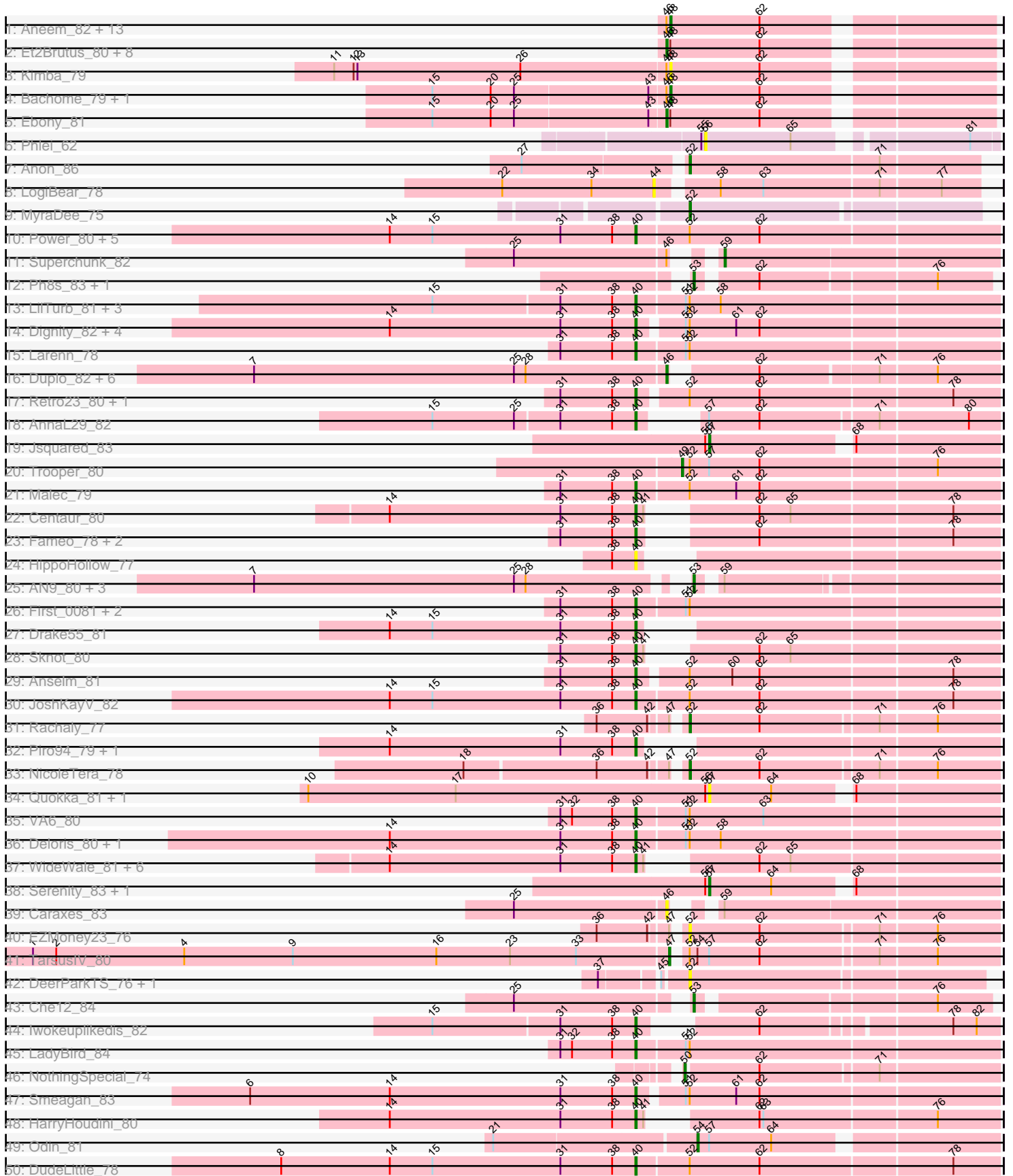
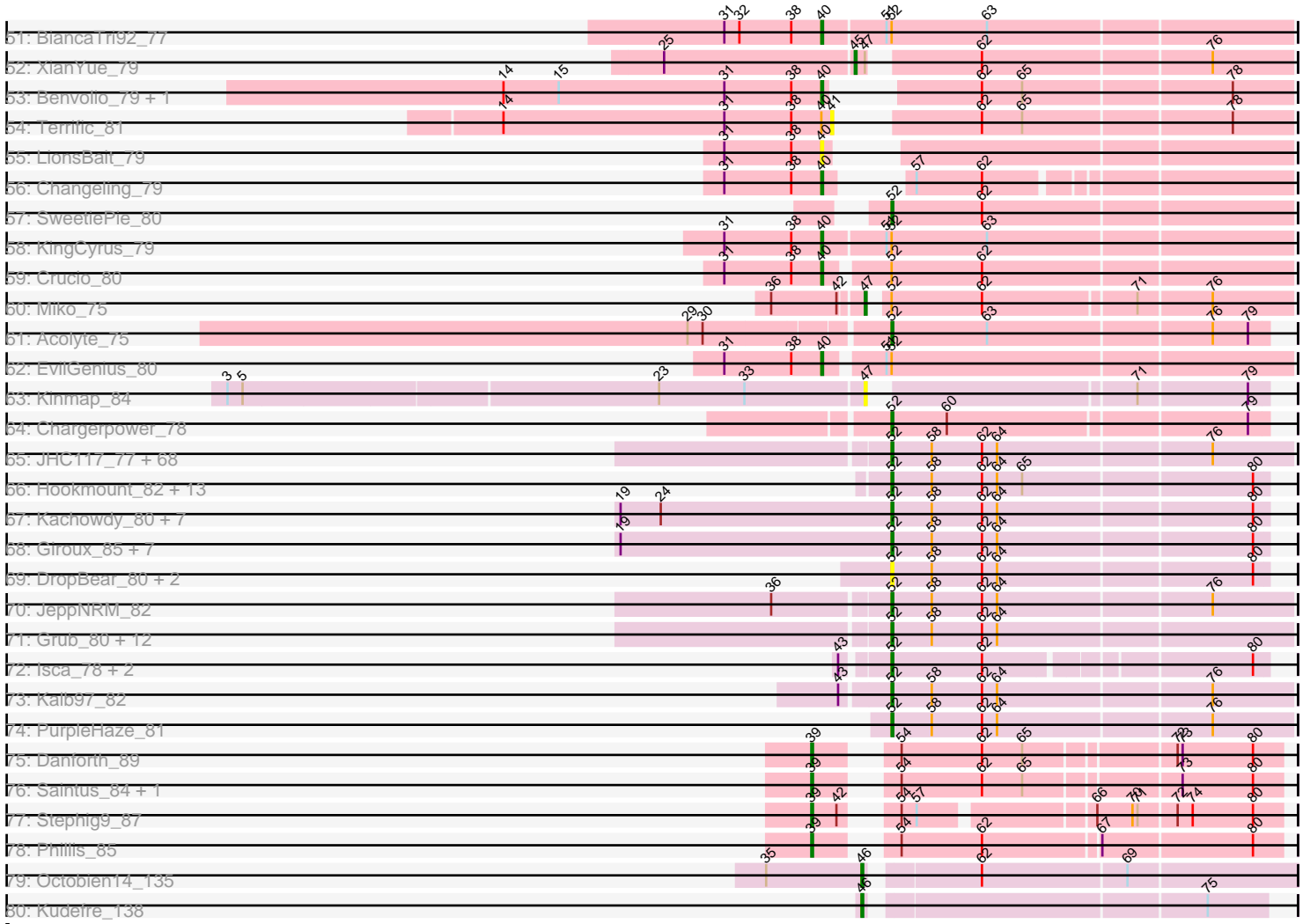


Pham 308005



Pham 308005



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 308005 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308005 has 253 members, 36 are drafts.

Phages represented in each track:

- Track 1 : Aneem_82, MaCh_81, Sham4_77, Bud_76, Gilberta_78, Petersenfast_75, Joselito_80, Orange_81, Flaverint_82, Wolpertinger_80, Mabel_81, Snape_81, Jabith_80, Mulciber_79
- Track 2 : Et2Brutus_80, Munch_81, Salz_76, Lucivia_82, TinyTimmy_80, Hutc2_77, Insomnia_80, Fibonacci_80, Timothy_81
- Track 3 : Kimba_79
- Track 4 : Bachome_79, Saskia_78
- Track 5 : Ebony_81
- Track 6 : Phlei_62
- Track 7 : Anon_86
- Track 8 : LogiBear_78
- Track 9 : MyraDee_75
- Track 10 : Power_80, SnapTap_80, SemperFi_80, Georgie2_82, FiringLine_80, QueenBeesly_80
- Track 11 : Superchunk_82
- Track 12 : Ph8s_83, Adzzy_83
- Track 13 : LilTurb_81, Jerm_82, Agape74_82, Bugsy_82
- Track 14 : Dignity_82, AbbyPaige_82, Turbido_81, Whabigail7_80, Leviathan_82
- Track 15 : Larenn_78
- Track 16 : Duplo_82, Kerberos_81, DBQu4n_81, Travvers_81, Pomar16_81, StarStuff_81, Tomathan_81
- Track 17 : Retro23_80, Dalmatian_80
- Track 18 : AnnaL29_82
- Track 19 : Jsquared_83
- Track 20 : Trooper_80
- Track 21 : Malec_79
- Track 22 : Centaur_80
- Track 23 : Fameo_78, QueenB2_77, Heffalump_77
- Track 24 : HippoHollow_77
- Track 25 : AN9_80, VC3_79, ANI8_80, C3_73
- Track 26 : First_0081, ChipMunk_81, 20ES_82
- Track 27 : Drake55_81
- Track 28 : Sknot_80
- Track 29 : Anselm_81
- Track 30 : JoshKayV_82
- Track 31 : Rachaly_77
- Track 32 : Piro94_79, NaSiaTalie_81

- Track 33 : NicoleTera_78
- Track 34 : Quokka_81, Bradman_82
- Track 35 : VA6_80
- Track 36 : Deloris_80, BengiVuitton_80
- Track 37 : WideWale_81, Flare16_80, MiculUcigas_80, Gratitude_78, Updawg_81, Baehexic_79, Equemioh13_80
- Track 38 : Serenity_83, TipsytheTRex_79
- Track 39 : Caraxes_83
- Track 40 : EZMoney23_76
- Track 41 : TarsusIV_80
- Track 42 : DeerParkTS_76, Prudy_75
- Track 43 : Che12_84
- Track 44 : Iwokeuplikedis_82
- Track 45 : LadyBird_84
- Track 46 : NothingSpecial_74
- Track 47 : Smeagan_83
- Track 48 : HarryHoudini_80
- Track 49 : Odin_81
- Track 50 : DudeLittle_78
- Track 51 : BiancaTri92_77
- Track 52 : XianYue_79
- Track 53 : Benvolio_79, Echild_82
- Track 54 : Terrific_81
- Track 55 : LionsBait_79
- Track 56 : Changeling_79
- Track 57 : SweetiePie_80
- Track 58 : KingCyrus_79
- Track 59 : Crucio_80
- Track 60 : Miko_75
- Track 61 : Acolyte_75
- Track 62 : EvilGenius_80
- Track 63 : Kinmap_84
- Track 64 : Chargerpower_78
- Track 65 : JHC117_77, HashRod_83, LugYA_85, Snickers_82, Marie_80, Grif_80, Louie6_81, Gemma_79, EpicPhail_83, HaveUMetTed_82, Mainiac_81, Daishi_81, Soshari_84, Pawn_80, Groupthink_82, Aglet_83, Gwennie_77, Methuselah_75, Hercules11_82, GtownJaz_82, Beauxregard13_81, Cullens_83, PhishRPhriends_78, JenCasNa_83, Sabinator_80, OlanP_80, Stagni_79, Sabia_80, Wooldri_84, Bxz2_77, Heliosoles_79, PotatoSplit_83, Farber_82, Marius_82, ClownCar_79, Vix_78, SoYo_79, LarryKay_82, TinyPebbles_81, MadMarie_80, Penny1_82, StepMih_82, Grum1_82, Kalnoky_82, Taurus_83, Croquant_79, Montavir_77, Reba_77, KADY_79, Tiffany_81, Manu_81, Bigflo_79, Calvinny_79, 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, Ollie_82, LBerry_83, Anubis_86
- Track 66 : Hookmount_82, EtoileNova_80, 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 67 : Kachowdy_80, Fred313_79, HelDan_82, BabyRay_81, Puppy_83, Roimos_81, Heathen_81, Scout_81
- Track 68 : Giroux_85, SaturnRing_83, Clammy_83, TNguyen7_83, BlueBird_84, Idleandcovert_82, Bugatti_83, Pistachio_82
- Track 69 : DropBear_80, Zarafa_79, Marchesa_81

- Track 70 : JeppNRM_82
- Track 71 : Grub_80, SoilDragon_82, Pembroke_82, BreSam8_82, Malinsilva_85, Lilith_80, PGHhamlin_84, AugsMagnumOpus_85, Microwolf_78, Watson_81, MuchMore_85, Lowa_79, Jobu08_78
- Track 72 : Isca_78, MA5_80, Phantastic_83
- Track 73 : Kalb97_82
- Track 74 : PurpleHaze_81
- Track 75 : Danforth_89
- Track 76 : Saintus_84, NearlyHeadless_89
- Track 77 : Stephig9_87
- Track 78 : Phillis_85
- Track 79 : Octobien14_135
- Track 80 : Kudetre_138

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

The start number called the most often in the published annotations is 52, it was called in 112 of the 217 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acolyte_75, Aglet_83, Anon_86, Anubis_86, AugsMagnumOpus_85, BabyRay_81, Beauxregard13_81, Bigflo_79, BlueBird_84, BreSam8_82, Bugatti_83, BuzzBuzz_76, Bxz2_77, Calvinny_79, Chargerpower_78, Clammy_83, ClownCar_79, Colbster_78, Croquant_79, Cullens_83, DaHudson_81, Daishi_81, DeerParkTS_76, Dieselweasel_83, DropBear_80, EZMoney23_76, EpicPhail_83, EtoileNova_80, Farber_82, Fernando_83, Fred313_79, Gemma_79, GingkoMaracino_82, Giroux_85, Grif_80, Groupthink_82, Grub_80, Grum1_82, GtownJaz_82, Gwennie_77, 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, Kalnok_82, LBerry_83, Lambert1_82, LarryKay_82, Lilith_80, Louie6_81, Lowa_79, 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, Montavir_77, MuchMore_85, MyraDee_75, NicoleTera_78, Noella_83, Norbert_78, 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, Prudy_75, Puppy_83, PurpleHaze_81, QuinnKiro_81, Rachaly_77, Reba_77, ResDef_80, Roimos_81, Rummer_81, Sabia_80, Sabinator_80, SaturnRing_83, Scout_81, Snickers_82, SoYo_79, SoilDragon_82, Soshari_84, Spike509_82, Stagni_79, StepMih_82, SweetiePie_80, TNguyen7_83, Taurus_83, Texage_80, Tiffany_81, TinyPebbles_81, Todacoro_82, Veracruz_79, Vix_78, Watson_81, Wooldri_84, Zarafa_79,

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, 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, Gratitude_78, HarryHoudini_80, Heffalump_77, HippoHollow_77, Hutc2_77, Insomnia_80, Iwokeuplikedis_82, Jabith_80, Joselito_80, Jsquared_83, Kerberos_81, Kimba_79, Kinmap_84, Kudrefre_138, LionsBait_79, LogiBear_78, Lucivia_82, MaCh_81, Mabel_81, MiculUcigas_80, Mulciber_79, Munch_81, NaSiaTalie_81, NearlyHeadless_89, NothingSpecial_74, Octobien14_135, Odin_81, Orange_81, Petersenfast_75, Ph8s_83, Phillis_85, Phlei_62, Piro94_79, Pomar16_81, QueenB2_77, Quokka_81, Saintus_84, Salz_76, Saskia_78, Serenity_83, Sham4_77, Sknot_80, Snape_81, StarStuff_81, Stephig9_87, Superchunk_82, Terrific_81, Timothy_81, TinyTimmy_80, TopsytheTRex_79, Tomathan_81, Travvers_81, Updawg_81, VC3_79, WideWale_81, Wolpertinger_80, XianYue_79,

Summary by start number:

Start 39:

- Found in 5 of 253 (2.0%) of genes in pham
- Manual Annotations of this start: 5 of 217
- 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 40:

- Found in 58 of 253 (22.9%) of genes in pham
- Manual Annotations of this start: 52 of 217
- Called 98.3% 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), Gratitude_78 (A2), HarryHoudini_80 (A2), Heffalump_77 (A2), HippoHollow_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), LionsBait_79 (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), Sknot_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 11 of 253 (4.3%) of genes in pham
- No Manual Annotations of this start.
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Terrific_81 (A2),

Start 44:

- Found in 1 of 253 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LogiBear_78 (A15),

Start 45:

- Found in 3 of 253 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 217
- Called 33.3% of time when present
- Phage (with cluster) where this start called: XianYue_79 (A2),

Start 46:

- Found in 38 of 253 (15.0%) of genes in pham
- Manual Annotations of this start: 18 of 217
- Called 52.6% of time when present
- Phage (with cluster) where this start called: Caraxes_83 (A2), DBQu4n_81 (A2), Duplo_82 (A2), Ebony_81 (A11), Et2Brutus_80 (A11), Fibonacci_80 (A11), Hutc2_77 (A11), Insomnia_80 (A11), Kerberos_81 (A2), Kudrefre_138 (DU1), Lucivia_82 (A11), Munch_81 (A11), Octobien14_135 (DU1), Pomar16_81 (A2), Salz_76 (A11), StarStuff_81 (A2), Timothy_81 (A11), TinyTimmy_80 (A11), Tomathan_81 (A2), Travvers_81 (A2),

Start 47:

- Found in 7 of 253 (2.8%) of genes in pham
- Manual Annotations of this start: 2 of 217
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Kinmap_84 (A21), Miko_75 (A2), TarsusIV_80 (A2),

Start 48:

- Found in 27 of 253 (10.7%) of genes in pham
- Manual Annotations of this start: 13 of 217
- Called 63.0% 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), Kimba_79 (A11), MaCh_81 (A11), Mabel_81 (A11), Mulciber_79 (A11), Orange_81 (A11), Petersenfast_75 (A11), Saskia_78 (A11), Sham4_77 (A11), Snape_81 (A11), Wolpertinger_80 (A11),

Start 49:

- Found in 1 of 253 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 217
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trooper_80 (A2),

Start 50:

- Found in 1 of 253 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 217
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NothingSpecial_74 (A2),

Start 52:

- Found in 168 of 253 (66.4%) of genes in pham
- Manual Annotations of this start: 112 of 217
- Called 78.0% of time when present
- Phage (with cluster) where this start called: Acolyte_75 (A2), Aglet_83 (A3), Anon_86 (A15), Anubis_86 (A3), AugsMagnumOpus_85 (A3), BabyRay_81 (A3), Beauxregard13_81 (A3), Bigflo_79 (A3), BlueBird_84 (A3), BreSam8_82 (A3), Bugatti_83 (A3), BuzzBuzz_76 (A3), Bxz2_77 (A3), Calvinny_79 (A3), Chargerpower_78 (A22), Clammy_83 (A3), ClownCar_79 (A3), Colbster_78 (A3), Croquant_79 (A3), Cullens_83 (A3), DaHudson_81 (A3), Daishi_81 (A3), DeerParkTS_76 (A2), Dieselweasel_83 (A3), DropBear_80 (A3), EZMoney23_76 (A2), EpicPhail_83 (A3), EtoileNova_80 (A3), Farber_82 (A3), Fernando_83 (A3), Fred313_79 (A3), Gemma_79 (A3), GingkoMaracino_82 (A3), Giroux_85 (A3), Grif_80 (A3), Groupthink_82 (A3), Grub_80 (A3), Grum1_82 (A3), GtownJaz_82 (A3), Gwennie_77 (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), LBerry_83 (A3), Lambert1_82 (A3), LarryKay_82 (A3), Lolith_80 (A3), Louie6_81 (A3), Lowa_79 (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), Montavir_77 (A3), MuchMore_85 (A3), MyraDee_75 (A18), NicoleTera_78 (A2), Noella_83 (A3), Norbert_78 (A3), 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), Prudy_75 (A2), Puppy_83 (A3), PurpleHaze_81 (A3), QuinnKiro_81 (A3), Rachaly_77 (A2), Reba_77 (A3), ResDef_80 (A3), Roimos_81 (A3), Rummer_81 (A3), Sabia_80 (A3), Sabinator_80 (A3), SaturnRing_83 (A3), Scout_81 (A3), Snickers_82 (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), TinyPebbles_81 (A3), Todacoro_82 (A3), Veracruz_79 (A3), Vix_78 (A3), Watson_81 (A3), Wooldri_84 (A3), Zarafa_79 (A3),

Start 53:

- Found in 7 of 253 (2.8%) of genes in pham
- Manual Annotations of this start: 7 of 217
- 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 54:

- Found in 7 of 253 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 217
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Odin_81 (A2),

Start 56:

- Found in 6 of 253 (2.4%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present

- Phage (with cluster) where this start called: Phlei_62 (A13),

Start 57:

- Found in 11 of 253 (4.3%) of genes in pham
- Manual Annotations of this start: 3 of 217
- Called 45.5% 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),

Start 59:

- Found in 6 of 253 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 217
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Superchunk_82 (A2),

Summary by clusters:

There are 10 clusters represented in this pham: A15, A21, A22, A11, A13, A18, A3, A2, DU1, A8,

Info for manual annotations of cluster A11:

- Start number 46 was manually annotated 10 times for cluster A11.
- Start number 48 was manually annotated 13 times for cluster A11.

Info for manual annotations of cluster A15:

- Start number 52 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A18:

- Start number 52 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:

- Start number 40 was manually annotated 52 times for cluster A2.
- Start number 45 was manually annotated 1 time for cluster A2.
- Start number 46 was manually annotated 6 times for cluster A2.
- Start number 47 was manually annotated 2 times for cluster A2.
- Start number 49 was manually annotated 1 time for cluster A2.
- Start number 50 was manually annotated 1 time for cluster A2.
- Start number 52 was manually annotated 4 times for cluster A2.
- Start number 53 was manually annotated 7 times for cluster A2.
- Start number 54 was manually annotated 1 time for cluster A2.
- Start number 57 was manually annotated 3 times for cluster A2.
- Start number 59 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A22:

- Start number 52 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A3:

- Start number 52 was manually annotated 105 times for cluster A3.

Info for manual annotations of cluster A8:

- Start number 39 was manually annotated 5 times for cluster A8.

Info for manual annotations of cluster DU1:

•Start number 46 was manually annotated 2 times for cluster DU1.

Gene Information:

Gene: 20ES_82 Start: 47043, Stop: 46771, Start Num: 40

Candidate Starts for 20ES_82:

(31, 47100), (38, 47061), (Start: 40 @47043 has 52 MA's), (51, 47007), (Start: 52 @47004 has 112 MA's),

Gene: AN9_80 Start: 45726, Stop: 45514, Start Num: 53

Candidate Starts for AN9_80:

(7, 46038), (25, 45837), (28, 45828), (Start: 53 @45726 has 7 MA's), (Start: 59 @45714 has 1 MA's),

Gene: ANI8_80 Start: 45726, Stop: 45514, Start Num: 53

Candidate Starts for ANI8_80:

(7, 46038), (25, 45837), (28, 45828), (Start: 53 @45726 has 7 MA's), (Start: 59 @45714 has 1 MA's),

Gene: AbbyPaige_82 Start: 47312, Stop: 47046, Start Num: 40

Candidate Starts for AbbyPaige_82:

(14, 47501), (31, 47369), (38, 47330), (Start: 40 @47312 has 52 MA's), (51, 47282), (Start: 52 @47279 has 112 MA's), (61, 47243), (62, 47225),

Gene: Acolyte_75 Start: 46237, Stop: 46019, Start Num: 52

Candidate Starts for Acolyte_75:

(29, 46348), (30, 46339), (Start: 52 @46237 has 112 MA's), (63, 46180), (76, 46051), (79, 46030),

Gene: Adzzy_83 Start: 46366, Stop: 46157, Start Num: 53

Candidate Starts for Adzzy_83:

(Start: 53 @46366 has 7 MA's), (62, 46327), (76, 46198),

Gene: Agape74_82 Start: 47312, Stop: 47040, Start Num: 40

Candidate Starts for Agape74_82:

(15, 47465), (31, 47369), (38, 47330), (Start: 40 @47312 has 52 MA's), (51, 47276), (Start: 52 @47273 has 112 MA's), (58, 47249),

Gene: Aglet_83 Start: 46040, Stop: 45807, Start Num: 52

Candidate Starts for Aglet_83:

(Start: 52 @46040 has 112 MA's), (58, 46016), (62, 45986), (64, 45977), (76, 45854),

Gene: Aneem_82 Start: 46211, Stop: 45981, Start Num: 48

Candidate Starts for Aneem_82:

(Start: 46 @46214 has 18 MA's), (Start: 48 @46211 has 13 MA's), (62, 46142),

Gene: AnnaL29_82 Start: 47478, Stop: 47248, Start Num: 40

Candidate Starts for AnnaL29_82:

(15, 47631), (25, 47568), (31, 47535), (38, 47496), (Start: 40 @47478 has 52 MA's), (Start: 57 @47463 has 3 MA's), (62, 47424), (71, 47337), (80, 47271),

Gene: Anon_86 Start: 46891, Stop: 46673, Start Num: 52

Candidate Starts for Anon_86:
(27, 47008), (Start: 52 @46891 has 112 MA's), (71, 46747),

Gene: Anselm_81 Start: 47199, Stop: 46933, Start Num: 40
Candidate Starts for Anselm_81:
(31, 47256), (38, 47217), (Start: 40 @47199 has 52 MA's), (Start: 52 @47166 has 112 MA's), (60, 47133), (62, 47112), (78, 46968),

Gene: Anubis_86 Start: 45926, Stop: 45693, Start Num: 52
Candidate Starts for Anubis_86:
(Start: 52 @45926 has 112 MA's), (58, 45902), (62, 45872), (64, 45863), (76, 45740),

Gene: AugsMagnumOpus_85 Start: 46028, Stop: 45795, Start Num: 52
Candidate Starts for AugsMagnumOpus_85:
(Start: 52 @46028 has 112 MA's), (58, 46004), (62, 45974), (64, 45965),

Gene: BabyRay_81 Start: 46355, Stop: 46137, Start Num: 52
Candidate Starts for BabyRay_81:
(19, 46517), (24, 46493), (Start: 52 @46355 has 112 MA's), (58, 46331), (62, 46301), (64, 46292), (80, 46145),

Gene: Bachome_79 Start: 45091, Stop: 44861, Start Num: 48
Candidate Starts for Bachome_79:
(15, 45271), (20, 45226), (25, 45208), (43, 45106), (Start: 46 @45094 has 18 MA's), (Start: 48 @45091 has 13 MA's), (62, 45022),

Gene: Baehexic_79 Start: 46679, Stop: 46440, Start Num: 40
Candidate Starts for Baehexic_79:
(14, 46868), (31, 46736), (38, 46697), (Start: 40 @46679 has 52 MA's), (41, 46673), (62, 46619), (65, 46595),

Gene: Beauxregard13_81 Start: 46043, Stop: 45810, Start Num: 52
Candidate Starts for Beauxregard13_81:
(Start: 52 @46043 has 112 MA's), (58, 46019), (62, 45989), (64, 45980), (76, 45857),

Gene: BengiVuitton_80 Start: 46850, Stop: 46578, Start Num: 40
Candidate Starts for BengiVuitton_80:
(14, 47039), (31, 46907), (38, 46868), (Start: 40 @46850 has 52 MA's), (51, 46814), (Start: 52 @46811 has 112 MA's), (58, 46787),

Gene: Benvolio_79 Start: 46873, Stop: 46640, Start Num: 40
Candidate Starts for Benvolio_79:
(14, 47062), (15, 47029), (31, 46930), (38, 46891), (Start: 40 @46873 has 52 MA's), (62, 46819), (65, 46795), (78, 46675),

Gene: BiancaTri92_77 Start: 46533, Stop: 46261, Start Num: 40
Candidate Starts for BiancaTri92_77:
(31, 46590), (32, 46581), (38, 46551), (Start: 40 @46533 has 52 MA's), (51, 46497), (Start: 52 @46494 has 112 MA's), (63, 46437),

Gene: Bigflo_79 Start: 46039, Stop: 45806, Start Num: 52
Candidate Starts for Bigflo_79:
(Start: 52 @46039 has 112 MA's), (58, 46015), (62, 45985), (64, 45976), (76, 45853),

Gene: BlueBird_84 Start: 46790, Stop: 46572, Start Num: 52
Candidate Starts for BlueBird_84:
(19, 46952), (Start: 52 @46790 has 112 MA's), (58, 46766), (62, 46736), (64, 46727), (80, 46580),

Gene: Bradman_82 Start: 46029, Stop: 45823, Start Num: 57
Candidate Starts for Bradman_82:
(10, 46338), (17, 46224), (56, 46032), (Start: 57 @46029 has 3 MA's), (64, 45981), (68, 45930),

Gene: BreSam8_82 Start: 46033, Stop: 45800, Start Num: 52
Candidate Starts for BreSam8_82:
(Start: 52 @46033 has 112 MA's), (58, 46009), (62, 45979), (64, 45970),

Gene: Bud_76 Start: 44648, Stop: 44418, Start Num: 48
Candidate Starts for Bud_76:
(Start: 46 @44651 has 18 MA's), (Start: 48 @44648 has 13 MA's), (62, 44579),

Gene: Bugatti_83 Start: 46790, Stop: 46572, Start Num: 52
Candidate Starts for Bugatti_83:
(19, 46952), (Start: 52 @46790 has 112 MA's), (58, 46766), (62, 46736), (64, 46727), (80, 46580),

Gene: Buggy_82 Start: 47363, Stop: 47091, Start Num: 40
Candidate Starts for Buggy_82:
(15, 47516), (31, 47420), (38, 47381), (Start: 40 @47363 has 52 MA's), (51, 47327), (Start: 52 @47324 has 112 MA's), (58, 47300),

Gene: BuzzBuzz_76 Start: 46068, Stop: 45835, Start Num: 52
Candidate Starts for BuzzBuzz_76:
(Start: 52 @46068 has 112 MA's), (58, 46044), (62, 46014), (64, 46005), (76, 45882),

Gene: Bxz2_77 Start: 46075, Stop: 45842, Start Num: 52
Candidate Starts for Bxz2_77:
(Start: 52 @46075 has 112 MA's), (58, 46051), (62, 46021), (64, 46012), (76, 45889),

Gene: C3_73 Start: 45726, Stop: 45514, Start Num: 53
Candidate Starts for C3_73:
(7, 46038), (25, 45837), (28, 45828), (Start: 53 @45726 has 7 MA's), (Start: 59 @45714 has 1 MA's),

Gene: Calvinny_79 Start: 45851, Stop: 45618, Start Num: 52
Candidate Starts for Calvinny_79:
(Start: 52 @45851 has 112 MA's), (58, 45827), (62, 45797), (64, 45788), (76, 45665),

Gene: Caraxes_83 Start: 46330, Stop: 46109, Start Num: 46
Candidate Starts for Caraxes_83:
(25, 46444), (Start: 46 @46330 has 18 MA's), (Start: 59 @46315 has 1 MA's),

Gene: Centaur_80 Start: 46557, Stop: 46318, Start Num: 40
Candidate Starts for Centaur_80:
(14, 46746), (31, 46614), (38, 46575), (Start: 40 @46557 has 52 MA's), (41, 46551), (62, 46497), (65, 46473), (78, 46353),

Gene: Changeling_79 Start: 47138, Stop: 46917, Start Num: 40
Candidate Starts for Changeling_79:

(31, 47195), (38, 47156), (Start: 40 @47138 has 52 MA's), (Start: 57 @47123 has 3 MA's), (62, 47084),

Gene: Chargerpower_78 Start: 45099, Stop: 44884, Start Num: 52

Candidate Starts for Chargerpower_78:

(Start: 52 @45099 has 112 MA's), (60, 45066), (79, 44895),

Gene: Che12_84 Start: 46444, Stop: 46235, Start Num: 53

Candidate Starts for Che12_84:

(25, 46564), (Start: 53 @46444 has 7 MA's), (76, 46276),

Gene: ChipMunk_81 Start: 48224, Stop: 47958, Start Num: 40

Candidate Starts for ChipMunk_81:

(31, 48281), (38, 48242), (Start: 40 @48224 has 52 MA's), (51, 48194), (Start: 52 @48191 has 112 MA's),

Gene: Clammy_83 Start: 46790, Stop: 46572, Start Num: 52

Candidate Starts for Clammy_83:

(19, 46952), (Start: 52 @46790 has 112 MA's), (58, 46766), (62, 46736), (64, 46727), (80, 46580),

Gene: ClownCar_79 Start: 45846, Stop: 45613, Start Num: 52

Candidate Starts for ClownCar_79:

(Start: 52 @45846 has 112 MA's), (58, 45822), (62, 45792), (64, 45783), (76, 45660),

Gene: Colbster_78 Start: 46043, Stop: 45810, Start Num: 52

Candidate Starts for Colbster_78:

(Start: 52 @46043 has 112 MA's), (58, 46019), (62, 45989), (64, 45980), (76, 45857),

Gene: Croquant_79 Start: 46040, Stop: 45807, Start Num: 52

Candidate Starts for Croquant_79:

(Start: 52 @46040 has 112 MA's), (58, 46016), (62, 45986), (64, 45977), (76, 45854),

Gene: Crucio_80 Start: 47111, Stop: 46845, Start Num: 40

Candidate Starts for Crucio_80:

(31, 47168), (38, 47129), (Start: 40 @47111 has 52 MA's), (Start: 52 @47078 has 112 MA's), (62, 47024),

Gene: Cullens_83 Start: 46042, Stop: 45809, Start Num: 52

Candidate Starts for Cullens_83:

(Start: 52 @46042 has 112 MA's), (58, 46018), (62, 45988), (64, 45979), (76, 45856),

Gene: DBQu4n_81 Start: 46768, Stop: 46538, Start Num: 46

Candidate Starts for DBQu4n_81:

(7, 47083), (25, 46882), (28, 46873), (Start: 46 @46768 has 18 MA's), (62, 46714), (71, 46627), (76, 46585),

Gene: DaHudson_81 Start: 46032, Stop: 45799, Start Num: 52

Candidate Starts for DaHudson_81:

(Start: 52 @46032 has 112 MA's), (58, 46008), (62, 45978), (64, 45969), (76, 45846),

Gene: Daishi_81 Start: 44909, Stop: 44676, Start Num: 52

Candidate Starts for Daishi_81:

(Start: 52 @44909 has 112 MA's), (58, 44885), (62, 44855), (64, 44846), (76, 44723),

Gene: Dalmatian_80 Start: 46936, Stop: 46664, Start Num: 40
Candidate Starts for Dalmatian_80:
(31, 46993), (38, 46954), (Start: 40 @46936 has 52 MA's), (Start: 52 @46897 has 112 MA's), (62, 46843), (78, 46699),

Gene: Danforth_89 Start: 47488, Stop: 47243, Start Num: 39
Candidate Starts for Danforth_89:
(Start: 39 @47488 has 5 MA's), (Start: 54 @47458 has 1 MA's), (62, 47410), (65, 47386), (72, 47305), (73, 47302), (80, 47260),

Gene: DeerParkTS_76 Start: 45601, Stop: 45383, Start Num: 52
Candidate Starts for DeerParkTS_76:
(37, 45658), (Start: 45 @45619 has 1 MA's), (Start: 52 @45601 has 112 MA's),

Gene: Deloris_80 Start: 46546, Stop: 46274, Start Num: 40
Candidate Starts for Deloris_80:
(14, 46735), (31, 46603), (38, 46564), (Start: 40 @46546 has 52 MA's), (51, 46510), (Start: 52 @46507 has 112 MA's), (58, 46483),

Gene: Dieselweasel_83 Start: 46041, Stop: 45808, Start Num: 52
Candidate Starts for Dieselweasel_83:
(Start: 52 @46041 has 112 MA's), (58, 46017), (62, 45987), (64, 45978), (76, 45855),

Gene: Dignity_82 Start: 47395, Stop: 47129, Start Num: 40
Candidate Starts for Dignity_82:
(14, 47584), (31, 47452), (38, 47413), (Start: 40 @47395 has 52 MA's), (51, 47365), (Start: 52 @47362 has 112 MA's), (61, 47326), (62, 47308),

Gene: Drake55_81 Start: 46808, Stop: 46575, Start Num: 40
Candidate Starts for Drake55_81:
(14, 46997), (15, 46964), (31, 46865), (38, 46826), (Start: 40 @46808 has 52 MA's),

Gene: DropBear_80 Start: 46719, Stop: 46501, Start Num: 52
Candidate Starts for DropBear_80:
(Start: 52 @46719 has 112 MA's), (58, 46695), (62, 46665), (64, 46656), (80, 46509),

Gene: DudeLittle_78 Start: 46702, Stop: 46430, Start Num: 40
Candidate Starts for DudeLittle_78:
(8, 46975), (14, 46891), (15, 46858), (31, 46759), (38, 46720), (Start: 40 @46702 has 52 MA's), (Start: 52 @46663 has 112 MA's), (62, 46609), (78, 46465),

Gene: Duplo_82 Start: 46825, Stop: 46595, Start Num: 46
Candidate Starts for Duplo_82:
(7, 47140), (25, 46939), (28, 46930), (Start: 46 @46825 has 18 MA's), (62, 46771), (71, 46684), (76, 46642),

Gene: EZMoney23_76 Start: 46264, Stop: 46034, Start Num: 52
Candidate Starts for EZMoney23_76:
(36, 46321), (42, 46282), (Start: 47 @46270 has 2 MA's), (Start: 52 @46264 has 112 MA's), (62, 46210), (71, 46123), (76, 46081),

Gene: Ebony_81 Start: 45785, Stop: 45552, Start Num: 46
Candidate Starts for Ebony_81:

(15, 45962), (20, 45917), (25, 45899), (43, 45797), (Start: 46 @45785 has 18 MA's), (Start: 48 @45782 has 13 MA's), (62, 45713),

Gene: Echild_82 Start: 46897, Stop: 46664, Start Num: 40

Candidate Starts for Echild_82:

(14, 47086), (15, 47053), (31, 46954), (38, 46915), (Start: 40 @46897 has 52 MA's), (62, 46843), (65, 46819), (78, 46699),

Gene: EpicPhail_83 Start: 46043, Stop: 45810, Start Num: 52

Candidate Starts for EpicPhail_83:

(Start: 52 @46043 has 112 MA's), (58, 46019), (62, 45989), (64, 45980), (76, 45857),

Gene: Equemioh13_80 Start: 46786, Stop: 46547, Start Num: 40

Candidate Starts for Equemioh13_80:

(14, 46975), (31, 46843), (38, 46804), (Start: 40 @46786 has 52 MA's), (41, 46780), (62, 46726), (65, 46702),

Gene: Et2Brutus_80 Start: 45748, Stop: 45515, Start Num: 46

Candidate Starts for Et2Brutus_80:

(Start: 46 @45748 has 18 MA's), (Start: 48 @45745 has 13 MA's), (62, 45676),

Gene: EtoileNova_80 Start: 46747, Stop: 46529, Start Num: 52

Candidate Starts for EtoileNova_80:

(Start: 52 @46747 has 112 MA's), (58, 46723), (62, 46693), (64, 46684), (65, 46669), (80, 46537),

Gene: EvilGenius_80 Start: 48225, Stop: 47959, Start Num: 40

Candidate Starts for EvilGenius_80:

(31, 48282), (38, 48243), (Start: 40 @48225 has 52 MA's), (51, 48195), (Start: 52 @48192 has 112 MA's),

Gene: Fameo_78 Start: 46711, Stop: 46472, Start Num: 40

Candidate Starts for Fameo_78:

(31, 46768), (38, 46729), (Start: 40 @46711 has 52 MA's), (62, 46651), (78, 46507),

Gene: Farber_82 Start: 46029, Stop: 45796, Start Num: 52

Candidate Starts for Farber_82:

(Start: 52 @46029 has 112 MA's), (58, 46005), (62, 45975), (64, 45966), (76, 45843),

Gene: Fernando_83 Start: 46042, Stop: 45809, Start Num: 52

Candidate Starts for Fernando_83:

(Start: 52 @46042 has 112 MA's), (58, 46018), (62, 45988), (64, 45979), (76, 45856),

Gene: Fibonacci_80 Start: 45754, Stop: 45521, Start Num: 46

Candidate Starts for Fibonacci_80:

(Start: 46 @45754 has 18 MA's), (Start: 48 @45751 has 13 MA's), (62, 45682),

Gene: FiringLine_80 Start: 47099, Stop: 46827, Start Num: 40

Candidate Starts for FiringLine_80:

(14, 47288), (15, 47255), (31, 47156), (38, 47117), (Start: 40 @47099 has 52 MA's), (Start: 52 @47060 has 112 MA's), (62, 47006),

Gene: First_0081 Start: 46943, Stop: 46671, Start Num: 40

Candidate Starts for First_0081:

(31, 47000), (38, 46961), (Start: 40 @46943 has 52 MA's), (51, 46907), (Start: 52 @46904 has 112 MA's),

Gene: Flare16_80 Start: 46601, Stop: 46362, Start Num: 40

Candidate Starts for Flare16_80:

(14, 46790), (31, 46658), (38, 46619), (Start: 40 @46601 has 52 MA's), (41, 46595), (62, 46541), (65, 46517),

Gene: Flaverint_82 Start: 46209, Stop: 45979, Start Num: 48

Candidate Starts for Flaverint_82:

(Start: 46 @46212 has 18 MA's), (Start: 48 @46209 has 13 MA's), (62, 46140),

Gene: Fred313_79 Start: 46420, Stop: 46202, Start Num: 52

Candidate Starts for Fred313_79:

(19, 46582), (24, 46558), (Start: 52 @46420 has 112 MA's), (58, 46396), (62, 46366), (64, 46357), (80, 46210),

Gene: Gemma_79 Start: 45849, Stop: 45616, Start Num: 52

Candidate Starts for Gemma_79:

(Start: 52 @45849 has 112 MA's), (58, 45825), (62, 45795), (64, 45786), (76, 45663),

Gene: Georgie2_82 Start: 47303, Stop: 47031, Start Num: 40

Candidate Starts for Georgie2_82:

(14, 47492), (15, 47459), (31, 47360), (38, 47321), (Start: 40 @47303 has 52 MA's), (Start: 52 @47264 has 112 MA's), (62, 47210),

Gene: Gilberta_78 Start: 45085, Stop: 44855, Start Num: 48

Candidate Starts for Gilberta_78:

(Start: 46 @45088 has 18 MA's), (Start: 48 @45085 has 13 MA's), (62, 45016),

Gene: GingkoMaracino_82 Start: 45925, Stop: 45692, Start Num: 52

Candidate Starts for GingkoMaracino_82:

(Start: 52 @45925 has 112 MA's), (58, 45901), (62, 45871), (64, 45862), (76, 45739),

Gene: Giroux_85 Start: 46789, Stop: 46571, Start Num: 52

Candidate Starts for Giroux_85:

(19, 46951), (Start: 52 @46789 has 112 MA's), (58, 46765), (62, 46735), (64, 46726), (80, 46579),

Gene: Gratitude_78 Start: 46786, Stop: 46547, Start Num: 40

Candidate Starts for Gratitude_78:

(14, 46975), (31, 46843), (38, 46804), (Start: 40 @46786 has 52 MA's), (41, 46780), (62, 46726), (65, 46702),

Gene: Grif_80 Start: 46116, Stop: 45883, Start Num: 52

Candidate Starts for Grif_80:

(Start: 52 @46116 has 112 MA's), (58, 46092), (62, 46062), (64, 46053), (76, 45930),

Gene: Groupthink_82 Start: 45850, Stop: 45617, Start Num: 52

Candidate Starts for Groupthink_82:

(Start: 52 @45850 has 112 MA's), (58, 45826), (62, 45796), (64, 45787), (76, 45664),

Gene: Grub_80 Start: 46032, Stop: 45799, Start Num: 52

Candidate Starts for Grub_80:

(Start: 52 @46032 has 112 MA's), (58, 46008), (62, 45978), (64, 45969),

Gene: Grum1_82 Start: 46042, Stop: 45809, Start Num: 52

Candidate Starts for Grum1_82:

(Start: 52 @46042 has 112 MA's), (58, 46018), (62, 45988), (64, 45979), (76, 45856),

Gene: GtownJaz_82 Start: 46040, Stop: 45807, Start Num: 52

Candidate Starts for GtownJaz_82:

(Start: 52 @46040 has 112 MA's), (58, 46016), (62, 45986), (64, 45977), (76, 45854),

Gene: Gwennie_77 Start: 46043, Stop: 45810, Start Num: 52

Candidate Starts for Gwennie_77:

(Start: 52 @46043 has 112 MA's), (58, 46019), (62, 45989), (64, 45980), (76, 45857),

Gene: HarryHoudini_80 Start: 46811, Stop: 46572, Start Num: 40

Candidate Starts for HarryHoudini_80:

(14, 47000), (31, 46868), (38, 46829), (Start: 40 @46811 has 52 MA's), (41, 46805), (62, 46751), (63, 46748), (76, 46619),

Gene: HashRod_83 Start: 46069, Stop: 45836, Start Num: 52

Candidate Starts for HashRod_83:

(Start: 52 @46069 has 112 MA's), (58, 46045), (62, 46015), (64, 46006), (76, 45883),

Gene: HaveUMetTed_82 Start: 45838, Stop: 45605, Start Num: 52

Candidate Starts for HaveUMetTed_82:

(Start: 52 @45838 has 112 MA's), (58, 45814), (62, 45784), (64, 45775), (76, 45652),

Gene: Heathen_81 Start: 46508, Stop: 46290, Start Num: 52

Candidate Starts for Heathen_81:

(19, 46670), (24, 46646), (Start: 52 @46508 has 112 MA's), (58, 46484), (62, 46454), (64, 46445), (80, 46298),

Gene: Heffalump_77 Start: 47179, Stop: 46940, Start Num: 40

Candidate Starts for Heffalump_77:

(31, 47236), (38, 47197), (Start: 40 @47179 has 52 MA's), (62, 47119), (78, 46975),

Gene: HelDan_82 Start: 46731, Stop: 46513, Start Num: 52

Candidate Starts for HelDan_82:

(19, 46893), (24, 46869), (Start: 52 @46731 has 112 MA's), (58, 46707), (62, 46677), (64, 46668), (80, 46521),

Gene: Heliosoles_79 Start: 45854, Stop: 45621, Start Num: 52

Candidate Starts for Heliosoles_79:

(Start: 52 @45854 has 112 MA's), (58, 45830), (62, 45800), (64, 45791), (76, 45668),

Gene: Hercules11_82 Start: 46051, Stop: 45818, Start Num: 52

Candidate Starts for Hercules11_82:

(Start: 52 @46051 has 112 MA's), (58, 46027), (62, 45997), (64, 45988), (76, 45865),

Gene: HippoHollow_77 Start: 47791, Stop: 47558, Start Num: 40

Candidate Starts for HippoHollow_77:

(38, 47809), (Start: 40 @47791 has 52 MA's),

Gene: Hookmount_82 Start: 46743, Stop: 46525, Start Num: 52
Candidate Starts for Hookmount_82:
(Start: 52 @46743 has 112 MA's), (58, 46719), (62, 46689), (64, 46680), (65, 46665), (80, 46533),

Gene: Hutc2_77 Start: 44638, Stop: 44405, Start Num: 46
Candidate Starts for Hutc2_77:
(Start: 46 @44638 has 18 MA's), (Start: 48 @44635 has 13 MA's), (62, 44566),

Gene: Idleandcovert_82 Start: 46790, Stop: 46572, Start Num: 52
Candidate Starts for Idleandcovert_82:
(19, 46952), (Start: 52 @46790 has 112 MA's), (58, 46766), (62, 46736), (64, 46727), (80, 46580),

Gene: Insomnia_80 Start: 45929, Stop: 45696, Start Num: 46
Candidate Starts for Insomnia_80:
(Start: 46 @45929 has 18 MA's), (Start: 48 @45926 has 13 MA's), (62, 45857),

Gene: Isca_78 Start: 45864, Stop: 45658, Start Num: 52
Candidate Starts for Isca_78:
(43, 45888), (Start: 52 @45864 has 112 MA's), (62, 45810), (80, 45666),

Gene: Iwokeuplikedis_82 Start: 47280, Stop: 47053, Start Num: 40
Candidate Starts for Iwokeuplikedis_82:
(15, 47433), (31, 47337), (38, 47298), (Start: 40 @47280 has 52 MA's), (62, 47220), (78, 47088), (82, 47070),

Gene: JHC117_77 Start: 46037, Stop: 45804, Start Num: 52
Candidate Starts for JHC117_77:
(Start: 52 @46037 has 112 MA's), (58, 46013), (62, 45983), (64, 45974), (76, 45851),

Gene: Jabith_80 Start: 45943, Stop: 45713, Start Num: 48
Candidate Starts for Jabith_80:
(Start: 46 @45946 has 18 MA's), (Start: 48 @45943 has 13 MA's), (62, 45874),

Gene: JenCasNa_83 Start: 46042, Stop: 45809, Start Num: 52
Candidate Starts for JenCasNa_83:
(Start: 52 @46042 has 112 MA's), (58, 46018), (62, 45988), (64, 45979), (76, 45856),

Gene: JeppNRM_82 Start: 45852, Stop: 45619, Start Num: 52
Candidate Starts for JeppNRM_82:
(36, 45918), (Start: 52 @45852 has 112 MA's), (58, 45828), (62, 45798), (64, 45789), (76, 45666),

Gene: Jerm_82 Start: 47384, Stop: 47112, Start Num: 40
Candidate Starts for Jerm_82:
(15, 47537), (31, 47441), (38, 47402), (Start: 40 @47384 has 52 MA's), (51, 47348), (Start: 52 @47345 has 112 MA's), (58, 47321),

Gene: Jobu08_78 Start: 45866, Stop: 45633, Start Num: 52
Candidate Starts for Jobu08_78:
(Start: 52 @45866 has 112 MA's), (58, 45842), (62, 45812), (64, 45803),

Gene: Joselito_80 Start: 45963, Stop: 45733, Start Num: 48
Candidate Starts for Joselito_80:
(Start: 46 @45966 has 18 MA's), (Start: 48 @45963 has 13 MA's), (62, 45894),

Gene: JoshKayV_82 Start: 47528, Stop: 47256, Start Num: 40
Candidate Starts for JoshKayV_82:
(14, 47717), (15, 47684), (31, 47585), (38, 47546), (Start: 40 @47528 has 52 MA's), (Start: 52 @47489 has 112 MA's), (62, 47435), (78, 47291),

Gene: Jsquared_83 Start: 46162, Stop: 45956, Start Num: 57
Candidate Starts for Jsquared_83:
(56, 46165), (Start: 57 @46162 has 3 MA's), (68, 46063),

Gene: KADY_79 Start: 46069, Stop: 45836, Start Num: 52
Candidate Starts for KADY_79:
(Start: 52 @46069 has 112 MA's), (58, 46045), (62, 46015), (64, 46006), (76, 45883),

Gene: Kachowdy_80 Start: 46760, Stop: 46542, Start Num: 52
Candidate Starts for Kachowdy_80:
(19, 46922), (24, 46898), (Start: 52 @46760 has 112 MA's), (58, 46736), (62, 46706), (64, 46697), (80, 46550),

Gene: Kalb97_82 Start: 45219, Stop: 44986, Start Num: 52
Candidate Starts for Kalb97_82:
(43, 45246), (Start: 52 @45219 has 112 MA's), (58, 45195), (62, 45165), (64, 45156), (76, 45033),

Gene: Kalnoky_82 Start: 45847, Stop: 45614, Start Num: 52
Candidate Starts for Kalnoky_82:
(Start: 52 @45847 has 112 MA's), (58, 45823), (62, 45793), (64, 45784), (76, 45661),

Gene: Kerberos_81 Start: 46788, Stop: 46558, Start Num: 46
Candidate Starts for Kerberos_81:
(7, 47103), (25, 46902), (28, 46893), (Start: 46 @46788 has 18 MA's), (62, 46734), (71, 46647), (76, 46605),

Gene: Kimba_79 Start: 45463, Stop: 45233, Start Num: 48
Candidate Starts for Kimba_79:
(11, 45721), (12, 45706), (13, 45703), (26, 45577), (Start: 46 @45466 has 18 MA's), (Start: 48 @45463 has 13 MA's), (62, 45394),

Gene: KingCyrus_79 Start: 48253, Stop: 47981, Start Num: 40
Candidate Starts for KingCyrus_79:
(31, 48310), (38, 48271), (Start: 40 @48253 has 52 MA's), (51, 48217), (Start: 52 @48214 has 112 MA's), (63, 48157),

Gene: Kinmap_84 Start: 45665, Stop: 45450, Start Num: 47
Candidate Starts for Kinmap_84:
(3, 46034), (5, 46025), (23, 45785), (33, 45734), (Start: 47 @45665 has 2 MA's), (71, 45524), (79, 45461),

Gene: Kudrefre_138 Start: 72466, Stop: 72245, Start Num: 46
Candidate Starts for Kudrefre_138:
(Start: 46 @72466 has 18 MA's), (75, 72280),

Gene: LBerry_83 Start: 46043, Stop: 45810, Start Num: 52
Candidate Starts for LBerry_83:

(Start: 52 @46043 has 112 MA's), (58, 46019), (62, 45989), (64, 45980), (76, 45857),

Gene: LadyBird_84 Start: 47454, Stop: 47182, Start Num: 40

Candidate Starts for LadyBird_84:

(31, 47511), (32, 47502), (38, 47472), (Start: 40 @47454 has 52 MA's), (51, 47418), (Start: 52 @47415 has 112 MA's),

Gene: Lambert1_82 Start: 46744, Stop: 46526, Start Num: 52

Candidate Starts for Lambert1_82:

(Start: 52 @46744 has 112 MA's), (58, 46720), (62, 46690), (64, 46681), (65, 46666), (80, 46534),

Gene: Larenn_78 Start: 46804, Stop: 46532, Start Num: 40

Candidate Starts for Larenn_78:

(31, 46861), (38, 46822), (Start: 40 @46804 has 52 MA's), (51, 46768), (Start: 52 @46765 has 112 MA's),

Gene: LarryKay_82 Start: 46073, Stop: 45840, Start Num: 52

Candidate Starts for LarryKay_82:

(Start: 52 @46073 has 112 MA's), (58, 46049), (62, 46019), (64, 46010), (76, 45887),

Gene: Leviathan_82 Start: 47444, Stop: 47178, Start Num: 40

Candidate Starts for Leviathan_82:

(14, 47633), (31, 47501), (38, 47462), (Start: 40 @47444 has 52 MA's), (51, 47414), (Start: 52 @47411 has 112 MA's), (61, 47375), (62, 47357),

Gene: LilTurb_81 Start: 47264, Stop: 46992, Start Num: 40

Candidate Starts for LilTurb_81:

(15, 47417), (31, 47321), (38, 47282), (Start: 40 @47264 has 52 MA's), (51, 47228), (Start: 52 @47225 has 112 MA's), (58, 47201),

Gene: Lilith_80 Start: 46032, Stop: 45799, Start Num: 52

Candidate Starts for Lilith_80:

(Start: 52 @46032 has 112 MA's), (58, 46008), (62, 45978), (64, 45969),

Gene: LionsBait_79 Start: 47790, Stop: 47557, Start Num: 40

Candidate Starts for LionsBait_79:

(31, 47847), (38, 47808), (Start: 40 @47790 has 52 MA's),

Gene: LogiBear_78 Start: 44882, Stop: 44649, Start Num: 44

Candidate Starts for LogiBear_78:

(22, 44999), (34, 44930), (44, 44882), (58, 44843), (63, 44810), (71, 44723), (77, 44678),

Gene: Louie6_81 Start: 46070, Stop: 45837, Start Num: 52

Candidate Starts for Louie6_81:

(Start: 52 @46070 has 112 MA's), (58, 46046), (62, 46016), (64, 46007), (76, 45884),

Gene: Lowa_79 Start: 46031, Stop: 45798, Start Num: 52

Candidate Starts for Lowa_79:

(Start: 52 @46031 has 112 MA's), (58, 46007), (62, 45977), (64, 45968),

Gene: Lucivia_82 Start: 46245, Stop: 46012, Start Num: 46

Candidate Starts for Lucivia_82:

(Start: 46 @46245 has 18 MA's), (Start: 48 @46242 has 13 MA's), (62, 46173),

Gene: LugYA_85 Start: 46043, Stop: 45810, Start Num: 52
Candidate Starts for LugYA_85:
(Start: 52 @46043 has 112 MA's), (58, 46019), (62, 45989), (64, 45980), (76, 45857),

Gene: MA5_80 Start: 45778, Stop: 45572, Start Num: 52
Candidate Starts for MA5_80:
(43, 45802), (Start: 52 @45778 has 112 MA's), (62, 45724), (80, 45580),

Gene: MaCh_81 Start: 46206, Stop: 45976, Start Num: 48
Candidate Starts for MaCh_81:
(Start: 46 @46209 has 18 MA's), (Start: 48 @46206 has 13 MA's), (62, 46137),

Gene: Mabel_81 Start: 46207, Stop: 45977, Start Num: 48
Candidate Starts for Mabel_81:
(Start: 46 @46210 has 18 MA's), (Start: 48 @46207 has 13 MA's), (62, 46138),

Gene: MadMarie_80 Start: 46040, Stop: 45807, Start Num: 52
Candidate Starts for MadMarie_80:
(Start: 52 @46040 has 112 MA's), (58, 46016), (62, 45986), (64, 45977), (76, 45854),

Gene: Mainiac_81 Start: 46032, Stop: 45799, Start Num: 52
Candidate Starts for Mainiac_81:
(Start: 52 @46032 has 112 MA's), (58, 46008), (62, 45978), (64, 45969), (76, 45846),

Gene: Malec_79 Start: 47374, Stop: 47102, Start Num: 40
Candidate Starts for Malec_79:
(31, 47431), (38, 47392), (Start: 40 @47374 has 52 MA's), (Start: 52 @47335 has 112 MA's), (61, 47299), (62, 47281),

Gene: Malinsilva_85 Start: 46031, Stop: 45798, Start Num: 52
Candidate Starts for Malinsilva_85:
(Start: 52 @46031 has 112 MA's), (58, 46007), (62, 45977), (64, 45968),

Gene: Manu_81 Start: 45854, Stop: 45621, Start Num: 52
Candidate Starts for Manu_81:
(Start: 52 @45854 has 112 MA's), (58, 45830), (62, 45800), (64, 45791), (76, 45668),

Gene: MarQuardt_82 Start: 46041, Stop: 45808, Start Num: 52
Candidate Starts for MarQuardt_82:
(Start: 52 @46041 has 112 MA's), (58, 46017), (62, 45987), (64, 45978), (76, 45855),

Gene: Marchesa_81 Start: 46712, Stop: 46494, Start Num: 52
Candidate Starts for Marchesa_81:
(Start: 52 @46712 has 112 MA's), (58, 46688), (62, 46658), (64, 46649), (80, 46502),

Gene: Margo_82 Start: 46769, Stop: 46551, Start Num: 52
Candidate Starts for Margo_82:
(Start: 52 @46769 has 112 MA's), (58, 46745), (62, 46715), (64, 46706), (65, 46691), (80, 46559),

Gene: Marie_80 Start: 46042, Stop: 45809, Start Num: 52
Candidate Starts for Marie_80:
(Start: 52 @46042 has 112 MA's), (58, 46018), (62, 45988), (64, 45979), (76, 45856),

Gene: Marius_82 Start: 45847, Stop: 45614, Start Num: 52

Candidate Starts for Marius_82:

(Start: 52 @45847 has 112 MA's), (58, 45823), (62, 45793), (64, 45784), (76, 45661),

Gene: Methuselah_75 Start: 46063, Stop: 45830, Start Num: 52

Candidate Starts for Methuselah_75:

(Start: 52 @46063 has 112 MA's), (58, 46039), (62, 46009), (64, 46000), (76, 45877),

Gene: Microwolf_78 Start: 46055, Stop: 45822, Start Num: 52

Candidate Starts for Microwolf_78:

(Start: 52 @46055 has 112 MA's), (58, 46031), (62, 46001), (64, 45992),

Gene: MiculUcigas_80 Start: 46504, Stop: 46265, Start Num: 40

Candidate Starts for MiculUcigas_80:

(14, 46693), (31, 46561), (38, 46522), (Start: 40 @46504 has 52 MA's), (41, 46498), (62, 46444), (65, 46420),

Gene: Miko_75 Start: 46074, Stop: 45838, Start Num: 47

Candidate Starts for Miko_75:

(36, 46125), (42, 46086), (Start: 47 @46074 has 2 MA's), (Start: 52 @46068 has 112 MA's), (62, 46014), (71, 45927), (76, 45885),

Gene: MoneyMay_82 Start: 46042, Stop: 45809, Start Num: 52

Candidate Starts for MoneyMay_82:

(Start: 52 @46042 has 112 MA's), (58, 46018), (62, 45988), (64, 45979), (76, 45856),

Gene: Montavir_77 Start: 46039, Stop: 45806, Start Num: 52

Candidate Starts for Montavir_77:

(Start: 52 @46039 has 112 MA's), (58, 46015), (62, 45985), (64, 45976), (76, 45853),

Gene: MuchMore_85 Start: 46028, Stop: 45795, Start Num: 52

Candidate Starts for MuchMore_85:

(Start: 52 @46028 has 112 MA's), (58, 46004), (62, 45974), (64, 45965),

Gene: Mulciber_79 Start: 45748, Stop: 45518, Start Num: 48

Candidate Starts for Mulciber_79:

(Start: 46 @45751 has 18 MA's), (Start: 48 @45748 has 13 MA's), (62, 45679),

Gene: Munch_81 Start: 46214, Stop: 45981, Start Num: 46

Candidate Starts for Munch_81:

(Start: 46 @46214 has 18 MA's), (Start: 48 @46211 has 13 MA's), (62, 46142),

Gene: MyraDee_75 Start: 43252, Stop: 43040, Start Num: 52

Candidate Starts for MyraDee_75:

(Start: 52 @43252 has 112 MA's),

Gene: NaSiaTalie_81 Start: 46791, Stop: 46558, Start Num: 40

Candidate Starts for NaSiaTalie_81:

(14, 46980), (31, 46848), (38, 46809), (Start: 40 @46791 has 52 MA's),

Gene: NearlyHeadless_89 Start: 47225, Stop: 46980, Start Num: 39

Candidate Starts for NearlyHeadless_89:

(Start: 39 @47225 has 5 MA's), (Start: 54 @47195 has 1 MA's), (62, 47147), (65, 47123), (73, 47039), (80, 46997),

Gene: NicoleTera_78 Start: 46731, Stop: 46501, Start Num: 52

Candidate Starts for NicoleTera_78:

(18, 46887), (36, 46788), (42, 46749), (Start: 47 @46737 has 2 MA's), (Start: 52 @46731 has 112 MA's), (62, 46677), (71, 46590), (76, 46548),

Gene: Noella_83 Start: 46745, Stop: 46527, Start Num: 52

Candidate Starts for Noella_83:

(Start: 52 @46745 has 112 MA's), (58, 46721), (62, 46691), (64, 46682), (65, 46667), (80, 46535),

Gene: Norbert_78 Start: 46742, Stop: 46524, Start Num: 52

Candidate Starts for Norbert_78:

(Start: 52 @46742 has 112 MA's), (58, 46718), (62, 46688), (64, 46679), (65, 46664), (80, 46532),

Gene: NothingSpecial_74 Start: 46407, Stop: 46177, Start Num: 50

Candidate Starts for NothingSpecial_74:

(Start: 50 @46407 has 1 MA's), (62, 46353), (71, 46266),

Gene: Octobien14_135 Start: 71190, Stop: 70951, Start Num: 46

Candidate Starts for Octobien14_135:

(35, 71247), (Start: 46 @71190 has 18 MA's), (62, 71133), (69, 71049),

Gene: Odin_81 Start: 46643, Stop: 46428, Start Num: 54

Candidate Starts for Odin_81:

(21, 46793), (Start: 54 @46643 has 1 MA's), (Start: 57 @46634 has 3 MA's), (64, 46586),

Gene: OlanP_80 Start: 46026, Stop: 45793, Start Num: 52

Candidate Starts for OlanP_80:

(Start: 52 @46026 has 112 MA's), (58, 46002), (62, 45972), (64, 45963), (76, 45840),

Gene: Ollie_82 Start: 45910, Stop: 45677, Start Num: 52

Candidate Starts for Ollie_82:

(Start: 52 @45910 has 112 MA's), (58, 45886), (62, 45856), (64, 45847), (76, 45724),

Gene: Orange_81 Start: 45761, Stop: 45531, Start Num: 48

Candidate Starts for Orange_81:

(Start: 46 @45764 has 18 MA's), (Start: 48 @45761 has 13 MA's), (62, 45692),

Gene: P28Green_82 Start: 46045, Stop: 45812, Start Num: 52

Candidate Starts for P28Green_82:

(Start: 52 @46045 has 112 MA's), (58, 46021), (62, 45991), (64, 45982), (76, 45859),

Gene: PGHhamlin_84 Start: 46031, Stop: 45798, Start Num: 52

Candidate Starts for PGHhamlin_84:

(Start: 52 @46031 has 112 MA's), (58, 46007), (62, 45977), (64, 45968),

Gene: Panamaxus_79 Start: 46744, Stop: 46526, Start Num: 52

Candidate Starts for Panamaxus_79:

(Start: 52 @46744 has 112 MA's), (58, 46720), (62, 46690), (64, 46681), (65, 46666), (80, 46534),

Gene: Pawn_80 Start: 45854, Stop: 45621, Start Num: 52

Candidate Starts for Pawn_80:

(Start: 52 @45854 has 112 MA's), (58, 45830), (62, 45800), (64, 45791), (76, 45668),

Gene: Pembroke_82 Start: 46040, Stop: 45807, Start Num: 52

Candidate Starts for Pembroke_82:

(Start: 52 @46040 has 112 MA's), (58, 46016), (62, 45986), (64, 45977),

Gene: Penny1_82 Start: 46043, Stop: 45810, Start Num: 52

Candidate Starts for Penny1_82:

(Start: 52 @46043 has 112 MA's), (58, 46019), (62, 45989), (64, 45980), (76, 45857),

Gene: Petersenfast_75 Start: 44642, Stop: 44412, Start Num: 48

Candidate Starts for Petersenfast_75:

(Start: 46 @44645 has 18 MA's), (Start: 48 @44642 has 13 MA's), (62, 44573),

Gene: Ph8s_83 Start: 46579, Stop: 46370, Start Num: 53

Candidate Starts for Ph8s_83:

(Start: 53 @46579 has 7 MA's), (62, 46540), (76, 46411),

Gene: Phantastic_83 Start: 46192, Stop: 45986, Start Num: 52

Candidate Starts for Phantastic_83:

(43, 46216), (Start: 52 @46192 has 112 MA's), (62, 46138), (80, 45994),

Gene: Phillis_85 Start: 46238, Stop: 45990, Start Num: 39

Candidate Starts for Phillis_85:

(Start: 39 @46238 has 5 MA's), (Start: 54 @46208 has 1 MA's), (62, 46160), (67, 46094), (80, 46007),

Gene: PhishRPhriends_78 Start: 45034, Stop: 44801, Start Num: 52

Candidate Starts for PhishRPhriends_78:

(Start: 52 @45034 has 112 MA's), (58, 45010), (62, 44980), (64, 44971), (76, 44848),

Gene: Phlei_62 Start: 43268, Stop: 43068, Start Num: 56

Candidate Starts for Phlei_62:

(55, 43271), (56, 43268), (65, 43202), (81, 43088),

Gene: Phoebe_83 Start: 46035, Stop: 45802, Start Num: 52

Candidate Starts for Phoebe_83:

(Start: 52 @46035 has 112 MA's), (58, 46011), (62, 45981), (64, 45972), (76, 45849),

Gene: Phoxy_82 Start: 46064, Stop: 45831, Start Num: 52

Candidate Starts for Phoxy_82:

(Start: 52 @46064 has 112 MA's), (58, 46040), (62, 46010), (64, 46001), (76, 45878),

Gene: Piro94_79 Start: 46739, Stop: 46506, Start Num: 40

Candidate Starts for Piro94_79:

(14, 46928), (31, 46796), (38, 46757), (Start: 40 @46739 has 52 MA's),

Gene: Pistachio_82 Start: 46337, Stop: 46119, Start Num: 52

Candidate Starts for Pistachio_82:

(19, 46499), (Start: 52 @46337 has 112 MA's), (58, 46313), (62, 46283), (64, 46274), (80, 46127),

Gene: Pocahontas_81 Start: 46740, Stop: 46522, Start Num: 52

Candidate Starts for Pocahontas_81:

(Start: 52 @46740 has 112 MA's), (58, 46716), (62, 46686), (64, 46677), (65, 46662), (80, 46530),

Gene: Pomar16_81 Start: 46861, Stop: 46628, Start Num: 46

Candidate Starts for Pomar16_81:

(7, 47176), (25, 46975), (28, 46966), (Start: 46 @46861 has 18 MA's), (62, 46807), (71, 46720), (76, 46675),

Gene: Popcicle_82 Start: 46740, Stop: 46522, Start Num: 52

Candidate Starts for Popcicle_82:

(Start: 52 @46740 has 112 MA's), (58, 46716), (62, 46686), (64, 46677), (65, 46662), (80, 46530),

Gene: PotatoSplit_83 Start: 46043, Stop: 45810, Start Num: 52

Candidate Starts for PotatoSplit_83:

(Start: 52 @46043 has 112 MA's), (58, 46019), (62, 45989), (64, 45980), (76, 45857),

Gene: Power_80 Start: 47302, Stop: 47030, Start Num: 40

Candidate Starts for Power_80:

(14, 47491), (15, 47458), (31, 47359), (38, 47320), (Start: 40 @47302 has 52 MA's), (Start: 52 @47263 has 112 MA's), (62, 47209),

Gene: Prudy_75 Start: 47086, Stop: 46868, Start Num: 52

Candidate Starts for Prudy_75:

(37, 47143), (Start: 45 @47104 has 1 MA's), (Start: 52 @47086 has 112 MA's),

Gene: Puppy_83 Start: 46407, Stop: 46189, Start Num: 52

Candidate Starts for Puppy_83:

(19, 46569), (24, 46545), (Start: 52 @46407 has 112 MA's), (58, 46383), (62, 46353), (64, 46344), (80, 46197),

Gene: PurpleHaze_81 Start: 45850, Stop: 45617, Start Num: 52

Candidate Starts for PurpleHaze_81:

(Start: 52 @45850 has 112 MA's), (58, 45826), (62, 45796), (64, 45787), (76, 45664),

Gene: QueenB2_77 Start: 46392, Stop: 46153, Start Num: 40

Candidate Starts for QueenB2_77:

(31, 46449), (38, 46410), (Start: 40 @46392 has 52 MA's), (62, 46332), (78, 46188),

Gene: QueenBeesly_80 Start: 47099, Stop: 46827, Start Num: 40

Candidate Starts for QueenBeesly_80:

(14, 47288), (15, 47255), (31, 47156), (38, 47117), (Start: 40 @47099 has 52 MA's), (Start: 52 @47060 has 112 MA's), (62, 47006),

Gene: QuinnKiro_81 Start: 46743, Stop: 46525, Start Num: 52

Candidate Starts for QuinnKiro_81:

(Start: 52 @46743 has 112 MA's), (58, 46719), (62, 46689), (64, 46680), (65, 46665), (80, 46533),

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

Candidate Starts for Quokka_81:

(10, 46339), (17, 46225), (56, 46033), (Start: 57 @46030 has 3 MA's), (64, 45982), (68, 45931),

Gene: Rachaly_77 Start: 46214, Stop: 45984, Start Num: 52

Candidate Starts for Rachaly_77:

(36, 46271), (42, 46232), (Start: 47 @46220 has 2 MA's), (Start: 52 @46214 has 112 MA's), (62, 46160), (71, 46073), (76, 46031),

Gene: Reba_77 Start: 44690, Stop: 44457, Start Num: 52

Candidate Starts for Reba_77:

(Start: 52 @44690 has 112 MA's), (58, 44666), (62, 44636), (64, 44627), (76, 44504),

Gene: ResDef_80 Start: 46746, Stop: 46528, Start Num: 52

Candidate Starts for ResDef_80:

(Start: 52 @46746 has 112 MA's), (58, 46722), (62, 46692), (64, 46683), (65, 46668), (80, 46536),

Gene: Retro23_80 Start: 46823, Stop: 46557, Start Num: 40

Candidate Starts for Retro23_80:

(31, 46880), (38, 46841), (Start: 40 @46823 has 52 MA's), (Start: 52 @46790 has 112 MA's), (62, 46736), (78, 46592),

Gene: Roimos_81 Start: 46646, Stop: 46428, Start Num: 52

Candidate Starts for Roimos_81:

(19, 46808), (24, 46784), (Start: 52 @46646 has 112 MA's), (58, 46622), (62, 46592), (64, 46583), (80, 46436),

Gene: Rummer_81 Start: 46067, Stop: 45834, Start Num: 52

Candidate Starts for Rummer_81:

(Start: 52 @46067 has 112 MA's), (58, 46043), (62, 46013), (64, 46004), (76, 45881),

Gene: Sabia_80 Start: 46047, Stop: 45814, Start Num: 52

Candidate Starts for Sabia_80:

(Start: 52 @46047 has 112 MA's), (58, 46023), (62, 45993), (64, 45984), (76, 45861),

Gene: Sabinator_80 Start: 46041, Stop: 45808, Start Num: 52

Candidate Starts for Sabinator_80:

(Start: 52 @46041 has 112 MA's), (58, 46017), (62, 45987), (64, 45978), (76, 45855),

Gene: Saintus_84 Start: 44090, Stop: 43845, Start Num: 39

Candidate Starts for Saintus_84:

(Start: 39 @44090 has 5 MA's), (Start: 54 @44060 has 1 MA's), (62, 44012), (65, 43988), (73, 43904), (80, 43862),

Gene: Salz_76 Start: 44560, Stop: 44327, Start Num: 46

Candidate Starts for Salz_76:

(Start: 46 @44560 has 18 MA's), (Start: 48 @44557 has 13 MA's), (62, 44488),

Gene: Saskia_78 Start: 45105, Stop: 44875, Start Num: 48

Candidate Starts for Saskia_78:

(15, 45285), (20, 45240), (25, 45222), (43, 45120), (Start: 46 @45108 has 18 MA's), (Start: 48 @45105 has 13 MA's), (62, 45036),

Gene: SaturnRing_83 Start: 46790, Stop: 46572, Start Num: 52

Candidate Starts for SaturnRing_83:

(19, 46952), (Start: 52 @46790 has 112 MA's), (58, 46766), (62, 46736), (64, 46727), (80, 46580),

Gene: Scout_81 Start: 45971, Stop: 45753, Start Num: 52

Candidate Starts for Scout_81:

(19, 46133), (24, 46109), (Start: 52 @45971 has 112 MA's), (58, 45947), (62, 45917), (64, 45908), (80, 45761),

Gene: SemperFi_80 Start: 46987, Stop: 46715, Start Num: 40

Candidate Starts for SemperFi_80:

(14, 47176), (15, 47143), (31, 47044), (38, 47005), (Start: 40 @46987 has 52 MA's), (Start: 52 @46948 has 112 MA's), (62, 46894),

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

Candidate Starts for Serenity_83:

(56, 46225), (Start: 57 @46222 has 3 MA's), (64, 46174), (68, 46123),

Gene: Sham4_77 Start: 44640, Stop: 44410, Start Num: 48

Candidate Starts for Sham4_77:

(Start: 46 @44643 has 18 MA's), (Start: 48 @44640 has 13 MA's), (62, 44571),

Gene: Sknot_80 Start: 46598, Stop: 46359, Start Num: 40

Candidate Starts for Sknot_80:

(31, 46655), (38, 46616), (Start: 40 @46598 has 52 MA's), (41, 46592), (62, 46538), (65, 46514),

Gene: Smeagan_83 Start: 47535, Stop: 47269, Start Num: 40

Candidate Starts for Smeagan_83:

(6, 47832), (14, 47724), (31, 47592), (38, 47553), (Start: 40 @47535 has 52 MA's), (51, 47505), (Start: 52 @47502 has 112 MA's), (61, 47466), (62, 47448),

Gene: SnapTap_80 Start: 46958, Stop: 46686, Start Num: 40

Candidate Starts for SnapTap_80:

(14, 47147), (15, 47114), (31, 47015), (38, 46976), (Start: 40 @46958 has 52 MA's), (Start: 52 @46919 has 112 MA's), (62, 46865),

Gene: Snape_81 Start: 45750, Stop: 45520, Start Num: 48

Candidate Starts for Snape_81:

(Start: 46 @45753 has 18 MA's), (Start: 48 @45750 has 13 MA's), (62, 45681),

Gene: Snickers_82 Start: 46012, Stop: 45779, Start Num: 52

Candidate Starts for Snickers_82:

(Start: 52 @46012 has 112 MA's), (58, 45988), (62, 45958), (64, 45949), (76, 45826),

Gene: SoYo_79 Start: 45955, Stop: 45722, Start Num: 52

Candidate Starts for SoYo_79:

(Start: 52 @45955 has 112 MA's), (58, 45931), (62, 45901), (64, 45892), (76, 45769),

Gene: SoilDragon_82 Start: 45482, Stop: 45249, Start Num: 52

Candidate Starts for SoilDragon_82:

(Start: 52 @45482 has 112 MA's), (58, 45458), (62, 45428), (64, 45419),

Gene: Soshari_84 Start: 46063, Stop: 45830, Start Num: 52

Candidate Starts for Soshari_84:

(Start: 52 @46063 has 112 MA's), (58, 46039), (62, 46009), (64, 46000), (76, 45877),

Gene: Spike509_82 Start: 46064, Stop: 45831, Start Num: 52

Candidate Starts for Spike509_82:

(Start: 52 @46064 has 112 MA's), (58, 46040), (62, 46010), (64, 46001), (76, 45878),

Gene: Stagni_79 Start: 46042, Stop: 45809, Start Num: 52

Candidate Starts for Stagni_79:

(Start: 52 @46042 has 112 MA's), (58, 46018), (62, 45988), (64, 45979), (76, 45856),

Gene: StarStuff_81 Start: 46823, Stop: 46593, Start Num: 46

Candidate Starts for StarStuff_81:

(7, 47138), (25, 46937), (28, 46928), (Start: 46 @46823 has 18 MA's), (62, 46769), (71, 46682), (76, 46640),

Gene: StepMih_82 Start: 46033, Stop: 45800, Start Num: 52

Candidate Starts for StepMih_82:

(Start: 52 @46033 has 112 MA's), (58, 46009), (62, 45979), (64, 45970), (76, 45847),

Gene: Stephig9_87 Start: 47239, Stop: 47000, Start Num: 39

Candidate Starts for Stephig9_87:

(Start: 39 @47239 has 5 MA's), (42, 47224), (Start: 54 @47209 has 1 MA's), (Start: 57 @47200 has 3 MA's), (66, 47107), (70, 47086), (71, 47083), (72, 47062), (74, 47053), (80, 47017),

Gene: Superchunk_82 Start: 46315, Stop: 46109, Start Num: 59

Candidate Starts for Superchunk_82:

(25, 46444), (Start: 46 @46330 has 18 MA's), (Start: 59 @46315 has 1 MA's),

Gene: SweetiePie_80 Start: 47051, Stop: 46818, Start Num: 52

Candidate Starts for SweetiePie_80:

(Start: 52 @47051 has 112 MA's), (62, 46997),

Gene: TNguyen7_83 Start: 46748, Stop: 46530, Start Num: 52

Candidate Starts for TNguyen7_83:

(19, 46910), (Start: 52 @46748 has 112 MA's), (58, 46724), (62, 46694), (64, 46685), (80, 46538),

Gene: TarsusIV_80 Start: 47106, Stop: 46870, Start Num: 47

Candidate Starts for TarsusIV_80:

(1, 47595), (2, 47577), (4, 47478), (9, 47394), (16, 47283), (23, 47226), (33, 47175), (Start: 47 @47106 has 2 MA's), (Start: 52 @47100 has 112 MA's), (Start: 54 @47094 has 1 MA's), (Start: 57 @47085 has 3 MA's), (62, 47046), (71, 46959), (76, 46917),

Gene: Taurus_83 Start: 46042, Stop: 45809, Start Num: 52

Candidate Starts for Taurus_83:

(Start: 52 @46042 has 112 MA's), (58, 46018), (62, 45988), (64, 45979), (76, 45856),

Gene: Terrific_81 Start: 46566, Stop: 46333, Start Num: 41

Candidate Starts for Terrific_81:

(14, 46761), (31, 46629), (38, 46590), (Start: 40 @46572 has 52 MA's), (41, 46566), (62, 46512), (65, 46488), (78, 46368),

Gene: Texage_80 Start: 46744, Stop: 46526, Start Num: 52

Candidate Starts for Texage_80:

(Start: 52 @46744 has 112 MA's), (58, 46720), (62, 46690), (64, 46681), (65, 46666), (80, 46534),

Gene: Tiffany_81 Start: 45927, Stop: 45694, Start Num: 52

Candidate Starts for Tiffany_81:

(Start: 52 @45927 has 112 MA's), (58, 45903), (62, 45873), (64, 45864), (76, 45741),

Gene: Timothy_81 Start: 45730, Stop: 45497, Start Num: 46
Candidate Starts for Timothy_81:
(Start: 46 @45730 has 18 MA's), (Start: 48 @45727 has 13 MA's), (62, 45658),

Gene: TinyPebbles_81 Start: 46071, Stop: 45838, Start Num: 52
Candidate Starts for TinyPebbles_81:
(Start: 52 @46071 has 112 MA's), (58, 46047), (62, 46017), (64, 46008), (76, 45885),

Gene: TinyTimmy_80 Start: 45459, Stop: 45226, Start Num: 46
Candidate Starts for TinyTimmy_80:
(Start: 46 @45459 has 18 MA's), (Start: 48 @45456 has 13 MA's), (62, 45387),

Gene: TipsytheTRex_79 Start: 46224, Stop: 46018, Start Num: 57
Candidate Starts for TipsytheTRex_79:
(56, 46227), (Start: 57 @46224 has 3 MA's), (64, 46176), (68, 46125),

Gene: Todacoro_82 Start: 46743, Stop: 46525, Start Num: 52
Candidate Starts for Todacoro_82:
(Start: 52 @46743 has 112 MA's), (58, 46719), (62, 46689), (64, 46680), (65, 46665), (80, 46533),

Gene: Tomathan_81 Start: 46901, Stop: 46671, Start Num: 46
Candidate Starts for Tomathan_81:
(7, 47216), (25, 47015), (28, 47006), (Start: 46 @46901 has 18 MA's), (62, 46847), (71, 46760), (76, 46718),

Gene: Travvers_81 Start: 46818, Stop: 46588, Start Num: 46
Candidate Starts for Travvers_81:
(7, 47133), (25, 46932), (28, 46923), (Start: 46 @46818 has 18 MA's), (62, 46764), (71, 46677), (76, 46635),

Gene: Trooper_80 Start: 46666, Stop: 46427, Start Num: 49
Candidate Starts for Trooper_80:
(Start: 49 @46666 has 1 MA's), (Start: 52 @46660 has 112 MA's), (Start: 57 @46645 has 3 MA's), (62, 46606), (76, 46474),

Gene: Turbido_81 Start: 47256, Stop: 46990, Start Num: 40
Candidate Starts for Turbido_81:
(14, 47445), (31, 47313), (38, 47274), (Start: 40 @47256 has 52 MA's), (51, 47226), (Start: 52 @47223 has 112 MA's), (61, 47187), (62, 47169),

Gene: Updawg_81 Start: 46786, Stop: 46547, Start Num: 40
Candidate Starts for Updawg_81:
(14, 46975), (31, 46843), (38, 46804), (Start: 40 @46786 has 52 MA's), (41, 46780), (62, 46726), (65, 46702),

Gene: VA6_80 Start: 46834, Stop: 46562, Start Num: 40
Candidate Starts for VA6_80:
(31, 46891), (32, 46882), (38, 46852), (Start: 40 @46834 has 52 MA's), (51, 46798), (Start: 52 @46795 has 112 MA's), (63, 46738),

Gene: VC3_79 Start: 45726, Stop: 45514, Start Num: 53
Candidate Starts for VC3_79:

(7, 46038), (25, 45837), (28, 45828), (Start: 53 @45726 has 7 MA's), (Start: 59 @45714 has 1 MA's),

Gene: Veracruz_79 Start: 46744, Stop: 46526, Start Num: 52

Candidate Starts for Veracruz_79:

(Start: 52 @46744 has 112 MA's), (58, 46720), (62, 46690), (64, 46681), (65, 46666), (80, 46534),

Gene: Vix_78 Start: 46122, Stop: 45889, Start Num: 52

Candidate Starts for Vix_78:

(Start: 52 @46122 has 112 MA's), (58, 46098), (62, 46068), (64, 46059), (76, 45936),

Gene: Watson_81 Start: 46031, Stop: 45798, Start Num: 52

Candidate Starts for Watson_81:

(Start: 52 @46031 has 112 MA's), (58, 46007), (62, 45977), (64, 45968),

Gene: Whabigail7_80 Start: 47254, Stop: 46988, Start Num: 40

Candidate Starts for Whabigail7_80:

(14, 47443), (31, 47311), (38, 47272), (Start: 40 @47254 has 52 MA's), (51, 47224), (Start: 52 @47221 has 112 MA's), (61, 47185), (62, 47167),

Gene: WideWale_81 Start: 46786, Stop: 46547, Start Num: 40

Candidate Starts for WideWale_81:

(14, 46975), (31, 46843), (38, 46804), (Start: 40 @46786 has 52 MA's), (41, 46780), (62, 46726), (65, 46702),

Gene: Wolpertinger_80 Start: 45759, Stop: 45529, Start Num: 48

Candidate Starts for Wolpertinger_80:

(Start: 46 @45762 has 18 MA's), (Start: 48 @45759 has 13 MA's), (62, 45690),

Gene: Wooldri_84 Start: 45948, Stop: 45715, Start Num: 52

Candidate Starts for Wooldri_84:

(Start: 52 @45948 has 112 MA's), (58, 45924), (62, 45894), (64, 45885), (76, 45762),

Gene: XianYue_79 Start: 47118, Stop: 46879, Start Num: 45

Candidate Starts for XianYue_79:

(25, 47229), (Start: 45 @47118 has 1 MA's), (Start: 47 @47112 has 2 MA's), (62, 47058), (76, 46926),

Gene: Zarafa_79 Start: 46732, Stop: 46514, Start Num: 52

Candidate Starts for Zarafa_79:

(Start: 52 @46732 has 112 MA's), (58, 46708), (62, 46678), (64, 46669), (80, 46522),