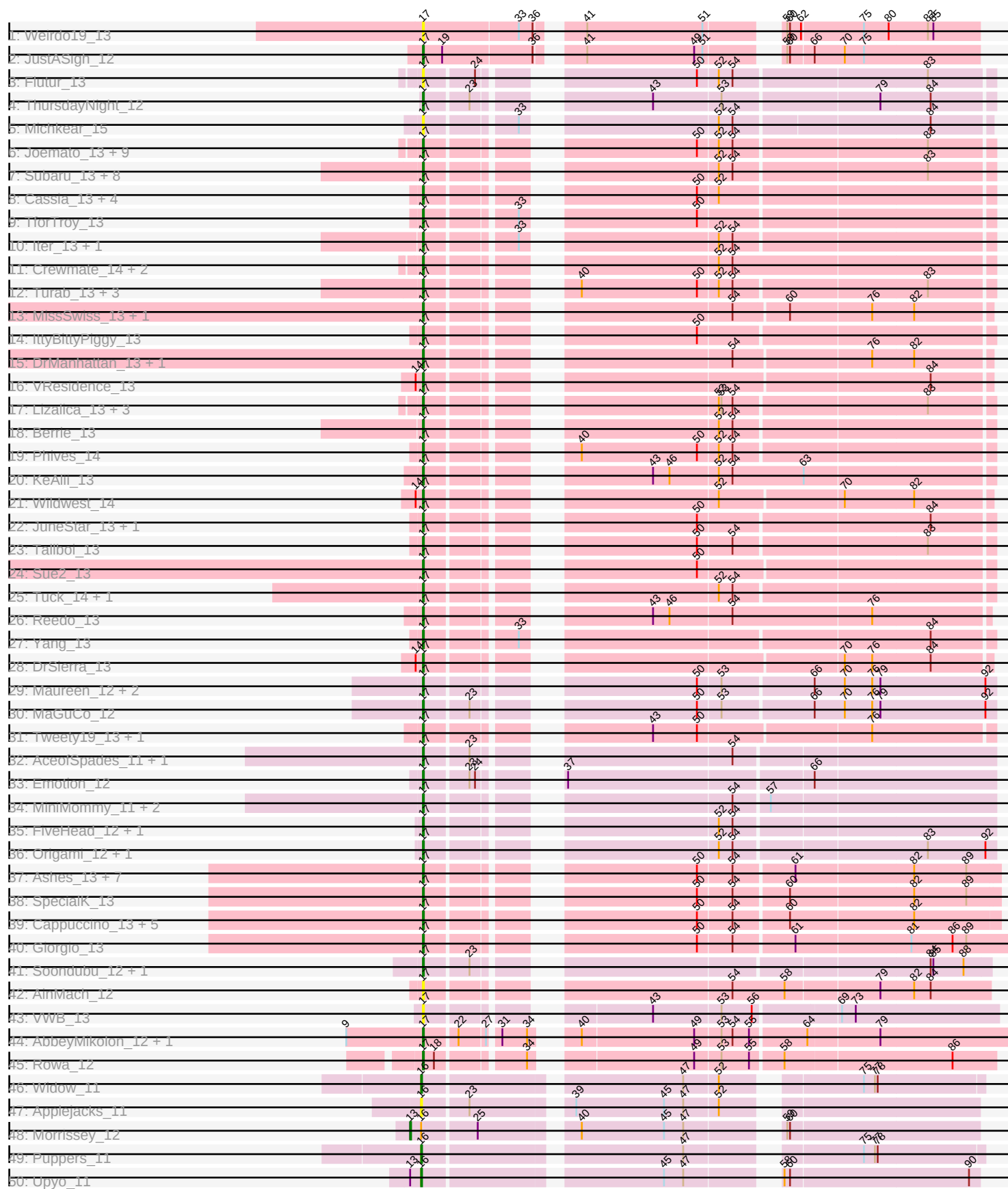
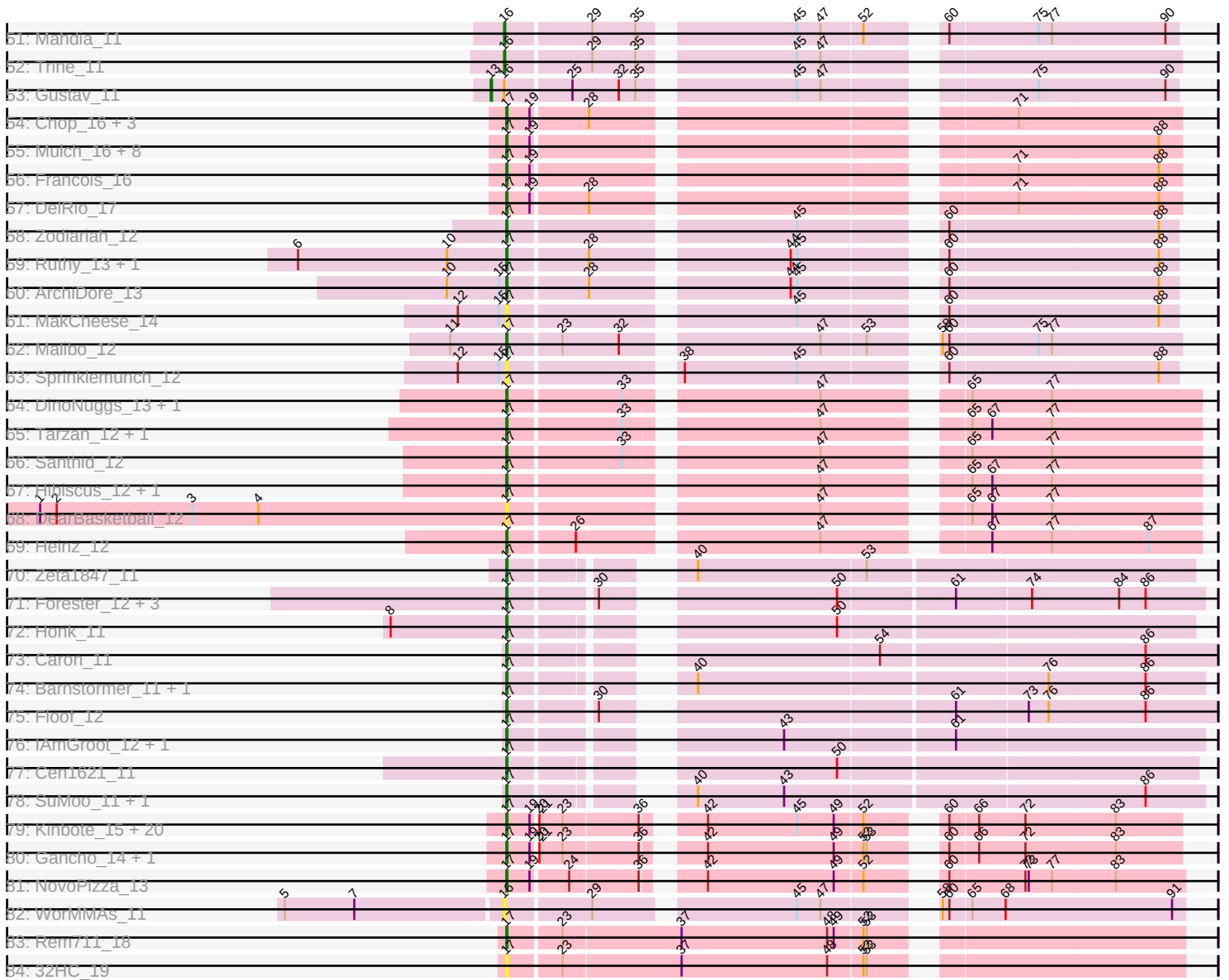




Pham 330518



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 330518 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330518 has 182 members, 23 are drafts.

Phages represented in each track:

- Track 1 : Weirido19_13
- Track 2 : JustASigh_12
- Track 3 : Flutur_13
- Track 4 : ThursdayNight_12
- Track 5 : Michkear_15
- Track 6 : Joemato_13, AGrandiflora_13, JohnDoe_13, Lego_13, YesChef_13, Simpson_14, Kaylissa_13, Tutumahutu_13, Powerpuff_13, Cyan_13
- Track 7 : Subaru_13, Jstan_13, Nitro_13, Elezi_13, Eraser_13, London_13, Asa16_13, Niobe_13, Skelbel_13
- Track 8 : Cassia_13, Pixelle_13, Pumpkins_13, Tian_13, Amyev_13
- Track 9 : TforTroy_13
- Track 10 : Iter_13, Ascela_13
- Track 11 : Crewmate_14, ObiToo_13, Janeemi_14
- Track 12 : Turab_13, Adumb2043_13, Amploria_13, AEgle_13
- Track 13 : MissSwiss_13, PandaPo_13
- Track 14 : IttyBittyPiggy_13
- Track 15 : DrManhattan_13, Adolin_13
- Track 16 : VResidence_13
- Track 17 : Lizalica_13, Tbone_13, Mudpuppy_13, Warda_13
- Track 18 : Berrie_13
- Track 19 : Phives_14
- Track 20 : KeAlii_13
- Track 21 : Wildwest_14
- Track 22 : JuneStar_13, Schaffner_13
- Track 23 : Tallboi_13
- Track 24 : Sue2_13
- Track 25 : Tuck_14, Community_14
- Track 26 : Reedo_13
- Track 27 : Yang_13
- Track 28 : DrSierra_13
- Track 29 : Maureen_12, IUFootball_12, Liebe_12
- Track 30 : MaGuCo_12
- Track 31 : Tweety19_13, Snek_13
- Track 32 : AceofSpades_11, VroomVroom_12
- Track 33 : Emotion_12
- Track 34 : MiniMommy_11, JasmineDragon_12, ShakeItOph_12
- Track 35 : FiveHead_12, JohnThicc_12

- Track 36 : Origami_12, LadyAstra_12
- Track 37 : Ashes_13, RockScotty_13, Mysterium_13, Halsey_13, Beaupre_13, Stuu_13, Gumpizza_13, Moss_13
- Track 38 : SpecialK_13
- Track 39 : Cappuccino_13, Kalimba_13, Donkey_13, Sabourin_13, Gambol_13, Sooty_13
- Track 40 : Giorgio_13
- Track 41 : Soondubu_12, Exile_12
- Track 42 : AinMach_12
- Track 43 : VWB_13
- Track 44 : AbbeyMikolon_12, Nesbitt_12
- Track 45 : Rowa_12
- Track 46 : Widow_11
- Track 47 : Applejacks_11
- Track 48 : Morrissey_12
- Track 49 : Puppies_11
- Track 50 : Upyo_11
- Track 51 : Mahdia_11
- Track 52 : Trine_11
- Track 53 : Gustav_11
- Track 54 : Chop_16, Ayotoya_16, GrandSlam_16, Hamood_16
- Track 55 : Mulch_16, Nadeem_16, BetterKatz_16, Brylie_16, Bock_16, Pimento_17, WheatThin_16, Parada_16, NancyRae_16
- Track 56 : Francois_16
- Track 57 : DelRio_17
- Track 58 : Zodiariah_12
- Track 59 : Ruthy_13, DumpsterDude_13
- Track 60 : ArchiDore_13
- Track 61 : MakCheese_14
- Track 62 : Malibo_12
- Track 63 : Sprinklemunch_12
- Track 64 : DinoNuggs_13, Reyja_13
- Track 65 : Tarzan_12, DonkeyMan_12
- Track 66 : Santhid_12
- Track 67 : Hibiscus_12, Jojo24_12
- Track 68 : DearBasketball_12
- Track 69 : Heinz_12
- Track 70 : Zeta1847_11
- Track 71 : Forester_12, Percival_12, SuperHands_12, Gretchen_12
- Track 72 : Honk_11
- Track 73 : Caron_11
- Track 74 : Barnstormer_11, UtzChips_11
- Track 75 : Floof_12
- Track 76 : IAmGroot_12, GardenState_12
- Track 77 : Cen1621_11
- Track 78 : SuMoo_11, Mabodamaca_12
- Track 79 : Kinbote_15, BloominB_15, Ein37_15, Daegal_16, Amochick_15, Evanesce_15, DeepSoil15_15, Amymech_15, Luna22_15, Dewey_15, HH92_15, Ubuntu_15, Webster2_15, Giles_15, Luke_15, Hail_15, LilHazelNut_15, Hadrien_15, OBUpride_15, Forge_15, Wishmaker_15
- Track 80 : Gancho_14, Gravaillia_15
- Track 81 : NovoPizza_13
- Track 82 : WorMMAs_11

- Track 83 : Rem711_18
- Track 84 : 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 17, it was called in 152 of the 159 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, 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, Cen1621_11, Chop_16, Community_14, Crewmate_14, Cyan_13, Daegal_16, DearBasketball_12, DeepSoil15_15, DelRio_17, Dewey_15, DinoNuggets_13, DonkeyMan_12, Donkey_13, DrManhattan_13, DrSierra_13, DumpsterDude_13, Ein37_15, Elezi_13, Emotion_12, Eraser_13, Evanesce_15, Exile_12, FiveHead_12, Floof_12, Flutur_13, Forester_12, Forge_15, Francois_16, Gambo1_13, Gancho_14, GardenState_12, Giles_15, Giorgio_13, GrandSlam_16, Gravaillia_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, 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, LadyAstra_12, Lego_13, Liebe_12, LilHazelNut_15, Lizalica_13, London_13, Luke_15, Luna22_15, MaGuCo_12, Mabodamaca_12, MakCheese_14, Malibo_12, Maureen_12, Michkear_15, MiniMommy_11, MissSwiss_13, Moss_13, Mudpuppy_13, Mulch_16, Mysterium_13, Nadeem_16, NancyRae_16, Nesbitt_12, Niobe_13, Nitro_13, NovoPizza_13, OBUpride_15, ObiToo_13, Origami_12, PandaPo_13, Parada_16, Percival_12, Phives_14, Pimento_17, Pixelle_13, Powerpuff_13, Pumpkins_13, 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_12, Tallboi_13, Tarzan_12, Tbone_13, TforTroy_13, ThursdayNight_12, Tian_13, Tuck_14, Turab_13, Tutumahutu_13, Tweety19_13, Ubuntu_15, UtzChips_11, VResidence_13, VWB_13, VroomVroom_12, Warda_13, Webster2_15, Weirido19_13, WheatThin_16, Wildwest_14, Wishmaker_15, Yang_13, YesChef_13, Zeta1847_11, Zodiariah_12,

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

-

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

- Applejacks_11, Gustav_11, Mahdia_11, Morrissey_12, Puppies_11, Trine_11, Upyo_11, Widow_11, WorMMAs_11,

Summary by start number:

Start 13:

- Found in 3 of 182 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 159
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Gustav_11 (CD), Morrissey_12 (CD),

Start 16:

- Found in 9 of 182 (4.9%) of genes in pham
- Manual Annotations of this start: 5 of 159
- Called 77.8% of time when present
- Phage (with cluster) where this start called: Applejacks_11 (CD), Mahdia_11 (CD), Puppies_11 (CD), Trine_11 (CD), Upyo_11 (CD), Widow_11 (CD), WorMMAs_11 (UNK),

Start 17:

- Found in 173 of 182 (95.1%) of genes in pham
- Manual Annotations of this start: 152 of 159
- Called 100.0% 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), 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), Cen1621_11 (EH), Chop_16 (DI), Community_14 (AZ1), Crewmate_14 (AZ1), Cyan_13 (AZ1), Daegal_16 (Q), DearBasketball_12 (DY), DeepSoil15_15 (Q), DelRio_17 (DI), Dewey_15 (Q), DinoNuggets_13 (DY), DonkeyMan_12 (DY), Donkey_13 (AZ5), DrManhattan_13 (AZ1), DrSierra_13 (AZ1), DumpsterDude_13 (DW), 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_12 (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), 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), LadyAstra_12 (AZ4), Lego_13 (AZ1), Liebe_12 (AZ2), LilHazelNut_15 (Q), Lizalica_13 (AZ1), London_13 (AZ1), Luke_15 (Q), Luna22_15 (Q), MaGuCo_12 (AZ2), Mabodamaca_12 (EH), MakCheese_14 (DW), Malibo_12 (DW), Maureen_12 (AZ2), Michkear_15 (AZ), MiniMommy_11 (AZ4), MissSwiss_13 (AZ1), 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), ObiToo_13 (AZ1), Origami_12 (AZ4), PandaPo_13 (AZ1), Parada_16 (DI), Percival_12 (EH), Phives_14 (AZ1), Pimento_17 (DI), Pixelle_13 (AZ1), Powerpuff_13 (AZ1), Pumpkins_13 (AZ1), 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_12 (EH), Tallboi_13 (AZ1),

Tarzan_12 (DY), Tbone_13 (AZ1), TforTroy_13 (AZ1), ThursdayNight_12 (AZ), Tian_13 (AZ1), Tuck_14 (AZ1), Turab_13 (AZ1), Tutumahutu_13 (AZ1), Tweety19_13 (AZ3), Ubuntu_15 (Q), UtzChips_11 (EH), VResidence_13 (AZ1), VWB_13 (BA), VroomVroom_12 (AZ4), Warda_13 (AZ1), Webster2_15 (Q), Weirido19_13 (AH), WheatThin_16 (DI), Wildwest_14 (AZ1), Wishmaker_15 (Q), Yang_13 (AZ1), YesChef_13 (AZ1), Zeta1847_11 (EH), Zodiariah_12 (DW),

Summary by clusters:

There are 19 clusters represented in this pham: AZ, Z, EH, DI, BL, AH, UNK, CD, Q, DW, DY, AZ7, AZ1, AZ2, AZ3, AZ4, AZ5, AZ6, BA,

Info for manual annotations of cluster AH:

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

Info for manual annotations of cluster AZ:

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

Info for manual annotations of cluster AZ1:

- Start number 17 was manually annotated 49 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 17 was manually annotated 4 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 17 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 17 was manually annotated 8 times for cluster AZ4.

Info for manual annotations of cluster AZ5:

- Start number 17 was manually annotated 16 times for cluster AZ5.

Info for manual annotations of cluster AZ6:

- Start number 17 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster BL:

- Start number 17 was manually annotated 3 times for cluster BL.

Info for manual annotations of cluster CD:

- Start number 13 was manually annotated 2 times for cluster CD.
- Start number 16 was manually annotated 5 times for cluster CD.

Info for manual annotations of cluster DI:

- Start number 17 was manually annotated 15 times for cluster DI.

Info for manual annotations of cluster DW:

- Start number 17 was manually annotated 5 times for cluster DW.

Info for manual annotations of cluster DY:

- Start number 17 was manually annotated 7 times for cluster DY.

Info for manual annotations of cluster EH:

- Start number 17 was manually annotated 15 times for cluster EH.

Info for manual annotations of cluster Q:

- Start number 17 was manually annotated 24 times for cluster Q.

Info for manual annotations of cluster Z:

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

Gene Information:

Gene: 32HC_19 Start: 11470, Stop: 12039, Start Num: 17

Candidate Starts for 32HC_19:

(Start: 17 @11470 has 152 MA's), (23, 11515), (37, 11620), (48, 11752), (52, 11782), (53, 11785),

Gene: AEgle_13 Start: 9479, Stop: 10030, Start Num: 17

Candidate Starts for AEgle_13:

(Start: 17 @9479 has 152 MA's), (40, 9596), (50, 9722), (52, 9743), (54, 9758), (83, 9962),

Gene: AGrandiflora_13 Start: 9464, Stop: 10015, Start Num: 17

Candidate Starts for AGrandiflora_13:

(Start: 17 @9464 has 152 MA's), (50, 9707), (52, 9728), (54, 9743), (83, 9947),

Gene: AbbeyMikolon_12 Start: 8168, Stop: 8740, Start Num: 17

Candidate Starts for AbbeyMikolon_12:

(9, 8084), (Start: 17 @8168 has 152 MA's), (22, 8201), (27, 8228), (31, 8237), (34, 8264), (40, 8291), (49, 8411), (53, 8438), (54, 8450), (55, 8468), (64, 8525), (79, 8600),

Gene: AceofSpades_11 Start: 7705, Stop: 8259, Start Num: 17

Candidate Starts for AceofSpades_11:

(Start: 17 @7705 has 152 MA's), (23, 7750), (54, 7984),

Gene: Adolin_13 Start: 9458, Stop: 10006, Start Num: 17

Candidate Starts for Adolin_13:

(Start: 17 @9458 has 152 MA's), (54, 9737), (76, 9881), (82, 9926),

Gene: Adumb2043_13 Start: 9478, Stop: 10029, Start Num: 17

Candidate Starts for Adumb2043_13:

(Start: 17 @9478 has 152 MA's), (40, 9595), (50, 9721), (52, 9742), (54, 9757), (83, 9961),

Gene: AinMach_12 Start: 8582, Stop: 9136, Start Num: 17

Candidate Starts for AinMach_12:

(Start: 17 @8582 has 152 MA's), (54, 8861), (58, 8918), (79, 9017), (82, 9053), (84, 9071),

Gene: Amochick_15 Start: 9932, Stop: 10471, Start Num: 17

Candidate Starts for Amochick_15:

(Start: 17 @9932 has 152 MA's), (19, 9953), (20, 9956), (21, 9959), (23, 9977), (36, 10043), (42, 10079), (45, 10160), (49, 10193), (52, 10217), (60, 10265), (66, 10289), (72, 10331), (83, 10412),

Gene: Amploria_13 Start: 9478, Stop: 10029, Start Num: 17

Candidate Starts for Amploria_13:

(Start: 17 @9478 has 152 MA's), (40, 9595), (50, 9721), (52, 9742), (54, 9757), (83, 9961),

Gene: Amyev_13 Start: 9490, Stop: 10041, Start Num: 17

Candidate Starts for Amyev_13:

(Start: 17 @9490 has 152 MA's), (50, 9733), (52, 9754),

Gene: Amymech_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Amymech_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Applejacks_11 Start: 7579, Stop: 8121, Start Num: 16

Candidate Starts for Applejacks_11:

(Start: 16 @7579 has 5 MA's), (23, 7624), (39, 7717), (45, 7813), (47, 7834), (52, 7870),

Gene: ArchiDore_13 Start: 8427, Stop: 8969, Start Num: 17

Candidate Starts for ArchiDore_13:

(10, 8376), (15, 8421), (Start: 17 @8427 has 152 MA's), (28, 8496), (44, 8655), (45, 8661), (60, 8766), (88, 8952),

Gene: Asa16_13 Start: 9448, Stop: 9999, Start Num: 17

Candidate Starts for Asa16_13:

(Start: 17 @9448 has 152 MA's), (52, 9712), (54, 9727), (83, 9931),

Gene: Ascela_13 Start: 9483, Stop: 10034, Start Num: 17

Candidate Starts for Ascela_13:

(Start: 17 @9483 has 152 MA's), (33, 9570), (52, 9747), (54, 9762),

Gene: Ashes_13 Start: 8980, Stop: 9540, Start Num: 17

Candidate Starts for Ashes_13:

(Start: 17 @8980 has 152 MA's), (50, 9223), (54, 9259), (61, 9322), (82, 9448), (89, 9505),

Gene: Ayotoya_16 Start: 9985, Stop: 10530, Start Num: 17

Candidate Starts for Ayotoya_16:

(Start: 17 @9985 has 152 MA's), (19, 10006), (28, 10054), (71, 10384),

Gene: Barnstormer_11 Start: 8636, Stop: 9199, Start Num: 17

Candidate Starts for Barnstormer_11:

(Start: 17 @8636 has 152 MA's), (40, 8753), (76, 9059), (86, 9146),

Gene: Beaupre_13 Start: 8981, Stop: 9541, Start Num: 17

Candidate Starts for Beaupre_13:

(Start: 17 @8981 has 152 MA's), (50, 9224), (54, 9260), (61, 9323), (82, 9449), (89, 9506),

Gene: Berrie_13 Start: 9450, Stop: 10001, Start Num: 17

Candidate Starts for Berrie_13:

(Start: 17 @9450 has 152 MA's), (52, 9714), (54, 9729),

Gene: BetterKatz_16 Start: 9953, Stop: 10498, Start Num: 17

Candidate Starts for BetterKatz_16:

(Start: 17 @9953 has 152 MA's), (19, 9974), (88, 10478),

Gene: BloominB_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for BloominB_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Bock_16 Start: 9703, Stop: 10248, Start Num: 17

Candidate Starts for Bock_16:

(Start: 17 @9703 has 152 MA's), (19, 9724), (88, 10228),

Gene: Brylie_16 Start: 9700, Stop: 10245, Start Num: 17

Candidate Starts for Brylie_16:

(Start: 17 @9700 has 152 MA's), (19, 9721), (88, 10225),

Gene: Cappuccino_13 Start: 8889, Stop: 9449, Start Num: 17

Candidate Starts for Cappuccino_13:

(Start: 17 @8889 has 152 MA's), (50, 9132), (54, 9168), (60, 9225), (82, 9357),

Gene: Caron_11 Start: 8664, Stop: 9239, Start Num: 17

Candidate Starts for Caron_11:

(Start: 17 @8664 has 152 MA's), (54, 8943), (86, 9174),

Gene: Cassia_13 Start: 9565, Stop: 10116, Start Num: 17

Candidate Starts for Cassia_13:

(Start: 17 @9565 has 152 MA's), (50, 9808), (52, 9829),

Gene: Cen1621_11 Start: 7782, Stop: 8339, Start Num: 17

Candidate Starts for Cen1621_11:

(Start: 17 @7782 has 152 MA's), (50, 8025),

Gene: Chop_16 Start: 9733, Stop: 10278, Start Num: 17

Candidate Starts for Chop_16:

(Start: 17 @9733 has 152 MA's), (19, 9754), (28, 9802), (71, 10132),

Gene: Community_14 Start: 10530, Stop: 11081, Start Num: 17

Candidate Starts for Community_14:

(Start: 17 @10530 has 152 MA's), (52, 10794), (54, 10809),

Gene: Crewmate_14 Start: 9913, Stop: 10470, Start Num: 17

Candidate Starts for Crewmate_14:

(Start: 17 @9913 has 152 MA's), (52, 10177), (54, 10192),

Gene: Cyan_13 Start: 9468, Stop: 10019, Start Num: 17

Candidate Starts for Cyan_13:

(Start: 17 @9468 has 152 MA's), (50, 9711), (52, 9732), (54, 9747), (83, 9951),

Gene: Daegal_16 Start: 10229, Stop: 10768, Start Num: 17

Candidate Starts for Daegal_16:

(Start: 17 @10229 has 152 MA's), (19, 10250), (20, 10253), (21, 10256), (23, 10274), (36, 10340), (42, 10376), (45, 10457), (49, 10490), (52, 10514), (60, 10562), (66, 10586), (72, 10628), (83, 10709),

Gene: DearBasketball_12 Start: 7930, Stop: 8496, Start Num: 17

Candidate Starts for DearBasketball_12:

(1, 7507), (2, 7522), (3, 7645), (4, 7705), (Start: 17 @7930 has 152 MA's), (47, 8185), (65, 8290), (67, 8308), (77, 8362),

Gene: DeepSoil15_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for DeepSoil15_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: DelRio_17 Start: 10210, Stop: 10755, Start Num: 17

Candidate Starts for DelRio_17:

(Start: 17 @10210 has 152 MA's), (19, 10231), (28, 10279), (71, 10609), (88, 10735),

Gene: Dewey_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Dewey_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: DinoNuggs_13 Start: 8077, Stop: 8643, Start Num: 17

Candidate Starts for DinoNuggs_13:

(Start: 17 @8077 has 152 MA's), (33, 8176), (47, 8332), (65, 8437), (77, 8509),

Gene: Donkey_13 Start: 8889, Stop: 9449, Start Num: 17

Candidate Starts for Donkey_13:

(Start: 17 @8889 has 152 MA's), (50, 9132), (54, 9168), (60, 9225), (82, 9357),

Gene: DonkeyMan_12 Start: 7926, Stop: 8492, Start Num: 17

Candidate Starts for DonkeyMan_12:

(Start: 17 @7926 has 152 MA's), (33, 8025), (47, 8181), (65, 8286), (67, 8304), (77, 8358),

Gene: DrManhattan_13 Start: 9448, Stop: 9996, Start Num: 17

Candidate Starts for DrManhattan_13:

(Start: 17 @9448 has 152 MA's), (54, 9727), (76, 9871), (82, 9916),

Gene: DrSierra_13 Start: 9480, Stop: 10028, Start Num: 17

Candidate Starts for DrSierra_13:

(14, 9474), (Start: 17 @9480 has 152 MA's), (70, 9873), (76, 9903), (84, 9966),

Gene: DumpsterDude_13 Start: 8440, Stop: 8982, Start Num: 17

Candidate Starts for DumpsterDude_13:

(6, 8254), (10, 8389), (Start: 17 @8440 has 152 MA's), (28, 8509), (44, 8668), (45, 8674), (60, 8779), (88, 8965),

Gene: Ein37_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Ein37_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Elezi_13 Start: 9449, Stop: 10000, Start Num: 17

Candidate Starts for Elezi_13:

(Start: 17 @9449 has 152 MA's), (52, 9713), (54, 9728), (83, 9932),

Gene: Emotion_12 Start: 7771, Stop: 8325, Start Num: 17

Candidate Starts for Emotion_12:

(Start: 17 @7771 has 152 MA's), (23, 7816), (24, 7822), (37, 7873), (66, 8131),

Gene: Eraser_13 Start: 9449, Stop: 10000, Start Num: 17

Candidate Starts for Eraser_13:

(Start: 17 @9449 has 152 MA's), (52, 9713), (54, 9728), (83, 9932),

Gene: Evanesce_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Evanesce_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Exile_12 Start: 9368, Stop: 9916, Start Num: 17

Candidate Starts for Exile_12:

(Start: 17 @9368 has 152 MA's), (23, 9413), (84, 9851), (85, 9854), (88, 9887),

Gene: FiveHead_12 Start: 7693, Stop: 8247, Start Num: 17

Candidate Starts for FiveHead_12:

(Start: 17 @7693 has 152 MA's), (52, 7957), (54, 7972),

Gene: Floof_12 Start: 8217, Stop: 8795, Start Num: 17

Candidate Starts for Floof_12:

(Start: 17 @8217 has 152 MA's), (30, 8286), (61, 8562), (73, 8625), (76, 8643), (86, 8730),

Gene: Flutur_13 Start: 9467, Stop: 10018, Start Num: 17

Candidate Starts for Flutur_13:

(Start: 17 @9467 has 152 MA's), (24, 9518), (50, 9710), (52, 9731), (54, 9746), (83, 9950),

Gene: Forester_12 Start: 9770, Stop: 10336, Start Num: 17

Candidate Starts for Forester_12:

(Start: 17 @9770 has 152 MA's), (30, 9839), (50, 10016), (61, 10115), (74, 10181), (84, 10259), (86, 10283),

Gene: Forge_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Forge_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Francois_16 Start: 9714, Stop: 10259, Start Num: 17

Candidate Starts for Francois_16:

(Start: 17 @9714 has 152 MA's), (19, 9735), (71, 10113), (88, 10239),

Gene: Gambol_13 Start: 8889, Stop: 9449, Start Num: 17

Candidate Starts for Gambol_13:

(Start: 17 @8889 has 152 MA's), (50, 9132), (54, 9168), (60, 9225), (82, 9357),

Gene: Gancho_14 Start: 9638, Stop: 10177, Start Num: 17

Candidate Starts for Gancho_14:

(Start: 17 @9638 has 152 MA's), (19, 9659), (20, 9662), (21, 9665), (23, 9683), (36, 9749), (42, 9785), (49, 9899), (52, 9923), (53, 9926), (60, 9971), (66, 9995), (72, 10037), (83, 10118),

Gene: GardenState_12 Start: 8881, Stop: 9447, Start Num: 17

Candidate Starts for GardenState_12:

(Start: 17 @8881 has 152 MA's), (43, 9079), (61, 9226),

Gene: Giles_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Giles_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Giorgio_13 Start: 8982, Stop: 9551, Start Num: 17

Candidate Starts for Giorgio_13:

(Start: 17 @8982 has 152 MA's), (50, 9225), (54, 9261), (61, 9324), (81, 9447), (86, 9492), (89, 9507),

Gene: GrandSlam_16 Start: 9733, Stop: 10278, Start Num: 17

Candidate Starts for GrandSlam_16:

(Start: 17 @9733 has 152 MA's), (19, 9754), (28, 9802), (71, 10132),

Gene: Gravaillia_15 Start: 9671, Stop: 10210, Start Num: 17

Candidate Starts for Gravaillia_15:

(Start: 17 @9671 has 152 MA's), (19, 9692), (20, 9695), (21, 9698), (23, 9716), (36, 9782), (42, 9818), (49, 9932), (52, 9956), (53, 9959), (60, 10004), (66, 10028), (72, 10070), (83, 10151),

Gene: Gretchen_12 Start: 9764, Stop: 10330, Start Num: 17

Candidate Starts for Gretchen_12:

(Start: 17 @9764 has 152 MA's), (30, 9833), (50, 10010), (61, 10109), (74, 10175), (84, 10253), (86, 10277),

Gene: Gumpizza_13 Start: 8981, Stop: 9541, Start Num: 17

Candidate Starts for Gumpizza_13:

(Start: 17 @8981 has 152 MA's), (50, 9224), (54, 9260), (61, 9323), (82, 9449), (89, 9506),

Gene: Gustav_11 Start: 7634, Stop: 8188, Start Num: 13

Candidate Starts for Gustav_11:

(Start: 13 @7634 has 2 MA's), (Start: 16 @7646 has 5 MA's), (25, 7700), (32, 7742), (35, 7757), (45, 7880), (47, 7901), (75, 8063), (90, 8177),

Gene: HH92_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for HH92_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Hadrien_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Hadrien_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Hail_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Hail_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Halsey_13 Start: 8980, Stop: 9540, Start Num: 17

Candidate Starts for Halsey_13:

(Start: 17 @8980 has 152 MA's), (50, 9223), (54, 9259), (61, 9322), (82, 9448), (89, 9505),

Gene: Hamood_16 Start: 9733, Stop: 10278, Start Num: 17

Candidate Starts for Hamood_16:

(Start: 17 @9733 has 152 MA's), (19, 9754), (28, 9802), (71, 10132),

Gene: Heinz_12 Start: 7958, Stop: 8524, Start Num: 17

Candidate Starts for Heinz_12:

(Start: 17 @7958 has 152 MA's), (26, 8015), (47, 8213), (67, 8336), (77, 8390), (87, 8477),

Gene: Hibiscus_12 Start: 7938, Stop: 8504, Start Num: 17

Candidate Starts for Hibiscus_12:

(Start: 17 @7938 has 152 MA's), (47, 8193), (65, 8298), (67, 8316), (77, 8370),

Gene: Honk_11 Start: 7750, Stop: 8304, Start Num: 17

Candidate Starts for Honk_11:

(8, 7645), (Start: 17 @7750 has 152 MA's), (50, 7993),

Gene: IAmGroot_12 Start: 9525, Stop: 10091, Start Num: 17

Candidate Starts for IAmGroot_12:

(Start: 17 @9525 has 152 MA's), (43, 9723), (61, 9870),

Gene: IUFootball_12 Start: 7927, Stop: 8487, Start Num: 17

Candidate Starts for IUFootball_12:

(Start: 17 @7927 has 152 MA's), (50, 8170), (53, 8194), (66, 8290), (70, 8323), (76, 8353), (79, 8362), (92, 8476),

Gene: Iter_13 Start: 9483, Stop: 10034, Start Num: 17

Candidate Starts for Iter_13:

(Start: 17 @9483 has 152 MA's), (33, 9570), (52, 9747), (54, 9762),

Gene: IttyBittyPiggy_13 Start: 9467, Stop: 10018, Start Num: 17

Candidate Starts for IttyBittyPiggy_13:

(Start: 17 @9467 has 152 MA's), (50, 9710),

Gene: Janeemi_14 Start: 10558, Stop: 11109, Start Num: 17

Candidate Starts for Janeemi_14:

(Start: 17 @10558 has 152 MA's), (52, 10822), (54, 10837),

Gene: JasmineDragon_12 Start: 7693, Stop: 8247, Start Num: 17

Candidate Starts for JasmineDragon_12:

(Start: 17 @7693 has 152 MA's), (54, 7972), (57, 8008),

Gene: Joemato_13 Start: 9468, Stop: 10019, Start Num: 17

Candidate Starts for Joemato_13:

(Start: 17 @9468 has 152 MA's), (50, 9711), (52, 9732), (54, 9747), (83, 9951),

Gene: JohnDoe_13 Start: 9466, Stop: 10014, Start Num: 17

Candidate Starts for JohnDoe_13:

(Start: 17 @9466 has 152 MA's), (50, 9709), (52, 9730), (54, 9745), (83, 9949),

Gene: JohnThicc_12 Start: 7693, Stop: 8247, Start Num: 17

Candidate Starts for JohnThicc_12:

(Start: 17 @7693 has 152 MA's), (52, 7957), (54, 7972),

Gene: Jojo24_12 Start: 7933, Stop: 8499, Start Num: 17

Candidate Starts for Jojo24_12:

(Start: 17 @7933 has 152 MA's), (47, 8188), (65, 8293), (67, 8311), (77, 8365),

Gene: Jstan_13 Start: 9449, Stop: 10000, Start Num: 17

Candidate Starts for Jstan_13:

(Start: 17 @9449 has 152 MA's), (52, 9713), (54, 9728), (83, 9932),

Gene: JuneStar_13 Start: 9561, Stop: 10112, Start Num: 17

Candidate Starts for JuneStar_13:

(Start: 17 @9561 has 152 MA's), (50, 9804), (84, 10047),

Gene: JustASigh_12 Start: 8934, Stop: 9476, Start Num: 17

Candidate Starts for JustASigh_12:

(Start: 17 @8934 has 152 MA's), (19, 8955), (36, 9051), (41, 9084), (49, 9201), (51, 9210), (59, 9270), (60, 9273), (66, 9297), (70, 9330), (75, 9351),

Gene: Kalimba_13 Start: 8889, Stop: 9449, Start Num: 17

Candidate Starts for Kalimba_13:

(Start: 17 @8889 has 152 MA's), (50, 9132), (54, 9168), (60, 9225), (82, 9357),

Gene: Kaylissa_13 Start: 9469, Stop: 10020, Start Num: 17

Candidate Starts for Kaylissa_13:

(Start: 17 @9469 has 152 MA's), (50, 9712), (52, 9733), (54, 9748), (83, 9952),

Gene: KeAlii_13 Start: 9493, Stop: 10050, Start Num: 17

Candidate Starts for KeAlii_13:

(Start: 17 @9493 has 152 MA's), (43, 9688), (46, 9706), (52, 9757), (54, 9772), (63, 9850),

Gene: Kinbote_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Kinbote_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: LadyAstra_12 Start: 7693, Stop: 8247, Start Num: 17

Candidate Starts for LadyAstra_12:

(Start: 17 @7693 has 152 MA's), (52, 7957), (54, 7972), (83, 8173), (92, 8236),

Gene: Lego_13 Start: 9467, Stop: 10018, Start Num: 17

Candidate Starts for Lego_13:

(Start: 17 @9467 has 152 MA's), (50, 9710), (52, 9731), (54, 9746), (83, 9950),

Gene: Liebe_12 Start: 7927, Stop: 8487, Start Num: 17

Candidate Starts for Liebe_12:

(Start: 17 @7927 has 152 MA's), (50, 8170), (53, 8194), (66, 8290), (70, 8323), (76, 8353), (79, 8362), (92, 8476),

Gene: LilHazelnut_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for LilHazelnut_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Lizalica_13 Start: 9453, Stop: 10004, Start Num: 17

Candidate Starts for Lizalica_13:

(Start: 17 @9453 has 152 MA's), (52, 9717), (53, 9720), (54, 9732), (83, 9936),

Gene: London_13 Start: 9449, Stop: 10000, Start Num: 17

Candidate Starts for London_13:

(Start: 17 @9449 has 152 MA's), (52, 9713), (54, 9728), (83, 9932),

Gene: Luke_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Luke_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Luna22_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Luna22_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: MaGuCo_12 Start: 7863, Stop: 8423, Start Num: 17

Candidate Starts for MaGuCo_12:

(Start: 17 @7863 has 152 MA's), (23, 7908), (50, 8106), (53, 8130), (66, 8226), (70, 8259), (76, 8289), (79, 8298), (92, 8412),

Gene: Mabodamaca_12 Start: 8972, Stop: 9535, Start Num: 17

Candidate Starts for Mabodamaca_12:

(Start: 17 @8972 has 152 MA's), (40, 9089), (43, 9167), (86, 9482),

Gene: Mahdia_11 Start: 7651, Stop: 8193, Start Num: 16

Candidate Starts for Mahdia_11:

(Start: 16 @7651 has 5 MA's), (29, 7723), (35, 7762), (45, 7885), (47, 7906), (52, 7942), (60, 7990), (75, 8068), (77, 8080), (90, 8182),

Gene: MakCheese_14 Start: 8246, Stop: 8788, Start Num: 17

Candidate Starts for MakCheese_14:

(12, 8204), (15, 8240), (Start: 17 @8246 has 152 MA's), (45, 8480), (60, 8585), (88, 8771),

Gene: Malibo_12 Start: 8220, Stop: 8765, Start Num: 17

Candidate Starts for Malibo_12:

(11, 8172), (Start: 17 @8220 has 152 MA's), (23, 8265), (32, 8316), (47, 8475), (53, 8514), (58, 8553), (60, 8559), (75, 8637), (77, 8649),

Gene: Maureen_12 Start: 7927, Stop: 8487, Start Num: 17

Candidate Starts for Maureen_12:

(Start: 17 @7927 has 152 MA's), (50, 8170), (53, 8194), (66, 8290), (70, 8323), (76, 8353), (79, 8362), (92, 8476),

Gene: Michkear_15 Start: 11359, Stop: 11904, Start Num: 17

Candidate Starts for Michkear_15:

(Start: 17 @11359 has 152 MA's), (33, 11446), (52, 11623), (54, 11638), (84, 11842),

Gene: MiniMommy_11 Start: 7693, Stop: 8247, Start Num: 17

Candidate Starts for MiniMommy_11:

(Start: 17 @7693 has 152 MA's), (54, 7972), (57, 8008),

Gene: MissSwiss_13 Start: 9452, Stop: 10000, Start Num: 17

Candidate Starts for MissSwiss_13:

(Start: 17 @9452 has 152 MA's), (54, 9731), (60, 9788), (76, 9875), (82, 9920),

Gene: Morrissey_12 Start: 8032, Stop: 8586, Start Num: 13

Candidate Starts for Morrissey_12:

(Start: 13 @8032 has 2 MA's), (Start: 16 @8044 has 5 MA's), (25, 8098), (40, 8188), (45, 8278), (47, 8299), (59, 8380), (60, 8383),

Gene: Moss_13 Start: 8980, Stop: 9540, Start Num: 17

Candidate Starts for Moss_13:

(Start: 17 @8980 has 152 MA's), (50, 9223), (54, 9259), (61, 9322), (82, 9448), (89, 9505),

Gene: Mudpuppy_13 Start: 9467, Stop: 10018, Start Num: 17

Candidate Starts for Mudpuppy_13:

(Start: 17 @9467 has 152 MA's), (52, 9731), (53, 9734), (54, 9746), (83, 9950),

Gene: Mulch_16 Start: 9700, Stop: 10245, Start Num: 17

Candidate Starts for Mulch_16:

(Start: 17 @9700 has 152 MA's), (19, 9721), (88, 10225),

Gene: Mysterium_13 Start: 8981, Stop: 9541, Start Num: 17

Candidate Starts for Mysterium_13:

(Start: 17 @8981 has 152 MA's), (50, 9224), (54, 9260), (61, 9323), (82, 9449), (89, 9506),

Gene: Nadeem_16 Start: 9700, Stop: 10245, Start Num: 17

Candidate Starts for Nadeem_16:

(Start: 17 @9700 has 152 MA's), (19, 9721), (88, 10225),

Gene: NancyRae_16 Start: 9700, Stop: 10245, Start Num: 17

Candidate Starts for NancyRae_16:

(Start: 17 @9700 has 152 MA's), (19, 9721), (88, 10225),

Gene: Nesbitt_12 Start: 8240, Stop: 8812, Start Num: 17

Candidate Starts for Nesbitt_12:

(9, 8156), (Start: 17 @8240 has 152 MA's), (22, 8273), (27, 8300), (31, 8309), (34, 8336), (40, 8363), (49, 8483), (53, 8510), (54, 8522), (55, 8540), (64, 8597), (79, 8672),

Gene: Niobe_13 Start: 9449, Stop: 10000, Start Num: 17

Candidate Starts for Niobe_13:

(Start: 17 @9449 has 152 MA's), (52, 9713), (54, 9728), (83, 9932),

Gene: Nitro_13 Start: 9472, Stop: 10023, Start Num: 17

Candidate Starts for Nitro_13:

(Start: 17 @9472 has 152 MA's), (52, 9736), (54, 9751), (83, 9955),

Gene: NovoPizza_13 Start: 10041, Stop: 10583, Start Num: 17

Candidate Starts for NovoPizza_13:

(Start: 17 @10041 has 152 MA's), (19, 10062), (24, 10092), (36, 10152), (42, 10188), (49, 10302), (52, 10326), (60, 10374), (72, 10440), (73, 10443), (77, 10464), (83, 10521),

Gene: OBUpride_15 Start: 9932, Stop: 10471, Start Num: 17

Candidate Starts for OBUpride_15:

(Start: 17 @9932 has 152 MA's), (19, 9953), (20, 9956), (21, 9959), (23, 9977), (36, 10043), (42, 10079), (45, 10160), (49, 10193), (52, 10217), (60, 10265), (66, 10289), (72, 10331), (83, 10412),

Gene: ObiToo_13 Start: 9650, Stop: 10207, Start Num: 17

Candidate Starts for ObiToo_13:

(Start: 17 @9650 has 152 MA's), (52, 9914), (54, 9929),

Gene: Origami_12 Start: 7693, Stop: 8247, Start Num: 17

Candidate Starts for Origami_12:

(Start: 17 @7693 has 152 MA's), (52, 7957), (54, 7972), (83, 8173), (92, 8236),

Gene: PandaPo_13 Start: 9452, Stop: 10000, Start Num: 17

Candidate Starts for PandaPo_13:

(Start: 17 @9452 has 152 MA's), (54, 9731), (60, 9788), (76, 9875), (82, 9920),

Gene: Parada_16 Start: 9700, Stop: 10245, Start Num: 17

Candidate Starts for Parada_16:

(Start: 17 @9700 has 152 MA's), (19, 9721), (88, 10225),

Gene: Percival_12 Start: 9598, Stop: 10164, Start Num: 17

Candidate Starts for Percival_12:

(Start: 17 @9598 has 152 MA's), (30, 9667), (50, 9844), (61, 9943), (74, 10009), (84, 10087), (86, 10111),

Gene: Phives_14 Start: 10550, Stop: 11101, Start Num: 17

Candidate Starts for Phives_14:

(Start: 17 @10550 has 152 MA's), (40, 10667), (50, 10793), (52, 10814), (54, 10829),

Gene: Pimento_17 Start: 9904, Stop: 10449, Start Num: 17

Candidate Starts for Pimento_17:

(Start: 17 @9904 has 152 MA's), (19, 9925), (88, 10429),

Gene: Pixelle_13 Start: 9493, Stop: 10044, Start Num: 17

Candidate Starts for Pixelle_13:

(Start: 17 @9493 has 152 MA's), (50, 9736), (52, 9757),

Gene: Powerpuff_13 Start: 9518, Stop: 10069, Start Num: 17

Candidate Starts for Powerpuff_13:

(Start: 17 @9518 has 152 MA's), (50, 9761), (52, 9782), (54, 9797), (83, 10001),

Gene: Pumpkins_13 Start: 9570, Stop: 10121, Start Num: 17

Candidate Starts for Pumpkins_13:

(Start: 17 @9570 has 152 MA's), (50, 9813), (52, 9834),

Gene: Puppies_11 Start: 7567, Stop: 8112, Start Num: 16

Candidate Starts for Puppies_11:

(Start: 16 @7567 has 5 MA's), (47, 7822), (75, 7984), (77, 7996), (78, 7999),

Gene: Reedo_13 Start: 9508, Stop: 10059, Start Num: 17

Candidate Starts for Reedo_13:

(Start: 17 @9508 has 152 MA's), (43, 9703), (46, 9721), (54, 9787), (76, 9937),

Gene: Rem711_18 Start: 11518, Stop: 12087, Start Num: 17

Candidate Starts for Rem711_18:

(Start: 17 @11518 has 152 MA's), (23, 11563), (37, 11668), (48, 11800), (49, 11806), (52, 11830), (53, 11833),

Gene: Reyja_13 Start: 8077, Stop: 8643, Start Num: 17

Candidate Starts for Reyja_13:

(Start: 17 @8077 has 152 MA's), (33, 8176), (47, 8332), (65, 8437), (77, 8509),

Gene: RockScotty_13 Start: 8980, Stop: 9540, Start Num: 17

Candidate Starts for RockScotty_13:

(Start: 17 @8980 has 152 MA's), (50, 9223), (54, 9259), (61, 9322), (82, 9448), (89, 9505),

Gene: Rowa_12 Start: 8015, Stop: 8572, Start Num: 17

Candidate Starts for Rowa_12:

(Start: 17 @8015 has 152 MA's), (18, 8027), (34, 8111), (49, 8258), (53, 8285), (55, 8315), (58, 8348), (86, 8525),

Gene: Ruthy_13 Start: 8511, Stop: 9053, Start Num: 17

Candidate Starts for Ruthy_13:

(6, 8325), (10, 8460), (Start: 17 @8511 has 152 MA's), (28, 8580), (44, 8739), (45, 8745), (60, 8850), (88, 9036),

Gene: Sabourin_13 Start: 8889, Stop: 9449, Start Num: 17

Candidate Starts for Sabourin_13:

(Start: 17 @8889 has 152 MA's), (50, 9132), (54, 9168), (60, 9225), (82, 9357),

Gene: Santhid_12 Start: 7942, Stop: 8508, Start Num: 17

Candidate Starts for Santhid_12:

(Start: 17 @7942 has 152 MA's), (33, 8041), (47, 8197), (65, 8302), (77, 8374),

Gene: Schaffner_13 Start: 9558, Stop: 10109, Start Num: 17

Candidate Starts for Schaffner_13:

(Start: 17 @9558 has 152 MA's), (50, 9801), (84, 10044),

Gene: ShakeltOph_12 Start: 7693, Stop: 8247, Start Num: 17

Candidate Starts for ShakeltOph_12:

(Start: 17 @7693 has 152 MA's), (54, 7972), (57, 8008),

Gene: Simpson_14 Start: 9468, Stop: 10019, Start Num: 17

Candidate Starts for Simpson_14:

(Start: 17 @9468 has 152 MA's), (50, 9711), (52, 9732), (54, 9747), (83, 9951),

Gene: Skelbel_13 Start: 9449, Stop: 10000, Start Num: 17

Candidate Starts for Skelbel_13:

(Start: 17 @9449 has 152 MA's), (52, 9713), (54, 9728), (83, 9932),

Gene: Snek_13 Start: 8559, Stop: 9110, Start Num: 17

Candidate Starts for Snek_13:

(Start: 17 @8559 has 152 MA's), (43, 8754), (50, 8802), (76, 8982),

Gene: Soondubu_12 Start: 9369, Stop: 9917, Start Num: 17

Candidate Starts for Soondubu_12:

(Start: 17 @9369 has 152 MA's), (23, 9414), (84, 9852), (85, 9855), (88, 9888),

Gene: Sooty_13 Start: 8890, Stop: 9450, Start Num: 17

Candidate Starts for Sooty_13:

(Start: 17 @8890 has 152 MA's), (50, 9133), (54, 9169), (60, 9226), (82, 9358),

Gene: SpecialK_13 Start: 8887, Stop: 9447, Start Num: 17

Candidate Starts for SpecialK_13:

(Start: 17 @8887 has 152 MA's), (50, 9130), (54, 9166), (60, 9223), (82, 9355), (89, 9412),

Gene: Sprinklemunch_12 Start: 8286, Stop: 8828, Start Num: 17

Candidate Starts for Sprinklemunch_12:

(12, 8244), (15, 8280), (Start: 17 @8286 has 152 MA's), (38, 8418), (45, 8520), (60, 8625), (88, 8811),

Gene: Stuu_13 Start: 8980, Stop: 9540, Start Num: 17

Candidate Starts for Stuu_13:

(Start: 17 @8980 has 152 MA's), (50, 9223), (54, 9259), (61, 9322), (82, 9448), (89, 9505),

Gene: SuMoo_11 Start: 7932, Stop: 8495, Start Num: 17

Candidate Starts for SuMoo_11:

(Start: 17 @7932 has 152 MA's), (40, 8049), (43, 8127), (86, 8442),

Gene: Subaru_13 Start: 9449, Stop: 10000, Start Num: 17

Candidate Starts for Subaru_13:

(Start: 17 @9449 has 152 MA's), (52, 9713), (54, 9728), (83, 9932),

Gene: Sue2_13 Start: 9472, Stop: 10023, Start Num: 17

Candidate Starts for Sue2_13:

(Start: 17 @9472 has 152 MA's), (50, 9715),

Gene: SuperHands_12 Start: 9770, Stop: 10336, Start Num: 17

Candidate Starts for SuperHands_12:

(Start: 17 @9770 has 152 MA's), (30, 9839), (50, 10016), (61, 10115), (74, 10181), (84, 10259), (86, 10283),

Gene: Tallboi_13 Start: 9476, Stop: 10027, Start Num: 17

Candidate Starts for Tallboi_13:

(Start: 17 @9476 has 152 MA's), (50, 9719), (54, 9755), (83, 9959),

Gene: Tarzan_12 Start: 7931, Stop: 8497, Start Num: 17

Candidate Starts for Tarzan_12:

(Start: 17 @7931 has 152 MA's), (33, 8030), (47, 8186), (65, 8291), (67, 8309), (77, 8363),

Gene: Tbone_13 Start: 9461, Stop: 10012, Start Num: 17

Candidate Starts for Tbone_13:

(Start: 17 @9461 has 152 MA's), (52, 9725), (53, 9728), (54, 9740), (83, 9944),

Gene: TforTroy_13 Start: 9590, Stop: 10141, Start Num: 17

Candidate Starts for TforTroy_13:

(Start: 17 @9590 has 152 MA's), (33, 9677), (50, 9833),

Gene: ThursdayNight_12 Start: 7964, Stop: 8515, Start Num: 17

Candidate Starts for ThursdayNight_12:

(Start: 17 @7964 has 152 MA's), (23, 8009), (43, 8159), (53, 8231), (79, 8396), (84, 8450),

Gene: Tian_13 Start: 9490, Stop: 10041, Start Num: 17

Candidate Starts for Tian_13:

(Start: 17 @9490 has 152 MA's), (50, 9733), (52, 9754),

Gene: Trine_11 Start: 7558, Stop: 8103, Start Num: 16

Candidate Starts for Trine_11:

(Start: 16 @7558 has 5 MA's), (29, 7630), (35, 7669), (45, 7792), (47, 7813),

Gene: Tuck_14 Start: 10510, Stop: 11061, Start Num: 17

Candidate Starts for Tuck_14:

(Start: 17 @10510 has 152 MA's), (52, 10774), (54, 10789),

Gene: Turab_13 Start: 9478, Stop: 10029, Start Num: 17

Candidate Starts for Turab_13:

(Start: 17 @9478 has 152 MA's), (40, 9595), (50, 9721), (52, 9742), (54, 9757), (83, 9961),

Gene: Tutumahutu_13 Start: 9518, Stop: 10069, Start Num: 17

Candidate Starts for Tutumahutu_13:

(Start: 17 @9518 has 152 MA's), (50, 9761), (52, 9782), (54, 9797), (83, 10001),

Gene: Tweety19_13 Start: 8558, Stop: 9109, Start Num: 17

Candidate Starts for Tweety19_13:

(Start: 17 @8558 has 152 MA's), (43, 8753), (50, 8801), (76, 8981),

Gene: Ubuntu_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Ubuntu_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Upyo_11 Start: 7576, Stop: 8118, Start Num: 16

Candidate Starts for Upyo_11:

(Start: 13 @7564 has 2 MA's), (Start: 16 @7576 has 5 MA's), (45, 7810), (47, 7831), (58, 7909), (60, 7915), (90, 8107),

Gene: UtzChips_11 Start: 8624, Stop: 9187, Start Num: 17

Candidate Starts for UtzChips_11:

(Start: 17 @8624 has 152 MA's), (40, 8741), (76, 9047), (86, 9134),

Gene: VResidence_13 Start: 9552, Stop: 10100, Start Num: 17

Candidate Starts for VResidence_13:

(14, 9546), (Start: 17 @9552 has 152 MA's), (84, 10038),

Gene: VWB_13 Start: 8668, Stop: 9222, Start Num: 17

Candidate Starts for VWB_13:

(Start: 17 @8668 has 152 MA's), (43, 8860), (53, 8932), (56, 8965), (69, 9052), (73, 9067),

Gene: VroomVroom_12 Start: 7705, Stop: 8259, Start Num: 17

Candidate Starts for VroomVroom_12:

(Start: 17 @7705 has 152 MA's), (23, 7750), (54, 7984),

Gene: Warda_13 Start: 9464, Stop: 10015, Start Num: 17

Candidate Starts for Warda_13:

(Start: 17 @9464 has 152 MA's), (52, 9728), (53, 9731), (54, 9743), (83, 9947),

Gene: Webster2_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Webster2_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: Weirido19_13 Start: 8705, Stop: 9247, Start Num: 17

Candidate Starts for Weirido19_13:

(Start: 17 @8705 has 152 MA's), (33, 8807), (36, 8822), (41, 8855), (51, 8981), (59, 9041), (60, 9044), (62, 9056), (75, 9122), (80, 9149), (83, 9191), (85, 9197),

Gene: WheatThin_16 Start: 9700, Stop: 10245, Start Num: 17

Candidate Starts for WheatThin_16:

(Start: 17 @9700 has 152 MA's), (19, 9721), (88, 10225),

Gene: Widow_11 Start: 7558, Stop: 8103, Start Num: 16

Candidate Starts for Widow_11:

(Start: 16 @7558 has 5 MA's), (47, 7813), (52, 7849), (75, 7975), (77, 7987), (78, 7990),

Gene: Wildwest_14 Start: 10387, Stop: 10935, Start Num: 17

Candidate Starts for Wildwest_14:

(14, 10381), (Start: 17 @10387 has 152 MA's), (52, 10651), (70, 10780), (82, 10855),

Gene: Wishmaker_15 Start: 9938, Stop: 10477, Start Num: 17

Candidate Starts for Wishmaker_15:

(Start: 17 @9938 has 152 MA's), (19, 9959), (20, 9962), (21, 9965), (23, 9983), (36, 10049), (42, 10085), (45, 10166), (49, 10199), (52, 10223), (60, 10271), (66, 10295), (72, 10337), (83, 10418),

Gene: WorMMAs_11 Start: 7486, Stop: 8034, Start Num: 16

Candidate Starts for WorMMAs_11:

(5, 7294), (7, 7357), (Start: 16 @7486 has 5 MA's), (29, 7558), (45, 7720), (47, 7741), (58, 7819), (60, 7825), (65, 7843), (68, 7873), (91, 8023),

Gene: Yang_13 Start: 9560, Stop: 10111, Start Num: 17

Candidate Starts for Yang_13:

(Start: 17 @9560 has 152 MA's), (33, 9647), (84, 10046),

Gene: YesChef_13 Start: 9518, Stop: 10069, Start Num: 17

Candidate Starts for YesChef_13:

(Start: 17 @9518 has 152 MA's), (50, 9761), (52, 9782), (54, 9797), (83, 10001),

Gene: Zeta1847_11 Start: 7708, Stop: 8262, Start Num: 17

Candidate Starts for Zeta1847_11:

(Start: 17 @7708 has 152 MA's), (40, 7825), (53, 7975),

Gene: Zodiariah_12 Start: 8235, Stop: 8777, Start Num: 17

Candidate Starts for Zodiariah_12:

(Start: 17 @8235 has 152 MA's), (45, 8469), (60, 8574), (88, 8760),