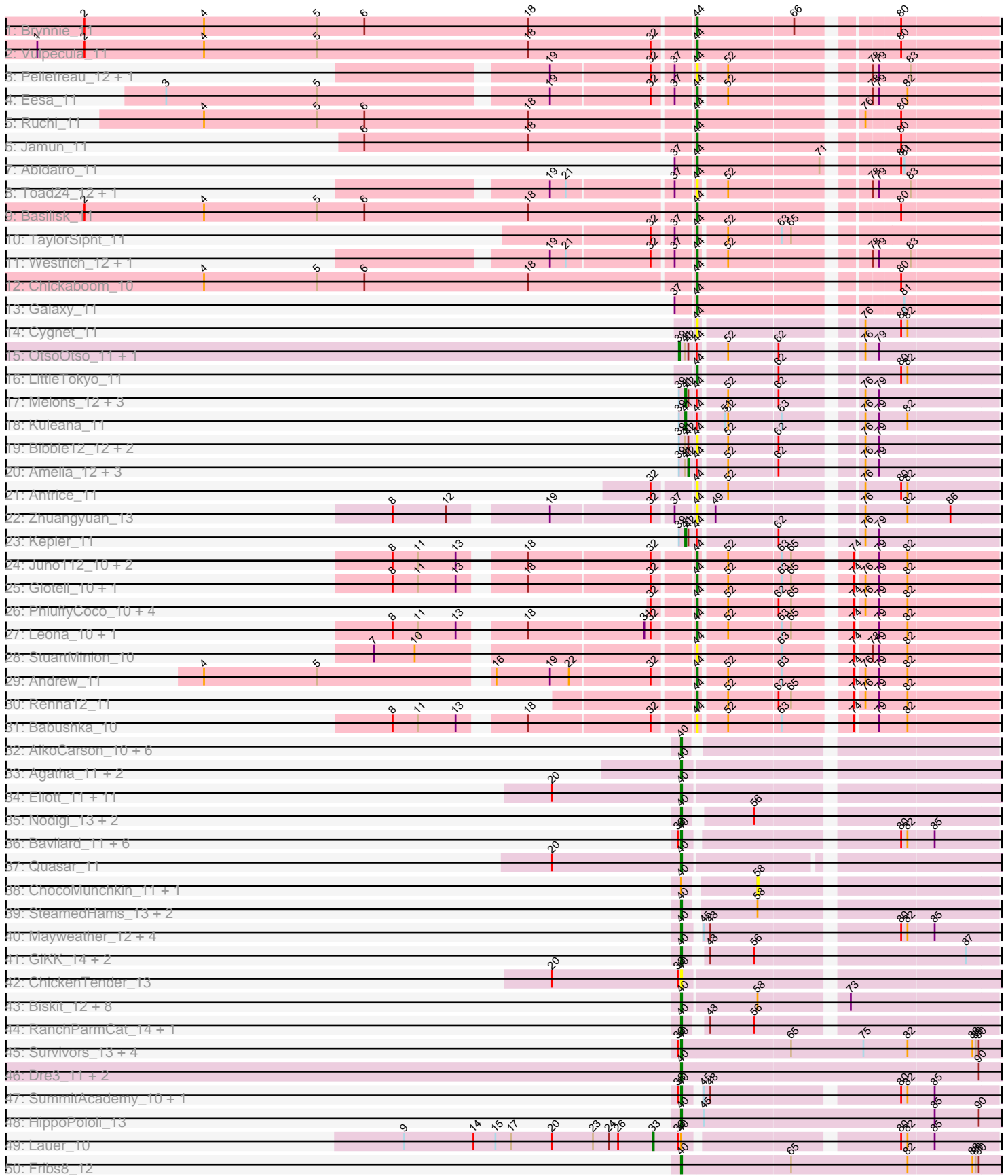
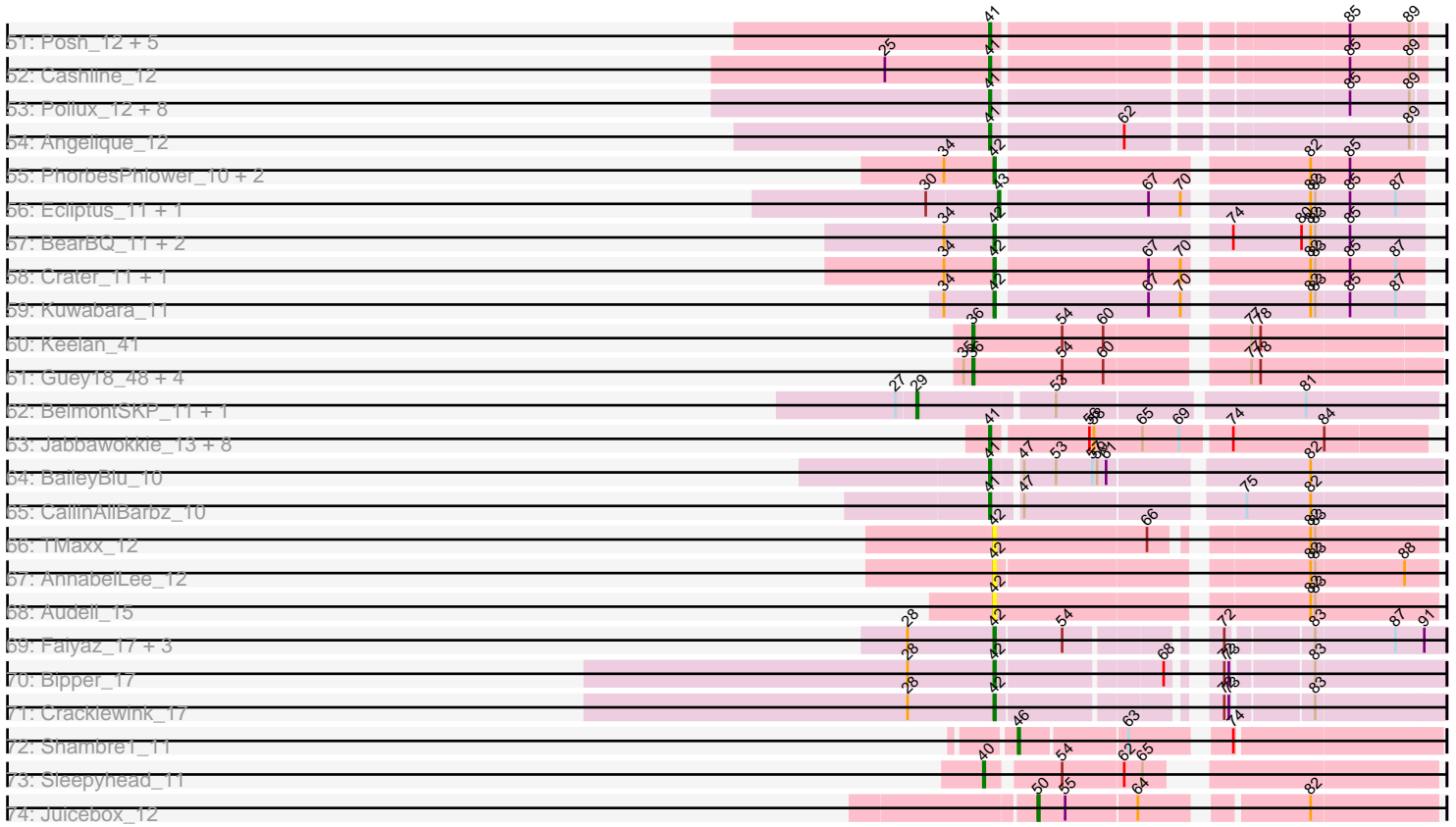


Pham 215879



Pham 215879



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 215879 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215879 has 181 members, 47 are drafts.

Phages represented in each track:

- Track 1 : Brynnie_11
- Track 2 : Vulpecula_11
- Track 3 : Pelletreau_12, Gravel_12
- Track 4 : Eesa_11
- Track 5 : Ruchi_11
- Track 6 : Jamun_11
- Track 7 : Abidatro_11
- Track 8 : Toad24_12, KendraB23_12
- Track 9 : Basilisk_11
- Track 10 : TaylorSipht_11
- Track 11 : Westrich_12, Orcanus_11
- Track 12 : Chickaboom_10
- Track 13 : Galaxy_11
- Track 14 : Cygnet_11
- Track 15 : OtsoOtso_11, Daob_12
- Track 16 : LittleTokyo_11
- Track 17 : Melons_12, Polka_11, Cote_12, Coral_11
- Track 18 : Kuleana_11
- Track 19 : Bible12_12, Colusalem_11, Jerole_12
- Track 20 : Amelia_12, Bedetta_12, Lunar_12, HannahPhantana_12
- Track 21 : Antrice_11
- Track 22 : Zhuangyuan_13
- Track 23 : Kepler_11
- Track 24 : Juno112_10, AmiCi24_10, Atlantica_10
- Track 25 : Glotell_10, KHumphrey_10
- Track 26 : PhluffyCoco_10, DanHam62_10, HamCheese_10, Camara_10, RedFox_10
- Track 27 : Leona_10, Rattail_10
- Track 28 : StuartMinion_10
- Track 29 : Andrew_11
- Track 30 : Renna12_11
- Track 31 : Babushka_10
- Track 32 : AikoCarson_10, Emalyn_10, Amok_10, BillDoor_13, Yarn_10, Yakult_12, AndPeggy_10
- Track 33 : Agatha_11, GoldHunter_12, Burnsey_11
- Track 34 : Elliott_11, Cozz_11, Nina_12, PsychoKiller_11, Axym_11, Starburst_12, Carsonalex_12, MunkgeeRoachy_11, Sopespian_11, RedBaron_12, Socotra_12,

Typhonomachy_12

- Track 35 : Nodigi_13, Hexbug_13, Orla_13
- Track 36 : Bavidard_11, Feastonyeet_10, Vine_12, KayGee_11, Yucky_13, BigChungus_10, Elinal_12
- Track 37 : Quasar_11
- Track 38 : ChocoMunchkin_11, CanesSauce_11
- Track 39 : SteamedHams_13, Tolls_13, GTE2_09
- Track 40 : Mayweather_12, CherryonLim_12, SheckWes_10, MAnor_11, Pons_11
- Track 41 : GiKK_14, Button_12, Jamzy_14
- Track 42 : ChickenTender_13
- Track 43 : Biskit_12, SweatNTears_13, Buttrmlkdreams_11, Troje_11, Yummy_12, MScarn_13, SketchMex_10, Blondies_11, Horseradish_12
- Track 44 : RanchParmCat_14, Margaret_14
- Track 45 : Survivors_13, Nibbles_13, Zareef_15, MaVan_13, Azira_13
- Track 46 : Dre3_11, Cleo_11, Gibbous_11
- Track 47 : SummitAcademy_10, PotPie_11
- Track 48 : HippoPololi_13
- Track 49 : Lauer_10
- Track 50 : Fribs8_12
- Track 51 : Posh_12, Wrigley_12, Pytheas_12, LonelyBoi_12, Jablanski_12, BeeGee_12
- Track 52 : Cashline_12
- Track 53 : Pollux_12, Lilas_12, Bradissa_12, Floral_12, BritBrat_12, Confidence_12, EMSquaredA_12, EnalisNailo_12, Marteena_12
- Track 54 : Angelique_12
- Track 55 : PhorbesPhlower_10, Morkie_10, Lucky10_10
- Track 56 : Ecliptus_11, ODay_11
- Track 57 : BearBQ_11, MortyNRick_11, Birdsong_11
- Track 58 : Crater_11, Apricot_11
- Track 59 : Kuwabara_11
- Track 60 : Keelan_41
- Track 61 : Guey18_48, Volt_45, Fryberger_43, Ronaldo_46, Ziko_46
- Track 62 : BelmontSKP_11, AnnaLie_11
- Track 63 : Jabbawokkie_13, Avani_12, Yoshi_12, Soul22_12, Che9d_12, Demsculpinboyz_12, Zapner_13, Blarby_13, SilverChicken_12
- Track 64 : BaileyBlu_10
- Track 65 : CallinAllBarbz_10
- Track 66 : TMaxx_12
- Track 67 : AnnabelLee_12
- Track 68 : Audell_15
- Track 69 : Faiyaz_17, Hilltopfarm_17, AuntGwenStacy_17, Typha_17
- Track 70 : Bipper_17
- Track 71 : Cracklewink_17
- Track 72 : Shambre1_11
- Track 73 : Sleepyhead_11
- Track 74 : Juicebox_12

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

The start number called the most often in the published annotations is 40, it was called in 54 of the 134 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agatha_11, AikoCarson_10, Amok_10, AndPeggy_10, Axym_11, Azira_13, Bavidard_11, BigChungus_10, BillDoor_13, Biskit_12, Blondies_11, Burnsey_11, Button_12, Buttrmlkdreams_11, Carsonalex_12, CherryonLim_12, ChickenTender_13, Cleo_11, Cozz_11, Dre3_11, Elinal_12, Elliott_11, Emalyn_10, Feastonyeet_10, Fribs8_12, GTE2_09, GiKK_14, Gibbous_11, GoldHunter_12, Hexbug_13, HippoPololi_13, Horseradish_12, Jamzy_14, KayGee_11, MAnor_11, MScarn_13, MaVan_13, Margaret_14, Mayweather_12, MunkgeeRoachy_11, Nibbles_13, Nina_12, Nodigi_13, Orla_13, Pons_11, PotPie_11, PsychoKiller_11, Quasar_11, RanchParmCat_14, RedBaron_12, SheckWes_10, SketchMex_10, Sleepyhead_11, Socotra_12, Sopespian_11, Starburst_12, SteamedHams_13, SummitAcademy_10, Survivors_13, SweatNTears_13, Tolls_13, Troje_11, Typhonomachy_12, Vine_12, Yakult_12, Yarn_10, Yucky_13, Yummy_12, Zareef_15,

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

- CanesSauce_11, ChocoMunchkin_11, Lauer_10,

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

- Abidatro_11, Amelia_12, AmiCi24_10, Andrew_11, Angelique_12, AnnaLie_11, AnnabelLee_12, Antrice_11, Apricot_11, Atlantica_10, Audell_15, AuntGwenStacy_17, Avani_12, Babushka_10, BaileyBlu_10, Basilisk_11, BearBQ_11, Bedetta_12, BeeGee_12, BelmontSKP_11, Bibble12_12, Bipper_17, Birdsong_11, Blarby_13, Bradissa_12, BritBrat_12, Brynnie_11, CallinAllBarbz_10, Camara_10, Cashline_12, Che9d_12, Chickaboom_10, Colusalem_11, Confidence_12, Coral_11, Cote_12, Cracklewink_17, Crater_11, Cygnet_11, DanHam62_10, Daob_12, Demsculpinboyz_12, EMSquaredA_12, Ecliptus_11, Eesa_11, EnalisNailo_12, Faiyaz_17, Floral_12, Fryberger_43, Galaxy_11, Glotell_10, Gravel_12, Guey18_48, HamCheese_10, HannahPhantana_12, Hilltopfarm_17, Jabbawokkie_13, Jablanski_12, Jamun_11, Jerole_12, Juicebox_12, Juno112_10, KHumphrey_10, Keelan_41, KendraB23_12, Kepler_11, Kuleana_11, Kuwabara_11, Leona_10, Lilas_12, LittleTokyo_11, LonelyBoi_12, Lucky10_10, Lunar_12, Marteena_12, Melons_12, Morkie_10, MortyNRick_11, ODay_11, Orcanus_11, OtsoOtso_11, Pelletreau_12, PhluffyCoco_10, PhorbesPhlower_10, Polka_11, Pollux_12, Posh_12, Pytheas_12, Rattail_10, RedFox_10, Renna12_11, Ronaldo_46, Ruchi_11, Shambre1_11, SilverChicken_12, Soul22_12, StuartMinion_10, TMaxx_12, TaylorSipt_11, Toad24_12, Typha_17, Volt_45, Vulpecula_11, Westrich_12, Wrigley_12, Yoshi_12, Zapner_13, Zhuangyuan_13, Ziko_46,

Summary by start number:

Start 29:

- Found in 2 of 181 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnnaLie_11 (EB), BelmontSKP_11 (EB),

Start 33:

- Found in 1 of 181 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 134

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lauer_10 (CT),

Start 36:

- Found in 6 of 181 (3.3%) of genes in pham
- Manual Annotations of this start: 6 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fryberger_43 (DP), Guey18_48 (DP), Keelan_41 (DP), Ronaldo_46 (DP), Volt_45 (DP), Ziko_46 (DP),

Start 39:

- Found in 15 of 181 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 13.3% of time when present
- Phage (with cluster) where this start called: Daob_12 (AS2), OtsoOtso_11 (AS2),

Start 40:

- Found in 72 of 181 (39.8%) of genes in pham
- Manual Annotations of this start: 54 of 134
- Called 95.8% of time when present
- Phage (with cluster) where this start called: Agatha_11 (CT), AikoCarson_10 (CT), Amok_10 (CT), AndPeggy_10 (CT), Axym_11 (CT), Azira_13 (CT), Bavidard_11 (CT), BigChungus_10 (CT), BillDoor_13 (CT), Biskit_12 (CT), Blondies_11 (CT), Burnsey_11 (CT), Button_12 (CT), Buttrmlkdreams_11 (CT), Carsonalex_12 (CT), CherryonLim_12 (CT), ChickenTender_13 (CT), Cleo_11 (CT), Cozz_11 (CT), Dre3_11 (CT), Elinal_12 (CT), Elliott_11 (CT), Emalyn_10 (CT), Feastonyeet_10 (CT), Fribs8_12 (CT), GTE2_09 (CT), GiKK_14 (CT), Gibbous_11 (CT), GoldHunter_12 (CT), Hexbug_13 (CT), HippoPololi_13 (CT), Horseradish_12 (CT), Jamzy_14 (CT), KayGee_11 (CT), MAnor_11 (CT), MScarn_13 (CT), MaVan_13 (CT), Margaret_14 (CT), Mayweather_12 (CT), MunkgeeRoachy_11 (CT), Nibbles_13 (CT), Nina_12 (CT), Nodigi_13 (CT), Orla_13 (CT), Pons_11 (CT), PotPie_11 (CT), PsychoKiller_11 (CT), Quasar_11 (CT), RanchParmCat_14 (CT), RedBaron_12 (CT), SheckWes_10 (CT), SketchMex_10 (CT), Sleepyhead_11 (singleton), Socotra_12 (CT), Sopespian_11 (CT), Starburst_12 (CT), SteamedHams_13 (CT), SummitAcademy_10 (CT), Survivors_13 (CT), SweatNTears_13 (CT), Tolls_13 (CT), Troje_11 (CT), Typhonmarchy_12 (CT), Vine_12 (CT), Yakult_12 (CT), Yarn_10 (CT), Yucky_13 (CT), Yummy_12 (CT), Zareef_15 (CT),

Start 41:

- Found in 43 of 181 (23.8%) of genes in pham
- Manual Annotations of this start: 32 of 134
- Called 79.1% of time when present
- Phage (with cluster) where this start called: Angelique_12 (CY1), Avani_12 (F2), BaileyBlu_10 (FP), BeeGee_12 (CY), Blarby_13 (F), Bradissa_12 (CY1), BritBrat_12 (CY2), CallinAllBarbz_10 (FP), Cashline_12 (CY), Che9d_12 (F2), Confidence_12 (CY1), Coral_11 (AS2), Cote_12 (AS2), Demsculpinboyz_12 (F2), EMSquaredA_12 (CY1), EnalisNailo_12 (CY1), Floral_12 (CY1), Jabbawokkie_13 (F2), Jablanski_12 (CY), Kepler_11 (AS2), Kuleana_11 (AS2), Lilas_12 (CY1), LonelyBoi_12 (CY), Marteena_12 (CY1), Melons_12 (AS2), Polka_11 (AS2), Pollux_12 (CY1), Posh_12 (CY), Pytheas_12 (CY), SilverChicken_12 (F2), Soul22_12 (F2), Wrigley_12 (CY), Yoshi_12 (F2), Zapner_13 (F2),

Start 42:

- Found in 32 of 181 (17.7%) of genes in pham
- Manual Annotations of this start: 15 of 134
- Called 68.8% of time when present
- Phage (with cluster) where this start called: Amelia_12 (AS2), AnnabelLee_12 (FR), Apricot_11 (DN3), Audell_15 (FR), AuntGwenStacy_17 (Y), BearBQ_11 (DN), Bedetta_12 (AS2), Bipper_17 (Y), Birdsong_11 (DN), Cracklewink_17 (Y), Crater_11 (DN3), Faiyaz_17 (Y), HannahPhantana_12 (AS2), Hilltopfarm_17 (Y), Kuwabara_11 (DN4), Lucky10_10 (DH), Lunar_12 (AS2), Morkie_10 (DH), MortyNRick_11 (DN), PhorbesPhlower_10 (DH), TMaxx_12 (FR), Typha_17 (Y),

Start 43:

- Found in 2 of 181 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ecliptus_11 (DN), ODay_11 (DN),

Start 44:

- Found in 51 of 181 (28.2%) of genes in pham
- Manual Annotations of this start: 19 of 134
- Called 76.5% of time when present
- Phage (with cluster) where this start called: Abidatro_11 (AS1), AmiCi24_10 (AS3), Andrew_11 (AS3), Antrice_11 (AS2), Atlantica_10 (AS3), Babushka_10 (AS3), Basilisk_11 (AS1), Bibble12_12 (AS2), Brynnie_11 (AS1), Camara_10 (AS3), Chickaboom_10 (AS1), Colusalem_11 (AS2), Cygnet_11 (AS2), DanHam62_10 (AS3), Eesa_11 (AS1), Galaxy_11 (AS1), Glotell_10 (AS3), Gravel_12 (AS1), HamCheese_10 (AS3), Jamun_11 (AS1), Jerole_12 (AS2), Juno112_10 (AS3), KHumphrey_10 (AS3), KendraB23_12 (AS1), Leona_10 (AS3), LittleTokyo_11 (AS2), Orcanus_11 (AS1), Pelletreau_12 (AS1), PhluffyCoco_10 (AS3), Rattail_10 (AS3), RedFox_10 (AS3), Renna12_11 (AS3), Ruchi_11 (AS1), StuartMinion_10 (AS3), TaylorSipht_11 (AS1), Toad24_12 (AS1), Vulpecula_11 (AS1), Westrich_12 (AS1), Zhuangyuan_13 (AS2),

Start 46:

- Found in 1 of 181 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shambre1_11 (singleton),

Start 50:

- Found in 1 of 181 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juicebox_12 (singleton),

Start 58:

- Found in 23 of 181 (12.7%) of genes in pham
- No Manual Annotations of this start.
- Called 8.7% of time when present
- Phage (with cluster) where this start called: CanesSauce_11 (CT), ChocoMunchkin_11 (CT),

Summary by clusters:

There are 19 clusters represented in this pham: DN, AS2, F2, DH, CY2, FR, F, AS1, FP, AS3, CY1, CY, DN3, Y, singleton, EB, DN4, DP, CT,

Info for manual annotations of cluster AS1:

- Start number 44 was manually annotated 11 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 39 was manually annotated 1 time for cluster AS2.
- Start number 41 was manually annotated 6 times for cluster AS2.
- Start number 42 was manually annotated 3 times for cluster AS2.
- Start number 44 was manually annotated 1 time for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 44 was manually annotated 7 times for cluster AS3.

Info for manual annotations of cluster CT:

- Start number 33 was manually annotated 1 time for cluster CT.
- Start number 40 was manually annotated 53 times for cluster CT.

Info for manual annotations of cluster CY:

- Start number 41 was manually annotated 7 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 41 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 41 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DH:

- Start number 42 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 42 was manually annotated 2 times for cluster DN.
- Start number 43 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN3:

- Start number 42 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 42 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 EB:

- Start number 29 was manually annotated 2 times for cluster EB.

Info for manual annotations of cluster F2:

- Start number 41 was manually annotated 7 times for cluster F2.

Info for manual annotations of cluster FP:

- Start number 41 was manually annotated 2 times for cluster FP.

Info for manual annotations of cluster Y:

•Start number 42 was manually annotated 4 times for cluster Y.

Gene Information:

Gene: Abidatro_11 Start: 8071, Stop: 8328, Start Num: 44

Candidate Starts for Abidatro_11:

(37, 8053), (Start: 44 @8071 has 19 MA's), (71, 8185), (80, 8239), (81, 8242),

Gene: Agatha_11 Start: 7257, Stop: 7538, Start Num: 40

Candidate Starts for Agatha_11:

(Start: 40 @7257 has 54 MA's),

Gene: AikoCarson_10 Start: 6987, Stop: 7256, Start Num: 40

Candidate Starts for AikoCarson_10:

(Start: 40 @6987 has 54 MA's),

Gene: Amelia_12 Start: 8244, Stop: 8504, Start Num: 42

Candidate Starts for Amelia_12:

(Start: 39 @8235 has 1 MA's), (Start: 41 @8241 has 32 MA's), (Start: 42 @8244 has 15 MA's), (Start: 44 @8250 has 19 MA's), (52, 8274), (62, 8319), (76, 8382), (79, 8394),

Gene: AmiCi24_10 Start: 7655, Stop: 7909, Start Num: 44

Candidate Starts for AmiCi24_10:

(8, 7397), (11, 7421), (13, 7457), (18, 7505), (32, 7619), (Start: 44 @7655 has 19 MA's), (52, 7679), (63, 7727), (65, 7736), (74, 7781), (79, 7799), (82, 7826),

Gene: Amok_10 Start: 6987, Stop: 7256, Start Num: 40

Candidate Starts for Amok_10:

(Start: 40 @6987 has 54 MA's),

Gene: AndPeggy_10 Start: 7275, Stop: 7547, Start Num: 40

Candidate Starts for AndPeggy_10:

(Start: 40 @7275 has 54 MA's),

Gene: Andrew_11 Start: 8034, Stop: 8288, Start Num: 44

Candidate Starts for Andrew_11:

(4, 7596), (5, 7704), (16, 7854), (19, 7905), (22, 7923), (32, 7998), (Start: 44 @8034 has 19 MA's), (52, 8058), (63, 8106), (74, 8160), (76, 8166), (79, 8178), (82, 8205),

Gene: Angelique_12 Start: 8007, Stop: 8264, Start Num: 41

Candidate Starts for Angelique_12:

(Start: 41 @8007 has 32 MA's), (62, 8088), (89, 8256),

Gene: AnnaLie_11 Start: 8000, Stop: 8320, Start Num: 29

Candidate Starts for AnnaLie_11:

(27, 7988), (Start: 29 @8000 has 2 MA's), (53, 8084), (81, 8237),

Gene: AnnabelLee_12 Start: 7464, Stop: 7730, Start Num: 42

Candidate Starts for AnnabelLee_12:

(Start: 42 @7464 has 15 MA's), (82, 7650), (83, 7653), (88, 7710),

Gene: Antrice_11 Start: 7990, Stop: 8244, Start Num: 44

Candidate Starts for Antrice_11:

(32, 7954), (Start: 44 @7990 has 19 MA's), (52, 8014), (76, 8122), (80, 8155), (82, 8161),

Gene: Apricot_11 Start: 7129, Stop: 7386, Start Num: 42

Candidate Starts for Apricot_11:

(34, 7096), (Start: 42 @7129 has 15 MA's), (67, 7222), (70, 7243), (82, 7315), (83, 7318), (85, 7339), (87, 7369),

Gene: Atlantica_10 Start: 7655, Stop: 7909, Start Num: 44

Candidate Starts for Atlantica_10:

(8, 7397), (11, 7421), (13, 7457), (18, 7505), (32, 7619), (Start: 44 @7655 has 19 MA's), (52, 7679), (63, 7727), (65, 7736), (74, 7781), (79, 7799), (82, 7826),

Gene: Audell_15 Start: 10801, Stop: 11070, Start Num: 42

Candidate Starts for Audell_15:

(Start: 42 @10801 has 15 MA's), (82, 10990), (83, 10993),

Gene: AuntGwenStacy_17 Start: 11749, Stop: 11997, Start Num: 42

Candidate Starts for AuntGwenStacy_17:

(28, 11692), (Start: 42 @11749 has 15 MA's), (54, 11791), (72, 11866), (83, 11914), (87, 11965), (91, 11983),

Gene: Avani_12 Start: 6948, Stop: 7220, Start Num: 41

Candidate Starts for Avani_12:

(Start: 41 @6948 has 32 MA's), (56, 7008), (58, 7011), (65, 7041), (69, 7065), (74, 7095), (84, 7155),

Gene: Axym_11 Start: 7257, Stop: 7538, Start Num: 40

Candidate Starts for Axym_11:

(20, 7134), (Start: 40 @7257 has 54 MA's),

Gene: Azira_13 Start: 8163, Stop: 8462, Start Num: 40

Candidate Starts for Azira_13:

(38, 8160), (Start: 40 @8163 has 54 MA's), (65, 8265), (75, 8334), (82, 8376), (88, 8436), (89, 8439), (90, 8442),

Gene: Babushka_10 Start: 7703, Stop: 7957, Start Num: 44

Candidate Starts for Babushka_10:

(8, 7445), (11, 7469), (13, 7505), (18, 7553), (32, 7667), (Start: 44 @7703 has 19 MA's), (52, 7727), (63, 7775), (74, 7829), (79, 7847), (82, 7874),

Gene: BaileyBlu_10 Start: 6510, Stop: 6782, Start Num: 41

Candidate Starts for BaileyBlu_10:

(Start: 41 @6510 has 32 MA's), (47, 6525), (53, 6546), (57, 6570), (59, 6573), (61, 6579), (82, 6699),

Gene: Basilisk_11 Start: 8395, Stop: 8652, Start Num: 44

Candidate Starts for Basilisk_11:

(2, 7819), (4, 7933), (5, 8041), (6, 8086), (18, 8242), (Start: 44 @8395 has 19 MA's), (80, 8563),

Gene: Bavilard_11 Start: 7809, Stop: 8081, Start Num: 40

Candidate Starts for Bavilard_11:

(38, 7806), (Start: 40 @7809 has 54 MA's), (80, 7992), (82, 7998), (85, 8022),

Gene: BearBQ_11 Start: 7129, Stop: 7386, Start Num: 42

Candidate Starts for BearBQ_11:

(34, 7096), (Start: 42 @7129 has 15 MA's), (74, 7264), (80, 7309), (82, 7315), (83, 7318), (85, 7339),

Gene: Bedetta_12 Start: 8244, Stop: 8504, Start Num: 42

Candidate Starts for Bedetta_12:

(Start: 39 @8235 has 1 MA's), (Start: 41 @8241 has 32 MA's), (Start: 42 @8244 has 15 MA's), (Start: 44 @8250 has 19 MA's), (52, 8274), (62, 8319), (76, 8382), (79, 8394),

Gene: BeeGee_12 Start: 8009, Stop: 8266, Start Num: 41

Candidate Starts for BeeGee_12:

(Start: 41 @8009 has 32 MA's), (85, 8219), (89, 8258),

Gene: BelmontSKP_11 Start: 8000, Stop: 8320, Start Num: 29

Candidate Starts for BelmontSKP_11:

(27, 7988), (Start: 29 @8000 has 2 MA's), (53, 8084), (81, 8237),

Gene: Bibble12_12 Start: 8253, Stop: 8507, Start Num: 44

Candidate Starts for Bibble12_12:

(Start: 39 @8238 has 1 MA's), (Start: 41 @8244 has 32 MA's), (Start: 42 @8247 has 15 MA's), (Start: 44 @8253 has 19 MA's), (52, 8277), (62, 8322), (76, 8385), (79, 8397),

Gene: BigChungus_10 Start: 7054, Stop: 7326, Start Num: 40

Candidate Starts for BigChungus_10:

(38, 7051), (Start: 40 @7054 has 54 MA's), (80, 7237), (82, 7243), (85, 7267),

Gene: BillDoor_13 Start: 7240, Stop: 7512, Start Num: 40

Candidate Starts for BillDoor_13:

(Start: 40 @7240 has 54 MA's),

Gene: Bipper_17 Start: 11835, Stop: 12083, Start Num: 42

Candidate Starts for Bipper_17:

(28, 11778), (Start: 42 @11835 has 15 MA's), (68, 11934), (72, 11952), (73, 11955), (83, 12000),

Gene: Birdsong_11 Start: 7129, Stop: 7386, Start Num: 42

Candidate Starts for Birdsong_11:

(34, 7096), (Start: 42 @7129 has 15 MA's), (74, 7264), (80, 7309), (82, 7315), (83, 7318), (85, 7339),

Gene: Biskit_12 Start: 7241, Stop: 7519, Start Num: 40

Candidate Starts for Biskit_12:

(Start: 40 @7241 has 54 MA's), (58, 7310), (73, 7382),

Gene: Blarby_13 Start: 7472, Stop: 7744, Start Num: 41

Candidate Starts for Blarby_13:

(Start: 41 @7472 has 32 MA's), (56, 7532), (58, 7535), (65, 7565), (69, 7589), (74, 7619), (84, 7679),

Gene: Blondies_11 Start: 7236, Stop: 7505, Start Num: 40

Candidate Starts for Blondies_11:

(Start: 40 @7236 has 54 MA's), (58, 7296), (73, 7368),

Gene: Bradissa_12 Start: 8013, Stop: 8270, Start Num: 41
Candidate Starts for Bradissa_12:
(Start: 41 @8013 has 32 MA's), (85, 8223), (89, 8262),

Gene: BritBrat_12 Start: 8015, Stop: 8272, Start Num: 41
Candidate Starts for BritBrat_12:
(Start: 41 @8015 has 32 MA's), (85, 8225), (89, 8264),

Gene: Brynnie_11 Start: 8207, Stop: 8464, Start Num: 44
Candidate Starts for Brynnie_11:
(2, 7631), (4, 7745), (5, 7853), (6, 7898), (18, 8054), (Start: 44 @8207 has 19 MA's), (66, 8297), (80, 8375),

Gene: Burnsey_11 Start: 7258, Stop: 7539, Start Num: 40
Candidate Starts for Burnsey_11:
(Start: 40 @7258 has 54 MA's),

Gene: Button_12 Start: 7274, Stop: 7543, Start Num: 40
Candidate Starts for Button_12:
(Start: 40 @7274 has 54 MA's), (48, 7289), (56, 7331), (87, 7514),

Gene: Buttrmlkdreams_11 Start: 7235, Stop: 7504, Start Num: 40
Candidate Starts for Buttrmlkdreams_11:
(Start: 40 @7235 has 54 MA's), (58, 7295), (73, 7367),

Gene: CallinAllBarbz_10 Start: 6520, Stop: 6792, Start Num: 41
Candidate Starts for CallinAllBarbz_10:
(Start: 41 @6520 has 32 MA's), (47, 6535), (75, 6667), (82, 6709),

Gene: Camara_10 Start: 7656, Stop: 7910, Start Num: 44
Candidate Starts for Camara_10:
(32, 7620), (Start: 44 @7656 has 19 MA's), (52, 7680), (62, 7725), (65, 7737), (74, 7782), (76, 7788), (79, 7800), (82, 7827),

Gene: CanesSauce_11 Start: 7339, Stop: 7548, Start Num: 58
Candidate Starts for CanesSauce_11:
(Start: 40 @7276 has 54 MA's), (58, 7339),

Gene: Carsonalex_12 Start: 7314, Stop: 7595, Start Num: 40
Candidate Starts for Carsonalex_12:
(20, 7191), (Start: 40 @7314 has 54 MA's),

Gene: Cashline_12 Start: 7862, Stop: 8119, Start Num: 41
Candidate Starts for Cashline_12:
(25, 7793), (Start: 41 @7862 has 32 MA's), (85, 8072), (89, 8111),

Gene: Che9d_12 Start: 6957, Stop: 7229, Start Num: 41
Candidate Starts for Che9d_12:
(Start: 41 @6957 has 32 MA's), (56, 7017), (58, 7020), (65, 7050), (69, 7074), (74, 7104), (84, 7164),

Gene: CherryonLim_12 Start: 7780, Stop: 8052, Start Num: 40
Candidate Starts for CherryonLim_12:
(Start: 40 @7780 has 54 MA's), (45, 7792), (48, 7798), (80, 7963), (82, 7969), (85, 7993),

Gene: Chickaboom_10 Start: 7752, Stop: 8009, Start Num: 44
Candidate Starts for Chickaboom_10:
(4, 7290), (5, 7398), (6, 7443), (18, 7599), (Start: 44 @7752 has 19 MA's), (80, 7920),

Gene: ChickenTender_13 Start: 7300, Stop: 7581, Start Num: 40
Candidate Starts for ChickenTender_13:
(20, 7177), (38, 7297), (Start: 40 @7300 has 54 MA's),

Gene: ChocoMunchkin_11 Start: 7339, Stop: 7548, Start Num: 58
Candidate Starts for ChocoMunchkin_11:
(Start: 40 @7276 has 54 MA's), (58, 7339),

Gene: Cleo_11 Start: 7463, Stop: 7762, Start Num: 40
Candidate Starts for Cleo_11:
(Start: 40 @7463 has 54 MA's), (90, 7742),

Gene: Colusalem_11 Start: 8089, Stop: 8343, Start Num: 44
Candidate Starts for Colusalem_11:
(Start: 39 @8074 has 1 MA's), (Start: 41 @8080 has 32 MA's), (Start: 42 @8083 has 15 MA's), (Start: 44 @8089 has 19 MA's), (52, 8113), (62, 8158), (76, 8221), (79, 8233),

Gene: Confidence_12 Start: 8009, Stop: 8266, Start Num: 41
Candidate Starts for Confidence_12:
(Start: 41 @8009 has 32 MA's), (85, 8219), (89, 8258),

Gene: Coral_11 Start: 8080, Stop: 8343, Start Num: 41
Candidate Starts for Coral_11:
(Start: 39 @8074 has 1 MA's), (Start: 41 @8080 has 32 MA's), (Start: 42 @8083 has 15 MA's), (Start: 44 @8089 has 19 MA's), (52, 8113), (62, 8158), (76, 8221), (79, 8233),

Gene: Cote_12 Start: 8241, Stop: 8504, Start Num: 41
Candidate Starts for Cote_12:
(Start: 39 @8235 has 1 MA's), (Start: 41 @8241 has 32 MA's), (Start: 42 @8244 has 15 MA's), (Start: 44 @8250 has 19 MA's), (52, 8274), (62, 8319), (76, 8382), (79, 8394),

Gene: Cozz_11 Start: 7258, Stop: 7539, Start Num: 40
Candidate Starts for Cozz_11:
(20, 7135), (Start: 40 @7258 has 54 MA's),

Gene: Cracklewink_17 Start: 11835, Stop: 12083, Start Num: 42
Candidate Starts for Cracklewink_17:
(28, 11778), (Start: 42 @11835 has 15 MA's), (72, 11952), (73, 11955), (83, 12000),

Gene: Crater_11 Start: 7129, Stop: 7386, Start Num: 42
Candidate Starts for Crater_11:
(34, 7096), (Start: 42 @7129 has 15 MA's), (67, 7222), (70, 7243), (82, 7315), (83, 7318), (85, 7339), (87, 7369),

Gene: Cygnet_11 Start: 8032, Stop: 8286, Start Num: 44
Candidate Starts for Cygnet_11:
(Start: 44 @8032 has 19 MA's), (76, 8164), (80, 8197), (82, 8203),

Gene: DanHam62_10 Start: 7655, Stop: 7909, Start Num: 44

Candidate Starts for DanHam62_10:

(32, 7619), (Start: 44 @7655 has 19 MA's), (52, 7679), (62, 7724), (65, 7736), (74, 7781), (76, 7787), (79, 7799), (82, 7826),

Gene: Daob_12 Start: 8238, Stop: 8507, Start Num: 39

Candidate Starts for Daob_12:

(Start: 39 @8238 has 1 MA's), (Start: 41 @8244 has 32 MA's), (Start: 42 @8247 has 15 MA's), (Start: 44 @8253 has 19 MA's), (52, 8277), (62, 8322), (76, 8385), (79, 8397),

Gene: Demsculpinboyz_12 Start: 6948, Stop: 7220, Start Num: 41

Candidate Starts for Demsculpinboyz_12:

(Start: 41 @6948 has 32 MA's), (56, 7008), (58, 7011), (65, 7041), (69, 7065), (74, 7095), (84, 7155),

Gene: Dre3_11 Start: 7410, Stop: 7709, Start Num: 40

Candidate Starts for Dre3_11:

(Start: 40 @7410 has 54 MA's), (90, 7689),

Gene: EMSquaredA_12 Start: 8015, Stop: 8272, Start Num: 41

Candidate Starts for EMSquaredA_12:

(Start: 41 @8015 has 32 MA's), (85, 8225), (89, 8264),

Gene: Ecliptus_11 Start: 6857, Stop: 7114, Start Num: 43

Candidate Starts for Ecliptus_11:

(30, 6812), (Start: 43 @6857 has 2 MA's), (67, 6950), (70, 6971), (82, 7043), (83, 7046), (85, 7067), (87, 7097),

Gene: Eesa_11 Start: 8248, Stop: 8502, Start Num: 44

Candidate Starts for Eesa_11:

(3, 7771), (5, 7915), (19, 8119), (32, 8212), (37, 8230), (Start: 44 @8248 has 19 MA's), (52, 8272), (78, 8386), (79, 8392), (82, 8419),

Gene: Elinal_12 Start: 7035, Stop: 7307, Start Num: 40

Candidate Starts for Elinal_12:

(38, 7032), (Start: 40 @7035 has 54 MA's), (80, 7218), (82, 7224), (85, 7248),

Gene: Elliott_11 Start: 7257, Stop: 7538, Start Num: 40

Candidate Starts for Elliott_11:

(20, 7134), (Start: 40 @7257 has 54 MA's),

Gene: Emalyn_10 Start: 6986, Stop: 7255, Start Num: 40

Candidate Starts for Emalyn_10:

(Start: 40 @6986 has 54 MA's),

Gene: EnalisNailo_12 Start: 8015, Stop: 8272, Start Num: 41

Candidate Starts for EnalisNailo_12:

(Start: 41 @8015 has 32 MA's), (85, 8225), (89, 8264),

Gene: Faiyaz_17 Start: 11749, Stop: 11997, Start Num: 42

Candidate Starts for Faiyaz_17:

(28, 11692), (Start: 42 @11749 has 15 MA's), (54, 11791), (72, 11866), (83, 11914), (87, 11965), (91, 11983),

Gene: Feastonyeet_10 Start: 7054, Stop: 7326, Start Num: 40
Candidate Starts for Feastonyeet_10:
(38, 7051), (Start: 40 @7054 has 54 MA's), (80, 7237), (82, 7243), (85, 7267),

Gene: Floral_12 Start: 8015, Stop: 8272, Start Num: 41
Candidate Starts for Floral_12:
(Start: 41 @8015 has 32 MA's), (85, 8225), (89, 8264),

Gene: Fribs8_12 Start: 7976, Stop: 8275, Start Num: 40
Candidate Starts for Fribs8_12:
(Start: 40 @7976 has 54 MA's), (65, 8078), (82, 8189), (88, 8249), (89, 8252), (90, 8255),

Gene: Fryberger_43 Start: 16293, Stop: 16577, Start Num: 36
Candidate Starts for Fryberger_43:
(35, 16287), (Start: 36 @16293 has 6 MA's), (54, 16350), (60, 16377), (77, 16458), (78, 16464),

Gene: GTE2_09 Start: 6936, Stop: 7208, Start Num: 40
Candidate Starts for GTE2_09:
(Start: 40 @6936 has 54 MA's), (58, 6999),

Gene: Galaxy_11 Start: 8078, Stop: 8335, Start Num: 44
Candidate Starts for Galaxy_11:
(37, 8060), (Start: 44 @8078 has 19 MA's), (81, 8249),

Gene: GiKK_14 Start: 7577, Stop: 7846, Start Num: 40
Candidate Starts for GiKK_14:
(Start: 40 @7577 has 54 MA's), (48, 7592), (56, 7634), (87, 7817),

Gene: Gibbous_11 Start: 7410, Stop: 7709, Start Num: 40
Candidate Starts for Gibbous_11:
(Start: 40 @7410 has 54 MA's), (90, 7689),

Gene: Glotell_10 Start: 7655, Stop: 7909, Start Num: 44
Candidate Starts for Glotell_10:
(8, 7397), (11, 7421), (13, 7457), (18, 7505), (32, 7619), (Start: 44 @7655 has 19 MA's), (52, 7679),
(63, 7727), (65, 7736), (74, 7781), (76, 7787), (79, 7799), (82, 7826),

Gene: GoldHunter_12 Start: 7258, Stop: 7539, Start Num: 40
Candidate Starts for GoldHunter_12:
(Start: 40 @7258 has 54 MA's),

Gene: Gravel_12 Start: 8244, Stop: 8498, Start Num: 44
Candidate Starts for Gravel_12:
(19, 8115), (32, 8208), (37, 8226), (Start: 44 @8244 has 19 MA's), (52, 8268), (78, 8382), (79, 8388),
(83, 8418),

Gene: Guey18_48 Start: 17486, Stop: 17770, Start Num: 36
Candidate Starts for Guey18_48:
(35, 17480), (Start: 36 @17486 has 6 MA's), (54, 17543), (60, 17570), (77, 17651), (78, 17657),

Gene: HamCheese_10 Start: 7655, Stop: 7909, Start Num: 44
Candidate Starts for HamCheese_10:

(32, 7619), (Start: 44 @7655 has 19 MA's), (52, 7679), (62, 7724), (65, 7736), (74, 7781), (76, 7787), (79, 7799), (82, 7826),

Gene: HannahPhantana_12 Start: 8247, Stop: 8507, Start Num: 42

Candidate Starts for HannahPhantana_12:

(Start: 39 @8238 has 1 MA's), (Start: 41 @8244 has 32 MA's), (Start: 42 @8247 has 15 MA's), (Start: 44 @8253 has 19 MA's), (52, 8277), (62, 8322), (76, 8385), (79, 8397),

Gene: Hexbug_13 Start: 8263, Stop: 8532, Start Num: 40

Candidate Starts for Hexbug_13:

(Start: 40 @8263 has 54 MA's), (56, 8320),

Gene: Hilltopfarm_17 Start: 11779, Stop: 12027, Start Num: 42

Candidate Starts for Hilltopfarm_17:

(28, 11722), (Start: 42 @11779 has 15 MA's), (54, 11821), (72, 11896), (83, 11944), (87, 11995), (91, 12013),

Gene: HippoPololi_13 Start: 8062, Stop: 8361, Start Num: 40

Candidate Starts for HippoPololi_13:

(Start: 40 @8062 has 54 MA's), (45, 8083), (85, 8299), (90, 8341),

Gene: Horseradish_12 Start: 7139, Stop: 7417, Start Num: 40

Candidate Starts for Horseradish_12:

(Start: 40 @7139 has 54 MA's), (58, 7208), (73, 7280),

Gene: Jabbawokkie_13 Start: 7471, Stop: 7743, Start Num: 41

Candidate Starts for Jabbawokkie_13:

(Start: 41 @7471 has 32 MA's), (56, 7531), (58, 7534), (65, 7564), (69, 7588), (74, 7618), (84, 7678),

Gene: Jablanski_12 Start: 7862, Stop: 8119, Start Num: 41

Candidate Starts for Jablanski_12:

(Start: 41 @7862 has 32 MA's), (85, 8072), (89, 8111),

Gene: Jamun_11 Start: 8419, Stop: 8676, Start Num: 44

Candidate Starts for Jamun_11:

(6, 8110), (18, 8266), (Start: 44 @8419 has 19 MA's), (80, 8587),

Gene: Jamzy_14 Start: 7587, Stop: 7856, Start Num: 40

Candidate Starts for Jamzy_14:

(Start: 40 @7587 has 54 MA's), (48, 7602), (56, 7644), (87, 7827),

Gene: Jerole_12 Start: 8250, Stop: 8504, Start Num: 44

Candidate Starts for Jerole_12:

(Start: 39 @8235 has 1 MA's), (Start: 41 @8241 has 32 MA's), (Start: 42 @8244 has 15 MA's), (Start: 44 @8250 has 19 MA's), (52, 8274), (62, 8319), (76, 8382), (79, 8394),

Gene: Juicebox_12 Start: 8597, Stop: 8833, Start Num: 50

Candidate Starts for Juicebox_12:

(Start: 50 @8597 has 1 MA's), (55, 8615), (64, 8660), (82, 8753),

Gene: Juno112_10 Start: 7656, Stop: 7910, Start Num: 44

Candidate Starts for Juno112_10:

(8, 7398), (11, 7422), (13, 7458), (18, 7506), (32, 7620), (Start: 44 @7656 has 19 MA's), (52, 7680), (63, 7728), (65, 7737), (74, 7782), (79, 7800), (82, 7827),

Gene: KHumphrey_10 Start: 7655, Stop: 7909, Start Num: 44

Candidate Starts for KHumphrey_10:

(8, 7397), (11, 7421), (13, 7457), (18, 7505), (32, 7619), (Start: 44 @7655 has 19 MA's), (52, 7679), (63, 7727), (65, 7736), (74, 7781), (76, 7787), (79, 7799), (82, 7826),

Gene: KayGee_11 Start: 7035, Stop: 7307, Start Num: 40

Candidate Starts for KayGee_11:

(38, 7032), (Start: 40 @7035 has 54 MA's), (80, 7218), (82, 7224), (85, 7248),

Gene: Keelan_41 Start: 16268, Stop: 16552, Start Num: 36

Candidate Starts for Keelan_41:

(Start: 36 @16268 has 6 MA's), (54, 16325), (60, 16352), (77, 16433), (78, 16439),

Gene: KendraB23_12 Start: 8245, Stop: 8499, Start Num: 44

Candidate Starts for KendraB23_12:

(19, 8116), (21, 8131), (37, 8227), (Start: 44 @8245 has 19 MA's), (52, 8269), (78, 8383), (79, 8389), (83, 8419),

Gene: Kepler_11 Start: 8079, Stop: 8342, Start Num: 41

Candidate Starts for Kepler_11:

(Start: 39 @8073 has 1 MA's), (Start: 41 @8079 has 32 MA's), (Start: 42 @8082 has 15 MA's), (Start: 44 @8088 has 19 MA's), (62, 8157), (76, 8220), (79, 8232),

Gene: Kuleana_11 Start: 8039, Stop: 8302, Start Num: 41

Candidate Starts for Kuleana_11:

(Start: 39 @8033 has 1 MA's), (Start: 41 @8039 has 32 MA's), (Start: 44 @8048 has 19 MA's), (51, 8069), (52, 8072), (63, 8120), (76, 8180), (79, 8192), (82, 8219),

Gene: Kuwabara_11 Start: 7129, Stop: 7386, Start Num: 42

Candidate Starts for Kuwabara_11:

(34, 7096), (Start: 42 @7129 has 15 MA's), (67, 7222), (70, 7243), (82, 7315), (83, 7318), (85, 7339), (87, 7369),

Gene: Lauer_10 Start: 7057, Stop: 7356, Start Num: 33

Candidate Starts for Lauer_10:

(9, 6820), (14, 6886), (15, 6907), (17, 6922), (20, 6961), (23, 7000), (24, 7015), (26, 7024), (Start: 33 @7057 has 1 MA's), (38, 7081), (Start: 40 @7084 has 54 MA's), (80, 7267), (82, 7273), (85, 7297),

Gene: Leona_10 Start: 7706, Stop: 7960, Start Num: 44

Candidate Starts for Leona_10:

(8, 7448), (11, 7472), (13, 7508), (18, 7556), (31, 7664), (32, 7670), (Start: 44 @7706 has 19 MA's), (52, 7730), (63, 7778), (65, 7787), (74, 7832), (79, 7850), (82, 7877),

Gene: Lilas_12 Start: 8015, Stop: 8272, Start Num: 41

Candidate Starts for Lilas_12:

(Start: 41 @8015 has 32 MA's), (85, 8225), (89, 8264),

Gene: LittleTokyo_11 Start: 7988, Stop: 8242, Start Num: 44

Candidate Starts for LittleTokyo_11:

(Start: 44 @7988 has 19 MA's), (62, 8057), (80, 8153), (82, 8159),

Gene: LonelyBoi_12 Start: 7862, Stop: 8119, Start Num: 41

Candidate Starts for LonelyBoi_12:

(Start: 41 @7862 has 32 MA's), (85, 8072), (89, 8111),

Gene: Lucky10_10 Start: 6338, Stop: 6595, Start Num: 42

Candidate Starts for Lucky10_10:

(34, 6305), (Start: 42 @6338 has 15 MA's), (82, 6524), (85, 6548),

Gene: Lunar_12 Start: 8244, Stop: 8504, Start Num: 42

Candidate Starts for Lunar_12:

(Start: 39 @8235 has 1 MA's), (Start: 41 @8241 has 32 MA's), (Start: 42 @8244 has 15 MA's), (Start: 44 @8250 has 19 MA's), (52, 8274), (62, 8319), (76, 8382), (79, 8394),

Gene: MAnor_11 Start: 7025, Stop: 7297, Start Num: 40

Candidate Starts for MAnor_11:

(Start: 40 @7025 has 54 MA's), (45, 7037), (48, 7043), (80, 7208), (82, 7214), (85, 7238),

Gene: MScarn_13 Start: 7235, Stop: 7504, Start Num: 40

Candidate Starts for MScarn_13:

(Start: 40 @7235 has 54 MA's), (58, 7295), (73, 7367),

Gene: MaVan_13 Start: 8163, Stop: 8462, Start Num: 40

Candidate Starts for MaVan_13:

(38, 8160), (Start: 40 @8163 has 54 MA's), (65, 8265), (75, 8334), (82, 8376), (88, 8436), (89, 8439), (90, 8442),

Gene: Margaret_14 Start: 7972, Stop: 8241, Start Num: 40

Candidate Starts for Margaret_14:

(Start: 40 @7972 has 54 MA's), (48, 7987), (56, 8029),

Gene: Marteena_12 Start: 8015, Stop: 8272, Start Num: 41

Candidate Starts for Marteena_12:

(Start: 41 @8015 has 32 MA's), (85, 8225), (89, 8264),

Gene: Mayweather_12 Start: 7658, Stop: 7930, Start Num: 40

Candidate Starts for Mayweather_12:

(Start: 40 @7658 has 54 MA's), (45, 7670), (48, 7676), (80, 7841), (82, 7847), (85, 7871),

Gene: Melons_12 Start: 8241, Stop: 8504, Start Num: 41

Candidate Starts for Melons_12:

(Start: 39 @8235 has 1 MA's), (Start: 41 @8241 has 32 MA's), (Start: 42 @8244 has 15 MA's), (Start: 44 @8250 has 19 MA's), (52, 8274), (62, 8319), (76, 8382), (79, 8394),

Gene: Morkie_10 Start: 6300, Stop: 6557, Start Num: 42

Candidate Starts for Morkie_10:

(34, 6267), (Start: 42 @6300 has 15 MA's), (82, 6486), (85, 6510),

Gene: MortyNRick_11 Start: 7129, Stop: 7386, Start Num: 42

Candidate Starts for MortyNRick_11:

(34, 7096), (Start: 42 @7129 has 15 MA's), (74, 7264), (80, 7309), (82, 7315), (83, 7318), (85, 7339),

Gene: MunkgeeRoachy_11 Start: 7305, Stop: 7586, Start Num: 40

Candidate Starts for MunkgeeRoachy_11:
(20, 7182), (Start: 40 @7305 has 54 MA's),

Gene: Nibbles_13 Start: 8163, Stop: 8462, Start Num: 40
Candidate Starts for Nibbles_13:
(38, 8160), (Start: 40 @8163 has 54 MA's), (65, 8265), (75, 8334), (82, 8376), (88, 8436), (89, 8439),
(90, 8442),

Gene: Nina_12 Start: 8291, Stop: 8572, Start Num: 40
Candidate Starts for Nina_12:
(20, 8168), (Start: 40 @8291 has 54 MA's),

Gene: Nodigi_13 Start: 8256, Stop: 8525, Start Num: 40
Candidate Starts for Nodigi_13:
(Start: 40 @8256 has 54 MA's), (56, 8313),

Gene: ODay_11 Start: 6855, Stop: 7112, Start Num: 43
Candidate Starts for ODay_11:
(30, 6810), (Start: 43 @6855 has 2 MA's), (67, 6948), (70, 6969), (82, 7041), (83, 7044), (85, 7065),
(87, 7095),

Gene: Orcanus_11 Start: 8038, Stop: 8292, Start Num: 44
Candidate Starts for Orcanus_11:
(19, 7909), (21, 7924), (32, 8002), (37, 8020), (Start: 44 @8038 has 19 MA's), (52, 8062), (78, 8176),
(79, 8182), (83, 8212),

Gene: Orla_13 Start: 8260, Stop: 8529, Start Num: 40
Candidate Starts for Orla_13:
(Start: 40 @8260 has 54 MA's), (56, 8317),

Gene: OtsoOtso_11 Start: 8074, Stop: 8343, Start Num: 39
Candidate Starts for OtsoOtso_11:
(Start: 39 @8074 has 1 MA's), (Start: 41 @8080 has 32 MA's), (Start: 42 @8083 has 15 MA's), (Start:
44 @8089 has 19 MA's), (52, 8113), (62, 8158), (76, 8221), (79, 8233),

Gene: Pelletreau_12 Start: 8244, Stop: 8498, Start Num: 44
Candidate Starts for Pelletreau_12:
(19, 8115), (32, 8208), (37, 8226), (Start: 44 @8244 has 19 MA's), (52, 8268), (78, 8382), (79, 8388),
(83, 8418),

Gene: PhluffyCoco_10 Start: 7655, Stop: 7909, Start Num: 44
Candidate Starts for PhluffyCoco_10:
(32, 7619), (Start: 44 @7655 has 19 MA's), (52, 7679), (62, 7724), (65, 7736), (74, 7781), (76, 7787),
(79, 7799), (82, 7826),

Gene: PhorbesPhlower_10 Start: 6300, Stop: 6557, Start Num: 42
Candidate Starts for PhorbesPhlower_10:
(34, 6267), (Start: 42 @6300 has 15 MA's), (82, 6486), (85, 6510),

Gene: Polka_11 Start: 8080, Stop: 8343, Start Num: 41
Candidate Starts for Polka_11:
(Start: 39 @8074 has 1 MA's), (Start: 41 @8080 has 32 MA's), (Start: 42 @8083 has 15 MA's), (Start:
44 @8089 has 19 MA's), (52, 8113), (62, 8158), (76, 8221), (79, 8233),

Gene: Pollux_12 Start: 8015, Stop: 8272, Start Num: 41

Candidate Starts for Pollux_12:

(Start: 41 @8015 has 32 MA's), (85, 8225), (89, 8264),

Gene: Pons_11 Start: 7037, Stop: 7309, Start Num: 40

Candidate Starts for Pons_11:

(Start: 40 @7037 has 54 MA's), (45, 7049), (48, 7055), (80, 7220), (82, 7226), (85, 7250),

Gene: Posh_12 Start: 8009, Stop: 8266, Start Num: 41

Candidate Starts for Posh_12:

(Start: 41 @8009 has 32 MA's), (85, 8219), (89, 8258),

Gene: PotPie_11 Start: 7888, Stop: 8160, Start Num: 40

Candidate Starts for PotPie_11:

(38, 7885), (Start: 40 @7888 has 54 MA's), (45, 7900), (48, 7906), (80, 8071), (82, 8077), (85, 8101),

Gene: PsychoKiller_11 Start: 7257, Stop: 7538, Start Num: 40

Candidate Starts for PsychoKiller_11:

(20, 7134), (Start: 40 @7257 has 54 MA's),

Gene: Pytheas_12 Start: 7862, Stop: 8119, Start Num: 41

Candidate Starts for Pytheas_12:

(Start: 41 @7862 has 32 MA's), (85, 8072), (89, 8111),

Gene: Quasar_11 Start: 7872, Stop: 8147, Start Num: 40

Candidate Starts for Quasar_11:

(20, 7749), (Start: 40 @7872 has 54 MA's),

Gene: RanchParmCat_14 Start: 7972, Stop: 8241, Start Num: 40

Candidate Starts for RanchParmCat_14:

(Start: 40 @7972 has 54 MA's), (48, 7987), (56, 8029),

Gene: Rattail_10 Start: 7706, Stop: 7960, Start Num: 44

Candidate Starts for Rattail_10:

(8, 7448), (11, 7472), (13, 7508), (18, 7556), (31, 7664), (32, 7670), (Start: 44 @7706 has 19 MA's), (52, 7730), (63, 7778), (65, 7787), (74, 7832), (79, 7850), (82, 7877),

Gene: RedBaron_12 Start: 7302, Stop: 7583, Start Num: 40

Candidate Starts for RedBaron_12:

(20, 7179), (Start: 40 @7302 has 54 MA's),

Gene: RedFox_10 Start: 7655, Stop: 7909, Start Num: 44

Candidate Starts for RedFox_10:

(32, 7619), (Start: 44 @7655 has 19 MA's), (52, 7679), (62, 7724), (65, 7736), (74, 7781), (76, 7787), (79, 7799), (82, 7826),

Gene: Renna12_11 Start: 7855, Stop: 8109, Start Num: 44

Candidate Starts for Renna12_11:

(Start: 44 @7855 has 19 MA's), (52, 7879), (62, 7924), (65, 7936), (74, 7981), (76, 7987), (79, 7999), (82, 8026),

Gene: Ronaldo_46 Start: 17223, Stop: 17507, Start Num: 36

Candidate Starts for Ronaldo_46:
(35, 17217), (Start: 36 @17223 has 6 MA's), (54, 17280), (60, 17307), (77, 17388), (78, 17394),

Gene: Ruchi_11 Start: 8341, Stop: 8598, Start Num: 44
Candidate Starts for Ruchi_11:
(4, 7879), (5, 7987), (6, 8032), (18, 8188), (Start: 44 @8341 has 19 MA's), (76, 8479), (80, 8509),

Gene: Shambre1_11 Start: 8534, Stop: 8782, Start Num: 46
Candidate Starts for Shambre1_11:
(Start: 46 @8534 has 1 MA's), (63, 8600), (74, 8654),

Gene: SheckWes_10 Start: 7025, Stop: 7297, Start Num: 40
Candidate Starts for SheckWes_10:
(Start: 40 @7025 has 54 MA's), (45, 7037), (48, 7043), (80, 7208), (82, 7214), (85, 7238),

Gene: SilverChicken_12 Start: 6948, Stop: 7220, Start Num: 41
Candidate Starts for SilverChicken_12:
(Start: 41 @6948 has 32 MA's), (56, 7008), (58, 7011), (65, 7041), (69, 7065), (74, 7095), (84, 7155),

Gene: SketchMex_10 Start: 7241, Stop: 7519, Start Num: 40
Candidate Starts for SketchMex_10:
(Start: 40 @7241 has 54 MA's), (58, 7310), (73, 7382),

Gene: Sleepyhead_11 Start: 7625, Stop: 7879, Start Num: 40
Candidate Starts for Sleepyhead_11:
(Start: 40 @7625 has 54 MA's), (54, 7667), (62, 7706), (65, 7718),

Gene: Socotra_12 Start: 7257, Stop: 7538, Start Num: 40
Candidate Starts for Socotra_12:
(20, 7134), (Start: 40 @7257 has 54 MA's),

Gene: Sopespian_11 Start: 7257, Stop: 7538, Start Num: 40
Candidate Starts for Sopespian_11:
(20, 7134), (Start: 40 @7257 has 54 MA's),

Gene: Soul22_12 Start: 6947, Stop: 7219, Start Num: 41
Candidate Starts for Soul22_12:
(Start: 41 @6947 has 32 MA's), (56, 7007), (58, 7010), (65, 7040), (69, 7064), (74, 7094), (84, 7154),

Gene: Starburst_12 Start: 7257, Stop: 7538, Start Num: 40
Candidate Starts for Starburst_12:
(20, 7134), (Start: 40 @7257 has 54 MA's),

Gene: SteamedHams_13 Start: 7276, Stop: 7548, Start Num: 40
Candidate Starts for SteamedHams_13:
(Start: 40 @7276 has 54 MA's), (58, 7339),

Gene: StuartMinion_10 Start: 7681, Stop: 7935, Start Num: 44
Candidate Starts for StuartMinion_10:
(7, 7405), (10, 7444), (Start: 44 @7681 has 19 MA's), (63, 7753), (74, 7807), (78, 7819), (79, 7825),
(82, 7852),

Gene: SummitAcademy_10 Start: 7103, Stop: 7375, Start Num: 40

Candidate Starts for SummitAcademy_10:

(38, 7100), (Start: 40 @7103 has 54 MA's), (45, 7115), (48, 7121), (80, 7286), (82, 7292), (85, 7316),

Gene: Survivors_13 Start: 8017, Stop: 8316, Start Num: 40

Candidate Starts for Survivors_13:

(38, 8014), (Start: 40 @8017 has 54 MA's), (65, 8119), (75, 8188), (82, 8230), (88, 8290), (89, 8293), (90, 8296),

Gene: SweatNTears_13 Start: 7761, Stop: 8030, Start Num: 40

Candidate Starts for SweatNTears_13:

(Start: 40 @7761 has 54 MA's), (58, 7821), (73, 7893),

Gene: TMaxx_12 Start: 7340, Stop: 7600, Start Num: 42

Candidate Starts for TMaxx_12:

(Start: 42 @7340 has 15 MA's), (66, 7439), (82, 7520), (83, 7523),

Gene: TaylorSipht_11 Start: 8123, Stop: 8377, Start Num: 44

Candidate Starts for TaylorSipht_11:

(32, 8087), (37, 8105), (Start: 44 @8123 has 19 MA's), (52, 8147), (63, 8195), (65, 8204),

Gene: Toad24_12 Start: 8245, Stop: 8499, Start Num: 44

Candidate Starts for Toad24_12:

(19, 8116), (21, 8131), (37, 8227), (Start: 44 @8245 has 19 MA's), (52, 8269), (78, 8383), (79, 8389), (83, 8419),

Gene: Tolls_13 Start: 7279, Stop: 7551, Start Num: 40

Candidate Starts for Tolls_13:

(Start: 40 @7279 has 54 MA's), (58, 7342),

Gene: Troje_11 Start: 7235, Stop: 7504, Start Num: 40

Candidate Starts for Troje_11:

(Start: 40 @7235 has 54 MA's), (58, 7295), (73, 7367),

Gene: Typha_17 Start: 11749, Stop: 11997, Start Num: 42

Candidate Starts for Typha_17:

(28, 11692), (Start: 42 @11749 has 15 MA's), (54, 11791), (72, 11866), (83, 11914), (87, 11965), (91, 11983),

Gene: Typhonomachy_12 Start: 7257, Stop: 7538, Start Num: 40

Candidate Starts for Typhonomachy_12:

(20, 7134), (Start: 40 @7257 has 54 MA's),

Gene: Vine_12 Start: 8032, Stop: 8304, Start Num: 40

Candidate Starts for Vine_12:

(38, 8029), (Start: 40 @8032 has 54 MA's), (80, 8215), (82, 8221), (85, 8245),

Gene: Volt_45 Start: 17223, Stop: 17507, Start Num: 36

Candidate Starts for Volt_45:

(35, 17217), (Start: 36 @17223 has 6 MA's), (54, 17280), (60, 17307), (77, 17388), (78, 17394),

Gene: Vulpecula_11 Start: 8417, Stop: 8674, Start Num: 44

Candidate Starts for Vulpecula_11:

(1, 7796), (2, 7841), (4, 7955), (5, 8063), (18, 8264), (32, 8381), (Start: 44 @8417 has 19 MA's), (80, 8585),

Gene: Westrich_12 Start: 8233, Stop: 8487, Start Num: 44

Candidate Starts for Westrich_12:

(19, 8104), (21, 8119), (32, 8197), (37, 8215), (Start: 44 @8233 has 19 MA's), (52, 8257), (78, 8371), (79, 8377), (83, 8407),

Gene: Wrigley_12 Start: 7859, Stop: 8116, Start Num: 41

Candidate Starts for Wrigley_12:

(Start: 41 @7859 has 32 MA's), (85, 8069), (89, 8108),

Gene: Yakult_12 Start: 7168, Stop: 7437, Start Num: 40

Candidate Starts for Yakult_12:

(Start: 40 @7168 has 54 MA's),

Gene: Yarn_10 Start: 7269, Stop: 7541, Start Num: 40

Candidate Starts for Yarn_10:

(Start: 40 @7269 has 54 MA's),

Gene: Yoshi_12 Start: 6947, Stop: 7219, Start Num: 41

Candidate Starts for Yoshi_12:

(Start: 41 @6947 has 32 MA's), (56, 7007), (58, 7010), (65, 7040), (69, 7064), (74, 7094), (84, 7154),

Gene: Yucky_13 Start: 7892, Stop: 8164, Start Num: 40

Candidate Starts for Yucky_13:

(38, 7889), (Start: 40 @7892 has 54 MA's), (80, 8075), (82, 8081), (85, 8105),

Gene: Yummy_12 Start: 7139, Stop: 7417, Start Num: 40

Candidate Starts for Yummy_12:

(Start: 40 @7139 has 54 MA's), (58, 7208), (73, 7280),

Gene: Zapner_13 Start: 7472, Stop: 7744, Start Num: 41

Candidate Starts for Zapner_13:

(Start: 41 @7472 has 32 MA's), (56, 7532), (58, 7535), (65, 7565), (69, 7589), (74, 7619), (84, 7679),

Gene: Zareef_15 Start: 8164, Stop: 8463, Start Num: 40

Candidate Starts for Zareef_15:

(38, 8161), (Start: 40 @8164 has 54 MA's), (65, 8266), (75, 8335), (82, 8377), (88, 8437), (89, 8440), (90, 8443),

Gene: Zhuangyuan_13 Start: 8412, Stop: 8666, Start Num: 44

Candidate Starts for Zhuangyuan_13:

(8, 8154), (12, 8205), (19, 8283), (32, 8376), (37, 8394), (Start: 44 @8412 has 19 MA's), (49, 8424), (76, 8544), (82, 8583), (86, 8622),

Gene: Ziko_46 Start: 17163, Stop: 17447, Start Num: 36

Candidate Starts for Ziko_46:

(35, 17157), (Start: 36 @17163 has 6 MA's), (54, 17220), (60, 17247), (77, 17328), (78, 17334),