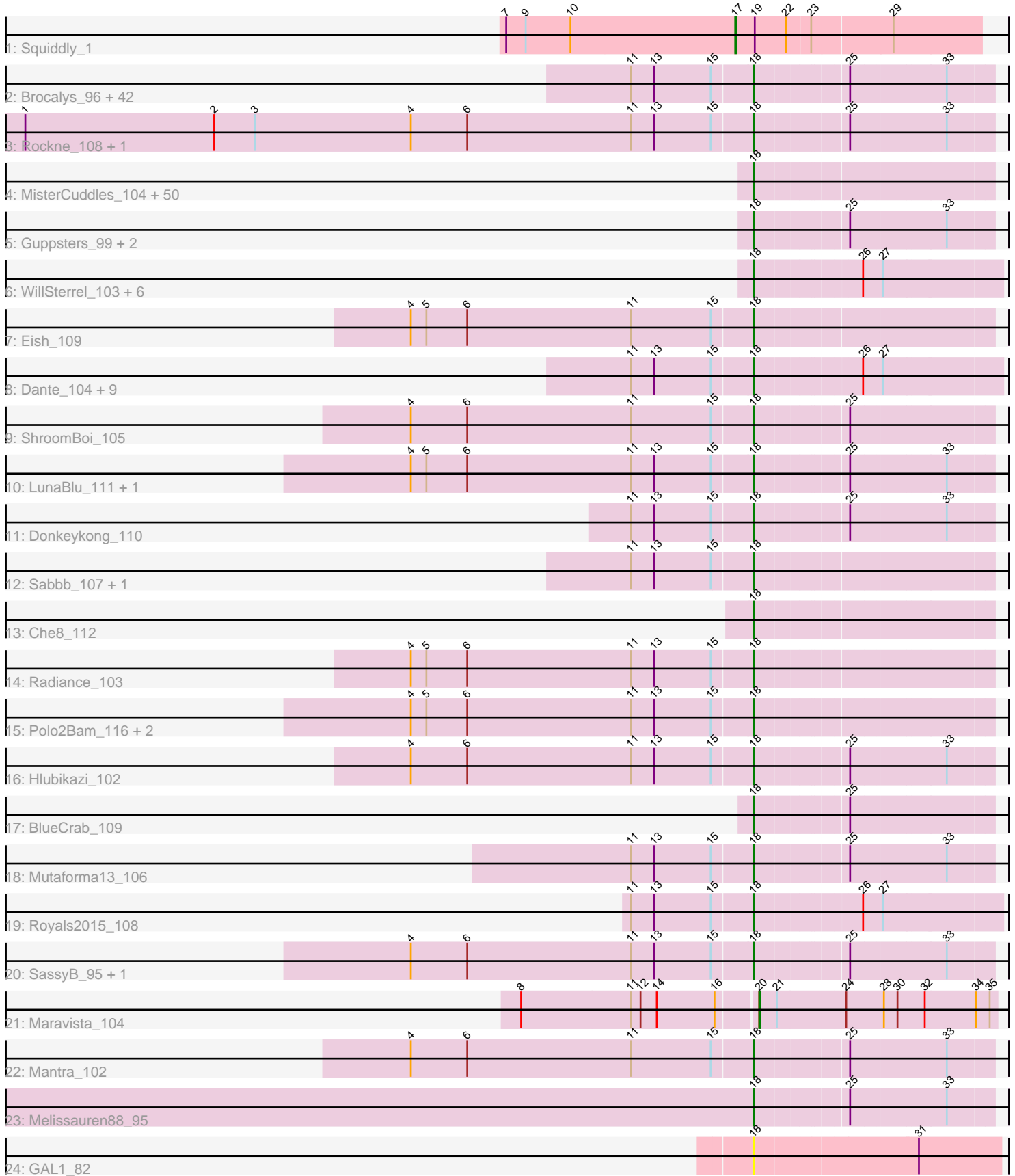


Pham 215936



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 215936 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215936 has 139 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Squiddly_1
- Track 2 : Brocalys_96, CaptainTrips_107, PhesterPhotato_109, MinionDave_103, Gorge_103, DLane_105, Moonbeam_107, Gandolph_104, MilanaBonita_98, Filuzino_105, GUmbie_104, ShowerHandel_107, Cabrinians_101, SuperGrey_103, Ms6_107, Ardmore_88, Rita_104, Philus_108, StAnnes_110, Pippy_103, KingMidas_105, Tweety_109, Florinda_117, Hamulus_105, FreddyB_113, Krakatau_97, SiSi_99, DillTech15_111, NormanBulbieJr_102, Fastidio_108, Whouxphf_108, Phalconet_106, Batiatus_105, James_108, Taj_110, Wee_109, Bipolar_106, EleanorGeorge_108, Emma_109, Kenuha5_96, Scottish_105, Veteran_94, Akhila_99
- Track 3 : Rockne_108, PMC_104
- Track 4 : MisterCuddles_104, Jarcob_107, Ruby_100, VRedHorse_105, Estave1_112, Karhdo_100, Mattes_105, Clifton_96, BodEinwohner17_116, Llama_111, Wachhund_101, RedBird_105, ByChance_95, Ochi17_110, Jinglebell_111, Seabastian_111, BobaPhett_108, Crumble_99, ShiLan_107, Nimbo_96, Byougenkin_101, OldBen_101, Sassafras_106, Leperchaun_106, JoeyJr_107, PHappiness_104, Inventum_102, MadMen_109, Lizziana_105, Priscilla_105, Deb65_97, DRBy19_104, Kersh_107, OfUltron_111, Polka14_108, RitaG_103, Ibhubesi_103, SwagPiggett_106, Phasih_100, Daenerys_102, Eradicator_95, Sparkdehlily_111, TDanisky_112, Hades_102, Girr_103, AlpineSix_102, Spoonbill_104, Geralt_97, KristaRAM_113, Modragons_107, Martik_103
- Track 5 : Guppsters_99, DoRead_112, Zizzle_108
- Track 6 : WillSterrel_103, Mahavrat_98, Maravista_102, Juniper1_98, Phanphagia_109, IrishSherpFalk_105, Shauna1_106
- Track 7 : Eish_109
- Track 8 : Dante_104, Phatniss_101, Chuckly_102, Bubbles123_100, Llij_99, Whatsapiecost_99, Burwell21_99, Minnie_99, Zerg_103, Sandalphon_103
- Track 9 : ShroomBoi_105
- Track 10 : LunaBlu_111, GigiOuiOui_99
- Track 11 : Donkeykong_110
- Track 12 : Sabbb_107, Pacc40_101
- Track 13 : Che8_112
- Track 14 : Radiance_103
- Track 15 : Polo2Bam_116, Galactic_109, NewHope4_108
- Track 16 : Hlubikazi_102
- Track 17 : BlueCrab_109

- Track 18 : Mutaforma13_106
- Track 19 : Royals2015_108
- Track 20 : SassyB_95, PopTart_95
- Track 21 : Maravista_104
- Track 22 : Mantra_102
- Track 23 : Melissauren88_95
- Track 24 : GAL1_82

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

The start number called the most often in the published annotations is 18, it was called in 131 of the 133 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_99, AlpineSix_102, Ardmore_88, Batiatus_105, Bipolar_106, BlueCrab_109, BobaPhett_108, BodEinwohner17_116, Brocalys_96, Bubbles123_100, Burwell21_99, ByChance_95, Byougenkin_101, Cabrinians_101, CaptainTrips_107, Che8_112, Chuckly_102, Clifton_96, Crumble_99, DLane_105, DRBy19_104, Daenerys_102, Dante_104, Deb65_97, DillTech15_111, DoRead_112, Donkeykong_110, Eish_109, EleanorGeorge_108, Emma_109, Eradicator_95, Estave1_112, Fastidio_108, Filuzino_105, Florinda_117, FreddyB_113, GAL1_82, GUmble_104, Galactic_109, Gandolph_104, Geralt_97, GigiOuiOui_99, Girr_103, Gorge_103, Guppsters_99, Hades_102, Hamulus_105, Hlubikazi_102, Ibhubesi_103, Inventum_102, IrishSherpFalk_105, James_108, Jarcob_107, Jinglebell_111, JoeyJr_107, Juniper1_98, Karhdo_100, Kenuha5_96, Kersh_107, KingMidas_105, Krakatau_97, KristaRAM_113, Leperchaun_106, Lizziana_105, Llama_111, Llij_99, LunaBlu_111, MadMen_109, Mahavrat_98, Mantra_102, Maravista_102, Martik_103, Mattes_105, Melissauren88_95, MilanaBonita_98, MinionDave_103, Minnie_99, MisterCuddles_104, Modragons_107, Moonbeam_107, Ms6_107, Mutaforma13_106, NewHope4_108, Nimbo_96, NormanBulbieJr_102, Ochi17_110, OfUltron_111, OldBen_101, PHappiness_104, PMC_104, Pacc40_101, Phalconet_106, Phanphagia_109, Phasih_100, Phatniss_101, PhesterPhotato_109, Philus_108, Pippy_103, Polka14_108, Polo2Bam_116, PopTart_95, Priscilla_105, Radiance_103, RedBird_105, RitaG_103, Rita_104, Rockne_108, Royals2015_108, Ruby_100, Sabbb_107, Sandalphon_103, Sassafras_106, SassyB_95, Scottish_105, Sebastian_111, Shauna1_106, ShiLan_107, ShowerHandel_107, ShroomBoi_105, SiSi_99, Sparkdehlily_111, Spoonbill_104, StAnnes_110, SuperGrey_103, SwagPiggett_106, TDanisky_112, Taj_110, Tweety_109, VRedHorse_105, Veteran_94, Wachhund_101, Wee_109, Whatsapiecost_99, Whouxphf_108, WillSterrel_103, Zerg_103, Zizzle_108,

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

-

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

- Maravista_104, Squiddly_1,

Summary by start number:

Start 17:

- Found in 1 of 139 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 133
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Squiddly_1 (DN2),

Start 18:

- Found in 137 of 139 (98.6%) of genes in pham
- Manual Annotations of this start: 131 of 133
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Akhila_99 (F1), AlpineSix_102 (F1), Ardmore_88 (F1), Batiatus_105 (F1), Bipolar_106 (F1), BlueCrab_109 (F1), BobaPhett_108 (F1), BodEinwohner17_116 (F1), Brocalys_96 (F1), Bubbles123_100 (F1), Burwell21_99 (F1), ByChance_95 (F1), Byougenkin_101 (F1), Cabrinians_101 (F1), CaptainTrips_107 (F1), Che8_112 (F1), Chuckly_102 (F1), Clifton_96 (F1), Crumble_99 (F1), DLane_105 (F1), DRBy19_104 (F1), Daenerys_102 (F1), Dante_104 (F1), Deb65_97 (F1), DillTech15_111 (F1), DoRead_112 (F1), Donkeykong_110 (F1), Eish_109 (F1), EleanorGeorge_108 (F1), Emma_109 (F1), Eradicator_95 (F1), Estave1_112 (F1), Fastidio_108 (F1), Filuzino_105 (F1), Florinda_117 (F1), FreddyB_113 (F1), GAL1_82 (singleton), GUmbie_104 (F1), Galactic_109 (F1), Gandalph_104 (F1), Geralt_97 (F1), GigiOuiOui_99 (F1), Girr_103 (F1), Gorge_103 (F1), Guppsters_99 (F1), Hades_102 (F1), Hamulus_105 (F1), Hlubikazi_102 (F1), Ibhubesi_103 (F1), Inventum_102 (F1), IrishSherpFalk_105 (F1), James_108 (F1), Jarcob_107 (F1), Jinglebell_111 (F1), JoeyJr_107 (F1), Juniper1_98 (F1), Karhdo_100 (F1), Kenuha5_96 (F1), Kersh_107 (F1), KingMidas_105 (F1), Krakatau_97 (F1), KristaRAM_113 (F1), Leperchaun_106 (F1), Lizziana_105 (F1), Llama_111 (F1), Llij_99 (F1), LunaBlu_111 (F1), MadMen_109 (F1), Mahavrat_98 (F1), Mantra_102 (F1), Maravista_102 (F1), Martik_103 (F1), Mattes_105 (F1), Melissauren88_95 (F1), MilanaBonita_98 (F1), MinionDave_103 (F1), Minnie_99 (F1), MisterCuddles_104 (F1), Modragons_107 (F1), Moonbeam_107 (F1), Ms6_107 (F1), Mutaforma13_106 (F1), NewHope4_108 (F1), Nimbo_96 (F1), NormanBulbieJr_102 (F1), Ochi17_110 (F1), OfUltron_111 (F1), OldBen_101 (F1), PHappiness_104 (F1), PMC_104 (F1), Pacc40_101 (F1), Phalconet_106 (F1), Phanphagia_109 (F1), Phasih_100 (F1), Phatniss_101 (F1), PhesterPhotato_109 (F1), Philus_108 (F1), Pippy_103 (F1), Polka14_108 (F1), Polo2Bam_116 (F1), PopTart_95 (F1), Priscilla_105 (F1), Radiance_103 (F1), RedBird_105 (F1), RitaG_103 (F1), Rita_104 (F1), Rockne_108 (F1), Royals2015_108 (F1), Ruby_100 (F1), Sabbb_107 (F1), Sandalphon_103 (F1), Sassafras_106 (F1), SassyB_95 (F1), Scottish_105 (F1), Seabastian_111 (F1), Shauna1_106 (F1), ShiLan_107 (F1), ShowerHandel_107 (F1), ShroomBoi_105 (F1), SiSi_99 (F1), Sparkdehlily_111 (F1), Spoonbill_104 (F1), StAnnes_110 (F1), SuperGrey_103 (F1), SwagPigglett_106 (F1), TDanisky_112 (F1), Taj_110 (F1), Tweety_109 (F1), VRedHorse_105 (F1), Veteran_94 (F1), Wachhund_101 (F1), Wee_109 (F1), Whatsapiecost_99 (F1), Whouxphf_108 (F1), WillSterrel_103 (F1), Zerg_103 (F1), Zizzle_108 (F1),

Start 20:

- Found in 1 of 139 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 133
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Maravista_104 (F1),

Summary by clusters:

There are 3 clusters represented in this pham: F1, singleton, DN2,

Info for manual annotations of cluster DN2:

- Start number 17 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster F1:

- Start number 18 was manually annotated 131 times for cluster F1.
- Start number 20 was manually annotated 1 time for cluster F1.

Gene Information:

Gene: Akhila_99 Start: 55783, Stop: 56109, Start Num: 18

Candidate Starts for Akhila_99:

(11, 55609), (13, 55645), (15, 55732), (Start: 18 @55783 has 131 MA's), (25, 55906), (33, 56041),

Gene: AlpineSix_102 Start: 56250, Stop: 56576, Start Num: 18

Candidate Starts for AlpineSix_102:

(Start: 18 @56250 has 131 MA's),

Gene: Ardmore_88 Start: 51672, Stop: 51998, Start Num: 18

Candidate Starts for Ardmore_88:

(11, 51498), (13, 51534), (15, 51621), (Start: 18 @51672 has 131 MA's), (25, 51795), (33, 51930),

Gene: Batiatus_105 Start: 57269, Stop: 57595, Start Num: 18

Candidate Starts for Batiatus_105:

(11, 57095), (13, 57131), (15, 57218), (Start: 18 @57269 has 131 MA's), (25, 57392), (33, 57527),

Gene: Bipolar_106 Start: 58515, Stop: 58841, Start Num: 18

Candidate Starts for Bipolar_106:

(11, 58341), (13, 58377), (15, 58464), (Start: 18 @58515 has 131 MA's), (25, 58638), (33, 58773),

Gene: BlueCrab_109 Start: 58669, Stop: 58995, Start Num: 18

Candidate Starts for BlueCrab_109:

(Start: 18 @58669 has 131 MA's), (25, 58792),

Gene: BobaPhett_108 Start: 59318, Stop: 59644, Start Num: 18

Candidate Starts for BobaPhett_108:

(Start: 18 @59318 has 131 MA's),

Gene: BodEinwohner17_116 Start: 59725, Stop: 60051, Start Num: 18

Candidate Starts for BodEinwohner17_116:

(Start: 18 @59725 has 131 MA's),

Gene: Brocalys_96 Start: 54283, Stop: 54609, Start Num: 18

Candidate Starts for Brocalys_96:

(11, 54109), (13, 54145), (15, 54232), (Start: 18 @54283 has 131 MA's), (25, 54406), (33, 54541),

Gene: Bubbles123_100 Start: 56967, Stop: 57311, Start Num: 18

Candidate Starts for Bubbles123_100:

(11, 56793), (13, 56829), (15, 56916), (Start: 18 @56967 has 131 MA's), (26, 57111), (27, 57135),

Gene: Burwell21_99 Start: 56858, Stop: 57202, Start Num: 18

Candidate Starts for Burwell21_99:
(11, 56684), (13, 56720), (15, 56807), (Start: 18 @56858 has 131 MA's), (26, 57002), (27, 57026),

Gene: ByChance_95 Start: 52655, Stop: 52981, Start Num: 18
Candidate Starts for ByChance_95:
(Start: 18 @52655 has 131 MA's),

Gene: Byougenkin_101 Start: 54217, Stop: 54543, Start Num: 18
Candidate Starts for Byougenkin_101:
(Start: 18 @54217 has 131 MA's),

Gene: Cabrinians_101 Start: 56202, Stop: 56528, Start Num: 18
Candidate Starts for Cabrinians_101:
(11, 56028), (13, 56064), (15, 56151), (Start: 18 @56202 has 131 MA's), (25, 56325), (33, 56460),

Gene: CaptainTrips_107 Start: 56860, Stop: 57186, Start Num: 18
Candidate Starts for CaptainTrips_107:
(11, 56686), (13, 56722), (15, 56809), (Start: 18 @56860 has 131 MA's), (25, 56983), (33, 57118),

Gene: Che8_112 Start: 58974, Stop: 59300, Start Num: 18
Candidate Starts for Che8_112:
(Start: 18 @58974 has 131 MA's),

Gene: Chuckly_102 Start: 53949, Stop: 54293, Start Num: 18
Candidate Starts for Chuckly_102:
(11, 53775), (13, 53811), (15, 53898), (Start: 18 @53949 has 131 MA's), (26, 54093), (27, 54117),

Gene: Clifton_96 Start: 55258, Stop: 55584, Start Num: 18
Candidate Starts for Clifton_96:
(Start: 18 @55258 has 131 MA's),

Gene: Crumble_99 Start: 52956, Stop: 53282, Start Num: 18
Candidate Starts for Crumble_99:
(Start: 18 @52956 has 131 MA's),

Gene: DLane_105 Start: 58431, Stop: 58757, Start Num: 18
Candidate Starts for DLane_105:
(11, 58257), (13, 58293), (15, 58380), (Start: 18 @58431 has 131 MA's), (25, 58554), (33, 58689),

Gene: DRBy19_104 Start: 57899, Stop: 58225, Start Num: 18
Candidate Starts for DRBy19_104:
(Start: 18 @57899 has 131 MA's),

Gene: Daenerys_102 Start: 57545, Stop: 57871, Start Num: 18
Candidate Starts for Daenerys_102:
(Start: 18 @57545 has 131 MA's),

Gene: Dante_104 Start: 58406, Stop: 58750, Start Num: 18
Candidate Starts for Dante_104:
(11, 58232), (13, 58268), (15, 58355), (Start: 18 @58406 has 131 MA's), (26, 58550), (27, 58574),

Gene: Deb65_97 Start: 55269, Stop: 55595, Start Num: 18
Candidate Starts for Deb65_97:

(Start: 18 @55269 has 131 MA's),

Gene: DillTech15_111 Start: 57330, Stop: 57656, Start Num: 18

Candidate Starts for DillTech15_111:

(11, 57156), (13, 57192), (15, 57279), (Start: 18 @57330 has 131 MA's), (25, 57453), (33, 57588),

Gene: DoRead_112 Start: 55713, Stop: 56039, Start Num: 18

Candidate Starts for DoRead_112:

(Start: 18 @55713 has 131 MA's), (25, 55836), (33, 55971),

Gene: Donkeykong_110 Start: 59010, Stop: 59336, Start Num: 18

Candidate Starts for Donkeykong_110:

(11, 58836), (13, 58872), (15, 58959), (Start: 18 @59010 has 131 MA's), (25, 59133), (33, 59268),

Gene: Eish_109 Start: 57682, Stop: 58008, Start Num: 18

Candidate Starts for Eish_109:

(4, 57169), (5, 57193), (6, 57256), (11, 57508), (15, 57631), (Start: 18 @57682 has 131 MA's),

Gene: EleanorGeorge_108 Start: 59015, Stop: 59341, Start Num: 18

Candidate Starts for EleanorGeorge_108:

(11, 58841), (13, 58877), (15, 58964), (Start: 18 @59015 has 131 MA's), (25, 59138), (33, 59273),

Gene: Emma_109 Start: 55950, Stop: 56276, Start Num: 18

Candidate Starts for Emma_109:

(11, 55776), (13, 55812), (15, 55899), (Start: 18 @55950 has 131 MA's), (25, 56073), (33, 56208),

Gene: Eradicator_95 Start: 55231, Stop: 55557, Start Num: 18

Candidate Starts for Eradicator_95:

(Start: 18 @55231 has 131 MA's),

Gene: Estave1_112 Start: 60259, Stop: 60585, Start Num: 18

Candidate Starts for Estave1_112:

(Start: 18 @60259 has 131 MA's),

Gene: Fastidio_108 Start: 55371, Stop: 55697, Start Num: 18

Candidate Starts for Fastidio_108:

(11, 55197), (13, 55233), (15, 55320), (Start: 18 @55371 has 131 MA's), (25, 55494), (33, 55629),

Gene: Filuzino_105 Start: 58837, Stop: 59163, Start Num: 18

Candidate Starts for Filuzino_105:

(11, 58663), (13, 58699), (15, 58786), (Start: 18 @58837 has 131 MA's), (25, 58960), (33, 59095),

Gene: Florinda_117 Start: 58948, Stop: 59274, Start Num: 18

Candidate Starts for Florinda_117:

(11, 58774), (13, 58810), (15, 58897), (Start: 18 @58948 has 131 MA's), (25, 59071), (33, 59206),

Gene: FreddyB_113 Start: 57850, Stop: 58176, Start Num: 18

Candidate Starts for FreddyB_113:

(11, 57676), (13, 57712), (15, 57799), (Start: 18 @57850 has 131 MA's), (25, 57973), (33, 58108),

Gene: GAL1_82 Start: 49576, Stop: 49935, Start Num: 18

Candidate Starts for GAL1_82:

(Start: 18 @49576 has 131 MA's), (31, 49810),

Gene: GUmbie_104 Start: 56919, Stop: 57245, Start Num: 18
Candidate Starts for GUmbie_104:
(11, 56745), (13, 56781), (15, 56868), (Start: 18 @56919 has 131 MA's), (25, 57042), (33, 57177),

Gene: Galactic_109 Start: 57393, Stop: 57719, Start Num: 18
Candidate Starts for Galactic_109:
(4, 56880), (5, 56904), (6, 56967), (11, 57219), (13, 57255), (15, 57342), (Start: 18 @57393 has 131 MA's),

Gene: Gandalph_104 Start: 54506, Stop: 54832, Start Num: 18
Candidate Starts for Gandalph_104:
(11, 54332), (13, 54368), (15, 54455), (Start: 18 @54506 has 131 MA's), (25, 54629), (33, 54764),

Gene: Geralt_97 Start: 55267, Stop: 55593, Start Num: 18
Candidate Starts for Geralt_97:
(Start: 18 @55267 has 131 MA's),

Gene: GigiOuiOui_99 Start: 55921, Stop: 56247, Start Num: 18
Candidate Starts for GigiOuiOui_99:
(4, 55408), (5, 55432), (6, 55495), (11, 55747), (13, 55783), (15, 55870), (Start: 18 @55921 has 131 MA's), (25, 56044), (33, 56179),

Gene: Girr_103 Start: 57256, Stop: 57582, Start Num: 18
Candidate Starts for Girr_103:
(Start: 18 @57256 has 131 MA's),

Gene: Gorge_103 Start: 57487, Stop: 57813, Start Num: 18
Candidate Starts for Gorge_103:
(11, 57313), (13, 57349), (15, 57436), (Start: 18 @57487 has 131 MA's), (25, 57610), (33, 57745),

Gene: Guppsters_99 Start: 54367, Stop: 54693, Start Num: 18
Candidate Starts for Guppsters_99:
(Start: 18 @54367 has 131 MA's), (25, 54490), (33, 54625),

Gene: Hades_102 Start: 54518, Stop: 54844, Start Num: 18
Candidate Starts for Hades_102:
(Start: 18 @54518 has 131 MA's),

Gene: Hamulus_105 Start: 56687, Stop: 57013, Start Num: 18
Candidate Starts for Hamulus_105:
(11, 56513), (13, 56549), (15, 56636), (Start: 18 @56687 has 131 MA's), (25, 56810), (33, 56945),

Gene: Hlubikazi_102 Start: 55002, Stop: 55328, Start Num: 18
Candidate Starts for Hlubikazi_102:
(4, 54489), (6, 54576), (11, 54828), (13, 54864), (15, 54951), (Start: 18 @55002 has 131 MA's), (25, 55125), (33, 55260),

Gene: Ibhubesi_103 Start: 55132, Stop: 55458, Start Num: 18
Candidate Starts for Ibhubesi_103:
(Start: 18 @55132 has 131 MA's),

Gene: Inventum_102 Start: 56555, Stop: 56881, Start Num: 18

Candidate Starts for Inventum_102:
(Start: 18 @56555 has 131 MA's),

Gene: IrishSherpFalk_105 Start: 57329, Stop: 57673, Start Num: 18
Candidate Starts for IrishSherpFalk_105:
(Start: 18 @57329 has 131 MA's), (26, 57473), (27, 57497),

Gene: James_108 Start: 59148, Stop: 59474, Start Num: 18
Candidate Starts for James_108:
(11, 58974), (13, 59010), (15, 59097), (Start: 18 @59148 has 131 MA's), (25, 59271), (33, 59406),

Gene: Jarcob_107 Start: 58468, Stop: 58794, Start Num: 18
Candidate Starts for Jarcob_107:
(Start: 18 @58468 has 131 MA's),

Gene: Jinglebell_111 Start: 58360, Stop: 58686, Start Num: 18
Candidate Starts for Jinglebell_111:
(Start: 18 @58360 has 131 MA's),

Gene: JoeyJr_107 Start: 58463, Stop: 58789, Start Num: 18
Candidate Starts for JoeyJr_107:
(Start: 18 @58463 has 131 MA's),

Gene: Juniper1_98 Start: 56030, Stop: 56374, Start Num: 18
Candidate Starts for Juniper1_98:
(Start: 18 @56030 has 131 MA's), (26, 56174), (27, 56198),

Gene: Karhdo_100 Start: 54911, Stop: 55237, Start Num: 18
Candidate Starts for Karhdo_100:
(Start: 18 @54911 has 131 MA's),

Gene: Kenuha5_96 Start: 56035, Stop: 56361, Start Num: 18
Candidate Starts for Kenuha5_96:
(11, 55861), (13, 55897), (15, 55984), (Start: 18 @56035 has 131 MA's), (25, 56158), (33, 56293),

Gene: Kersh_107 Start: 59723, Stop: 60049, Start Num: 18
Candidate Starts for Kersh_107:
(Start: 18 @59723 has 131 MA's),

Gene: KingMidas_105 Start: 56917, Stop: 57243, Start Num: 18
Candidate Starts for KingMidas_105:
(11, 56743), (13, 56779), (15, 56866), (Start: 18 @56917 has 131 MA's), (25, 57040), (33, 57175),

Gene: Krakatau_97 Start: 52590, Stop: 52916, Start Num: 18
Candidate Starts for Krakatau_97:
(11, 52416), (13, 52452), (15, 52539), (Start: 18 @52590 has 131 MA's), (25, 52713), (33, 52848),

Gene: KristaRAM_113 Start: 58232, Stop: 58558, Start Num: 18
Candidate Starts for KristaRAM_113:
(Start: 18 @58232 has 131 MA's),

Gene: Leperchaun_106 Start: 57697, Stop: 58023, Start Num: 18
Candidate Starts for Leperchaun_106:

(Start: 18 @57697 has 131 MA's),

Gene: Lizziana_105 Start: 57926, Stop: 58252, Start Num: 18

Candidate Starts for Lizziana_105:

(Start: 18 @57926 has 131 MA's),

Gene: Llama_111 Start: 58003, Stop: 58329, Start Num: 18

Candidate Starts for Llama_111:

(Start: 18 @58003 has 131 MA's),

Gene: Llij_99 Start: 55622, Stop: 55966, Start Num: 18

Candidate Starts for Llij_99:

(11, 55448), (13, 55484), (15, 55571), (Start: 18 @55622 has 131 MA's), (26, 55766), (27, 55790),

Gene: LunaBlu_111 Start: 58815, Stop: 59141, Start Num: 18

Candidate Starts for LunaBlu_111:

(4, 58302), (5, 58326), (6, 58389), (11, 58641), (13, 58677), (15, 58764), (Start: 18 @58815 has 131 MA's), (25, 58938), (33, 59073),

Gene: MadMen_109 Start: 57291, Stop: 57617, Start Num: 18

Candidate Starts for MadMen_109:

(Start: 18 @57291 has 131 MA's),

Gene: Mahavrat_98 Start: 54698, Stop: 55042, Start Num: 18

Candidate Starts for Mahavrat_98:

(Start: 18 @54698 has 131 MA's), (26, 54842), (27, 54866),

Gene: Mantra_102 Start: 56533, Stop: 56859, Start Num: 18

Candidate Starts for Mantra_102:

(4, 56020), (6, 56107), (11, 56359), (15, 56482), (Start: 18 @56533 has 131 MA's), (25, 56656), (33, 56791),

Gene: Maravista_102 Start: 58887, Stop: 59231, Start Num: 18

Candidate Starts for Maravista_102:

(Start: 18 @58887 has 131 MA's), (26, 59031), (27, 59055),

Gene: Maravista_104 Start: 59702, Stop: 60061, Start Num: 20

Candidate Starts for Maravista_104:

(8, 59351), (11, 59519), (12, 59534), (14, 59558), (16, 59645), (Start: 20 @59702 has 1 MA's), (21, 59729), (24, 59831), (28, 59888), (30, 59909), (32, 59951), (34, 60029), (35, 60050),

Gene: Martik_103 Start: 58387, Stop: 58713, Start Num: 18

Candidate Starts for Martik_103:

(Start: 18 @58387 has 131 MA's),

Gene: Mattes_105 Start: 57605, Stop: 57931, Start Num: 18

Candidate Starts for Mattes_105:

(Start: 18 @57605 has 131 MA's),

Gene: Melissauren88_95 Start: 53888, Stop: 54214, Start Num: 18

Candidate Starts for Melissauren88_95:

(Start: 18 @53888 has 131 MA's), (25, 54011), (33, 54146),

Gene: MilanaBonita_98 Start: 55783, Stop: 56109, Start Num: 18
Candidate Starts for MilanaBonita_98:
(11, 55609), (13, 55645), (15, 55732), (Start: 18 @55783 has 131 MA's), (25, 55906), (33, 56041),

Gene: MinionDave_103 Start: 57559, Stop: 57885, Start Num: 18
Candidate Starts for MinionDave_103:
(11, 57385), (13, 57421), (15, 57508), (Start: 18 @57559 has 131 MA's), (25, 57682), (33, 57817),

Gene: Minnie_99 Start: 58017, Stop: 58361, Start Num: 18
Candidate Starts for Minnie_99:
(11, 57843), (13, 57879), (15, 57966), (Start: 18 @58017 has 131 MA's), (26, 58161), (27, 58185),

Gene: MisterCuddles_104 Start: 57256, Stop: 57582, Start Num: 18
Candidate Starts for MisterCuddles_104:
(Start: 18 @57256 has 131 MA's),

Gene: Modragons_107 Start: 57991, Stop: 58317, Start Num: 18
Candidate Starts for Modragons_107:
(Start: 18 @57991 has 131 MA's),

Gene: Moonbeam_107 Start: 57515, Stop: 57841, Start Num: 18
Candidate Starts for Moonbeam_107:
(11, 57341), (13, 57377), (15, 57464), (Start: 18 @57515 has 131 MA's), (25, 57638), (33, 57773),

Gene: Ms6_107 Start: 53778, Stop: 54104, Start Num: 18
Candidate Starts for Ms6_107:
(11, 53604), (13, 53640), (15, 53727), (Start: 18 @53778 has 131 MA's), (25, 53901), (33, 54036),

Gene: Mutaforma13_106 Start: 57233, Stop: 57559, Start Num: 18
Candidate Starts for Mutaforma13_106:
(11, 57059), (13, 57095), (15, 57182), (Start: 18 @57233 has 131 MA's), (25, 57356), (33, 57491),

Gene: NewHope4_108 Start: 56941, Stop: 57267, Start Num: 18
Candidate Starts for NewHope4_108:
(4, 56428), (5, 56452), (6, 56515), (11, 56767), (13, 56803), (15, 56890), (Start: 18 @56941 has 131 MA's),

Gene: Nimbo_96 Start: 55269, Stop: 55595, Start Num: 18
Candidate Starts for Nimbo_96:
(Start: 18 @55269 has 131 MA's),

Gene: NormanBulbieJr_102 Start: 57635, Stop: 57961, Start Num: 18
Candidate Starts for NormanBulbieJr_102:
(11, 57461), (13, 57497), (15, 57584), (Start: 18 @57635 has 131 MA's), (25, 57758), (33, 57893),

Gene: Ochi17_110 Start: 57598, Stop: 57924, Start Num: 18
Candidate Starts for Ochi17_110:
(Start: 18 @57598 has 131 MA's),

Gene: OfUltron_111 Start: 58147, Stop: 58473, Start Num: 18
Candidate Starts for OfUltron_111:
(Start: 18 @58147 has 131 MA's),

Gene: OldBen_101 Start: 56661, Stop: 56987, Start Num: 18
Candidate Starts for OldBen_101:
(Start: 18 @56661 has 131 MA's),

Gene: PHappiness_104 Start: 57490, Stop: 57816, Start Num: 18
Candidate Starts for PHappiness_104:
(Start: 18 @57490 has 131 MA's),

Gene: PMC_104 Start: 56224, Stop: 56550, Start Num: 18
Candidate Starts for PMC_104:
(1, 55117), (2, 55408), (3, 55471), (4, 55711), (6, 55798), (11, 56050), (13, 56086), (15, 56173), (Start: 18 @56224 has 131 MA's), (25, 56347), (33, 56482),

Gene: Pacc40_101 Start: 58086, Stop: 58412, Start Num: 18
Candidate Starts for Pacc40_101:
(11, 57912), (13, 57948), (15, 58035), (Start: 18 @58086 has 131 MA's),

Gene: Phalconet_106 Start: 57180, Stop: 57506, Start Num: 18
Candidate Starts for Phalconet_106:
(11, 57006), (13, 57042), (15, 57129), (Start: 18 @57180 has 131 MA's), (25, 57303), (33, 57438),

Gene: Phanphagia_109 Start: 58459, Stop: 58803, Start Num: 18
Candidate Starts for Phanphagia_109:
(Start: 18 @58459 has 131 MA's), (26, 58603), (27, 58627),

Gene: Phasih_100 Start: 55657, Stop: 55983, Start Num: 18
Candidate Starts for Phasih_100:
(Start: 18 @55657 has 131 MA's),

Gene: Phatniss_101 Start: 56036, Stop: 56380, Start Num: 18
Candidate Starts for Phatniss_101:
(11, 55862), (13, 55898), (15, 55985), (Start: 18 @56036 has 131 MA's), (26, 56180), (27, 56204),

Gene: PhesterPhotato_109 Start: 57154, Stop: 57480, Start Num: 18
Candidate Starts for PhesterPhotato_109:
(11, 56980), (13, 57016), (15, 57103), (Start: 18 @57154 has 131 MA's), (25, 57277), (33, 57412),

Gene: Philus_108 Start: 58766, Stop: 59092, Start Num: 18
Candidate Starts for Philus_108:
(11, 58592), (13, 58628), (15, 58715), (Start: 18 @58766 has 131 MA's), (25, 58889), (33, 59024),

Gene: Pippy_103 Start: 56195, Stop: 56521, Start Num: 18
Candidate Starts for Pippy_103:
(11, 56021), (13, 56057), (15, 56144), (Start: 18 @56195 has 131 MA's), (25, 56318), (33, 56453),

Gene: Polka14_108 Start: 58259, Stop: 58585, Start Num: 18
Candidate Starts for Polka14_108:
(Start: 18 @58259 has 131 MA's),

Gene: Polo2Bam_116 Start: 56795, Stop: 57121, Start Num: 18
Candidate Starts for Polo2Bam_116:
(4, 56282), (5, 56306), (6, 56369), (11, 56621), (13, 56657), (15, 56744), (Start: 18 @56795 has 131 MA's),

Gene: PopTart_95 Start: 54627, Stop: 54953, Start Num: 18
Candidate Starts for PopTart_95:
(4, 54114), (6, 54201), (11, 54453), (13, 54489), (15, 54576), (Start: 18 @54627 has 131 MA's), (25, 54750), (33, 54885),

Gene: Priscilla_105 Start: 57733, Stop: 58059, Start Num: 18
Candidate Starts for Priscilla_105:
(Start: 18 @57733 has 131 MA's),

Gene: Radiance_103 Start: 56827, Stop: 57153, Start Num: 18
Candidate Starts for Radiance_103:
(4, 56314), (5, 56338), (6, 56401), (11, 56653), (13, 56689), (15, 56776), (Start: 18 @56827 has 131 MA's),

Gene: RedBird_105 Start: 58237, Stop: 58563, Start Num: 18
Candidate Starts for RedBird_105:
(Start: 18 @58237 has 131 MA's),

Gene: Rita_104 Start: 58303, Stop: 58629, Start Num: 18
Candidate Starts for Rita_104:
(11, 58129), (13, 58165), (15, 58252), (Start: 18 @58303 has 131 MA's), (25, 58426), (33, 58561),

Gene: RitaG_103 Start: 57292, Stop: 57618, Start Num: 18
Candidate Starts for RitaG_103:
(Start: 18 @57292 has 131 MA's),

Gene: Rockne_108 Start: 56236, Stop: 56562, Start Num: 18
Candidate Starts for Rockne_108:
(1, 55129), (2, 55420), (3, 55483), (4, 55723), (6, 55810), (11, 56062), (13, 56098), (15, 56185), (Start: 18 @56236 has 131 MA's), (25, 56359), (33, 56494),

Gene: Royals2015_108 Start: 56107, Stop: 56451, Start Num: 18
Candidate Starts for Royals2015_108:
(11, 55933), (13, 55969), (15, 56056), (Start: 18 @56107 has 131 MA's), (26, 56251), (27, 56275),

Gene: Ruby_100 Start: 57258, Stop: 57584, Start Num: 18
Candidate Starts for Ruby_100:
(Start: 18 @57258 has 131 MA's),

Gene: Sabbb_107 Start: 55263, Stop: 55589, Start Num: 18
Candidate Starts for Sabbb_107:
(11, 55089), (13, 55125), (15, 55212), (Start: 18 @55263 has 131 MA's),

Gene: Sandalphon_103 Start: 58290, Stop: 58634, Start Num: 18
Candidate Starts for Sandalphon_103:
(11, 58116), (13, 58152), (15, 58239), (Start: 18 @58290 has 131 MA's), (26, 58434), (27, 58458),

Gene: Sassafras_106 Start: 56554, Stop: 56880, Start Num: 18
Candidate Starts for Sassafras_106:
(Start: 18 @56554 has 131 MA's),

Gene: SassyB_95 Start: 54627, Stop: 54953, Start Num: 18

Candidate Starts for SassyB_95:
(4, 54114), (6, 54201), (11, 54453), (13, 54489), (15, 54576), (Start: 18 @54627 has 131 MA's), (25, 54750), (33, 54885),

Gene: Scottish_105 Start: 56356, Stop: 56682, Start Num: 18
Candidate Starts for Scottish_105:
(11, 56182), (13, 56218), (15, 56305), (Start: 18 @56356 has 131 MA's), (25, 56479), (33, 56614),

Gene: Seabastian_111 Start: 58148, Stop: 58474, Start Num: 18
Candidate Starts for Seabastian_111:
(Start: 18 @58148 has 131 MA's),

Gene: Shauna1_106 Start: 58075, Stop: 58419, Start Num: 18
Candidate Starts for Shauna1_106:
(Start: 18 @58075 has 131 MA's), (26, 58219), (27, 58243),

Gene: ShiLan_107 Start: 59324, Stop: 59650, Start Num: 18
Candidate Starts for ShiLan_107:
(Start: 18 @59324 has 131 MA's),

Gene: ShowerHandel_107 Start: 57093, Stop: 57419, Start Num: 18
Candidate Starts for ShowerHandel_107:
(11, 56919), (13, 56955), (15, 57042), (Start: 18 @57093 has 131 MA's), (25, 57216), (33, 57351),

Gene: ShroomBoi_105 Start: 57753, Stop: 58079, Start Num: 18
Candidate Starts for ShroomBoi_105:
(4, 57240), (6, 57327), (11, 57579), (15, 57702), (Start: 18 @57753 has 131 MA's), (25, 57876),

Gene: SiSi_99 Start: 55811, Stop: 56137, Start Num: 18
Candidate Starts for SiSi_99:
(11, 55637), (13, 55673), (15, 55760), (Start: 18 @55811 has 131 MA's), (25, 55934), (33, 56069),

Gene: Sparkdehlily_111 Start: 55806, Stop: 56132, Start Num: 18
Candidate Starts for Sparkdehlily_111:
(Start: 18 @55806 has 131 MA's),

Gene: Spoonbill_104 Start: 55237, Stop: 55563, Start Num: 18
Candidate Starts for Spoonbill_104:
(Start: 18 @55237 has 131 MA's),

Gene: Squiddly_1 Start: 362, Stop: 730, Start Num: 17
Candidate Starts for Squiddly_1:
(7, 11), (9, 41), (10, 110), (Start: 17 @362 has 1 MA's), (19, 392), (22, 440), (23, 476), (29, 596),

Gene: StAnnes_110 Start: 58889, Stop: 59215, Start Num: 18
Candidate Starts for StAnnes_110:
(11, 58715), (13, 58751), (15, 58838), (Start: 18 @58889 has 131 MA's), (25, 59012), (33, 59147),

Gene: SuperGrey_103 Start: 58875, Stop: 59201, Start Num: 18
Candidate Starts for SuperGrey_103:
(11, 58701), (13, 58737), (15, 58824), (Start: 18 @58875 has 131 MA's), (25, 58998), (33, 59133),

Gene: SwagPiggett_106 Start: 58433, Stop: 58759, Start Num: 18

Candidate Starts for SwagPiggett_106:

(Start: 18 @58433 has 131 MA's),

Gene: TDanisky_112 Start: 55806, Stop: 56132, Start Num: 18

Candidate Starts for TDanisky_112:

(Start: 18 @55806 has 131 MA's),

Gene: Taj_110 Start: 58080, Stop: 58430, Start Num: 18

Candidate Starts for Taj_110:

(11, 57906), (13, 57942), (15, 58029), (Start: 18 @58080 has 131 MA's), (25, 58203), (33, 58338),

Gene: Tweety_109 Start: 58225, Stop: 58551, Start Num: 18

Candidate Starts for Tweety_109:

(11, 58051), (13, 58087), (15, 58174), (Start: 18 @58225 has 131 MA's), (25, 58348), (33, 58483),

Gene: VRedHorse_105 Start: 54331, Stop: 54657, Start Num: 18

Candidate Starts for VRedHorse_105:

(Start: 18 @54331 has 131 MA's),

Gene: Veteran_94 Start: 55679, Stop: 56005, Start Num: 18

Candidate Starts for Veteran_94:

(11, 55505), (13, 55541), (15, 55628), (Start: 18 @55679 has 131 MA's), (25, 55802), (33, 55937),

Gene: Wachhund_101 Start: 54046, Stop: 54372, Start Num: 18

Candidate Starts for Wachhund_101:

(Start: 18 @54046 has 131 MA's),

Gene: Wee_109 Start: 58763, Stop: 59089, Start Num: 18

Candidate Starts for Wee_109:

(11, 58589), (13, 58625), (15, 58712), (Start: 18 @58763 has 131 MA's), (25, 58886), (33, 59021),

Gene: Whatsapiecost_99 Start: 52358, Stop: 52702, Start Num: 18

Candidate Starts for Whatsapiecost_99:

(11, 52184), (13, 52220), (15, 52307), (Start: 18 @52358 has 131 MA's), (26, 52502), (27, 52526),

Gene: Whouxphf_108 Start: 58625, Stop: 58951, Start Num: 18

Candidate Starts for Whouxphf_108:

(11, 58451), (13, 58487), (15, 58574), (Start: 18 @58625 has 131 MA's), (25, 58748), (33, 58883),

Gene: WillSterrel_103 Start: 57362, Stop: 57706, Start Num: 18

Candidate Starts for WillSterrel_103:

(Start: 18 @57362 has 131 MA's), (26, 57506), (27, 57530),

Gene: Zerg_103 Start: 56837, Stop: 57181, Start Num: 18

Candidate Starts for Zerg_103:

(11, 56663), (13, 56699), (15, 56786), (Start: 18 @56837 has 131 MA's), (26, 56981), (27, 57005),

Gene: Zizzle_108 Start: 58913, Stop: 59239, Start Num: 18

Candidate Starts for Zizzle_108:

(Start: 18 @58913 has 131 MA's), (25, 59036), (33, 59171),