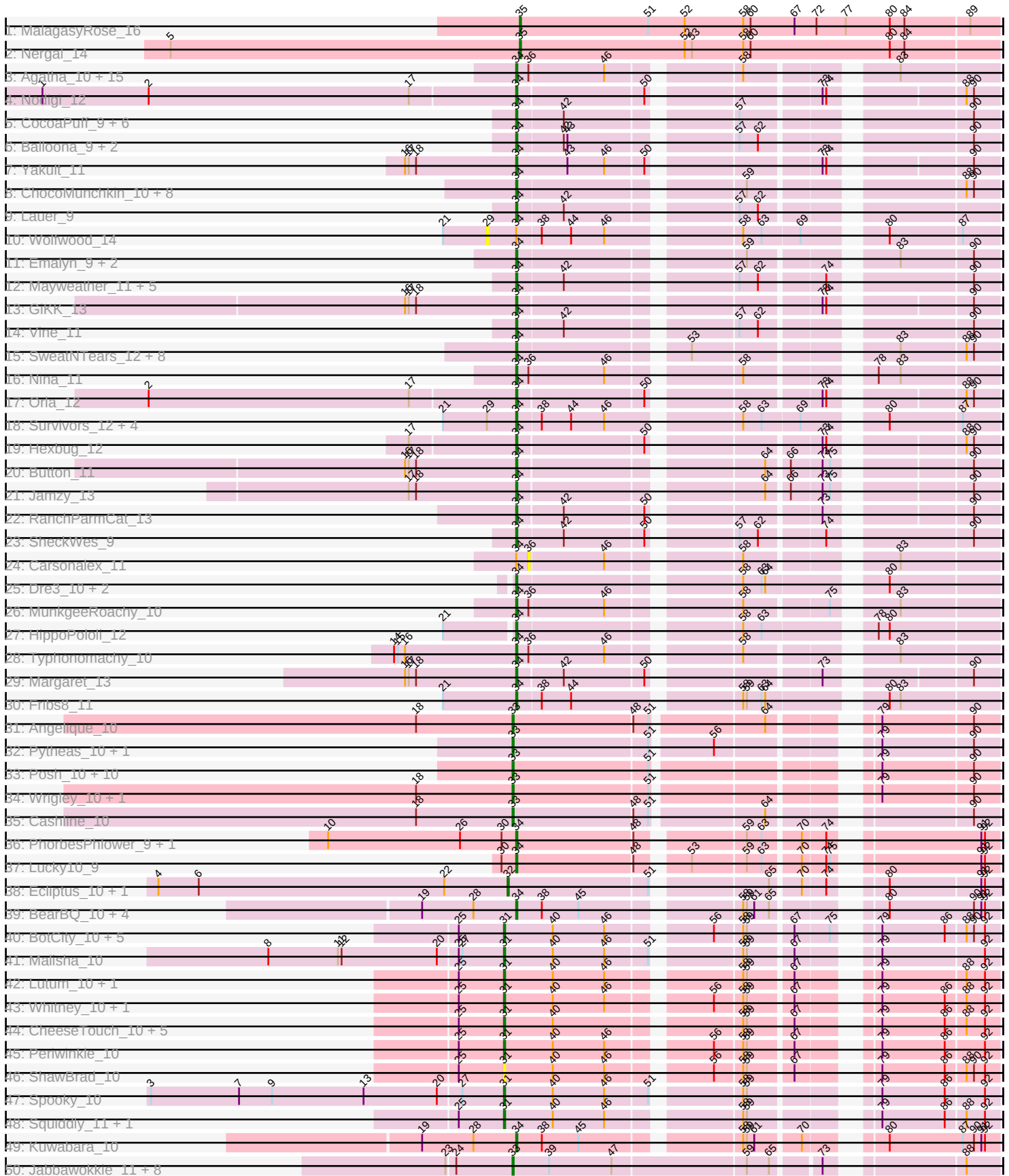
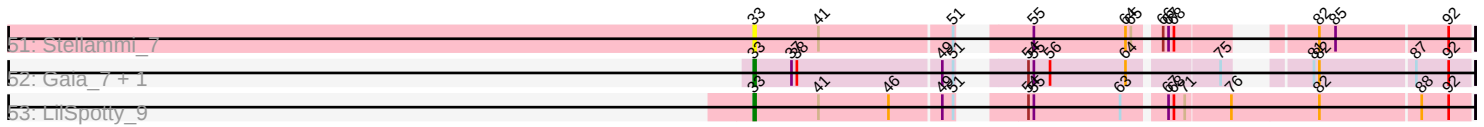


Pham 280174



Pham 280174



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 280174 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280174 has 145 members, 26 are drafts.

Phages represented in each track:

- Track 1 : MalagasyRose_16
- Track 2 : Nergal_14
- Track 3 : Agatha_10, Elliott_10, Quasar_10, Bubble_10, Cozz_10, PsychoKiller_10, ChickenTender_12, RSchmailzl_11, Axym_10, Starburst_11, GoldHunter_11, RedBaron_11, RADical_11, Socotra_11, Burnsey_10, Sopespian_10
- Track 4 : Nodigi_12
- Track 5 : CocoaPuff_9, Bavidard_10, PotPie_10, KayGee_10, Elinal_11, Yucky_10, SummitAcademy_9
- Track 6 : Balloona_9, BigChungus_9, Feastonyet_9
- Track 7 : Yakult_11
- Track 8 : ChocoMunchkin_10, SteamedHams_12, GTE2_08, AndPeggy_9, Tolls_12, BillDoor_12, CanesSauce_10, CaramelLatte_10, Yarn_9
- Track 9 : Lauer_9
- Track 10 : Wolfwood_14
- Track 11 : Emalyn_9, Amok_9, AikoCarson_9
- Track 12 : Mayweather_11, CherryonLim_11, McDazzle_9, MAnor_10, Pons_10, ElJefes_9
- Track 13 : GiKK_13
- Track 14 : Vine_11
- Track 15 : SweatNTears_12, Yummy_11, Biskit_11, SketchMex_9, Buttermilkdreams_10, Troje_10, MScarn_12, Horseradish_11, Blondies_11
- Track 16 : Nina_11
- Track 17 : Orla_12
- Track 18 : Survivors_12, Zareef_12, Nibbles_12, MaVan_12, Azira_12
- Track 19 : Hexbug_12
- Track 20 : Button_11
- Track 21 : Jamzy_13
- Track 22 : RanchParmCat_13
- Track 23 : SheckWes_9
- Track 24 : Carsonalex_11
- Track 25 : Dre3_10, Cleo_10, Gibbous_10
- Track 26 : MunkgeeRoachy_10
- Track 27 : HippoPololi_12
- Track 28 : Typhonomachy_10
- Track 29 : Margaret_13
- Track 30 : Fribs8_11
- Track 31 : Angelique_10

- Track 32 : Pytheas_10, Jablanski_10
- Track 33 : Posh_10, Lilas_10, BritBrat_10, Floral_10, LonelyBoi_10, EMSquaredA_10, Pollux_10, Bradissa_10, EnalisNailo_10, Confidence_10, Marteena_10
- Track 34 : Wrigley_10, BeeGee_10
- Track 35 : Cashline_10
- Track 36 : PhorbesPhlower_9, Morkie_9
- Track 37 : Lucky10_9
- Track 38 : Ecliptus_10, ODay_10
- Track 39 : BearBQ_10, MortyNRick_10, Birdsong_10, Crater_10, Apricot_10
- Track 40 : BotCity_10, Leroy_10, BENtherdunthat_10, Horus_10, Frickyeah_10, Asapag_10
- Track 41 : Malisha_10
- Track 42 : Lutum_10, Kenna_10
- Track 43 : Whitney_10, GetaLong_10
- Track 44 : CheeseTouch_10, Budski_10, LitninMcQueen_10, Kamaru_10, Holliday_10, Phabuloso_10
- Track 45 : Periwinkle_10
- Track 46 : ShawBrad_10
- Track 47 : Spooky_10
- Track 48 : Squiddly_11, Phistory_10
- Track 49 : Kuwabara_10
- Track 50 : Jabbawokkie_11, Avani_10, Yoshi_10, Soul22_10, Che9d_10, Demsculpinboyz_10, Zapner_11, Blarby_11, SilverChicken_10
- Track 51 : Stellammi_7
- Track 52 : Gaia_7, Nebkiss_7
- Track 53 : LilSpotty_9

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

The start number called the most often in the published annotations is 34, it was called in 68 of the 119 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agatha_10, AikoCarson_9, Amok_9, AndPeggy_9, Apricot_10, Axym_10, Azira_12, Balloona_9, Bavilard_10, BearBQ_10, BigChungus_9, BillDoor_12, Birdsong_10, Biskit_11, Blondies_11, Bubble_10, Burnsey_10, Button_11, Buttrmilkdreams_10, CanesSauce_10, CaramelLatte_10, CherryonLim_11, ChickenTender_12, ChocoMunchkin_10, Cleo_10, CocoaPuff_9, Cozz_10, Crater_10, Dre3_10, ElJefes_9, Elinal_11, Elliott_10, Emalyn_9, Feastonyeet_9, Fribs8_11, GTE2_08, GiKK_13, Gibbous_10, GoldHunter_11, Hexbug_12, HippoPololi_12, Horseradish_11, Jamzy_13, KayGee_10, Kuwabara_10, Lauer_9, Lucky10_9, MAnor_10, MScarn_12, MaVan_12, Margaret_13, Mayweather_11, McDazzle_9, Morkie_9, MortyNRick_10, MunkgeeRoachy_10, Nibbles_12, Nina_11, Nodigi_12, Orla_12, PhorbesPhlower_9, Pons_10, PotPie_10, PsychoKiller_10, Quasar_10, RADical_11, RSchmailzl_11, RanchParmCat_13, RedBaron_11, SheckWes_9, SketchMex_9, Socotra_11, Sopeopian_10, Starburst_11, SteamedHams_12, SummitAcademy_9, Survivors_12, SweatNTears_12, Tolls_12, Troje_10, Typhonomachy_10, Vine_11, Yakult_11, Yarn_9, Yucky_10, Yummy_11, Zareef_12,

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

- Carsonalex_11, Wolfwood_14,

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

- Angelique_10, Asapag_10, Avani_10, BENtherdunthat_10, BeeGee_10, Blarby_11, BotCity_10, Bradissa_10, BritBrat_10, Budski_10, Cashline_10, Che9d_10, CheeseTouch_10, Confidence_10, Demsculpinboyz_10, EMSquaredA_10, Ecliptus_10, EnalisNailo_10, Floral_10, Frickyeh_10, Gaia_7, Getalong_10, Holliday_10, Horus_10, Jabbawokkie_11, Jablanski_10, Kamaru_10, Kenna_10, Leroy_10, LilSpotty_9, Lilas_10, LitninMcQueen_10, LonelyBoi_10, Lutum_10, MalagasyRose_16, Malisha_10, Marteena_10, Nebkiss_7, Nergal_14, ODay_10, Periwinkle_10, Phabuloso_10, Phistory_10, Pollux_10, Posh_10, Pytheas_10, ShawBrad_10, SilverChicken_10, Soul22_10, Spooky_10, Squiddly_11, Stellammi_7, Whitney_10, Wrigley_10, Yoshi_10, Zapner_11,

Summary by start number:

Start 29:

- Found in 6 of 145 (4.1%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Wolfwood_14 (CT),

Start 31:

- Found in 22 of 145 (15.2%) of genes in pham
- Manual Annotations of this start: 20 of 119
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Asapag_10 (DN1), BENtherdunthat_10 (DN1), BotCity_10 (DN), Budski_10 (DN), CheeseTouch_10 (DN1), Frickyeh_10 (DN1), Getalong_10 (DN1), Holliday_10 (DN1), Horus_10 (DN1), Kamaru_10 (DN1), Kenna_10 (DN1), Leroy_10 (DN1), LitninMcQueen_10 (DN1), Lutum_10 (DN1), Malisha_10 (DN), Periwinkle_10 (DN1), Phabuloso_10 (DN1), Phistory_10 (DN1), ShawBrad_10 (DN1), Spooky_10 (DN2), Squiddly_11 (DN2), Whitney_10 (DN1),

Start 32:

- Found in 2 of 145 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 119
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ecliptus_10 (DN), ODay_10 (DN),

Start 33:

- Found in 30 of 145 (20.7%) of genes in pham
- Manual Annotations of this start: 27 of 119
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique_10 (CY1), Avani_10 (F2), BeeGee_10 (CY5), Blarby_11 (F), Bradissa_10 (CY1), BritBrat_10 (CY2), Cashline_10 (CY6), Che9d_10 (F2), Confidence_10 (CY1), Demsculpinboyz_10 (F2), EMSquaredA_10 (CY1), EnalisNailo_10 (CY1), Floral_10 (CY1), Gaia_7 (X), Jabbawokkie_11 (F2), Jablanski_10 (CY3), LilSpotty_9 (singleton), Lilas_10 (CY1), LonelyBoi_10 (CY7), Marteena_10 (CY1), Nebkiss_7 (X), Pollux_10 (CY1), Posh_10 (CY4), Pytheas_10 (CY3), SilverChicken_10 (F2), Soul22_10 (F2), Stellammi_7 (UNK), Wrigley_10 (CY4), Yoshi_10 (F2), Zapner_11 (F2),

Start 34:

- Found in 89 of 145 (61.4%) of genes in pham
- Manual Annotations of this start: 68 of 119
- Called 97.8% of time when present
- Phage (with cluster) where this start called: Agatha_10 (CT), AikoCarson_9 (CT), Amok_9 (CT), AndPeggy_9 (CT), Apricot_10 (DN3), Axym_10 (CT), Azira_12 (CT), Balloona_9 (CT), Bavidard_10 (CT), BearBQ_10 (DN), BigChungus_9 (CT), BillDoor_12 (CT), Birdsong_10 (DN), Biskit_11 (CT), Blondies_11 (CT), Bubble_10 (CT), Burnsey_10 (CT), Button_11 (CT), Buttrmlkdreams_10 (CT), CanesSauce_10 (CT), CaramelLatte_10 (CT), CherryonLim_11 (CT), ChickenTender_12 (CT), ChocoMunchkin_10 (CT), Cleo_10 (CT), CocoaPuff_9 (CT), Cozz_10 (CT), Crater_10 (DN3), Dre3_10 (CT), ElJefes_9 (CT), Elinal_11 (CT), Elliott_10 (CT), Emalyn_9 (CT), Featonyeet_9 (CT), Fribs8_11 (CT), GTE2_08 (CT), GiKK_13 (CT), Gibbous_10 (CT), GoldHunter_11 (CT), Hexbug_12 (CT), HippoPololi_12 (CT), Horseradish_11 (CT), Jamzy_13 (CT), KayGee_10 (CT), Kuwabara_10 (DN4), Lauer_9 (CT), Lucky10_9 (DH), MAnor_10 (CT), MScarn_12 (CT), MaVan_12 (CT), Margaret_13 (CT), Mayweather_11 (CT), McDazzle_9 (CT), Morkie_9 (DH), MortyNRick_10 (DN), MunkgeeRoachy_10 (CT), Nibbles_12 (CT), Nina_11 (CT), Nodigi_12 (CT), Orla_12 (CT), PhorbesPhlower_9 (DH), Pons_10 (CT), PotPie_10 (CT), PsychoKiller_10 (CT), Quasar_10 (CT), RADical_11 (CT), RSchmailzl_11 (CT), RanchParmCat_13 (CT), RedBaron_11 (CT), SheckWes_9 (CT), SketchMex_9 (CT), Socotra_11 (CT), Sopespian_10 (CT), Starburst_11 (CT), SteamedHams_12 (CT), SummitAcademy_9 (CT), Survivors_12 (CT), SweatNTears_12 (CT), Tolls_12 (CT), Troje_10 (CT), Typhonomachy_10 (CT), Vine_11 (CT), Yakult_11 (CT), Yarn_9 (CT), Yucky_10 (CT), Yummy_11 (CT), Zareef_12 (CT),

Start 35:

- Found in 2 of 145 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 119
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose_16 (AG), Nergal_14 (AG),

Start 36:

- Found in 20 of 145 (13.8%) of genes in pham
- No Manual Annotations of this start.
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Carsonalex_11 (CT),

Summary by clusters:

There are 20 clusters represented in this pham: DN, CY3, F2, UNK, CY7, DH, AG, CY4, F, CY1, singleton, DN4, DN1, DN3, DN2, CY5, X, CY6, CY2, CT,

Info for manual annotations of cluster AG:

- Start number 35 was manually annotated 2 times for cluster AG.

Info for manual annotations of cluster CT:

- Start number 34 was manually annotated 59 times for cluster CT.

Info for manual annotations of cluster CY1:

- Start number 33 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 33 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:

- Start number 33 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 33 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 33 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:

- Start number 33 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 33 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster DH:

- Start number 34 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 31 was manually annotated 3 times for cluster DN.
- Start number 32 was manually annotated 2 times for cluster DN.
- Start number 34 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 31 was manually annotated 15 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 31 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 34 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 34 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster F2:

- Start number 33 was manually annotated 7 times for cluster F2.

Info for manual annotations of cluster X:

- Start number 33 was manually annotated 2 times for cluster X.

Gene Information:

Gene: Agatha_10 Start: 6923, Stop: 7264, Start Num: 34

Candidate Starts for Agatha_10:

(Start: 34 @6923 has 68 MA's), (36, 6932), (46, 6992), (58, 7085), (83, 7187),

Gene: AikoCarson_9 Start: 6653, Stop: 6994, Start Num: 34
Candidate Starts for AikoCarson_9:
(Start: 34 @6653 has 68 MA's), (59, 6818), (83, 6917), (90, 6974),

Gene: Amok_9 Start: 6653, Stop: 6994, Start Num: 34
Candidate Starts for Amok_9:
(Start: 34 @6653 has 68 MA's), (59, 6818), (83, 6917), (90, 6974),

Gene: AndPeggy_9 Start: 6941, Stop: 7282, Start Num: 34
Candidate Starts for AndPeggy_9:
(Start: 34 @6941 has 68 MA's), (59, 7106), (88, 7256), (90, 7262),

Gene: Angelique_10 Start: 7476, Stop: 7823, Start Num: 33
Candidate Starts for Angelique_10:
(18, 7398), (Start: 33 @7476 has 27 MA's), (48, 7572), (51, 7584), (64, 7668), (79, 7731), (90, 7803),

Gene: Apricot_10 Start: 6791, Stop: 7132, Start Num: 34
Candidate Starts for Apricot_10:
(19, 6716), (28, 6758), (Start: 34 @6791 has 68 MA's), (38, 6812), (45, 6842), (58, 6956), (59, 6959),
(61, 6965), (65, 6977), (80, 7043), (90, 7112), (91, 7118), (92, 7121),

Gene: Asapag_10 Start: 6480, Stop: 6827, Start Num: 31
Candidate Starts for Asapag_10:
(25, 6444), (Start: 31 @6480 has 20 MA's), (40, 6519), (46, 6561), (56, 6633), (58, 6654), (59, 6657),
(67, 6690), (75, 6717), (79, 6735), (86, 6786), (88, 6801), (90, 6807), (92, 6816),

Gene: Avani_10 Start: 6438, Stop: 6791, Start Num: 33
Candidate Starts for Avani_10:
(23, 6387), (24, 6393), (Start: 33 @6438 has 27 MA's), (39, 6468), (47, 6519), (59, 6624), (65, 6642),
(73, 6675), (88, 6765),

Gene: Axym_10 Start: 6923, Stop: 7264, Start Num: 34
Candidate Starts for Axym_10:
(Start: 34 @6923 has 68 MA's), (36, 6932), (46, 6992), (58, 7085), (83, 7187),

Gene: Azira_12 Start: 7820, Stop: 8170, Start Num: 34
Candidate Starts for Azira_12:
(21, 7760), (29, 7796), (Start: 34 @7820 has 68 MA's), (38, 7838), (44, 7862), (46, 7889), (58, 7985),
(63, 8000), (69, 8030), (80, 8084), (87, 8141),

Gene: BENtherdunthat_10 Start: 6480, Stop: 6827, Start Num: 31
Candidate Starts for BENtherdunthat_10:
(25, 6444), (Start: 31 @6480 has 20 MA's), (40, 6519), (46, 6561), (56, 6633), (58, 6654), (59, 6657),
(67, 6690), (75, 6717), (79, 6735), (86, 6786), (88, 6801), (90, 6807), (92, 6816),

Gene: Balloona_9 Start: 6695, Stop: 7036, Start Num: 34
Candidate Starts for Balloona_9:
(Start: 34 @6695 has 68 MA's), (42, 6731), (43, 6734), (57, 6854), (62, 6869), (90, 7016),

Gene: Bavilard_10 Start: 7475, Stop: 7816, Start Num: 34
Candidate Starts for Bavilard_10:
(Start: 34 @7475 has 68 MA's), (42, 7511), (57, 7634), (90, 7796),

Gene: BearBQ_10 Start: 6791, Stop: 7132, Start Num: 34

Candidate Starts for BearBQ_10:

(19, 6716), (28, 6758), (Start: 34 @6791 has 68 MA's), (38, 6812), (45, 6842), (58, 6956), (59, 6959), (61, 6965), (65, 6977), (80, 7043), (90, 7112), (91, 7118), (92, 7121),

Gene: BeeGee_10 Start: 7478, Stop: 7825, Start Num: 33

Candidate Starts for BeeGee_10:

(18, 7400), (Start: 33 @7478 has 27 MA's), (51, 7586), (79, 7733), (90, 7805),

Gene: BigChungus_9 Start: 6720, Stop: 7061, Start Num: 34

Candidate Starts for BigChungus_9:

(Start: 34 @6720 has 68 MA's), (42, 6756), (43, 6759), (57, 6879), (62, 6894), (90, 7041),

Gene: BillDoor_12 Start: 6906, Stop: 7247, Start Num: 34

Candidate Starts for BillDoor_12:

(Start: 34 @6906 has 68 MA's), (59, 7071), (88, 7221), (90, 7227),

Gene: Birdsong_10 Start: 6791, Stop: 7132, Start Num: 34

Candidate Starts for Birdsong_10:

(19, 6716), (28, 6758), (Start: 34 @6791 has 68 MA's), (38, 6812), (45, 6842), (58, 6956), (59, 6959), (61, 6965), (65, 6977), (80, 7043), (90, 7112), (91, 7118), (92, 7121),

Gene: Biskit_11 Start: 6907, Stop: 7248, Start Num: 34

Candidate Starts for Biskit_11:

(Start: 34 @6907 has 68 MA's), (53, 7030), (83, 7171), (88, 7222), (90, 7228),

Gene: Blarby_11 Start: 6962, Stop: 7315, Start Num: 33

Candidate Starts for Blarby_11:

(23, 6911), (24, 6917), (Start: 33 @6962 has 27 MA's), (39, 6992), (47, 7043), (59, 7148), (65, 7166), (73, 7199), (88, 7289),

Gene: Blondies_11 Start: 6902, Stop: 7243, Start Num: 34

Candidate Starts for Blondies_11:

(Start: 34 @6902 has 68 MA's), (53, 7025), (83, 7166), (88, 7217), (90, 7223),

Gene: BotCity_10 Start: 6478, Stop: 6825, Start Num: 31

Candidate Starts for BotCity_10:

(25, 6442), (Start: 31 @6478 has 20 MA's), (40, 6517), (46, 6559), (56, 6631), (58, 6652), (59, 6655), (67, 6688), (75, 6715), (79, 6733), (86, 6784), (88, 6799), (90, 6805), (92, 6814),

Gene: Bradissa_10 Start: 7482, Stop: 7829, Start Num: 33

Candidate Starts for Bradissa_10:

(Start: 33 @7482 has 27 MA's), (51, 7590), (79, 7737), (90, 7809),

Gene: BritBrat_10 Start: 7484, Stop: 7831, Start Num: 33

Candidate Starts for BritBrat_10:

(Start: 33 @7484 has 27 MA's), (51, 7592), (79, 7739), (90, 7811),

Gene: Bubble_10 Start: 6923, Stop: 7264, Start Num: 34

Candidate Starts for Bubble_10:

(Start: 34 @6923 has 68 MA's), (36, 6932), (46, 6992), (58, 7085), (83, 7187),

Gene: Budski_10 Start: 6485, Stop: 6832, Start Num: 31

Candidate Starts for Budski_10:

(25, 6449), (Start: 31 @6485 has 20 MA's), (40, 6524), (58, 6659), (59, 6662), (67, 6695), (79, 6740), (86, 6791), (88, 6806), (92, 6821),

Gene: Burnsey_10 Start: 6924, Stop: 7265, Start Num: 34

Candidate Starts for Burnsey_10:

(Start: 34 @6924 has 68 MA's), (36, 6933), (46, 6993), (58, 7086), (83, 7188),

Gene: Button_11 Start: 6943, Stop: 7281, Start Num: 34

Candidate Starts for Button_11:

(16, 6853), (17, 6856), (18, 6862), (Start: 34 @6943 has 68 MA's), (64, 7123), (66, 7138), (73, 7162), (75, 7168), (90, 7261),

Gene: Buttrmlkdreams_10 Start: 6901, Stop: 7242, Start Num: 34

Candidate Starts for Buttrmlkdreams_10:

(Start: 34 @6901 has 68 MA's), (53, 7024), (83, 7165), (88, 7216), (90, 7222),

Gene: CanesSauce_10 Start: 6942, Stop: 7283, Start Num: 34

Candidate Starts for CanesSauce_10:

(Start: 34 @6942 has 68 MA's), (59, 7107), (88, 7257), (90, 7263),

Gene: CaramellLatte_10 Start: 6942, Stop: 7283, Start Num: 34

Candidate Starts for CaramellLatte_10:

(Start: 34 @6942 has 68 MA's), (59, 7107), (88, 7257), (90, 7263),

Gene: Carsonalex_11 Start: 6989, Stop: 7321, Start Num: 36

Candidate Starts for Carsonalex_11:

(Start: 34 @6980 has 68 MA's), (36, 6989), (46, 7049), (58, 7142), (83, 7244),

Gene: Cashline_10 Start: 7331, Stop: 7678, Start Num: 33

Candidate Starts for Cashline_10:

(18, 7253), (Start: 33 @7331 has 27 MA's), (48, 7427), (51, 7439), (64, 7523), (90, 7658),

Gene: Che9d_10 Start: 6447, Stop: 6800, Start Num: 33

Candidate Starts for Che9d_10:

(23, 6396), (24, 6402), (Start: 33 @6447 has 27 MA's), (39, 6477), (47, 6528), (59, 6633), (65, 6651), (73, 6684), (88, 6774),

Gene: CheeseTouch_10 Start: 6485, Stop: 6832, Start Num: 31

Candidate Starts for CheeseTouch_10:

(25, 6449), (Start: 31 @6485 has 20 MA's), (40, 6524), (58, 6659), (59, 6662), (67, 6695), (79, 6740), (86, 6791), (88, 6806), (92, 6821),

Gene: CherryonLim_11 Start: 7446, Stop: 7787, Start Num: 34

Candidate Starts for CherryonLim_11:

(Start: 34 @7446 has 68 MA's), (42, 7482), (57, 7605), (62, 7620), (74, 7668), (90, 7767),

Gene: ChickenTender_12 Start: 6966, Stop: 7307, Start Num: 34

Candidate Starts for ChickenTender_12:

(Start: 34 @6966 has 68 MA's), (36, 6975), (46, 7035), (58, 7128), (83, 7230),

Gene: ChocoMunchkin_10 Start: 6942, Stop: 7283, Start Num: 34

Candidate Starts for ChocoMunchkin_10:

(Start: 34 @6942 has 68 MA's), (59, 7107), (88, 7257), (90, 7263),

Gene: Cleo_10 Start: 7123, Stop: 7470, Start Num: 34

Candidate Starts for Cleo_10:

(Start: 34 @7123 has 68 MA's), (58, 7285), (63, 7300), (64, 7303), (80, 7384),

Gene: CocoaPuff_9 Start: 6695, Stop: 7036, Start Num: 34

Candidate Starts for CocoaPuff_9:

(Start: 34 @6695 has 68 MA's), (42, 6731), (57, 6854), (90, 7016),

Gene: Confidence_10 Start: 7478, Stop: 7825, Start Num: 33

Candidate Starts for Confidence_10:

(Start: 33 @7478 has 27 MA's), (51, 7586), (79, 7733), (90, 7805),

Gene: Cozz_10 Start: 6924, Stop: 7265, Start Num: 34

Candidate Starts for Cozz_10:

(Start: 34 @6924 has 68 MA's), (36, 6933), (46, 6993), (58, 7086), (83, 7188),

Gene: Crater_10 Start: 6791, Stop: 7132, Start Num: 34

Candidate Starts for Crater_10:

(19, 6716), (28, 6758), (Start: 34 @6791 has 68 MA's), (38, 6812), (45, 6842), (58, 6956), (59, 6959), (61, 6965), (65, 6977), (80, 7043), (90, 7112), (91, 7118), (92, 7121),

Gene: Demsculpinboyz_10 Start: 6438, Stop: 6791, Start Num: 33

Candidate Starts for Demsculpinboyz_10:

(23, 6387), (24, 6393), (Start: 33 @6438 has 27 MA's), (39, 6468), (47, 6519), (59, 6624), (65, 6642), (73, 6675), (88, 6765),

Gene: Dre3_10 Start: 7070, Stop: 7417, Start Num: 34

Candidate Starts for Dre3_10:

(Start: 34 @7070 has 68 MA's), (58, 7232), (63, 7247), (64, 7250), (80, 7331),

Gene: EMSquaredA_10 Start: 7484, Stop: 7831, Start Num: 33

Candidate Starts for EMSquaredA_10:

(Start: 33 @7484 has 27 MA's), (51, 7592), (79, 7739), (90, 7811),

Gene: Ecliptus_10 Start: 6513, Stop: 6860, Start Num: 32

Candidate Starts for Ecliptus_10:

(4, 6228), (6, 6261), (22, 6462), (Start: 32 @6513 has 2 MA's), (51, 6624), (65, 6705), (70, 6726), (74, 6744), (80, 6771), (91, 6843), (92, 6846),

Gene: ElJefes_9 Start: 7172, Stop: 7513, Start Num: 34

Candidate Starts for ElJefes_9:

(Start: 34 @7172 has 68 MA's), (42, 7208), (57, 7331), (62, 7346), (74, 7394), (90, 7493),

Gene: Elinal_11 Start: 6701, Stop: 7042, Start Num: 34

Candidate Starts for Elinal_11:

(Start: 34 @6701 has 68 MA's), (42, 6737), (57, 6860), (90, 7022),

Gene: Elliott_10 Start: 6923, Stop: 7264, Start Num: 34

Candidate Starts for Elliott_10:

(Start: 34 @6923 has 68 MA's), (36, 6932), (46, 6992), (58, 7085), (83, 7187),

Gene: Emalyn_9 Start: 6652, Stop: 6993, Start Num: 34

Candidate Starts for Emalyn_9:

(Start: 34 @6652 has 68 MA's), (59, 6817), (83, 6916), (90, 6973),

Gene: EnalisNailo_10 Start: 7484, Stop: 7831, Start Num: 33

Candidate Starts for EnalisNailo_10:

(Start: 33 @7484 has 27 MA's), (51, 7592), (79, 7739), (90, 7811),

Gene: Feastonyeet_9 Start: 6720, Stop: 7061, Start Num: 34

Candidate Starts for Feastonyeet_9:

(Start: 34 @6720 has 68 MA's), (42, 6756), (43, 6759), (57, 6879), (62, 6894), (90, 7041),

Gene: Floral_10 Start: 7484, Stop: 7831, Start Num: 33

Candidate Starts for Floral_10:

(Start: 33 @7484 has 27 MA's), (51, 7592), (79, 7739), (90, 7811),

Gene: Fribs8_11 Start: 7633, Stop: 7983, Start Num: 34

Candidate Starts for Fribs8_11:

(21, 7573), (Start: 34 @7633 has 68 MA's), (38, 7651), (44, 7675), (58, 7798), (59, 7801), (63, 7813), (64, 7816), (80, 7897), (83, 7906),

Gene: Frickyeah_10 Start: 6480, Stop: 6827, Start Num: 31

Candidate Starts for Frickyeah_10:

(25, 6444), (Start: 31 @6480 has 20 MA's), (40, 6519), (46, 6561), (56, 6633), (58, 6654), (59, 6657), (67, 6690), (75, 6717), (79, 6735), (86, 6786), (88, 6801), (90, 6807), (92, 6816),

Gene: GTE2_08 Start: 6602, Stop: 6943, Start Num: 34

Candidate Starts for GTE2_08:

(Start: 34 @6602 has 68 MA's), (59, 6767), (88, 6917), (90, 6923),

Gene: Gaia_7 Start: 7028, Stop: 7366, Start Num: 33

Candidate Starts for Gaia_7:

(Start: 33 @7028 has 27 MA's), (37, 7049), (38, 7052), (49, 7130), (51, 7136), (54, 7157), (55, 7160), (56, 7169), (64, 7211), (75, 7256), (81, 7283), (82, 7286), (87, 7337), (92, 7355),

Gene: Getalong_10 Start: 6480, Stop: 6827, Start Num: 31

Candidate Starts for Getalong_10:

(25, 6444), (Start: 31 @6480 has 20 MA's), (40, 6519), (46, 6561), (56, 6633), (58, 6654), (59, 6657), (67, 6690), (79, 6735), (86, 6786), (88, 6801), (92, 6816),

Gene: GiKK_13 Start: 7246, Stop: 7584, Start Num: 34

Candidate Starts for GiKK_13:

(16, 7156), (17, 7159), (18, 7165), (Start: 34 @7246 has 68 MA's), (73, 7465), (74, 7468), (90, 7564),

Gene: Gibbous_10 Start: 7070, Stop: 7417, Start Num: 34

Candidate Starts for Gibbous_10:

(Start: 34 @7070 has 68 MA's), (58, 7232), (63, 7247), (64, 7250), (80, 7331),

Gene: GoldHunter_11 Start: 6924, Stop: 7265, Start Num: 34

Candidate Starts for GoldHunter_11:

(Start: 34 @6924 has 68 MA's), (36, 6933), (46, 6993), (58, 7086), (83, 7188),

Gene: Hexbug_12 Start: 7932, Stop: 8270, Start Num: 34

Candidate Starts for Hexbug_12:

(17, 7848), (Start: 34 @7932 has 68 MA's), (50, 8031), (73, 8151), (74, 8154), (88, 8244), (90, 8250),

Gene: HippoPololi_12 Start: 7722, Stop: 8069, Start Num: 34

Candidate Starts for HippoPololi_12:

(21, 7668), (Start: 34 @7722 has 68 MA's), (58, 7884), (63, 7899), (78, 7974), (80, 7983),

Gene: Holliday_10 Start: 6485, Stop: 6832, Start Num: 31

Candidate Starts for Holliday_10:

(25, 6449), (Start: 31 @6485 has 20 MA's), (40, 6524), (58, 6659), (59, 6662), (67, 6695), (79, 6740), (86, 6791), (88, 6806), (92, 6821),

Gene: Horseradish_11 Start: 6805, Stop: 7146, Start Num: 34

Candidate Starts for Horseradish_11:

(Start: 34 @6805 has 68 MA's), (53, 6928), (83, 7069), (88, 7120), (90, 7126),

Gene: Horus_10 Start: 6480, Stop: 6827, Start Num: 31

Candidate Starts for Horus_10:

(25, 6444), (Start: 31 @6480 has 20 MA's), (40, 6519), (46, 6561), (56, 6633), (58, 6654), (59, 6657), (67, 6690), (75, 6717), (79, 6735), (86, 6786), (88, 6801), (90, 6807), (92, 6816),

Gene: Jabbawokkie_11 Start: 6961, Stop: 7314, Start Num: 33

Candidate Starts for Jabbawokkie_11:

(23, 6910), (24, 6916), (Start: 33 @6961 has 27 MA's), (39, 6991), (47, 7042), (59, 7147), (65, 7165), (73, 7198), (88, 7288),

Gene: Jablanski_10 Start: 7331, Stop: 7678, Start Num: 33

Candidate Starts for Jablanski_10:

(Start: 33 @7331 has 27 MA's), (51, 7439), (56, 7484), (79, 7586), (90, 7658),

Gene: Jamzy_13 Start: 7256, Stop: 7594, Start Num: 34

Candidate Starts for Jamzy_13:

(17, 7169), (18, 7175), (Start: 34 @7256 has 68 MA's), (64, 7436), (66, 7451), (73, 7475), (75, 7481), (90, 7574),

Gene: Kamaru_10 Start: 6485, Stop: 6832, Start Num: 31

Candidate Starts for Kamaru_10:

(25, 6449), (Start: 31 @6485 has 20 MA's), (40, 6524), (58, 6659), (59, 6662), (67, 6695), (79, 6740), (86, 6791), (88, 6806), (92, 6821),

Gene: KayGee_10 Start: 6701, Stop: 7042, Start Num: 34

Candidate Starts for KayGee_10:

(Start: 34 @6701 has 68 MA's), (42, 6737), (57, 6860), (90, 7022),

Gene: Kenna_10 Start: 6480, Stop: 6827, Start Num: 31

Candidate Starts for Kenna_10:

(25, 6444), (Start: 31 @6480 has 20 MA's), (40, 6519), (46, 6561), (58, 6654), (59, 6657), (67, 6690), (79, 6735), (88, 6801), (92, 6816),

Gene: Kuwabara_10 Start: 6791, Stop: 7132, Start Num: 34

Candidate Starts for Kuwabara_10:

(19, 6716), (28, 6758), (Start: 34 @6791 has 68 MA's), (38, 6812), (45, 6842), (58, 6956), (59, 6959), (61, 6965), (70, 6998), (80, 7043), (87, 7103), (90, 7112), (91, 7118), (92, 7121),

Gene: Lauer_9 Start: 6750, Stop: 7091, Start Num: 34

Candidate Starts for Lauer_9:

(Start: 34 @6750 has 68 MA's), (42, 6786), (57, 6909), (62, 6924),

Gene: Leroy_10 Start: 6481, Stop: 6828, Start Num: 31

Candidate Starts for Leroy_10:

(25, 6445), (Start: 31 @6481 has 20 MA's), (40, 6520), (46, 6562), (56, 6634), (58, 6655), (59, 6658), (67, 6691), (75, 6718), (79, 6736), (86, 6787), (88, 6802), (90, 6808), (92, 6817),

Gene: LilSpotty_9 Start: 6468, Stop: 6830, Start Num: 33

Candidate Starts for LilSpotty_9:

(Start: 33 @6468 has 27 MA's), (41, 6504), (46, 6543), (49, 6570), (51, 6576), (54, 6597), (55, 6600), (63, 6648), (67, 6669), (68, 6672), (71, 6678), (76, 6702), (82, 6750), (88, 6804), (92, 6819),

Gene: Lilas_10 Start: 7484, Stop: 7831, Start Num: 33

Candidate Starts for Lilas_10:

(Start: 33 @7484 has 27 MA's), (51, 7592), (79, 7739), (90, 7811),

Gene: LitninMcQueen_10 Start: 6485, Stop: 6832, Start Num: 31

Candidate Starts for LitninMcQueen_10:

(25, 6449), (Start: 31 @6485 has 20 MA's), (40, 6524), (58, 6659), (59, 6662), (67, 6695), (79, 6740), (86, 6791), (88, 6806), (92, 6821),

Gene: LonelyBoi_10 Start: 7331, Stop: 7678, Start Num: 33

Candidate Starts for LonelyBoi_10:

(Start: 33 @7331 has 27 MA's), (51, 7439), (79, 7586), (90, 7658),

Gene: Lucky10_9 Start: 6000, Stop: 6341, Start Num: 34

Candidate Starts for Lucky10_9:

(30, 5988), (Start: 34 @6000 has 68 MA's), (48, 6093), (53, 6126), (59, 6168), (63, 6180), (70, 6207), (74, 6225), (75, 6228), (91, 6327), (92, 6330),

Gene: Lutum_10 Start: 6480, Stop: 6827, Start Num: 31

Candidate Starts for Lutum_10:

(25, 6444), (Start: 31 @6480 has 20 MA's), (40, 6519), (46, 6561), (58, 6654), (59, 6657), (67, 6690), (79, 6735), (88, 6801), (92, 6816),

Gene: MAnor_10 Start: 6691, Stop: 7032, Start Num: 34

Candidate Starts for MAnor_10:

(Start: 34 @6691 has 68 MA's), (42, 6727), (57, 6850), (62, 6865), (74, 6913), (90, 7012),

Gene: MScarn_12 Start: 6901, Stop: 7242, Start Num: 34

Candidate Starts for MScarn_12:

(Start: 34 @6901 has 68 MA's), (53, 7024), (83, 7165), (88, 7216), (90, 7222),

Gene: MaVan_12 Start: 7820, Stop: 8170, Start Num: 34

Candidate Starts for MaVan_12:

(21, 7760), (29, 7796), (Start: 34 @7820 has 68 MA's), (38, 7838), (44, 7862), (46, 7889), (58, 7985), (63, 8000), (69, 8030), (80, 8084), (87, 8141),

Gene: MalagasyRose_16 Start: 9681, Stop: 10070, Start Num: 35

Candidate Starts for MalagasyRose_16:

(Start: 35 @9681 has 2 MA's), (51, 9786), (52, 9816), (58, 9864), (60, 9870), (67, 9906), (72, 9924), (77, 9948), (80, 9984), (84, 9996), (89, 10047),

Gene: Malisha_10 Start: 7530, Stop: 7877, Start Num: 31

Candidate Starts for Malisha_10:

(8, 7341), (11, 7398), (12, 7401), (20, 7479), (25, 7494), (27, 7497), (Start: 31 @7530 has 20 MA's), (40, 7569), (46, 7611), (51, 7644), (58, 7704), (59, 7707), (67, 7740), (79, 7785), (92, 7866),

Gene: Margaret_13 Start: 7641, Stop: 7979, Start Num: 34

Candidate Starts for Margaret_13:

(16, 7551), (17, 7554), (18, 7560), (Start: 34 @7641 has 68 MA's), (42, 7677), (50, 7740), (73, 7860), (90, 7959),

Gene: Marteena_10 Start: 7484, Stop: 7831, Start Num: 33

Candidate Starts for Marteena_10:

(Start: 33 @7484 has 27 MA's), (51, 7592), (79, 7739), (90, 7811),

Gene: Mayweather_11 Start: 7324, Stop: 7665, Start Num: 34

Candidate Starts for Mayweather_11:

(Start: 34 @7324 has 68 MA's), (42, 7360), (57, 7483), (62, 7498), (74, 7546), (90, 7645),

Gene: McDazzle_9 Start: 7166, Stop: 7507, Start Num: 34

Candidate Starts for McDazzle_9:

(Start: 34 @7166 has 68 MA's), (42, 7202), (57, 7325), (62, 7340), (74, 7388), (90, 7487),

Gene: Morkie_9 Start: 5962, Stop: 6303, Start Num: 34

Candidate Starts for Morkie_9:

(10, 5809), (26, 5917), (30, 5950), (Start: 34 @5962 has 68 MA's), (48, 6055), (59, 6130), (63, 6142), (70, 6169), (74, 6187), (91, 6289), (92, 6292),

Gene: MortyNRick_10 Start: 6791, Stop: 7132, Start Num: 34

Candidate Starts for MortyNRick_10:

(19, 6716), (28, 6758), (Start: 34 @6791 has 68 MA's), (38, 6812), (45, 6842), (58, 6956), (59, 6959), (61, 6965), (65, 6977), (80, 7043), (90, 7112), (91, 7118), (92, 7121),

Gene: MunkgeeRoachy_10 Start: 6971, Stop: 7312, Start Num: 34

Candidate Starts for MunkgeeRoachy_10:

(Start: 34 @6971 has 68 MA's), (36, 6980), (46, 7040), (58, 7133), (75, 7196), (83, 7235),

Gene: Nebkiss_7 Start: 7029, Stop: 7367, Start Num: 33

Candidate Starts for Nebkiss_7:

(Start: 33 @7029 has 27 MA's), (37, 7050), (38, 7053), (49, 7131), (51, 7137), (54, 7158), (55, 7161), (56, 7170), (64, 7212), (75, 7257), (81, 7284), (82, 7287), (87, 7338), (92, 7356),

Gene: Nergal_14 Start: 10144, Stop: 10533, Start Num: 35

Candidate Starts for Nergal_14:

(5, 9859), (Start: 35 @10144 has 2 MA's), (52, 10279), (53, 10285), (58, 10327), (60, 10333), (80, 10447), (84, 10459),

Gene: Nibbles_12 Start: 7820, Stop: 8170, Start Num: 34

Candidate Starts for Nibbles_12:

(21, 7760), (29, 7796), (Start: 34 @7820 has 68 MA's), (38, 7838), (44, 7862), (46, 7889), (58, 7985), (63, 8000), (69, 8030), (80, 8084), (87, 8141),

Gene: Nina_11 Start: 7957, Stop: 8298, Start Num: 34

Candidate Starts for Nina_11:

(Start: 34 @7957 has 68 MA's), (36, 7966), (46, 8026), (58, 8119), (78, 8203), (83, 8221),

Gene: Nodigi_12 Start: 7925, Stop: 8263, Start Num: 34

Candidate Starts for Nodigi_12:

(1, 7541), (2, 7628), (17, 7841), (Start: 34 @7925 has 68 MA's), (50, 8024), (73, 8144), (74, 8147), (88, 8237), (90, 8243),

Gene: ODay_10 Start: 6511, Stop: 6858, Start Num: 32

Candidate Starts for ODay_10:

(4, 6226), (6, 6259), (22, 6460), (Start: 32 @6511 has 2 MA's), (51, 6622), (65, 6703), (70, 6724), (74, 6742), (80, 6769), (91, 6841), (92, 6844),

Gene: Orla_12 Start: 7929, Stop: 8267, Start Num: 34

Candidate Starts for Orla_12:

(2, 7632), (17, 7845), (Start: 34 @7929 has 68 MA's), (50, 8028), (73, 8148), (74, 8151), (88, 8241), (90, 8247),

Gene: Periwinkle_10 Start: 6480, Stop: 6827, Start Num: 31

Candidate Starts for Periwinkle_10:

(25, 6444), (Start: 31 @6480 has 20 MA's), (40, 6519), (46, 6561), (56, 6633), (58, 6654), (59, 6657), (67, 6690), (79, 6735), (86, 6786), (92, 6816),

Gene: Phabuloso_10 Start: 6485, Stop: 6832, Start Num: 31

Candidate Starts for Phabuloso_10:

(25, 6449), (Start: 31 @6485 has 20 MA's), (40, 6524), (58, 6659), (59, 6662), (67, 6695), (79, 6740), (86, 6791), (88, 6806), (92, 6821),

Gene: Phistory_10 Start: 6469, Stop: 6816, Start Num: 31

Candidate Starts for Phistory_10:

(25, 6433), (Start: 31 @6469 has 20 MA's), (40, 6508), (46, 6550), (58, 6643), (59, 6646), (79, 6724), (86, 6775), (88, 6790), (92, 6805),

Gene: PhorbesPhlower_9 Start: 5962, Stop: 6303, Start Num: 34

Candidate Starts for PhorbesPhlower_9:

(10, 5809), (26, 5917), (30, 5950), (Start: 34 @5962 has 68 MA's), (48, 6055), (59, 6130), (63, 6142), (70, 6169), (74, 6187), (91, 6289), (92, 6292),

Gene: Pollux_10 Start: 7484, Stop: 7831, Start Num: 33

Candidate Starts for Pollux_10:

(Start: 33 @7484 has 27 MA's), (51, 7592), (79, 7739), (90, 7811),

Gene: Pons_10 Start: 6703, Stop: 7044, Start Num: 34

Candidate Starts for Pons_10:

(Start: 34 @6703 has 68 MA's), (42, 6739), (57, 6862), (62, 6877), (74, 6925), (90, 7024),

Gene: Posh_10 Start: 7478, Stop: 7825, Start Num: 33

Candidate Starts for Posh_10:

(Start: 33 @7478 has 27 MA's), (51, 7586), (79, 7733), (90, 7805),

Gene: PotPie_10 Start: 7554, Stop: 7895, Start Num: 34
Candidate Starts for PotPie_10:
(Start: 34 @7554 has 68 MA's), (42, 7590), (57, 7713), (90, 7875),

Gene: PsychoKiller_10 Start: 6923, Stop: 7264, Start Num: 34
Candidate Starts for PsychoKiller_10:
(Start: 34 @6923 has 68 MA's), (36, 6932), (46, 6992), (58, 7085), (83, 7187),

Gene: Pytheas_10 Start: 7331, Stop: 7678, Start Num: 33
Candidate Starts for Pytheas_10:
(Start: 33 @7331 has 27 MA's), (51, 7439), (56, 7484), (79, 7586), (90, 7658),

Gene: Quasar_10 Start: 7538, Stop: 7879, Start Num: 34
Candidate Starts for Quasar_10:
(Start: 34 @7538 has 68 MA's), (36, 7547), (46, 7607), (58, 7700), (83, 7802),

Gene: RADical_11 Start: 6924, Stop: 7265, Start Num: 34
Candidate Starts for RADical_11:
(Start: 34 @6924 has 68 MA's), (36, 6933), (46, 6993), (58, 7086), (83, 7188),

Gene: RSchmailzl_11 Start: 7064, Stop: 7405, Start Num: 34
Candidate Starts for RSchmailzl_11:
(Start: 34 @7064 has 68 MA's), (36, 7073), (46, 7133), (58, 7226), (83, 7328),

Gene: RanchParmCat_13 Start: 7641, Stop: 7979, Start Num: 34
Candidate Starts for RanchParmCat_13:
(Start: 34 @7641 has 68 MA's), (42, 7677), (50, 7740), (73, 7860), (90, 7959),

Gene: RedBaron_11 Start: 6968, Stop: 7309, Start Num: 34
Candidate Starts for RedBaron_11:
(Start: 34 @6968 has 68 MA's), (36, 6977), (46, 7037), (58, 7130), (83, 7232),

Gene: ShawBrad_10 Start: 6485, Stop: 6832, Start Num: 31
Candidate Starts for ShawBrad_10:
(25, 6449), (Start: 31 @6485 has 20 MA's), (40, 6524), (46, 6566), (56, 6638), (58, 6659), (59, 6662),
(67, 6695), (79, 6740), (86, 6791), (88, 6806), (90, 6812), (92, 6821),

Gene: SheckWes_9 Start: 6691, Stop: 7032, Start Num: 34
Candidate Starts for SheckWes_9:
(Start: 34 @6691 has 68 MA's), (42, 6727), (50, 6790), (57, 6850), (62, 6865), (74, 6913), (90, 7012),

Gene: SilverChicken_10 Start: 6438, Stop: 6791, Start Num: 33
Candidate Starts for SilverChicken_10:
(23, 6387), (24, 6393), (Start: 33 @6438 has 27 MA's), (39, 6468), (47, 6519), (59, 6624), (65, 6642),
(73, 6675), (88, 6765),

Gene: SketchMex_9 Start: 6907, Stop: 7248, Start Num: 34
Candidate Starts for SketchMex_9:
(Start: 34 @6907 has 68 MA's), (53, 7030), (83, 7171), (88, 7222), (90, 7228),

Gene: Socotra_11 Start: 6923, Stop: 7264, Start Num: 34
Candidate Starts for Socotra_11:

(Start: 34 @6923 has 68 MA's), (36, 6932), (46, 6992), (58, 7085), (83, 7187),

Gene: Sopespian_10 Start: 6923, Stop: 7264, Start Num: 34

Candidate Starts for Sopespian_10:

(Start: 34 @6923 has 68 MA's), (36, 6932), (46, 6992), (58, 7085), (83, 7187),

Gene: Soul22_10 Start: 6437, Stop: 6790, Start Num: 33

Candidate Starts for Soul22_10:

(23, 6386), (24, 6392), (Start: 33 @6437 has 27 MA's), (39, 6467), (47, 6518), (59, 6623), (65, 6641), (73, 6674), (88, 6764),

Gene: Spooky_10 Start: 6478, Stop: 6825, Start Num: 31

Candidate Starts for Spooky_10:

(3, 6193), (7, 6265), (9, 6292), (13, 6367), (20, 6427), (27, 6445), (Start: 31 @6478 has 20 MA's), (40, 6517), (46, 6559), (51, 6592), (58, 6652), (59, 6655), (79, 6733), (86, 6784), (92, 6814),

Gene: Squiddly_11 Start: 7165, Stop: 7512, Start Num: 31

Candidate Starts for Squiddly_11:

(25, 7129), (Start: 31 @7165 has 20 MA's), (40, 7204), (46, 7246), (58, 7339), (59, 7342), (79, 7420), (86, 7471), (88, 7486), (92, 7501),

Gene: Starburst_11 Start: 6923, Stop: 7264, Start Num: 34

Candidate Starts for Starburst_11:

(Start: 34 @6923 has 68 MA's), (36, 6932), (46, 6992), (58, 7085), (83, 7187),

Gene: SteamedHams_12 Start: 6942, Stop: 7283, Start Num: 34

Candidate Starts for SteamedHams_12:

(Start: 34 @6942 has 68 MA's), (59, 7107), (88, 7257), (90, 7263),

Gene: Stellammi_7 Start: 5925, Stop: 6263, Start Num: 33

Candidate Starts for Stellammi_7:

(Start: 33 @5925 has 27 MA's), (41, 5961), (51, 6033), (55, 6057), (64, 6108), (65, 6111), (66, 6123), (67, 6126), (68, 6129), (82, 6183), (85, 6192), (92, 6252),

Gene: SummitAcademy_9 Start: 6769, Stop: 7110, Start Num: 34

Candidate Starts for SummitAcademy_9:

(Start: 34 @6769 has 68 MA's), (42, 6805), (57, 6928), (90, 7090),

Gene: Survivors_12 Start: 7674, Stop: 8024, Start Num: 34

Candidate Starts for Survivors_12:

(21, 7614), (29, 7650), (Start: 34 @7674 has 68 MA's), (38, 7692), (44, 7716), (46, 7743), (58, 7839), (63, 7854), (69, 7884), (80, 7938), (87, 7995),

Gene: SweatNTears_12 Start: 7427, Stop: 7768, Start Num: 34

Candidate Starts for SweatNTears_12:

(Start: 34 @7427 has 68 MA's), (53, 7550), (83, 7691), (88, 7742), (90, 7748),

Gene: Tolls_12 Start: 6945, Stop: 7286, Start Num: 34

Candidate Starts for Tolls_12:

(Start: 34 @6945 has 68 MA's), (59, 7110), (88, 7260), (90, 7266),

Gene: Troje_10 Start: 6901, Stop: 7242, Start Num: 34

Candidate Starts for Troje_10:

(Start: 34 @6901 has 68 MA's), (53, 7024), (83, 7165), (88, 7216), (90, 7222),

Gene: Typhonomachy_10 Start: 6923, Stop: 7264, Start Num: 34

Candidate Starts for Typhonomachy_10:

(14, 6824), (15, 6827), (16, 6833), (Start: 34 @6923 has 68 MA's), (36, 6932), (46, 6992), (58, 7085), (83, 7187),

Gene: Vine_11 Start: 7698, Stop: 8039, Start Num: 34

Candidate Starts for Vine_11:

(Start: 34 @7698 has 68 MA's), (42, 7734), (57, 7857), (62, 7872), (90, 8019),

Gene: Whitney_10 Start: 6480, Stop: 6827, Start Num: 31

Candidate Starts for Whitney_10:

(25, 6444), (Start: 31 @6480 has 20 MA's), (40, 6519), (46, 6561), (56, 6633), (58, 6654), (59, 6657), (67, 6690), (79, 6735), (86, 6786), (88, 6801), (92, 6816),

Gene: Wolfwood_14 Start: 7795, Stop: 8169, Start Num: 29

Candidate Starts for Wolfwood_14:

(21, 7759), (29, 7795), (Start: 34 @7819 has 68 MA's), (38, 7837), (44, 7861), (46, 7888), (58, 7984), (63, 7999), (69, 8029), (80, 8083), (87, 8140),

Gene: Wrigley_10 Start: 7328, Stop: 7675, Start Num: 33

Candidate Starts for Wrigley_10:

(18, 7250), (Start: 33 @7328 has 27 MA's), (51, 7436), (79, 7583), (90, 7655),

Gene: Yakult_11 Start: 6834, Stop: 7175, Start Num: 34

Candidate Starts for Yakult_11:

(16, 6744), (17, 6747), (18, 6753), (Start: 34 @6834 has 68 MA's), (43, 6876), (46, 6906), (50, 6936), (73, 7056), (74, 7059), (90, 7155),

Gene: Yarn_9 Start: 6935, Stop: 7276, Start Num: 34

Candidate Starts for Yarn_9:

(Start: 34 @6935 has 68 MA's), (59, 7100), (88, 7250), (90, 7256),

Gene: Yoshi_10 Start: 6437, Stop: 6790, Start Num: 33

Candidate Starts for Yoshi_10:

(23, 6386), (24, 6392), (Start: 33 @6437 has 27 MA's), (39, 6467), (47, 6518), (59, 6623), (65, 6641), (73, 6674), (88, 6764),

Gene: Yucky_10 Start: 7558, Stop: 7899, Start Num: 34

Candidate Starts for Yucky_10:

(Start: 34 @7558 has 68 MA's), (42, 7594), (57, 7717), (90, 7879),

Gene: Yummy_11 Start: 6805, Stop: 7146, Start Num: 34

Candidate Starts for Yummy_11:

(Start: 34 @6805 has 68 MA's), (53, 6928), (83, 7069), (88, 7120), (90, 7126),

Gene: Zapner_11 Start: 6962, Stop: 7315, Start Num: 33

Candidate Starts for Zapner_11:

(23, 6911), (24, 6917), (Start: 33 @6962 has 27 MA's), (39, 6992), (47, 7043), (59, 7148), (65, 7166), (73, 7199), (88, 7289),

Gene: Zareef_12 Start: 7821, Stop: 8171, Start Num: 34

Candidate Starts for Zareef_12:

(21, 7761), (29, 7797), (Start: 34 @7821 has 68 MA's), (38, 7839), (44, 7863), (46, 7890), (58, 7986),
(63, 8001), (69, 8031), (80, 8085), (87, 8142),