_82, Marie_80, Marius_82, Methuselah_75, Microwolf_78, MoneyMay_82, MuchMore_85, NicoleTera_78, Noella_83, Norbert_78, Octobien14_135, OlanP_80, Ollie_82, P28Green_82, PGHhamlin_84, Panamaxus_79, Pawn_80, Pembroke_82, Penny1_82, Phantastic_83, PhishRPhriends_78, Phoebe_83, Phoxy_82, Pistachio_82, Pocahontas_81, Popcicle_82, PotatoSplit_83, Puppy_83, PurpleHaze_81, QuinnKiro_81, Rachaly_77, Reba_77, ResDef_80, Rummer_81, Sabia_80, Sabinator_80, SaturnRing_83, Scout_81, Snickers_78, SoYo_79, SoilDragon_82, Soshari_84, Spike509_82, Stagni_79, StepMih_82, SweetiePie_80, TNguyen7_83, Taurus_83, Texage_80, Tiffany_81, Todacoro_82, Veracruz_79, Vix_78, Watson_81, Wooldri_84,

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

- 20ES_82, AbbyPaige_82, Agape74_82, Anselm_81, BengiVuitton_80, BiancaTri92_77, Buggy_82, ChipMunk_81, Crucio_80, Dalmatian_80, Deloris_80, Dignity_82, DudeLittle_78, EvilGenius_80, FiringLine_80, First_0081, Georgie2_82, Jerm_82, JoshKayV_82, KingCyrus_79, LadyBird_84, Larenn_78, Leviathan_82, LilTurb_81, Malec_79, Miko_75, Power_80, QueenBeesly_80, Retro23_80, SemperFi_80, Smeagan_83, SnapTap_80, TarsusIV_80, Trooper_80, Turbido_81, VA6_80, Whabigail7_80,

Genes that do not have the "Most Annotated" start:

- AN9_80, ANI8_80, Acolyte_75, Adzzy_83, Aneem_82, AnnaL29_82, Bachome_79, Baehexic_79, Benvolio_79, Bradman_82, Bud_76, C3_73, Caraxes_83, Centaur_80, Changeling_79, Che12_84, DBQu4n_81, Danforth_89, Drake55_81, Duplo_82, Ebony_81, Echild_82, Equemioh13_80, Et2Brutus_80, Fameo_78, Fibonacci_80, Flare16_80, Flaverint_82, Gilberta_78, HarryHoudini_80, Heffalump_77, Hutc2_77, Insomnia_80, Iwokeuplikedis_82, Jabith_80, Joselito_80, Jsquared_83, Kerberos_81,

Kinmap_84, Lucivia_82, MaCh_81, Mabel_81, MiculUcigas_80, Mulciber_79, Munch_81, MyraDee_75, NaSiaTalie_81, NearlyHeadless_89, NothingSpecial_74, Odin_81, Orange_81, Petersenfast_75, Ph8s_83, Phillis_85, Phlei_62, Piro94_79, Pomar16_81, QueenB2_77, Quokka_81, Saintus_84, Salz_76, Serenity_83, Sham4_77, Snape_81, StarStuff_81, Stephig9_87, Superchunk_82, Timothy_81, TinyTimmy_80, TopsytheTRex_79, Tomathan_81, Travvers_81, Updawg_81, VC3_79, WideWale_81, XianYue_79,

Summary by start number:

Start 34:

- Found in 5 of 230 (2.2%) of genes in pham
- Manual Annotations of this start: 5 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Danforth_89 (A8), NearlyHeadless_89 (A8), Phillis_85 (A8), Saintus_84 (A8), Stephig9_87 (A8),

Start 35:

- Found in 53 of 230 (23.0%) of genes in pham
- Manual Annotations of this start: 51 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 20ES_82 (A2), AbbyPaige_82 (A2), Agape74_82 (A2), AnnaL29_82 (A2), Anselm_81 (A2), Baehexic_79 (A2), BengiVuitton_80 (A2), Benvolio_79 (A2), BiancaTri92_77 (A2), Buggy_82 (A2), Centaur_80 (A2), Changeling_79 (A2), ChipMunk_81 (A2), Crucio_80 (A2), Dalmatian_80 (A2), Deloris_80 (A2), Dignity_82 (A2), Drake55_81 (A2), DudeLittle_78 (A2), Echild_82 (A2), Equemioh13_80 (A2), EvilGenius_80 (A2), Fameo_78 (A2), FiringLine_80 (A2), First_0081 (A2), Flare16_80 (A2), Georgie2_82 (A2), HarryHoudini_80 (A2), Heffalump_77 (A2), Iwokeuplikedis_82 (A2), Jerm_82 (A2), JoshKayV_82 (A2), KingCyrus_79 (A2), LadyBird_84 (A2), Larenn_78 (A2), Leviathan_82 (A2), LilTurb_81 (A2), Malec_79 (A2), MiculUcigas_80 (A2), NaSiaTalie_81 (A2), Piro94_79 (A2), Power_80 (A2), QueenB2_77 (A2), QueenBeesly_80 (A2), Retro23_80 (A2), SemperFi_80 (A2), Smeagan_83 (A2), SnapTap_80 (A2), Turbido_81 (A2), Updawg_81 (A2), VA6_80 (A2), Whabigail7_80 (A2), WideWale_81 (A2),

Start 41:

- Found in 24 of 230 (10.4%) of genes in pham
- Manual Annotations of this start: 10 of 212
- Called 41.7% of time when present
- Phage (with cluster) where this start called: Ebony_81 (A11), Et2Brutus_80 (A11), Fibonacci_80 (A11), Hutc2_77 (A11), Insomnia_80 (A11), Lucivia_82 (A11), Munch_81 (A11), Salz_76 (A11), Timothy_81 (A11), TinyTimmy_80 (A11),

Start 42:

- Found in 24 of 230 (10.4%) of genes in pham
- Manual Annotations of this start: 13 of 212
- Called 58.3% of time when present
- Phage (with cluster) where this start called: Aneem_82 (A11), Bachome_79 (A11), Bud_76 (A11), Flaverint_82 (A11), Gilberta_78 (A11), Jabith_80 (A11), Joselito_80 (A11), MaCh_81 (A11), Mabel_81 (A11), Mulciber_79 (A11), Orange_81 (A11), Petersenfast_75 (A11), Sham4_77 (A11), Snape_81 (A11),

Start 43:

- Found in 1 of 230 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: XianYue_79 (A2),

Start 44:

- Found in 9 of 230 (3.9%) of genes in pham
- Manual Annotations of this start: 6 of 212
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Caraxes_83 (A2), DBQu4n_81 (A2), Duplo_82 (A2), Kerberos_81 (A2), Pomar16_81 (A2), StarStuff_81 (A2), Tomathan_81 (A2), Travvers_81 (A2),

Start 45:

- Found in 7 of 230 (3.0%) of genes in pham
- Manual Annotations of this start: 2 of 212
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Kinmap_84 (A21), Miko_75 (A2), TarsusIV_80 (A2),

Start 46:

- Found in 1 of 230 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trooper_80 (A2),

Start 47:

- Found in 1 of 230 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NothingSpecial_74 (A2),

Start 49:

- Found in 2 of 230 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acolyte_75 (A2), MyraDee_75 (A18),

Start 50:

- Found in 154 of 230 (67.0%) of genes in pham
- Manual Annotations of this start: 108 of 212
- Called 76.0% of time when present
- Phage (with cluster) where this start called: Aglet_83 (A3), Anon_86 (A15), Anubis_86 (A3), AugsMagnumOpus_85 (A3), BabyRay_81 (A3), Beauxregard13_81 (A3), BlueBird_84 (A3), BreSam8_82 (A3), Bugatti_83 (A3), BuzzBuzz_76 (A3), Bxz2_77 (A3), Chargerpower_78 (A), Colbster_78 (A3), Cullens_83 (A3), DaHudson_81 (A3), Daishi_81 (A3), Dieselweasel_83 (A3), DropBear_80 (A3), EZMoney23_76 (A2), EpicPhail_83 (A3), Farber_82 (A3), Fernando_83 (A3), Fred313_79 (A3), Gemma_79 (A3), GingkoMaracino_82 (A3), Giroux_80 (A3), Grif_80 (A3), Groupthink_82 (A3), Grub_80 (A3), Grum1_82 (A3), GtownJaz_82 (A3), HashRod_83 (A3), HaveUMetTed_82 (A3), Heathen_81 (A3), HelDan_82 (A3), Heliosoles_79 (A3), Hercules11_82 (A3), Hookmount_82 (A3), Idleandcovert_82

(A3), Isca_78 (A3), JHC117_77 (A3), JenCasNa_83 (A3), JeppNRM_82 (A3), Jobu08_78 (A3), KADY_79 (A3), Kachowdy_80 (A3), Kalb97_82 (A3), Kalnoky_82 (A3), Kudefre_138 (DU1), LBerry_83 (A3), Lambert1_82 (A3), LarryKay_82 (A3), Lilith_80 (A3), Louie6_81 (A3), LugYA_85 (A3), MA5_80 (A3), MadMarie_80 (A3), Mainiac_81 (A3), Malinsilva_85 (A3), Manu_81 (A3), MarQuardt_82 (A3), Marchesa_81 (A3), Margo_82 (A3), Marie_80 (A3), Marius_82 (A3), Methuselah_75 (A3), Microwolf_78 (A3), MoneyMay_82 (A3), MuchMore_85 (A3), NicoleTera_78 (A2), Noella_83 (A3), Norbert_78 (A3), Octobien14_135 (DU1), OlanP_80 (A3), Ollie_82 (A3), P28Green_82 (A3), PGHhamlin_84 (A3), Panamaxus_79 (A3), Pawn_80 (A3), Pembroke_82 (A3), Penny1_82 (A3), Phantastic_83 (A3), PhishRPhriends_78 (A3), Phoebe_83 (A3), Phoxy_82 (A3), Pistachio_82 (A3), Pocahontas_81 (A3), Popcicle_82 (A3), PotatoSplit_83 (A3), Puppy_83 (A3), PurpleHaze_81 (A3), QuinnKiro_81 (A3), Rachaly_77 (A2), Reba_77 (A3), ResDef_80 (A3), Rummer_81 (A3), Sabia_80 (A3), Sabinator_80 (A3), SaturnRing_83 (A3), Scout_81 (A3), Snickers_78 (A3), SoYo_79 (A3), SoilDragon_82 (A3), Soshari_84 (A3), Spike509_82 (A3), Stagni_79 (A3), StepMih_82 (A3), SweetiePie_80 (A2), TNguyen7_83 (A3), Taurus_83 (A3), Texage_80 (A3), Tiffany_81 (A3), Todacoro_82 (A3), Veracruz_79 (A3), Vix_78 (A3), Watson_81 (A3), Wooldri_84 (A3),

Start 51:

- Found in 7 of 230 (3.0%) of genes in pham
- Manual Annotations of this start: 7 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AN9_80 (A2), ANI8_80 (A2), Adzzy_83 (A2), C3_73 (A2), Che12_84 (A2), Ph8s_83 (A2), VC3_79 (A2),

Start 53:

- Found in 1 of 230 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Odin_81 (A2),

Start 55:

- Found in 12 of 230 (5.2%) of genes in pham
- Manual Annotations of this start: 1 of 212
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Phlei_62 (A13), Superchunk_82 (A2),

Start 57:

- Found in 6 of 230 (2.6%) of genes in pham
- Manual Annotations of this start: 3 of 212
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Bradman_82 (A2), Jsquared_83 (A2), Quokka_81 (A2), Serenity_83 (A2), TipsytheTRex_79 (A2),

Summary by clusters:

There are 10 clusters represented in this pham: A, A15, A11, A13, A21, A18, A3, A2, DU1, A8,

Info for manual annotations of cluster A:

- Start number 50 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A11:

- Start number 41 was manually annotated 10 times for cluster A11.
- Start number 42 was manually annotated 13 times for cluster A11.

Info for manual annotations of cluster A15:

- Start number 50 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A18:

- Start number 49 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:

- Start number 35 was manually annotated 51 times for cluster A2.
- Start number 43 was manually annotated 1 time for cluster A2.
- Start number 44 was manually annotated 6 times for cluster A2.
- Start number 45 was manually annotated 2 times for cluster A2.
- Start number 46 was manually annotated 1 time for cluster A2.
- Start number 47 was manually annotated 1 time for cluster A2.
- Start number 49 was manually annotated 1 time for cluster A2.
- Start number 50 was manually annotated 3 times for cluster A2.
- Start number 51 was manually annotated 7 times for cluster A2.
- Start number 53 was manually annotated 1 time for cluster A2.
- Start number 55 was manually annotated 1 time for cluster A2.
- Start number 57 was manually annotated 3 times for cluster A2.

Info for manual annotations of cluster A3:

- Start number 50 was manually annotated 101 times for cluster A3.

Info for manual annotations of cluster A8:

- Start number 34 was manually annotated 5 times for cluster A8.

Info for manual annotations of cluster DU1:

- Start number 50 was manually annotated 2 times for cluster DU1.

Gene Information:

Gene: 20ES_82 Start: 47043, Stop: 46771, Start Num: 35

Candidate Starts for 20ES_82:

(28, 47100), (33, 47061), (Start: 35 @47043 has 51 MA's), (48, 47007), (Start: 50 @47004 has 108 MA's),

Gene: AN9_80 Start: 45726, Stop: 45514, Start Num: 51

Candidate Starts for AN9_80:

(7, 46038), (22, 45837), (24, 45828), (Start: 51 @45726 has 7 MA's), (59, 45714),

Gene: ANI8_80 Start: 45726, Stop: 45514, Start Num: 51

Candidate Starts for ANI8_80:

(7, 46038), (22, 45837), (24, 45828), (Start: 51 @45726 has 7 MA's), (59, 45714),

Gene: AbbyPaige_82 Start: 47312, Stop: 47046, Start Num: 35
Candidate Starts for AbbyPaige_82:
(11, 47501), (28, 47369), (33, 47330), (Start: 35 @47312 has 51 MA's), (48, 47282), (Start: 50 @47279 has 108 MA's), (61, 47243), (63, 47225),

Gene: Acolyte_75 Start: 46237, Stop: 46019, Start Num: 49
Candidate Starts for Acolyte_75:
(25, 46348), (27, 46339), (Start: 49 @46237 has 2 MA's), (64, 46180), (77, 46051), (79, 46030),

Gene: Adzzy_83 Start: 46366, Stop: 46157, Start Num: 51
Candidate Starts for Adzzy_83:
(Start: 51 @46366 has 7 MA's), (62, 46327), (77, 46198),

Gene: Agape74_82 Start: 47312, Stop: 47040, Start Num: 35
Candidate Starts for Agape74_82:
(12, 47465), (28, 47369), (33, 47330), (Start: 35 @47312 has 51 MA's), (48, 47276), (Start: 50 @47273 has 108 MA's), (58, 47249),

Gene: Aglet_83 Start: 46040, Stop: 45807, Start Num: 50
Candidate Starts for Aglet_83:
(Start: 50 @46040 has 108 MA's), (58, 46016), (63, 45986), (65, 45977), (77, 45854),

Gene: Aneem_82 Start: 46211, Stop: 45981, Start Num: 42
Candidate Starts for Aneem_82:
(Start: 41 @46214 has 10 MA's), (Start: 42 @46211 has 13 MA's), (63, 46142),

Gene: AnnaL29_82 Start: 47478, Stop: 47248, Start Num: 35
Candidate Starts for AnnaL29_82:
(12, 47631), (22, 47568), (28, 47535), (33, 47496), (Start: 35 @47478 has 51 MA's), (Start: 55 @47463 has 1 MA's), (63, 47424), (72, 47337), (80, 47271),

Gene: Anon_86 Start: 46891, Stop: 46673, Start Num: 50
Candidate Starts for Anon_86:
(26, 47008), (Start: 50 @46891 has 108 MA's), (72, 46747),

Gene: Anselm_81 Start: 47199, Stop: 46933, Start Num: 35
Candidate Starts for Anselm_81:
(28, 47256), (33, 47217), (Start: 35 @47199 has 51 MA's), (Start: 50 @47166 has 108 MA's), (60, 47133), (63, 47112), (78, 46968),

Gene: Anubis_86 Start: 45926, Stop: 45693, Start Num: 50
Candidate Starts for Anubis_86:
(Start: 50 @45926 has 108 MA's), (58, 45902), (63, 45872), (65, 45863), (77, 45740),

Gene: AugsMagnumOpus_85 Start: 46028, Stop: 45795, Start Num: 50
Candidate Starts for AugsMagnumOpus_85:
(Start: 50 @46028 has 108 MA's), (58, 46004), (63, 45974), (65, 45965),

Gene: BabyRay_81 Start: 46355, Stop: 46137, Start Num: 50
Candidate Starts for BabyRay_81:
(17, 46517), (20, 46493), (Start: 50 @46355 has 108 MA's), (58, 46331), (63, 46301), (65, 46292), (80, 46145),

Gene: Bachome_79 Start: 45091, Stop: 44861, Start Num: 42
Candidate Starts for Bachome_79:
(13, 45271), (18, 45226), (23, 45208), (40, 45106), (Start: 41 @45094 has 10 MA's), (Start: 42 @45091 has 13 MA's), (63, 45022),

Gene: Baehexic_79 Start: 46679, Stop: 46440, Start Num: 35
Candidate Starts for Baehexic_79:
(11, 46868), (28, 46736), (33, 46697), (Start: 35 @46679 has 51 MA's), (37, 46673), (63, 46619), (66, 46595),

Gene: Beauxregard13_81 Start: 46043, Stop: 45810, Start Num: 50
Candidate Starts for Beauxregard13_81:
(Start: 50 @46043 has 108 MA's), (58, 46019), (63, 45989), (65, 45980), (77, 45857),

Gene: BengiVuitton_80 Start: 46850, Stop: 46578, Start Num: 35
Candidate Starts for BengiVuitton_80:
(11, 47039), (28, 46907), (33, 46868), (Start: 35 @46850 has 51 MA's), (48, 46814), (Start: 50 @46811 has 108 MA's), (58, 46787),

Gene: Benvolio_79 Start: 46873, Stop: 46640, Start Num: 35
Candidate Starts for Benvolio_79:
(11, 47062), (12, 47029), (28, 46930), (33, 46891), (Start: 35 @46873 has 51 MA's), (63, 46819), (66, 46795), (78, 46675),

Gene: BiancaTri92_77 Start: 46533, Stop: 46261, Start Num: 35
Candidate Starts for BiancaTri92_77:
(28, 46590), (29, 46581), (33, 46551), (Start: 35 @46533 has 51 MA's), (48, 46497), (Start: 50 @46494 has 108 MA's), (64, 46437),

Gene: BlueBird_84 Start: 46790, Stop: 46572, Start Num: 50
Candidate Starts for BlueBird_84:
(17, 46952), (Start: 50 @46790 has 108 MA's), (58, 46766), (63, 46736), (65, 46727), (80, 46580),

Gene: Bradman_82 Start: 46029, Stop: 45823, Start Num: 57
Candidate Starts for Bradman_82:
(10, 46338), (15, 46224), (Start: 55 @46032 has 1 MA's), (Start: 57 @46029 has 3 MA's), (65, 45981), (69, 45930),

Gene: BreSam8_82 Start: 46033, Stop: 45800, Start Num: 50
Candidate Starts for BreSam8_82:
(Start: 50 @46033 has 108 MA's), (58, 46009), (63, 45979), (65, 45970),

Gene: Bud_76 Start: 44648, Stop: 44418, Start Num: 42
Candidate Starts for Bud_76:
(Start: 41 @44651 has 10 MA's), (Start: 42 @44648 has 13 MA's), (63, 44579),

Gene: Bugatti_83 Start: 46790, Stop: 46572, Start Num: 50
Candidate Starts for Bugatti_83:
(17, 46952), (Start: 50 @46790 has 108 MA's), (58, 46766), (63, 46736), (65, 46727), (80, 46580),

Gene: Buggy_82 Start: 47363, Stop: 47091, Start Num: 35
Candidate Starts for Buggy_82:

(12, 47516), (28, 47420), (33, 47381), (Start: 35 @47363 has 51 MA's), (48, 47327), (Start: 50 @47324 has 108 MA's), (58, 47300),

Gene: BuzzBuzz_76 Start: 46068, Stop: 45835, Start Num: 50

Candidate Starts for BuzzBuzz_76:

(Start: 50 @46068 has 108 MA's), (58, 46044), (63, 46014), (65, 46005), (77, 45882),

Gene: Bxz2_77 Start: 46075, Stop: 45842, Start Num: 50

Candidate Starts for Bxz2_77:

(Start: 50 @46075 has 108 MA's), (58, 46051), (63, 46021), (65, 46012), (77, 45889),

Gene: C3_73 Start: 45726, Stop: 45514, Start Num: 51

Candidate Starts for C3_73:

(7, 46038), (22, 45837), (24, 45828), (Start: 51 @45726 has 7 MA's), (59, 45714),

Gene: Caraxes_83 Start: 46330, Stop: 46109, Start Num: 44

Candidate Starts for Caraxes_83:

(22, 46444), (Start: 44 @46330 has 6 MA's), (Start: 55 @46315 has 1 MA's),

Gene: Centaur_80 Start: 46557, Stop: 46318, Start Num: 35

Candidate Starts for Centaur_80:

(11, 46746), (28, 46614), (33, 46575), (Start: 35 @46557 has 51 MA's), (37, 46551), (63, 46497), (66, 46473), (78, 46353),

Gene: Changeling_79 Start: 47138, Stop: 46917, Start Num: 35

Candidate Starts for Changeling_79:

(28, 47195), (33, 47156), (Start: 35 @47138 has 51 MA's), (Start: 55 @47123 has 1 MA's), (63, 47084),

Gene: Chargerpower_78 Start: 45099, Stop: 44884, Start Num: 50

Candidate Starts for Chargerpower_78:

(Start: 50 @45099 has 108 MA's), (60, 45066), (79, 44895),

Gene: Che12_84 Start: 46444, Stop: 46235, Start Num: 51

Candidate Starts for Che12_84:

(22, 46564), (Start: 51 @46444 has 7 MA's), (77, 46276),

Gene: ChipMunk_81 Start: 48224, Stop: 47958, Start Num: 35

Candidate Starts for ChipMunk_81:

(28, 48281), (33, 48242), (Start: 35 @48224 has 51 MA's), (48, 48194), (Start: 50 @48191 has 108 MA's),

Gene: Colbster_78 Start: 46043, Stop: 45810, Start Num: 50

Candidate Starts for Colbster_78:

(Start: 50 @46043 has 108 MA's), (58, 46019), (63, 45989), (65, 45980), (77, 45857),

Gene: Crucio_80 Start: 47111, Stop: 46845, Start Num: 35

Candidate Starts for Crucio_80:

(28, 47168), (33, 47129), (Start: 35 @47111 has 51 MA's), (Start: 50 @47078 has 108 MA's), (63, 47024),

Gene: Cullens_83 Start: 46042, Stop: 45809, Start Num: 50

Candidate Starts for Cullens_83:

(Start: 50 @46042 has 108 MA's), (58, 46018), (63, 45988), (65, 45979), (77, 45856),

Gene: DBQu4n_81 Start: 46768, Stop: 46538, Start Num: 44

Candidate Starts for DBQu4n_81:

(7, 47083), (22, 46882), (24, 46873), (Start: 44 @46768 has 6 MA's), (63, 46714), (72, 46627), (77, 46585),

Gene: DaHudson_81 Start: 46032, Stop: 45799, Start Num: 50

Candidate Starts for DaHudson_81:

(Start: 50 @46032 has 108 MA's), (58, 46008), (63, 45978), (65, 45969), (77, 45846),

Gene: Daishi_81 Start: 44909, Stop: 44676, Start Num: 50

Candidate Starts for Daishi_81:

(Start: 50 @44909 has 108 MA's), (58, 44885), (63, 44855), (65, 44846), (77, 44723),

Gene: Dalmatian_80 Start: 46936, Stop: 46664, Start Num: 35

Candidate Starts for Dalmatian_80:

(28, 46993), (33, 46954), (Start: 35 @46936 has 51 MA's), (Start: 50 @46897 has 108 MA's), (63, 46843), (78, 46699),

Gene: Danforth_89 Start: 47488, Stop: 47243, Start Num: 34

Candidate Starts for Danforth_89:

(Start: 34 @47488 has 5 MA's), (52, 47458), (63, 47410), (66, 47386), (73, 47305), (74, 47302), (80, 47260),

Gene: Deloris_80 Start: 46546, Stop: 46274, Start Num: 35

Candidate Starts for Deloris_80:

(11, 46735), (28, 46603), (33, 46564), (Start: 35 @46546 has 51 MA's), (48, 46510), (Start: 50 @46507 has 108 MA's), (58, 46483),

Gene: Dieselweasel_83 Start: 46041, Stop: 45808, Start Num: 50

Candidate Starts for Dieselweasel_83:

(Start: 50 @46041 has 108 MA's), (58, 46017), (63, 45987), (65, 45978), (77, 45855),

Gene: Dignity_82 Start: 47395, Stop: 47129, Start Num: 35

Candidate Starts for Dignity_82:

(11, 47584), (28, 47452), (33, 47413), (Start: 35 @47395 has 51 MA's), (48, 47365), (Start: 50 @47362 has 108 MA's), (61, 47326), (63, 47308),

Gene: Drake55_81 Start: 46808, Stop: 46575, Start Num: 35

Candidate Starts for Drake55_81:

(11, 46997), (12, 46964), (28, 46865), (33, 46826), (Start: 35 @46808 has 51 MA's),

Gene: DropBear_80 Start: 46719, Stop: 46501, Start Num: 50

Candidate Starts for DropBear_80:

(Start: 50 @46719 has 108 MA's), (58, 46695), (63, 46665), (65, 46656), (80, 46509),

Gene: DudeLittle_78 Start: 46702, Stop: 46430, Start Num: 35

Candidate Starts for DudeLittle_78:

(8, 46975), (11, 46891), (12, 46858), (28, 46759), (33, 46720), (Start: 35 @46702 has 51 MA's), (Start: 50 @46663 has 108 MA's), (63, 46609), (78, 46465),

Gene: Duplo_82 Start: 46825, Stop: 46595, Start Num: 44

Candidate Starts for Duplo_82:

(7, 47140), (22, 46939), (24, 46930), (Start: 44 @46825 has 6 MA's), (63, 46771), (72, 46684), (77, 46642),

Gene: EZMoney23_76 Start: 46264, Stop: 46034, Start Num: 50

Candidate Starts for EZMoney23_76:

(32, 46321), (39, 46282), (Start: 45 @46270 has 2 MA's), (Start: 50 @46264 has 108 MA's), (63, 46210), (72, 46123), (77, 46081),

Gene: Ebony_81 Start: 45785, Stop: 45552, Start Num: 41

Candidate Starts for Ebony_81:

(13, 45962), (18, 45917), (23, 45899), (40, 45797), (Start: 41 @45785 has 10 MA's), (Start: 42 @45782 has 13 MA's), (63, 45713),

Gene: Echild_82 Start: 46897, Stop: 46664, Start Num: 35

Candidate Starts for Echild_82:

(11, 47086), (12, 47053), (28, 46954), (33, 46915), (Start: 35 @46897 has 51 MA's), (63, 46843), (66, 46819), (78, 46699),

Gene: EpicPhail_83 Start: 46043, Stop: 45810, Start Num: 50

Candidate Starts for EpicPhail_83:

(Start: 50 @46043 has 108 MA's), (58, 46019), (63, 45989), (65, 45980), (77, 45857),

Gene: Equemioh13_80 Start: 46786, Stop: 46547, Start Num: 35

Candidate Starts for Equemioh13_80:

(11, 46975), (28, 46843), (33, 46804), (Start: 35 @46786 has 51 MA's), (37, 46780), (63, 46726), (66, 46702),

Gene: Et2Brutus_80 Start: 45748, Stop: 45515, Start Num: 41

Candidate Starts for Et2Brutus_80:

(Start: 41 @45748 has 10 MA's), (Start: 42 @45745 has 13 MA's), (63, 45676),

Gene: EvilGenius_80 Start: 48225, Stop: 47959, Start Num: 35

Candidate Starts for EvilGenius_80:

(28, 48282), (33, 48243), (Start: 35 @48225 has 51 MA's), (48, 48195), (Start: 50 @48192 has 108 MA's),

Gene: Fameo_78 Start: 46711, Stop: 46472, Start Num: 35

Candidate Starts for Fameo_78:

(28, 46768), (33, 46729), (Start: 35 @46711 has 51 MA's), (63, 46651), (78, 46507),

Gene: Farber_82 Start: 46029, Stop: 45796, Start Num: 50

Candidate Starts for Farber_82:

(Start: 50 @46029 has 108 MA's), (58, 46005), (63, 45975), (65, 45966), (77, 45843),

Gene: Fernando_83 Start: 46042, Stop: 45809, Start Num: 50

Candidate Starts for Fernando_83:

(Start: 50 @46042 has 108 MA's), (58, 46018), (63, 45988), (65, 45979), (77, 45856),

Gene: Fibonacci_80 Start: 45754, Stop: 45521, Start Num: 41

Candidate Starts for Fibonacci_80:

(Start: 41 @45754 has 10 MA's), (Start: 42 @45751 has 13 MA's), (63, 45682),

Gene: FiringLine_80 Start: 47099, Stop: 46827, Start Num: 35

Candidate Starts for FiringLine_80:

(11, 47288), (12, 47255), (28, 47156), (33, 47117), (Start: 35 @47099 has 51 MA's), (Start: 50 @47060 has 108 MA's), (63, 47006),

Gene: First_0081 Start: 46943, Stop: 46671, Start Num: 35

Candidate Starts for First_0081:

(28, 47000), (33, 46961), (Start: 35 @46943 has 51 MA's), (48, 46907), (Start: 50 @46904 has 108 MA's),

Gene: Flare16_80 Start: 46601, Stop: 46362, Start Num: 35

Candidate Starts for Flare16_80:

(11, 46790), (28, 46658), (33, 46619), (Start: 35 @46601 has 51 MA's), (37, 46595), (63, 46541), (66, 46517),

Gene: Flaverint_82 Start: 46209, Stop: 45979, Start Num: 42

Candidate Starts for Flaverint_82:

(Start: 41 @46212 has 10 MA's), (Start: 42 @46209 has 13 MA's), (63, 46140),

Gene: Fred313_79 Start: 46420, Stop: 46202, Start Num: 50

Candidate Starts for Fred313_79:

(17, 46582), (20, 46558), (Start: 50 @46420 has 108 MA's), (58, 46396), (63, 46366), (65, 46357), (80, 46210),

Gene: Gemma_79 Start: 45849, Stop: 45616, Start Num: 50

Candidate Starts for Gemma_79:

(Start: 50 @45849 has 108 MA's), (58, 45825), (63, 45795), (65, 45786), (77, 45663),

Gene: Georgie2_82 Start: 47303, Stop: 47031, Start Num: 35

Candidate Starts for Georgie2_82:

(11, 47492), (12, 47459), (28, 47360), (33, 47321), (Start: 35 @47303 has 51 MA's), (Start: 50 @47264 has 108 MA's), (63, 47210),

Gene: Gilberta_78 Start: 45085, Stop: 44855, Start Num: 42

Candidate Starts for Gilberta_78:

(Start: 41 @45088 has 10 MA's), (Start: 42 @45085 has 13 MA's), (63, 45016),

Gene: GingkoMaracino_82 Start: 45925, Stop: 45692, Start Num: 50

Candidate Starts for GingkoMaracino_82:

(Start: 50 @45925 has 108 MA's), (58, 45901), (63, 45871), (65, 45862), (77, 45739),

Gene: Giroux_80 Start: 46789, Stop: 46571, Start Num: 50

Candidate Starts for Giroux_80:

(17, 46951), (Start: 50 @46789 has 108 MA's), (58, 46765), (63, 46735), (65, 46726), (80, 46579),

Gene: Grif_80 Start: 46116, Stop: 45883, Start Num: 50

Candidate Starts for Grif_80:

(Start: 50 @46116 has 108 MA's), (58, 46092), (63, 46062), (65, 46053), (77, 45930),

Gene: Groupthink_82 Start: 45850, Stop: 45617, Start Num: 50

Candidate Starts for Groupthink_82:

(Start: 50 @45850 has 108 MA's), (58, 45826), (63, 45796), (65, 45787), (77, 45664),

Gene: Grub_80 Start: 46032, Stop: 45799, Start Num: 50
Candidate Starts for Grub_80:
(Start: 50 @46032 has 108 MA's), (58, 46008), (63, 45978), (65, 45969),

Gene: Grum1_82 Start: 46042, Stop: 45809, Start Num: 50
Candidate Starts for Grum1_82:
(Start: 50 @46042 has 108 MA's), (58, 46018), (63, 45988), (65, 45979), (77, 45856),

Gene: GtownJaz_82 Start: 46040, Stop: 45807, Start Num: 50
Candidate Starts for GtownJaz_82:
(Start: 50 @46040 has 108 MA's), (58, 46016), (63, 45986), (65, 45977), (77, 45854),

Gene: HarryHoudini_80 Start: 46811, Stop: 46572, Start Num: 35
Candidate Starts for HarryHoudini_80:
(11, 47000), (28, 46868), (33, 46829), (Start: 35 @46811 has 51 MA's), (37, 46805), (63, 46751), (64, 46748), (77, 46619),

Gene: HashRod_83 Start: 46069, Stop: 45836, Start Num: 50
Candidate Starts for HashRod_83:
(Start: 50 @46069 has 108 MA's), (58, 46045), (63, 46015), (65, 46006), (77, 45883),

Gene: HaveUMetTed_82 Start: 45838, Stop: 45605, Start Num: 50
Candidate Starts for HaveUMetTed_82:
(Start: 50 @45838 has 108 MA's), (58, 45814), (63, 45784), (65, 45775), (77, 45652),

Gene: Heathen_81 Start: 46508, Stop: 46290, Start Num: 50
Candidate Starts for Heathen_81:
(17, 46670), (20, 46646), (Start: 50 @46508 has 108 MA's), (58, 46484), (63, 46454), (65, 46445), (80, 46298),

Gene: Heffalump_77 Start: 47179, Stop: 46940, Start Num: 35
Candidate Starts for Heffalump_77:
(28, 47236), (33, 47197), (Start: 35 @47179 has 51 MA's), (63, 47119), (78, 46975),

Gene: HelDan_82 Start: 46731, Stop: 46513, Start Num: 50
Candidate Starts for HelDan_82:
(17, 46893), (20, 46869), (Start: 50 @46731 has 108 MA's), (58, 46707), (63, 46677), (65, 46668), (80, 46521),

Gene: Heliosoles_79 Start: 45854, Stop: 45621, Start Num: 50
Candidate Starts for Heliosoles_79:
(Start: 50 @45854 has 108 MA's), (58, 45830), (63, 45800), (65, 45791), (77, 45668),

Gene: Hercules11_82 Start: 46051, Stop: 45818, Start Num: 50
Candidate Starts for Hercules11_82:
(Start: 50 @46051 has 108 MA's), (58, 46027), (63, 45997), (65, 45988), (77, 45865),

Gene: Hookmount_82 Start: 46743, Stop: 46525, Start Num: 50
Candidate Starts for Hookmount_82:
(Start: 50 @46743 has 108 MA's), (58, 46719), (63, 46689), (65, 46680), (66, 46665), (80, 46533),

Gene: Hutc2_77 Start: 44638, Stop: 44405, Start Num: 41
Candidate Starts for Hutc2_77:

(Start: 41 @44638 has 10 MA's), (Start: 42 @44635 has 13 MA's), (63, 44566),

Gene: Idleandcovert_82 Start: 46790, Stop: 46572, Start Num: 50

Candidate Starts for Idleandcovert_82:

(17, 46952), (Start: 50 @46790 has 108 MA's), (58, 46766), (63, 46736), (65, 46727), (80, 46580),

Gene: Insomnia_80 Start: 45929, Stop: 45696, Start Num: 41

Candidate Starts for Insomnia_80:

(Start: 41 @45929 has 10 MA's), (Start: 42 @45926 has 13 MA's), (63, 45857),

Gene: Isca_78 Start: 45864, Stop: 45658, Start Num: 50

Candidate Starts for Isca_78:

(38, 45888), (Start: 50 @45864 has 108 MA's), (63, 45810), (80, 45666),

Gene: Iwokeuplikedis_82 Start: 47280, Stop: 47053, Start Num: 35

Candidate Starts for Iwokeuplikedis_82:

(12, 47433), (28, 47337), (33, 47298), (Start: 35 @47280 has 51 MA's), (63, 47220), (78, 47088), (81, 47070),

Gene: JHC117_77 Start: 46037, Stop: 45804, Start Num: 50

Candidate Starts for JHC117_77:

(Start: 50 @46037 has 108 MA's), (58, 46013), (63, 45983), (65, 45974), (77, 45851),

Gene: Jabith_80 Start: 45943, Stop: 45713, Start Num: 42

Candidate Starts for Jabith_80:

(Start: 41 @45946 has 10 MA's), (Start: 42 @45943 has 13 MA's), (63, 45874),

Gene: JenCasNa_83 Start: 46042, Stop: 45809, Start Num: 50

Candidate Starts for JenCasNa_83:

(Start: 50 @46042 has 108 MA's), (58, 46018), (63, 45988), (65, 45979), (77, 45856),

Gene: JeppNRM_82 Start: 45852, Stop: 45619, Start Num: 50

Candidate Starts for JeppNRM_82:

(31, 45918), (Start: 50 @45852 has 108 MA's), (58, 45828), (63, 45798), (65, 45789), (77, 45666),

Gene: Jerm_82 Start: 47384, Stop: 47112, Start Num: 35

Candidate Starts for Jerm_82:

(12, 47537), (28, 47441), (33, 47402), (Start: 35 @47384 has 51 MA's), (48, 47348), (Start: 50 @47345 has 108 MA's), (58, 47321),

Gene: Jobu08_78 Start: 45866, Stop: 45633, Start Num: 50

Candidate Starts for Jobu08_78:

(Start: 50 @45866 has 108 MA's), (58, 45842), (63, 45812), (65, 45803),

Gene: Joselito_80 Start: 45963, Stop: 45733, Start Num: 42

Candidate Starts for Joselito_80:

(Start: 41 @45966 has 10 MA's), (Start: 42 @45963 has 13 MA's), (63, 45894),

Gene: JoshKayV_82 Start: 47528, Stop: 47256, Start Num: 35

Candidate Starts for JoshKayV_82:

(11, 47717), (12, 47684), (28, 47585), (33, 47546), (Start: 35 @47528 has 51 MA's), (Start: 50 @47489 has 108 MA's), (63, 47435), (78, 47291),

Gene: Jsquared_83 Start: 46162, Stop: 45956, Start Num: 57
Candidate Starts for Jsquared_83:
(Start: 55 @46165 has 1 MA's), (Start: 57 @46162 has 3 MA's), (69, 46063),

Gene: KADY_79 Start: 46069, Stop: 45836, Start Num: 50
Candidate Starts for KADY_79:
(Start: 50 @46069 has 108 MA's), (58, 46045), (63, 46015), (65, 46006), (77, 45883),

Gene: Kachowdy_80 Start: 46760, Stop: 46542, Start Num: 50
Candidate Starts for Kachowdy_80:
(17, 46922), (20, 46898), (Start: 50 @46760 has 108 MA's), (58, 46736), (63, 46706), (65, 46697), (80, 46550),

Gene: Kalb97_82 Start: 45219, Stop: 44986, Start Num: 50
Candidate Starts for Kalb97_82:
(38, 45246), (Start: 50 @45219 has 108 MA's), (58, 45195), (63, 45165), (65, 45156), (77, 45033),

Gene: Kalnoky_82 Start: 45847, Stop: 45614, Start Num: 50
Candidate Starts for Kalnoky_82:
(Start: 50 @45847 has 108 MA's), (58, 45823), (63, 45793), (65, 45784), (77, 45661),

Gene: Kerberos_81 Start: 46788, Stop: 46558, Start Num: 44
Candidate Starts for Kerberos_81:
(7, 47103), (22, 46902), (24, 46893), (Start: 44 @46788 has 6 MA's), (63, 46734), (72, 46647), (77, 46605),

Gene: KingCyrus_79 Start: 48253, Stop: 47981, Start Num: 35
Candidate Starts for KingCyrus_79:
(28, 48310), (33, 48271), (Start: 35 @48253 has 51 MA's), (48, 48217), (Start: 50 @48214 has 108 MA's), (64, 48157),

Gene: Kinmap_84 Start: 45665, Stop: 45450, Start Num: 45
Candidate Starts for Kinmap_84:
(3, 46034), (5, 46025), (21, 45785), (30, 45734), (Start: 45 @45665 has 2 MA's), (72, 45524), (79, 45461),

Gene: Kudefre_138 Start: 72466, Stop: 72245, Start Num: 50
Candidate Starts for Kudefre_138:
(Start: 50 @72466 has 108 MA's), (76, 72280),

Gene: LBerry_83 Start: 46043, Stop: 45810, Start Num: 50
Candidate Starts for LBerry_83:
(Start: 50 @46043 has 108 MA's), (58, 46019), (63, 45989), (65, 45980), (77, 45857),

Gene: LadyBird_84 Start: 47454, Stop: 47182, Start Num: 35
Candidate Starts for LadyBird_84:
(28, 47511), (29, 47502), (33, 47472), (Start: 35 @47454 has 51 MA's), (48, 47418), (Start: 50 @47415 has 108 MA's),

Gene: Lambert1_82 Start: 46744, Stop: 46526, Start Num: 50
Candidate Starts for Lambert1_82:
(Start: 50 @46744 has 108 MA's), (58, 46720), (63, 46690), (65, 46681), (66, 46666), (80, 46534),

Gene: Larenn_78 Start: 46804, Stop: 46532, Start Num: 35
Candidate Starts for Larenn_78:
(28, 46861), (33, 46822), (Start: 35 @46804 has 51 MA's), (48, 46768), (Start: 50 @46765 has 108 MA's),

Gene: LarryKay_82 Start: 46073, Stop: 45840, Start Num: 50
Candidate Starts for LarryKay_82:
(Start: 50 @46073 has 108 MA's), (58, 46049), (63, 46019), (65, 46010), (77, 45887),

Gene: Leviathan_82 Start: 47444, Stop: 47178, Start Num: 35
Candidate Starts for Leviathan_82:
(11, 47633), (28, 47501), (33, 47462), (Start: 35 @47444 has 51 MA's), (48, 47414), (Start: 50 @47411 has 108 MA's), (61, 47375), (63, 47357),

Gene: LilTurb_81 Start: 47264, Stop: 46992, Start Num: 35
Candidate Starts for LilTurb_81:
(12, 47417), (28, 47321), (33, 47282), (Start: 35 @47264 has 51 MA's), (48, 47228), (Start: 50 @47225 has 108 MA's), (58, 47201),

Gene: Lilith_80 Start: 46032, Stop: 45799, Start Num: 50
Candidate Starts for Lilith_80:
(Start: 50 @46032 has 108 MA's), (58, 46008), (63, 45978), (65, 45969),

Gene: Louie6_81 Start: 46070, Stop: 45837, Start Num: 50
Candidate Starts for Louie6_81:
(Start: 50 @46070 has 108 MA's), (58, 46046), (63, 46016), (65, 46007), (77, 45884),

Gene: Lucivia_82 Start: 46245, Stop: 46012, Start Num: 41
Candidate Starts for Lucivia_82:
(Start: 41 @46245 has 10 MA's), (Start: 42 @46242 has 13 MA's), (63, 46173),

Gene: LugYA_85 Start: 46043, Stop: 45810, Start Num: 50
Candidate Starts for LugYA_85:
(Start: 50 @46043 has 108 MA's), (58, 46019), (63, 45989), (65, 45980), (77, 45857),

Gene: MA5_80 Start: 45778, Stop: 45572, Start Num: 50
Candidate Starts for MA5_80:
(38, 45802), (Start: 50 @45778 has 108 MA's), (63, 45724), (80, 45580),

Gene: MaCh_81 Start: 46206, Stop: 45976, Start Num: 42
Candidate Starts for MaCh_81:
(Start: 41 @46209 has 10 MA's), (Start: 42 @46206 has 13 MA's), (63, 46137),

Gene: Mabel_81 Start: 46207, Stop: 45977, Start Num: 42
Candidate Starts for Mabel_81:
(Start: 41 @46210 has 10 MA's), (Start: 42 @46207 has 13 MA's), (63, 46138),

Gene: MadMarie_80 Start: 46040, Stop: 45807, Start Num: 50
Candidate Starts for MadMarie_80:
(Start: 50 @46040 has 108 MA's), (58, 46016), (63, 45986), (65, 45977), (77, 45854),

Gene: Mainiac_81 Start: 46032, Stop: 45799, Start Num: 50
Candidate Starts for Mainiac_81:

(Start: 50 @46032 has 108 MA's), (58, 46008), (63, 45978), (65, 45969), (77, 45846),

Gene: Malec_79 Start: 47374, Stop: 47102, Start Num: 35

Candidate Starts for Malec_79:

(28, 47431), (33, 47392), (Start: 35 @47374 has 51 MA's), (Start: 50 @47335 has 108 MA's), (61, 47299), (63, 47281),

Gene: Malinsilva_85 Start: 46031, Stop: 45798, Start Num: 50

Candidate Starts for Malinsilva_85:

(Start: 50 @46031 has 108 MA's), (58, 46007), (63, 45977), (65, 45968),

Gene: Manu_81 Start: 45854, Stop: 45621, Start Num: 50

Candidate Starts for Manu_81:

(Start: 50 @45854 has 108 MA's), (58, 45830), (63, 45800), (65, 45791), (77, 45668),

Gene: MarQuardt_82 Start: 46041, Stop: 45808, Start Num: 50

Candidate Starts for MarQuardt_82:

(Start: 50 @46041 has 108 MA's), (58, 46017), (63, 45987), (65, 45978), (77, 45855),

Gene: Marchesa_81 Start: 46712, Stop: 46494, Start Num: 50

Candidate Starts for Marchesa_81:

(Start: 50 @46712 has 108 MA's), (58, 46688), (63, 46658), (65, 46649), (80, 46502),

Gene: Margo_82 Start: 46769, Stop: 46551, Start Num: 50

Candidate Starts for Margo_82:

(Start: 50 @46769 has 108 MA's), (58, 46745), (63, 46715), (65, 46706), (66, 46691), (80, 46559),

Gene: Marie_80 Start: 46042, Stop: 45809, Start Num: 50

Candidate Starts for Marie_80:

(Start: 50 @46042 has 108 MA's), (58, 46018), (63, 45988), (65, 45979), (77, 45856),

Gene: Marius_82 Start: 45847, Stop: 45614, Start Num: 50

Candidate Starts for Marius_82:

(Start: 50 @45847 has 108 MA's), (58, 45823), (63, 45793), (65, 45784), (77, 45661),

Gene: Methuselah_75 Start: 46063, Stop: 45830, Start Num: 50

Candidate Starts for Methuselah_75:

(Start: 50 @46063 has 108 MA's), (58, 46039), (63, 46009), (65, 46000), (77, 45877),

Gene: Microwolf_78 Start: 46055, Stop: 45822, Start Num: 50

Candidate Starts for Microwolf_78:

(Start: 50 @46055 has 108 MA's), (58, 46031), (63, 46001), (65, 45992),

Gene: MiculUcigas_80 Start: 46504, Stop: 46265, Start Num: 35

Candidate Starts for MiculUcigas_80:

(11, 46693), (28, 46561), (33, 46522), (Start: 35 @46504 has 51 MA's), (37, 46498), (63, 46444), (66, 46420),

Gene: Miko_75 Start: 46074, Stop: 45838, Start Num: 45

Candidate Starts for Miko_75:

(32, 46125), (39, 46086), (Start: 45 @46074 has 2 MA's), (Start: 50 @46068 has 108 MA's), (63, 46014), (72, 45927), (77, 45885),

Gene: MoneyMay_82 Start: 46042, Stop: 45809, Start Num: 50
Candidate Starts for MoneyMay_82:
(Start: 50 @46042 has 108 MA's), (58, 46018), (63, 45988), (65, 45979), (77, 45856),

Gene: MuchMore_85 Start: 46028, Stop: 45795, Start Num: 50
Candidate Starts for MuchMore_85:
(Start: 50 @46028 has 108 MA's), (58, 46004), (63, 45974), (65, 45965),

Gene: Mulciber_79 Start: 45748, Stop: 45518, Start Num: 42
Candidate Starts for Mulciber_79:
(Start: 41 @45751 has 10 MA's), (Start: 42 @45748 has 13 MA's), (63, 45679),

Gene: Munch_81 Start: 46214, Stop: 45981, Start Num: 41
Candidate Starts for Munch_81:
(Start: 41 @46214 has 10 MA's), (Start: 42 @46211 has 13 MA's), (63, 46142),

Gene: MyraDee_75 Start: 43252, Stop: 43040, Start Num: 49
Candidate Starts for MyraDee_75:
(Start: 49 @43252 has 2 MA's),

Gene: NaSiaTalie_81 Start: 46791, Stop: 46558, Start Num: 35
Candidate Starts for NaSiaTalie_81:
(11, 46980), (28, 46848), (33, 46809), (Start: 35 @46791 has 51 MA's),

Gene: NearlyHeadless_89 Start: 47225, Stop: 46980, Start Num: 34
Candidate Starts for NearlyHeadless_89:
(Start: 34 @47225 has 5 MA's), (52, 47195), (63, 47147), (66, 47123), (74, 47039), (80, 46997),

Gene: NicoleTera_78 Start: 46731, Stop: 46501, Start Num: 50
Candidate Starts for NicoleTera_78:
(16, 46887), (32, 46788), (39, 46749), (Start: 45 @46737 has 2 MA's), (Start: 50 @46731 has 108 MA's), (63, 46677), (72, 46590), (77, 46548),

Gene: Noella_83 Start: 46745, Stop: 46527, Start Num: 50
Candidate Starts for Noella_83:
(Start: 50 @46745 has 108 MA's), (58, 46721), (63, 46691), (65, 46682), (66, 46667), (80, 46535),

Gene: Norbert_78 Start: 46742, Stop: 46524, Start Num: 50
Candidate Starts for Norbert_78:
(Start: 50 @46742 has 108 MA's), (58, 46718), (63, 46688), (65, 46679), (66, 46664), (80, 46532),

Gene: NothingSpecial_74 Start: 46407, Stop: 46177, Start Num: 47
Candidate Starts for NothingSpecial_74:
(Start: 47 @46407 has 1 MA's), (63, 46353), (72, 46266),

Gene: Octobien14_135 Start: 71190, Stop: 70951, Start Num: 50
Candidate Starts for Octobien14_135:
(33, 71247), (Start: 50 @71190 has 108 MA's), (63, 71133), (70, 71049),

Gene: Odin_81 Start: 46643, Stop: 46428, Start Num: 53
Candidate Starts for Odin_81:
(19, 46793), (Start: 53 @46643 has 1 MA's), (Start: 57 @46634 has 3 MA's), (65, 46586),

Gene: OlanP_80 Start: 46026, Stop: 45793, Start Num: 50
Candidate Starts for OlanP_80:
(Start: 50 @46026 has 108 MA's), (58, 46002), (63, 45972), (65, 45963), (77, 45840),

Gene: Ollie_82 Start: 45910, Stop: 45677, Start Num: 50
Candidate Starts for Ollie_82:
(Start: 50 @45910 has 108 MA's), (58, 45886), (63, 45856), (65, 45847), (77, 45724),

Gene: Orange_81 Start: 45761, Stop: 45531, Start Num: 42
Candidate Starts for Orange_81:
(Start: 41 @45764 has 10 MA's), (Start: 42 @45761 has 13 MA's), (63, 45692),

Gene: P28Green_82 Start: 46045, Stop: 45812, Start Num: 50
Candidate Starts for P28Green_82:
(Start: 50 @46045 has 108 MA's), (58, 46021), (63, 45991), (65, 45982), (77, 45859),

Gene: PGHhamlin_84 Start: 46031, Stop: 45798, Start Num: 50
Candidate Starts for PGHhamlin_84:
(Start: 50 @46031 has 108 MA's), (58, 46007), (63, 45977), (65, 45968),

Gene: Panamaxus_79 Start: 46744, Stop: 46526, Start Num: 50
Candidate Starts for Panamaxus_79:
(Start: 50 @46744 has 108 MA's), (58, 46720), (63, 46690), (65, 46681), (66, 46666), (80, 46534),

Gene: Pawn_80 Start: 45854, Stop: 45621, Start Num: 50
Candidate Starts for Pawn_80:
(Start: 50 @45854 has 108 MA's), (58, 45830), (63, 45800), (65, 45791), (77, 45668),

Gene: Pembroke_82 Start: 46040, Stop: 45807, Start Num: 50
Candidate Starts for Pembroke_82:
(Start: 50 @46040 has 108 MA's), (58, 46016), (63, 45986), (65, 45977),

Gene: Penny1_82 Start: 46043, Stop: 45810, Start Num: 50
Candidate Starts for Penny1_82:
(Start: 50 @46043 has 108 MA's), (58, 46019), (63, 45989), (65, 45980), (77, 45857),

Gene: Petersenfast_75 Start: 44642, Stop: 44412, Start Num: 42
Candidate Starts for Petersenfast_75:
(Start: 41 @44645 has 10 MA's), (Start: 42 @44642 has 13 MA's), (63, 44573),

Gene: Ph8s_83 Start: 46579, Stop: 46370, Start Num: 51
Candidate Starts for Ph8s_83:
(Start: 51 @46579 has 7 MA's), (62, 46540), (77, 46411),

Gene: Phantastic_83 Start: 46192, Stop: 45986, Start Num: 50
Candidate Starts for Phantastic_83:
(38, 46216), (Start: 50 @46192 has 108 MA's), (63, 46138), (80, 45994),

Gene: Phillis_85 Start: 46238, Stop: 45990, Start Num: 34
Candidate Starts for Phillis_85:
(Start: 34 @46238 has 5 MA's), (52, 46208), (63, 46160), (68, 46094), (80, 46007),

Gene: PhishRPhriends_78 Start: 45034, Stop: 44801, Start Num: 50

Candidate Starts for PhishRPhriends_78:

(Start: 50 @45034 has 108 MA's), (58, 45010), (63, 44980), (65, 44971), (77, 44848),

Gene: Phlei_62 Start: 43268, Stop: 43068, Start Num: 55

Candidate Starts for Phlei_62:

(54, 43271), (Start: 55 @43268 has 1 MA's), (66, 43202), (80, 43088),

Gene: Phoebe_83 Start: 46035, Stop: 45802, Start Num: 50

Candidate Starts for Phoebe_83:

(Start: 50 @46035 has 108 MA's), (58, 46011), (63, 45981), (65, 45972), (77, 45849),

Gene: Phoxy_82 Start: 46064, Stop: 45831, Start Num: 50

Candidate Starts for Phoxy_82:

(Start: 50 @46064 has 108 MA's), (58, 46040), (63, 46010), (65, 46001), (77, 45878),

Gene: Piro94_79 Start: 46739, Stop: 46506, Start Num: 35

Candidate Starts for Piro94_79:

(11, 46928), (28, 46796), (33, 46757), (Start: 35 @46739 has 51 MA's),

Gene: Pistachio_82 Start: 46337, Stop: 46119, Start Num: 50

Candidate Starts for Pistachio_82:

(17, 46499), (Start: 50 @46337 has 108 MA's), (58, 46313), (63, 46283), (65, 46274), (80, 46127),

Gene: Pocahontas_81 Start: 46740, Stop: 46522, Start Num: 50

Candidate Starts for Pocahontas_81:

(Start: 50 @46740 has 108 MA's), (58, 46716), (63, 46686), (65, 46677), (66, 46662), (80, 46530),

Gene: Pomar16_81 Start: 46861, Stop: 46628, Start Num: 44

Candidate Starts for Pomar16_81:

(7, 47176), (22, 46975), (24, 46966), (Start: 44 @46861 has 6 MA's), (63, 46807), (72, 46720), (77, 46675),

Gene: Popcicle_82 Start: 46740, Stop: 46522, Start Num: 50

Candidate Starts for Popcicle_82:

(Start: 50 @46740 has 108 MA's), (58, 46716), (63, 46686), (65, 46677), (66, 46662), (80, 46530),

Gene: PotatoSplit_83 Start: 46043, Stop: 45810, Start Num: 50

Candidate Starts for PotatoSplit_83:

(Start: 50 @46043 has 108 MA's), (58, 46019), (63, 45989), (65, 45980), (77, 45857),

Gene: Power_80 Start: 47302, Stop: 47030, Start Num: 35

Candidate Starts for Power_80:

(11, 47491), (12, 47458), (28, 47359), (33, 47320), (Start: 35 @47302 has 51 MA's), (Start: 50 @47263 has 108 MA's), (63, 47209),

Gene: Puppy_83 Start: 46407, Stop: 46189, Start Num: 50

Candidate Starts for Puppy_83:

(17, 46569), (20, 46545), (Start: 50 @46407 has 108 MA's), (58, 46383), (63, 46353), (65, 46344), (80, 46197),

Gene: PurpleHaze_81 Start: 45850, Stop: 45617, Start Num: 50

Candidate Starts for PurpleHaze_81:

(Start: 50 @45850 has 108 MA's), (58, 45826), (63, 45796), (65, 45787), (77, 45664),

Gene: QueenB2_77 Start: 46392, Stop: 46153, Start Num: 35

Candidate Starts for QueenB2_77:

(28, 46449), (33, 46410), (Start: 35 @46392 has 51 MA's), (63, 46332), (78, 46188),

Gene: QueenBeesly_80 Start: 47099, Stop: 46827, Start Num: 35

Candidate Starts for QueenBeesly_80:

(11, 47288), (12, 47255), (28, 47156), (33, 47117), (Start: 35 @47099 has 51 MA's), (Start: 50 @47060 has 108 MA's), (63, 47006),

Gene: QuinnKiro_81 Start: 46743, Stop: 46525, Start Num: 50

Candidate Starts for QuinnKiro_81:

(Start: 50 @46743 has 108 MA's), (58, 46719), (63, 46689), (65, 46680), (66, 46665), (80, 46533),

Gene: Quokka_81 Start: 46030, Stop: 45824, Start Num: 57

Candidate Starts for Quokka_81:

(10, 46339), (15, 46225), (Start: 55 @46033 has 1 MA's), (Start: 57 @46030 has 3 MA's), (65, 45982), (69, 45931),

Gene: Rachaly_77 Start: 46214, Stop: 45984, Start Num: 50

Candidate Starts for Rachaly_77:

(32, 46271), (39, 46232), (Start: 45 @46220 has 2 MA's), (Start: 50 @46214 has 108 MA's), (63, 46160), (72, 46073), (77, 46031),

Gene: Reba_77 Start: 44690, Stop: 44457, Start Num: 50

Candidate Starts for Reba_77:

(Start: 50 @44690 has 108 MA's), (58, 44666), (63, 44636), (65, 44627), (77, 44504),

Gene: ResDef_80 Start: 46746, Stop: 46528, Start Num: 50

Candidate Starts for ResDef_80:

(Start: 50 @46746 has 108 MA's), (58, 46722), (63, 46692), (65, 46683), (66, 46668), (80, 46536),

Gene: Retro23_80 Start: 46823, Stop: 46557, Start Num: 35

Candidate Starts for Retro23_80:

(28, 46880), (33, 46841), (Start: 35 @46823 has 51 MA's), (Start: 50 @46790 has 108 MA's), (63, 46736), (78, 46592),

Gene: Rummer_81 Start: 46067, Stop: 45834, Start Num: 50

Candidate Starts for Rummer_81:

(Start: 50 @46067 has 108 MA's), (58, 46043), (63, 46013), (65, 46004), (77, 45881),

Gene: Sabia_80 Start: 46047, Stop: 45814, Start Num: 50

Candidate Starts for Sabia_80:

(Start: 50 @46047 has 108 MA's), (58, 46023), (63, 45993), (65, 45984), (77, 45861),

Gene: Sabinator_80 Start: 46041, Stop: 45808, Start Num: 50

Candidate Starts for Sabinator_80:

(Start: 50 @46041 has 108 MA's), (58, 46017), (63, 45987), (65, 45978), (77, 45855),

Gene: Saintus_84 Start: 44090, Stop: 43845, Start Num: 34

Candidate Starts for Saintus_84:

(Start: 34 @44090 has 5 MA's), (52, 44060), (63, 44012), (66, 43988), (74, 43904), (80, 43862),

Gene: Salz_76 Start: 44560, Stop: 44327, Start Num: 41

Candidate Starts for Salz_76:

(Start: 41 @44560 has 10 MA's), (Start: 42 @44557 has 13 MA's), (63, 44488),

Gene: SaturnRing_83 Start: 46790, Stop: 46572, Start Num: 50

Candidate Starts for SaturnRing_83:

(17, 46952), (Start: 50 @46790 has 108 MA's), (58, 46766), (63, 46736), (65, 46727), (80, 46580),

Gene: Scout_81 Start: 45971, Stop: 45753, Start Num: 50

Candidate Starts for Scout_81:

(17, 46133), (20, 46109), (Start: 50 @45971 has 108 MA's), (58, 45947), (63, 45917), (65, 45908), (80, 45761),

Gene: SemperFi_80 Start: 46987, Stop: 46715, Start Num: 35

Candidate Starts for SemperFi_80:

(11, 47176), (12, 47143), (28, 47044), (33, 47005), (Start: 35 @46987 has 51 MA's), (Start: 50 @46948 has 108 MA's), (63, 46894),

Gene: Serenity_83 Start: 46222, Stop: 46016, Start Num: 57

Candidate Starts for Serenity_83:

(Start: 55 @46225 has 1 MA's), (Start: 57 @46222 has 3 MA's), (65, 46174), (69, 46123),

Gene: Sham4_77 Start: 44640, Stop: 44410, Start Num: 42

Candidate Starts for Sham4_77:

(Start: 41 @44643 has 10 MA's), (Start: 42 @44640 has 13 MA's), (63, 44571),

Gene: Smeagan_83 Start: 47535, Stop: 47269, Start Num: 35

Candidate Starts for Smeagan_83:

(6, 47832), (11, 47724), (28, 47592), (33, 47553), (Start: 35 @47535 has 51 MA's), (48, 47505), (Start: 50 @47502 has 108 MA's), (61, 47466), (63, 47448),

Gene: SnapTap_80 Start: 46958, Stop: 46686, Start Num: 35

Candidate Starts for SnapTap_80:

(11, 47147), (12, 47114), (28, 47015), (33, 46976), (Start: 35 @46958 has 51 MA's), (Start: 50 @46919 has 108 MA's), (63, 46865),

Gene: Snape_81 Start: 45750, Stop: 45520, Start Num: 42

Candidate Starts for Snape_81:

(Start: 41 @45753 has 10 MA's), (Start: 42 @45750 has 13 MA's), (63, 45681),

Gene: Snickers_78 Start: 46012, Stop: 45779, Start Num: 50

Candidate Starts for Snickers_78:

(Start: 50 @46012 has 108 MA's), (58, 45988), (63, 45958), (65, 45949), (77, 45826),

Gene: SoYo_79 Start: 45955, Stop: 45722, Start Num: 50

Candidate Starts for SoYo_79:

(Start: 50 @45955 has 108 MA's), (58, 45931), (63, 45901), (65, 45892), (77, 45769),

Gene: SoilDragon_82 Start: 45482, Stop: 45249, Start Num: 50

Candidate Starts for SoilDragon_82:

(Start: 50 @45482 has 108 MA's), (58, 45458), (63, 45428), (65, 45419),

Gene: Soshari_84 Start: 46063, Stop: 45830, Start Num: 50

Candidate Starts for Soshari_84:

(Start: 50 @46063 has 108 MA's), (58, 46039), (63, 46009), (65, 46000), (77, 45877),

Gene: Spike509_82 Start: 46064, Stop: 45831, Start Num: 50

Candidate Starts for Spike509_82:

(Start: 50 @46064 has 108 MA's), (58, 46040), (63, 46010), (65, 46001), (77, 45878),

Gene: Stagni_79 Start: 46042, Stop: 45809, Start Num: 50

Candidate Starts for Stagni_79:

(Start: 50 @46042 has 108 MA's), (58, 46018), (63, 45988), (65, 45979), (77, 45856),

Gene: StarStuff_81 Start: 46823, Stop: 46593, Start Num: 44

Candidate Starts for StarStuff_81:

(7, 47138), (22, 46937), (24, 46928), (Start: 44 @46823 has 6 MA's), (63, 46769), (72, 46682), (77, 46640),

Gene: StepMih_82 Start: 46033, Stop: 45800, Start Num: 50

Candidate Starts for StepMih_82:

(Start: 50 @46033 has 108 MA's), (58, 46009), (63, 45979), (65, 45970), (77, 45847),

Gene: Stephig9_87 Start: 47239, Stop: 47000, Start Num: 34

Candidate Starts for Stephig9_87:

(Start: 34 @47239 has 5 MA's), (36, 47224), (52, 47209), (56, 47200), (67, 47107), (71, 47086), (72, 47083), (73, 47062), (75, 47053), (80, 47017),

Gene: Superchunk_82 Start: 46315, Stop: 46109, Start Num: 55

Candidate Starts for Superchunk_82:

(22, 46444), (Start: 44 @46330 has 6 MA's), (Start: 55 @46315 has 1 MA's),

Gene: SweetiePie_80 Start: 47051, Stop: 46818, Start Num: 50

Candidate Starts for SweetiePie_80:

(Start: 50 @47051 has 108 MA's), (63, 46997),

Gene: TNguyen7_83 Start: 46748, Stop: 46530, Start Num: 50

Candidate Starts for TNguyen7_83:

(17, 46910), (Start: 50 @46748 has 108 MA's), (58, 46724), (63, 46694), (65, 46685), (80, 46538),

Gene: TarsusIV_80 Start: 47106, Stop: 46870, Start Num: 45

Candidate Starts for TarsusIV_80:

(1, 47595), (2, 47577), (4, 47478), (9, 47394), (14, 47283), (21, 47226), (30, 47175), (Start: 45 @47106 has 2 MA's), (Start: 50 @47100 has 108 MA's), (52, 47094), (Start: 55 @47085 has 1 MA's), (63, 47046), (72, 46959), (77, 46917),

Gene: Taurus_83 Start: 46042, Stop: 45809, Start Num: 50

Candidate Starts for Taurus_83:

(Start: 50 @46042 has 108 MA's), (58, 46018), (63, 45988), (65, 45979), (77, 45856),

Gene: Texage_80 Start: 46744, Stop: 46526, Start Num: 50

Candidate Starts for Texage_80:

(Start: 50 @46744 has 108 MA's), (58, 46720), (63, 46690), (65, 46681), (66, 46666), (80, 46534),

Gene: Tiffany_81 Start: 45927, Stop: 45694, Start Num: 50

Candidate Starts for Tiffany_81:

(Start: 50 @45927 has 108 MA's), (58, 45903), (63, 45873), (65, 45864), (77, 45741),

Gene: Timothy_81 Start: 45730, Stop: 45497, Start Num: 41

Candidate Starts for Timothy_81:

(Start: 41 @45730 has 10 MA's), (Start: 42 @45727 has 13 MA's), (63, 45658),

Gene: TinyTimmy_80 Start: 45459, Stop: 45226, Start Num: 41

Candidate Starts for TinyTimmy_80:

(Start: 41 @45459 has 10 MA's), (Start: 42 @45456 has 13 MA's), (63, 45387),

Gene: TopsytheTRex_79 Start: 46224, Stop: 46018, Start Num: 57

Candidate Starts for TopsytheTRex_79:

(Start: 55 @46227 has 1 MA's), (Start: 57 @46224 has 3 MA's), (65, 46176), (69, 46125),

Gene: Todacoro_82 Start: 46743, Stop: 46525, Start Num: 50

Candidate Starts for Todacoro_82:

(Start: 50 @46743 has 108 MA's), (58, 46719), (63, 46689), (65, 46680), (66, 46665), (80, 46533),

Gene: Tomathan_81 Start: 46901, Stop: 46671, Start Num: 44

Candidate Starts for Tomathan_81:

(7, 47216), (22, 47015), (24, 47006), (Start: 44 @46901 has 6 MA's), (63, 46847), (72, 46760), (77, 46718),

Gene: Travvers_81 Start: 46818, Stop: 46588, Start Num: 44

Candidate Starts for Travvers_81:

(7, 47133), (22, 46932), (24, 46923), (Start: 44 @46818 has 6 MA's), (63, 46764), (72, 46677), (77, 46635),

Gene: Trooper_80 Start: 46666, Stop: 46427, Start Num: 46

Candidate Starts for Trooper_80:

(Start: 46 @46666 has 1 MA's), (Start: 50 @46660 has 108 MA's), (Start: 55 @46645 has 1 MA's), (63, 46606), (77, 46474),

Gene: Turbido_81 Start: 47256, Stop: 46990, Start Num: 35

Candidate Starts for Turbido_81:

(11, 47445), (28, 47313), (33, 47274), (Start: 35 @47256 has 51 MA's), (48, 47226), (Start: 50 @47223 has 108 MA's), (61, 47187), (63, 47169),

Gene: Updawg_81 Start: 46786, Stop: 46547, Start Num: 35

Candidate Starts for Updawg_81:

(11, 46975), (28, 46843), (33, 46804), (Start: 35 @46786 has 51 MA's), (37, 46780), (63, 46726), (66, 46702),

Gene: VA6_80 Start: 46834, Stop: 46562, Start Num: 35

Candidate Starts for VA6_80:

(28, 46891), (29, 46882), (33, 46852), (Start: 35 @46834 has 51 MA's), (48, 46798), (Start: 50 @46795 has 108 MA's), (64, 46738),

Gene: VC3_79 Start: 45726, Stop: 45514, Start Num: 51

Candidate Starts for VC3_79:

(7, 46038), (22, 45837), (24, 45828), (Start: 51 @45726 has 7 MA's), (59, 45714),

Gene: Veracruz_79 Start: 46744, Stop: 46526, Start Num: 50

Candidate Starts for Veracruz_79:

(Start: 50 @46744 has 108 MA's), (58, 46720), (63, 46690), (65, 46681), (66, 46666), (80, 46534),

Gene: Vix_78 Start: 46122, Stop: 45889, Start Num: 50

Candidate Starts for Vix_78:

(Start: 50 @46122 has 108 MA's), (58, 46098), (63, 46068), (65, 46059), (77, 45936),

Gene: Watson_81 Start: 46031, Stop: 45798, Start Num: 50

Candidate Starts for Watson_81:

(Start: 50 @46031 has 108 MA's), (58, 46007), (63, 45977), (65, 45968),

Gene: Whabigail7_80 Start: 47254, Stop: 46988, Start Num: 35

Candidate Starts for Whabigail7_80:

(11, 47443), (28, 47311), (33, 47272), (Start: 35 @47254 has 51 MA's), (48, 47224), (Start: 50 @47221 has 108 MA's), (61, 47185), (63, 47167),

Gene: WideWale_81 Start: 46786, Stop: 46547, Start Num: 35

Candidate Starts for WideWale_81:

(11, 46975), (28, 46843), (33, 46804), (Start: 35 @46786 has 51 MA's), (37, 46780), (63, 46726), (66, 46702),

Gene: Wooldri_84 Start: 45948, Stop: 45715, Start Num: 50

Candidate Starts for Wooldri_84:

(Start: 50 @45948 has 108 MA's), (58, 45924), (63, 45894), (65, 45885), (77, 45762),

Gene: XianYue_79 Start: 47118, Stop: 46879, Start Num: 43

Candidate Starts for XianYue_79:

(22, 47229), (Start: 43 @47118 has 1 MA's), (Start: 45 @47112 has 2 MA's), (63, 47058), (77, 46926),