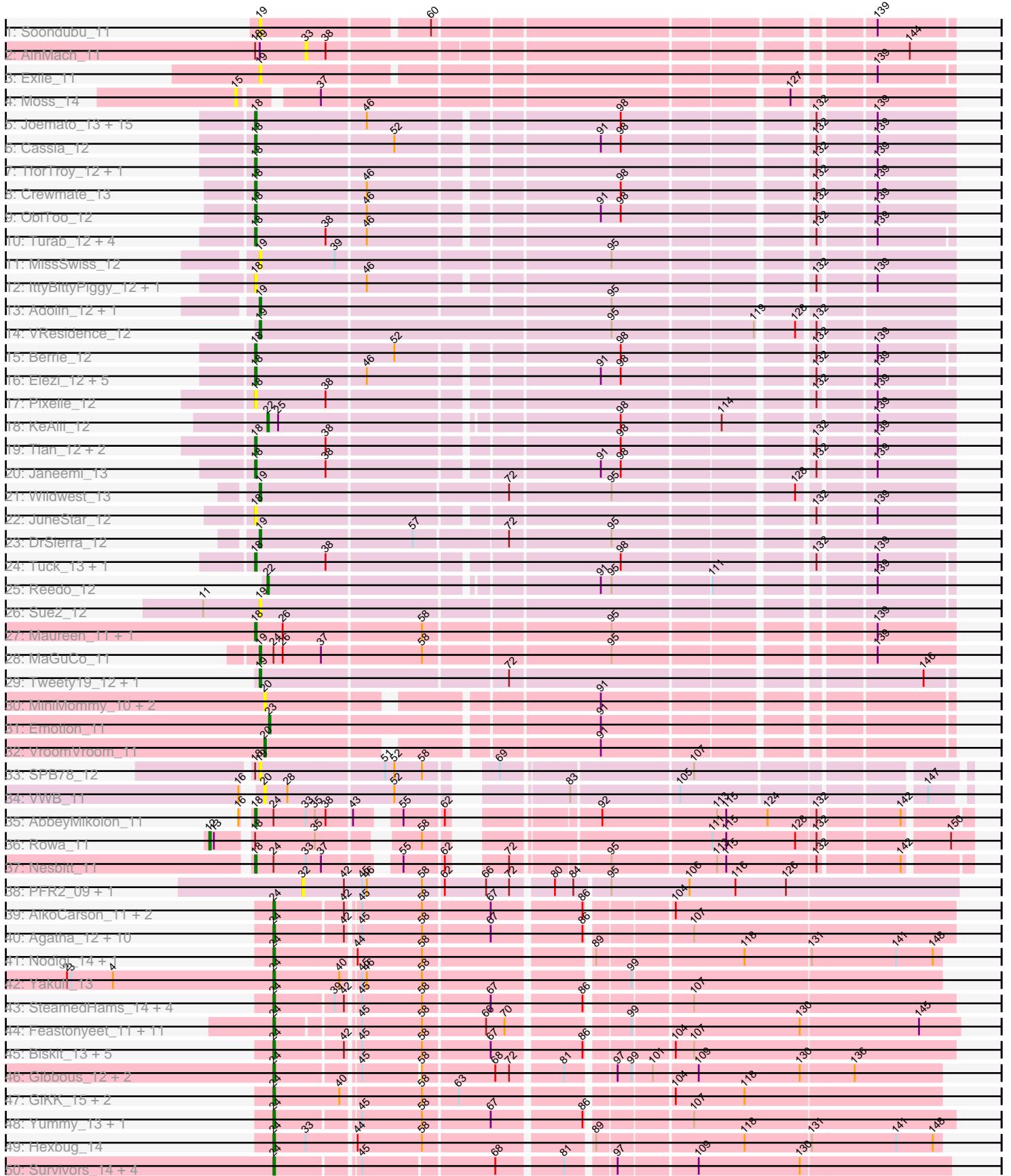
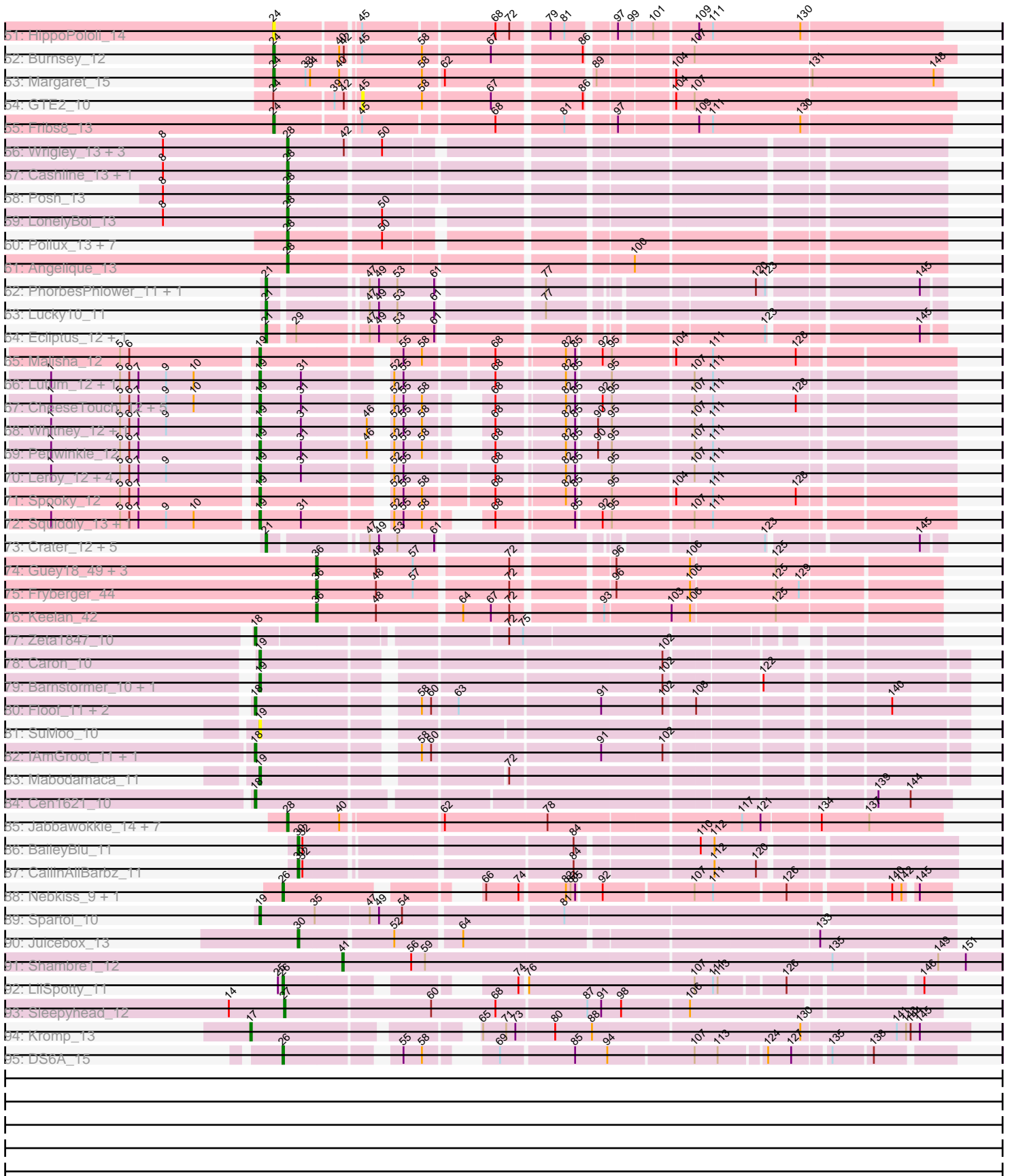


Pham 163341



Pham 163341



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 163341 Report

This analysis was run 04/28/24 on database version 559.

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 163341 has 217 members, 45 are drafts.

Phages represented in each track:

- Track 1 : Soondubu_11
- Track 2 : AinMach_11
- Track 3 : Exile_11
- Track 4 : Moss_14
- Track 5 : Joemato_13, Iter_12, AGrandiflora_12, JohnDoe_12, Cyan_12, YesChef_12, Lizalica_12, Kaylissa_12, Lego_12, Warda_12, Tutumahutu_12, Tbone_12, Simpson_13, Powerpuff_12, Ascela_12, Mudpuppy_12
- Track 6 : Cassia_12
- Track 7 : TforTroy_12, Yang_12
- Track 8 : Crewmate_13
- Track 9 : ObiToo_12
- Track 10 : Turab_12, Adumb2043_12, Tallboi_12, AEgle_12, Nitro_12
- Track 11 : MissSwiss_12
- Track 12 : IttyBittyPiggy_12, Pumpkins_22
- Track 13 : Adolin_12, DrManhattan_12
- Track 14 : VResidence_12
- Track 15 : Berrie_12
- Track 16 : Elezi_12, Jstan_12, Eraser_12, London_12, Niobe_12, Asa16_12
- Track 17 : Pixelle_12
- Track 18 : KeAlii_12
- Track 19 : Tian_12, Amyev_12, Phives_13
- Track 20 : Janeemi_13
- Track 21 : Wildwest_13
- Track 22 : JuneStar_12
- Track 23 : DrSierra_12
- Track 24 : Tuck_13, Community_13
- Track 25 : Reedo_12
- Track 26 : Sue2_12
- Track 27 : Maureen_11, Liebe_11
- Track 28 : MaGuCo_11
- Track 29 : Tweety19_12, Snek_12
- Track 30 : MiniMommy_10, JasmineDragon_11, ShakeltOph_11
- Track 31 : Emotion_11

- Track 32 : VroomVroom_11
- Track 33 : SPB78_12
- Track 34 : VWB_11
- Track 35 : AbbeyMikolon_11
- Track 36 : Rowa_11
- Track 37 : Nesbitt_11
- Track 38 : PFR2_09, PFR1_09
- Track 39 : AikoCarson_11, Amok_11, Emalyn_11
- Track 40 : Agatha_12, Elliott_12, Quasar_12, Cozz_12, PsychoKiller_12, Nina_13, MunkgeeRoachy_13, Typhonmarchy_13, Sopespian_12, RedBaron_13, Axym_12
- Track 41 : Nodigi_14, Orla_14
- Track 42 : Yakult_13
- Track 43 : SteamedHams_14, Tolls_14, BillDoor_14, Yarn_11, AndPeggy_11
- Track 44 : Feastonyeet_11, Mayweather_13, CherryonLim_13, BigChungus_11, PotPie_13, KayGee_11, SheckWes_11, Elinal_13, Pons_12, SummitAcademy_11, Lauer_11, Vine_13
- Track 45 : Biskit_13, SweatNTears_14, Buttrmilkdreams_12, Troje_12, SketchMex_11, MScarn_14
- Track 46 : Gibbous_12, Cleo_12, Dre3_12
- Track 47 : GiKK_15, Button_13, Jamzy_15
- Track 48 : Yummy_13, Horseradish_13
- Track 49 : Hexbug_14
- Track 50 : Survivors_14, Zareef_16, MaVan_14, Nibbles_14, Azira_14
- Track 51 : HippoPololi_14
- Track 52 : Burnsey_12
- Track 53 : Margaret_15
- Track 54 : GTE2_10
- Track 55 : Fribs8_13
- Track 56 : Wrigley_13, Confidence_13, Pytheas_13, Jablanski_13
- Track 57 : Cashline_13, BeeGee_13
- Track 58 : Posh_13
- Track 59 : LonelyBoi_13
- Track 60 : Pollux_13, Lilas_13, Bradissa_13, BritBrat_13, Floral_13, EMSquaredA_13, EnalisNailo_13, Marteena_13
- Track 61 : Angelique_13
- Track 62 : PhorbesPhlower_11, Morkie_11
- Track 63 : Lucky10_11
- Track 64 : Ecliptus_12, ODay_12
- Track 65 : Malisha_12
- Track 66 : Lutum_12, Kenna_12
- Track 67 : CheeseTouch_12, Budski_12, Phabuloso_12, LitninMcQueen_12, Kamaru_12, Holliday_12
- Track 68 : Whitney_12, Getalong_12
- Track 69 : Periwinkle_12
- Track 70 : Leroy_12, Horus_12, BENtherdunthat_12, Frickyeah_12, Asapag_12
- Track 71 : Spooky_12
- Track 72 : Squiddly_13, Phistory_12
- Track 73 : Crater_12, BearBQ_12, Kuwabara_12, MortyNRick_12, Birdsong_12, Apricot_12
- Track 74 : Guey18_49, Ronaldo_47, Ziko_47, Volt_46
- Track 75 : Fryberger_44
- Track 76 : Keelan_42
- Track 77 : Zeta1847_10

- Track 78 : Caron_10
- Track 79 : Barnstormer_10, UtzChips_10
- Track 80 : Floof_11, Percival_11, Gretchen_11
- Track 81 : SuMoo_10
- Track 82 : IAmGroot_11, GardenState_11
- Track 83 : Mabodamaca_11
- Track 84 : Cen1621_10
- Track 85 : Jabbawokkie_14, Avani_13, Yoshi_13, Soul22_13, Che9d_13, Demsculpinboyz_13, Blarby_14, Zapner_14
- Track 86 : BaileyBlu_11
- Track 87 : CallinAllBarbz_11
- Track 88 : Nebkiss_9, Gaia_9
- Track 89 : Spartoi_10
- Track 90 : Juicebox_13
- Track 91 : Shambre1_12
- Track 92 : LilSpotty_11
- Track 93 : Sleepyhead_12
- Track 94 : Kromp_13
- Track 95 : DS6A_15

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

The start number called the most often in the published annotations is 24, it was called in 48 of the 172 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agatha_12, AikoCarson_11, Amok_11, AndPeggy_11, Axym_12, Azira_14, BigChungus_11, BillDoor_14, Biskit_13, Burnsey_12, Button_13, Buttrmikedreams_12, CherryonLim_13, Cleo_12, Cozz_12, Dre3_12, Elinal_13, Elliott_12, Emalyn_11, Feastonyeet_11, Fribs8_13, GiKK_15, Gibbous_12, Hexbug_14, HippoPololi_14, Horseradish_13, Jamzy_15, KayGee_11, Lauer_11, MScarn_14, MaVan_14, Margaret_15, Mayweather_13, MunkgeeRoachy_13, Nibbles_14, Nina_13, Nodigi_14, Orla_14, Pons_12, PotPie_13, PsychoKiller_12, Quasar_12, RedBaron_13, SheckWes_11, SketchMex_11, Sopespian_12, SteamedHams_14, SummitAcademy_11, Survivors_14, SweatNTears_14, Tolls_14, Troje_12, Typhonomachy_13, Vine_13, Yakult_13, Yarn_11, Yummy_13, Zareef_16,

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

- AbbeyMikolon_11, GTE2_10, MaGuCo_11, Nesbitt_11,

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

- AEgle_12, AGrandiflora_12, Adolin_12, Adumb2043_12, AinMach_11, Amyev_12, Angelique_13, Apricot_12, Asa16_12, Asapag_12, Ascela_12, Avani_13, BENtherdunthat_12, BaileyBlu_11, Barnstormer_10, BearBQ_12, BeeGee_13, Berrie_12, Birdsong_12, Blarby_14, Bradissa_13, BritBrat_13, Budski_12, CallinAllBarbz_11, Caron_10, Cashline_13, Cassia_12, Cen1621_10, Che9d_13, CheeseTouch_12, Community_13, Confidence_13, Crater_12, Crewmate_13, Cyan_12, DS6A_15, Demsculpinboyz_13, DrManhattan_12, DrSierra_12, EMSquaredA_13, Ecliptus_12, Elezi_12, Emotion_11, EnalisNailo_13, Eraser_12, Exile_11, Floof_11, Floral_13, Frickyeah_12, Fryberger_44, Gaia_9,

GardenState_11, Getalong_12, Gretchen_11, Guey18_49, Holliday_12, Horus_12, IAmGroot_11, Iter_12, IttyBittyPiggy_12, Jabbawokkie_14, Jablanski_13, Janeemi_13, JasmineDragon_11, Joemato_13, JohnDoe_12, Jstan_12, Juicebox_13, JuneStar_12, Kamaru_12, Kaylissa_12, KeAlii_12, Keelan_42, Kenna_12, Kromp_13, Kuwabara_12, Lego_12, Leroy_12, Liebe_11, LilSpotty_11, Lilas_13, LitninMcQueen_12, Lizalica_12, London_12, LonelyBoi_13, Lucky10_11, Lutum_12, Mabodamaca_11, Malisha_12, Marteena_13, Maureen_11, MiniMommy_10, MissSwiss_12, Morkie_11, MortyNRick_12, Moss_14, Mudpuppy_12, Nebkiss_9, Niobe_12, Nitro_12, ODay_12, ObiToo_12, PFR1_09, PFR2_09, Percival_11, Periwinkle_12, Phabuloso_12, Phistory_12, Phives_13, PhorbesPhlower_11, Pixelle_12, Pollux_13, Posh_13, Powerpuff_12, Pumpkins_22, Pytheas_13, Reedo_12, Ronaldo_47, Rowa_11, SPB78_12, ShakeltOph_11, Shambre1_12, Simpson_13, Sleepyhead_12, Snek_12, Soondubu_11, Soul22_13, Spartoi_10, Spooky_12, Squiddly_13, SuMoo_10, Sue2_12, Tallboi_12, Tbone_12, TforTroy_12, Tian_12, Tuck_13, Turab_12, Tutumahutu_12, Tweety19_12, UtzChips_10, VResidence_12, VWB_11, Volt_46, VroomVroom_11, Warda_12, Whitney_12, Wildwest_13, Wrigley_13, Yang_12, YesChef_12, Yoshi_13, Zapner_14, Zeta1847_10, Ziko_47,

Summary by start number:

Start 12:

- Found in 1 of 217 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 172
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rowa_11 (BL),

Start 15:

- Found in 1 of 217 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Moss_14 (AZ),

Start 17:

- Found in 1 of 217 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 172
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kromp_13 (singleton),

Start 18:

- Found in 57 of 217 (26.3%) of genes in pham
- Manual Annotations of this start: 38 of 172
- Called 94.7% of time when present
- Phage (with cluster) where this start called: AEgle_12 (AZ1), AGrandiflora_12 (AZ1), AbbeyMikolon_11 (BL), Adumb2043_12 (AZ1), Amyev_12 (AZ1), Asa16_12 (AZ1), Ascela_12 (AZ1), Berrie_12 (AZ1), Cassia_12 (AZ1), Cen1621_10 (EH), Community_13 (AZ1), Crewmate_13 (AZ1), Cyan_12 (AZ1), Elezi_12 (AZ1), Eraser_12 (AZ1), Floof_11 (EH), GardenState_11 (EH), Gretchen_11 (EH), IAmGroot_11 (EH), Iter_12 (AZ1), IttyBittyPiggy_12 (AZ1), Janeemi_13 (AZ1), Joemato_13 (AZ1), JohnDoe_12 (AZ1), Jstan_12 (AZ1), JuneStar_12 (AZ1), Kaylissa_12 (AZ1), Lego_12 (AZ1), Liebe_11 (AZ2), Lizalica_12 (AZ1), London_12 (AZ1), Maureen_11 (AZ2), Mudpuppy_12 (AZ1), Nesbitt_11 (BL), Niobe_12 (AZ1), Nitro_12 (AZ1), ObiToo_12 (AZ1), Percival_11 (EH), Phives_13 (AZ1), Pixelle_12

(AZ1), Powerpuff_12 (AZ1), Pumpkins_22 (AZ1), Simpson_13 (AZ1), Tallboi_12 (AZ1), Tbone_12 (AZ1), TforTroy_12 (AZ1), Tian_12 (AZ1), Tuck_13 (AZ1), Turab_12 (AZ1), Tutumahutu_12 (AZ1), Warda_12 (AZ1), Yang_12 (AZ1), YesChef_12 (AZ1), Zeta1847_10 (EH),

Start 19:

- Found in 40 of 217 (18.4%) of genes in pham
- Manual Annotations of this start: 31 of 172
- Called 97.5% of time when present
- Phage (with cluster) where this start called: Adolin_12 (AZ1), Asapag_12 (DN1), BENTherdunthat_12 (DN1), Barnstormer_10 (EH), Budski_12 (DN), Caron_10 (EH), CheeseTouch_12 (DN1), DrManhattan_12 (AZ1), DrSierra_12 (AZ1), Exile_11 (AZ), Frickyeah_12 (DN1), Getalong_12 (DN1), Holliday_12 (DN1), Horus_12 (DN1), Kamaru_12 (DN1), Kenna_12 (DN1), Leroy_12 (DN1), LitninMcQueen_12 (DN1), Lutum_12 (DN1), MaGuCo_11 (AZ2), Mabodamaca_11 (EH), Malisha_12 (DN), MissSwiss_12 (AZ1), Periwinkle_12 (DN1), Phabuloso_12 (DN1), Phistory_12 (DN1), SPB78_12 (BA), Snek_12 (AZ3), Soondubu_11 (AZ), Spartoi_10 (singleton), Spooky_12 (DN2), Squiddly_13 (DN2), SuMoo_10 (EH), Sue2_12 (AZ1), Tweety19_12 (AZ3), UtzChips_10 (EH), VResidence_12 (AZ1), Whitney_12 (DN1), Wildwest_13 (AZ1),

Start 20:

- Found in 5 of 217 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 172
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JasmineDragon_11 (AZ4), MiniMommy_10 (AZ4), ShakeltOph_11 (AZ4), VWB_11 (BA), VroomVroom_11 (AZ4),

Start 21:

- Found in 11 of 217 (5.1%) of genes in pham
- Manual Annotations of this start: 10 of 172
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot_12 (DN3), BearBQ_12 (DN), Birdsong_12 (DN), Crater_12 (DN3), Ecliptus_12 (DN), Kuwabara_12 (DN4), Lucky10_11 (DH), Morkie_11 (DH), MortyNRick_12 (DN), ODay_12 (DN), PhorbesPhlower_11 (DH),

Start 22:

- Found in 2 of 217 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 172
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KeAlii_12 (AZ1), Reedo_12 (AZ1),

Start 23:

- Found in 1 of 217 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 172
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Emotion_11 (AZ4),

Start 24:

- Found in 62 of 217 (28.6%) of genes in pham
- Manual Annotations of this start: 48 of 172

- Called 93.5% of time when present
- Phage (with cluster) where this start called: Agatha_12 (CT), AikoCarson_11 (CT), Amok_11 (CT), AndPeggy_11 (CT), Axym_12 (CT), Azira_14 (CT), BigChungus_11 (CT), BillDoor_14 (CT), Biskit_13 (CT), Burnsey_12 (CT), Button_13 (CT), Buttrmlkdreams_12 (CT), CherryonLim_13 (CT), Cleo_12 (CT), Cozz_12 (CT), Dre3_12 (CT), Elinal_13 (CT), Elliott_12 (CT), Emalyn_11 (CT), Feastonyeet_11 (CT), Fribs8_13 (CT), GiKK_15 (CT), Gibbous_12 (CT), Hexbug_14 (CT), HippoPololi_14 (CT), Horseradish_13 (CT), Jamzy_15 (CT), KayGee_11 (CT), Lauer_11 (CT), MScarn_14 (CT), MaVan_14 (CT), Margaret_15 (CT), Mayweather_13 (CT), MunkgeeRoachy_13 (CT), Nibbles_14 (CT), Nina_13 (CT), Nodigi_14 (CT), Orla_14 (CT), Pons_12 (CT), PotPie_13 (CT), PsychoKiller_12 (CT), Quasar_12 (CT), RedBaron_13 (CT), SheckWes_11 (CT), SketchMex_11 (CT), Sopespian_12 (CT), SteamedHams_14 (CT), SummitAcademy_11 (CT), Survivors_14 (CT), SweatNTears_14 (CT), Tolls_14 (CT), Troje_12 (CT), Typhonmarchy_13 (CT), Vine_13 (CT), Yakult_13 (CT), Yarn_11 (CT), Yummy_13 (CT), Zareef_16 (CT),

Start 26:

- Found in 7 of 217 (3.2%) of genes in pham
- Manual Annotations of this start: 4 of 172
- Called 57.1% of time when present
- Phage (with cluster) where this start called: DS6A_15 (singleton), Gaia_9 (X), LilSpotty_11 (singleton), Nebkiss_9 (X),

Start 27:

- Found in 1 of 217 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 172
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sleepyhead_12 (singleton),

Start 28:

- Found in 26 of 217 (12.0%) of genes in pham
- Manual Annotations of this start: 24 of 172
- Called 96.2% of time when present
- Phage (with cluster) where this start called: Angelique_13 (CY1), Avani_13 (F2), BeeGee_13 (CY), Blarby_14 (F), Bradissa_13 (CY1), BritBrat_13 (CY2), Cashline_13 (CY), Che9d_13 (F2), Confidence_13 (CY1), Demsculpinboyz_13 (F2), EMSquaredA_13 (CY1), EnalisNailo_13 (CY1), Floral_13 (CY1), Jabbawokkie_14 (F2), Jablanski_13 (CY), Lilas_13 (CY1), LonelyBoi_13 (CY), Marteena_13 (CY1), Pollux_13 (CY1), Posh_13 (CY), Pytheas_13 (CY), Soul22_13 (F2), Wrigley_13 (CY), Yoshi_13 (F2), Zapner_14 (F2),

Start 30:

- Found in 3 of 217 (1.4%) of genes in pham
- Manual Annotations of this start: 3 of 172
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaileyBlu_11 (FP), CallinAllBarbz_11 (FP), Juicebox_13 (singleton),

Start 32:

- Found in 4 of 217 (1.8%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: PFR1_09 (BX), PFR2_09 (BX),

Start 33:

- Found in 5 of 217 (2.3%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: AinMach_11 (AZ),

Start 36:

- Found in 6 of 217 (2.8%) of genes in pham
- Manual Annotations of this start: 6 of 172
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fryberger_44 (DP), Guey18_49 (DP), Keelan_42 (DP), Ronaldo_47 (DP), Volt_46 (DP), Ziko_47 (DP),

Start 41:

- Found in 1 of 217 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 172
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shambre1_12 (singleton),

Start 45:

- Found in 54 of 217 (24.9%) of genes in pham
- No Manual Annotations of this start.
- Called 1.9% of time when present
- Phage (with cluster) where this start called: GTE2_10 (CT),

Summary by clusters:

There are 25 clusters represented in this pham: DN, FP, singleton, BA, DH, BL, BX, DP, DN4, DN1, DN3, DN2, CY2, CY1, EH, F, CY, X, AZ, CT, F2, AZ1, AZ2, AZ3, AZ4,

Info for manual annotations of cluster AZ1:

- Start number 18 was manually annotated 27 times for cluster AZ1.
- Start number 19 was manually annotated 5 times for cluster AZ1.
- Start number 22 was manually annotated 2 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 18 was manually annotated 2 times for cluster AZ2.
- Start number 19 was manually annotated 1 time for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 19 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 20 was manually annotated 1 time for cluster AZ4.
- Start number 23 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster BL:

- Start number 12 was manually annotated 1 time for cluster BL.
- Start number 18 was manually annotated 2 times for cluster BL.

Info for manual annotations of cluster CT:

- Start number 24 was manually annotated 48 times for cluster CT.

Info for manual annotations of cluster CY:

- Start number 28 was manually annotated 7 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 28 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 28 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DH:

- Start number 21 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 19 was manually annotated 2 times for cluster DN.
- Start number 21 was manually annotated 4 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 19 was manually annotated 14 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 19 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 21 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 21 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DP:

- Start number 36 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster EH:

- Start number 18 was manually annotated 7 times for cluster EH.
- Start number 19 was manually annotated 4 times for cluster EH.

Info for manual annotations of cluster F2:

- Start number 28 was manually annotated 7 times for cluster F2.

Info for manual annotations of cluster FP:

- Start number 30 was manually annotated 2 times for cluster FP.

Info for manual annotations of cluster X:

- Start number 26 was manually annotated 2 times for cluster X.

Gene Information:

Gene: AEgle_12 Start: 9049, Stop: 9459, Start Num: 18

Candidate Starts for AEgle_12:

(Start: 18 @9049 has 38 MA's), (38, 9094), (46, 9118), (132, 9379), (139, 9412),

Gene: AGrandiflora_12 Start: 9036, Stop: 9449, Start Num: 18

Candidate Starts for AGrandiflora_12:

(Start: 18 @9036 has 38 MA's), (46, 9105), (98, 9255), (132, 9366), (139, 9399),

Gene: AbbeyMikolon_11 Start: 7783, Stop: 8178, Start Num: 18

Candidate Starts for AbbeyMikolon_11:

(16, 7780), (Start: 18 @7783 has 38 MA's), (Start: 24 @7795 has 48 MA's), (33, 7816), (35, 7822), (38, 7828), (43, 7843), (55, 7864), (62, 7888), (92, 7957), (113, 8029), (115, 8035), (124, 8062), (132, 8092), (142, 8140),

Gene: Adolin_12 Start: 9024, Stop: 9440, Start Num: 19

Candidate Starts for Adolin_12:

(Start: 19 @9024 has 31 MA's), (95, 9240),

Gene: Adumb2043_12 Start: 9048, Stop: 9458, Start Num: 18

Candidate Starts for Adumb2043_12:

(Start: 18 @9048 has 38 MA's), (38, 9093), (46, 9117), (132, 9378), (139, 9411),

Gene: Agatha_12 Start: 7522, Stop: 7932, Start Num: 24

Candidate Starts for Agatha_12:

(Start: 24 @7522 has 48 MA's), (42, 7564), (45, 7570), (58, 7609), (67, 7651), (86, 7705), (107, 7765),

Gene: AikoCarson_11 Start: 7243, Stop: 7653, Start Num: 24

Candidate Starts for AikoCarson_11:

(Start: 24 @7243 has 48 MA's), (42, 7285), (45, 7291), (58, 7330), (67, 7372), (86, 7426), (104, 7474),

Gene: AinMach_11 Start: 8183, Stop: 8566, Start Num: 33

Candidate Starts for AinMach_11:

(Start: 18 @8150 has 38 MA's), (Start: 19 @8153 has 31 MA's), (33, 8183), (38, 8195), (144, 8537),

Gene: Amok_11 Start: 7243, Stop: 7653, Start Num: 24

Candidate Starts for Amok_11:

(Start: 24 @7243 has 48 MA's), (42, 7285), (45, 7291), (58, 7330), (67, 7372), (86, 7426), (104, 7474),

Gene: Amyev_12 Start: 9064, Stop: 9477, Start Num: 18

Candidate Starts for Amyev_12:

(Start: 18 @9064 has 38 MA's), (38, 9109), (98, 9283), (132, 9394), (139, 9427),

Gene: AndPeggy_11 Start: 7534, Stop: 7944, Start Num: 24

Candidate Starts for AndPeggy_11:

(Start: 24 @7534 has 48 MA's), (39, 7570), (42, 7576), (45, 7582), (58, 7621), (67, 7663), (86, 7717), (107, 7777),

Gene: Angelique_13 Start: 8261, Stop: 8653, Start Num: 28

Candidate Starts for Angelique_13:

(Start: 28 @8261 has 24 MA's), (100, 8465),

Gene: Apricot_12 Start: 7390, Stop: 7773, Start Num: 21

Candidate Starts for Apricot_12:

(Start: 21 @7390 has 10 MA's), (47, 7444), (49, 7450), (53, 7462), (61, 7486), (123, 7669), (145, 7759),

Gene: Asa16_12 Start: 9018, Stop: 9428, Start Num: 18

Candidate Starts for Asa16_12:

(Start: 18 @9018 has 38 MA's), (46, 9087), (91, 9225), (98, 9237), (132, 9348), (139, 9381),

Gene: Asapag_12 Start: 7041, Stop: 7451, Start Num: 19

Candidate Starts for Asapag_12:

(1, 6912), (5, 6957), (6, 6963), (7, 6969), (9, 6987), (Start: 19 @7041 has 31 MA's), (31, 7068), (52, 7113), (55, 7119), (68, 7173), (82, 7212), (85, 7218), (95, 7239), (107, 7290), (111, 7302),

Gene: Ascela_12 Start: 9053, Stop: 9463, Start Num: 18

Candidate Starts for Ascela_12:

(Start: 18 @9053 has 38 MA's), (46, 9122), (98, 9272), (132, 9383), (139, 9416),

Gene: Avani_13 Start: 7213, Stop: 7617, Start Num: 28

Candidate Starts for Avani_13:

(Start: 28 @7213 has 24 MA's), (40, 7246), (62, 7306), (78, 7372), (117, 7492), (121, 7504), (134, 7540), (137, 7570),

Gene: Axym_12 Start: 7522, Stop: 7932, Start Num: 24

Candidate Starts for Axym_12:

(Start: 24 @7522 has 48 MA's), (42, 7564), (45, 7570), (58, 7609), (67, 7651), (86, 7705), (107, 7765),

Gene: Azira_14 Start: 8446, Stop: 8850, Start Num: 24

Candidate Starts for Azira_14:

(Start: 24 @8446 has 48 MA's), (45, 8494), (68, 8575), (81, 8614), (97, 8641), (109, 8689), (130, 8755),

Gene: BENtherdunthat_12 Start: 7041, Stop: 7451, Start Num: 19

Candidate Starts for BENtherdunthat_12:

(1, 6912), (5, 6957), (6, 6963), (7, 6969), (9, 6987), (Start: 19 @7041 has 31 MA's), (31, 7068), (52, 7113), (55, 7119), (68, 7173), (82, 7212), (85, 7218), (95, 7239), (107, 7290), (111, 7302),

Gene: BaileyBlu_11 Start: 6789, Stop: 7178, Start Num: 30

Candidate Starts for BaileyBlu_11:

(Start: 30 @6789 has 3 MA's), (32, 6792), (84, 6951), (110, 7023), (112, 7032),

Gene: Barnstormer_10 Start: 8216, Stop: 8632, Start Num: 19

Candidate Starts for Barnstormer_10:

(Start: 19 @8216 has 31 MA's), (102, 8456), (122, 8513),

Gene: BearBQ_12 Start: 7390, Stop: 7773, Start Num: 21

Candidate Starts for BearBQ_12:

(Start: 21 @7390 has 10 MA's), (47, 7444), (49, 7450), (53, 7462), (61, 7486), (123, 7669), (145, 7759),

Gene: BeeGee_13 Start: 8263, Stop: 8649, Start Num: 28

Candidate Starts for BeeGee_13:

(8, 8182), (Start: 28 @8263 has 24 MA's),

Gene: Berrie_12 Start: 9020, Stop: 9430, Start Num: 18

Candidate Starts for Berrie_12:

(Start: 18 @9020 has 38 MA's), (52, 9107), (98, 9239), (132, 9350), (139, 9383),

Gene: BigChungus_11 Start: 7313, Stop: 7723, Start Num: 24

Candidate Starts for BigChungus_11:

(Start: 24 @7313 has 48 MA's), (45, 7358), (58, 7397), (66, 7436), (70, 7448), (99, 7517), (130, 7622), (145, 7697),

Gene: BillDoor_14 Start: 7499, Stop: 7909, Start Num: 24

Candidate Starts for BillDoor_14:

(Start: 24 @7499 has 48 MA's), (39, 7535), (42, 7541), (45, 7547), (58, 7586), (67, 7628), (86, 7682), (107, 7742),

Gene: Birdsong_12 Start: 7390, Stop: 7773, Start Num: 21

Candidate Starts for Birdsong_12:

(Start: 21 @7390 has 10 MA's), (47, 7444), (49, 7450), (53, 7462), (61, 7486), (123, 7669), (145, 7759),

Gene: Biskit_13 Start: 7506, Stop: 7916, Start Num: 24

Candidate Starts for Biskit_13:

(Start: 24 @7506 has 48 MA's), (42, 7548), (45, 7554), (58, 7593), (67, 7635), (86, 7689), (104, 7737), (107, 7749),

Gene: Blarby_14 Start: 7737, Stop: 8141, Start Num: 28

Candidate Starts for Blarby_14:

(Start: 28 @7737 has 24 MA's), (40, 7770), (62, 7830), (78, 7896), (117, 8016), (121, 8028), (134, 8064), (137, 8094),

Gene: Bradissa_13 Start: 8267, Stop: 8653, Start Num: 28

Candidate Starts for Bradissa_13:

(Start: 28 @8267 has 24 MA's), (50, 8324),

Gene: BritBrat_13 Start: 8269, Stop: 8655, Start Num: 28

Candidate Starts for BritBrat_13:

(Start: 28 @8269 has 24 MA's), (50, 8326),

Gene: Budski_12 Start: 7046, Stop: 7438, Start Num: 19

Candidate Starts for Budski_12:

(1, 6917), (5, 6962), (6, 6968), (7, 6974), (9, 6992), (10, 7010), (Start: 19 @7046 has 31 MA's), (31, 7073), (52, 7118), (55, 7124), (58, 7136), (68, 7160), (82, 7199), (85, 7205), (92, 7220), (95, 7226), (107, 7277), (111, 7289), (128, 7343),

Gene: Burnsey_12 Start: 7523, Stop: 7933, Start Num: 24

Candidate Starts for Burnsey_12:

(Start: 24 @7523 has 48 MA's), (40, 7562), (42, 7565), (45, 7571), (58, 7610), (67, 7652), (86, 7706), (107, 7766),

Gene: Button_13 Start: 7530, Stop: 7934, Start Num: 24

Candidate Starts for Button_13:

(Start: 24 @7530 has 48 MA's), (40, 7572), (58, 7620), (63, 7641), (104, 7764), (118, 7809),

Gene: Buttrmlkdreams_12 Start: 7491, Stop: 7901, Start Num: 24

Candidate Starts for Buttrmlkdreams_12:

(Start: 24 @7491 has 48 MA's), (42, 7533), (45, 7539), (58, 7578), (67, 7620), (86, 7674), (104, 7722), (107, 7734),

Gene: CallinAllBarbz_11 Start: 6799, Stop: 7188, Start Num: 30

Candidate Starts for CallinAllBarbz_11:

(Start: 30 @6799 has 3 MA's), (32, 6802), (84, 6961), (112, 7042), (120, 7069),

Gene: Caron_10 Start: 8244, Stop: 8660, Start Num: 19

Candidate Starts for Caron_10:

(Start: 19 @8244 has 31 MA's), (102, 8484),

Gene: Cashline_13 Start: 8116, Stop: 8508, Start Num: 28

Candidate Starts for Cashline_13:

(8, 8035), (Start: 28 @8116 has 24 MA's),

Gene: Cassia_12 Start: 9139, Stop: 9552, Start Num: 18

Candidate Starts for Cassia_12:

(Start: 18 @9139 has 38 MA's), (52, 9226), (91, 9346), (98, 9358), (132, 9469), (139, 9502),

Gene: Cen1621_10 Start: 7355, Stop: 7771, Start Num: 18

Candidate Starts for Cen1621_10:

(Start: 18 @7355 has 38 MA's), (139, 7724), (144, 7745),

Gene: Che9d_13 Start: 7222, Stop: 7626, Start Num: 28

Candidate Starts for Che9d_13:

(Start: 28 @7222 has 24 MA's), (40, 7255), (62, 7315), (78, 7381), (117, 7501), (121, 7513), (134, 7549), (137, 7579),

Gene: CheeseTouch_12 Start: 7046, Stop: 7438, Start Num: 19

Candidate Starts for CheeseTouch_12:

(1, 6917), (5, 6962), (6, 6968), (7, 6974), (9, 6992), (10, 7010), (Start: 19 @7046 has 31 MA's), (31, 7073), (52, 7118), (55, 7124), (58, 7136), (68, 7160), (82, 7199), (85, 7205), (92, 7220), (95, 7226), (107, 7277), (111, 7289), (128, 7343),

Gene: CherryonLim_13 Start: 8039, Stop: 8449, Start Num: 24

Candidate Starts for CherryonLim_13:

(Start: 24 @8039 has 48 MA's), (45, 8084), (58, 8123), (66, 8162), (70, 8174), (99, 8243), (130, 8348), (145, 8423),

Gene: Cleo_12 Start: 7746, Stop: 8144, Start Num: 24

Candidate Starts for Cleo_12:

(Start: 24 @7746 has 48 MA's), (45, 7794), (58, 7830), (68, 7875), (72, 7884), (81, 7914), (97, 7941), (99, 7950), (101, 7962), (109, 7989), (130, 8055), (136, 8088),

Gene: Community_13 Start: 10099, Stop: 10509, Start Num: 18

Candidate Starts for Community_13:

(Start: 18 @10099 has 38 MA's), (38, 10144), (98, 10318), (132, 10429), (139, 10462),

Gene: Confidence_13 Start: 8263, Stop: 8649, Start Num: 28

Candidate Starts for Confidence_13:

(8, 8182), (Start: 28 @8263 has 24 MA's), (42, 8299), (50, 8320),

Gene: Cozz_12 Start: 7523, Stop: 7933, Start Num: 24

Candidate Starts for Cozz_12:

(Start: 24 @7523 has 48 MA's), (42, 7565), (45, 7571), (58, 7610), (67, 7652), (86, 7706), (107, 7766),

Gene: Crater_12 Start: 7390, Stop: 7773, Start Num: 21

Candidate Starts for Crater_12:

(Start: 21 @7390 has 10 MA's), (47, 7444), (49, 7450), (53, 7462), (61, 7486), (123, 7669), (145, 7759),

Gene: Crewmate_13 Start: 9485, Stop: 9898, Start Num: 18

Candidate Starts for Crewmate_13:

(Start: 18 @9485 has 38 MA's), (46, 9554), (98, 9704), (132, 9815), (139, 9848),

Gene: Cyan_12 Start: 9040, Stop: 9453, Start Num: 18

Candidate Starts for Cyan_12:

(Start: 18 @9040 has 38 MA's), (46, 9109), (98, 9259), (132, 9370), (139, 9403),

Gene: DS6A_15 Start: 10364, Stop: 10735, Start Num: 26

Candidate Starts for DS6A_15:

(Start: 26 @10364 has 4 MA's), (55, 10427), (58, 10439), (69, 10466), (85, 10511), (94, 10532), (107, 10586), (113, 10601), (124, 10628), (127, 10643), (135, 10664), (138, 10688),

Gene: Demsculpinboyz_13 Start: 7213, Stop: 7617, Start Num: 28

Candidate Starts for Demsculpinboyz_13:

(Start: 28 @7213 has 24 MA's), (40, 7246), (62, 7306), (78, 7372), (117, 7492), (121, 7504), (134, 7540), (137, 7570),

Gene: DrManhattan_12 Start: 9014, Stop: 9430, Start Num: 19

Candidate Starts for DrManhattan_12:

(Start: 19 @9014 has 31 MA's), (95, 9230),

Gene: DrSierra_12 Start: 9047, Stop: 9463, Start Num: 19

Candidate Starts for DrSierra_12:

(Start: 19 @9047 has 31 MA's), (57, 9143), (72, 9200), (95, 9263),

Gene: Dre3_12 Start: 7693, Stop: 8091, Start Num: 24

Candidate Starts for Dre3_12:

(Start: 24 @7693 has 48 MA's), (45, 7741), (58, 7777), (68, 7822), (72, 7831), (81, 7861), (97, 7888), (99, 7897), (101, 7909), (109, 7936), (130, 8002), (136, 8035),

Gene: EMSquaredA_13 Start: 8269, Stop: 8655, Start Num: 28

Candidate Starts for EMSquaredA_13:

(Start: 28 @8269 has 24 MA's), (50, 8326),

Gene: Ecliptus_12 Start: 7118, Stop: 7501, Start Num: 21

Candidate Starts for Ecliptus_12:

(Start: 21 @7118 has 10 MA's), (29, 7133), (47, 7172), (49, 7178), (53, 7190), (61, 7214), (123, 7397), (145, 7487),

Gene: Elezi_12 Start: 9019, Stop: 9429, Start Num: 18

Candidate Starts for Elezi_12:

(Start: 18 @9019 has 38 MA's), (46, 9088), (91, 9226), (98, 9238), (132, 9349), (139, 9382),

Gene: Elinal_13 Start: 7294, Stop: 7704, Start Num: 24

Candidate Starts for Elinal_13:

(Start: 24 @7294 has 48 MA's), (45, 7339), (58, 7378), (66, 7417), (70, 7429), (99, 7498), (130, 7603), (145, 7678),

Gene: Elliott_12 Start: 7522, Stop: 7932, Start Num: 24

Candidate Starts for Elliott_12:

(Start: 24 @7522 has 48 MA's), (42, 7564), (45, 7570), (58, 7609), (67, 7651), (86, 7705), (107, 7765),

Gene: Emalyn_11 Start: 7242, Stop: 7652, Start Num: 24

Candidate Starts for Emalyn_11:

(Start: 24 @7242 has 48 MA's), (42, 7284), (45, 7290), (58, 7329), (67, 7371), (86, 7425), (104, 7473),

Gene: Emotion_11 Start: 7354, Stop: 7758, Start Num: 23

Candidate Starts for Emotion_11:

(Start: 23 @7354 has 1 MA's), (91, 7555),

Gene: EnalisNailo_13 Start: 8269, Stop: 8655, Start Num: 28

Candidate Starts for EnalisNailo_13:

(Start: 28 @8269 has 24 MA's), (50, 8326),

Gene: Eraser_12 Start: 9019, Stop: 9429, Start Num: 18

Candidate Starts for Eraser_12:

(Start: 18 @9019 has 38 MA's), (46, 9088), (91, 9226), (98, 9238), (132, 9349), (139, 9382),

Gene: Exile_11 Start: 8927, Stop: 9337, Start Num: 19

Candidate Starts for Exile_11:

(Start: 19 @8927 has 31 MA's), (139, 9290),

Gene: Feastonyeet_11 Start: 7313, Stop: 7723, Start Num: 24

Candidate Starts for Feastonyeet_11:

(Start: 24 @7313 has 48 MA's), (45, 7358), (58, 7397), (66, 7436), (70, 7448), (99, 7517), (130, 7622), (145, 7697),

Gene: Floof_11 Start: 7791, Stop: 8213, Start Num: 18

Candidate Starts for Floof_11:

(Start: 18 @7791 has 38 MA's), (58, 7884), (60, 7890), (63, 7905), (91, 7995), (102, 8034), (108, 8052), (140, 8163),

Gene: Floral_13 Start: 8269, Stop: 8655, Start Num: 28

Candidate Starts for Floral_13:

(Start: 28 @8269 has 24 MA's), (50, 8326),

Gene: Fribs8_13 Start: 8259, Stop: 8663, Start Num: 24

Candidate Starts for Fribs8_13:

(Start: 24 @8259 has 48 MA's), (45, 8307), (68, 8388), (81, 8427), (97, 8454), (109, 8502), (111, 8511), (130, 8568),

Gene: Frickyeah_12 Start: 7041, Stop: 7451, Start Num: 19

Candidate Starts for Frickyeah_12:

(1, 6912), (5, 6957), (6, 6963), (7, 6969), (9, 6987), (Start: 19 @7041 has 31 MA's), (31, 7068), (52, 7113), (55, 7119), (68, 7173), (82, 7212), (85, 7218), (95, 7239), (107, 7290), (111, 7302),

Gene: Fryberger_44 Start: 16578, Stop: 16958, Start Num: 36

Candidate Starts for Fryberger_44:

(Start: 36 @16578 has 6 MA's), (48, 16617), (57, 16641), (72, 16698), (96, 16755), (106, 16803), (125, 16857), (129, 16872),

Gene: GTE2_10 Start: 7243, Stop: 7605, Start Num: 45

Candidate Starts for GTE2_10:

(Start: 24 @7195 has 48 MA's), (39, 7231), (42, 7237), (45, 7243), (58, 7282), (67, 7324), (86, 7378), (104, 7426), (107, 7438),

Gene: Gaia_9 Start: 7642, Stop: 8013, Start Num: 26

Candidate Starts for Gaia_9:

(Start: 26 @7642 has 4 MA's), (66, 7738), (74, 7759), (82, 7786), (83, 7789), (85, 7792), (92, 7807), (107, 7864), (111, 7876), (126, 7921), (140, 7981), (142, 7987), (145, 7993),

Gene: GardenState_11 Start: 8458, Stop: 8877, Start Num: 18

Candidate Starts for GardenState_11:

(Start: 18 @8458 has 38 MA's), (58, 8551), (60, 8557), (91, 8662), (102, 8701),

Gene: Getalong_12 Start: 7041, Stop: 7433, Start Num: 19

Candidate Starts for Getalong_12:

(1, 6912), (5, 6957), (6, 6963), (7, 6969), (9, 6987), (Start: 19 @7041 has 31 MA's), (31, 7068), (46, 7107), (52, 7113), (55, 7119), (58, 7131), (68, 7155), (82, 7194), (85, 7200), (90, 7212), (95, 7221), (107, 7272), (111, 7284),

Gene: GiKK_15 Start: 7833, Stop: 8237, Start Num: 24

Candidate Starts for GiKK_15:

(Start: 24 @7833 has 48 MA's), (40, 7875), (58, 7923), (63, 7944), (104, 8067), (118, 8112),

Gene: Gibbous_12 Start: 7693, Stop: 8091, Start Num: 24

Candidate Starts for Gibbous_12:

(Start: 24 @7693 has 48 MA's), (45, 7741), (58, 7777), (68, 7822), (72, 7831), (81, 7861), (97, 7888), (99, 7897), (101, 7909), (109, 7936), (130, 8002), (136, 8035),

Gene: Gretchen_11 Start: 9337, Stop: 9759, Start Num: 18

Candidate Starts for Gretchen_11:

(Start: 18 @9337 has 38 MA's), (58, 9430), (60, 9436), (63, 9451), (91, 9541), (102, 9580), (108, 9598), (140, 9709),

Gene: Guey18_49 Start: 17771, Stop: 18151, Start Num: 36

Candidate Starts for Guey18_49:

(Start: 36 @17771 has 6 MA's), (48, 17810), (57, 17834), (72, 17891), (96, 17948), (106, 17996), (125, 18050),

Gene: Hexbug_14 Start: 8519, Stop: 8923, Start Num: 24

Candidate Starts for Hexbug_14:

(Start: 24 @8519 has 48 MA's), (33, 8540), (44, 8567), (58, 8609), (89, 8708), (118, 8798), (131, 8840), (141, 8894), (148, 8918),

Gene: HippoPololi_14 Start: 8345, Stop: 8743, Start Num: 24

Candidate Starts for HippoPololi_14:

(Start: 24 @8345 has 48 MA's), (45, 8393), (68, 8474), (72, 8483), (79, 8504), (81, 8513), (97, 8540), (99, 8549), (101, 8561), (109, 8588), (111, 8597), (130, 8654),

Gene: Holliday_12 Start: 7046, Stop: 7438, Start Num: 19

Candidate Starts for Holliday_12:

(1, 6917), (5, 6962), (6, 6968), (7, 6974), (9, 6992), (10, 7010), (Start: 19 @7046 has 31 MA's), (31, 7073), (52, 7118), (55, 7124), (58, 7136), (68, 7160), (82, 7199), (85, 7205), (92, 7220), (95, 7226), (107, 7277), (111, 7289), (128, 7343),

Gene: Horseradish_13 Start: 7404, Stop: 7814, Start Num: 24

Candidate Starts for Horseradish_13:

(Start: 24 @7404 has 48 MA's), (45, 7452), (58, 7491), (67, 7533), (86, 7587), (107, 7647),

Gene: Horus_12 Start: 7041, Stop: 7451, Start Num: 19

Candidate Starts for Horus_12:

(1, 6912), (5, 6957), (6, 6963), (7, 6969), (9, 6987), (Start: 19 @7041 has 31 MA's), (31, 7068), (52, 7113), (55, 7119), (68, 7173), (82, 7212), (85, 7218), (95, 7239), (107, 7290), (111, 7302),

Gene: IAmGroot_11 Start: 9102, Stop: 9521, Start Num: 18

Candidate Starts for IAmGroot_11:

(Start: 18 @9102 has 38 MA's), (58, 9195), (60, 9201), (91, 9306), (102, 9345),

Gene: Iter_12 Start: 9053, Stop: 9463, Start Num: 18

Candidate Starts for Iter_12:

(Start: 18 @9053 has 38 MA's), (46, 9122), (98, 9272), (132, 9383), (139, 9416),

Gene: IttyBittyPiggy_12 Start: 9041, Stop: 9454, Start Num: 18

Candidate Starts for IttyBittyPiggy_12:

(Start: 18 @9041 has 38 MA's), (46, 9110), (132, 9371), (139, 9404),

Gene: Jabbawokkie_14 Start: 7736, Stop: 8140, Start Num: 28

Candidate Starts for Jabbawokkie_14:

(Start: 28 @7736 has 24 MA's), (40, 7769), (62, 7829), (78, 7895), (117, 8015), (121, 8027), (134, 8063), (137, 8093),

Gene: Jablanski_13 Start: 8116, Stop: 8502, Start Num: 28

Candidate Starts for Jablanski_13:

(8, 8035), (Start: 28 @8116 has 24 MA's), (42, 8152), (50, 8173),

Gene: Jamzy_15 Start: 7843, Stop: 8247, Start Num: 24

Candidate Starts for Jamzy_15:

(Start: 24 @7843 has 48 MA's), (40, 7885), (58, 7933), (63, 7954), (104, 8077), (118, 8122),

Gene: Janeemi_13 Start: 10130, Stop: 10543, Start Num: 18

Candidate Starts for Janeemi_13:

(Start: 18 @10130 has 38 MA's), (38, 10175), (91, 10337), (98, 10349), (132, 10460), (139, 10493),

Gene: JasmineDragon_11 Start: 7286, Stop: 7681, Start Num: 20

Candidate Starts for JasmineDragon_11:

(Start: 20 @7286 has 1 MA's), (91, 7478),

Gene: Joemato_13 Start: 9040, Stop: 9453, Start Num: 18

Candidate Starts for Joemato_13:

(Start: 18 @9040 has 38 MA's), (46, 9109), (98, 9259), (132, 9370), (139, 9403),

Gene: JohnDoe_12 Start: 9038, Stop: 9451, Start Num: 18

Candidate Starts for JohnDoe_12:

(Start: 18 @9038 has 38 MA's), (46, 9107), (98, 9257), (132, 9368), (139, 9401),

Gene: Jstan_12 Start: 9019, Stop: 9429, Start Num: 18

Candidate Starts for Jstan_12:

(Start: 18 @9019 has 38 MA's), (46, 9088), (91, 9226), (98, 9238), (132, 9349), (139, 9382),

Gene: Juicebox_13 Start: 8820, Stop: 9218, Start Num: 30

Candidate Starts for Juicebox_13:

(Start: 30 @8820 has 3 MA's), (52, 8877), (64, 8916), (133, 9132),

Gene: JuneStar_12 Start: 9135, Stop: 9548, Start Num: 18

Candidate Starts for JuneStar_12:

(Start: 18 @9135 has 38 MA's), (132, 9465), (139, 9498),

Gene: Kamaru_12 Start: 7046, Stop: 7438, Start Num: 19

Candidate Starts for Kamaru_12:

(1, 6917), (5, 6962), (6, 6968), (7, 6974), (9, 6992), (10, 7010), (Start: 19 @7046 has 31 MA's), (31, 7073), (52, 7118), (55, 7124), (58, 7136), (68, 7160), (82, 7199), (85, 7205), (92, 7220), (95, 7226), (107, 7277), (111, 7289), (128, 7343),

Gene: KayGee_11 Start: 7294, Stop: 7704, Start Num: 24

Candidate Starts for KayGee_11:

(Start: 24 @7294 has 48 MA's), (45, 7339), (58, 7378), (66, 7417), (70, 7429), (99, 7498), (130, 7603), (145, 7678),

Gene: Kaylissa_12 Start: 9041, Stop: 9454, Start Num: 18

Candidate Starts for Kaylissa_12:

(Start: 18 @9041 has 38 MA's), (46, 9110), (98, 9260), (132, 9371), (139, 9404),

Gene: KeAlii_12 Start: 9073, Stop: 9474, Start Num: 22

Candidate Starts for KeAlii_12:

(Start: 22 @9073 has 2 MA's), (25, 9079), (98, 9280), (114, 9340), (139, 9424),

Gene: Keelan_42 Start: 16553, Stop: 16933, Start Num: 36

Candidate Starts for Keelan_42:

(Start: 36 @16553 has 6 MA's), (48, 16592), (64, 16643), (67, 16661), (72, 16673), (93, 16724), (103, 16766), (106, 16778), (125, 16832),

Gene: Kenna_12 Start: 7041, Stop: 7451, Start Num: 19

Candidate Starts for Kenna_12:

(1, 6912), (5, 6957), (6, 6963), (7, 6969), (9, 6987), (10, 7005), (Start: 19 @7041 has 31 MA's), (31, 7068), (52, 7113), (55, 7119), (68, 7173), (82, 7212), (85, 7218), (95, 7239), (107, 7290), (111, 7302),

Gene: Kromp_13 Start: 9303, Stop: 9734, Start Num: 17

Candidate Starts for Kromp_13:

(Start: 17 @9303 has 1 MA's), (65, 9426), (71, 9441), (73, 9447), (80, 9471), (88, 9495), (130, 9627), (141, 9687), (143, 9693), (144, 9696), (145, 9702),

Gene: Kuwabara_12 Start: 7390, Stop: 7773, Start Num: 21

Candidate Starts for Kuwabara_12:

(Start: 21 @7390 has 10 MA's), (47, 7444), (49, 7450), (53, 7462), (61, 7486), (123, 7669), (145, 7759),

Gene: Lauer_11 Start: 7343, Stop: 7753, Start Num: 24

Candidate Starts for Lauer_11:

(Start: 24 @7343 has 48 MA's), (45, 7388), (58, 7427), (66, 7466), (70, 7478), (99, 7547), (130, 7652), (145, 7727),

Gene: Lego_12 Start: 9039, Stop: 9452, Start Num: 18

Candidate Starts for Lego_12:

(Start: 18 @9039 has 38 MA's), (46, 9108), (98, 9258), (132, 9369), (139, 9402),

Gene: Leroy_12 Start: 7042, Stop: 7452, Start Num: 19

Candidate Starts for Leroy_12:

(1, 6913), (5, 6958), (6, 6964), (7, 6970), (9, 6988), (Start: 19 @7042 has 31 MA's), (31, 7069), (52, 7114), (55, 7120), (68, 7174), (82, 7213), (85, 7219), (95, 7240), (107, 7291), (111, 7303),

Gene: Liebe_11 Start: 7496, Stop: 7915, Start Num: 18

Candidate Starts for Liebe_11:

(Start: 18 @7496 has 38 MA's), (Start: 26 @7514 has 4 MA's), (58, 7601), (95, 7715), (139, 7865),

Gene: LilSpotty_11 Start: 7105, Stop: 7479, Start Num: 26

Candidate Starts for LilSpotty_11:

(25, 7102), (Start: 26 @7105 has 4 MA's), (74, 7219), (76, 7222), (107, 7330), (111, 7342), (113, 7345), (126, 7384), (146, 7459),

Gene: Lilas_13 Start: 8269, Stop: 8655, Start Num: 28

Candidate Starts for Lilas_13:

(Start: 28 @8269 has 24 MA's), (50, 8326),

Gene: LitninMcQueen_12 Start: 7046, Stop: 7438, Start Num: 19

Candidate Starts for LitninMcQueen_12:

(1, 6917), (5, 6962), (6, 6968), (7, 6974), (9, 6992), (10, 7010), (Start: 19 @7046 has 31 MA's), (31, 7073), (52, 7118), (55, 7124), (58, 7136), (68, 7160), (82, 7199), (85, 7205), (92, 7220), (95, 7226), (107, 7277), (111, 7289), (128, 7343),

Gene: Lizalica_12 Start: 9025, Stop: 9438, Start Num: 18

Candidate Starts for Lizalica_12:

(Start: 18 @9025 has 38 MA's), (46, 9094), (98, 9244), (132, 9355), (139, 9388),

Gene: London_12 Start: 9019, Stop: 9429, Start Num: 18

Candidate Starts for London_12:

(Start: 18 @9019 has 38 MA's), (46, 9088), (91, 9226), (98, 9238), (132, 9349), (139, 9382),

Gene: LonelyBoi_13 Start: 8116, Stop: 8502, Start Num: 28

Candidate Starts for LonelyBoi_13:

(8, 8035), (Start: 28 @8116 has 24 MA's), (50, 8173),

Gene: Lucky10_11 Start: 6599, Stop: 6982, Start Num: 21

Candidate Starts for Lucky10_11:

(Start: 21 @6599 has 10 MA's), (47, 6653), (49, 6659), (53, 6671), (61, 6695), (77, 6755),

Gene: Lutum_12 Start: 7041, Stop: 7451, Start Num: 19

Candidate Starts for Lutum_12:

(1, 6912), (5, 6957), (6, 6963), (7, 6969), (9, 6987), (10, 7005), (Start: 19 @7041 has 31 MA's), (31, 7068), (52, 7113), (55, 7119), (68, 7173), (82, 7212), (85, 7218), (95, 7239), (107, 7290), (111, 7302),

Gene: MScarn_14 Start: 7491, Stop: 7901, Start Num: 24

Candidate Starts for MScarn_14:

(Start: 24 @7491 has 48 MA's), (42, 7533), (45, 7539), (58, 7578), (67, 7620), (86, 7674), (104, 7722), (107, 7734),

Gene: MaGuCo_11 Start: 7435, Stop: 7851, Start Num: 19

Candidate Starts for MaGuCo_11:

(Start: 19 @7435 has 31 MA's), (Start: 24 @7444 has 48 MA's), (Start: 26 @7450 has 4 MA's), (37, 7474), (58, 7537), (95, 7651), (139, 7801),

Gene: MaVan_14 Start: 8446, Stop: 8850, Start Num: 24

Candidate Starts for MaVan_14:

(Start: 24 @8446 has 48 MA's), (45, 8494), (68, 8575), (81, 8614), (97, 8641), (109, 8689), (130, 8755),

Gene: Mabodamaca_11 Start: 8555, Stop: 8968, Start Num: 19

Candidate Starts for Mabodamaca_11:

(Start: 19 @8555 has 31 MA's), (72, 8696),

Gene: Malisha_12 Start: 8091, Stop: 8501, Start Num: 19

Candidate Starts for Malisha_12:

(5, 8007), (6, 8013), (Start: 19 @8091 has 31 MA's), (55, 8169), (58, 8181), (68, 8223), (82, 8262), (85, 8268), (92, 8283), (95, 8289), (104, 8328), (111, 8352), (128, 8406),

Gene: Margaret_15 Start: 8228, Stop: 8632, Start Num: 24

Candidate Starts for Margaret_15:

(Start: 24 @8228 has 48 MA's), (33, 8249), (34, 8252), (40, 8270), (58, 8318), (62, 8330), (89, 8417), (104, 8462), (131, 8549), (148, 8627),

Gene: Marteena_13 Start: 8269, Stop: 8655, Start Num: 28

Candidate Starts for Marteena_13:

(Start: 28 @8269 has 24 MA's), (50, 8326),

Gene: Maureen_11 Start: 7496, Stop: 7915, Start Num: 18

Candidate Starts for Maureen_11:

(Start: 18 @7496 has 38 MA's), (Start: 26 @7514 has 4 MA's), (58, 7601), (95, 7715), (139, 7865),

Gene: Mayweather_13 Start: 7917, Stop: 8327, Start Num: 24

Candidate Starts for Mayweather_13:

(Start: 24 @7917 has 48 MA's), (45, 7962), (58, 8001), (66, 8040), (70, 8052), (99, 8121), (130, 8226), (145, 8301),

Gene: MiniMommy_10 Start: 7286, Stop: 7681, Start Num: 20

Candidate Starts for MiniMommy_10:

(Start: 20 @7286 has 1 MA's), (91, 7478),

Gene: MissSwiss_12 Start: 9018, Stop: 9434, Start Num: 19

Candidate Starts for MissSwiss_12:

(Start: 19 @9018 has 31 MA's), (39, 9066), (95, 9234),

Gene: Morkie_11 Start: 6561, Stop: 6944, Start Num: 21

Candidate Starts for Morkie_11:

(Start: 21 @6561 has 10 MA's), (47, 6615), (49, 6621), (53, 6633), (61, 6657), (77, 6717), (120, 6834), (123, 6840), (145, 6930),

Gene: MortyNRick_12 Start: 7390, Stop: 7773, Start Num: 21

Candidate Starts for MortyNRick_12:

(Start: 21 @7390 has 10 MA's), (47, 7444), (49, 7450), (53, 7462), (61, 7486), (123, 7669), (145, 7759),

Gene: Moss_14 Start: 8547, Stop: 8966, Start Num: 15

Candidate Starts for Moss_14:

(15, 8547), (37, 8589), (127, 8871),

Gene: Mudpuppy_12 Start: 9039, Stop: 9452, Start Num: 18

Candidate Starts for Mudpuppy_12:

(Start: 18 @9039 has 38 MA's), (46, 9108), (98, 9258), (132, 9369), (139, 9402),

Gene: MunkgeeRoachy_13 Start: 7570, Stop: 7980, Start Num: 24

Candidate Starts for MunkgeeRoachy_13:

(Start: 24 @7570 has 48 MA's), (42, 7612), (45, 7618), (58, 7657), (67, 7699), (86, 7753), (107, 7813),

Gene: Nebkiss_9 Start: 7643, Stop: 8014, Start Num: 26

Candidate Starts for Nebkiss_9:

(Start: 26 @7643 has 4 MA's), (66, 7739), (74, 7760), (82, 7787), (83, 7790), (85, 7793), (92, 7808), (107, 7865), (111, 7877), (126, 7922), (140, 7982), (142, 7988), (145, 7994),

Gene: Nesbitt_11 Start: 7855, Stop: 8250, Start Num: 18

Candidate Starts for Nesbitt_11:

(Start: 18 @7855 has 38 MA's), (Start: 24 @7867 has 48 MA's), (33, 7888), (37, 7897), (55, 7936), (62, 7960), (72, 7981), (95, 8035), (113, 8101), (115, 8107), (132, 8164), (142, 8212),

Gene: Nibbles_14 Start: 8446, Stop: 8850, Start Num: 24

Candidate Starts for Nibbles_14:

(Start: 24 @8446 has 48 MA's), (45, 8494), (68, 8575), (81, 8614), (97, 8641), (109, 8689), (130, 8755),

Gene: Nina_13 Start: 8556, Stop: 8966, Start Num: 24

Candidate Starts for Nina_13:

(Start: 24 @8556 has 48 MA's), (42, 8598), (45, 8604), (58, 8643), (67, 8685), (86, 8739), (107, 8799),

Gene: Niobe_12 Start: 9019, Stop: 9429, Start Num: 18

Candidate Starts for Niobe_12:

(Start: 18 @9019 has 38 MA's), (46, 9088), (91, 9226), (98, 9238), (132, 9349), (139, 9382),

Gene: Nitro_12 Start: 9042, Stop: 9452, Start Num: 18

Candidate Starts for Nitro_12:

(Start: 18 @9042 has 38 MA's), (38, 9087), (46, 9111), (132, 9372), (139, 9405),

Gene: Nodigi_14 Start: 8512, Stop: 8916, Start Num: 24

Candidate Starts for Nodigi_14:

(Start: 24 @8512 has 48 MA's), (44, 8560), (58, 8602), (89, 8701), (118, 8791), (131, 8833), (141, 8887), (148, 8911),

Gene: ODay_12 Start: 7116, Stop: 7499, Start Num: 21
Candidate Starts for ODay_12:
(Start: 21 @7116 has 10 MA's), (29, 7131), (47, 7170), (49, 7176), (53, 7188), (61, 7212), (123, 7395),
(145, 7485),

Gene: ObiToo_12 Start: 9222, Stop: 9635, Start Num: 18
Candidate Starts for ObiToo_12:
(Start: 18 @9222 has 38 MA's), (46, 9291), (91, 9429), (98, 9441), (132, 9552), (139, 9585),

Gene: Orla_14 Start: 8516, Stop: 8920, Start Num: 24
Candidate Starts for Orla_14:
(Start: 24 @8516 has 48 MA's), (44, 8564), (58, 8606), (89, 8705), (118, 8795), (131, 8837), (141,
8891), (148, 8915),

Gene: PFR1_09 Start: 7693, Stop: 8106, Start Num: 32
Candidate Starts for PFR1_09:
(32, 7693), (42, 7720), (45, 7732), (46, 7735), (58, 7771), (62, 7783), (66, 7810), (72, 7825), (80,
7849), (84, 7861), (95, 7882), (106, 7933), (116, 7963), (126, 7996),

Gene: PFR2_09 Start: 7693, Stop: 8106, Start Num: 32
Candidate Starts for PFR2_09:
(32, 7693), (42, 7720), (45, 7732), (46, 7735), (58, 7771), (62, 7783), (66, 7810), (72, 7825), (80,
7849), (84, 7861), (95, 7882), (106, 7933), (116, 7963), (126, 7996),

Gene: Percival_11 Start: 9171, Stop: 9593, Start Num: 18
Candidate Starts for Percival_11:
(Start: 18 @9171 has 38 MA's), (58, 9264), (60, 9270), (63, 9285), (91, 9375), (102, 9414), (108,
9432), (140, 9543),

Gene: Periwinkle_12 Start: 7041, Stop: 7433, Start Num: 19
Candidate Starts for Periwinkle_12:
(1, 6912), (5, 6957), (6, 6963), (7, 6969), (Start: 19 @7041 has 31 MA's), (31, 7068), (46, 7107), (52,
7113), (55, 7119), (58, 7131), (68, 7155), (82, 7194), (85, 7200), (90, 7212), (95, 7221), (107, 7272),
(111, 7284),

Gene: Phabuloso_12 Start: 7046, Stop: 7438, Start Num: 19
Candidate Starts for Phabuloso_12:
(1, 6917), (5, 6962), (6, 6968), (7, 6974), (9, 6992), (10, 7010), (Start: 19 @7046 has 31 MA's), (31,
7073), (52, 7118), (55, 7124), (58, 7136), (68, 7160), (82, 7199), (85, 7205), (92, 7220), (95, 7226),
(107, 7277), (111, 7289), (128, 7343),

Gene: Phistory_12 Start: 7030, Stop: 7422, Start Num: 19
Candidate Starts for Phistory_12:
(1, 6901), (5, 6946), (6, 6952), (7, 6958), (9, 6976), (10, 6994), (Start: 19 @7030 has 31 MA's), (31,
7057), (52, 7102), (55, 7108), (58, 7120), (68, 7144), (85, 7189), (92, 7204), (95, 7210), (107, 7261),
(111, 7273),

Gene: Phives_13 Start: 10124, Stop: 10537, Start Num: 18
Candidate Starts for Phives_13:
(Start: 18 @10124 has 38 MA's), (38, 10169), (98, 10343), (132, 10454), (139, 10487),

Gene: PhorbesPhlower_11 Start: 6561, Stop: 6944, Start Num: 21

Candidate Starts for PhorbesPhlower_11:

(Start: 21 @6561 has 10 MA's), (47, 6615), (49, 6621), (53, 6633), (61, 6657), (77, 6717), (120, 6834), (123, 6840), (145, 6930),

Gene: Pixelle_12 Start: 9067, Stop: 9480, Start Num: 18

Candidate Starts for Pixelle_12:

(Start: 18 @9067 has 38 MA's), (38, 9112), (132, 9397), (139, 9430),

Gene: Pollux_13 Start: 8269, Stop: 8655, Start Num: 28

Candidate Starts for Pollux_13:

(Start: 28 @8269 has 24 MA's), (50, 8326),

Gene: Pons_12 Start: 7296, Stop: 7706, Start Num: 24

Candidate Starts for Pons_12:

(Start: 24 @7296 has 48 MA's), (45, 7341), (58, 7380), (66, 7419), (70, 7431), (99, 7500), (130, 7605), (145, 7680),

Gene: Posh_13 Start: 8263, Stop: 8655, Start Num: 28

Candidate Starts for Posh_13:

(8, 8182), (Start: 28 @8263 has 24 MA's),

Gene: PotPie_13 Start: 8147, Stop: 8557, Start Num: 24

Candidate Starts for PotPie_13:

(Start: 24 @8147 has 48 MA's), (45, 8192), (58, 8231), (66, 8270), (70, 8282), (99, 8351), (130, 8456), (145, 8531),

Gene: Powerpuff_12 Start: 9090, Stop: 9503, Start Num: 18

Candidate Starts for Powerpuff_12:

(Start: 18 @9090 has 38 MA's), (46, 9159), (98, 9309), (132, 9420), (139, 9453),

Gene: PsychoKiller_12 Start: 7522, Stop: 7932, Start Num: 24

Candidate Starts for PsychoKiller_12:

(Start: 24 @7522 has 48 MA's), (42, 7564), (45, 7570), (58, 7609), (67, 7651), (86, 7705), (107, 7765),

Gene: Pumpkins_22 Start: 9144, Stop: 9557, Start Num: 18

Candidate Starts for Pumpkins_22:

(Start: 18 @9144 has 38 MA's), (46, 9213), (132, 9474), (139, 9507),

Gene: Pytheas_13 Start: 8116, Stop: 8502, Start Num: 28

Candidate Starts for Pytheas_13:

(8, 8035), (Start: 28 @8116 has 24 MA's), (42, 8152), (50, 8173),

Gene: Quasar_12 Start: 8131, Stop: 8541, Start Num: 24

Candidate Starts for Quasar_12:

(Start: 24 @8131 has 48 MA's), (42, 8173), (45, 8179), (58, 8218), (67, 8260), (86, 8314), (107, 8374),

Gene: RedBaron_13 Start: 7567, Stop: 7977, Start Num: 24

Candidate Starts for RedBaron_13:

(Start: 24 @7567 has 48 MA's), (42, 7609), (45, 7615), (58, 7654), (67, 7696), (86, 7750), (107, 7810),

Gene: Reedo_12 Start: 9091, Stop: 9489, Start Num: 22

Candidate Starts for Reedo_12:

(Start: 22 @9091 has 2 MA's), (91, 9286), (95, 9292), (111, 9352), (139, 9442),

Gene: Ronaldo_47 Start: 17508, Stop: 17888, Start Num: 36

Candidate Starts for Ronaldo_47:

(Start: 36 @17508 has 6 MA's), (48, 17547), (57, 17571), (72, 17628), (96, 17685), (106, 17733), (125, 17787),

Gene: Rowa_11 Start: 7599, Stop: 8018, Start Num: 12

Candidate Starts for Rowa_11:

(Start: 12 @7599 has 1 MA's), (13, 7602), (Start: 18 @7620 has 38 MA's), (35, 7659), (58, 7710), (111, 7863), (115, 7872), (128, 7917), (132, 7929), (150, 8004),

Gene: SPB78_12 Start: 8026, Stop: 8427, Start Num: 19

Candidate Starts for SPB78_12:

(Start: 18 @8023 has 38 MA's), (Start: 19 @8026 has 31 MA's), (51, 8104), (52, 8110), (58, 8128), (69, 8155), (107, 8269),

Gene: ShakeltOph_11 Start: 7286, Stop: 7681, Start Num: 20

Candidate Starts for ShakeltOph_11:

(Start: 20 @7286 has 1 MA's), (91, 7478),

Gene: Shambre1_12 Start: 8782, Stop: 9204, Start Num: 41

Candidate Starts for Shambre1_12:

(Start: 41 @8782 has 1 MA's), (56, 8827), (59, 8836), (135, 9097), (149, 9163), (151, 9181),

Gene: SheckWes_11 Start: 7284, Stop: 7694, Start Num: 24

Candidate Starts for SheckWes_11:

(Start: 24 @7284 has 48 MA's), (45, 7329), (58, 7368), (66, 7407), (70, 7419), (99, 7488), (130, 7593), (145, 7668),

Gene: Simpson_13 Start: 9040, Stop: 9453, Start Num: 18

Candidate Starts for Simpson_13:

(Start: 18 @9040 has 38 MA's), (46, 9109), (98, 9259), (132, 9370), (139, 9403),

Gene: SketchMex_11 Start: 7506, Stop: 7916, Start Num: 24

Candidate Starts for SketchMex_11:

(Start: 24 @7506 has 48 MA's), (42, 7548), (45, 7554), (58, 7593), (67, 7635), (86, 7689), (104, 7737), (107, 7749),

Gene: Sleepyhead_12 Start: 7869, Stop: 8279, Start Num: 27

Candidate Starts for Sleepyhead_12:

(14, 7833), (Start: 27 @7869 has 1 MA's), (60, 7962), (68, 8004), (87, 8061), (91, 8070), (98, 8082), (106, 8124),

Gene: Snek_12 Start: 8127, Stop: 8540, Start Num: 19

Candidate Starts for Snek_12:

(Start: 19 @8127 has 31 MA's), (72, 8280), (146, 8523),

Gene: Soondubu_11 Start: 8928, Stop: 9338, Start Num: 19

Candidate Starts for Soondubu_11:

(Start: 19 @8928 has 31 MA's), (60, 9030), (139, 9291),

Gene: Sopespian_12 Start: 7522, Stop: 7932, Start Num: 24

Candidate Starts for Sopespian_12:

(Start: 24 @7522 has 48 MA's), (42, 7564), (45, 7570), (58, 7609), (67, 7651), (86, 7705), (107, 7765),

Gene: Soul22_13 Start: 7212, Stop: 7616, Start Num: 28

Candidate Starts for Soul22_13:

(Start: 28 @7212 has 24 MA's), (40, 7245), (62, 7305), (78, 7371), (117, 7491), (121, 7503), (134, 7539), (137, 7569),

Gene: Spartoi_10 Start: 6599, Stop: 7030, Start Num: 19

Candidate Starts for Spartoi_10:

(Start: 19 @6599 has 31 MA's), (35, 6635), (47, 6668), (49, 6674), (54, 6689), (81, 6785),

Gene: Spooky_12 Start: 7039, Stop: 7449, Start Num: 19

Candidate Starts for Spooky_12:

(5, 6955), (6, 6961), (7, 6967), (Start: 19 @7039 has 31 MA's), (52, 7111), (55, 7117), (58, 7129), (68, 7171), (82, 7210), (85, 7216), (95, 7237), (104, 7276), (111, 7300), (128, 7354),

Gene: Squiddly_13 Start: 7726, Stop: 8118, Start Num: 19

Candidate Starts for Squiddly_13:

(1, 7597), (5, 7642), (6, 7648), (7, 7654), (9, 7672), (10, 7690), (Start: 19 @7726 has 31 MA's), (31, 7753), (52, 7798), (55, 7804), (58, 7816), (68, 7840), (85, 7885), (92, 7900), (95, 7906), (107, 7957), (111, 7969),

Gene: SteamedHams_14 Start: 7535, Stop: 7945, Start Num: 24

Candidate Starts for SteamedHams_14:

(Start: 24 @7535 has 48 MA's), (39, 7571), (42, 7577), (45, 7583), (58, 7622), (67, 7664), (86, 7718), (107, 7778),

Gene: SuMoo_10 Start: 7515, Stop: 7928, Start Num: 19

Candidate Starts for SuMoo_10:

(Start: 19 @7515 has 31 MA's),

Gene: Sue2_12 Start: 9043, Stop: 9456, Start Num: 19

Candidate Starts for Sue2_12:

(11, 9007), (Start: 19 @9043 has 31 MA's),

Gene: SummitAcademy_11 Start: 7362, Stop: 7772, Start Num: 24

Candidate Starts for SummitAcademy_11:

(Start: 24 @7362 has 48 MA's), (45, 7407), (58, 7446), (66, 7485), (70, 7497), (99, 7566), (130, 7671), (145, 7746),

Gene: Survivors_14 Start: 8300, Stop: 8704, Start Num: 24

Candidate Starts for Survivors_14:

(Start: 24 @8300 has 48 MA's), (45, 8348), (68, 8429), (81, 8468), (97, 8495), (109, 8543), (130, 8609),

Gene: SweatNTears_14 Start: 8017, Stop: 8427, Start Num: 24

Candidate Starts for SweatNTears_14:

(Start: 24 @8017 has 48 MA's), (42, 8059), (45, 8065), (58, 8104), (67, 8146), (86, 8200), (104, 8248), (107, 8260),

Gene: Tallboi_12 Start: 9050, Stop: 9463, Start Num: 18

Candidate Starts for Tallboi_12:

(Start: 18 @9050 has 38 MA's), (38, 9095), (46, 9119), (132, 9380), (139, 9413),

Gene: Tbone_12 Start: 9033, Stop: 9446, Start Num: 18

Candidate Starts for Tbone_12:

(Start: 18 @9033 has 38 MA's), (46, 9102), (98, 9252), (132, 9363), (139, 9396),

Gene: TforTroy_12 Start: 9164, Stop: 9577, Start Num: 18

Candidate Starts for TforTroy_12:

(Start: 18 @9164 has 38 MA's), (132, 9494), (139, 9527),

Gene: Tian_12 Start: 9064, Stop: 9477, Start Num: 18

Candidate Starts for Tian_12:

(Start: 18 @9064 has 38 MA's), (38, 9109), (98, 9283), (132, 9394), (139, 9427),

Gene: Tolls_14 Start: 7538, Stop: 7948, Start Num: 24

Candidate Starts for Tolls_14:

(Start: 24 @7538 has 48 MA's), (39, 7574), (42, 7580), (45, 7586), (58, 7625), (67, 7667), (86, 7721), (107, 7781),

Gene: Troje_12 Start: 7491, Stop: 7901, Start Num: 24

Candidate Starts for Troje_12:

(Start: 24 @7491 has 48 MA's), (42, 7533), (45, 7539), (58, 7578), (67, 7620), (86, 7674), (104, 7722), (107, 7734),

Gene: Tuck_13 Start: 10079, Stop: 10489, Start Num: 18

Candidate Starts for Tuck_13:

(Start: 18 @10079 has 38 MA's), (38, 10124), (98, 10298), (132, 10409), (139, 10442),

Gene: Turab_12 Start: 9048, Stop: 9458, Start Num: 18

Candidate Starts for Turab_12:

(Start: 18 @9048 has 38 MA's), (38, 9093), (46, 9117), (132, 9378), (139, 9411),

Gene: Tutumahutu_12 Start: 9090, Stop: 9503, Start Num: 18

Candidate Starts for Tutumahutu_12:

(Start: 18 @9090 has 38 MA's), (46, 9159), (98, 9309), (132, 9420), (139, 9453),

Gene: Tweety19_12 Start: 8126, Stop: 8539, Start Num: 19

Candidate Starts for Tweety19_12:

(Start: 19 @8126 has 31 MA's), (72, 8279), (146, 8522),

Gene: Typhonomachy_13 Start: 7522, Stop: 7932, Start Num: 24

Candidate Starts for Typhonomachy_13:

(Start: 24 @7522 has 48 MA's), (42, 7564), (45, 7570), (58, 7609), (67, 7651), (86, 7705), (107, 7765),

Gene: UtzChips_10 Start: 8204, Stop: 8620, Start Num: 19

Candidate Starts for UtzChips_10:

(Start: 19 @8204 has 31 MA's), (102, 8444), (122, 8501),

Gene: VResidence_12 Start: 9113, Stop: 9535, Start Num: 19

Candidate Starts for VResidence_12:

(Start: 19 @9113 has 31 MA's), (95, 9335), (119, 9422), (128, 9443), (132, 9452),

Gene: VWB_11 Start: 8079, Stop: 8474, Start Num: 20

Candidate Starts for VWB_11:

(16, 8073), (Start: 20 @8079 has 1 MA's), (Start: 28 @8094 has 24 MA's), (52, 8160), (83, 8244), (105, 8310), (147, 8454),

Gene: Vine_13 Start: 8291, Stop: 8701, Start Num: 24

Candidate Starts for Vine_13:

(Start: 24 @8291 has 48 MA's), (45, 8336), (58, 8375), (66, 8414), (70, 8426), (99, 8495), (130, 8600), (145, 8675),

Gene: Volt_46 Start: 17508, Stop: 17888, Start Num: 36

Candidate Starts for Volt_46:

(Start: 36 @17508 has 6 MA's), (48, 17547), (57, 17571), (72, 17628), (96, 17685), (106, 17733), (125, 17787),

Gene: VroomVroom_11 Start: 7298, Stop: 7693, Start Num: 20

Candidate Starts for VroomVroom_11:

(Start: 20 @7298 has 1 MA's), (91, 7490),

Gene: Warda_12 Start: 9036, Stop: 9449, Start Num: 18

Candidate Starts for Warda_12:

(Start: 18 @9036 has 38 MA's), (46, 9105), (98, 9255), (132, 9366), (139, 9399),

Gene: Whitney_12 Start: 7041, Stop: 7433, Start Num: 19

Candidate Starts for Whitney_12:

(1, 6912), (5, 6957), (6, 6963), (7, 6969), (9, 6987), (Start: 19 @7041 has 31 MA's), (31, 7068), (46, 7107), (52, 7113), (55, 7119), (58, 7131), (68, 7155), (82, 7194), (85, 7200), (90, 7212), (95, 7221), (107, 7272), (111, 7284),

Gene: Wildwest_13 Start: 9954, Stop: 10370, Start Num: 19

Candidate Starts for Wildwest_13:

(Start: 19 @9954 has 31 MA's), (72, 10107), (95, 10170), (128, 10278),

Gene: Wrigley_13 Start: 8113, Stop: 8499, Start Num: 28

Candidate Starts for Wrigley_13:

(8, 8032), (Start: 28 @8113 has 24 MA's), (42, 8149), (50, 8170),

Gene: Yakult_13 Start: 7424, Stop: 7828, Start Num: 24

Candidate Starts for Yakult_13:

(2, 7289), (3, 7292), (4, 7319), (Start: 24 @7424 has 48 MA's), (40, 7466), (45, 7475), (46, 7478), (58, 7514), (99, 7634),

Gene: Yang_12 Start: 9134, Stop: 9547, Start Num: 18

Candidate Starts for Yang_12:

(Start: 18 @9134 has 38 MA's), (132, 9464), (139, 9497),

Gene: Yarn_11 Start: 7528, Stop: 7938, Start Num: 24

Candidate Starts for Yarn_11:

(Start: 24 @7528 has 48 MA's), (39, 7564), (42, 7570), (45, 7576), (58, 7615), (67, 7657), (86, 7711), (107, 7771),

Gene: YesChef_12 Start: 9090, Stop: 9503, Start Num: 18

Candidate Starts for YesChef_12:

(Start: 18 @9090 has 38 MA's), (46, 9159), (98, 9309), (132, 9420), (139, 9453),

Gene: Yoshi_13 Start: 7212, Stop: 7616, Start Num: 28

Candidate Starts for Yoshi_13:

(Start: 28 @7212 has 24 MA's), (40, 7245), (62, 7305), (78, 7371), (117, 7491), (121, 7503), (134, 7539), (137, 7569),

Gene: Yummy_13 Start: 7404, Stop: 7814, Start Num: 24

Candidate Starts for Yummy_13:

(Start: 24 @7404 has 48 MA's), (45, 7452), (58, 7491), (67, 7533), (86, 7587), (107, 7647),

Gene: Zapner_14 Start: 7737, Stop: 8141, Start Num: 28

Candidate Starts for Zapner_14:

(Start: 28 @7737 has 24 MA's), (40, 7770), (62, 7830), (78, 7896), (117, 8016), (121, 8028), (134, 8064), (137, 8094),

Gene: Zareef_16 Start: 8447, Stop: 8851, Start Num: 24

Candidate Starts for Zareef_16:

(Start: 24 @8447 has 48 MA's), (45, 8495), (68, 8576), (81, 8615), (97, 8642), (109, 8690), (130, 8756),

Gene: Zeta1847_10 Start: 7300, Stop: 7692, Start Num: 18

Candidate Starts for Zeta1847_10:

(Start: 18 @7300 has 38 MA's), (72, 7444), (75, 7453),

Gene: Ziko_47 Start: 17448, Stop: 17828, Start Num: 36

Candidate Starts for Ziko_47:

(Start: 36 @17448 has 6 MA's), (48, 17487), (57, 17511), (72, 17568), (96, 17625), (106, 17673), (125, 17727),