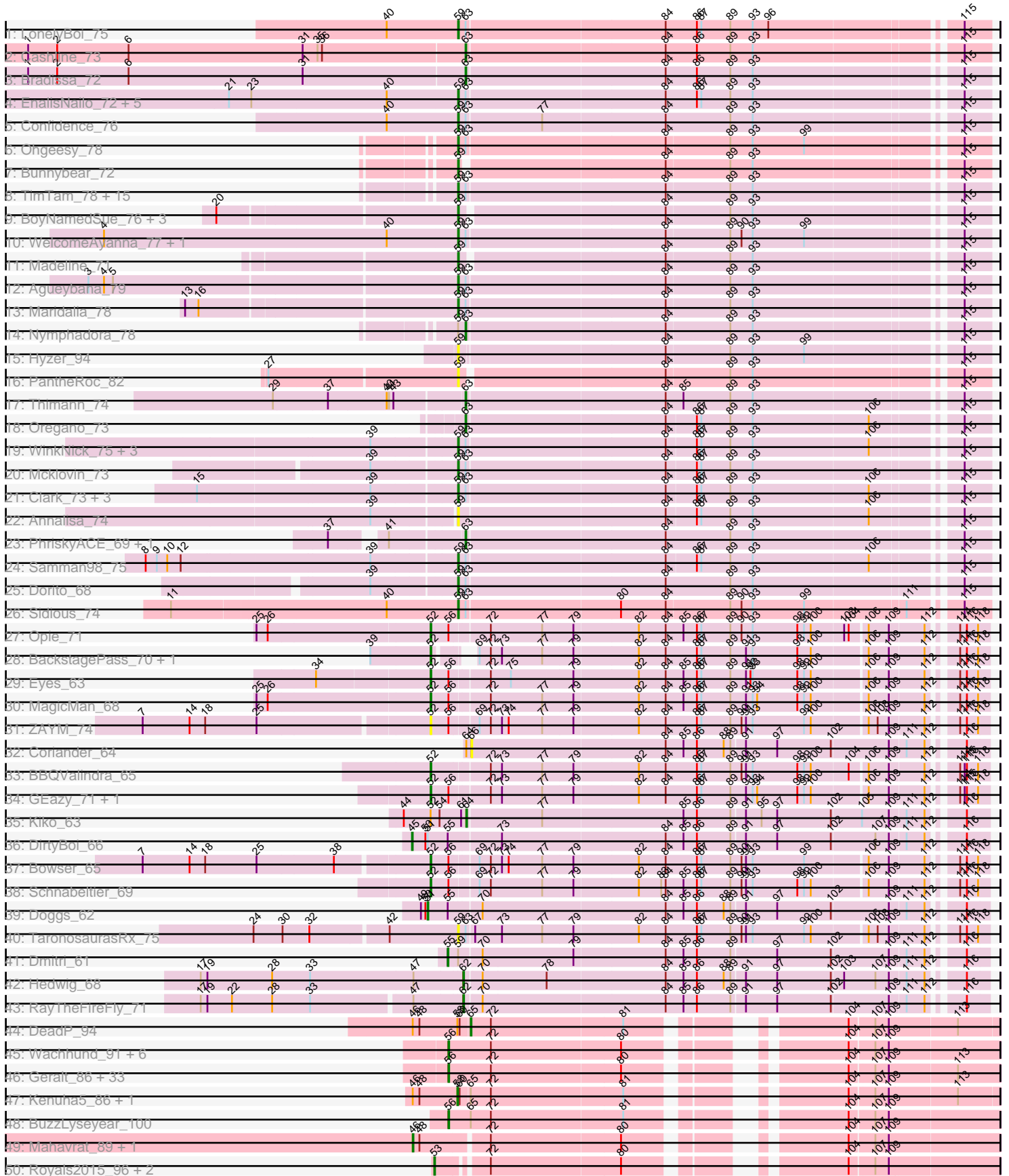
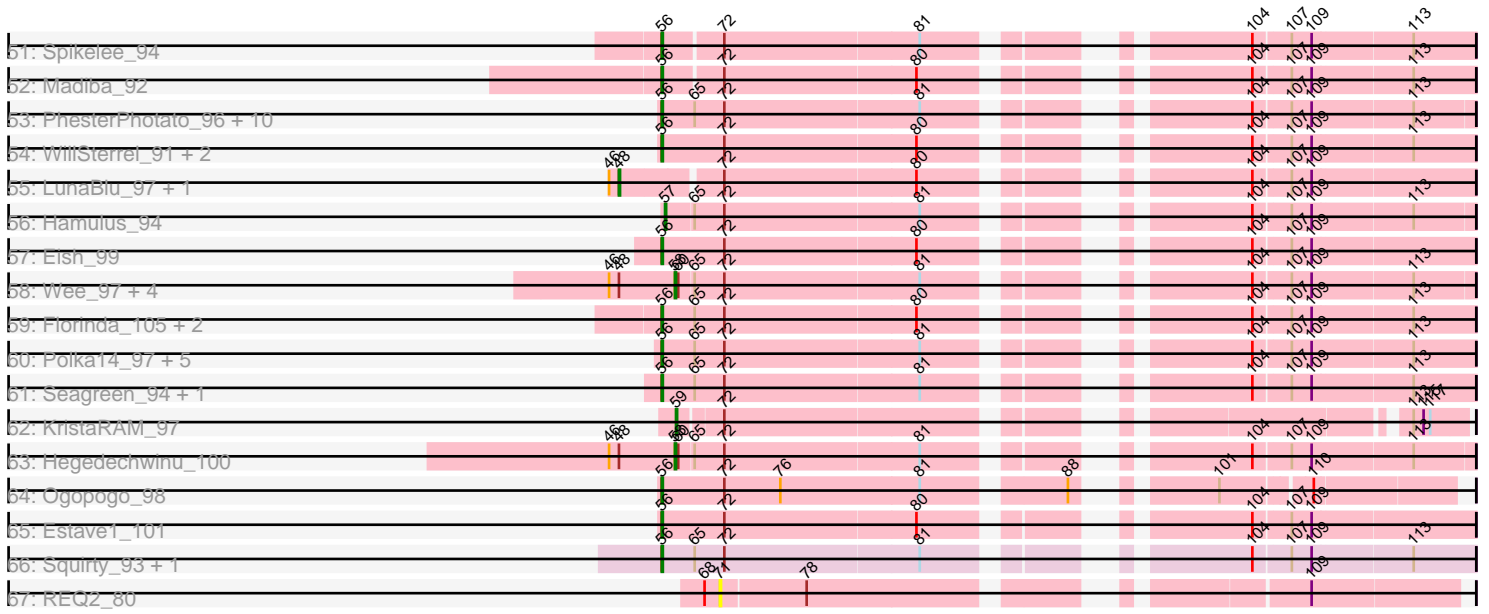


Pham 606



Pham 606



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 606 Report

This analysis was run 07/09/24 on database version 566.

Pham number 606 has 169 members, 18 are drafts.

Phages represented in each track:

- Track 1 : LonelyBoi_75
- Track 2 : Cashline_73
- Track 3 : Bradissa_72
- Track 4 : EnalisNailo_72, Lilas_73, Floral_77, EMsquaredA_76, Pollux_79, Marteena_75
- Track 5 : Confidence_76
- Track 6 : Ohgeesy_78
- Track 7 : Bunnybear_72
- Track 8 : TimTam_78, Trumpet_74, Zameen_74, Eviarto_78, Eudoria_74, Neobush_76, Bosnia_76, Hugley_76, Antonio_73, Kita_75, Herod_78, BatStarr_77, Manasvini_76, Polly_71, Suscepit_74, Tayonia_74
- Track 9 : BoyNamedSue_76, Bialota_73, AlumE_76, Zirinka_73
- Track 10 : WelcomeAyanna_77, ThankyouJordi_77
- Track 11 : Madeline_71
- Track 12 : Agueybana_79
- Track 13 : Maridalia_78
- Track 14 : Nymphadora_78
- Track 15 : Hyzer_94
- Track 16 : PantheRoc_82
- Track 17 : Thimann_74
- Track 18 : Oregano_73
- Track 19 : WinkNick_75, Suerte_68, Dolores_75, Sekhmet_74
- Track 20 : Mcklovin_73
- Track 21 : Clark_73, Easley_72, Beenie_68, MichaelScott_75
- Track 22 : Annalisa_74
- Track 23 : PhriskyACE_69, Powerball_70
- Track 24 : Samman98_75
- Track 25 : Dorito_68
- Track 26 : Sidious_74
- Track 27 : Opie_71
- Track 28 : BackstagePass_70, Bunker_59
- Track 29 : Eyes_63
- Track 30 : MagicMan_68
- Track 31 : ZAYM_74
- Track 32 : Coriander_64
- Track 33 : BBQValindra_65
- Track 34 : GEazy_71, HannahD_68

- Track 35 : Kiko_63
- Track 36 : DirtyBoi_66
- Track 37 : Bowser_65
- Track 38 : Schnabeltier_69
- Track 39 : Doggs_62
- Track 40 : TaronosaurusRx_75
- Track 41 : Dmitri_61
- Track 42 : Hedwig_68
- Track 43 : RayTheFireFly_71
- Track 44 : DeadP_94
- Track 45 : Wachhund_91, Ovechkin_97, IbOuu_88, Harley_96, Hades_90, Ibhubesi_91, Byougenkin_91
- Track 46 : Geralt_86, RitaG_92, BodEinwohner17_103, PMC_92, GigiOuiOui_88, Boomer_96, Juice456_92, Inventum_91, DirtMcgirt_94, Ramsey_98, UncleRicky_93, Fastidio_94, Dorothy_94, Lorde_96, Deb65_85, Leperchaun_95, Enby_97, Nimbo_85, Kimberlium_95, Sassafras_95, RedBird_94, RockyHorror_97, JoeyJr_96, OldBen_90, GUmble_92, Cornucopia_93, DaWorst_93, Daenerys_91, Drago_92, Rockne_96, PHappiness_93, Stap_88, DotProduct_87, QuickMath_94
- Track 47 : Kenuha5_86, DaddyRickover_95
- Track 48 : BuzzLyseyear_100
- Track 49 : Mahavrat_89, Galactic_94
- Track 50 : Royals2015_96, CaptainTrips_95, SimranZ1_89
- Track 51 : Spikelee_94
- Track 52 : Madiba_92
- Track 53 : PhesterPhotato_96, Tweety_94, Phalconet_94, Emma_98, Phatniss_91, Ms6_95, DLane_93, StAnnes_97, Starcevich_95, LittleShirley_101, Moonbeam_96
- Track 54 : WillSterrel_91, IrishSherpFalk_93, VRedHorse_94
- Track 55 : LunaBlu_97, Juniper1_89
- Track 56 : Hamulus_94
- Track 57 : Eish_99
- Track 58 : Wee_97, Taj_100, Filuzino_93, XFactor_84, Fruitloop_91
- Track 59 : Florinda_105, Girafales_102, Quico_102
- Track 60 : Polka14_97, Doomphist_98, Empress_93, KingMidas_93, Poenanya_97, Scottish_93
- Track 61 : Seagreen_94, Ardmore_78
- Track 62 : KristaRAM_97
- Track 63 : Hegedechwinu_100
- Track 64 : Ogopogo_98
- Track 65 : Estave1_101
- Track 66 : Squirty_93, MilleniumForce_93
- Track 67 : REQ2_80

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

The start number called the most often in the published annotations is 56, it was called in 68 of the 151 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ardmore_78, BodEinwohner17_103, Boomer_96, BuzzLyseyear_100, Byougenkin_91, Cornucopia_93, DLane_93, DaWorst_93, Daenerys_91, Deb65_85,

DirtMcgirt_94, Doomphist_98, Dorothy_94, DotProduct_87, Drago_92, Eish_99, Emma_98, Empress_93, Enby_97, Estave1_101, Fastidio_94, Florinda_105, GUMbie_92, Geralt_86, GigiOuiOui_88, Girafales_102, Hades_90, Harley_96, IbOuu_88, Ibhubesi_91, Inventum_91, IrishSherpFalk_93, JoeyJr_96, Juice456_92, Kimberlium_95, KingMidas_93, Leperchaun_95, LittleShirley_101, Lorde_96, Madiba_92, MilleniumForce_93, Moonbeam_96, Ms6_95, Nimbo_85, OgoPogo_98, OldBen_90, Ovechkin_97, PHappiness_93, PMC_92, Phalconet_94, Phatniss_91, PhesterPhotato_96, Poenanya_97, Polka14_97, QuickMath_94, Quico_102, Ramsey_98, RedBird_94, RitaG_92, Rockne_96, RockyHorror_97, Sassafras_95, Scottish_93, Seagreen_94, Spikelee_94, Squirty_93, StAnnes_97, Stap_88, StarceVich_95, Tweety_94, UncleRicky_93, VRedHorse_94, Wachhund_91, WillSterrel_91,

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

- Bowser_65, Eyes_63, GEazy_71, HannahD_68, MagicMan_68, Opie_71, Schnabeltier_69, ZAYM_74,

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

- Agueybana_79, AlumE_76, Annalisa_74, Antonio_73, BBQValindra_65, BackstagePass_70, BatStarr_77, Beenie_68, Bialota_73, Bosnia_76, BoyNamedSue_76, Bradissa_72, Bunker_59, Bunnybear_72, CaptainTrips_95, Cashline_73, Clark_73, Confidence_76, Coriander_64, DaddyRickover_95, DeadP_94, DirtyBoi_66, Dmitri_61, Doggs_62, Dolores_75, Dorito_68, EMSquaredA_76, Easley_72, EnalisNailo_72, Eudoria_74, Eviarto_78, Filuzino_93, Floral_77, Fruitloop_91, Galactic_94, Hamulus_94, Hedwig_68, Hegedechwinu_100, Herod_78, Hugley_76, Hyzer_94, Juniper1_89, Kenuha5_86, Kiko_63, Kita_75, KristaRAM_97, Lilas_73, LonelyBoi_75, LunaBlu_97, Madeline_71, Mahavrat_89, Manasvini_76, Maridalia_78, Marteena_75, Mcklovin_73, MichaelScott_75, Neobush_76, Nymphadora_78, Ohgeesy_78, Oregano_73, PantheRoc_82, PhriskyACE_69, Pollux_79, Polly_71, Powerball_70, REQ2_80, RayTheFireFly_71, Royals2015_96, Samman98_75, Sekhmet_74, Sidious_74, SimranZ1_89, Suerte_68, Suscepit_74, Taj_100, TaronosaurusRx_75, Tayonia_74, ThankyouJordi_77, Thimann_74, TimTam_78, Trumpet_74, Wee_97, WelcomeAyanna_77, WinkNick_75, XFactor_84, Zameen_74, Zirinka_73,

Summary by start number:

Start 45:

- Found in 1 of 169 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 151
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DirtyBoi_66 (DB),

Start 46:

- Found in 13 of 169 (7.7%) of genes in pham
- Manual Annotations of this start: 2 of 151
- Called 15.4% of time when present
- Phage (with cluster) where this start called: Galactic_94 (F1), Mahavrat_89 (F1),

Start 48:

- Found in 13 of 169 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 151
- Called 15.4% of time when present

- Phage (with cluster) where this start called: Juniper1_89 (F1), LunaBlu_97 (F1),

Start 51:

- Found in 2 of 169 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 151
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Doggs_62 (DB),

Start 52:

- Found in 12 of 169 (7.1%) of genes in pham
- Manual Annotations of this start: 9 of 151
- Called 91.7% of time when present
- Phage (with cluster) where this start called: BBQValindra_65 (DB), BackstagePass_70 (DB), Bowser_65 (DB), Bunker_59 (DB), Eyes_63 (DB), GEazy_71 (DB), HannahD_68 (DB), MagicMan_68 (DB), Opie_71 (DB), Schnabeltier_69 (DB), ZAYM_74 (DB),

Start 53:

- Found in 3 of 169 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 151
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CaptainTrips_95 (F1), Royals2015_96 (F1), SimranZ1_89 (F1),

Start 55:

- Found in 3 of 169 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 151
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Dmitri_61 (DB),

Start 56:

- Found in 82 of 169 (48.5%) of genes in pham
- Manual Annotations of this start: 68 of 151
- Called 90.2% of time when present
- Phage (with cluster) where this start called: Ardmore_78 (F1), BodEinwohner17_103 (F1), Boomer_96 (F1), BuzzLyseyear_100 (F1), Byougenkin_91 (F1), Cornucopia_93 (F1), DLane_93 (F1), DaWorst_93 (F1), Daenerys_91 (F1), Deb65_85 (F1), DirtMcgirt_94 (F1), Doomphist_98 (F1), Dorothy_94 (F1), DotProduct_87 (F1), Drago_92 (F1), Eish_99 (F1), Emma_98 (F1), Empress_93 (F1), Enby_97 (F1), Estave1_101 (F1), Fastidio_94 (F1), Florinda_105 (F1), GUmbie_92 (F1), Geralt_86 (F1), GigiOuiOui_88 (F1), Girafales_102 (F1), Hades_90 (F1), Harley_96 (F1), IbOuu_88 (F1), lbhubesi_91 (F1), Inventum_91 (F1), IrishSherpFalk_93 (F1), JoeyJr_96 (F1), Juice456_92 (F1), Kimberlium_95 (F1), KingMidas_93 (F1), Leperchaun_95 (F1), LittleShirley_101 (F1), Lorde_96 (F1), Madiba_92 (F1), MilleniumForce_93 (F1), Moonbeam_96 (F1), Ms6_95 (F1), Nimbo_85 (F1), Ogopogo_98 (F1), OldBen_90 (F1), Ovechkin_97 (F1), PHappiness_93 (F1), PMC_92 (F1), Phalconet_94 (F1), Phatniss_91 (F1), PhesterPhotato_96 (F1), Poenanya_97 (F1), Polka14_97 (F1), QuickMath_94 (F1), Quico_102 (F1), Ramsey_98 (F1), RedBird_94 (F1), RitaG_92 (F1), Rockne_96 (F1), RockyHorror_97 (F1), Sassafras_95 (F1), Scottish_93 (F1), Seagreen_94 (F1), Spikelee_94 (F1), Squirry_93 (F3), StAnnes_97 (F1), Stap_88 (F1), Starcevich_95 (F1), Tweety_94 (F1), UncleRicky_93 (F1), VRedHorse_94 (F1), Wachhund_91 (F1), WillSterrel_91 (F1),

Start 57:

- Found in 1 of 169 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 151
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hamulus_94 (F1),

Start 58:

- Found in 9 of 169 (5.3%) of genes in pham
- Manual Annotations of this start: 7 of 151
- Called 88.9% of time when present
- Phage (with cluster) where this start called: DaddyRickover_95 (F1), Filuzino_93 (F1), Fruitloop_91 (F1), Hegedechwinu_100 (F1), Kenuha5_86 (F1), Taj_100 (F1), Wee_97 (F1), XFactor_84 (F1),

Start 59:

- Found in 54 of 169 (32.0%) of genes in pham
- Manual Annotations of this start: 47 of 151
- Called 96.3% of time when present
- Phage (with cluster) where this start called: Agueybana_79 (CZ1), AlumE_76 (CZ1), Annalisa_74 (CZ4), Antonio_73 (CZ1), BatStarr_77 (CZ1), Beenie_68 (CZ4), Bialota_73 (CZ1), Bosnia_76 (CZ1), BoyNamedSue_76 (CZ1), Bunnybear_72 (CZ), Clark_73 (CZ4), Confidence_76 (CY1), Dolores_75 (CZ4), Dorito_68 (CZ4), EMSquaredA_76 (CY1), Easley_72 (CZ4), EnalisNailo_72 (CY1), Eudoria_74 (CZ1), Eviarto_78 (CZ1), Floral_77 (CY1), Herod_78 (CZ1), Hugley_76 (CZ1), Hyzer_94 (CZ1), Kita_75 (CZ1), KristaRAM_97 (F1), Lilas_73 (CY1), LonelyBoi_75 (CY), Madeline_71 (CZ1), Manasvini_76 (CZ1), Maridalia_78 (CZ1), Marteena_75 (CY1), Mcklovin_73 (CZ4), MichaelScott_75 (CZ4), Neobush_76 (CZ1), Ohgeesy_78 (CZ), PantheRoc_82 (CZ3), Pollux_79 (CY1), Polly_71 (CZ1), Samman98_75 (CZ4), Sekhmet_74 (CZ4), Sidious_74 (CZ7), Suerte_68 (CZ4), Suscepit_74 (CZ1), TaronosaurusRx_75 (DB), Tayonia_74 (CZ1), ThankyouJordi_77 (CZ1), TimTam_78 (CZ1), Trumpet_74 (CZ1), WelcomeAyanna_77 (CZ1), WinkNick_75 (CZ4), Zameen_74 (CZ1), Zirinka_73 (CZ1),

Start 62:

- Found in 2 of 169 (1.2%) of genes in pham
- Manual Annotations of this start: 2 of 151
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hedwig_68 (DB), RayTheFireFly_71 (DB),

Start 63:

- Found in 49 of 169 (29.0%) of genes in pham
- Manual Annotations of this start: 6 of 151
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Bradissa_72 (CY1), Cashline_73 (CY), Nymphadora_78 (CZ1), Oregano_73 (CZ4), PhriskyACE_69 (CZ4), Powerball_70 (CZ4), Thimann_74 (CZ4),

Start 64:

- Found in 2 of 169 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 151
- Called 50.0% of time when present

- Phage (with cluster) where this start called: Kiko_63 (DB),

Start 65:

- Found in 35 of 169 (20.7%) of genes in pham
- Manual Annotations of this start: 1 of 151
- Called 2.9% of time when present
- Phage (with cluster) where this start called: DeadP_94 (F1),

Start 66:

- Found in 1 of 169 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Coriander_64 (DB),

Start 71:

- Found in 1 of 169 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: REQ2_80 (singleton),

Summary by clusters:

There are 11 clusters represented in this pham: F1, CY1, F3, CZ3, CZ1, DB, CZ7, CZ4, CZ, CY, singleton,

Info for manual annotations of cluster CY:

- Start number 59 was manually annotated 1 time for cluster CY.
- Start number 63 was manually annotated 1 time for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 59 was manually annotated 7 times for cluster CY1.
- Start number 63 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CZ:

- Start number 59 was manually annotated 2 times for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 59 was manually annotated 24 times for cluster CZ1.
- Start number 63 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ4:

- Start number 59 was manually annotated 11 times for cluster CZ4.
- Start number 63 was manually annotated 3 times for cluster CZ4.

Info for manual annotations of cluster CZ7:

- Start number 59 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DB:

- Start number 45 was manually annotated 1 time for cluster DB.
- Start number 51 was manually annotated 1 time for cluster DB.
- Start number 52 was manually annotated 9 times for cluster DB.
- Start number 55 was manually annotated 1 time for cluster DB.

- Start number 62 was manually annotated 2 times for cluster DB.
- Start number 64 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster F1:

- Start number 46 was manually annotated 2 times for cluster F1.
- Start number 48 was manually annotated 1 time for cluster F1.
- Start number 53 was manually annotated 3 times for cluster F1.
- Start number 56 was manually annotated 67 times for cluster F1.
- Start number 57 was manually annotated 1 time for cluster F1.
- Start number 58 was manually annotated 7 times for cluster F1.
- Start number 59 was manually annotated 1 time for cluster F1.
- Start number 65 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F3:

- Start number 56 was manually annotated 1 time for cluster F3.

Gene Information:

Gene: Agueybana_79 Start: 50300, Stop: 50974, Start Num: 59

Candidate Starts for Agueybana_79:

(3, 49817), (4, 49838), (5, 49850), (Start: 59 @50300 has 47 MA's), (Start: 63 @50309 has 6 MA's), (84, 50570), (89, 50654), (93, 50684), (115, 50939),

Gene: AlumE_76 Start: 50192, Stop: 50857, Start Num: 59

Candidate Starts for AlumE_76:

(20, 49886), (Start: 59 @50192 has 47 MA's), (84, 50453), (89, 50537), (93, 50567), (115, 50822),

Gene: Annalisa_74 Start: 44997, Stop: 45671, Start Num: 59

Candidate Starts for Annalisa_74:

(39, 44895), (Start: 59 @44997 has 47 MA's), (84, 45267), (86, 45306), (87, 45312), (89, 45351), (93, 45381), (106, 45534), (115, 45636),

Gene: Antonio_73 Start: 47946, Stop: 48620, Start Num: 59

Candidate Starts for Antonio_73:

(Start: 59 @47946 has 47 MA's), (Start: 63 @47955 has 6 MA's), (84, 48216), (89, 48300), (93, 48330), (115, 48585),

Gene: Ardmore_78 Start: 46559, Stop: 47200, Start Num: 56

Candidate Starts for Ardmore_78:

(Start: 56 @46559 has 68 MA's), (Start: 65 @46589 has 1 MA's), (72, 46616), (81, 46790), (104, 47012), (107, 47042), (109, 47060), (113, 47147),

Gene: BBQValindra_65 Start: 45391, Stop: 46092, Start Num: 52

Candidate Starts for BBQValindra_65:

(Start: 52 @45391 has 9 MA's), (72, 45463), (73, 45478), (77, 45532), (79, 45571), (82, 45655), (84, 45691), (86, 45733), (87, 45739), (89, 45778), (90, 45793), (91, 45799), (93, 45808), (98, 45868), (99, 45877), (100, 45886), (104, 45934), (106, 45955), (109, 45982), (112, 46027), (114, 46054), (115, 46060), (116, 46063), (118, 46078),

Gene: BackstagePass_70 Start: 44766, Stop: 45440, Start Num: 52

Candidate Starts for BackstagePass_70:

(39, 44688), (Start: 52 @44766 has 9 MA's), (69, 44796), (72, 44811), (73, 44826), (77, 44880), (79, 44919), (82, 45003), (84, 45039), (86, 45081), (87, 45087), (89, 45126), (91, 45147), (93, 45156), (98, 45216), (100, 45234), (106, 45303), (109, 45330), (112, 45375), (114, 45402), (116, 45411), (118, 45426),

Gene: BatStarr_77 Start: 50914, Stop: 51588, Start Num: 59

Candidate Starts for BatStarr_77:

(Start: 59 @50914 has 47 MA's), (Start: 63 @50923 has 6 MA's), (84, 51184), (89, 51268), (93, 51298), (115, 51553),

Gene: Beenie_68 Start: 45544, Stop: 46218, Start Num: 59

Candidate Starts for Beenie_68:

(15, 45211), (39, 45436), (Start: 59 @45544 has 47 MA's), (Start: 63 @45553 has 6 MA's), (84, 45814), (86, 45853), (87, 45859), (89, 45898), (93, 45928), (106, 46081), (115, 46183),

Gene: Bialota_73 Start: 49643, Stop: 50308, Start Num: 59

Candidate Starts for Bialota_73:

(20, 49337), (Start: 59 @49643 has 47 MA's), (84, 49904), (89, 49988), (93, 50018), (115, 50273),

Gene: BodEinwohner17_103 Start: 54614, Stop: 55252, Start Num: 56

Candidate Starts for BodEinwohner17_103:

(Start: 56 @54614 has 68 MA's), (72, 54665), (80, 54836), (104, 55061), (107, 55091), (109, 55109), (113, 55196),

Gene: Boomer_96 Start: 52848, Stop: 53486, Start Num: 56

Candidate Starts for Boomer_96:

(Start: 56 @52848 has 68 MA's), (72, 52899), (80, 53070), (104, 53295), (107, 53325), (109, 53343), (113, 53430),

Gene: Bosnia_76 Start: 52028, Stop: 52702, Start Num: 59

Candidate Starts for Bosnia_76:

(Start: 59 @52028 has 47 MA's), (Start: 63 @52037 has 6 MA's), (84, 52298), (89, 52382), (93, 52412), (115, 52667),

Gene: Bowser_65 Start: 45082, Stop: 45783, Start Num: 52

Candidate Starts for Bowser_65:

(7, 44710), (14, 44773), (18, 44794), (25, 44863), (38, 44965), (Start: 52 @45082 has 9 MA's), (Start: 56 @45106 has 68 MA's), (69, 45139), (72, 45154), (73, 45169), (74, 45178), (77, 45223), (79, 45262), (82, 45346), (84, 45382), (86, 45424), (87, 45430), (89, 45469), (90, 45484), (91, 45490), (93, 45499), (99, 45568), (106, 45646), (109, 45673), (112, 45718), (114, 45745), (116, 45754), (118, 45769),

Gene: BoyNamedSue_76 Start: 50192, Stop: 50857, Start Num: 59

Candidate Starts for BoyNamedSue_76:

(20, 49886), (Start: 59 @50192 has 47 MA's), (84, 50453), (89, 50537), (93, 50567), (115, 50822),

Gene: Bradissa_72 Start: 49989, Stop: 50657, Start Num: 63

Candidate Starts for Bradissa_72:

(1, 49407), (2, 49446), (6, 49542), (31, 49776), (Start: 63 @49989 has 6 MA's), (84, 50250), (86, 50292), (89, 50337), (93, 50367), (115, 50622),

Gene: Bunker_59 Start: 44048, Stop: 44725, Start Num: 52

Candidate Starts for Bunker_59:

(39, 43970), (Start: 52 @44048 has 9 MA's), (69, 44081), (72, 44096), (73, 44111), (77, 44165), (79, 44204), (82, 44288), (84, 44324), (86, 44366), (87, 44372), (89, 44411), (91, 44432), (93, 44441), (98, 44501), (100, 44519), (106, 44588), (109, 44615), (112, 44660), (114, 44687), (116, 44696), (118, 44711),

Gene: Bunnybear_72 Start: 48915, Stop: 49580, Start Num: 59

Candidate Starts for Bunnybear_72:

(Start: 59 @48915 has 47 MA's), (84, 49176), (89, 49260), (93, 49290), (115, 49545),

Gene: BuzzLyseyear_100 Start: 54341, Stop: 54985, Start Num: 56

Candidate Starts for BuzzLyseyear_100:

(Start: 56 @54341 has 68 MA's), (Start: 65 @54371 has 1 MA's), (72, 54398), (81, 54572), (104, 54794), (107, 54824), (109, 54842),

Gene: Byougenkin_91 Start: 49179, Stop: 49823, Start Num: 56

Candidate Starts for Byougenkin_91:

(Start: 56 @49179 has 68 MA's), (72, 49236), (80, 49407), (104, 49632), (107, 49662), (109, 49680),

Gene: CaptainTrips_95 Start: 51744, Stop: 52388, Start Num: 53

Candidate Starts for CaptainTrips_95:

(Start: 53 @51744 has 3 MA's), (72, 51801), (80, 51972), (104, 52197), (107, 52227), (109, 52245),

Gene: Cashline_73 Start: 50684, Stop: 51352, Start Num: 63

Candidate Starts for Cashline_73:

(1, 50102), (2, 50141), (6, 50237), (31, 50471), (35, 50489), (36, 50495), (Start: 63 @50684 has 6 MA's), (84, 50945), (86, 50987), (89, 51032), (93, 51062), (115, 51317),

Gene: Clark_73 Start: 45307, Stop: 45981, Start Num: 59

Candidate Starts for Clark_73:

(15, 44974), (39, 45199), (Start: 59 @45307 has 47 MA's), (Start: 63 @45316 has 6 MA's), (84, 45577), (86, 45616), (87, 45622), (89, 45661), (93, 45691), (106, 45844), (115, 45946),

Gene: Confidence_76 Start: 48755, Stop: 49432, Start Num: 59

Candidate Starts for Confidence_76:

(40, 48662), (Start: 59 @48755 has 47 MA's), (Start: 63 @48764 has 6 MA's), (77, 48863), (84, 49025), (89, 49112), (93, 49142), (115, 49397),

Gene: Coriander_64 Start: 42778, Stop: 43434, Start Num: 66

Candidate Starts for Coriander_64:

(Start: 64 @42775 has 1 MA's), (66, 42778), (84, 43033), (85, 43057), (86, 43075), (88, 43111), (89, 43120), (91, 43135), (97, 43177), (102, 43249), (109, 43324), (111, 43345), (112, 43369), (116, 43405),

Gene: Cornucopia_93 Start: 50126, Stop: 50764, Start Num: 56

Candidate Starts for Cornucopia_93:

(Start: 56 @50126 has 68 MA's), (72, 50177), (80, 50348), (104, 50573), (107, 50603), (109, 50621), (113, 50708),

Gene: DLane_93 Start: 53029, Stop: 53670, Start Num: 56

Candidate Starts for DLane_93:

(Start: 56 @53029 has 68 MA's), (Start: 65 @53059 has 1 MA's), (72, 53086), (81, 53260), (104, 53482), (107, 53512), (109, 53530), (113, 53617),

Gene: DaWorst_93 Start: 51942, Stop: 52580, Start Num: 56

Candidate Starts for DaWorst_93:

(Start: 56 @51942 has 68 MA's), (72, 51993), (80, 52164), (104, 52389), (107, 52419), (109, 52437), (113, 52524),

Gene: DaddyRickover_95 Start: 52820, Stop: 53446, Start Num: 58

Candidate Starts for DaddyRickover_95:

(Start: 46 @52760 has 2 MA's), (Start: 48 @52769 has 1 MA's), (Start: 58 @52820 has 7 MA's), (60, 52823), (Start: 65 @52835 has 1 MA's), (72, 52862), (81, 53036), (104, 53258), (107, 53288), (109, 53306), (113, 53393),

Gene: Daenerys_91 Start: 52971, Stop: 53615, Start Num: 56

Candidate Starts for Daenerys_91:

(Start: 56 @52971 has 68 MA's), (72, 53028), (80, 53199), (104, 53424), (107, 53454), (109, 53472), (113, 53559),

Gene: DeadP_94 Start: 50840, Stop: 51451, Start Num: 65

Candidate Starts for DeadP_94:

(Start: 46 @50765 has 2 MA's), (Start: 48 @50774 has 1 MA's), (Start: 58 @50825 has 7 MA's), (60, 50828), (Start: 65 @50840 has 1 MA's), (72, 50867), (81, 51041), (104, 51263), (107, 51293), (109, 51311), (113, 51398),

Gene: Deb65_85 Start: 50695, Stop: 51339, Start Num: 56

Candidate Starts for Deb65_85:

(Start: 56 @50695 has 68 MA's), (72, 50752), (80, 50923), (104, 51148), (107, 51178), (109, 51196), (113, 51283),

Gene: DirtMcgirt_94 Start: 49458, Stop: 50096, Start Num: 56

Candidate Starts for DirtMcgirt_94:

(Start: 56 @49458 has 68 MA's), (72, 49509), (80, 49680), (104, 49905), (107, 49935), (109, 49953), (113, 50040),

Gene: DirtyBoi_66 Start: 42349, Stop: 43077, Start Num: 45

Candidate Starts for DirtyBoi_66:

(Start: 45 @42349 has 1 MA's), (50, 42367), (Start: 51 @42370 has 1 MA's), (Start: 55 @42397 has 1 MA's), (73, 42460), (84, 42676), (85, 42700), (86, 42718), (89, 42763), (91, 42778), (97, 42820), (102, 42892), (107, 42949), (109, 42967), (111, 42988), (112, 43012), (116, 43048),

Gene: Dmitri_61 Start: 44300, Stop: 44980, Start Num: 55

Candidate Starts for Dmitri_61:

(Start: 55 @44300 has 1 MA's), (Start: 59 @44312 has 47 MA's), (70, 44339), (79, 44459), (84, 44579), (85, 44603), (86, 44621), (89, 44666), (97, 44723), (102, 44795), (109, 44870), (111, 44891), (112, 44915), (116, 44951),

Gene: Doggs_62 Start: 43922, Stop: 44629, Start Num: 51

Candidate Starts for Doggs_62:

(49, 43913), (50, 43919), (Start: 51 @43922 has 1 MA's), (Start: 55 @43949 has 1 MA's), (70, 43988), (84, 44228), (85, 44252), (86, 44270), (88, 44306), (89, 44315), (91, 44330), (97, 44372), (102, 44444), (109, 44519), (111, 44540), (112, 44564), (116, 44600),

Gene: Dolores_75 Start: 45050, Stop: 45724, Start Num: 59

Candidate Starts for Dolores_75:

(39, 44942), (Start: 59 @45050 has 47 MA's), (Start: 63 @45059 has 6 MA's), (84, 45320), (86, 45359), (87, 45365), (89, 45404), (93, 45434), (106, 45587), (115, 45689),

Gene: Doomphist_98 Start: 53625, Stop: 54266, Start Num: 56

Candidate Starts for Doomphist_98:

(Start: 56 @53625 has 68 MA's), (Start: 65 @53655 has 1 MA's), (72, 53682), (81, 53856), (104, 54078), (107, 54108), (109, 54126), (113, 54213),

Gene: Dorito_68 Start: 43725, Stop: 44402, Start Num: 59

Candidate Starts for Dorito_68:

(39, 43617), (Start: 59 @43725 has 47 MA's), (Start: 63 @43734 has 6 MA's), (84, 43995), (89, 44082), (93, 44112), (115, 44367),

Gene: Dorothy_94 Start: 53800, Stop: 54435, Start Num: 56

Candidate Starts for Dorothy_94:

(Start: 56 @53800 has 68 MA's), (72, 53851), (80, 54022), (104, 54247), (107, 54277), (109, 54295), (113, 54382),

Gene: DotProduct_87 Start: 49809, Stop: 50453, Start Num: 56

Candidate Starts for DotProduct_87:

(Start: 56 @49809 has 68 MA's), (72, 49866), (80, 50037), (104, 50262), (107, 50292), (109, 50310), (113, 50397),

Gene: Drago_92 Start: 49461, Stop: 50099, Start Num: 56

Candidate Starts for Drago_92:

(Start: 56 @49461 has 68 MA's), (72, 49512), (80, 49683), (104, 49908), (107, 49938), (109, 49956), (113, 50043),

Gene: EMSquaredA_76 Start: 48772, Stop: 49449, Start Num: 59

Candidate Starts for EMSquaredA_76:

(21, 48469), (23, 48499), (40, 48679), (Start: 59 @48772 has 47 MA's), (Start: 63 @48781 has 6 MA's), (84, 49042), (86, 49084), (87, 49090), (89, 49129), (93, 49159), (115, 49414),

Gene: Easley_72 Start: 44308, Stop: 44982, Start Num: 59

Candidate Starts for Easley_72:

(15, 43975), (39, 44200), (Start: 59 @44308 has 47 MA's), (Start: 63 @44317 has 6 MA's), (84, 44578), (86, 44617), (87, 44623), (89, 44662), (93, 44692), (106, 44845), (115, 44947),

Gene: Eish_99 Start: 53255, Stop: 53899, Start Num: 56

Candidate Starts for Eish_99:

(Start: 56 @53255 has 68 MA's), (72, 53312), (80, 53483), (104, 53708), (107, 53738), (109, 53756),

Gene: Emma_98 Start: 51313, Stop: 51954, Start Num: 56

Candidate Starts for Emma_98:

(Start: 56 @51313 has 68 MA's), (Start: 65 @51343 has 1 MA's), (72, 51370), (81, 51544), (104, 51766), (107, 51796), (109, 51814), (113, 51901),

Gene: Empress_93 Start: 51888, Stop: 52529, Start Num: 56

Candidate Starts for Empress_93:

(Start: 56 @51888 has 68 MA's), (Start: 65 @51918 has 1 MA's), (72, 51945), (81, 52119), (104, 52341), (107, 52371), (109, 52389), (113, 52476),

Gene: EnalisNailo_72 Start: 49264, Stop: 49941, Start Num: 59

Candidate Starts for EnalisNailo_72:

(21, 48961), (23, 48991), (40, 49171), (Start: 59 @49264 has 47 MA's), (Start: 63 @49273 has 6 MA's), (84, 49534), (86, 49576), (87, 49582), (89, 49621), (93, 49651), (115, 49906),

Gene: Enby_97 Start: 49737, Stop: 50375, Start Num: 56

Candidate Starts for Enby_97:

(Start: 56 @49737 has 68 MA's), (72, 49788), (80, 49959), (104, 50184), (107, 50214), (109, 50232), (113, 50319),

Gene: Estave1_101 Start: 55618, Stop: 56262, Start Num: 56

Candidate Starts for Estave1_101:

(Start: 56 @55618 has 68 MA's), (72, 55675), (80, 55846), (104, 56071), (107, 56101), (109, 56119),

Gene: Eudoria_74 Start: 47946, Stop: 48620, Start Num: 59

Candidate Starts for Eudoria_74:

(Start: 59 @47946 has 47 MA's), (Start: 63 @47955 has 6 MA's), (84, 48216), (89, 48300), (93, 48330), (115, 48585),

Gene: Eviarto_78 Start: 50889, Stop: 51563, Start Num: 59

Candidate Starts for Eviarto_78:

(Start: 59 @50889 has 47 MA's), (Start: 63 @50898 has 6 MA's), (84, 51159), (89, 51243), (93, 51273), (115, 51528),

Gene: Eyes_63 Start: 45288, Stop: 45989, Start Num: 52

Candidate Starts for Eyes_63:

(34, 45141), (Start: 52 @45288 has 9 MA's), (Start: 56 @45312 has 68 MA's), (72, 45360), (75, 45387), (79, 45468), (82, 45552), (84, 45588), (85, 45612), (86, 45630), (87, 45636), (89, 45675), (91, 45696), (92, 45702), (93, 45705), (98, 45765), (99, 45774), (100, 45783), (106, 45852), (109, 45879), (112, 45924), (114, 45951), (116, 45960), (118, 45975),

Gene: Fastidio_94 Start: 50201, Stop: 50845, Start Num: 56

Candidate Starts for Fastidio_94:

(Start: 56 @50201 has 68 MA's), (72, 50258), (80, 50429), (104, 50654), (107, 50684), (109, 50702), (113, 50789),

Gene: Filuzino_93 Start: 53739, Stop: 54365, Start Num: 58

Candidate Starts for Filuzino_93:

(Start: 46 @53679 has 2 MA's), (Start: 48 @53688 has 1 MA's), (Start: 58 @53739 has 7 MA's), (60, 53742), (Start: 65 @53754 has 1 MA's), (72, 53781), (81, 53955), (104, 54177), (107, 54207), (109, 54225), (113, 54312),

Gene: Floral_77 Start: 50729, Stop: 51406, Start Num: 59

Candidate Starts for Floral_77:

(21, 50426), (23, 50456), (40, 50636), (Start: 59 @50729 has 47 MA's), (Start: 63 @50738 has 6 MA's), (84, 50999), (86, 51041), (87, 51047), (89, 51086), (93, 51116), (115, 51371),

Gene: Florinda_105 Start: 54106, Stop: 54750, Start Num: 56

Candidate Starts for Florinda_105:

(Start: 56 @54106 has 68 MA's), (Start: 65 @54136 has 1 MA's), (72, 54163), (80, 54334), (104, 54559), (107, 54589), (109, 54607), (113, 54694),

Gene: Fruitloop_91 Start: 52881, Stop: 53507, Start Num: 58

Candidate Starts for Fruitloop_91:

(Start: 46 @52821 has 2 MA's), (Start: 48 @52830 has 1 MA's), (Start: 58 @52881 has 7 MA's), (60, 52884), (Start: 65 @52896 has 1 MA's), (72, 52923), (81, 53097), (104, 53319), (107, 53349), (109, 53367), (113, 53454),

Gene: GEazy_71 Start: 45244, Stop: 45945, Start Num: 52

Candidate Starts for GEazy_71:

(Start: 52 @45244 has 9 MA's), (Start: 56 @45268 has 68 MA's), (72, 45316), (73, 45331), (77, 45385), (79, 45424), (82, 45508), (84, 45544), (86, 45586), (87, 45592), (89, 45631), (91, 45652), (93, 45661), (94, 45667), (98, 45721), (99, 45730), (100, 45739), (106, 45808), (109, 45835), (112, 45880), (114, 45907), (115, 45913), (116, 45916), (118, 45931),

Gene: GUmbie_92 Start: 51823, Stop: 52467, Start Num: 56

Candidate Starts for GUmbie_92:

(Start: 56 @51823 has 68 MA's), (72, 51880), (80, 52051), (104, 52276), (107, 52306), (109, 52324), (113, 52411),

Gene: Galactic_94 Start: 51390, Stop: 52070, Start Num: 46

Candidate Starts for Galactic_94:

(Start: 46 @51390 has 2 MA's), (Start: 48 @51399 has 1 MA's), (72, 51483), (80, 51654), (104, 51879), (107, 51909), (109, 51927),

Gene: Geralt_86 Start: 50693, Stop: 51337, Start Num: 56

Candidate Starts for Geralt_86:

(Start: 56 @50693 has 68 MA's), (72, 50750), (80, 50921), (104, 51146), (107, 51176), (109, 51194), (113, 51281),

Gene: GigiOuiOui_88 Start: 50826, Stop: 51470, Start Num: 56

Candidate Starts for GigiOuiOui_88:

(Start: 56 @50826 has 68 MA's), (72, 50883), (80, 51054), (104, 51279), (107, 51309), (109, 51327), (113, 51414),

Gene: Girafales_102 Start: 53711, Stop: 54355, Start Num: 56

Candidate Starts for Girafales_102:

(Start: 56 @53711 has 68 MA's), (Start: 65 @53741 has 1 MA's), (72, 53768), (80, 53939), (104, 54164), (107, 54194), (109, 54212), (113, 54299),

Gene: Hades_90 Start: 49413, Stop: 50057, Start Num: 56

Candidate Starts for Hades_90:

(Start: 56 @49413 has 68 MA's), (72, 49470), (80, 49641), (104, 49866), (107, 49896), (109, 49914),

Gene: Hamulus_94 Start: 51783, Stop: 52418, Start Num: 57

Candidate Starts for Hamulus_94:

(Start: 57 @51783 has 1 MA's), (Start: 65 @51807 has 1 MA's), (72, 51834), (81, 52008), (104, 52230), (107, 52260), (109, 52278), (113, 52365),

Gene: HannahD_68 Start: 44611, Stop: 45312, Start Num: 52

Candidate Starts for HannahD_68:

(Start: 52 @44611 has 9 MA's), (Start: 56 @44635 has 68 MA's), (72, 44683), (73, 44698), (77, 44752), (79, 44791), (82, 44875), (84, 44911), (86, 44953), (87, 44959), (89, 44998), (91, 45019), (93, 45028), (94, 45034), (98, 45088), (99, 45097), (100, 45106), (106, 45175), (109, 45202), (112, 45247), (114, 45274), (115, 45280), (116, 45283), (118, 45298),

Gene: Harley_96 Start: 52957, Stop: 53601, Start Num: 56

Candidate Starts for Harley_96:

(Start: 56 @52957 has 68 MA's), (72, 53014), (80, 53185), (104, 53410), (107, 53440), (109, 53458),

Gene: Hedwig_68 Start: 43118, Stop: 43780, Start Num: 62

Candidate Starts for Hedwig_68:

(17, 42770), (19, 42779), (28, 42866), (33, 42917), (47, 43055), (Start: 62 @43118 has 2 MA's), (70, 43139), (78, 43223), (84, 43379), (85, 43403), (86, 43421), (88, 43457), (89, 43466), (91, 43481), (97, 43523), (102, 43595), (103, 43610), (107, 43652), (109, 43670), (111, 43691), (112, 43715), (116, 43751),

Gene: Hegedechwinu_100 Start: 52102, Stop: 52728, Start Num: 58

Candidate Starts for Hegedechwinu_100:

(Start: 46 @52042 has 2 MA's), (Start: 48 @52051 has 1 MA's), (Start: 58 @52102 has 7 MA's), (60, 52105), (Start: 65 @52117 has 1 MA's), (72, 52144), (81, 52318), (104, 52540), (107, 52570), (109, 52588), (113, 52675),

Gene: Herod_78 Start: 51308, Stop: 51982, Start Num: 59

Candidate Starts for Herod_78:

(Start: 59 @51308 has 47 MA's), (Start: 63 @51317 has 6 MA's), (84, 51578), (89, 51662), (93, 51692), (115, 51947),

Gene: Hugley_76 Start: 51288, Stop: 51962, Start Num: 59

Candidate Starts for Hugley_76:

(Start: 59 @51288 has 47 MA's), (Start: 63 @51297 has 6 MA's), (84, 51558), (89, 51642), (93, 51672), (115, 51927),

Gene: Hyzer_94 Start: 57961, Stop: 58632, Start Num: 59

Candidate Starts for Hyzer_94:

(Start: 59 @57961 has 47 MA's), (84, 58228), (89, 58312), (93, 58342), (99, 58411), (115, 58597),

Gene: IbOuu_88 Start: 49730, Stop: 50368, Start Num: 56

Candidate Starts for IbOuu_88:

(Start: 56 @49730 has 68 MA's), (72, 49781), (80, 49952), (104, 50177), (107, 50207), (109, 50225),

Gene: Ibhubesi_91 Start: 49826, Stop: 50470, Start Num: 56

Candidate Starts for Ibhubesi_91:

(Start: 56 @49826 has 68 MA's), (72, 49883), (80, 50054), (104, 50279), (107, 50309), (109, 50327),

Gene: Inventum_91 Start: 51985, Stop: 52623, Start Num: 56

Candidate Starts for Inventum_91:

(Start: 56 @51985 has 68 MA's), (72, 52036), (80, 52207), (104, 52432), (107, 52462), (109, 52480), (113, 52567),

Gene: IrishSherpFalk_93 Start: 52251, Stop: 52895, Start Num: 56

Candidate Starts for IrishSherpFalk_93:

(Start: 56 @52251 has 68 MA's), (72, 52308), (80, 52479), (104, 52704), (107, 52734), (109, 52752), (113, 52839),

Gene: JoeyJr_96 Start: 53893, Stop: 54531, Start Num: 56

Candidate Starts for JoeyJr_96:

(Start: 56 @53893 has 68 MA's), (72, 53944), (80, 54115), (104, 54340), (107, 54370), (109, 54388), (113, 54475),

Gene: Juice456_92 Start: 51599, Stop: 52243, Start Num: 56

Candidate Starts for Juice456_92:

(Start: 56 @51599 has 68 MA's), (72, 51656), (80, 51827), (104, 52052), (107, 52082), (109, 52100), (113, 52187),

Gene: Juniper1_89 Start: 50920, Stop: 51591, Start Num: 48

Candidate Starts for Juniper1_89:

(Start: 46 @50911 has 2 MA's), (Start: 48 @50920 has 1 MA's), (72, 51004), (80, 51175), (104, 51400), (107, 51430), (109, 51448),

Gene: Kenuha5_86 Start: 51623, Stop: 52249, Start Num: 58

Candidate Starts for Kenuha5_86:

(Start: 46 @51563 has 2 MA's), (Start: 48 @51572 has 1 MA's), (Start: 58 @51623 has 7 MA's), (60, 51626), (Start: 65 @51638 has 1 MA's), (72, 51665), (81, 51839), (104, 52061), (107, 52091), (109, 52109), (113, 52196),

Gene: Kiko_63 Start: 42578, Stop: 43237, Start Num: 64

Candidate Starts for Kiko_63:

(44, 42497), (Start: 52 @42533 has 9 MA's), (54, 42545), (61, 42572), (Start: 64 @42578 has 1 MA's), (77, 42674), (85, 42860), (86, 42878), (89, 42923), (91, 42938), (95, 42959), (97, 42980), (102, 43052), (105, 43091), (109, 43127), (111, 43148), (112, 43172), (116, 43208),

Gene: Kimberlium_95 Start: 51699, Stop: 52343, Start Num: 56

Candidate Starts for Kimberlium_95:

(Start: 56 @51699 has 68 MA's), (72, 51756), (80, 51927), (104, 52152), (107, 52182), (109, 52200), (113, 52287),

Gene: KingMidas_93 Start: 52119, Stop: 52760, Start Num: 56

Candidate Starts for KingMidas_93:

(Start: 56 @52119 has 68 MA's), (Start: 65 @52149 has 1 MA's), (72, 52176), (81, 52350), (104, 52572), (107, 52602), (109, 52620), (113, 52707),

Gene: Kita_75 Start: 47955, Stop: 48629, Start Num: 59

Candidate Starts for Kita_75:

(Start: 59 @47955 has 47 MA's), (Start: 63 @47964 has 6 MA's), (84, 48225), (89, 48309), (93, 48339), (115, 48594),

Gene: KristaRAM_97 Start: 52508, Stop: 53104, Start Num: 59

Candidate Starts for KristaRAM_97:

(Start: 59 @52508 has 47 MA's), (72, 52544), (113, 53057), (115, 53066), (117, 53072),

Gene: Leperchaun_95 Start: 53127, Stop: 53765, Start Num: 56

Candidate Starts for Leperchaun_95:

(Start: 56 @53127 has 68 MA's), (72, 53178), (80, 53349), (104, 53574), (107, 53604), (109, 53622), (113, 53709),

Gene: Lilas_73 Start: 50802, Stop: 51479, Start Num: 59

Candidate Starts for Lilas_73:

(21, 50499), (23, 50529), (40, 50709), (Start: 59 @50802 has 47 MA's), (Start: 63 @50811 has 6 MA's), (84, 51072), (86, 51114), (87, 51120), (89, 51159), (93, 51189), (115, 51444),

Gene: LittleShirley_101 Start: 53432, Stop: 54073, Start Num: 56

Candidate Starts for LittleShirley_101:

(Start: 56 @53432 has 68 MA's), (Start: 65 @53462 has 1 MA's), (72, 53489), (81, 53663), (104, 53885), (107, 53915), (109, 53933), (113, 54020),

Gene: LonelyBoi_75 Start: 51902, Stop: 52579, Start Num: 59

Candidate Starts for LonelyBoi_75:

(40, 51809), (Start: 59 @51902 has 47 MA's), (Start: 63 @51911 has 6 MA's), (84, 52172), (86, 52214), (87, 52220), (89, 52259), (93, 52289), (96, 52310), (115, 52544),

Gene: Lorde_96 Start: 48902, Stop: 49540, Start Num: 56

Candidate Starts for Lorde_96:

(Start: 56 @48902 has 68 MA's), (72, 48953), (80, 49124), (104, 49349), (107, 49379), (109, 49397), (113, 49484),

Gene: LunaBlu_97 Start: 52885, Stop: 53556, Start Num: 48

Candidate Starts for LunaBlu_97:

(Start: 46 @52876 has 2 MA's), (Start: 48 @52885 has 1 MA's), (72, 52969), (80, 53140), (104, 53365), (107, 53395), (109, 53413),

Gene: Madeline_71 Start: 49286, Stop: 49951, Start Num: 59

Candidate Starts for Madeline_71:

(Start: 59 @49286 has 47 MA's), (84, 49547), (89, 49631), (93, 49661), (115, 49916),

Gene: Madiba_92 Start: 51342, Stop: 51980, Start Num: 56

Candidate Starts for Madiba_92:

(Start: 56 @51342 has 68 MA's), (72, 51393), (80, 51564), (104, 51789), (107, 51819), (109, 51837), (113, 51924),

Gene: MagicMan_68 Start: 46114, Stop: 46815, Start Num: 52

Candidate Starts for MagicMan_68:

(25, 45886), (26, 45901), (Start: 52 @46114 has 9 MA's), (Start: 56 @46138 has 68 MA's), (72, 46186), (77, 46255), (79, 46294), (82, 46378), (84, 46414), (85, 46438), (86, 46456), (87, 46462), (89, 46501), (91, 46522), (93, 46531), (94, 46537), (98, 46591), (99, 46600), (100, 46609), (106, 46678), (109, 46705), (112, 46750), (114, 46777), (116, 46786), (118, 46801),

Gene: Mahavrat_89 Start: 49940, Stop: 50620, Start Num: 46

Candidate Starts for Mahavrat_89:

(Start: 46 @49940 has 2 MA's), (Start: 48 @49949 has 1 MA's), (72, 50033), (80, 50204), (104, 50429), (107, 50459), (109, 50477),

Gene: Manasvini_76 Start: 47970, Stop: 48644, Start Num: 59

Candidate Starts for Manasvini_76:

(Start: 59 @47970 has 47 MA's), (Start: 63 @47979 has 6 MA's), (84, 48240), (89, 48324), (93, 48354), (115, 48609),

Gene: Maridalia_78 Start: 49232, Stop: 49906, Start Num: 59

Candidate Starts for Maridalia_78:

(13, 48884), (16, 48902), (Start: 59 @49232 has 47 MA's), (Start: 63 @49241 has 6 MA's), (84, 49502), (89, 49586), (93, 49616), (115, 49871),

Gene: Marteena_75 Start: 48772, Stop: 49449, Start Num: 59

Candidate Starts for Marteena_75:

(21, 48469), (23, 48499), (40, 48679), (Start: 59 @48772 has 47 MA's), (Start: 63 @48781 has 6 MA's), (84, 49042), (86, 49084), (87, 49090), (89, 49129), (93, 49159), (115, 49414),

Gene: Mcklovin_73 Start: 50813, Stop: 51487, Start Num: 59

Candidate Starts for Mcklovin_73:

(39, 50705), (Start: 59 @50813 has 47 MA's), (Start: 63 @50822 has 6 MA's), (84, 51083), (86, 51122), (87, 51128), (89, 51167), (93, 51197), (115, 51452),

Gene: MichaelScott_75 Start: 45988, Stop: 46662, Start Num: 59

Candidate Starts for MichaelScott_75:

(15, 45655), (39, 45880), (Start: 59 @45988 has 47 MA's), (Start: 63 @45997 has 6 MA's), (84, 46258), (86, 46297), (87, 46303), (89, 46342), (93, 46372), (106, 46525), (115, 46627),

Gene: MilleniumForce_93 Start: 52501, Stop: 53142, Start Num: 56

Candidate Starts for MilleniumForce_93:

(Start: 56 @52501 has 68 MA's), (Start: 65 @52531 has 1 MA's), (72, 52558), (81, 52732), (104, 52954), (107, 52984), (109, 53002), (113, 53089),

Gene: Moonbeam_96 Start: 52879, Stop: 53520, Start Num: 56

Candidate Starts for Moonbeam_96:

(Start: 56 @52879 has 68 MA's), (Start: 65 @52909 has 1 MA's), (72, 52936), (81, 53110), (104, 53332), (107, 53362), (109, 53380), (113, 53467),

Gene: Ms6_95 Start: 48665, Stop: 49306, Start Num: 56

Candidate Starts for Ms6_95:

(Start: 56 @48665 has 68 MA's), (Start: 65 @48695 has 1 MA's), (72, 48722), (81, 48896), (104, 49118), (107, 49148), (109, 49166), (113, 49253),

Gene: Neobush_76 Start: 48514, Stop: 49188, Start Num: 59

Candidate Starts for Neobush_76:

(Start: 59 @48514 has 47 MA's), (Start: 63 @48523 has 6 MA's), (84, 48784), (89, 48868), (93, 48898), (115, 49153),

Gene: Nimbo_85 Start: 50695, Stop: 51339, Start Num: 56

Candidate Starts for Nimbo_85:

(Start: 56 @50695 has 68 MA's), (72, 50752), (80, 50923), (104, 51148), (107, 51178), (109, 51196), (113, 51283),

Gene: Nymphadora_78 Start: 50922, Stop: 51587, Start Num: 63

Candidate Starts for Nymphadora_78:

(Start: 59 @50913 has 47 MA's), (Start: 63 @50922 has 6 MA's), (84, 51183), (89, 51267), (93, 51297), (115, 51552),

Gene: Ogotogo_98 Start: 51343, Stop: 51966, Start Num: 56

Candidate Starts for Ogotogo_98:

(Start: 56 @51343 has 68 MA's), (72, 51400), (76, 51451), (81, 51577), (88, 51688), (101, 51772), (110, 51844),

Gene: Ohgeesy_78 Start: 50455, Stop: 51129, Start Num: 59

Candidate Starts for Ohgeesy_78:

(Start: 59 @50455 has 47 MA's), (Start: 63 @50464 has 6 MA's), (84, 50725), (89, 50809), (93, 50839), (99, 50908), (115, 51094),

Gene: OldBen_90 Start: 52087, Stop: 52731, Start Num: 56

Candidate Starts for OldBen_90:

(Start: 56 @52087 has 68 MA's), (72, 52144), (80, 52315), (104, 52540), (107, 52570), (109, 52588), (113, 52675),

Gene: Opie_71 Start: 46229, Stop: 46930, Start Num: 52

Candidate Starts for Opie_71:

(25, 46001), (26, 46016), (Start: 52 @46229 has 9 MA's), (Start: 56 @46253 has 68 MA's), (72, 46301), (77, 46370), (79, 46409), (82, 46493), (84, 46529), (85, 46553), (86, 46571), (87, 46577), (89, 46616), (90, 46631), (93, 46646), (98, 46706), (99, 46715), (100, 46724), (103, 46766), (104, 46772), (106, 46793), (109, 46820), (112, 46865), (114, 46892), (116, 46901), (118, 46916),

Gene: Oregano_73 Start: 44851, Stop: 45516, Start Num: 63

Candidate Starts for Oregano_73:

(Start: 63 @44851 has 6 MA's), (84, 45112), (86, 45151), (87, 45157), (89, 45196), (93, 45226), (106, 45379), (115, 45481),

Gene: Ovechkin_97 Start: 52925, Stop: 53569, Start Num: 56

Candidate Starts for Ovechkin_97:

(Start: 56 @52925 has 68 MA's), (72, 52982), (80, 53153), (104, 53378), (107, 53408), (109, 53426),

Gene: PHappiness_93 Start: 52916, Stop: 53560, Start Num: 56

Candidate Starts for PHappiness_93:

(Start: 56 @52916 has 68 MA's), (72, 52973), (80, 53144), (104, 53369), (107, 53399), (109, 53417), (113, 53504),

Gene: PMC_92 Start: 51072, Stop: 51710, Start Num: 56

Candidate Starts for PMC_92:

(Start: 56 @51072 has 68 MA's), (72, 51123), (80, 51294), (104, 51519), (107, 51549), (109, 51567), (113, 51654),

Gene: PantheRoc_82 Start: 50657, Stop: 51322, Start Num: 59

Candidate Starts for PantheRoc_82:

(27, 50411), (Start: 59 @50657 has 47 MA's), (84, 50918), (89, 51002), (93, 51032), (115, 51287),

Gene: Phalconet_94 Start: 52067, Stop: 52708, Start Num: 56

Candidate Starts for Phalconet_94:

(Start: 56 @52067 has 68 MA's), (Start: 65 @52097 has 1 MA's), (72, 52124), (81, 52298), (104, 52520), (107, 52550), (109, 52568), (113, 52655),

Gene: Phatniss_91 Start: 51399, Stop: 52040, Start Num: 56

Candidate Starts for Phatniss_91:

(Start: 56 @51399 has 68 MA's), (Start: 65 @51429 has 1 MA's), (72, 51456), (81, 51630), (104, 51852), (107, 51882), (109, 51900), (113, 51987),

Gene: PhesterPhotato_96 Start: 52041, Stop: 52682, Start Num: 56

Candidate Starts for PhesterPhotato_96:

(Start: 56 @52041 has 68 MA's), (Start: 65 @52071 has 1 MA's), (72, 52098), (81, 52272), (104, 52494), (107, 52524), (109, 52542), (113, 52629),

Gene: PhriskyACE_69 Start: 44844, Stop: 45512, Start Num: 63

Candidate Starts for PhriskyACE_69:

(37, 44697), (41, 44754), (Start: 63 @44844 has 6 MA's), (84, 45105), (89, 45192), (93, 45222), (115, 45477),

Gene: Poenanya_97 Start: 53625, Stop: 54266, Start Num: 56

Candidate Starts for Poenanya_97:

(Start: 56 @53625 has 68 MA's), (Start: 65 @53655 has 1 MA's), (72, 53682), (81, 53856), (104, 54078), (107, 54108), (109, 54126), (113, 54213),

Gene: Polka14_97 Start: 53683, Stop: 54327, Start Num: 56

Candidate Starts for Polka14_97:

(Start: 56 @53683 has 68 MA's), (Start: 65 @53713 has 1 MA's), (72, 53740), (81, 53914), (104, 54136), (107, 54166), (109, 54184), (113, 54271),

Gene: Pollux_79 Start: 50729, Stop: 51406, Start Num: 59

Candidate Starts for Pollux_79:

(21, 50426), (23, 50456), (40, 50636), (Start: 59 @50729 has 47 MA's), (Start: 63 @50738 has 6 MA's), (84, 50999), (86, 51041), (87, 51047), (89, 51086), (93, 51116), (115, 51371),

Gene: Polly_71 Start: 47389, Stop: 48063, Start Num: 59

Candidate Starts for Polly_71:

(Start: 59 @47389 has 47 MA's), (Start: 63 @47398 has 6 MA's), (84, 47659), (89, 47743), (93, 47773), (115, 48028),

Gene: Powerball_70 Start: 44947, Stop: 45615, Start Num: 63

Candidate Starts for Powerball_70:

(37, 44800), (41, 44857), (Start: 63 @44947 has 6 MA's), (84, 45208), (89, 45295), (93, 45325), (115, 45580),

Gene: QuickMath_94 Start: 51951, Stop: 52595, Start Num: 56

Candidate Starts for QuickMath_94:

(Start: 56 @51951 has 68 MA's), (72, 52008), (80, 52179), (104, 52404), (107, 52434), (109, 52452), (113, 52539),

Gene: Quico_102 Start: 53926, Stop: 54570, Start Num: 56

Candidate Starts for Quico_102:

(Start: 56 @53926 has 68 MA's), (Start: 65 @53956 has 1 MA's), (72, 53983), (80, 54154), (104, 54379), (107, 54409), (109, 54427), (113, 54514),

Gene: REQ2_80 Start: 47326, Stop: 47904, Start Num: 71

Candidate Starts for REQ2_80:

(68, 47314), (71, 47326), (78, 47401), (109, 47773),

Gene: Ramsey_98 Start: 53930, Stop: 54568, Start Num: 56

Candidate Starts for Ramsey_98:

(Start: 56 @53930 has 68 MA's), (72, 53981), (80, 54152), (104, 54377), (107, 54407), (109, 54425), (113, 54512),

Gene: RayTheFireFly_71 Start: 44336, Stop: 44998, Start Num: 62

Candidate Starts for RayTheFireFly_71:

(17, 43997), (19, 44006), (22, 44039), (28, 44093), (33, 44144), (47, 44273), (Start: 62 @44336 has 2 MA's), (70, 44357), (84, 44597), (85, 44621), (86, 44639), (89, 44684), (91, 44699), (97, 44741), (102, 44813), (109, 44888), (111, 44909), (112, 44933), (116, 44969),

Gene: RedBird_94 Start: 53670, Stop: 54305, Start Num: 56

Candidate Starts for RedBird_94:

(Start: 56 @53670 has 68 MA's), (72, 53721), (80, 53892), (104, 54117), (107, 54147), (109, 54165), (113, 54252),

Gene: RitaG_92 Start: 52718, Stop: 53362, Start Num: 56

Candidate Starts for RitaG_92:

(Start: 56 @52718 has 68 MA's), (72, 52775), (80, 52946), (104, 53171), (107, 53201), (109, 53219), (113, 53306),

Gene: Rockne_96 Start: 51084, Stop: 51722, Start Num: 56

Candidate Starts for Rockne_96:

(Start: 56 @51084 has 68 MA's), (72, 51135), (80, 51306), (104, 51531), (107, 51561), (109, 51579), (113, 51666),

Gene: RockyHorror_97 Start: 51834, Stop: 52472, Start Num: 56

Candidate Starts for RockyHorror_97:

(Start: 56 @51834 has 68 MA's), (72, 51885), (80, 52056), (104, 52281), (107, 52311), (109, 52329), (113, 52416),

Gene: Royals2015_96 Start: 50949, Stop: 51593, Start Num: 53

Candidate Starts for Royals2015_96:

(Start: 53 @50949 has 3 MA's), (72, 51006), (80, 51177), (104, 51402), (107, 51432), (109, 51450),

Gene: Samman98_75 Start: 45410, Stop: 46084, Start Num: 59

Candidate Starts for Samman98_75:

(8, 45011), (9, 45026), (10, 45038), (12, 45056), (39, 45302), (Start: 59 @45410 has 47 MA's), (Start: 63 @45419 has 6 MA's), (84, 45680), (86, 45719), (87, 45725), (89, 45764), (93, 45794), (106, 45947), (115, 46049),

Gene: Sassafras_95 Start: 51984, Stop: 52622, Start Num: 56

Candidate Starts for Sassafras_95:

(Start: 56 @51984 has 68 MA's), (72, 52035), (80, 52206), (104, 52431), (107, 52461), (109, 52479), (113, 52566),

Gene: Schnabeltier_69 Start: 45411, Stop: 46112, Start Num: 52

Candidate Starts for Schnabeltier_69:

(Start: 52 @45411 has 9 MA's), (Start: 56 @45435 has 68 MA's), (69, 45468), (72, 45483), (77, 45552), (79, 45591), (82, 45675), (83, 45705), (84, 45711), (85, 45735), (86, 45753), (87, 45759), (89, 45798), (90, 45813), (91, 45819), (93, 45828), (98, 45888), (99, 45897), (100, 45906), (106, 45975), (109, 46002), (112, 46047), (114, 46074), (116, 46083), (118, 46098),

Gene: Scottish_93 Start: 51558, Stop: 52199, Start Num: 56

Candidate Starts for Scottish_93:

(Start: 56 @51558 has 68 MA's), (Start: 65 @51588 has 1 MA's), (72, 51615), (81, 51789), (104, 52011), (107, 52041), (109, 52059), (113, 52146),

Gene: Seagreen_94 Start: 52570, Stop: 53214, Start Num: 56

Candidate Starts for Seagreen_94:

(Start: 56 @52570 has 68 MA's), (Start: 65 @52600 has 1 MA's), (72, 52627), (81, 52801), (104, 53023), (107, 53053), (109, 53071), (113, 53158),

Gene: Sekhmet_74 Start: 45449, Stop: 46123, Start Num: 59

Candidate Starts for Sekhmet_74:

(39, 45341), (Start: 59 @45449 has 47 MA's), (Start: 63 @45458 has 6 MA's), (84, 45719), (86, 45758), (87, 45764), (89, 45803), (93, 45833), (106, 45986), (115, 46088),

Gene: Sidious_74 Start: 49331, Stop: 50005, Start Num: 59

Candidate Starts for Sidious_74:

(11, 48956), (40, 49238), (Start: 59 @49331 has 47 MA's), (Start: 63 @49340 has 6 MA's), (80, 49541), (84, 49601), (89, 49685), (90, 49700), (93, 49715), (99, 49784), (111, 49913), (115, 49970),

Gene: SimranZ1_89 Start: 50450, Stop: 51094, Start Num: 53

Candidate Starts for SimranZ1_89:

(Start: 53 @50450 has 3 MA's), (72, 50507), (80, 50678), (104, 50903), (107, 50933), (109, 50951),

Gene: Spikelee_94 Start: 53728, Stop: 54366, Start Num: 56

Candidate Starts for Spikelee_94:

(Start: 56 @53728 has 68 MA's), (72, 53779), (81, 53953), (104, 54175), (107, 54205), (109, 54223), (113, 54310),

Gene: Squirty_93 Start: 55759, Stop: 56403, Start Num: 56

Candidate Starts for Squirty_93:

(Start: 56 @55759 has 68 MA's), (Start: 65 @55789 has 1 MA's), (72, 55816), (81, 55990), (104, 56212), (107, 56242), (109, 56260), (113, 56347),

Gene: StAnnes_97 Start: 53486, Stop: 54127, Start Num: 56

Candidate Starts for StAnnes_97:

(Start: 56 @53486 has 68 MA's), (Start: 65 @53516 has 1 MA's), (72, 53543), (81, 53717), (104, 53939), (107, 53969), (109, 53987), (113, 54074),

Gene: Stap_88 Start: 49216, Stop: 49854, Start Num: 56

Candidate Starts for Stap_88:

(Start: 56 @49216 has 68 MA's), (72, 49267), (80, 49438), (104, 49663), (107, 49693), (109, 49711), (113, 49798),

Gene: Starcevich_95 Start: 53333, Stop: 53974, Start Num: 56

Candidate Starts for Starcevich_95:

(Start: 56 @53333 has 68 MA's), (Start: 65 @53363 has 1 MA's), (72, 53390), (81, 53564), (104, 53786), (107, 53816), (109, 53834), (113, 53921),

Gene: Suerte_68 Start: 44552, Stop: 45226, Start Num: 59

Candidate Starts for Suerte_68:

(39, 44444), (Start: 59 @44552 has 47 MA's), (Start: 63 @44561 has 6 MA's), (84, 44822), (86, 44861), (87, 44867), (89, 44906), (93, 44936), (106, 45089), (115, 45191),

Gene: Suscepit_74 Start: 47947, Stop: 48621, Start Num: 59

Candidate Starts for Suscepit_74:

(Start: 59 @47947 has 47 MA's), (Start: 63 @47956 has 6 MA's), (84, 48217), (89, 48301), (93, 48331), (115, 48586),

Gene: Taj_100 Start: 53662, Stop: 54288, Start Num: 58

Candidate Starts for Taj_100:

(Start: 46 @53602 has 2 MA's), (Start: 48 @53611 has 1 MA's), (Start: 58 @53662 has 7 MA's), (60, 53665), (Start: 65 @53677 has 1 MA's), (72, 53704), (81, 53878), (104, 54100), (107, 54130), (109, 54148), (113, 54235),

Gene: TaronosaurusRx_75 Start: 45816, Stop: 46484, Start Num: 59

Candidate Starts for TaronosaurusRx_75:

(24, 45558), (30, 45597), (32, 45630), (42, 45729), (Start: 59 @45816 has 47 MA's), (Start: 63 @45825 has 6 MA's), (67, 45834), (73, 45870), (77, 45924), (79, 45963), (82, 46047), (84, 46083), (86, 46125), (87, 46131), (89, 46170), (90, 46185), (91, 46191), (93, 46200), (99, 46269), (100, 46278), (106, 46347), (108, 46359), (109, 46374), (112, 46419), (114, 46446), (116, 46455), (118, 46470),

Gene: Tayonia_74 Start: 47946, Stop: 48620, Start Num: 59

Candidate Starts for Tayonia_74:

(Start: 59 @47946 has 47 MA's), (Start: 63 @47955 has 6 MA's), (84, 48216), (89, 48300), (93, 48330), (115, 48585),

Gene: ThankyouJordi_77 Start: 51118, Stop: 51792, Start Num: 59

Candidate Starts for ThankyouJordi_77:

(4, 50647), (40, 51025), (Start: 59 @51118 has 47 MA's), (Start: 63 @51127 has 6 MA's), (84, 51388), (89, 51472), (90, 51487), (93, 51502), (99, 51571), (115, 51757),

Gene: Thimann_74 Start: 45455, Stop: 46123, Start Num: 63

Candidate Starts for Thimann_74:

(29, 45212), (37, 45284), (40, 45362), (41, 45365), (43, 45371), (Start: 63 @45455 has 6 MA's), (84, 45716), (85, 45740), (89, 45803), (93, 45833), (115, 46088),

Gene: TimTam_78 Start: 50913, Stop: 51587, Start Num: 59

Candidate Starts for TimTam_78:

(Start: 59 @50913 has 47 MA's), (Start: 63 @50922 has 6 MA's), (84, 51183), (89, 51267), (93, 51297), (115, 51552),

Gene: Trumpet_74 Start: 47947, Stop: 48621, Start Num: 59

Candidate Starts for Trumpet_74:

(Start: 59 @47947 has 47 MA's), (Start: 63 @47956 has 6 MA's), (84, 48217), (89, 48301), (93, 48331), (115, 48586),

Gene: Tweety_94 Start: 52911, Stop: 53552, Start Num: 56

Candidate Starts for Tweety_94:

(Start: 56 @52911 has 68 MA's), (Start: 65 @52941 has 1 MA's), (72, 52968), (81, 53142), (104, 53364), (107, 53394), (109, 53412), (113, 53499),

Gene: UncleRicky_93 Start: 50958, Stop: 51596, Start Num: 56

Candidate Starts for UncleRicky_93:

(Start: 56 @50958 has 68 MA's), (72, 51009), (80, 51180), (104, 51405), (107, 51435), (109, 51453), (113, 51540),

Gene: VRedHorse_94 Start: 49768, Stop: 50412, Start Num: 56

Candidate Starts for VRedHorse_94:

(Start: 56 @49768 has 68 MA's), (72, 49825), (80, 49996), (104, 50221), (107, 50251), (109, 50269), (113, 50356),

Gene: Wachhund_91 Start: 49006, Stop: 49650, Start Num: 56

Candidate Starts for Wachhund_91:

(Start: 56 @49006 has 68 MA's), (72, 49063), (80, 49234), (104, 49459), (107, 49489), (109, 49507),

Gene: Wee_97 Start: 53738, Stop: 54364, Start Num: 58

Candidate Starts for Wee_97:

(Start: 46 @53678 has 2 MA's), (Start: 48 @53687 has 1 MA's), (Start: 58 @53738 has 7 MA's), (60, 53741), (Start: 65 @53753 has 1 MA's), (72, 53780), (81, 53954), (104, 54176), (107, 54206), (109, 54224), (113, 54311),

Gene: WelcomeAyanna_77 Start: 51265, Stop: 51939, Start Num: 59

Candidate Starts for WelcomeAyanna_77:

(4, 50794), (40, 51172), (Start: 59 @51265 has 47 MA's), (Start: 63 @51274 has 6 MA's), (84, 51535), (89, 51619), (90, 51634), (93, 51649), (99, 51718), (115, 51904),

Gene: WillSterrel_91 Start: 52284, Stop: 52928, Start Num: 56

Candidate Starts for WillSterrel_91:

(Start: 56 @52284 has 68 MA's), (72, 52341), (80, 52512), (104, 52737), (107, 52767), (109, 52785), (113, 52872),

Gene: WinkNick_75 Start: 44973, Stop: 45647, Start Num: 59

Candidate Starts for WinkNick_75:

(39, 44865), (Start: 59 @44973 has 47 MA's), (Start: 63 @44982 has 6 MA's), (84, 45243), (86, 45282), (87, 45288), (89, 45327), (93, 45357), (106, 45510), (115, 45612),

Gene: XFactor_84 Start: 50051, Stop: 50677, Start Num: 58

Candidate Starts for XFactor_84:

(Start: 46 @49991 has 2 MA's), (Start: 48 @50000 has 1 MA's), (Start: 58 @50051 has 7 MA's), (60, 50054), (Start: 65 @50066 has 1 MA's), (72, 50093), (81, 50267), (104, 50489), (107, 50519), (109, 50537), (113, 50624),

Gene: ZAYM_74 Start: 45625, Stop: 46326, Start Num: 52

Candidate Starts for ZAYM_74:

(7, 45253), (14, 45316), (18, 45337), (25, 45406), (Start: 52 @45625 has 9 MA's), (Start: 56 @45649 has 68 MA's), (69, 45682), (72, 45697), (73, 45712), (74, 45721), (77, 45766), (79, 45805), (82, 45889), (84, 45925), (86, 45967), (87, 45973), (89, 46012), (90, 46027), (91, 46033), (93, 46042), (99, 46111), (100, 46120), (106, 46189), (108, 46201), (109, 46216), (112, 46261), (114, 46288), (116, 46297), (118, 46312),

Gene: Zameen_74 Start: 47946, Stop: 48620, Start Num: 59

Candidate Starts for Zameen_74:

(Start: 59 @47946 has 47 MA's), (Start: 63 @47955 has 6 MA's), (84, 48216), (89, 48300), (93, 48330), (115, 48585),

Gene: Zirinka_73 Start: 49631, Stop: 50296, Start Num: 59

Candidate Starts for Zirinka_73:

(20, 49325), (Start: 59 @49631 has 47 MA's), (84, 49892), (89, 49976), (93, 50006), (115, 50261),