

Pham 311291



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 311291 Report

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

Pham number 311291 has 168 members, 28 are drafts.

Phages represented in each track:

- Track 1 : Clank_98
- Track 2 : Flathead_102, Brocalys_92, CaptainTrips_102, Doomslug_118, Guppsters_95, Beanstalk_96, Llama_107, DotProduct_94, KristaRAM_108, DosHalletts_97, Brushbloom_100, Clifton_92, Medindi_105, Hamulus_100, Eish_105, MisterCuddles_100, DLane_100, Zerg_98, IMpilo_98, MilleniumForce_100, Ochi17_106, Bubbles123_94, PhesterPhotato_104, Seabastian_107, MilanaBonita_93, Phalconet_101, DeadP_100, IbOuu_91, AlpineSix_98, Jennelsea_97, ShowerHandel_101, Sarma624_102, BobaPhett_102, Ardmore_84, Ms6_102, Coco12_101, Violac_101, Mozy_104, Rita_100, Philus_104, Seagreen_101, Chuckly_97, Aubs_100, LastJedi_91, Jinglebell_107, LittleShirley_108, Pippy_98, Corium_99, Cerasum_99, Okabe_92, VRedHorse_101, Nichirin_100, Girr_99, Batiatus_100, SG4_101, Cabrinians_97, Burwell21_94, Lizziana_101, OfUltron_107, Mutaforma13_101, Mova_102, Kingsley_109, Royals2015_104, Vivum_100, Hegedechwinu_108, Oksu_104, Slim_103, Filuzino_100, Karhdo_95, XFactor_91, Taj_106, Tweety_101, Firehouse51_94, James_104, Maravista_97, Emmaloid_103, SwagPiggett_102, Priscilla_101, NormanBulbieJr_98, Velveteen_97, BigPhil_97, Blexus_97, Martik_99, Jant_107, Wee_103, Melissauren88_90, Bipolar_102, PatoPoderoso_101, Phanphagia_105, Tootsieroll_94, Whatsapiecost_94, Cornucopia_100, Koella_93, Kenuha5_92, Fruitloop_98, Emma_105, Dante_98, Brookers_99, KingJulian_108, Zizzle_103, Akhila_94, Shauna1_102
- Track 3 : JalFarm20_109
- Track 4 : Stap_95
- Track 5 : DoRead_102
- Track 6 : Nitzel_94, Florinda_112, StAnnes_104, Girafales_109, Mwanjiwa_103, ShroomBoi_98, Quico_109, Job42_101
- Track 7 : Aloeri_92, ChickenDinner_91, DocMcStuffins_88
- Track 8 : Che8_107
- Track 9 : Crumble_95, OlympiaSaint_104, Sabbb_103
- Track 10 : Awesomesauce_91, Beakin_92
- Track 11 : Silverleaf_95
- Track 12 : Rose5_98, JoeDirt_98, Enceladus_93
- Track 13 : Crossroads_101
- Track 14 : Nicholasp3_100, OverPar_102, LilDestine_98, Underpass_92, Bazzle_97, Archie_97, Finemlucis_101, Itos_100, Kahlid_99, Gabriela_100, Zakai_101, SoJulia_102, Rumpelstiltskin_96, BobsGarage_99
- Track 15 : DanBing_100, Baoshan_101

- Track 16 : Rossetti_101
- Track 17 : Claus_99
- Track 18 : BourbonZero_99, KirDoubleO7_96, Ellson_97, DuncansLeg_99, LiyuLake_97
- Track 19 : Jubie_97, Finnry_98, MsGreen_98, Clautastrophe_96, Bellis_98, Samty_97
- Track 20 : Krypton555_100
- Track 21 : Douzhi_102, Bromden_102, BrainDrainer_103, Sheng711_103, PYPDinur_102, Douge_102
- Track 22 : FarmResident_103
- Track 23 : Quby_102
- Track 24 : Baudelaire_109, Aegeus_109

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

The start number called the most often in the published annotations is 22, it was called in 108 of the 140 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_94, Aloeri_92, AlpineSix_98, Ardmore_84, Aubs_100, Awesomesauce_91, Batiatus_100, Beakin_92, Beanstalk_96, BigPhil_97, Bipolar_102, Blexus_97, BobaPhett_102, Brocalys_92, Brookers_99, Brushbloom_100, Bubbles123_94, Burwell21_94, Cabrinians_97, CaptainTrips_102, Cerasum_99, Che8_107, ChickenDinner_91, Chuckly_97, Clank_98, Clifton_92, Coco12_101, Corium_99, Cornucopia_100, Crumble_95, DLane_100, Dante_98, DeadP_100, DoRead_102, DocMcStuffins_88, Doomslug_118, DosHalletts_97, DotProduct_94, Eish_105, Emma_105, Emmaloid_103, Filuzino_100, Firehouse51_94, Flathead_102, Florinda_112, Fruitloop_98, Girafales_109, Girr_99, Guppsters_95, Hamulus_100, Hegedechwinu_108, IMPilo_98, IbOuu_91, JalFarm20_109, James_104, Jant_107, Jennelsea_97, Jinglebell_107, Job42_101, Karhdo_95, Kenuha5_92, KingJulian_108, Kingsley_109, Koella_93, KristaRAM_108, LastJedi_91, LittleShirley_108, Lizziana_101, Llama_107, Maravista_97, Martik_99, Medindi_105, Melissauren88_90, MilanaBonita_93, MilleniumForce_100, MisterCuddles_100, Mova_102, Mozy_104, Ms6_102, Mutaforma13_101, Mwanjiwa_103, Nichirin_100, Nitzel_94, NormanBulbieJr_98, Ochi17_106, OfUltron_107, Okabe_92, Oksu_104, OlympiaSaint_104, PatoPoderoso_101, Phalconet_101, Phanphagia_105, PhesterPhotato_104, Philus_104, Pippy_98, Priscilla_101, Quico_109, Rita_100, Royals2015_104, SG4_101, Sabbb_103, Sarma624_102, Seabastian_107, Seagreen_101, Shauna1_102, ShowerHandel_101, ShroomBoi_98, Slim_103, StAnnes_104, Stap_95, SwagPiggett_102, Taj_106, Tootsieroll_94, Tweety_101, VRedHorse_101, Velveteen_97, Violac_101, Vivum_100, Wee_103, Whatsapiecost_94, XFactor_91, Zerg_98, Zizzle_103,

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

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

- Aegeus_109, Archie_97, Baoshan_101, Baudelaire_109, Bazzle_97, Bellis_98, BobsGarage_99, BourbonZero_99, BrainDrainer_103, Bromden_102, Claus_99, Clautastrophe_96, Crossroads_101, DanBing_100, Douge_102, Douzhi_102,

DuncansLeg_99, Ellson_97, Enceladus_93, FarmResident_103, Finemlucis_101, Finnry_98, Gabriela_100, Itos_100, JoeDirt_98, Jubie_97, Kahlid_99, KirDoubleO7_96, Krypton555_100, LilDestine_98, LiyuLake_97, MsGreen_98, Nicholasp3_100, OverPar_102, PYPDinur_102, Quby_102, Rose5_98, Rossetti_101, Rumpelstiltskin_96, Samty_97, Sheng711_103, Silverleaf_95, SoJulia_102, Underpass_92, Zakai_101,

Summary by start number:

Start 17:

- Found in 40 of 168 (23.8%) of genes in pham
- Manual Annotations of this start: 27 of 140
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aegeus_109 (L5), Archie_97 (L2), Baoshan_101 (L2), Baudelaire_109 (L5), Bazzle_97 (L2), Bellis_98 (L3), BobsGarage_99 (L2), BourbonZero_99 (L3), BrainDrainer_103 (L4), Bromden_102 (L4), Clautastrophe_96 (L3), Crossroads_101 (L2), DanBing_100 (L2), Douge_102 (L4), Douzhi_102 (L4), DuncansLeg_99 (L3), Ellson_97 (L3), FarmResident_103 (L4), Finemlucis_101 (L2), Finnry_98 (L3), Gabriela_100 (L2), Itos_100 (L2), Jubie_97 (L3), Kahlid_99 (L2), KirDoubleO7_96 (L3), Krypton555_100 (L3), LilDestine_98 (L2), LiyuLake_97 (L3), MsGreen_98 (L3), Nicholasp3_100 (L2), OverPar_102 (L2), PYPDinur_102 (L4), Quby_102 (L4), Rossetti_101 (L2), Rumpelstiltskin_96 (L2), Samty_97 (L3), Sheng711_103 (L4), SoJulia_102 (L2), Underpass_92 (L2), Zakai_101 (L2),

Start 19:

- Found in 3 of 168 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 140
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Enceladus_93 (L1), JoeDirt_98 (L1), Rose5_98 (L1),

Start 21:

- Found in 2 of 168 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 140
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Silverleaf_95 (L1),

Start 22:

- Found in 123 of 168 (73.2%) of genes in pham
- Manual Annotations of this start: 108 of 140
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Akhila_94 (F1), Aloeri_92 (F1), AlpineSix_98 (F1), Ardmore_84 (F1), Aubs_100 (F1), Awesomesauce_91 (F1), Batiatus_100 (F1), Beakin_92 (F1), Beanstalk_96 (F1), BigPhil_97 (F1), Bipolar_102 (F1), Blexus_97 (F1), BobaPhett_102 (F1), Brocalys_92 (F1), Brookers_99 (F1), Brushbloom_100 (F1), Bubbles123_94 (F1), Burwell21_94 (F1), Cabrinians_97 (F1), CaptainTrips_102 (F1), Cerasum_99 (F1), Che8_107 (F1), ChickenDinner_91 (F1), Chuckly_97 (F1), Clank_98 (F), Clifton_92 (F1), Coco12_101 (F1), Corium_99 (F1), Cornucopia_100 (F1), Crumble_95 (F1), DLane_100 (F1), Dante_98 (F1), DeadP_100 (F1), DoRead_102 (F1), DocMcStuffins_88 (F1), Doomslug_118 (F), DosHalletts_97 (F1), DotProduct_94 (F1), Eish_105 (F1), Emma_105 (F1), Emmaloid_103 (F1), Filuzino_100 (F1), Firehouse51_94 (F1), Flathead_102 (F1),

Florinda_112 (F1), Fruitloop_98 (F1), Girafales_109 (F1), Girr_99 (F1), Guppsters_95 (F1), Hamulus_100 (F1), Hegedechwinu_108 (F1), IMpilo_98 (F1), IbOuu_91 (F1), JalFarm20_109 (F1), James_104 (F1), Jant_107 (F1), Jennelsea_97 (F1), Jinglebell_107 (F1), Job42_101 (F1), Karhdo_95 (F1), Kenuha5_92 (F1), KingJulian_108 (F1), Kingsley_109 (F1), Koella_93 (F1), KristaRAM_108 (F1), LastJedi_91 (F1), LittleShirley_108 (F1), Lizziana_101 (F1), Llama_107 (F1), Maravista_97 (F1), Martik_99 (F1), Medindi_105 (F1), Melissauren88_90 (F1), MilanaBonita_93 (F1), MilleniumForce_100 (F1), MisterCuddles_100 (F1), Mova_102 (F1), Mozy_104 (F1), Ms6_102 (F1), Mutaforma13_101 (F1), Mwanjiwa_103 (F1), Nichirin_100 (F1), Nitzel_94 (F1), NormanBulbieJr_98 (F1), Ochi17_106 (F1), OfUltron_107 (F1), Okabe_92 (F8), Oksu_104 (F1), OlympiaSaint_104 (F1), PatoPoderoso_101 (F1), Phalconet_101 (F1), Phanphagia_105 (F1), PhesterPhotato_104 (F1), Philus_104 (F1), Pippy_98 (F1), Priscilla_101 (F1), Quico_109 (F1), Rita_100 (F1), Royals2015_104 (F1), SG4_101 (F1), Sabb_103 (F1), Sarma624_102 (F1), Seabastian_107 (F1), Seagreen_101 (F1), Shauna1_102 (F1), ShowerHandel_101 (F1), ShroomBoi_98 (F1), Slim_103 (F1), StAnnes_104 (F1), Stap_95 (F1), SwagPiggett_102 (F1), Taj_106 (F1), Tootsieroll_94 (F1), Tweety_101 (F1), VRedHorse_101 (F1), Velveteen_97 (F1), Violac_101 (F1), Vivum_100 (F1), Wee_103 (F1), Whatsapiecost_94 (F1), XFactor_91 (F1), Zerg_98 (F1), Zizzle_103 (F1),

Start 24:

- Found in 32 of 168 (19.0%) of genes in pham
- Manual Annotations of this start: 1 of 140
- Called 3.1% of time when present
- Phage (with cluster) where this start called: Claus_99 (L2),

Summary by clusters:

There are 8 clusters represented in this pham: F1, F, F8, L4, L5, L2, L3, L1,

Info for manual annotations of cluster F1:

- Start number 22 was manually annotated 108 times for cluster F1.

Info for manual annotations of cluster L1:

- Start number 19 was manually annotated 3 times for cluster L1.
- Start number 21 was manually annotated 1 time for cluster L1.

Info for manual annotations of cluster L2:

- Start number 17 was manually annotated 15 times for cluster L2.
- Start number 24 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L3:

- Start number 17 was manually annotated 8 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 17 was manually annotated 2 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 17 was manually annotated 2 times for cluster L5.

Gene Information:

Gene: Aegeus_109 Start: 63189, Stop: 63410, Start Num: 17

Candidate Starts for Aegeus_109:

(3, 63087), (12, 63156), (14, 63174), (16, 63180), (Start: 17 @63189 has 27 MA's), (23, 63204), (28, 63333), (30, 63354),

Gene: Akhila_94 Start: 52864, Stop: 53025, Start Num: 22

Candidate Starts for Akhila_94:

(Start: 22 @52864 has 108 MA's),

Gene: Aloeri_92 Start: 54002, Stop: 54163, Start Num: 22

Candidate Starts for Aloeri_92:

(10, 53921), (Start: 22 @54002 has 108 MA's),

Gene: AlpineSix_98 Start: 53582, Stop: 53743, Start Num: 22

Candidate Starts for AlpineSix_98:

(Start: 22 @53582 has 108 MA's),

Gene: Archie_97 Start: 61162, Stop: 61338, Start Num: 17

Candidate Starts for Archie_97:

(Start: 17 @61162 has 27 MA's), (Start: 24 @61195 has 1 MA's),

Gene: Ardmore_84 Start: 48753, Stop: 48914, Start Num: 22

Candidate Starts for Ardmore_84:

(Start: 22 @48753 has 108 MA's),

Gene: Aubs_100 Start: 55755, Stop: 55916, Start Num: 22

Candidate Starts for Aubs_100:

(Start: 22 @55755 has 108 MA's),

Gene: Awesomesauce_91 Start: 54238, Stop: 54399, Start Num: 22

Candidate Starts for Awesomesauce_91:

(Start: 22 @54238 has 108 MA's),

Gene: Baoshan_101 Start: 61947, Stop: 62117, Start Num: 17

Candidate Starts for Baoshan_101:

(5, 61857), (6, 61872), (8, 61887), (11, 61908), (Start: 17 @61947 has 27 MA's), (Start: 24 @61980 has 1 MA's),

Gene: Batiatus_100 Start: 54303, Stop: 54464, Start Num: 22

Candidate Starts for Batiatus_100:

(Start: 22 @54303 has 108 MA's),

Gene: Baudelaire_109 Start: 63189, Stop: 63410, Start Num: 17

Candidate Starts for Baudelaire_109:

(3, 63087), (12, 63156), (14, 63174), (16, 63180), (Start: 17 @63189 has 27 MA's), (23, 63204), (28, 63333), (30, 63354),

Gene: Bazzle_97 Start: 61718, Stop: 61894, Start Num: 17

Candidate Starts for Bazzle_97:

(Start: 17 @61718 has 27 MA's), (Start: 24 @61751 has 1 MA's),

Gene: Beakin_92 Start: 51276, Stop: 51437, Start Num: 22

Candidate Starts for Beakin_92:

(Start: 22 @51276 has 108 MA's),

Gene: Beanstalk_96 Start: 53453, Stop: 53614, Start Num: 22

Candidate Starts for Beanstalk_96:

(Start: 22 @53453 has 108 MA's),

Gene: Bellis_98 Start: 61495, Stop: 61671, Start Num: 17

Candidate Starts for Bellis_98:

(9, 61435), (Start: 17 @61495 has 27 MA's), (26, 61594),

Gene: BigPhil_97 Start: 51095, Stop: 51256, Start Num: 22

Candidate Starts for BigPhil_97:

(Start: 22 @51095 has 108 MA's),

Gene: Bipolar_102 Start: 56072, Stop: 56233, Start Num: 22

Candidate Starts for Bipolar_102:

(Start: 22 @56072 has 108 MA's),

Gene: Blexus_97 Start: 54682, Stop: 54843, Start Num: 22

Candidate Starts for Blexus_97:

(Start: 22 @54682 has 108 MA's),

Gene: BobaPhett_102 Start: 56361, Stop: 56522, Start Num: 22

Candidate Starts for BobaPhett_102:

(Start: 22 @56361 has 108 MA's),

Gene: BobsGarage_99 Start: 61936, Stop: 62106, Start Num: 17

Candidate Starts for BobsGarage_99:

(Start: 17 @61936 has 27 MA's), (Start: 24 @61969 has 1 MA's),

Gene: BourbonZero_99 Start: 61668, Stop: 61850, Start Num: 17

Candidate Starts for BourbonZero_99:

(Start: 17 @61668 has 27 MA's), (Start: 24 @61701 has 1 MA's),

Gene: BrainDrainer_103 Start: 61982, Stop: 62167, Start Num: 17

Candidate Starts for BrainDrainer_103:

(Start: 17 @61982 has 27 MA's), (Start: 24 @62015 has 1 MA's), (27, 62111),

Gene: Brocalys_92 Start: 51840, Stop: 52001, Start Num: 22

Candidate Starts for Brocalys_92:

(Start: 22 @51840 has 108 MA's),

Gene: Bromden_102 Start: 62718, Stop: 62903, Start Num: 17

Candidate Starts for Bromden_102:

(Start: 17 @62718 has 27 MA's), (Start: 24 @62751 has 1 MA's), (27, 62847),

Gene: Brookers_99 Start: 54046, Stop: 54207, Start Num: 22

Candidate Starts for Brookers_99:

(Start: 22 @54046 has 108 MA's),

Gene: Brushbloom_100 Start: 55347, Stop: 55508, Start Num: 22
Candidate Starts for Brushbloom_100:
(Start: 22 @55347 has 108 MA's),

Gene: Bubbles123_94 Start: 54115, Stop: 54276, Start Num: 22
Candidate Starts for Bubbles123_94:
(Start: 22 @54115 has 108 MA's),

Gene: Burwell21_94 Start: 54126, Stop: 54287, Start Num: 22
Candidate Starts for Burwell21_94:
(Start: 22 @54126 has 108 MA's),

Gene: Cabrinians_97 Start: 53761, Stop: 53922, Start Num: 22
Candidate Starts for Cabrinians_97:
(Start: 22 @53761 has 108 MA's),

Gene: CaptainTrips_102 Start: 53941, Stop: 54102, Start Num: 22
Candidate Starts for CaptainTrips_102:
(Start: 22 @53941 has 108 MA's),

Gene: Cerasum_99 Start: 51113, Stop: 51274, Start Num: 22
Candidate Starts for Cerasum_99:
(Start: 22 @51113 has 108 MA's),

Gene: Che8_107 Start: 55993, Stop: 56154, Start Num: 22
Candidate Starts for Che8_107:
(Start: 22 @55993 has 108 MA's),

Gene: ChickenDinner_91 Start: 54002, Stop: 54163, Start Num: 22
Candidate Starts for ChickenDinner_91:
(10, 53921), (Start: 22 @54002 has 108 MA's),

Gene: Chuckly_97 Start: 50983, Stop: 51144, Start Num: 22
Candidate Starts for Chuckly_97:
(Start: 22 @50983 has 108 MA's),

Gene: Clank_98 Start: 52021, Stop: 52182, Start Num: 22
Candidate Starts for Clank_98:
(Start: 22 @52021 has 108 MA's),

Gene: Claus_99 Start: 61712, Stop: 61909, Start Num: 24
Candidate Starts for Claus_99:
(Start: 21 @61679 has 1 MA's), (Start: 24 @61712 has 1 MA's), (29, 61832), (31, 61874),

Gene: Clautastrophe_96 Start: 61490, Stop: 61666, Start Num: 17
Candidate Starts for Clautastrophe_96:
(9, 61430), (Start: 17 @61490 has 27 MA's), (26, 61589),

Gene: Clifton_92 Start: 52815, Stop: 52976, Start Num: 22
Candidate Starts for Clifton_92:
(Start: 22 @52815 has 108 MA's),

Gene: Coco12_101 Start: 55170, Stop: 55331, Start Num: 22
Candidate Starts for Coco12_101:
(Start: 22 @55170 has 108 MA's),

Gene: Corium_99 Start: 55970, Stop: 56131, Start Num: 22
Candidate Starts for Corium_99:
(Start: 22 @55970 has 108 MA's),

Gene: Cornucopia_100 Start: 52241, Stop: 52402, Start Num: 22
Candidate Starts for Cornucopia_100:
(Start: 22 @52241 has 108 MA's),

Gene: Crossroads_101 Start: 61823, Stop: 61993, Start Num: 17
Candidate Starts for Crossroads_101:
(5, 61733), (8, 61763), (Start: 17 @61823 has 27 MA's), (Start: 24 @61856 has 1 MA's),

Gene: Crumble_95 Start: 50509, Stop: 50670, Start Num: 22
Candidate Starts for Crumble_95:
(1, 50290), (2, 50347), (15, 50467), (Start: 22 @50509 has 108 MA's),

Gene: DLane_100 Start: 55223, Stop: 55384, Start Num: 22
Candidate Starts for DLane_100:
(Start: 22 @55223 has 108 MA's),

Gene: DanBing_100 Start: 61639, Stop: 61809, Start Num: 17
Candidate Starts for DanBing_100:
(5, 61549), (6, 61564), (8, 61579), (11, 61600), (Start: 17 @61639 has 27 MA's), (Start: 24 @61672 has 1 MA's),

Gene: Dante_98 Start: 55573, Stop: 55734, Start Num: 22
Candidate Starts for Dante_98:
(Start: 22 @55573 has 108 MA's),

Gene: DeadP_100 Start: 52801, Stop: 52962, Start Num: 22
Candidate Starts for DeadP_100:
(Start: 22 @52801 has 108 MA's),

Gene: DoRead_102 Start: 52714, Stop: 52875, Start Num: 22
Candidate Starts for DoRead_102:
(15, 52672), (Start: 22 @52714 has 108 MA's),

Gene: DocMcStuffins_88 Start: 55632, Stop: 55793, Start Num: 22
Candidate Starts for DocMcStuffins_88:
(10, 55551), (Start: 22 @55632 has 108 MA's),

Gene: Doomslug_118 Start: 57272, Stop: 57433, Start Num: 22
Candidate Starts for Doomslug_118:
(Start: 22 @57272 has 108 MA's),

Gene: DosHalletts_97 Start: 54563, Stop: 54724, Start Num: 22
Candidate Starts for DosHalletts_97:
(Start: 22 @54563 has 108 MA's),

Gene: DotProduct_94 Start: 51930, Stop: 52091, Start Num: 22
Candidate Starts for DotProduct_94:
(Start: 22 @51930 has 108 MA's),

Gene: Douge_102 Start: 61402, Stop: 61587, Start Num: 17
Candidate Starts for Douge_102:
(Start: 17 @61402 has 27 MA's), (Start: 24 @61435 has 1 MA's), (27, 61531),

Gene: Douzhi_102 Start: 61671, Stop: 61856, Start Num: 17
Candidate Starts for Douzhi_102:
(Start: 17 @61671 has 27 MA's), (Start: 24 @61704 has 1 MA's), (27, 61800),

Gene: DuncansLeg_99 Start: 61656, Stop: 61838, Start Num: 17
Candidate Starts for DuncansLeg_99:
(Start: 17 @61656 has 27 MA's), (Start: 24 @61689 has 1 MA's),

Gene: Eish_105 Start: 55239, Stop: 55400, Start Num: 22
Candidate Starts for Eish_105:
(Start: 22 @55239 has 108 MA's),

Gene: Ellson_97 Start: 61971, Stop: 62153, Start Num: 17
Candidate Starts for Ellson_97:
(Start: 17 @61971 has 27 MA's), (Start: 24 @62004 has 1 MA's),

Gene: Emma_105 Start: 53507, Stop: 53668, Start Num: 22
Candidate Starts for Emma_105:
(Start: 22 @53507 has 108 MA's),

Gene: Emmaloid_103 Start: 54427, Stop: 54588, Start Num: 22
Candidate Starts for Emmaloid_103:
(Start: 22 @54427 has 108 MA's),

Gene: Enceladus_93 Start: 59494, Stop: 59661, Start Num: 19
Candidate Starts for Enceladus_93:
(4, 59380), (11, 59434), (13, 59449), (18, 59485), (Start: 19 @59494 has 3 MA's), (25, 59548),

Gene: FarmResident_103 Start: 61588, Stop: 61764, Start Num: 17
Candidate Starts for FarmResident_103:
(Start: 17 @61588 has 27 MA's), (Start: 24 @61621 has 1 MA's),

Gene: Filuzino_100 Start: 55918, Stop: 56079, Start Num: 22
Candidate Starts for Filuzino_100:
(Start: 22 @55918 has 108 MA's),

Gene: Finemlucis_101 Start: 62639, Stop: 62809, Start Num: 17
Candidate Starts for Finemlucis_101:
(Start: 17 @62639 has 27 MA's), (Start: 24 @62672 has 1 MA's),

Gene: Finnry_98 Start: 61843, Stop: 62019, Start Num: 17
Candidate Starts for Finnry_98:
(9, 61783), (Start: 17 @61843 has 27 MA's), (26, 61942),

Gene: Firehouse51_94 Start: 54735, Stop: 54896, Start Num: 22

Candidate Starts for Firehouse51_94:
(Start: 22 @54735 has 108 MA's),

Gene: Flathead_102 Start: 54239, Stop: 54400, Start Num: 22
Candidate Starts for Flathead_102:
(Start: 22 @54239 has 108 MA's),

Gene: Florinda_112 Start: 56324, Stop: 56485, Start Num: 22
Candidate Starts for Florinda_112:
(Start: 22 @56324 has 108 MA's),

Gene: Fruitloop_98 Start: 55083, Stop: 55244, Start Num: 22
Candidate Starts for Fruitloop_98:
(Start: 22 @55083 has 108 MA's),

Gene: Gabriela_100 Start: 60925, Stop: 61095, Start Num: 17
Candidate Starts for Gabriela_100:
(Start: 17 @60925 has 27 MA's), (Start: 24 @60958 has 1 MA's),

Gene: Girafales_109 Start: 55929, Stop: 56090, Start Num: 22
Candidate Starts for Girafales_109:
(Start: 22 @55929 has 108 MA's),

Gene: Girr_99 Start: 54813, Stop: 54974, Start Num: 22
Candidate Starts for Girr_99:
(Start: 22 @54813 has 108 MA's),

Gene: Guppsters_95 Start: 51924, Stop: 52085, Start Num: 22
Candidate Starts for Guppsters_95:
(Start: 22 @51924 has 108 MA's),

Gene: Hamulus_100 Start: 53768, Stop: 53929, Start Num: 22
Candidate Starts for Hamulus_100:
(Start: 22 @53768 has 108 MA's),

Gene: Hegedechwinu_108 Start: 54304, Stop: 54465, Start Num: 22
Candidate Starts for Hegedechwinu_108:
(Start: 22 @54304 has 108 MA's),

Gene: IMpilo_98 Start: 52546, Stop: 52707, Start Num: 22
Candidate Starts for IMpilo_98:
(Start: 22 @52546 has 108 MA's),

Gene: IbOuu_91 Start: 51910, Stop: 52071, Start Num: 22
Candidate Starts for IbOuu_91:
(Start: 22 @51910 has 108 MA's),

Gene: Itos_100 Start: 60485, Stop: 60655, Start Num: 17
Candidate Starts for Itos_100:
(Start: 17 @60485 has 27 MA's), (Start: 24 @60518 has 1 MA's),

Gene: JalFarm20_109 Start: 56245, Stop: 56406, Start Num: 22
Candidate Starts for JalFarm20_109:

(Start: 22 @56245 has 108 MA's),

Gene: James_104 Start: 56416, Stop: 56577, Start Num: 22

Candidate Starts for James_104:

(Start: 22 @56416 has 108 MA's),

Gene: Jant_107 Start: 53731, Stop: 53892, Start Num: 22

Candidate Starts for Jant_107:

(Start: 22 @53731 has 108 MA's),

Gene: Jennelsea_97 Start: 53316, Stop: 53477, Start Num: 22

Candidate Starts for Jennelsea_97:

(Start: 22 @53316 has 108 MA's),

Gene: Jinglebell_107 Start: 55692, Stop: 55853, Start Num: 22

Candidate Starts for Jinglebell_107:

(Start: 22 @55692 has 108 MA's),

Gene: Job42_101 Start: 56590, Stop: 56751, Start Num: 22

Candidate Starts for Job42_101:

(Start: 22 @56590 has 108 MA's),

Gene: JoeDirt_98 Start: 60423, Stop: 60590, Start Num: 19

Candidate Starts for JoeDirt_98:

(4, 60309), (11, 60363), (13, 60378), (18, 60414), (Start: 19 @60423 has 3 MA's), (25, 60477),

Gene: Jubie_97 Start: 61625, Stop: 61801, Start Num: 17

Candidate Starts for Jubie_97:

(9, 61565), (Start: 17 @61625 has 27 MA's), (26, 61724),

Gene: Kahlid_99 Start: 61290, Stop: 61460, Start Num: 17

Candidate Starts for Kahlid_99:

(Start: 17 @61290 has 27 MA's), (Start: 24 @61323 has 1 MA's),

Gene: Karhdo_95 Start: 52179, Stop: 52340, Start Num: 22

Candidate Starts for Karhdo_95:

(Start: 22 @52179 has 108 MA's),

Gene: Kenuha5_92 Start: 53592, Stop: 53753, Start Num: 22

Candidate Starts for Kenuha5_92:

(Start: 22 @53592 has 108 MA's),

Gene: KingJulian_108 Start: 56834, Stop: 56995, Start Num: 22

Candidate Starts for KingJulian_108:

(Start: 22 @56834 has 108 MA's),

Gene: Kingsley_109 Start: 57777, Stop: 57938, Start Num: 22

Candidate Starts for Kingsley_109:

(Start: 22 @57777 has 108 MA's),

Gene: KirDoubleO7_96 Start: 61658, Stop: 61840, Start Num: 17

Candidate Starts for KirDoubleO7_96:

(Start: 17 @61658 has 27 MA's), (Start: 24 @61691 has 1 MA's),

Gene: Koella_93 Start: 51178, Stop: 51339, Start Num: 22
Candidate Starts for Koella_93:
(Start: 22 @51178 has 108 MA's),

Gene: KristaRAM_108 Start: 55500, Stop: 55661, Start Num: 22
Candidate Starts for KristaRAM_108:
(Start: 22 @55500 has 108 MA's),

Gene: Krypton555_100 Start: 61911, Stop: 62087, Start Num: 17
Candidate Starts for Krypton555_100:
(Start: 17 @61911 has 27 MA's),

Gene: LastJedi_91 Start: 52235, Stop: 52396, Start Num: 22
Candidate Starts for LastJedi_91:
(Start: 22 @52235 has 108 MA's),

Gene: LilDestine_98 Start: 61249, Stop: 61419, Start Num: 17
Candidate Starts for LilDestine_98:
(Start: 17 @61249 has 27 MA's), (Start: 24 @61282 has 1 MA's),

Gene: LittleShirley_108 Start: 55612, Stop: 55773, Start Num: 22
Candidate Starts for LittleShirley_108:
(Start: 22 @55612 has 108 MA's),

Gene: LiyuLake_97 Start: 61731, Stop: 61913, Start Num: 17
Candidate Starts for LiyuLake_97:
(Start: 17 @61731 has 27 MA's), (Start: 24 @61764 has 1 MA's),

Gene: Lizziana_101 Start: 55483, Stop: 55644, Start Num: 22
Candidate Starts for Lizziana_101:
(Start: 22 @55483 has 108 MA's),

Gene: Llama_107 Start: 55335, Stop: 55496, Start Num: 22
Candidate Starts for Llama_107:
(Start: 22 @55335 has 108 MA's),

Gene: Maravista_97 Start: 56143, Stop: 56304, Start Num: 22
Candidate Starts for Maravista_97:
(Start: 22 @56143 has 108 MA's),

Gene: Martik_99 Start: 55946, Stop: 56107, Start Num: 22
Candidate Starts for Martik_99:
(Start: 22 @55946 has 108 MA's),

Gene: Medindi_105 Start: 55294, Stop: 55455, Start Num: 22
Candidate Starts for Medindi_105:
(Start: 22 @55294 has 108 MA's),

Gene: Melissauren88_90 Start: 50968, Stop: 51129, Start Num: 22
Candidate Starts for Melissauren88_90:
(Start: 22 @50968 has 108 MA's),

Gene: MilanaBonita_93 Start: 52864, Stop: 53025, Start Num: 22
Candidate Starts for MilanaBonita_93:
(Start: 22 @52864 has 108 MA's),

Gene: MilleniumForce_100 Start: 54671, Stop: 54832, Start Num: 22
Candidate Starts for MilleniumForce_100:
(Start: 22 @54671 has 108 MA's),

Gene: MisterCuddles_100 Start: 54813, Stop: 54974, Start Num: 22
Candidate Starts for MisterCuddles_100:
(Start: 22 @54813 has 108 MA's),

Gene: Mova_102 Start: 54601, Stop: 54762, Start Num: 22
Candidate Starts for Mova_102:
(Start: 22 @54601 has 108 MA's),

Gene: Mozy_104 Start: 54236, Stop: 54397, Start Num: 22
Candidate Starts for Mozy_104:
(Start: 22 @54236 has 108 MA's),

Gene: Ms6_102 Start: 50859, Stop: 51020, Start Num: 22
Candidate Starts for Ms6_102:
(Start: 22 @50859 has 108 MA's),

Gene: MsGreen_98 Start: 61489, Stop: 61665, Start Num: 17
Candidate Starts for MsGreen_98:
(9, 61429), (Start: 17 @61489 has 27 MA's), (26, 61588),

Gene: Mutaforma13_101 Start: 54270, Stop: 54431, Start Num: 22
Candidate Starts for Mutaforma13_101:
(Start: 22 @54270 has 108 MA's),

Gene: Mwanjiwa_103 Start: 55673, Stop: 55834, Start Num: 22
Candidate Starts for Mwanjiwa_103:
(Start: 22 @55673 has 108 MA's),

Gene: Nichirin_100 Start: 55178, Stop: 55339, Start Num: 22
Candidate Starts for Nichirin_100:
(Start: 22 @55178 has 108 MA's),

Gene: Nicholasp3_100 Start: 61372, Stop: 61542, Start Num: 17
Candidate Starts for Nicholasp3_100:
(Start: 17 @61372 has 27 MA's), (Start: 24 @61405 has 1 MA's),

Gene: Nitzel_94 Start: 51429, Stop: 51590, Start Num: 22
Candidate Starts for Nitzel_94:
(Start: 22 @51429 has 108 MA's),

Gene: NormanBulbieJr_98 Start: 55192, Stop: 55353, Start Num: 22
Candidate Starts for NormanBulbieJr_98:
(Start: 22 @55192 has 108 MA's),

Gene: Ochi17_106 Start: 54930, Stop: 55091, Start Num: 22

Candidate Starts for Ochi17_106:
(Start: 22 @54930 has 108 MA's),

Gene: OfUltron_107 Start: 55479, Stop: 55640, Start Num: 22
Candidate Starts for OfUltron_107:
(Start: 22 @55479 has 108 MA's),

Gene: Okabe_92 Start: 50646, Stop: 50807, Start Num: 22
Candidate Starts for Okabe_92:
(Start: 22 @50646 has 108 MA's),

Gene: Oksu_104 Start: 56569, Stop: 56730, Start Num: 22
Candidate Starts for Oksu_104:
(Start: 22 @56569 has 108 MA's),

Gene: OlympiaSaint_104 Start: 55382, Stop: 55543, Start Num: 22
Candidate Starts for OlympiaSaint_104:
(1, 55163), (2, 55220), (15, 55340), (Start: 22 @55382 has 108 MA's),

Gene: OverPar_102 Start: 61740, Stop: 61910, Start Num: 17
Candidate Starts for OverPar_102:
(Start: 17 @61740 has 27 MA's), (Start: 24 @61773 has 1 MA's),

Gene: PYPDinur_102 Start: 62234, Stop: 62419, Start Num: 17
Candidate Starts for PYPDinur_102:
(Start: 17 @62234 has 27 MA's), (Start: 24 @62267 has 1 MA's), (27, 62363),

Gene: PatoPoderoso_101 Start: 56834, Stop: 56995, Start Num: 22
Candidate Starts for PatoPoderoso_101:
(Start: 22 @56834 has 108 MA's),

Gene: Phalconet_101 Start: 54261, Stop: 54422, Start Num: 22
Candidate Starts for Phalconet_101:
(Start: 22 @54261 has 108 MA's),

Gene: Phanphagia_105 Start: 56016, Stop: 56177, Start Num: 22
Candidate Starts for Phanphagia_105:
(Start: 22 @56016 has 108 MA's),

Gene: PhesterPhotato_104 Start: 54235, Stop: 54396, Start Num: 22
Candidate Starts for PhesterPhotato_104:
(Start: 22 @54235 has 108 MA's),

Gene: Philus_104 Start: 56323, Stop: 56484, Start Num: 22
Candidate Starts for Philus_104:
(Start: 22 @56323 has 108 MA's),

Gene: Pippy_98 Start: 53463, Stop: 53624, Start Num: 22
Candidate Starts for Pippy_98:
(Start: 22 @53463 has 108 MA's),

Gene: Priscilla_101 Start: 55290, Stop: 55451, Start Num: 22
Candidate Starts for Priscilla_101:

(Start: 22 @55290 has 108 MA's),

Gene: Quby_102 Start: 61563, Stop: 61739, Start Num: 17

Candidate Starts for Quby_102:

(Start: 17 @61563 has 27 MA's), (Start: 24 @61596 has 1 MA's),

Gene: Quico_109 Start: 56144, Stop: 56305, Start Num: 22

Candidate Starts for Quico_109:

(Start: 22 @56144 has 108 MA's),

Gene: Rita_100 Start: 55860, Stop: 56021, Start Num: 22

Candidate Starts for Rita_100:

(Start: 22 @55860 has 108 MA's),

Gene: Rose5_98 Start: 60265, Stop: 60432, Start Num: 19

Candidate Starts for Rose5_98:

(4, 60151), (11, 60205), (13, 60220), (18, 60256), (Start: 19 @60265 has 3 MA's), (25, 60319),

Gene: Rossetti_101 Start: 61909, Stop: 62079, Start Num: 17

Candidate Starts for Rossetti_101:

(5, 61819), (6, 61834), (7, 61837), (8, 61849), (Start: 17 @61909 has 27 MA's), (Start: 24 @61942 has 1 MA's),

Gene: Royals2015_104 Start: 53395, Stop: 53556, Start Num: 22

Candidate Starts for Royals2015_104:

(Start: 22 @53395 has 108 MA's),

Gene: Rumpelstiltskin_96 Start: 61165, Stop: 61335, Start Num: 17

Candidate Starts for Rumpelstiltskin_96:

(Start: 17 @61165 has 27 MA's), (Start: 24 @61198 has 1 MA's),

Gene: SG4_101 Start: 55629, Stop: 55790, Start Num: 22

Candidate Starts for SG4_101:

(Start: 22 @55629 has 108 MA's),

Gene: Sabbb_103 Start: 52820, Stop: 52981, Start Num: 22

Candidate Starts for Sabbb_103:

(1, 52601), (2, 52658), (15, 52778), (Start: 22 @52820 has 108 MA's),

Gene: Samty_97 Start: 61587, Stop: 61763, Start Num: 17

Candidate Starts for Samty_97:

(9, 61527), (Start: 17 @61587 has 27 MA's), (26, 61686),

Gene: Sarma624_102 Start: 51789, Stop: 51950, Start Num: 22

Candidate Starts for Sarma624_102:

(Start: 22 @51789 has 108 MA's),

Gene: Seabastian_107 Start: 55480, Stop: 55641, Start Num: 22

Candidate Starts for Seabastian_107:

(Start: 22 @55480 has 108 MA's),

Gene: Seagreen_101 Start: 54767, Stop: 54928, Start Num: 22

Candidate Starts for Seagreen_101:

(Start: 22 @54767 has 108 MA's),

Gene: Shauna1_102 Start: 55632, Stop: 55793, Start Num: 22

Candidate Starts for Shauna1_102:

(Start: 22 @55632 has 108 MA's),

Gene: Sheng711_103 Start: 61758, Stop: 61943, Start Num: 17

Candidate Starts for Sheng711_103:

(Start: 17 @61758 has 27 MA's), (Start: 24 @61791 has 1 MA's), (27, 61887),

Gene: ShowerHandel_101 Start: 54136, Stop: 54297, Start Num: 22

Candidate Starts for ShowerHandel_101:

(Start: 22 @54136 has 108 MA's),

Gene: ShroomBoi_98 Start: 54184, Stop: 54345, Start Num: 22

Candidate Starts for ShroomBoi_98:

(Start: 22 @54184 has 108 MA's),

Gene: Silverleaf_95 Start: 59405, Stop: 59572, Start Num: 21

Candidate Starts for Silverleaf_95:

(4, 59279), (11, 59333), (13, 59348), (18, 59384), (20, 59396), (Start: 21 @59405 has 1 MA's), (25, 59459),

Gene: Slim_103 Start: 54418, Stop: 54579, Start Num: 22

Candidate Starts for Slim_103:

(Start: 22 @54418 has 108 MA's),

Gene: SoJulia_102 Start: 63096, Stop: 63266, Start Num: 17

Candidate Starts for SoJulia_102:

(Start: 17 @63096 has 27 MA's), (Start: 24 @63129 has 1 MA's),

Gene: StAnnes_104 Start: 55680, Stop: 55841, Start Num: 22

Candidate Starts for StAnnes_104:

(Start: 22 @55680 has 108 MA's),

Gene: Stap_95 Start: 51396, Stop: 51557, Start Num: 22

Candidate Starts for Stap_95:

(15, 51354), (Start: 22 @51396 has 108 MA's),

Gene: SwagPigglett_102 Start: 55990, Stop: 56151, Start Num: 22

Candidate Starts for SwagPigglett_102:

(Start: 22 @55990 has 108 MA's),

Gene: Taj_106 Start: 55638, Stop: 55799, Start Num: 22

Candidate Starts for Taj_106:

(Start: 22 @55638 has 108 MA's),

Gene: Tootsieroll_94 Start: 54782, Stop: 54943, Start Num: 22

Candidate Starts for Tootsieroll_94:

(Start: 22 @54782 has 108 MA's),

Gene: Tweety_101 Start: 55032, Stop: 55193, Start Num: 22

Candidate Starts for Tweety_101:

(Start: 22 @55032 has 108 MA's),

Gene: Underpass_92 Start: 56408, Stop: 56578, Start Num: 17

Candidate Starts for Underpass_92:

(Start: 17 @56408 has 27 MA's), (Start: 24 @56441 has 1 MA's),

Gene: VRedHorse_101 Start: 51888, Stop: 52049, Start Num: 22

Candidate Starts for VRedHorse_101:

(Start: 22 @51888 has 108 MA's),

Gene: Velveteen_97 Start: 51789, Stop: 51950, Start Num: 22

Candidate Starts for Velveteen_97:

(Start: 22 @51789 has 108 MA's),

Gene: Violac_101 Start: 55284, Stop: 55445, Start Num: 22

Candidate Starts for Violac_101:

(Start: 22 @55284 has 108 MA's),

Gene: Vivum_100 Start: 56225, Stop: 56386, Start Num: 22

Candidate Starts for Vivum_100:

(Start: 22 @56225 has 108 MA's),

Gene: Wee_103 Start: 55714, Stop: 55875, Start Num: 22

Candidate Starts for Wee_103:

(Start: 22 @55714 has 108 MA's),

Gene: Whatsapiecost_94 Start: 49439, Stop: 49600, Start Num: 22

Candidate Starts for Whatsapiecost_94:

(Start: 22 @49439 has 108 MA's),

Gene: XFactor_91 Start: 52230, Stop: 52391, Start Num: 22

Candidate Starts for XFactor_91:

(Start: 22 @52230 has 108 MA's),

Gene: Zakai_101 Start: 61981, Stop: 62151, Start Num: 17

Candidate Starts for Zakai_101:

(Start: 17 @61981 has 27 MA's), (Start: 24 @62014 has 1 MA's),

Gene: Zerg_98 Start: 54105, Stop: 54266, Start Num: 22

Candidate Starts for Zerg_98:

(Start: 22 @54105 has 108 MA's),

Gene: Zizzle_103 Start: 56181, Stop: 56342, Start Num: 22

Candidate Starts for Zizzle_103:

(Start: 22 @56181 has 108 MA's),