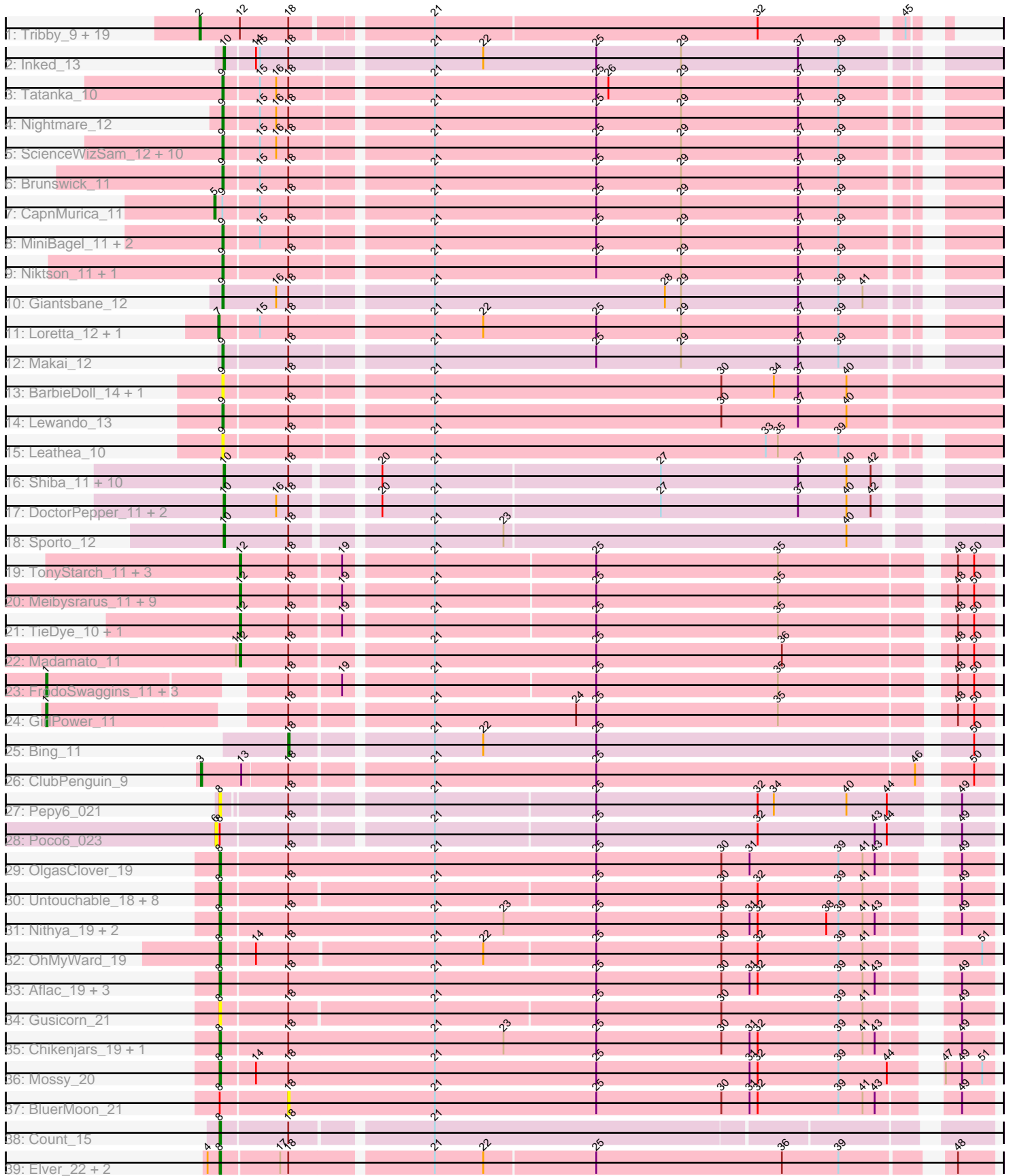


Pham 178970



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 178970 Report

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

Pham number 178970 has 117 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Tribby_9, Mooshroom_9, KeaneyLin_8, Heisenberger_9, Kardesai_8, JEGGS_9, Dynamite_9, BenitoAntonio_9, Xenomorph_8, Arcadia_9, Nason_9, GoCrazy_8, Circum_9, Benllo_8, NapoleonB_9, Cheesy_9, Hankly_8, Mudcat_9, Correa_9, Elsa_9
- Track 2 : Inked_13
- Track 3 : Tatanka_10
- Track 4 : Nightmare_12
- Track 5 : ScienceWizSam_12, Darby_11, Issa_11, AreFloNak_11, Breylor17_12, Synopsis_10, DevitoJr_11, CastorTray_13, Trustiboi_12, Nivinsha_11, Gordon_11
- Track 6 : Brunswick_11
- Track 7 : CapnMurica_11
- Track 8 : MiniBagel_11, Tenno_12, Teacup_11
- Track 9 : Niktson_11, ElephantMan_11
- Track 10 : Giantsbane_12
- Track 11 : Loretta_12, Ingrid_12
- Track 12 : Makai_12
- Track 13 : BarbieDoll_14, Renaldo_15
- Track 14 : Lewando_13
- Track 15 : Leatheia_10
- Track 16 : Shiba_11, ProfFrink_11, Michelle_11, MrAaronian_11, Djungelskog_11, Egad_11, Stayer_11, BronxBay_11, Sloopyjoe_11, Raunak_11, StarLord_11
- Track 17 : DoctorPepper_11, Salk_11, Linda_11
- Track 18 : Sporto_12
- Track 19 : TonyStarch_11, OlympicHelado_11, Rima_11, Namo_11
- Track 20 : Meibysrarus_11, FidgetOrca_11, Maya_11, Jaylociraptor_11, IceWarrior_11, Hoshi_11, Indigenous_11, Spectropatronm_11, CherryBlossom_11, Esketit_11
- Track 21 : TieDye_10, TaidaOne_11
- Track 22 : Madamoto_11
- Track 23 : FrodoSwaggins_11, Soshi_11, DrGrey_11, Popy_11
- Track 24 : GirlPower_11
- Track 25 : Bing_11
- Track 26 : ClubPenguin_9
- Track 27 : Pepy6_021
- Track 28 : POCO6_023
- Track 29 : OlgasClover_19

- Track 30 : Untouchable_18, Nadmeg_19, Vardy_19, Crocheter_18, Runhaar_19, Burley_19, Madvan_19, Phepper_19, ShaggyRogers_22
- Track 31 : Nithya_19, Duffington_19, EndAve_19
- Track 32 : OhMyWard_19
- Track 33 : Aflac_19, Jodelie19_19, TenaciousP_19, Figliar_19
- Track 34 : Gusicorn_21
- Track 35 : Chikenjars_19, AlainaMarie_19
- Track 36 : Mossy_20
- Track 37 : BluerMoon_21
- Track 38 : Count_15
- Track 39 : Elver_22, Paella_23, Qui_23

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

The start number called the most often in the published annotations is 8, it was called in 23 of the 103 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aflac_19, AlainaMarie_19, Burley_19, Chikenjars_19, Count_15, Crocheter_18, Duffington_19, Elver_22, EndAve_19, Figliar_19, Gusicorn_21, Jodelie19_19, Madvan_19, Mossy_20, Nadmeg_19, Nithya_19, OhMyWard_19, OlgasClover_19, Paella_23, Pepy6_021, Phepper_19, Qui_23, Runhaar_19, ShaggyRogers_22, TenaciousP_19, Untouchable_18, Vardy_19,

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

- BluerMoon_21, Poco6_023,

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

- Arcadia_9, AreFloNak_11, BarbieDoll_14, BenitoAntonio_9, Benllo_8, Bing_11, Breylor17_12, BronxBay_11, Brunswick_11, CapnMurica_11, CastorTray_13, Cheesy_9, CherryBlossom_11, Circum_9, ClubPenguin_9, Correa_9, Darby_11, DevitoJr_11, Djungelskog_11, DoctorPepper_11, DrGrey_11, Dynamite_9, Egad_11, ElephantMan_11, Elsa_9, Esketit_11, FidgetOrca_11, FrodoSwaggins_11, Giantsbane_12, GirlPower_11, GoCrazy_8, Gordon_11, Hankly_8, Heisenberger_9, Hoshi_11, IceWarrior_11, Indigenous_11, Ingrid_12, Inked_13, Issa_11, JEGGS_9, Jaylociraptor_11, Kardesai_8, KeaneyLin_8, Leathea_10, Lewando_13, Linda_11, Loretta_12, Madamato_11, Makai_12, Maya_11, Meibysrarus_11, Michelle_11, MiniBagel_11, Mooshroom_9, MrAaronian_11, Mudcat_9, Namo_11, NapoleonB_9, Nason_9, Nightmare_12, Niktson_11, Nivinsha_11, OlympicHelado_11, Popy_11, ProfFrink_11, Raunak_11, Renaldo_15, Rima_11, Salk_11, ScienceWizSam_12, Shiba_11, Sloopyjoe_11, Soshi_11, Spectropatronm_11, Sporto_12, StarLord_11, Stayer_11, Synepsis_10, TaidaOne_11, Tatanka_10, Teacup_11, Tenno_12, TieDye_10, TonyStarch_11, Tribby_9, Trustiboi_12, Xenomorph_8,

Summary by start number:

Start 1:

- Found in 5 of 117 (4.3%) of genes in pham
- Manual Annotations of this start: 5 of 103
- Called 100.0% of time when present

- Phage (with cluster) where this start called: DrGrey_11 (BI1), FrodoSwaggins_11 (BI1), GirlPower_11 (BI1), Popy_11 (BI1), Soshi_11 (BI1),

Start 2:

- Found in 20 of 117 (17.1%) of genes in pham
- Manual Annotations of this start: 19 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arcadia_9 (AM), BenitoAntonio_9 (AM), Benllo_8 (AM), Cheesy_9 (AM), Circum_9 (AM), Correa_9 (AM), Dynamite_9 (AM), Elsa_9 (AM), GoCrazy_8 (AM), Hankly_8 (AM), Heisenberger_9 (AM), JEGGS_9 (AM), Kardesai_8 (AM), KeaneyLin_8 (AM), Mooshroom_9 (AM), Mudcat_9 (AM), NapoleonB_9 (AM), Nason_9 (AM), Tribby_9 (AM), Xenomorph_8 (AM),

Start 3:

- Found in 1 of 117 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ClubPenguin_9 (BI7),

Start 5:

- Found in 1 of 117 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CapnMurica_11 (AU1),

Start 6:

- Found in 1 of 117 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Poco6_023 (CC),

Start 7:

- Found in 2 of 117 (1.7%) of genes in pham
- Manual Annotations of this start: 2 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ingrid_12 (AU3), Loretta_12 (AU3),

Start 8:

- Found in 29 of 117 (24.8%) of genes in pham
- Manual Annotations of this start: 23 of 103
- Called 93.1% of time when present
- Phage (with cluster) where this start called: Aflac_19 (DJ), AlainaMarie_19 (DJ), Burley_19 (DJ), Chikenjars_19 (DJ), Count_15 (EL), Crocheter_18 (DJ), Duffington_19 (DJ), Elver_22 (FK), EndAve_19 (DJ), Figliar_19 (DJ), Gusicorn_21 (DJ), Jodelie19_19 (DJ), Madvan_19 (DJ), Mossy_20 (DJ), Nadmeg_19 (DJ), Nithya_19 (DJ), OhMyWard_19 (DJ), OlgasClover_19 (DJ), Paella_23 (FK), Pepy6_021 (CC), Phepper_19 (DJ), Qui_23 (FK), Runhaar_19 (DJ), ShaggyRogers_22 (DJ), TenaciousP_19 (DJ), Untouchable_18 (DJ), Vardy_19 (DJ),

Start 9:

- Found in 26 of 117 (22.2%) of genes in pham
- Manual Annotations of this start: 19 of 103
- Called 96.2% of time when present

- Phage (with cluster) where this start called: AreFloNak_11 (AU1), BarbieDoll_14 (AU6), Breylor17_12 (AU1), Brunswick_11 (AU1), CastorTray_13 (AU1), Darby_11 (AU1), DevitoJr_11 (AU1), ElephantMan_11 (AU1), Giantsbane_12 (AU2), Gordon_11 (AU1), Issa_11 (AU1), Leathea_10 (AU6), Lewando_13 (AU6), Makai_12 (AU5), MiniBagel_11 (AU1), Nightmare_12 (AU1), Niktson_11 (AU1), Nivinsha_11 (AU1), Renaldo_15 (AU6), ScienceWizSam_12 (AU1), Synopsis_10 (AU1), Tatanka_10 (AU1), Teacup_11 (AU1), Tenno_12 (AU1), Trustiboi_12 (AU1),

Start 10:

- Found in 16 of 117 (13.7%) of genes in pham
- Manual Annotations of this start: 15 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BronxBay_11 (AW), Djungelskog_11 (AW), DoctorPepper_11 (AW), Egad_11 (AW), Inked_13 (AU), Linda_11 (AW), Michelle_11 (AW), MrAaronian_11 (AW), ProfFrink_11 (AW), Raunak_11 (AW), Salk_11 (AW), Shiba_11 (AW), Sloopyjoe_11 (AW), Sporto_12 (AW), StarLord_11 (AW), Stayer_11 (AW),

Start 12:

- Found in 37 of 117 (31.6%) of genes in pham
- Manual Annotations of this start: 17 of 103
- Called 45.9% of time when present
- Phage (with cluster) where this start called: CherryBlossom_11 (BI1), Esketit_11 (BI1), FidgetOrca_11 (BI1), Hoshi_11 (BI1), IceWarrior_11 (BI1), Indigenous_11 (BI1), Jaylociraptor_11 (BI1), Madamoto_11 (BI1), Maya_11 (BI1), Meibysrarus_11 (BI1), Namu_11 (BI1), OlympicHelado_11 (BI1), Rima_11 (BI1), Spectropatronm_11 (BI1), TaidaOne_11 (BI1), TieDye_10 (BI1), TonyStarch_11 (BI1),

Start 18:

- Found in 117 of 117 (100.0%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 1.7% of time when present
- Phage (with cluster) where this start called: Bing_11 (BI5), BluerMoon_21 (DJ),

Summary by clusters:

There are 15 clusters represented in this pham: EL, BI5, DJ, CC, AM, AU1, AU3, AU2, AU5, AW, AU6, BI7, FK, AU, BI1,

Info for manual annotations of cluster AM:

- Start number 2 was manually annotated 19 times for cluster AM.

Info for manual annotations of cluster AU:

- Start number 10 was manually annotated 1 time for cluster AU.

Info for manual annotations of cluster AU1:

- Start number 5 was manually annotated 1 time for cluster AU1.
- Start number 9 was manually annotated 16 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 9 was manually annotated 1 time for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 7 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU5:

- Start number 9 was manually annotated 1 time for cluster AU5.

Info for manual annotations of cluster AU6:

- Start number 9 was manually annotated 1 time for cluster AU6.

Info for manual annotations of cluster AW:

- Start number 10 was manually annotated 14 times for cluster AW.

Info for manual annotations of cluster BI1:

- Start number 1 was manually annotated 5 times for cluster BI1.
- Start number 12 was manually annotated 17 times for cluster BI1.

Info for manual annotations of cluster BI5:

- Start number 18 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI7:

- Start number 3 was manually annotated 1 time for cluster BI7.

Info for manual annotations of cluster DJ:

- Start number 8 was manually annotated 20 times for cluster DJ.

Info for manual annotations of cluster EL:

- Start number 8 was manually annotated 1 time for cluster EL.

Info for manual annotations of cluster FK:

- Start number 8 was manually annotated 2 times for cluster FK.

Gene Information:

Gene: Aflac_19 Start: 13092, Stop: 13640, Start Num: 8

Candidate Starts for Aflac_19:

(Start: 8 @13092 has 23 MA's), (Start: 18 @13140 has 1 MA's), (21, 13248), (25, 13368), (30, 13461), (31, 13482), (32, 13488), (39, 13548), (41, 13566), (43, 13575), (49, 13617),

Gene: AlainaMarie_19 Start: 13082, Stop: 13630, Start Num: 8

Candidate Starts for AlainaMarie_19:

(Start: 8 @13082 has 23 MA's), (Start: 18 @13130 has 1 MA's), (21, 13238), (23, 13289), (25, 13358), (30, 13451), (31, 13472), (32, 13478), (39, 13538), (41, 13556), (43, 13565), (49, 13607),

Gene: Arcadia_9 Start: 6000, Stop: 6509, Start Num: 2

Candidate Starts for Arcadia_9:

(Start: 2 @6000 has 19 MA's), (Start: 12 @6030 has 17 MA's), (Start: 18 @6066 has 1 MA's), (21, 6159), (32, 6396), (45, 6495),

Gene: AreFloNak_11 Start: 7203, Stop: 7739, Start Num: 9

Candidate Starts for AreFloNak_11:

(Start: 9 @7203 has 19 MA's), (15, 7227), (16, 7239), (Start: 18 @7248 has 1 MA's), (21, 7344), (25, 7464), (29, 7527), (37, 7614), (39, 7644),

Gene: BarbieDoll_14 Start: 7762, Stop: 8319, Start Num: 9

Candidate Starts for BarbieDoll_14:

(Start: 9 @7762 has 19 MA's), (Start: 18 @7807 has 1 MA's), (21, 7903), (30, 8116), (34, 8155), (37, 8173), (40, 8209),

Gene: BenitoAntonio_9 Start: 5608, Stop: 6117, Start Num: 2

Candidate Starts for BenitoAntonio_9:

(Start: 2 @5608 has 19 MA's), (Start: 12 @5638 has 17 MA's), (Start: 18 @5674 has 1 MA's), (21, 5767), (32, 6004), (45, 6103),

Gene: Benllo_8 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for Benllo_8:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: Bing_11 Start: 5895, Stop: 6389, Start Num: 18

Candidate Starts for Bing_11:

(Start: 18 @5895 has 1 MA's), (21, 5991), (22, 6027), (25, 6111), (50, 6375),

Gene: BluerMoon_21 Start: 13134, Stop: 13634, Start Num: 18

Candidate Starts for BluerMoon_21:

(Start: 8 @13086 has 23 MA's), (Start: 18 @13134 has 1 MA's), (21, 13242), (25, 13362), (30, 13455), (31, 13476), (32, 13482), (39, 13542), (41, 13560), (43, 13569), (49, 13611),

Gene: Breylor17_12 Start: 7871, Stop: 8407, Start Num: 9

Candidate Starts for Breylor17_12:

(Start: 9 @7871 has 19 MA's), (15, 7895), (16, 7907), (Start: 18 @7916 has 1 MA's), (21, 8012), (25, 8132), (29, 8195), (37, 8282), (39, 8312),

Gene: BronxBay_11 Start: 6416, Stop: 6946, Start Num: 10

Candidate Starts for BronxBay_11:

(Start: 10 @6416 has 15 MA's), (Start: 18 @6464 has 1 MA's), (20, 6518), (21, 6557), (27, 6722), (37, 6824), (40, 6860), (42, 6878),

Gene: Brunswick_11 Start: 7315, Stop: 7851, Start Num: 9

Candidate Starts for Brunswick_11:

(Start: 9 @7315 has 19 MA's), (15, 7339), (Start: 18 @7360 has 1 MA's), (21, 7456), (25, 7576), (29, 7639), (37, 7726), (39, 7756),

Gene: Burley_19 Start: 12850, Stop: 13392, Start Num: 8

Candidate Starts for Burley_19:

(Start: 8 @12850 has 23 MA's), (Start: 18 @12898 has 1 MA's), (21, 13003), (25, 13120), (30, 13213), (32, 13240), (39, 13300), (41, 13318), (49, 13369),

Gene: CapnMurica_11 Start: 8409, Stop: 8951, Start Num: 5

Candidate Starts for CapnMurica_11:

(Start: 5 @8409 has 1 MA's), (Start: 9 @8415 has 19 MA's), (15, 8439), (Start: 18 @8460 has 1 MA's), (21, 8556), (25, 8676), (29, 8739), (37, 8826), (39, 8856),

Gene: CastorTray_13 Start: 7722, Stop: 8258, Start Num: 9

Candidate Starts for CastorTray_13:

(Start: 9 @7722 has 19 MA's), (15, 7746), (16, 7758), (Start: 18 @7767 has 1 MA's), (21, 7863), (25, 7983), (29, 8046), (37, 8133), (39, 8163),

Gene: Cheesy_9 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for Cheesy_9:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: CherryBlossom_11 Start: 6323, Stop: 6850, Start Num: 12

Candidate Starts for CherryBlossom_11:

(Start: 12 @6323 has 17 MA's), (Start: 18 @6359 has 1 MA's), (19, 6395), (21, 6455), (25, 6572), (35, 6707), (48, 6824), (50, 6836),

Gene: Chikenjars_19 Start: 13082, Stop: 13630, Start Num: 8

Candidate Starts for Chikenjars_19:

(Start: 8 @13082 has 23 MA's), (Start: 18 @13130 has 1 MA's), (21, 13238), (23, 13289), (25, 13358), (30, 13451), (31, 13472), (32, 13478), (39, 13538), (41, 13556), (43, 13565), (49, 13607),

Gene: Circum_9 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for Circum_9:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: ClubPenguin_9 Start: 6264, Stop: 6821, Start Num: 3

Candidate Starts for ClubPenguin_9:

(Start: 3 @6264 has 1 MA's), (13, 6294), (Start: 18 @6327 has 1 MA's), (21, 6423), (25, 6543), (46, 6777), (50, 6807),

Gene: Correa_9 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for Correa_9:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: Count_15 Start: 8040, Stop: 8570, Start Num: 8

Candidate Starts for Count_15:

(Start: 8 @8040 has 23 MA's), (Start: 18 @8088 has 1 MA's), (21, 8184),

Gene: Crocheter_18 Start: 11810, Stop: 12352, Start Num: 8

Candidate Starts for Crocheter_18:

(Start: 8 @11810 has 23 MA's), (Start: 18 @11858 has 1 MA's), (21, 11963), (25, 12080), (30, 12173), (32, 12200), (39, 12260), (41, 12278), (49, 12329),

Gene: Darby_11 Start: 7185, Stop: 7721, Start Num: 9

Candidate Starts for Darby_11:

(Start: 9 @7185 has 19 MA's), (15, 7209), (16, 7221), (Start: 18 @7230 has 1 MA's), (21, 7326), (25, 7446), (29, 7509), (37, 7596), (39, 7626),

Gene: DevitoJr_11 Start: 7327, Stop: 7863, Start Num: 9

Candidate Starts for DevitoJr_11:

(Start: 9 @7327 has 19 MA's), (15, 7351), (16, 7363), (Start: 18 @7372 has 1 MA's), (21, 7468), (25, 7588), (29, 7651), (37, 7738), (39, 7768),

Gene: Djungelskog_11 Start: 6416, Stop: 6946, Start Num: 10

Candidate Starts for Djungelskog_11:

(Start: 10 @6416 has 15 MA's), (Start: 18 @6464 has 1 MA's), (20, 6518), (21, 6557), (27, 6722), (37, 6824), (40, 6860), (42, 6878),

Gene: DoctorPepper_11 Start: 6416, Stop: 6946, Start Num: 10

Candidate Starts for DoctorPepper_11:

(Start: 10 @6416 has 15 MA's), (16, 6455), (Start: 18 @6464 has 1 MA's), (20, 6518), (21, 6557), (27, 6722), (37, 6824), (40, 6860), (42, 6878),

Gene: DrGrey_11 Start: 6705, Stop: 7352, Start Num: 1

Candidate Starts for DrGrey_11:

(Start: 1 @6705 has 5 MA's), (Start: 18 @6861 has 1 MA's), (19, 6897), (21, 6957), (25, 7074), (35, 7209), (48, 7326), (50, 7338),

Gene: Duffington_19 Start: 13067, Stop: 13615, Start Num: 8

Candidate Starts for Duffington_19:

(Start: 8 @13067 has 23 MA's), (Start: 18 @13115 has 1 MA's), (21, 13223), (23, 13274), (25, 13343), (30, 13436), (31, 13457), (32, 13463), (38, 13514), (39, 13523), (41, 13541), (43, 13550), (49, 13592),

Gene: Dynamite_9 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for Dynamite_9:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: Egad_11 Start: 6417, Stop: 6947, Start Num: 10

Candidate Starts for Egad_11:

(Start: 10 @6417 has 15 MA's), (Start: 18 @6465 has 1 MA's), (20, 6519), (21, 6558), (27, 6723), (37, 6825), (40, 6861), (42, 6879),

Gene: ElephantMan_11 Start: 7886, Stop: 8422, Start Num: 9

Candidate Starts for ElephantMan_11:

(Start: 9 @7886 has 19 MA's), (Start: 18 @7931 has 1 MA's), (21, 8027), (25, 8147), (29, 8210), (37, 8297), (39, 8327),

Gene: Elsa_9 Start: 6000, Stop: 6509, Start Num: 2

Candidate Starts for Elsa_9:

(Start: 2 @6000 has 19 MA's), (Start: 12 @6030 has 17 MA's), (Start: 18 @6066 has 1 MA's), (21, 6159), (32, 6396), (45, 6495),

Gene: Elver_22 Start: 12959, Stop: 13495, Start Num: 8

Candidate Starts for Elver_22:

(4, 12950), (Start: 8 @12959 has 23 MA's), (17, 13001), (Start: 18 @13007 has 1 MA's), (21, 13106), (22, 13142), (25, 13223), (36, 13361), (39, 13403), (48, 13469),

Gene: EndAve_19 Start: 13082, Stop: 13630, Start Num: 8

Candidate Starts for EndAve_19:

(Start: 8 @13082 has 23 MA's), (Start: 18 @13130 has 1 MA's), (21, 13238), (23, 13289), (25, 13358), (30, 13451), (31, 13472), (32, 13478), (38, 13529), (39, 13538), (41, 13556), (43, 13565), (49, 13607),

Gene: Esketit_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for Esketit_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: FidgetOrca_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for FidgetOrca_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: Figliar_19 Start: 13092, Stop: 13640, Start Num: 8

Candidate Starts for Figliar_19:

(Start: 8 @13092 has 23 MA's), (Start: 18 @13140 has 1 MA's), (21, 13248), (25, 13368), (30, 13461), (31, 13482), (32, 13488), (39, 13548), (41, 13566), (43, 13575), (49, 13617),

Gene: FrodoSwaggins_11 Start: 6705, Stop: 7352, Start Num: 1

Candidate Starts for FrodoSwaggins_11:

(Start: 1 @6705 has 5 MA's), (Start: 18 @6861 has 1 MA's), (19, 6897), (21, 6957), (25, 7074), (35, 7209), (48, 7326), (50, 7338),

Gene: Giantsbane_12 Start: 7730, Stop: 8269, Start Num: 9

Candidate Starts for Giantsbane_12:

(Start: 9 @7730 has 19 MA's), (16, 7769), (Start: 18 @7778 has 1 MA's), (21, 7874), (28, 8045), (29, 8057), (37, 8144), (39, 8174), (41, 8192),

Gene: GirlPower_11 Start: 8228, Stop: 8878, Start Num: 1

Candidate Starts for GirlPower_11:

(Start: 1 @8228 has 5 MA's), (Start: 18 @8384 has 1 MA's), (21, 8480), (24, 8585), (25, 8600), (35, 8735), (48, 8852), (50, 8864),

Gene: GoCrazy_8 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for GoCrazy_8:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: Gordon_11 Start: 8451, Stop: 8987, Start Num: 9

Candidate Starts for Gordon_11:

(Start: 9 @8451 has 19 MA's), (15, 8475), (16, 8487), (Start: 18 @8496 has 1 MA's), (21, 8592), (25, 8712), (29, 8775), (37, 8862), (39, 8892),

Gene: Gusicorn_21 Start: 12882, Stop: 13424, Start Num: 8

Candidate Starts for Gusicorn_21:

(Start: 8 @12882 has 23 MA's), (Start: 18 @12930 has 1 MA's), (21, 13035), (25, 13152), (30, 13245), (39, 13332), (41, 13350), (49, 13401),

Gene: Hankly_8 Start: 5634, Stop: 6143, Start Num: 2

Candidate Starts for Hankly_8:

(Start: 2 @5634 has 19 MA's), (Start: 12 @5664 has 17 MA's), (Start: 18 @5700 has 1 MA's), (21, 5793), (32, 6030), (45, 6129),

Gene: Heisenberger_9 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for Heisenberger_9:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: Hoshi_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for Hoshi_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: IceWarrior_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for IceWarrior_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: Indigenous_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for Indigenous_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: Ingrid_12 Start: 8171, Stop: 8713, Start Num: 7

Candidate Starts for Ingrid_12:

(Start: 7 @8171 has 2 MA's), (15, 8198), (Start: 18 @8219 has 1 MA's), (21, 8318), (22, 8354), (25, 8438), (29, 8501), (37, 8588), (39, 8618),

Gene: Inked_13 Start: 7950, Stop: 8486, Start Num: 10

Candidate Starts for Inked_13:

(Start: 10 @7950 has 15 MA's), (14, 7971), (15, 7974), (Start: 18 @7995 has 1 MA's), (21, 8091), (22, 8127), (25, 8211), (29, 8274), (37, 8361), (39, 8391),

Gene: Issa_11 Start: 7161, Stop: 7697, Start Num: 9

Candidate Starts for Issa_11:

(Start: 9 @7161 has 19 MA's), (15, 7185), (16, 7197), (Start: 18 @7206 has 1 MA's), (21, 7302), (25, 7422), (29, 7485), (37, 7572), (39, 7602),

Gene: JEGGS_9 Start: 5612, Stop: 6121, Start Num: 2

Candidate Starts for JEGGS_9:

(Start: 2 @5612 has 19 MA's), (Start: 12 @5642 has 17 MA's), (Start: 18 @5678 has 1 MA's), (21, 5771), (32, 6008), (45, 6107),

Gene: Jaylociraptor_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for Jaylociraptor_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: Jodelie19_19 Start: 13086, Stop: 13634, Start Num: 8

Candidate Starts for Jodelie19_19:

(Start: 8 @13086 has 23 MA's), (Start: 18 @13134 has 1 MA's), (21, 13242), (25, 13362), (30, 13455), (31, 13476), (32, 13482), (39, 13542), (41, 13560), (43, 13569), (49, 13611),

Gene: Kardesai_8 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for Kardesai_8:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: KeaneyLin_8 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for KeaneyLin_8:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: Leathea_10 Start: 6005, Stop: 6541, Start Num: 9

Candidate Starts for Leathea_10:

(Start: 9 @6005 has 19 MA's), (Start: 18 @6050 has 1 MA's), (21, 6146), (33, 6392), (35, 6401), (39, 6446),

Gene: Lewando_13 Start: 7761, Stop: 8318, Start Num: 9

Candidate Starts for Lewando_13:

(Start: 9 @7761 has 19 MA's), (Start: 18 @7806 has 1 MA's), (21, 7902), (30, 8115), (37, 8172), (40, 8208),

Gene: Linda_11 Start: 6416, Stop: 6946, Start Num: 10

Candidate Starts for Linda_11:

(Start: 10 @6416 has 15 MA's), (16, 6455), (Start: 18 @6464 has 1 MA's), (20, 6518), (21, 6557), (27, 6722), (37, 6824), (40, 6860), (42, 6878),

Gene: Loretta_12 Start: 8171, Stop: 8713, Start Num: 7

Candidate Starts for Loretta_12:

(Start: 7 @8171 has 2 MA's), (15, 8198), (Start: 18 @8219 has 1 MA's), (21, 8318), (22, 8354), (25, 8438), (29, 8501), (37, 8588), (39, 8618),

Gene: Madamoto_11 Start: 6302, Stop: 6832, Start Num: 12

Candidate Starts for Madamoto_11:

(11, 6299), (Start: 12 @6302 has 17 MA's), (Start: 18 @6338 has 1 MA's), (21, 6434), (25, 6554), (36, 6692), (48, 6806), (50, 6818),

Gene: Madvan_19 Start: 12883, Stop: 13425, Start Num: 8

Candidate Starts for Madvan_19:

(Start: 8 @12883 has 23 MA's), (Start: 18 @12931 has 1 MA's), (21, 13036), (25, 13153), (30, 13246), (32, 13273), (39, 13333), (41, 13351), (49, 13402),

Gene: Makai_12 Start: 7858, Stop: 8394, Start Num: 9

Candidate Starts for Makai_12:

(Start: 9 @7858 has 19 MA's), (Start: 18 @7903 has 1 MA's), (21, 7999), (25, 8119), (29, 8182), (37, 8269), (39, 8299),

Gene: Maya_11 Start: 6314, Stop: 6841, Start Num: 12

Candidate Starts for Maya_11:

(Start: 12 @6314 has 17 MA's), (Start: 18 @6350 has 1 MA's), (19, 6386), (21, 6446), (25, 6563), (35, 6698), (48, 6815), (50, 6827),

Gene: Meibysrarus_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for Meibysrarus_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: Michelle_11 Start: 6416, Stop: 6946, Start Num: 10

Candidate Starts for Michelle_11:

(Start: 10 @6416 has 15 MA's), (Start: 18 @6464 has 1 MA's), (20, 6518), (21, 6557), (27, 6722), (37, 6824), (40, 6860), (42, 6878),

Gene: MiniBagel_11 Start: 8406, Stop: 8942, Start Num: 9

Candidate Starts for MiniBagel_11:

(Start: 9 @8406 has 19 MA's), (15, 8430), (Start: 18 @8451 has 1 MA's), (21, 8547), (25, 8667), (29, 8730), (37, 8817), (39, 8847),

Gene: Mooshroom_9 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for Mooshroom_9:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: Mossy_20 Start: 14297, Stop: 14848, Start Num: 8

Candidate Starts for Mossy_20:

(Start: 8 @14297 has 23 MA's), (14, 14321), (Start: 18 @14345 has 1 MA's), (21, 14453), (25, 14573), (31, 14687), (32, 14693), (39, 14753), (44, 14789), (47, 14813), (49, 14825), (51, 14840),

Gene: MrAaronian_11 Start: 6416, Stop: 6946, Start Num: 10

Candidate Starts for MrAaronian_11:

(Start: 10 @6416 has 15 MA's), (Start: 18 @6464 has 1 MA's), (20, 6518), (21, 6557), (27, 6722), (37, 6824), (40, 6860), (42, 6878),

Gene: Mudcat_9 Start: 5611, Stop: 6120, Start Num: 2

Candidate Starts for Mudcat_9:

(Start: 2 @5611 has 19 MA's), (Start: 12 @5641 has 17 MA's), (Start: 18 @5677 has 1 MA's), (21, 5770), (32, 6007), (45, 6106),

Gene: Nadmeg_19 Start: 12884, Stop: 13426, Start Num: 8

Candidate Starts for Nadmeg_19:

(Start: 8 @12884 has 23 MA's), (Start: 18 @12932 has 1 MA's), (21, 13037), (25, 13154), (30, 13247), (32, 13274), (39, 13334), (41, 13352), (49, 13403),

Gene: Namo_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for Namo_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: NapoleonB_9 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for NapoleonB_9:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: Nason_9 Start: 6000, Stop: 6509, Start Num: 2

Candidate Starts for Nason_9:

(Start: 2 @6000 has 19 MA's), (Start: 12 @6030 has 17 MA's), (Start: 18 @6066 has 1 MA's), (21, 6159), (32, 6396), (45, 6495),

Gene: Nightmare_12 Start: 7725, Stop: 8261, Start Num: 9

Candidate Starts for Nightmare_12:

(Start: 9 @7725 has 19 MA's), (15, 7749), (16, 7761), (Start: 18 @7770 has 1 MA's), (21, 7866), (25, 7986), (29, 8049), (37, 8136), (39, 8166),

Gene: Niktson_11 Start: 7886, Stop: 8422, Start Num: 9

Candidate Starts for Niktson_11:

(Start: 9 @7886 has 19 MA's), (Start: 18 @7931 has 1 MA's), (21, 8027), (25, 8147), (29, 8210), (37, 8297), (39, 8327),

Gene: Nithya_19 Start: 13082, Stop: 13630, Start Num: 8

Candidate Starts for Nithya_19:

(Start: 8 @13082 has 23 MA's), (Start: 18 @13130 has 1 MA's), (21, 13238), (23, 13289), (25, 13358), (30, 13451), (31, 13472), (32, 13478), (38, 13529), (39, 13538), (41, 13556), (43, 13565), (49, 13607),

Gene: Nivinsha_11 Start: 7203, Stop: 7739, Start Num: 9

Candidate Starts for Nivinsha_11:

(Start: 9 @7203 has 19 MA's), (15, 7227), (16, 7239), (Start: 18 @7248 has 1 MA's), (21, 7344), (25, 7464), (29, 7527), (37, 7614), (39, 7644),

Gene: OhMyWard_19 Start: 13629, Stop: 14171, Start Num: 8

Candidate Starts for OhMyWard_19:

(Start: 8 @13629 has 23 MA's), (14, 13653), (Start: 18 @13677 has 1 MA's), (21, 13782), (22, 13818), (25, 13899), (30, 13992), (32, 14019), (39, 14079), (41, 14097), (51, 14163),

Gene: OlgasClover_19 Start: 13815, Stop: 14363, Start Num: 8

Candidate Starts for OlgasClover_19:

(Start: 8 @13815 has 23 MA's), (Start: 18 @13863 has 1 MA's), (21, 13971), (25, 14091), (30, 14184), (31, 14205), (39, 14271), (41, 14289), (43, 14298), (49, 14340),

Gene: OlympicHelado_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for OlympicHelado_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: Paella_23 Start: 12961, Stop: 13497, Start Num: 8

Candidate Starts for Paella_23:

(4, 12952), (Start: 8 @12961 has 23 MA's), (17, 13003), (Start: 18 @13009 has 1 MA's), (21, 13108), (22, 13144), (25, 13225), (36, 13363), (39, 13405), (48, 13471),

Gene: Pepy6_021 Start: 19396, Stop: 19935, Start Num: 8

Candidate Starts for Pepy6_021:

(Start: 8 @19396 has 23 MA's), (Start: 18 @19441 has 1 MA's), (21, 19537), (25, 19654), (32, 19774), (34, 19786), (40, 19840), (44, 19870), (49, 19912),

Gene: Phepper_19 Start: 12882, Stop: 13424, Start Num: 8

Candidate Starts for Phepper_19:

(Start: 8 @12882 has 23 MA's), (Start: 18 @12930 has 1 MA's), (21, 13035), (25, 13152), (30, 13245), (32, 13272), (39, 13332), (41, 13350), (49, 13401),

Gene: Poco6_023 Start: 21412, Stop: 21957, Start Num: 6

Candidate Starts for Poco6_023:

(6, 21412), (Start: 8 @21415 has 23 MA's), (Start: 18 @21463 has 1 MA's), (21, 21559), (25, 21676), (32, 21796), (43, 21883), (44, 21892), (49, 21934),

Gene: Popy_11 Start: 6705, Stop: 7352, Start Num: 1

Candidate Starts for Popy_11:

(Start: 1 @6705 has 5 MA's), (Start: 18 @6861 has 1 MA's), (19, 6897), (21, 6957), (25, 7074), (35, 7209), (48, 7326), (50, 7338),

Gene: ProfFrink_11 Start: 6416, Stop: 6946, Start Num: 10

Candidate Starts for ProfFrink_11:

(Start: 10 @6416 has 15 MA's), (Start: 18 @6464 has 1 MA's), (20, 6518), (21, 6557), (27, 6722), (37, 6824), (40, 6860), (42, 6878),

Gene: Qui_23 Start: 12961, Stop: 13497, Start Num: 8

Candidate Starts for Qui_23:

(4, 12952), (Start: 8 @12961 has 23 MA's), (17, 13003), (Start: 18 @13009 has 1 MA's), (21, 13108), (22, 13144), (25, 13225), (36, 13363), (39, 13405), (48, 13471),

Gene: Raunak_11 Start: 6416, Stop: 6946, Start Num: 10

Candidate Starts for Raunak_11:

(Start: 10 @6416 has 15 MA's), (Start: 18 @6464 has 1 MA's), (20, 6518), (21, 6557), (27, 6722), (37, 6824), (40, 6860), (42, 6878),

Gene: Renaldo_15 Start: 7762, Stop: 8319, Start Num: 9

Candidate Starts for Renaldo_15:

(Start: 9 @7762 has 19 MA's), (Start: 18 @7807 has 1 MA's), (21, 7903), (30, 8116), (34, 8155), (37, 8173), (40, 8209),

Gene: Rima_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for Rima_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: Runhaar_19 Start: 12884, Stop: 13426, Start Num: 8

Candidate Starts for Runhaar_19:

(Start: 8 @12884 has 23 MA's), (Start: 18 @12932 has 1 MA's), (21, 13037), (25, 13154), (30, 13247), (32, 13274), (39, 13334), (41, 13352), (49, 13403),

Gene: Salk_11 Start: 6416, Stop: 6946, Start Num: 10

Candidate Starts for Salk_11:

(Start: 10 @6416 has 15 MA's), (16, 6455), (Start: 18 @6464 has 1 MA's), (20, 6518), (21, 6557), (27, 6722), (37, 6824), (40, 6860), (42, 6878),

Gene: ScienceWizSam_12 Start: 7158, Stop: 7694, Start Num: 9

Candidate Starts for ScienceWizSam_12:

(Start: 9 @7158 has 19 MA's), (15, 7182), (16, 7194), (Start: 18 @7203 has 1 MA's), (21, 7299), (25, 7419), (29, 7482), (37, 7569), (39, 7599),

Gene: ShaggyRogers_22 Start: 12881, Stop: 13423, Start Num: 8

Candidate Starts for ShaggyRogers_22:

(Start: 8 @12881 has 23 MA's), (Start: 18 @12929 has 1 MA's), (21, 13034), (25, 13151), (30, 13244), (32, 13271), (39, 13331), (41, 13349), (49, 13400),

Gene: Shiba_11 Start: 6416, Stop: 6946, Start Num: 10

Candidate Starts for Shiba_11:

(Start: 10 @6416 has 15 MA's), (Start: 18 @6464 has 1 MA's), (20, 6518), (21, 6557), (27, 6722), (37, 6824), (40, 6860), (42, 6878),

Gene: Sloopyjoe_11 Start: 6417, Stop: 6947, Start Num: 10

Candidate Starts for Sloopyjoe_11:

(Start: 10 @6417 has 15 MA's), (Start: 18 @6465 has 1 MA's), (20, 6519), (21, 6558), (27, 6723), (37, 6825), (40, 6861), (42, 6879),

Gene: Soshi_11 Start: 6705, Stop: 7352, Start Num: 1

Candidate Starts for Soshi_11:

(Start: 1 @6705 has 5 MA's), (Start: 18 @6861 has 1 MA's), (19, 6897), (21, 6957), (25, 7074), (35, 7209), (48, 7326), (50, 7338),

Gene: Spectropatronm_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for Spectropatronm_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: Sporto_12 Start: 7645, Stop: 8175, Start Num: 10

Candidate Starts for Sporto_12:

(Start: 10 @7645 has 15 MA's), (Start: 18 @7693 has 1 MA's), (21, 7786), (23, 7837), (40, 8089),

Gene: StarLord_11 Start: 6417, Stop: 6947, Start Num: 10

Candidate Starts for StarLord_11:

(Start: 10 @6417 has 15 MA's), (Start: 18 @6465 has 1 MA's), (20, 6519), (21, 6558), (27, 6723), (37, 6825), (40, 6861), (42, 6879),

Gene: Stayer_11 Start: 6416, Stop: 6946, Start Num: 10

Candidate Starts for Stayer_11:

(Start: 10 @6416 has 15 MA's), (Start: 18 @6464 has 1 MA's), (20, 6518), (21, 6557), (27, 6722), (37, 6824), (40, 6860), (42, 6878),

Gene: Synopsis_10 Start: 7323, Stop: 7859, Start Num: 9

Candidate Starts for Synopsis_10:

(Start: 9 @7323 has 19 MA's), (15, 7347), (16, 7359), (Start: 18 @7368 has 1 MA's), (21, 7464), (25, 7584), (29, 7647), (37, 7734), (39, 7764),

Gene: TaidaOne_11 Start: 6948, Stop: 7475, Start Num: 12

Candidate Starts for TaidaOne_11:

(Start: 12 @6948 has 17 MA's), (Start: 18 @6984 has 1 MA's), (19, 7020), (21, 7080), (25, 7197), (35, 7332), (48, 7449), (50, 7461),

Gene: Tatanka_10 Start: 7263, Stop: 7799, Start Num: 9

Candidate Starts for Tatanka_10:

(Start: 9 @7263 has 19 MA's), (15, 7287), (16, 7299), (Start: 18 @7308 has 1 MA's), (21, 7404), (25, 7524), (26, 7533), (29, 7587), (37, 7674), (39, 7704),

Gene: Teacup_11 Start: 7161, Stop: 7697, Start Num: 9

Candidate Starts for Teacup_11:

(Start: 9 @7161 has 19 MA's), (15, 7185), (Start: 18 @7206 has 1 MA's), (21, 7302), (25, 7422), (29, 7485), (37, 7572), (39, 7602),

Gene: TenaciousP_19 Start: 13086, Stop: 13634, Start Num: 8

Candidate Starts for TenaciousP_19:

(Start: 8 @13086 has 23 MA's), (Start: 18 @13134 has 1 MA's), (21, 13242), (25, 13362), (30, 13455), (31, 13476), (32, 13482), (39, 13542), (41, 13560), (43, 13569), (49, 13611),

Gene: Tenno_12 Start: 8415, Stop: 8951, Start Num: 9

Candidate Starts for Tenno_12:

(Start: 9 @8415 has 19 MA's), (15, 8439), (Start: 18 @8460 has 1 MA's), (21, 8556), (25, 8676), (29, 8739), (37, 8826), (39, 8856),

Gene: TieDye_10 Start: 6016, Stop: 6543, Start Num: 12

Candidate Starts for TieDye_10:

(Start: 12 @6016 has 17 MA's), (Start: 18 @6052 has 1 MA's), (19, 6088), (21, 6148), (25, 6265), (35, 6400), (48, 6517), (50, 6529),

Gene: TonyStarch_11 Start: 6306, Stop: 6833, Start Num: 12

Candidate Starts for TonyStarch_11:

(Start: 12 @6306 has 17 MA's), (Start: 18 @6342 has 1 MA's), (19, 6378), (21, 6438), (25, 6555), (35, 6690), (48, 6807), (50, 6819),

Gene: Tribby_9 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for Tribby_9:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),

Gene: Trustiboi_12 Start: 7890, Stop: 8426, Start Num: 9

Candidate Starts for Trustiboi_12:

(Start: 9 @7890 has 19 MA's), (15, 7914), (16, 7926), (Start: 18 @7935 has 1 MA's), (21, 8031), (25, 8151), (29, 8214), (37, 8301), (39, 8331),

Gene: Untouchable_18 Start: 11809, Stop: 12351, Start Num: 8

Candidate Starts for Untouchable_18:

(Start: 8 @11809 has 23 MA's), (Start: 18 @11857 has 1 MA's), (21, 11962), (25, 12079), (30, 12172), (32, 12199), (39, 12259), (41, 12277), (49, 12328),

Gene: Vardy_19 Start: 12849, Stop: 13391, Start Num: 8

Candidate Starts for Vardy_19:

(Start: 8 @12849 has 23 MA's), (Start: 18 @12897 has 1 MA's), (21, 13002), (25, 13119), (30, 13212), (32, 13239), (39, 13299), (41, 13317), (49, 13368),

Gene: Xenomorph_8 Start: 5610, Stop: 6119, Start Num: 2

Candidate Starts for Xenomorph_8:

(Start: 2 @5610 has 19 MA's), (Start: 12 @5640 has 17 MA's), (Start: 18 @5676 has 1 MA's), (21, 5769), (32, 6006), (45, 6105),