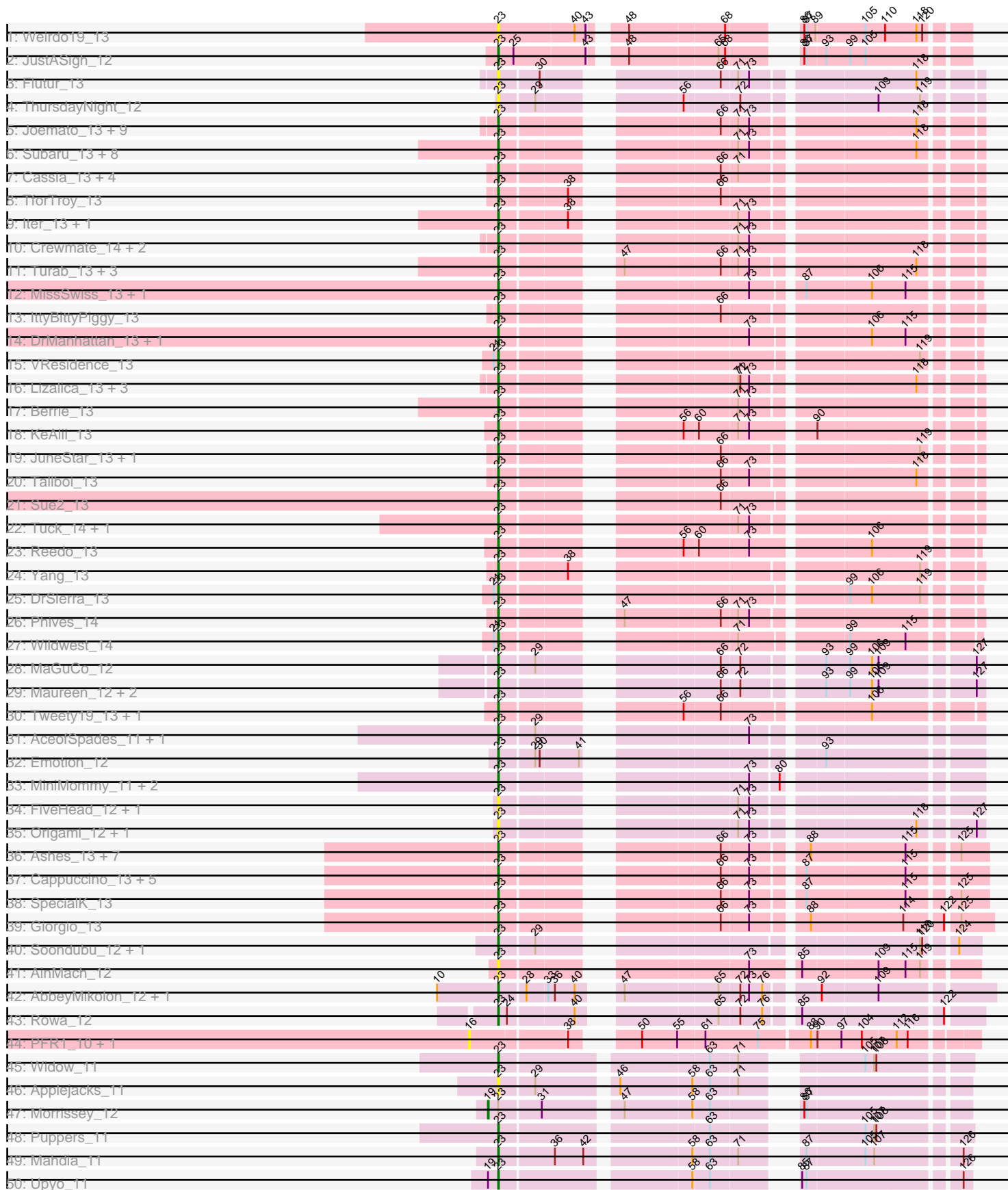
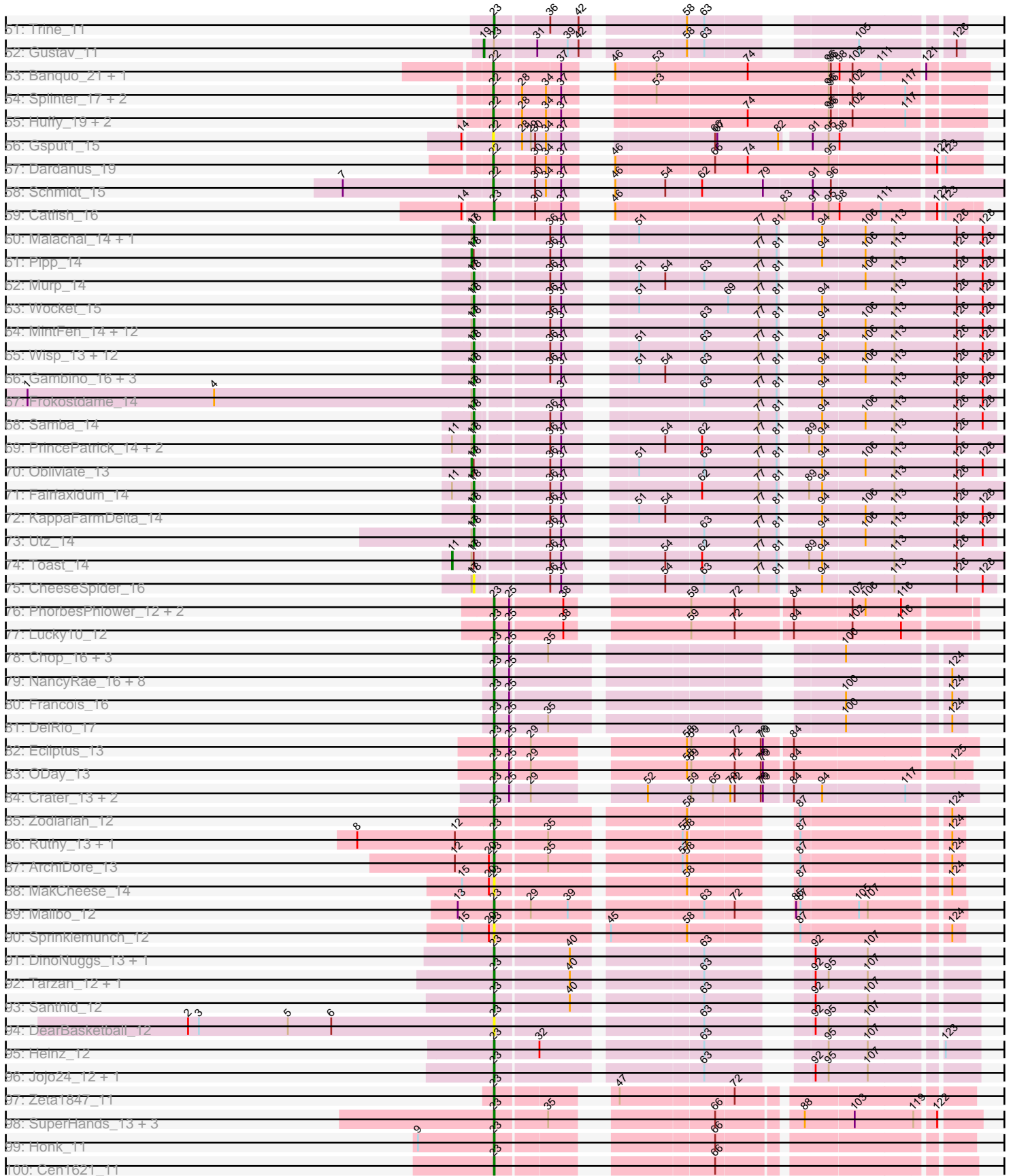


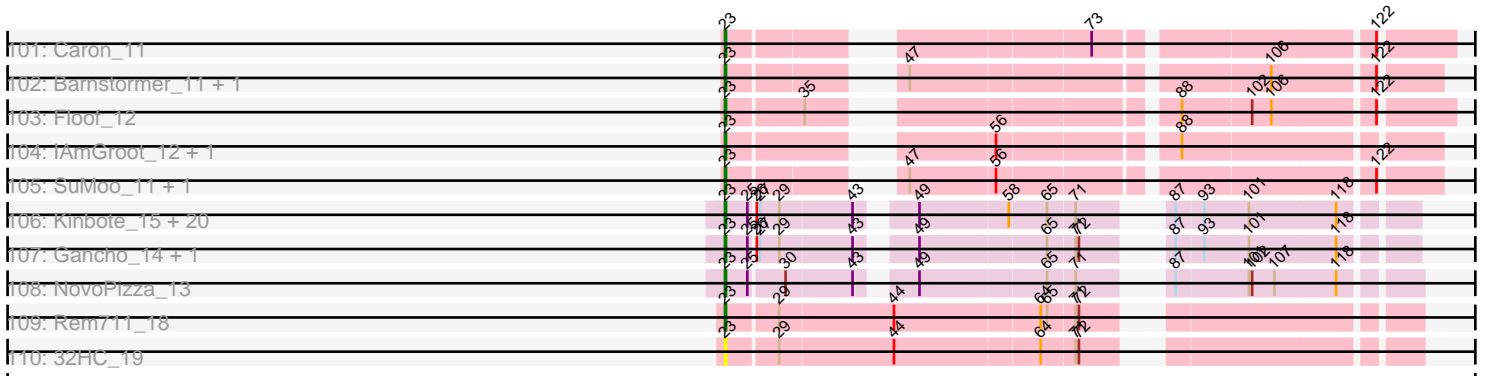
Pham 296210



Pham 296210



Pham 296210



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 296210 Report

This analysis was run 04/25/26 on database version 644.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 296210 has 248 members, 38 are drafts.

Phages represented in each track:

- Track 1 : Weirdo19_13
- Track 2 : JustASigh_12
- Track 3 : Flutur_13
- Track 4 : ThursdayNight_12
- Track 5 : Joemato_13, AGrandiflora_13, JohnDoe_13, Lego_13, YesChef_13, Simpson_14, Kaylissa_13, Cyan_13, Tutumahutu_13, Powerpuff_13
- Track 6 : Subaru_13, London_13, Nitro_13, Elezi_13, Asa16_13, Eraser_13, Niobe_13, Skelbel_13, Jstan_13
- Track 7 : Cassia_13, Pixelle_13, Pumpkins_13, Tian_13, Amyev_13
- Track 8 : TforTroy_13
- Track 9 : lter_13, Ascela_13
- Track 10 : Crewmate_14, ObiToo_13, Janeemi_14
- Track 11 : Turab_13, Adumb2043_13, Amploria_13, AEgle_13
- Track 12 : MissSwiss_13, PandaPo_13
- Track 13 : IttyBittyPiggy_13
- Track 14 : DrManhattan_13, Adolin_13
- Track 15 : VResidence_13
- Track 16 : Lizalica_13, Tbone_13, Mudpuppy_13, Warda_13
- Track 17 : Berrie_13
- Track 18 : KeAlii_13
- Track 19 : JuneStar_13, Schaffner_13
- Track 20 : Tallboi_13
- Track 21 : Sue2_13
- Track 22 : Tuck_14, Community_14
- Track 23 : Reedo_13
- Track 24 : Yang_13
- Track 25 : DrSierra_13
- Track 26 : Phives_14
- Track 27 : Wildwest_14
- Track 28 : MaGuCo_12
- Track 29 : Maureen_12, IUFootball_12, Liebe_12
- Track 30 : Tweety19_13, Snek_13
- Track 31 : AceofSpades_11, VroomVroom_12

- Track 32 : Emotion_12
- Track 33 : MiniMommy_11, JasmineDragon_12, ShakeltOph_12
- Track 34 : FiveHead_12, JohnThicc_12
- Track 35 : Origami_12, LadyAstra_12
- Track 36 : Ashes_13, RockScotty_13, Mysterium_13, Halsey_13, Beaupre_13, Stuu_13, Gumpizza_13, Moss_13
- Track 37 : Cappuccino_13, Kalimba_13, Donkey_13, Sabourin_13, Gambol_13, Sooty_13
- Track 38 : SpecialK_13
- Track 39 : Giorgio_13
- Track 40 : Soondubu_12, Exile_12
- Track 41 : AinMach_12
- Track 42 : AbbeyMikolon_12, Nesbitt_12
- Track 43 : Rowa_12
- Track 44 : PFR1_10, PFR2_10
- Track 45 : Widow_11
- Track 46 : Applejacks_11
- Track 47 : Morrissey_12
- Track 48 : Puppies_11
- Track 49 : Mahdia_11
- Track 50 : Upyo_11
- Track 51 : Trine_11
- Track 52 : Gustav_11
- Track 53 : Banquo_21, TinaLin_20
- Track 54 : Splinter_17, Vendetta_17, Goib_18
- Track 55 : Huffy_19, TZGordon_19, DinoDaryn_19
- Track 56 : Gspu1_15
- Track 57 : Dardanus_19
- Track 58 : Schmidt_15
- Track 59 : Catfish_16
- Track 60 : Malachai_14, Begonia_14
- Track 61 : Pipp_14
- Track 62 : Murp_14
- Track 63 : Wocket_15
- Track 64 : MintFen_14, CaptainKirk2_14, Delian_14, Melba_14, Archis_15, BlingBling_14, Barco_14, Guacamole_14, UmaThurman_14, JasperJr_14, Fenry_13, JuJu_14, Zarbodnamra_14
- Track 65 : Wisp_13, Mellie_13, PhrostedPhlake_15, Petra_16, ZiggyZoo_13, CarolAnn_14, Blino_14, Hitter_14, Soilmate_14, Jalammah_15, Zilla_14, Lysidious_14, Walrus_15
- Track 66 : Gambino_16, Azula_16, Blueberry_16, MissRona_16
- Track 67 : Frokostdame_14
- Track 68 : Samba_14
- Track 69 : PrincePatrick_14, William_14, PCoral7_14
- Track 70 : Obliviate_13
- Track 71 : Fairfaxidum_14
- Track 72 : KappaFarmDelta_14
- Track 73 : Utz_14
- Track 74 : Toast_14
- Track 75 : CheeseSpider_16
- Track 76 : PhorbessPhlower_12, Morkie_12, InLimbo_13
- Track 77 : Lucky10_12
- Track 78 : Chop_16, Ayotoya_16, GrandSlam_16, Hamood_16

- Track 79 : NancyRae_16, Mulch_16, Nadeem_16, BetterKatz_16, Brylie_16, Bock_16, Pimento_17, WheatThin_16, Parada_16
- Track 80 : Francois_16
- Track 81 : DelRio_17
- Track 82 : Ecliptus_13
- Track 83 : ODay_13
- Track 84 : Crater_13, Kuwabara_13, Apricot_13
- Track 85 : Zodiariah_12
- Track 86 : Ruthy_13, DumpsterDude_13
- Track 87 : ArchiDore_13
- Track 88 : MakCheese_14
- Track 89 : Malibo_12
- Track 90 : Sprinklemunch_12
- Track 91 : DinoNuggs_13, Reyja_13
- Track 92 : Tarzan_12, DonkeyMan_12
- Track 93 : Santhid_12
- Track 94 : DearBasketball_12
- Track 95 : Heinz_12
- Track 96 : Jojo24_12, Hibiscus_12
- Track 97 : Zeta1847_11
- Track 98 : SuperHands_13, Percival_12, Forester_21, Gretchen_12
- Track 99 : Honk_11
- Track 100 : Cen1621_11
- Track 101 : Caron_11
- Track 102 : Barnstormer_11, UtzChips_11
- Track 103 : Floof_12
- Track 104 : IAmGroot_12, GardenState_12
- Track 105 : SuMoo_11, Mabodamaca_12
- Track 106 : Kinbote_15, BloominB_15, Ein37_15, HH92_15, Daegal_16, Amymech_15, Amochick_15, Luna22_15, Evanesce_15, DeepSoil15_15, Dewey_15, Webster2_15, Giles_15, Ubuntu_15, Luke_15, Hail_15, LilHazelNut_15, OBUpride_15, Hadrien_15, Forge_15, Wishmaker_15
- Track 107 : Gancho_14, Gravaillia_15
- Track 108 : NovoPizza_13
- Track 109 : Rem711_18
- Track 110 : 32HC_19

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

The start number called the most often in the published annotations is 23, it was called in 155 of the 210 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 32HC_19, AEgle_13, AGrandiflora_13, AbbeyMikolon_12, AceofSpades_11, Adolin_13, Adumb2043_13, AinMach_12, Amochick_15, Amploria_13, Amyev_13, Amymech_15, Applejacks_11, Apricot_13, ArchiDore_13, Asa16_13, Ascela_13, Ashes_13, Ayotoya_16, Barnstormer_11, Beaupre_13, Berrie_13, BetterKatz_16, BloominB_15, Bock_16, Brylie_16, Cappuccino_13, Caron_11, Cassia_13, Catfish_16, Cen1621_11, Chop_16, Community_14, Crater_13, Crewmate_14, Cyan_13, Daegal_16, DearBasketball_12, DeepSoil15_15, DelRio_17, Dewey_15,

DinoNuggs_13, DonkeyMan_12, Donkey_13, DrManhattan_13, DrSierra_13, DumpsterDude_13, Ecliptus_13, Ein37_15, Elezi_13, Emotion_12, Eraser_13, Evanesce_15, Exile_12, FiveHead_12, Floof_12, Flutur_13, Forester_21, Forge_15, Francois_16, Gambol_13, Gancho_14, GardenState_12, Giles_15, Giorgio_13, GrandSlam_16, Gravallia_15, Gretchen_12, Gumpizza_13, HH92_15, Hadrien_15, Hail_15, Halsey_13, Hamood_16, Heinz_12, Hibiscus_12, Honk_11, IAmGroot_12, IUFootball_12, InLimbo_13, Iter_13, IttyBittyPiggy_13, Janeemi_14, JasmineDragon_12, Joemato_13, JohnDoe_13, JohnThicc_12, Jojo24_12, Jstan_13, JuneStar_13, JustASigh_12, Kalimba_13, Kaylissa_13, KeAlii_13, Kinbote_15, Kuwabara_13, LadyAstra_12, Lego_13, Liebe_12, LilHazelNut_15, Lizalica_13, London_13, Lucky10_12, Luke_15, Luna22_15, MaGuCo_12, Mabodamaca_12, Mahdia_11, MakCheese_14, Malibo_12, Maureen_12, MiniMommy_11, MissSwiss_13, Morkie_12, Moss_13, Mudpuppy_13, Mulch_16, Mysterium_13, Nadeem_16, NancyRae_16, Nesbitt_12, Niobe_13, Nitro_13, NovoPizza_13, OBUpride_15, ODay_13, ObiToo_13, Origami_12, PandaPo_13, Parada_16, Percival_12, Phives_14, PhorbesPhlower_12, Pimento_17, Pixelle_13, Powerpuff_13, Pumpkins_13, Puppies_11, Reedo_13, Rem711_18, Reyja_13, RockScotty_13, Rowa_12, Ruthy_13, Sabourin_13, Santhid_12, Schaffner_13, ShakeltOph_12, Simpson_14, Skelbel_13, Snek_13, Soondubu_12, Sooty_13, SpecialK_13, Sprinklemunch_12, Stuu_13, SuMoo_11, Subaru_13, Sue2_13, SuperHands_13, Tallboi_13, Tarzan_12, Tbone_13, TforTroy_13, ThursdayNight_12, Tian_13, Trine_11, Tuck_14, Turab_13, Tutumahutu_13, Tweety19_13, Ubuntu_15, Upyo_11, UtzChips_11, VResidence_13, VroomVroom_12, Warda_13, Webster2_15, Weirdo19_13, WheatThin_16, Widow_11, Wildwest_14, Wishmaker_15, Yang_13, YesChef_13, Zeta1847_11, Zodiariah_12,

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

- Gustav_11, Morrissey_12,

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

- Archis_15, Azula_16, Banquo_21, Barco_14, Begonia_14, BlingBling_14, Blino_14, Blueberry_16, CaptainKirk2_14, CarolAnn_14, CheeseSpider_16, Dardanus_19, Delian_14, DinoDaryn_19, Fairfaxidum_14, Fenry_13, Frokostdame_14, Gambino_16, Goib_18, Gspu1_15, Guacamole_14, Hitter_14, Huffy_19, Jalammah_15, JasperJr_14, JuJu_14, KappaFarmDelta_14, Lysidious_14, Malachai_14, Melba_14, Mellie_13, MintFen_14, MissRona_16, Murp_14, Obliviate_13, PCoral7_14, PFR1_10, PFR2_10, Petra_16, PhrostedPhlake_15, Pipp_14, PrincePatrick_14, Samba_14, Schmidt_15, Soilmate_14, Splinter_17, TZGordon_19, TinaLin_20, Toast_14, UmaThurman_14, Utz_14, Vendetta_17, Walrus_15, William_14, Wisp_13, Wocket_15, Zarbodnamra_14, ZiggyZoo_13, Zilla_14,

Summary by start number:

Start 11:

- Found in 5 of 248 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 210
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Toast_14 (CV),

Start 16:

- Found in 2 of 248 (0.8%) of genes in pham
- No Manual Annotations of this start.

- Called 100.0% of time when present
- Phage (with cluster) where this start called: PFR1_10 (BX), PFR2_10 (BX),

Start 17:

- Found in 46 of 248 (18.5%) of genes in pham
- Manual Annotations of this start: 2 of 210
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Obliviate_13 (CV), Pipp_14 (CV),

Start 18:

- Found in 46 of 248 (18.5%) of genes in pham
- Manual Annotations of this start: 40 of 210
- Called 93.5% of time when present
- Phage (with cluster) where this start called: Archis_15 (CV), Azula_16 (CV), Barco_14 (CV), Begonia_14 (CV), BlingBling_14 (CV), Blino_14 (CV), Blueberry_16 (CV), CaptainKirk2_14 (CV), CarolAnn_14 (CV), CheeseSpider_16 (CV), Delian_14 (CV), Fairfaxidum_14 (CV), Fenry_13 (CV), Frokostdame_14 (CV), Gambino_16 (CV), Guacamole_14 (CV), Hitter_14 (CV), Jalamah_15 (CV), JasperJr_14 (CV), JuJu_14 (CV), KappaFarmDelta_14 (CV), Lysidious_14 (CV), Malachai_14 (CV), Melba_14 (CV), Mellie_13 (CV), MintFen_14 (CV), MissRona_16 (CV), Murp_14 (CV), PCoral7_14 (CV), Petra_16 (CV), PhrostedPhlake_15 (CV), PrincePatrick_14 (CV), Samba_14 (CV), Soilmate_14 (CV), UmaThurman_14 (CV), Utz_14 (CV), Walrus_15 (CV), William_14 (CV), Wisp_13 (CV), Wocket_15 (CV), Zarbodnamra_14 (CV), ZiggyZoo_13 (CV), Zilla_14 (CV),

Start 19:

- Found in 3 of 248 (1.2%) of genes in pham
- Manual Annotations of this start: 2 of 210
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Gustav_11 (CD), Morrissey_12 (CD),

Start 22:

- Found in 11 of 248 (4.4%) of genes in pham
- Manual Annotations of this start: 10 of 210
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Banquo_21 (CU1), Dardanus_19 (CU3), DinoDaryn_19 (CU1), Goib_18 (CU1), Gspu1_15 (CU2), Huff_19 (CU1), Schmidt_15 (CU4), Splinter_17 (CU1), TZGordon_19 (CU1), TinaLin_20 (CU1), Vendetta_17 (CU1),

Start 23:

- Found in 189 of 248 (76.2%) of genes in pham
- Manual Annotations of this start: 155 of 210
- Called 98.9% of time when present
- Phage (with cluster) where this start called: 32HC_19 (Z), AEgle_13 (AZ1), AGrandiflora_13 (AZ1), AbbeyMikolon_12 (BL), AceofSpades_11 (AZ4), Adolin_13 (AZ1), Adumb2043_13 (AZ1), AinMach_12 (AZ7), Amochick_15 (Q), Amploria_13 (AZ1), Amyev_13 (AZ1), Amymech_15 (Q), Applejacks_11 (CD), Apricot_13 (DN3), ArchiDore_13 (DW), Asa16_13 (AZ1), Ascela_13 (AZ1), Ashes_13 (AZ5), Ayotoya_16 (DI), Barnstormer_11 (EH), Beaupre_13 (AZ5), Berrie_13 (AZ1), BetterKatz_16 (DI), BloominB_15 (Q), Bock_16 (DI), Brylie_16 (DI), Cappuccino_13 (AZ5), Caron_11 (EH), Cassia_13 (AZ1), Catfish_16 (CU5), Cen1621_11 (EH), Chop_16 (DI), Community_14 (AZ1), Crater_13 (DN3), Crewmate_14 (AZ1),

Cyan_13 (AZ1), Daegal_16 (Q), DearBasketball_12 (DY), DeepSoil15_15 (Q), DelRio_17 (DI), Dewey_15 (Q), DinoNuggs_13 (DY), DonkeyMan_12 (DY), Donkey_13 (AZ5), DrManhattan_13 (AZ1), DrSierra_13 (AZ1), DumpsterDude_13 (DW), Ecliptus_13 (DN), Ein37_15 (Q), Elezi_13 (AZ1), Emotion_12 (AZ4), Eraser_13 (AZ1), Evanesce_15 (Q), Exile_12 (AZ6), FiveHead_12 (AZ4), Floof_12 (EH), Flutur_13 (AZ), Forester_21 (EH), Forge_15 (Q), Francois_16 (DI), Gambol_13 (AZ5), Gancho_14 (Q), GardenState_12 (EH), Giles_15 (Q), Giorgio_13 (AZ5), GrandSlam_16 (DI), Gravallia_15 (Q), Gretchen_12 (EH), Gumpizza_13 (AZ5), HH92_15 (Q), Hadrien_15 (Q), Hail_15 (Q), Halsey_13 (AZ5), Hamood_16 (DI), Heinz_12 (DY), Hibiscus_12 (DY), Honk_11 (EH), IAmGroot_12 (EH), IUFootball_12 (AZ2), InLimbo_13 (DH), Iter_13 (AZ1), IttyBittyPiggy_13 (AZ1), Janeemi_14 (AZ1), JasmineDragon_12 (AZ4), Joemato_13 (AZ1), JohnDoe_13 (AZ1), JohnThicc_12 (AZ4), Jojo24_12 (DY), Jstan_13 (AZ1), JuneStar_13 (AZ1), JustASigh_12 (AH), Kalimba_13 (AZ5), Kaylissa_13 (AZ1), KeAlii_13 (AZ1), Kinbote_15 (Q), Kuwabara_13 (DN4), LadyAstra_12 (AZ4), Lego_13 (AZ1), Liebe_12 (AZ2), LilHazelNut_15 (Q), Lizalica_13 (AZ1), London_13 (AZ1), Lucky10_12 (DH), Luke_15 (Q), Luna22_15 (Q), MaGuCo_12 (AZ2), Mabodamaca_12 (EH), Mahdia_11 (CD), MakCheese_14 (DW), Malibo_12 (DW), Maureen_12 (AZ2), MiniMommy_11 (AZ4), MissSwiss_13 (AZ1), Morkie_12 (DH), Moss_13 (AZ5), Mudpuppy_13 (AZ1), Mulch_16 (DI), Mysterium_13 (AZ5), Nadeem_16 (DI), NancyRae_16 (DI), Nesbitt_12 (BL), Niobe_13 (AZ1), Nitro_13 (AZ1), NovoPizza_13 (Q), OBUpride_15 (Q), ODay_13 (DN), ObiToo_13 (AZ1), Origami_12 (AZ4), PandaPo_13 (AZ1), Parada_16 (DI), Percival_12 (EH), Phives_14 (AZ1), PhorbesPhlower_12 (DH), Pimento_17 (DI), Pixelle_13 (AZ1), Powerpuff_13 (AZ1), Pumpkins_13 (AZ1), Puppies_11 (CD), Reedo_13 (AZ1), Rem711_18 (Z), Reyja_13 (DY), RockScotty_13 (AZ5), Rowa_12 (BL), Ruthy_13 (DW), Sabourin_13 (AZ5), Santhid_12 (DY), Schaffner_13 (AZ1), ShakeltOph_12 (AZ4), Simpson_14 (AZ1), Skelbel_13 (AZ1), Snek_13 (AZ3), Soondubu_12 (AZ6), Sooty_13 (AZ5), SpecialK_13 (AZ5), Sprinklemunch_12 (DW), Stuu_13 (AZ5), SuMoo_11 (EH), Subaru_13 (AZ1), Sue2_13 (AZ1), SuperHands_13 (EH), Tallboi_13 (AZ1), Tarzan_12 (DY), Tbone_13 (AZ1), TforTroy_13 (AZ1), ThursdayNight_12 (AZ), Tian_13 (AZ1), Trine_11 (CD), Tuck_14 (AZ1), Turab_13 (AZ1), Tutumahutu_13 (AZ1), Tweety19_13 (AZ3), Ubuntu_15 (Q), Upyo_11 (CD), UtzChips_11 (EH), VResidence_13 (AZ1), VroomVroom_12 (AZ4), Warda_13 (AZ1), Webster2_15 (Q), Weirdo19_13 (AH), WheatThin_16 (DI), Widow_11 (CD), Wildwest_14 (AZ1), Wishmaker_15 (Q), Yang_13 (AZ1), YesChef_13 (AZ1), Zeta1847_11 (EH), Zodiariah_12 (DW),

Summary by clusters:

There are 28 clusters represented in this pham: DN, DH, DI, BL, DY, DW, BX, CU5, CU4, CU3, CU2, CU1, DN4, DN3, EH, AH, CD, Q, Z, CV, AZ, AZ1, AZ2, AZ3, AZ4, AZ5, AZ6, AZ7,

Info for manual annotations of cluster AH:

- Start number 23 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster AZ1:

- Start number 23 was manually annotated 46 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 23 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 23 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 23 was manually annotated 5 times for cluster AZ4.

Info for manual annotations of cluster AZ5:

- Start number 23 was manually annotated 16 times for cluster AZ5.

Info for manual annotations of cluster AZ6:

- Start number 23 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster BL:

- Start number 23 was manually annotated 3 times for cluster BL.

Info for manual annotations of cluster CD:

- Start number 19 was manually annotated 2 times for cluster CD.
- Start number 23 was manually annotated 5 times for cluster CD.

Info for manual annotations of cluster CU1:

- Start number 22 was manually annotated 8 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 22 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 22 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

- Start number 23 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster CV:

- Start number 11 was manually annotated 1 time for cluster CV.
- Start number 17 was manually annotated 2 times for cluster CV.
- Start number 18 was manually annotated 40 times for cluster CV.

Info for manual annotations of cluster DH:

- Start number 23 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DI:

- Start number 23 was manually annotated 15 times for cluster DI.

Info for manual annotations of cluster DN:

- Start number 23 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN3:

- Start number 23 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 23 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DW:

- Start number 23 was manually annotated 5 times for cluster DW.

Info for manual annotations of cluster DY:

- Start number 23 was manually annotated 7 times for cluster DY.

Info for manual annotations of cluster EH:

- Start number 23 was manually annotated 13 times for cluster EH.

Info for manual annotations of cluster Q:

- Start number 23 was manually annotated 23 times for cluster Q.

Info for manual annotations of cluster Z:

- Start number 23 was manually annotated 1 time for cluster Z.

Gene Information:

Gene: 32HC_19 Start: 11470, Stop: 12039, Start Num: 23

Candidate Starts for 32HC_19:

(Start: 23 @11470 has 155 MA's), (29, 11515), (44, 11620), (64, 11752), (71, 11782), (72, 11785),

Gene: AEgle_13 Start: 9479, Stop: 10030, Start Num: 23

Candidate Starts for AEgle_13:

(Start: 23 @9479 has 155 MA's), (47, 9596), (66, 9722), (71, 9743), (73, 9758), (118, 9962),

Gene: AGrandiflora_13 Start: 9464, Stop: 10015, Start Num: 23

Candidate Starts for AGrandiflora_13:

(Start: 23 @9464 has 155 MA's), (66, 9707), (71, 9728), (73, 9743), (118, 9947),

Gene: AbbeyMikolon_12 Start: 8168, Stop: 8740, Start Num: 23

Candidate Starts for AbbeyMikolon_12:

(10, 8084), (Start: 23 @8168 has 155 MA's), (28, 8201), (33, 8228), (36, 8237), (40, 8264), (47, 8291), (65, 8411), (72, 8438), (73, 8450), (76, 8468), (92, 8525), (109, 8600),

Gene: AceofSpades_11 Start: 7705, Stop: 8259, Start Num: 23

Candidate Starts for AceofSpades_11:

(Start: 23 @7705 has 155 MA's), (29, 7750), (73, 7984),

Gene: Adolin_13 Start: 9458, Stop: 10006, Start Num: 23

Candidate Starts for Adolin_13:

(Start: 23 @9458 has 155 MA's), (73, 9737), (106, 9881), (115, 9926),

Gene: Adumb2043_13 Start: 9478, Stop: 10029, Start Num: 23

Candidate Starts for Adumb2043_13:

(Start: 23 @9478 has 155 MA's), (47, 9595), (66, 9721), (71, 9742), (73, 9757), (118, 9961),

Gene: AinMach_12 Start: 8582, Stop: 9136, Start Num: 23

Candidate Starts for AinMach_12:

(Start: 23 @8582 has 155 MA's), (73, 8861), (85, 8918), (109, 9017), (115, 9053), (119, 9071),

Gene: Amochick_15 Start: 9932, Stop: 10471, Start Num: 23

Candidate Starts for Amochick_15:

(Start: 23 @9932 has 155 MA's), (25, 9953), (26, 9956), (27, 9959), (29, 9977), (43, 10043), (49, 10079), (58, 10160), (65, 10193), (71, 10217), (87, 10265), (93, 10289), (101, 10331), (118, 10412),

Gene: Amploria_13 Start: 9478, Stop: 10029, Start Num: 23

Candidate Starts for Amploria_13:

(Start: 23 @9478 has 155 MA's), (47, 9595), (66, 9721), (71, 9742), (73, 9757), (118, 9961),

Gene: Amyev_13 Start: 9490, Stop: 10041, Start Num: 23

Candidate Starts for Amyev_13:

(Start: 23 @9490 has 155 MA's), (66, 9733), (71, 9754),

Gene: Amymech_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Amymech_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Applejacks_11 Start: 7579, Stop: 8121, Start Num: 23

Candidate Starts for Applejacks_11:

(Start: 23 @7579 has 155 MA's), (29, 7624), (46, 7717), (58, 7813), (63, 7834), (71, 7870),

Gene: Apricot_13 Start: 7836, Stop: 8429, Start Num: 23

Candidate Starts for Apricot_13:

(Start: 23 @7836 has 155 MA's), (25, 7857), (29, 7881), (52, 7995), (59, 8055), (65, 8085), (70, 8109), (72, 8115), (78, 8151), (79, 8154), (84, 8190), (94, 8229), (117, 8340),

Gene: ArchiDore_13 Start: 8427, Stop: 8969, Start Num: 23

Candidate Starts for ArchiDore_13:

(12, 8376), (20, 8421), (Start: 23 @8427 has 155 MA's), (35, 8496), (57, 8655), (58, 8661), (87, 8766), (124, 8952),

Gene: Archis_15 Start: 8891, Stop: 9529, Start Num: 18

Candidate Starts for Archis_15:

(Start: 17 @8888 has 2 MA's), (Start: 18 @8891 has 40 MA's), (36, 8981), (37, 8996), (63, 9149), (77, 9224), (81, 9248), (94, 9296), (106, 9353), (113, 9392), (126, 9476), (128, 9512),

Gene: Asa16_13 Start: 9448, Stop: 9999, Start Num: 23

Candidate Starts for Asa16_13:

(Start: 23 @9448 has 155 MA's), (71, 9712), (73, 9727), (118, 9931),

Gene: Ascela_13 Start: 9483, Stop: 10034, Start Num: 23

Candidate Starts for Ascela_13:

(Start: 23 @9483 has 155 MA's), (38, 9570), (71, 9747), (73, 9762),

Gene: Ashes_13 Start: 8980, Stop: 9540, Start Num: 23

Candidate Starts for Ashes_13:

(Start: 23 @8980 has 155 MA's), (66, 9223), (73, 9259), (88, 9322), (115, 9448), (125, 9505),

Gene: Ayotoya_16 Start: 9985, Stop: 10530, Start Num: 23

Candidate Starts for Ayotoya_16:

(Start: 23 @9985 has 155 MA's), (25, 10006), (35, 10054), (100, 10384),

Gene: Azula_16 Start: 9023, Stop: 9661, Start Num: 18

Candidate Starts for Azula_16:

(Start: 17 @9020 has 2 MA's), (Start: 18 @9023 has 40 MA's), (36, 9113), (37, 9128), (51, 9194), (54, 9230), (63, 9281), (77, 9356), (81, 9380), (94, 9428), (106, 9485), (113, 9524), (126, 9608), (128, 9644),

Gene: Banquo_21 Start: 11777, Stop: 12373, Start Num: 22

Candidate Starts for Banquo_21:

(Start: 22 @11777 has 10 MA's), (37, 11861), (46, 11885), (53, 11939), (74, 12062), (95, 12173), (96, 12176), (98, 12185), (102, 12203), (111, 12242), (121, 12293),

Gene: Barco_14 Start: 8679, Stop: 9317, Start Num: 18

Candidate Starts for Barco_14:

(Start: 17 @8676 has 2 MA's), (Start: 18 @8679 has 40 MA's), (36, 8769), (37, 8784), (63, 8937), (77, 9012), (81, 9036), (94, 9084), (106, 9141), (113, 9180), (126, 9264), (128, 9300),

Gene: Barnstormer_11 Start: 8636, Stop: 9199, Start Num: 23

Candidate Starts for Barnstormer_11:

(Start: 23 @8636 has 155 MA's), (47, 8753), (106, 9059), (122, 9146),

Gene: Beaupre_13 Start: 8981, Stop: 9541, Start Num: 23

Candidate Starts for Beaupre_13:

(Start: 23 @8981 has 155 MA's), (66, 9224), (73, 9260), (88, 9323), (115, 9449), (125, 9506),

Gene: Begonia_14 Start: 8682, Stop: 9320, Start Num: 18

Candidate Starts for Begonia_14:

(Start: 17 @8679 has 2 MA's), (Start: 18 @8682 has 40 MA's), (36, 8772), (37, 8787), (51, 8853), (77, 9015), (81, 9039), (94, 9087), (106, 9144), (113, 9183), (126, 9267), (128, 9303),

Gene: Berrie_13 Start: 9450, Stop: 10001, Start Num: 23

Candidate Starts for Berrie_13:

(Start: 23 @9450 has 155 MA's), (71, 9714), (73, 9729),

Gene: BetterKatz_16 Start: 9953, Stop: 10498, Start Num: 23

Candidate Starts for BetterKatz_16:

(Start: 23 @9953 has 155 MA's), (25, 9974), (124, 10478),

Gene: BlingBling_14 Start: 8679, Stop: 9317, Start Num: 18

Candidate Starts for BlingBling_14:

(Start: 17 @8676 has 2 MA's), (Start: 18 @8679 has 40 MA's), (36, 8769), (37, 8784), (63, 8937), (77, 9012), (81, 9036), (94, 9084), (106, 9141), (113, 9180), (126, 9264), (128, 9300),

Gene: Blino_14 Start: 8579, Stop: 9217, Start Num: 18

Candidate Starts for Blino_14:

(Start: 17 @8576 has 2 MA's), (Start: 18 @8579 has 40 MA's), (36, 8669), (37, 8684), (51, 8750), (63, 8837), (77, 8912), (81, 8936), (94, 8984), (106, 9041), (113, 9080), (126, 9164), (128, 9200),

Gene: BloominB_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for BloominB_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Blueberry_16 Start: 9023, Stop: 9661, Start Num: 18

Candidate Starts for Blueberry_16:

(Start: 17 @9020 has 2 MA's), (Start: 18 @9023 has 40 MA's), (36, 9113), (37, 9128), (51, 9194), (54, 9230), (63, 9281), (77, 9356), (81, 9380), (94, 9428), (106, 9485), (113, 9524), (126, 9608), (128, 9644),

Gene: Bock_16 Start: 9703, Stop: 10248, Start Num: 23

Candidate Starts for Bock_16:

(Start: 23 @9703 has 155 MA's), (25, 9724), (124, 10228),

Gene: Brylie_16 Start: 9700, Stop: 10245, Start Num: 23

Candidate Starts for Brylie_16:

(Start: 23 @9700 has 155 MA's), (25, 9721), (124, 10225),

Gene: Cappuccino_13 Start: 8889, Stop: 9449, Start Num: 23

Candidate Starts for Cappuccino_13:

(Start: 23 @8889 has 155 MA's), (66, 9132), (73, 9168), (87, 9225), (115, 9357),

Gene: CaptainKirk2_14 Start: 8682, Stop: 9320, Start Num: 18

Candidate Starts for CaptainKirk2_14:

(Start: 17 @8679 has 2 MA's), (Start: 18 @8682 has 40 MA's), (36, 8772), (37, 8787), (63, 8940), (77, 9015), (81, 9039), (94, 9087), (106, 9144), (113, 9183), (126, 9267), (128, 9303),

Gene: CarolAnn_14 Start: 8578, Stop: 9216, Start Num: 18

Candidate Starts for CarolAnn_14:

(Start: 17 @8575 has 2 MA's), (Start: 18 @8578 has 40 MA's), (36, 8668), (37, 8683), (51, 8749), (63, 8836), (77, 8911), (81, 8935), (94, 8983), (106, 9040), (113, 9079), (126, 9163), (128, 9199),

Gene: Caron_11 Start: 8664, Stop: 9239, Start Num: 23

Candidate Starts for Caron_11:

(Start: 23 @8664 has 155 MA's), (73, 8943), (122, 9174),

Gene: Cassia_13 Start: 9565, Stop: 10116, Start Num: 23

Candidate Starts for Cassia_13:

(Start: 23 @9565 has 155 MA's), (66, 9808), (71, 9829),

Gene: Catfish_16 Start: 9760, Stop: 10344, Start Num: 23

Candidate Starts for Catfish_16:

(14, 9721), (Start: 23 @9760 has 155 MA's), (30, 9811), (37, 9844), (46, 9868), (83, 10096), (91, 10135), (95, 10156), (98, 10168), (111, 10225), (122, 10291), (123, 10297),

Gene: Cen1621_11 Start: 7782, Stop: 8339, Start Num: 23

Candidate Starts for Cen1621_11:

(Start: 23 @7782 has 155 MA's), (66, 8025),

Gene: CheeseSpider_16 Start: 9022, Stop: 9660, Start Num: 18

Candidate Starts for CheeseSpider_16:

(Start: 17 @9019 has 2 MA's), (Start: 18 @9022 has 40 MA's), (36, 9112), (37, 9127), (54, 9229), (63, 9280), (77, 9355), (81, 9379), (94, 9427), (113, 9523), (126, 9607), (128, 9643),

Gene: Chop_16 Start: 9733, Stop: 10278, Start Num: 23

Candidate Starts for Chop_16:

(Start: 23 @9733 has 155 MA's), (25, 9754), (35, 9802), (100, 10132),

Gene: Community_14 Start: 10530, Stop: 11081, Start Num: 23

Candidate Starts for Community_14:

(Start: 23 @10530 has 155 MA's), (71, 10794), (73, 10809),

Gene: Crater_13 Start: 7836, Stop: 8429, Start Num: 23

Candidate Starts for Crater_13:

(Start: 23 @7836 has 155 MA's), (25, 7857), (29, 7881), (52, 7995), (59, 8055), (65, 8085), (70, 8109), (72, 8115), (78, 8151), (79, 8154), (84, 8190), (94, 8229), (117, 8340),

Gene: Crewmate_14 Start: 9913, Stop: 10470, Start Num: 23

Candidate Starts for Crewmate_14:

(Start: 23 @9913 has 155 MA's), (71, 10177), (73, 10192),

Gene: Cyan_13 Start: 9468, Stop: 10019, Start Num: 23

Candidate Starts for Cyan_13:

(Start: 23 @9468 has 155 MA's), (66, 9711), (71, 9732), (73, 9747), (118, 9951),

Gene: Daegal_16 Start: 10229, Stop: 10768, Start Num: 23

Candidate Starts for Daegal_16:

(Start: 23 @10229 has 155 MA's), (25, 10250), (26, 10253), (27, 10256), (29, 10274), (43, 10340), (49, 10376), (58, 10457), (65, 10490), (71, 10514), (87, 10562), (93, 10586), (101, 10628), (118, 10709),

Gene: Dardanus_19 Start: 10822, Stop: 11409, Start Num: 22

Candidate Starts for Dardanus_19:

(Start: 22 @10822 has 10 MA's), (30, 10873), (34, 10888), (37, 10906), (46, 10930), (66, 11062), (74, 11107), (95, 11218), (122, 11353), (123, 11359),

Gene: DearBasketball_12 Start: 7930, Stop: 8496, Start Num: 23

Candidate Starts for DearBasketball_12:

(2, 7507), (3, 7522), (5, 7645), (6, 7705), (Start: 23 @7930 has 155 MA's), (63, 8185), (92, 8290), (95, 8308), (107, 8362),

Gene: DeepSoil15_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for DeepSoil15_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: DelRio_17 Start: 10210, Stop: 10755, Start Num: 23

Candidate Starts for DelRio_17:

(Start: 23 @10210 has 155 MA's), (25, 10231), (35, 10279), (100, 10609), (124, 10735),

Gene: Delian_14 Start: 8682, Stop: 9320, Start Num: 18

Candidate Starts for Delian_14:

(Start: 17 @8679 has 2 MA's), (Start: 18 @8682 has 40 MA's), (36, 8772), (37, 8787), (63, 8940), (77, 9015), (81, 9039), (94, 9087), (106, 9144), (113, 9183), (126, 9267), (128, 9303),

Gene: Dewey_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Dewey_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: DinoDaryn_19 Start: 10919, Stop: 11509, Start Num: 22

Candidate Starts for DinoDaryn_19:

(Start: 22 @10919 has 10 MA's), (28, 10952), (34, 10985), (37, 11003), (74, 11204), (95, 11315), (96, 11318), (102, 11345), (117, 11417),

Gene: DinoNuggs_13 Start: 8077, Stop: 8643, Start Num: 23

Candidate Starts for DinoNuggs_13:

(Start: 23 @8077 has 155 MA's), (40, 8176), (63, 8332), (92, 8437), (107, 8509),

Gene: Donkey_13 Start: 8889, Stop: 9449, Start Num: 23

Candidate Starts for Donkey_13:

(Start: 23 @8889 has 155 MA's), (66, 9132), (73, 9168), (87, 9225), (115, 9357),

Gene: DonkeyMan_12 Start: 7926, Stop: 8492, Start Num: 23

Candidate Starts for DonkeyMan_12:

(Start: 23 @7926 has 155 MA's), (40, 8025), (63, 8181), (92, 8286), (95, 8304), (107, 8358),

Gene: DrManhattan_13 Start: 9448, Stop: 9996, Start Num: 23

Candidate Starts for DrManhattan_13:

(Start: 23 @9448 has 155 MA's), (73, 9727), (106, 9871), (115, 9916),

Gene: DrSierra_13 Start: 9480, Stop: 10028, Start Num: 23

Candidate Starts for DrSierra_13:

(21, 9474), (Start: 23 @9480 has 155 MA's), (99, 9873), (106, 9903), (119, 9966),

Gene: DumpsterDude_13 Start: 8440, Stop: 8982, Start Num: 23

Candidate Starts for DumpsterDude_13:

(8, 8254), (12, 8389), (Start: 23 @8440 has 155 MA's), (35, 8509), (57, 8668), (58, 8674), (87, 8779), (124, 8965),

Gene: Ecliptus_13 Start: 7565, Stop: 8158, Start Num: 23

Candidate Starts for Ecliptus_13:

(Start: 23 @7565 has 155 MA's), (25, 7586), (29, 7610), (58, 7778), (59, 7784), (72, 7844), (78, 7880), (79, 7883), (84, 7919),

Gene: Ein37_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Ein37_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Elezi_13 Start: 9449, Stop: 10000, Start Num: 23

Candidate Starts for Elezi_13:

(Start: 23 @9449 has 155 MA's), (71, 9713), (73, 9728), (118, 9932),

Gene: Emotion_12 Start: 7771, Stop: 8325, Start Num: 23

Candidate Starts for Emotion_12:

(Start: 23 @7771 has 155 MA's), (29, 7816), (30, 7822), (41, 7873), (93, 8131),

Gene: Eraser_13 Start: 9449, Stop: 10000, Start Num: 23

Candidate Starts for Eraser_13:

(Start: 23 @9449 has 155 MA's), (71, 9713), (73, 9728), (118, 9932),

Gene: Evanesce_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Evanesce_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Exile_12 Start: 9368, Stop: 9916, Start Num: 23

Candidate Starts for Exile_12:

(Start: 23 @9368 has 155 MA's), (29, 9413), (119, 9851), (120, 9854), (124, 9887),

Gene: Fairfaxidum_14 Start: 8713, Stop: 9366, Start Num: 18

Candidate Starts for Fairfaxidum_14:

(Start: 11 @8683 has 1 MA's), (Start: 17 @8710 has 2 MA's), (Start: 18 @8713 has 40 MA's), (36, 8803), (37, 8818), (62, 8968), (77, 9046), (81, 9070), (89, 9100), (94, 9118), (113, 9214), (126, 9298),

Gene: Fenry_13 Start: 8428, Stop: 9066, Start Num: 18

Candidate Starts for Fenry_13:

(Start: 17 @8425 has 2 MA's), (Start: 18 @8428 has 40 MA's), (36, 8518), (37, 8533), (63, 8686), (77, 8761), (81, 8785), (94, 8833), (106, 8890), (113, 8929), (126, 9013), (128, 9049),

Gene: FiveHead_12 Start: 7693, Stop: 8247, Start Num: 23

Candidate Starts for FiveHead_12:

(Start: 23 @7693 has 155 MA's), (71, 7957), (73, 7972),

Gene: Floof_12 Start: 8217, Stop: 8795, Start Num: 23

Candidate Starts for Floof_12:

(Start: 23 @8217 has 155 MA's), (35, 8286), (88, 8562), (102, 8625), (106, 8643), (122, 8730),

Gene: Flutur_13 Start: 9467, Stop: 10018, Start Num: 23

Candidate Starts for Flutur_13:

(Start: 23 @9467 has 155 MA's), (30, 9518), (66, 9710), (71, 9731), (73, 9746), (118, 9950),

Gene: Forester_21 Start: 9770, Stop: 10336, Start Num: 23

Candidate Starts for Forester_21:

(Start: 23 @9770 has 155 MA's), (35, 9839), (66, 10016), (88, 10115), (103, 10181), (119, 10259), (122, 10283),

Gene: Forge_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Forge_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Francois_16 Start: 9714, Stop: 10259, Start Num: 23

Candidate Starts for Francois_16:

(Start: 23 @9714 has 155 MA's), (25, 9735), (100, 10113), (124, 10239),

Gene: Frokostdame_14 Start: 8673, Stop: 9311, Start Num: 18

Candidate Starts for Frokostdame_14:

(1, 8058), (4, 8316), (Start: 17 @8670 has 2 MA's), (Start: 18 @8673 has 40 MA's), (37, 8778), (63, 8931), (77, 9006), (81, 9030), (94, 9078), (113, 9174), (126, 9258), (128, 9294),

Gene: Gambino_16 Start: 9023, Stop: 9661, Start Num: 18

Candidate Starts for Gambino_16:

(Start: 17 @9020 has 2 MA's), (Start: 18 @9023 has 40 MA's), (36, 9113), (37, 9128), (51, 9194), (54, 9230), (63, 9281), (77, 9356), (81, 9380), (94, 9428), (106, 9485), (113, 9524), (126, 9608), (128, 9644),

Gene: Gambol_13 Start: 8889, Stop: 9449, Start Num: 23

Candidate Starts for Gambol_13:

(Start: 23 @8889 has 155 MA's), (66, 9132), (73, 9168), (87, 9225), (115, 9357),

Gene: Gancho_14 Start: 9638, Stop: 10177, Start Num: 23

Candidate Starts for Gancho_14:

(Start: 23 @9638 has 155 MA's), (25, 9659), (26, 9662), (27, 9665), (29, 9683), (43, 9749), (49, 9785), (65, 9899), (71, 9923), (72, 9926), (87, 9971), (93, 9995), (101, 10037), (118, 10118),

Gene: GardenState_12 Start: 8881, Stop: 9447, Start Num: 23

Candidate Starts for GardenState_12:

(Start: 23 @8881 has 155 MA's), (56, 9079), (88, 9226),

Gene: Giles_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Giles_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Giorgio_13 Start: 8982, Stop: 9551, Start Num: 23

Candidate Starts for Giorgio_13:

(Start: 23 @8982 has 155 MA's), (66, 9225), (73, 9261), (88, 9324), (114, 9447), (122, 9492), (125, 9507),

Gene: Goib_18 Start: 10694, Stop: 11284, Start Num: 22

Candidate Starts for Goib_18:

(Start: 22 @10694 has 10 MA's), (28, 10727), (34, 10760), (37, 10778), (53, 10856), (95, 11090), (96, 11093), (102, 11120), (117, 11192),

Gene: GrandSlam_16 Start: 9733, Stop: 10278, Start Num: 23

Candidate Starts for GrandSlam_16:

(Start: 23 @9733 has 155 MA's), (25, 9754), (35, 9802), (100, 10132),

Gene: Gravaillia_15 Start: 9671, Stop: 10210, Start Num: 23

Candidate Starts for Gravaillia_15:

(Start: 23 @9671 has 155 MA's), (25, 9692), (26, 9695), (27, 9698), (29, 9716), (43, 9782), (49, 9818), (65, 9932), (71, 9956), (72, 9959), (87, 10004), (93, 10028), (101, 10070), (118, 10151),

Gene: Gretchen_12 Start: 9764, Stop: 10330, Start Num: 23

Candidate Starts for Gretchen_12:

(Start: 23 @9764 has 155 MA's), (35, 9833), (66, 10010), (88, 10109), (103, 10175), (119, 10253), (122, 10277),

Gene: Gspu1_15 Start: 9141, Stop: 9716, Start Num: 22

Candidate Starts for Gspu1_15:

(14, 9105), (Start: 22 @9141 has 10 MA's), (28, 9174), (29, 9186), (30, 9192), (34, 9207), (37, 9225), (66, 9381), (67, 9384), (82, 9468), (91, 9504), (95, 9525), (98, 9537),

Gene: Guacamole_14 Start: 8683, Stop: 9321, Start Num: 18

Candidate Starts for Guacamole_14:

(Start: 17 @8680 has 2 MA's), (Start: 18 @8683 has 40 MA's), (36, 8773), (37, 8788), (63, 8941), (77, 9016), (81, 9040), (94, 9088), (106, 9145), (113, 9184), (126, 9268), (128, 9304),

Gene: Gumpizza_13 Start: 8981, Stop: 9541, Start Num: 23

Candidate Starts for Gumpizza_13:

(Start: 23 @8981 has 155 MA's), (66, 9224), (73, 9260), (88, 9323), (115, 9449), (125, 9506),

Gene: Gustav_11 Start: 7634, Stop: 8188, Start Num: 19

Candidate Starts for Gustav_11:

(Start: 19 @7634 has 2 MA's), (Start: 23 @7646 has 155 MA's), (31, 7700), (39, 7742), (42, 7757), (58, 7880), (63, 7901), (105, 8063), (126, 8177),

Gene: HH92_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for HH92_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Hadrien_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Hadrien_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Hail_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Hail_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Halsey_13 Start: 8980, Stop: 9540, Start Num: 23

Candidate Starts for Halsey_13:

(Start: 23 @8980 has 155 MA's), (66, 9223), (73, 9259), (88, 9322), (115, 9448), (125, 9505),

Gene: Hamood_16 Start: 9733, Stop: 10278, Start Num: 23

Candidate Starts for Hamood_16:

(Start: 23 @9733 has 155 MA's), (25, 9754), (35, 9802), (100, 10132),

Gene: Heinz_12 Start: 7958, Stop: 8524, Start Num: 23

Candidate Starts for Heinz_12:

(Start: 23 @7958 has 155 MA's), (32, 8015), (63, 8213), (95, 8336), (107, 8390), (123, 8477),

Gene: Hibiscus_12 Start: 7938, Stop: 8504, Start Num: 23

Candidate Starts for Hibiscus_12:

(Start: 23 @7938 has 155 MA's), (63, 8193), (92, 8298), (95, 8316), (107, 8370),

Gene: Hitter_14 Start: 8679, Stop: 9317, Start Num: 18

Candidate Starts for Hitter_14:

(Start: 17 @8676 has 2 MA's), (Start: 18 @8679 has 40 MA's), (36, 8769), (37, 8784), (51, 8850), (63, 8937), (77, 9012), (81, 9036), (94, 9084), (106, 9141), (113, 9180), (126, 9264), (128, 9300),

Gene: Honk_11 Start: 7750, Stop: 8304, Start Num: 23

Candidate Starts for Honk_11:

(9, 7645), (Start: 23 @7750 has 155 MA's), (66, 7993),

Gene: Huff_19 Start: 10919, Stop: 11509, Start Num: 22

Candidate Starts for Huff_19:

(Start: 22 @10919 has 10 MA's), (28, 10952), (34, 10985), (37, 11003), (74, 11204), (95, 11315), (96, 11318), (102, 11345), (117, 11417),

Gene: IAmGroot_12 Start: 9525, Stop: 10091, Start Num: 23

Candidate Starts for IAmGroot_12:

(Start: 23 @9525 has 155 MA's), (56, 9723), (88, 9870),

Gene: IUFootball_12 Start: 7927, Stop: 8487, Start Num: 23

Candidate Starts for IUFootball_12:

(Start: 23 @7927 has 155 MA's), (66, 8170), (72, 8194), (93, 8290), (99, 8323), (106, 8353), (109, 8362), (127, 8476),

Gene: InLimbo_13 Start: 7004, Stop: 7594, Start Num: 23

Candidate Starts for InLimbo_13:

(Start: 23 @7004 has 155 MA's), (25, 7025), (38, 7094), (59, 7223), (72, 7283), (84, 7358), (102, 7436), (106, 7454), (116, 7502),

Gene: Iter_13 Start: 9483, Stop: 10034, Start Num: 23

Candidate Starts for Iter_13:

(Start: 23 @9483 has 155 MA's), (38, 9570), (71, 9747), (73, 9762),

Gene: IttyBittyPiggy_13 Start: 9467, Stop: 10018, Start Num: 23

Candidate Starts for IttyBittyPiggy_13:

(Start: 23 @9467 has 155 MA's), (66, 9710),

Gene: Jalammah_15 Start: 8950, Stop: 9588, Start Num: 18

Candidate Starts for Jalammah_15:

(Start: 17 @8947 has 2 MA's), (Start: 18 @8950 has 40 MA's), (36, 9040), (37, 9055), (51, 9121), (63, 9208), (77, 9283), (81, 9307), (94, 9355), (106, 9412), (113, 9451), (126, 9535), (128, 9571),

Gene: Janeemi_14 Start: 10558, Stop: 11109, Start Num: 23

Candidate Starts for Janeemi_14:

(Start: 23 @10558 has 155 MA's), (71, 10822), (73, 10837),

Gene: JasmineDragon_12 Start: 7693, Stop: 8247, Start Num: 23

Candidate Starts for JasmineDragon_12:

(Start: 23 @7693 has 155 MA's), (73, 7972), (80, 8008),

Gene: JasperJr_14 Start: 8683, Stop: 9321, Start Num: 18

Candidate Starts for JasperJr_14:

(Start: 17 @8680 has 2 MA's), (Start: 18 @8683 has 40 MA's), (36, 8773), (37, 8788), (63, 8941), (77, 9016), (81, 9040), (94, 9088), (106, 9145), (113, 9184), (126, 9268), (128, 9304),

Gene: Joemato_13 Start: 9468, Stop: 10019, Start Num: 23

Candidate Starts for Joemato_13:

(Start: 23 @9468 has 155 MA's), (66, 9711), (71, 9732), (73, 9747), (118, 9951),

Gene: JohnDoe_13 Start: 9466, Stop: 10014, Start Num: 23

Candidate Starts for JohnDoe_13:

(Start: 23 @9466 has 155 MA's), (66, 9709), (71, 9730), (73, 9745), (118, 9949),

Gene: JohnThicc_12 Start: 7693, Stop: 8247, Start Num: 23

Candidate Starts for JohnThicc_12:

(Start: 23 @7693 has 155 MA's), (71, 7957), (73, 7972),

Gene: Jojo24_12 Start: 7933, Stop: 8499, Start Num: 23

Candidate Starts for Jojo24_12:

(Start: 23 @7933 has 155 MA's), (63, 8188), (92, 8293), (95, 8311), (107, 8365),

Gene: Jstan_13 Start: 9449, Stop: 10000, Start Num: 23

Candidate Starts for Jstan_13:

(Start: 23 @9449 has 155 MA's), (71, 9713), (73, 9728), (118, 9932),

Gene: JuJu_14 Start: 8607, Stop: 9245, Start Num: 18

Candidate Starts for JuJu_14:

(Start: 17 @8604 has 2 MA's), (Start: 18 @8607 has 40 MA's), (36, 8697), (37, 8712), (63, 8865), (77, 8940), (81, 8964), (94, 9012), (106, 9069), (113, 9108), (126, 9192), (128, 9228),

Gene: JuneStar_13 Start: 9561, Stop: 10112, Start Num: 23

Candidate Starts for JuneStar_13:

(Start: 23 @9561 has 155 MA's), (66, 9804), (119, 10047),

Gene: JustASigh_12 Start: 8934, Stop: 9476, Start Num: 23

Candidate Starts for JustASigh_12:

(Start: 23 @8934 has 155 MA's), (25, 8955), (43, 9051), (48, 9084), (65, 9201), (68, 9210), (86, 9270), (87, 9273), (93, 9297), (99, 9330), (105, 9351),

Gene: Kalimba_13 Start: 8889, Stop: 9449, Start Num: 23

Candidate Starts for Kalimba_13:

(Start: 23 @8889 has 155 MA's), (66, 9132), (73, 9168), (87, 9225), (115, 9357),

Gene: KappaFarmDelta_14 Start: 8832, Stop: 9470, Start Num: 18

Candidate Starts for KappaFarmDelta_14:

(Start: 17 @8829 has 2 MA's), (Start: 18 @8832 has 40 MA's), (36, 8922), (37, 8937), (51, 9003), (54, 9039), (77, 9165), (81, 9189), (94, 9237), (106, 9294), (113, 9333), (126, 9417), (128, 9453),

Gene: Kaylissa_13 Start: 9469, Stop: 10020, Start Num: 23

Candidate Starts for Kaylissa_13:

(Start: 23 @9469 has 155 MA's), (66, 9712), (71, 9733), (73, 9748), (118, 9952),

Gene: KeAlii_13 Start: 9493, Stop: 10050, Start Num: 23

Candidate Starts for KeAlii_13:

(Start: 23 @9493 has 155 MA's), (56, 9688), (60, 9706), (71, 9757), (73, 9772), (90, 9850),

Gene: Kinbote_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Kinbote_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Kuwabara_13 Start: 7836, Stop: 8429, Start Num: 23

Candidate Starts for Kuwabara_13:

(Start: 23 @7836 has 155 MA's), (25, 7857), (29, 7881), (52, 7995), (59, 8055), (65, 8085), (70, 8109), (72, 8115), (78, 8151), (79, 8154), (84, 8190), (94, 8229), (117, 8340),

Gene: LadyAstra_12 Start: 7693, Stop: 8247, Start Num: 23

Candidate Starts for LadyAstra_12:

(Start: 23 @7693 has 155 MA's), (71, 7957), (73, 7972), (118, 8173), (127, 8236),

Gene: Lego_13 Start: 9467, Stop: 10018, Start Num: 23

Candidate Starts for Lego_13:

(Start: 23 @9467 has 155 MA's), (66, 9710), (71, 9731), (73, 9746), (118, 9950),

Gene: Liebe_12 Start: 7927, Stop: 8487, Start Num: 23

Candidate Starts for Liebe_12:

(Start: 23 @7927 has 155 MA's), (66, 8170), (72, 8194), (93, 8290), (99, 8323), (106, 8353), (109, 8362), (127, 8476),

Gene: LilHazelnut_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for LilHazelnut_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Lizalica_13 Start: 9453, Stop: 10004, Start Num: 23

Candidate Starts for Lizalica_13:

(Start: 23 @9453 has 155 MA's), (71, 9717), (72, 9720), (73, 9732), (118, 9936),

Gene: London_13 Start: 9449, Stop: 10000, Start Num: 23

Candidate Starts for London_13:

(Start: 23 @9449 has 155 MA's), (71, 9713), (73, 9728), (118, 9932),

Gene: Lucky10_12 Start: 7042, Stop: 7632, Start Num: 23

Candidate Starts for Lucky10_12:

(Start: 23 @7042 has 155 MA's), (25, 7063), (38, 7132), (59, 7261), (72, 7321), (84, 7396), (102, 7474), (116, 7540),

Gene: Luke_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Luke_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Luna22_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Luna22_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Lysidious_14 Start: 8679, Stop: 9317, Start Num: 18

Candidate Starts for Lysidious_14:

(Start: 17 @8676 has 2 MA's), (Start: 18 @8679 has 40 MA's), (36, 8769), (37, 8784), (51, 8850), (63, 8937), (77, 9012), (81, 9036), (94, 9084), (106, 9141), (113, 9180), (126, 9264), (128, 9300),

Gene: MaGuCo_12 Start: 7863, Stop: 8423, Start Num: 23

Candidate Starts for MaGuCo_12:

(Start: 23 @7863 has 155 MA's), (29, 7908), (66, 8106), (72, 8130), (93, 8226), (99, 8259), (106, 8289), (109, 8298), (127, 8412),

Gene: Mabodamaca_12 Start: 8972, Stop: 9535, Start Num: 23

Candidate Starts for Mabodamaca_12:

(Start: 23 @8972 has 155 MA's), (47, 9089), (56, 9167), (122, 9482),

Gene: Mahdia_11 Start: 7651, Stop: 8193, Start Num: 23

Candidate Starts for Mahdia_11:

(Start: 23 @7651 has 155 MA's), (36, 7723), (42, 7762), (58, 7885), (63, 7906), (71, 7942), (87, 7990), (105, 8068), (107, 8080), (126, 8182),

Gene: MakCheese_14 Start: 8246, Stop: 8788, Start Num: 23

Candidate Starts for MakCheese_14:

(15, 8204), (20, 8240), (Start: 23 @8246 has 155 MA's), (58, 8480), (87, 8585), (124, 8771),

Gene: Malachai_14 Start: 8682, Stop: 9320, Start Num: 18

Candidate Starts for Malachai_14:

(Start: 17 @8679 has 2 MA's), (Start: 18 @8682 has 40 MA's), (36, 8772), (37, 8787), (51, 8853), (77, 9015), (81, 9039), (94, 9087), (106, 9144), (113, 9183), (126, 9267), (128, 9303),

Gene: Malibo_12 Start: 8220, Stop: 8765, Start Num: 23

Candidate Starts for Malibo_12:

(13, 8172), (Start: 23 @8220 has 155 MA's), (29, 8265), (39, 8316), (63, 8475), (72, 8514), (85, 8553), (87, 8559), (105, 8637), (107, 8649),

Gene: Maureen_12 Start: 7927, Stop: 8487, Start Num: 23

Candidate Starts for Maureen_12:

(Start: 23 @7927 has 155 MA's), (66, 8170), (72, 8194), (93, 8290), (99, 8323), (106, 8353), (109, 8362), (127, 8476),

Gene: Melba_14 Start: 8679, Stop: 9317, Start Num: 18

Candidate Starts for Melba_14:

(Start: 17 @8676 has 2 MA's), (Start: 18 @8679 has 40 MA's), (36, 8769), (37, 8784), (63, 8937), (77, 9012), (81, 9036), (94, 9084), (106, 9141), (113, 9180), (126, 9264), (128, 9300),

Gene: Mellie_13 Start: 8419, Stop: 9057, Start Num: 18

Candidate Starts for Mellie_13:

(Start: 17 @8416 has 2 MA's), (Start: 18 @8419 has 40 MA's), (36, 8509), (37, 8524), (51, 8590), (63, 8677), (77, 8752), (81, 8776), (94, 8824), (106, 8881), (113, 8920), (126, 9004), (128, 9040),

Gene: MiniMommy_11 Start: 7693, Stop: 8247, Start Num: 23

Candidate Starts for MiniMommy_11:

(Start: 23 @7693 has 155 MA's), (73, 7972), (80, 8008),

Gene: MintFen_14 Start: 8679, Stop: 9317, Start Num: 18

Candidate Starts for MintFen_14:

(Start: 17 @8676 has 2 MA's), (Start: 18 @8679 has 40 MA's), (36, 8769), (37, 8784), (63, 8937), (77, 9012), (81, 9036), (94, 9084), (106, 9141), (113, 9180), (126, 9264), (128, 9300),

Gene: MissRona_16 Start: 9023, Stop: 9661, Start Num: 18

Candidate Starts for MissRona_16:

(Start: 17 @9020 has 2 MA's), (Start: 18 @9023 has 40 MA's), (36, 9113), (37, 9128), (51, 9194), (54, 9230), (63, 9281), (77, 9356), (81, 9380), (94, 9428), (106, 9485), (113, 9524), (126, 9608), (128, 9644),

Gene: MissSwiss_13 Start: 9452, Stop: 10000, Start Num: 23

Candidate Starts for MissSwiss_13:

(Start: 23 @9452 has 155 MA's), (73, 9731), (87, 9788), (106, 9875), (115, 9920),

Gene: Morkie_12 Start: 7004, Stop: 7594, Start Num: 23

Candidate Starts for Morkie_12:

(Start: 23 @7004 has 155 MA's), (25, 7025), (38, 7094), (59, 7223), (72, 7283), (84, 7358), (102, 7436), (106, 7454), (116, 7502),

Gene: Morrissey_12 Start: 8032, Stop: 8586, Start Num: 19

Candidate Starts for Morrissey_12:

(Start: 19 @8032 has 2 MA's), (Start: 23 @8044 has 155 MA's), (31, 8098), (47, 8188), (58, 8278), (63, 8299), (86, 8380), (87, 8383),

Gene: Moss_13 Start: 8980, Stop: 9540, Start Num: 23

Candidate Starts for Moss_13:

(Start: 23 @8980 has 155 MA's), (66, 9223), (73, 9259), (88, 9322), (115, 9448), (125, 9505),

Gene: Mudpuppy_13 Start: 9467, Stop: 10018, Start Num: 23

Candidate Starts for Mudpuppy_13:

(Start: 23 @9467 has 155 MA's), (71, 9731), (72, 9734), (73, 9746), (118, 9950),

Gene: Mulch_16 Start: 9700, Stop: 10245, Start Num: 23

Candidate Starts for Mulch_16:

(Start: 23 @9700 has 155 MA's), (25, 9721), (124, 10225),

Gene: Murp_14 Start: 8672, Stop: 9310, Start Num: 18

Candidate Starts for Murp_14:

(Start: 17 @8669 has 2 MA's), (Start: 18 @8672 has 40 MA's), (36, 8762), (37, 8777), (51, 8843), (54, 8879), (63, 8930), (77, 9005), (81, 9029), (106, 9134), (113, 9173), (126, 9257), (128, 9293),

Gene: Mysterium_13 Start: 8981, Stop: 9541, Start Num: 23

Candidate Starts for Mysterium_13:

(Start: 23 @8981 has 155 MA's), (66, 9224), (73, 9260), (88, 9323), (115, 9449), (125, 9506),

Gene: Nadeem_16 Start: 9700, Stop: 10245, Start Num: 23

Candidate Starts for Nadeem_16:

(Start: 23 @9700 has 155 MA's), (25, 9721), (124, 10225),

Gene: NancyRae_16 Start: 9700, Stop: 10245, Start Num: 23

Candidate Starts for NancyRae_16:

(Start: 23 @9700 has 155 MA's), (25, 9721), (124, 10225),

Gene: Nesbitt_12 Start: 8240, Stop: 8812, Start Num: 23

Candidate Starts for Nesbitt_12:

(10, 8156), (Start: 23 @8240 has 155 MA's), (28, 8273), (33, 8300), (36, 8309), (40, 8336), (47, 8363), (65, 8483), (72, 8510), (73, 8522), (76, 8540), (92, 8597), (109, 8672),

Gene: Niobe_13 Start: 9449, Stop: 10000, Start Num: 23

Candidate Starts for Niobe_13:

(Start: 23 @9449 has 155 MA's), (71, 9713), (73, 9728), (118, 9932),

Gene: Nitro_13 Start: 9472, Stop: 10023, Start Num: 23

Candidate Starts for Nitro_13:

(Start: 23 @9472 has 155 MA's), (71, 9736), (73, 9751), (118, 9955),

Gene: NovoPizza_13 Start: 10041, Stop: 10583, Start Num: 23

Candidate Starts for NovoPizza_13:

(Start: 23 @10041 has 155 MA's), (25, 10062), (30, 10092), (43, 10152), (49, 10188), (65, 10302), (71, 10326), (87, 10374), (101, 10440), (102, 10443), (107, 10464), (118, 10521),

Gene: OBUpride_15 Start: 9932, Stop: 10471, Start Num: 23

Candidate Starts for OBUpride_15:

(Start: 23 @9932 has 155 MA's), (25, 9953), (26, 9956), (27, 9959), (29, 9977), (43, 10043), (49, 10079), (58, 10160), (65, 10193), (71, 10217), (87, 10265), (93, 10289), (101, 10331), (118, 10412),

Gene: ODay_13 Start: 7563, Stop: 8147, Start Num: 23

Candidate Starts for ODay_13:

(Start: 23 @7563 has 155 MA's), (25, 7584), (29, 7608), (58, 7776), (59, 7782), (72, 7842), (78, 7878), (79, 7881), (84, 7917), (125, 8124),

Gene: ObiToo_13 Start: 9650, Stop: 10207, Start Num: 23

Candidate Starts for ObiToo_13:

(Start: 23 @9650 has 155 MA's), (71, 9914), (73, 9929),

Gene: Obliviate_13 Start: 8445, Stop: 9086, Start Num: 17

Candidate Starts for Obliviate_13:

(Start: 17 @8445 has 2 MA's), (Start: 18 @8448 has 40 MA's), (36, 8538), (37, 8553), (51, 8619), (63, 8706), (77, 8781), (81, 8805), (94, 8853), (106, 8910), (113, 8949), (126, 9033), (128, 9069),

Gene: Origami_12 Start: 7693, Stop: 8247, Start Num: 23

Candidate Starts for Origami_12:

(Start: 23 @7693 has 155 MA's), (71, 7957), (73, 7972), (118, 8173), (127, 8236),

Gene: PCoral7_14 Start: 8656, Stop: 9306, Start Num: 18

Candidate Starts for PCoral7_14:

(Start: 11 @8626 has 1 MA's), (Start: 17 @8653 has 2 MA's), (Start: 18 @8656 has 40 MA's), (36, 8746), (37, 8761), (54, 8863), (62, 8911), (77, 8989), (81, 9013), (89, 9043), (94, 9061), (113, 9157), (126, 9241),

Gene: PFR1_10 Start: 8107, Stop: 8706, Start Num: 16

Candidate Starts for PFR1_10:

(16, 8107), (38, 8227), (50, 8281), (55, 8326), (61, 8362), (75, 8431), (88, 8497), (90, 8506), (97, 8539), (104, 8566), (112, 8608), (116, 8623),

Gene: PFR2_10 Start: 8107, Stop: 8706, Start Num: 16

Candidate Starts for PFR2_10:

(16, 8107), (38, 8227), (50, 8281), (55, 8326), (61, 8362), (75, 8431), (88, 8497), (90, 8506), (97, 8539), (104, 8566), (112, 8608), (116, 8623),

Gene: PandaPo_13 Start: 9452, Stop: 10000, Start Num: 23

Candidate Starts for PandaPo_13:

(Start: 23 @9452 has 155 MA's), (73, 9731), (87, 9788), (106, 9875), (115, 9920),

Gene: Parada_16 Start: 9700, Stop: 10245, Start Num: 23

Candidate Starts for Parada_16:

(Start: 23 @9700 has 155 MA's), (25, 9721), (124, 10225),

Gene: Percival_12 Start: 9598, Stop: 10164, Start Num: 23

Candidate Starts for Percival_12:

(Start: 23 @9598 has 155 MA's), (35, 9667), (66, 9844), (88, 9943), (103, 10009), (119, 10087), (122, 10111),

Gene: Petra_16 Start: 9059, Stop: 9697, Start Num: 18

Candidate Starts for Petra_16:

(Start: 17 @9056 has 2 MA's), (Start: 18 @9059 has 40 MA's), (36, 9149), (37, 9164), (51, 9230), (63, 9317), (77, 9392), (81, 9416), (94, 9464), (106, 9521), (113, 9560), (126, 9644), (128, 9680),

Gene: Phives_14 Start: 10550, Stop: 11101, Start Num: 23

Candidate Starts for Phives_14:

(Start: 23 @10550 has 155 MA's), (47, 10667), (66, 10793), (71, 10814), (73, 10829),

Gene: PhorbesPhlower_12 Start: 7004, Stop: 7594, Start Num: 23

Candidate Starts for PhorbesPhlower_12:

(Start: 23 @7004 has 155 MA's), (25, 7025), (38, 7094), (59, 7223), (72, 7283), (84, 7358), (102, 7436), (106, 7454), (116, 7502),

Gene: PhrostedPhlake_15 Start: 9037, Stop: 9675, Start Num: 18

Candidate Starts for PhrostedPhlake_15:

(Start: 17 @9034 has 2 MA's), (Start: 18 @9037 has 40 MA's), (36, 9127), (37, 9142), (51, 9208), (63, 9295), (77, 9370), (81, 9394), (94, 9442), (106, 9499), (113, 9538), (126, 9622), (128, 9658),

Gene: Pimento_17 Start: 9904, Stop: 10449, Start Num: 23

Candidate Starts for Pimento_17:

(Start: 23 @9904 has 155 MA's), (25, 9925), (124, 10429),

Gene: Pipp_14 Start: 8651, Stop: 9292, Start Num: 17

Candidate Starts for Pipp_14:

(Start: 17 @8651 has 2 MA's), (Start: 18 @8654 has 40 MA's), (36, 8744), (37, 8759), (77, 8987), (81, 9011), (94, 9059), (106, 9116), (113, 9155), (126, 9239), (128, 9275),

Gene: Pixelle_13 Start: 9493, Stop: 10044, Start Num: 23

Candidate Starts for Pixelle_13:

(Start: 23 @9493 has 155 MA's), (66, 9736), (71, 9757),

Gene: Powerpuff_13 Start: 9518, Stop: 10069, Start Num: 23

Candidate Starts for Powerpuff_13:

(Start: 23 @9518 has 155 MA's), (66, 9761), (71, 9782), (73, 9797), (118, 10001),

Gene: PrincePatrick_14 Start: 8714, Stop: 9367, Start Num: 18

Candidate Starts for PrincePatrick_14:

(Start: 11 @8684 has 1 MA's), (Start: 17 @8711 has 2 MA's), (Start: 18 @8714 has 40 MA's), (36, 8804), (37, 8819), (54, 8921), (62, 8969), (77, 9047), (81, 9071), (89, 9101), (94, 9119), (113, 9215), (126, 9299),

Gene: Pumpkins_13 Start: 9570, Stop: 10121, Start Num: 23

Candidate Starts for Pumpkins_13:

(Start: 23 @9570 has 155 MA's), (66, 9813), (71, 9834),

Gene: Puppies_11 Start: 7567, Stop: 8112, Start Num: 23

Candidate Starts for Puppies_11:

(Start: 23 @7567 has 155 MA's), (63, 7822), (105, 7984), (107, 7996), (108, 7999),

Gene: Reedo_13 Start: 9508, Stop: 10059, Start Num: 23

Candidate Starts for Reedo_13:

(Start: 23 @9508 has 155 MA's), (56, 9703), (60, 9721), (73, 9787), (106, 9937),

Gene: Rem711_18 Start: 11518, Stop: 12087, Start Num: 23

Candidate Starts for Rem711_18:

(Start: 23 @11518 has 155 MA's), (29, 11563), (44, 11668), (64, 11800), (65, 11806), (71, 11830), (72, 11833),

Gene: Reyja_13 Start: 8077, Stop: 8643, Start Num: 23

Candidate Starts for Reyja_13:

(Start: 23 @8077 has 155 MA's), (40, 8176), (63, 8332), (92, 8437), (107, 8509),

Gene: RockScotty_13 Start: 8980, Stop: 9540, Start Num: 23

Candidate Starts for RockScotty_13:

(Start: 23 @8980 has 155 MA's), (66, 9223), (73, 9259), (88, 9322), (115, 9448), (125, 9505),

Gene: Rowa_12 Start: 8015, Stop: 8572, Start Num: 23

Candidate Starts for Rowa_12:

(Start: 23 @8015 has 155 MA's), (24, 8027), (40, 8111), (65, 8258), (72, 8285), (76, 8315), (85, 8348), (122, 8525),

Gene: Ruthy_13 Start: 8511, Stop: 9053, Start Num: 23

Candidate Starts for Ruthy_13:

(8, 8325), (12, 8460), (Start: 23 @8511 has 155 MA's), (35, 8580), (57, 8739), (58, 8745), (87, 8850), (124, 9036),

Gene: Sabourin_13 Start: 8889, Stop: 9449, Start Num: 23

Candidate Starts for Sabourin_13:

(Start: 23 @8889 has 155 MA's), (66, 9132), (73, 9168), (87, 9225), (115, 9357),

Gene: Samba_14 Start: 8787, Stop: 9425, Start Num: 18

Candidate Starts for Samba_14:

(Start: 17 @8784 has 2 MA's), (Start: 18 @8787 has 40 MA's), (36, 8877), (37, 8892), (77, 9120), (81, 9144), (94, 9192), (106, 9249), (113, 9288), (126, 9372), (128, 9408),

Gene: Santhid_12 Start: 7942, Stop: 8508, Start Num: 23

Candidate Starts for Santhid_12:

(Start: 23 @7942 has 155 MA's), (40, 8041), (63, 8197), (92, 8302), (107, 8374),

Gene: Schaffner_13 Start: 9558, Stop: 10109, Start Num: 23

Candidate Starts for Schaffner_13:

(Start: 23 @9558 has 155 MA's), (66, 9801), (119, 10044),

Gene: Schmidt_15 Start: 9115, Stop: 9729, Start Num: 22

Candidate Starts for Schmidt_15:

(7, 8911), (Start: 22 @9115 has 10 MA's), (30, 9166), (34, 9181), (37, 9199), (46, 9223), (54, 9289), (62, 9337), (79, 9421), (91, 9487), (96, 9511),

Gene: ShakeltOph_12 Start: 7693, Stop: 8247, Start Num: 23

Candidate Starts for ShakeltOph_12:

(Start: 23 @7693 has 155 MA's), (73, 7972), (80, 8008),

Gene: Simpson_14 Start: 9468, Stop: 10019, Start Num: 23

Candidate Starts for Simpson_14:

(Start: 23 @9468 has 155 MA's), (66, 9711), (71, 9732), (73, 9747), (118, 9951),

Gene: Skelbel_13 Start: 9449, Stop: 10000, Start Num: 23

Candidate Starts for Skelbel_13:

(Start: 23 @9449 has 155 MA's), (71, 9713), (73, 9728), (118, 9932),

Gene: Snek_13 Start: 8559, Stop: 9110, Start Num: 23

Candidate Starts for Snek_13:

(Start: 23 @8559 has 155 MA's), (56, 8754), (66, 8802), (106, 8982),

Gene: Soilmate_14 Start: 8578, Stop: 9216, Start Num: 18

Candidate Starts for Soilmate_14:

(Start: 17 @8575 has 2 MA's), (Start: 18 @8578 has 40 MA's), (36, 8668), (37, 8683), (51, 8749), (63, 8836), (77, 8911), (81, 8935), (94, 8983), (106, 9040), (113, 9079), (126, 9163), (128, 9199),

Gene: Soondubu_12 Start: 9369, Stop: 9917, Start Num: 23

Candidate Starts for Soondubu_12:

(Start: 23 @9369 has 155 MA's), (29, 9414), (119, 9852), (120, 9855), (124, 9888),

Gene: Sooty_13 Start: 8890, Stop: 9450, Start Num: 23

Candidate Starts for Sooty_13:

(Start: 23 @8890 has 155 MA's), (66, 9133), (73, 9169), (87, 9226), (115, 9358),

Gene: SpecialK_13 Start: 8887, Stop: 9447, Start Num: 23

Candidate Starts for SpecialK_13:

(Start: 23 @8887 has 155 MA's), (66, 9130), (73, 9166), (87, 9223), (115, 9355), (125, 9412),

Gene: Splinter_17 Start: 10694, Stop: 11284, Start Num: 22

Candidate Starts for Splinter_17:

(Start: 22 @10694 has 10 MA's), (28, 10727), (34, 10760), (37, 10778), (53, 10856), (95, 11090), (96, 11093), (102, 11120), (117, 11192),

Gene: Sprinklemunch_12 Start: 8286, Stop: 8828, Start Num: 23

Candidate Starts for Sprinklemunch_12:

(15, 8244), (20, 8280), (Start: 23 @8286 has 155 MA's), (45, 8418), (58, 8520), (87, 8625), (124, 8811),

Gene: Stuu_13 Start: 8980, Stop: 9540, Start Num: 23

Candidate Starts for Stuu_13:

(Start: 23 @8980 has 155 MA's), (66, 9223), (73, 9259), (88, 9322), (115, 9448), (125, 9505),

Gene: SuMoo_11 Start: 7932, Stop: 8495, Start Num: 23

Candidate Starts for SuMoo_11:

(Start: 23 @7932 has 155 MA's), (47, 8049), (56, 8127), (122, 8442),

Gene: Subaru_13 Start: 9449, Stop: 10000, Start Num: 23

Candidate Starts for Subaru_13:

(Start: 23 @9449 has 155 MA's), (71, 9713), (73, 9728), (118, 9932),

Gene: Sue2_13 Start: 9472, Stop: 10023, Start Num: 23

Candidate Starts for Sue2_13:

(Start: 23 @9472 has 155 MA's), (66, 9715),

Gene: SuperHands_13 Start: 9770, Stop: 10336, Start Num: 23

Candidate Starts for SuperHands_13:

(Start: 23 @9770 has 155 MA's), (35, 9839), (66, 10016), (88, 10115), (103, 10181), (119, 10259), (122, 10283),

Gene: TZGordon_19 Start: 10836, Stop: 11426, Start Num: 22

Candidate Starts for TZGordon_19:

(Start: 22 @10836 has 10 MA's), (28, 10869), (34, 10902), (37, 10920), (74, 11121), (95, 11232), (96, 11235), (102, 11262), (117, 11334),

Gene: Tallboi_13 Start: 9476, Stop: 10027, Start Num: 23

Candidate Starts for Tallboi_13:

(Start: 23 @9476 has 155 MA's), (66, 9719), (73, 9755), (118, 9959),

Gene: Tarzan_12 Start: 7931, Stop: 8497, Start Num: 23

Candidate Starts for Tarzan_12:

(Start: 23 @7931 has 155 MA's), (40, 8030), (63, 8186), (92, 8291), (95, 8309), (107, 8363),

Gene: Tbone_13 Start: 9461, Stop: 10012, Start Num: 23

Candidate Starts for Tbone_13:

(Start: 23 @9461 has 155 MA's), (71, 9725), (72, 9728), (73, 9740), (118, 9944),

Gene: TforTroy_13 Start: 9590, Stop: 10141, Start Num: 23

Candidate Starts for TforTroy_13:

(Start: 23 @9590 has 155 MA's), (38, 9677), (66, 9833),

Gene: ThursdayNight_12 Start: 7964, Stop: 8515, Start Num: 23

Candidate Starts for ThursdayNight_12:

(Start: 23 @7964 has 155 MA's), (29, 8009), (56, 8159), (72, 8231), (109, 8396), (119, 8450),

Gene: Tian_13 Start: 9490, Stop: 10041, Start Num: 23

Candidate Starts for Tian_13:

(Start: 23 @9490 has 155 MA's), (66, 9733), (71, 9754),

Gene: TinaLin_20 Start: 11401, Stop: 11997, Start Num: 22

Candidate Starts for TinaLin_20:

(Start: 22 @11401 has 10 MA's), (37, 11485), (46, 11509), (53, 11563), (74, 11686), (95, 11797), (96, 11800), (98, 11809), (102, 11827), (111, 11866), (121, 11917),

Gene: Toast_14 Start: 8626, Stop: 9306, Start Num: 11

Candidate Starts for Toast_14:

(Start: 11 @8626 has 1 MA's), (Start: 17 @8653 has 2 MA's), (Start: 18 @8656 has 40 MA's), (36, 8746), (37, 8761), (54, 8863), (62, 8911), (77, 8989), (81, 9013), (89, 9043), (94, 9061), (113, 9157), (126, 9241),

Gene: Trine_11 Start: 7558, Stop: 8103, Start Num: 23

Candidate Starts for Trine_11:

(Start: 23 @7558 has 155 MA's), (36, 7630), (42, 7669), (58, 7792), (63, 7813),

Gene: Tuck_14 Start: 10510, Stop: 11061, Start Num: 23

Candidate Starts for Tuck_14:

(Start: 23 @10510 has 155 MA's), (71, 10774), (73, 10789),

Gene: Turab_13 Start: 9478, Stop: 10029, Start Num: 23

Candidate Starts for Turab_13:

(Start: 23 @9478 has 155 MA's), (47, 9595), (66, 9721), (71, 9742), (73, 9757), (118, 9961),

Gene: Tutumahutu_13 Start: 9518, Stop: 10069, Start Num: 23

Candidate Starts for Tutumahutu_13:

(Start: 23 @9518 has 155 MA's), (66, 9761), (71, 9782), (73, 9797), (118, 10001),

Gene: Tweety19_13 Start: 8558, Stop: 9109, Start Num: 23

Candidate Starts for Tweety19_13:

(Start: 23 @8558 has 155 MA's), (56, 8753), (66, 8801), (106, 8981),

Gene: Ubuntu_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Ubuntu_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: UmaThurman_14 Start: 8786, Stop: 9424, Start Num: 18

Candidate Starts for UmaThurman_14:

(Start: 17 @8783 has 2 MA's), (Start: 18 @8786 has 40 MA's), (36, 8876), (37, 8891), (63, 9044), (77, 9119), (81, 9143), (94, 9191), (106, 9248), (113, 9287), (126, 9371), (128, 9407),

Gene: Upyo_11 Start: 7576, Stop: 8118, Start Num: 23

Candidate Starts for Upyo_11:

(Start: 19 @7564 has 2 MA's), (Start: 23 @7576 has 155 MA's), (58, 7810), (63, 7831), (85, 7909), (87, 7915), (126, 8107),

Gene: Utz_14 Start: 8653, Stop: 9291, Start Num: 18

Candidate Starts for Utz_14:

(Start: 17 @8650 has 2 MA's), (Start: 18 @8653 has 40 MA's), (36, 8743), (37, 8758), (63, 8911), (77, 8986), (81, 9010), (94, 9058), (106, 9115), (113, 9154), (126, 9238), (128, 9274),

Gene: UtzChips_11 Start: 8624, Stop: 9187, Start Num: 23

Candidate Starts for UtzChips_11:

(Start: 23 @8624 has 155 MA's), (47, 8741), (106, 9047), (122, 9134),

Gene: VResidence_13 Start: 9552, Stop: 10100, Start Num: 23

Candidate Starts for VResidence_13:

(21, 9546), (Start: 23 @9552 has 155 MA's), (119, 10038),

Gene: Vendetta_17 Start: 10694, Stop: 11284, Start Num: 22

Candidate Starts for Vendetta_17:

(Start: 22 @10694 has 10 MA's), (28, 10727), (34, 10760), (37, 10778), (53, 10856), (95, 11090), (96, 11093), (102, 11120), (117, 11192),

Gene: VroomVroom_12 Start: 7705, Stop: 8259, Start Num: 23

Candidate Starts for VroomVroom_12:

(Start: 23 @7705 has 155 MA's), (29, 7750), (73, 7984),

Gene: Walrus_15 Start: 8881, Stop: 9519, Start Num: 18

Candidate Starts for Walrus_15:

(Start: 17 @8878 has 2 MA's), (Start: 18 @8881 has 40 MA's), (36, 8971), (37, 8986), (51, 9052), (63, 9139), (77, 9214), (81, 9238), (94, 9286), (106, 9343), (113, 9382), (126, 9466), (128, 9502),

Gene: Warda_13 Start: 9464, Stop: 10015, Start Num: 23

Candidate Starts for Warda_13:

(Start: 23 @9464 has 155 MA's), (71, 9728), (72, 9731), (73, 9743), (118, 9947),

Gene: Webster2_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Webster2_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Weirido19_13 Start: 8705, Stop: 9247, Start Num: 23

Candidate Starts for Weirido19_13:

(Start: 23 @8705 has 155 MA's), (40, 8807), (43, 8822), (48, 8855), (68, 8981), (86, 9041), (87, 9044), (89, 9056), (105, 9122), (110, 9149), (118, 9191), (120, 9197),

Gene: WheatThin_16 Start: 9700, Stop: 10245, Start Num: 23

Candidate Starts for WheatThin_16:

(Start: 23 @9700 has 155 MA's), (25, 9721), (124, 10225),

Gene: Widow_11 Start: 7558, Stop: 8103, Start Num: 23

Candidate Starts for Widow_11:

(Start: 23 @7558 has 155 MA's), (63, 7813), (71, 7849), (105, 7975), (107, 7987), (108, 7990),

Gene: Wildwest_14 Start: 10387, Stop: 10935, Start Num: 23

Candidate Starts for Wildwest_14:

(21, 10381), (Start: 23 @10387 has 155 MA's), (71, 10651), (99, 10780), (115, 10855),

Gene: William_14 Start: 8602, Stop: 9252, Start Num: 18

Candidate Starts for William_14:

(Start: 11 @8572 has 1 MA's), (Start: 17 @8599 has 2 MA's), (Start: 18 @8602 has 40 MA's), (36, 8692), (37, 8707), (54, 8809), (62, 8857), (77, 8935), (81, 8959), (89, 8989), (94, 9007), (113, 9103), (126, 9187),

Gene: Wishmaker_15 Start: 9938, Stop: 10477, Start Num: 23

Candidate Starts for Wishmaker_15:

(Start: 23 @9938 has 155 MA's), (25, 9959), (26, 9962), (27, 9965), (29, 9983), (43, 10049), (49, 10085), (58, 10166), (65, 10199), (71, 10223), (87, 10271), (93, 10295), (101, 10337), (118, 10418),

Gene: Wisp_13 Start: 8419, Stop: 9057, Start Num: 18

Candidate Starts for Wisp_13:

(Start: 17 @8416 has 2 MA's), (Start: 18 @8419 has 40 MA's), (36, 8509), (37, 8524), (51, 8590), (63, 8677), (77, 8752), (81, 8776), (94, 8824), (106, 8881), (113, 8920), (126, 9004), (128, 9040),

Gene: Wocket_15 Start: 8904, Stop: 9542, Start Num: 18

Candidate Starts for Wocket_15:

(Start: 17 @8901 has 2 MA's), (Start: 18 @8904 has 40 MA's), (36, 8994), (37, 9009), (51, 9075), (69, 9195), (77, 9237), (81, 9261), (94, 9309), (113, 9405), (126, 9489), (128, 9525),

Gene: Yang_13 Start: 9560, Stop: 10111, Start Num: 23

Candidate Starts for Yang_13:

(Start: 23 @9560 has 155 MA's), (38, 9647), (119, 10046),

Gene: YesChef_13 Start: 9518, Stop: 10069, Start Num: 23

Candidate Starts for YesChef_13:

(Start: 23 @9518 has 155 MA's), (66, 9761), (71, 9782), (73, 9797), (118, 10001),

Gene: Zarbodnamra_14 Start: 8678, Stop: 9316, Start Num: 18

Candidate Starts for Zarbodnamra_14:

(Start: 17 @8675 has 2 MA's), (Start: 18 @8678 has 40 MA's), (36, 8768), (37, 8783), (63, 8936), (77, 9011), (81, 9035), (94, 9083), (106, 9140), (113, 9179), (126, 9263), (128, 9299),

Gene: Zeta1847_11 Start: 7708, Stop: 8262, Start Num: 23

Candidate Starts for Zeta1847_11:

(Start: 23 @7708 has 155 MA's), (47, 7825), (72, 7975),

Gene: ZiggyZoo_13 Start: 8448, Stop: 9086, Start Num: 18

Candidate Starts for ZiggyZoo_13:

(Start: 17 @8445 has 2 MA's), (Start: 18 @8448 has 40 MA's), (36, 8538), (37, 8553), (51, 8619), (63, 8706), (77, 8781), (81, 8805), (94, 8853), (106, 8910), (113, 8949), (126, 9033), (128, 9069),

Gene: Zilla_14 Start: 8728, Stop: 9366, Start Num: 18

Candidate Starts for Zilla_14:

(Start: 17 @8725 has 2 MA's), (Start: 18 @8728 has 40 MA's), (36, 8818), (37, 8833), (51, 8899), (63, 8986), (77, 9061), (81, 9085), (94, 9133), (106, 9190), (113, 9229), (126, 9313), (128, 9349),

Gene: Zodiariah_12 Start: 8235, Stop: 8777, Start Num: 23

Candidate Starts for Zodiariah_12:

(Start: 23 @8235 has 155 MA's), (58, 8469), (87, 8574), (124, 8760),