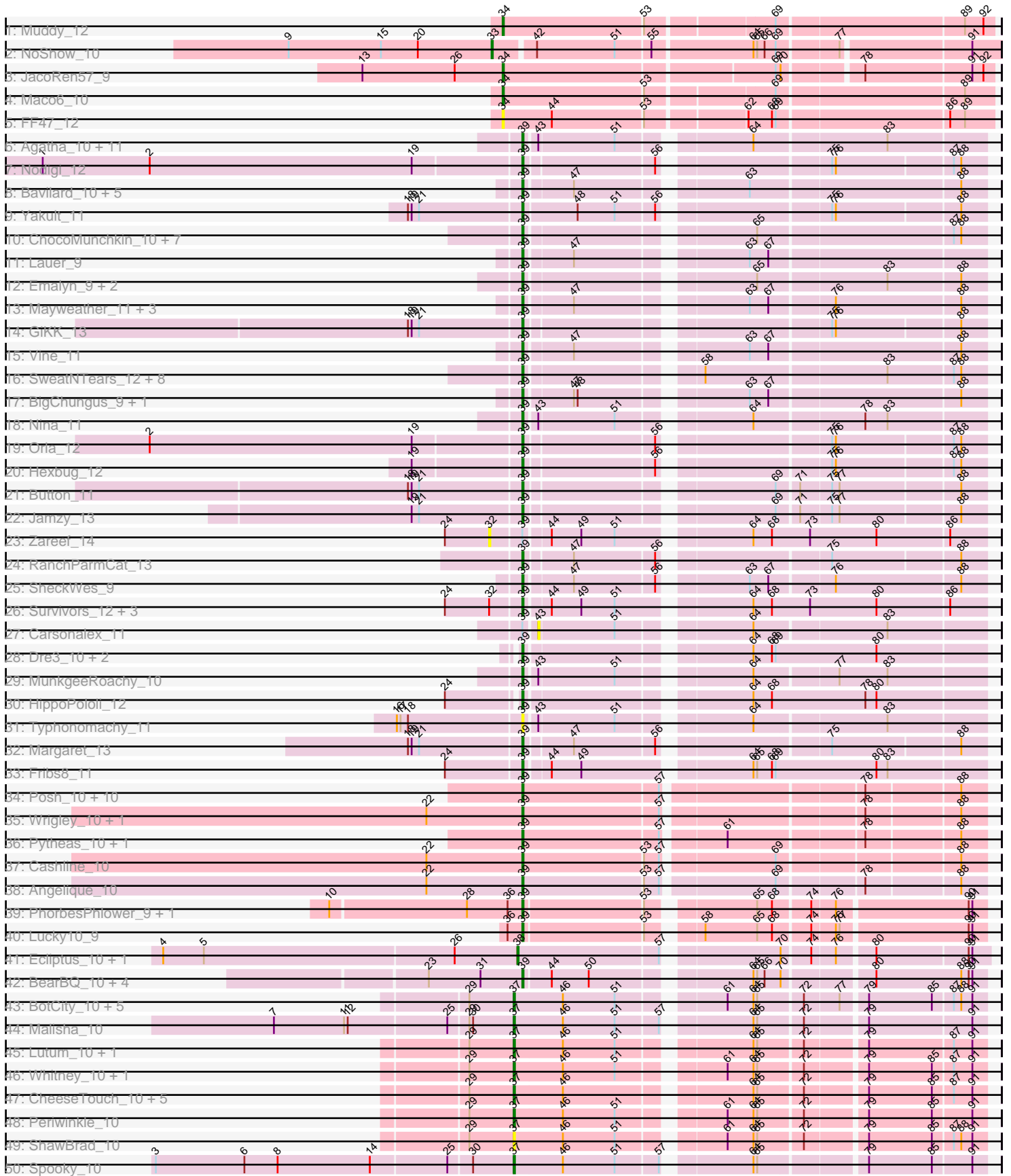
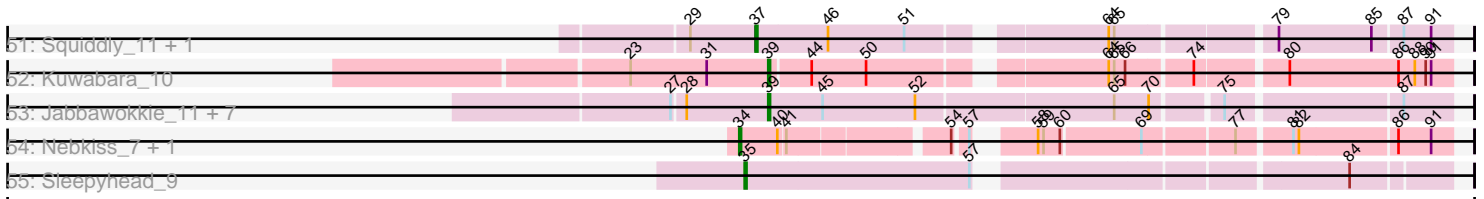


Pham 202761



Pham 202761



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 202761 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202761 has 136 members, 22 are drafts.

Phages represented in each track:

- Track 1 : Muddy_12
- Track 2 : NoShow_10
- Track 3 : JacoRen57_9
- Track 4 : Maco6_10
- Track 5 : FF47_12
- Track 6 : Agatha_10, Elliott_10, Quasar_10, Cozz_10, PsychoKiller_10, ChickenTender_12, Axym_10, Starburst_11, GoldHunter_11, Sopeopian_10, RedBaron_11, Burnsey_10
- Track 7 : Nodigi_12
- Track 8 : Bavidard_10, PotPie_10, KayGee_10, SummitAcademy_9, Elinal_11, Yucky_12
- Track 9 : Yakult_11
- Track 10 : ChocoMunchkin_10, SteamedHams_12, AndPeggy_9, Tolls_12, GTE2_08, BillDoor_12, CanesSauce_10, Yarn_9
- Track 11 : Lauer_9
- Track 12 : Emalyn_9, Amok_9, AikoCarson_9
- Track 13 : Mayweather_11, CherryonLim_11, MAnor_10, Pons_10
- Track 14 : GiKK_13
- Track 15 : Vine_11
- Track 16 : SweatNTears_12, Yummy_11, Buttrmlkdreams_10, Biskit_11, SketchMex_9, Troje_10, Horseradish_11, MScarn_12, Blondies_10
- Track 17 : BigChungus_9, Feastonyeet_9
- Track 18 : Nina_11
- Track 19 : Orla_12
- Track 20 : Hexbug_12
- Track 21 : Button_11
- Track 22 : Jamzy_13
- Track 23 : Zareef_14
- Track 24 : RanchParmCat_13
- Track 25 : SheckWes_9
- Track 26 : Survivors_12, Nibbles_12, MaVan_12, Azira_12
- Track 27 : Carsonalex_11
- Track 28 : Dre3_10, Cleo_10, Gibbous_10
- Track 29 : MunkgeeRoachy_10
- Track 30 : HippoPololi_12
- Track 31 : Typhonmarchy_11
- Track 32 : Margaret_13

- Track 33 : Fribs8_11
- Track 34 : Posh_10, Pollux_10, Lilas_10, BritBrat_10, Floral_10, LonelyBoi_10, EMSquaredA_10, Bradissa_10, EnalisNailo_10, Marteena_10, Confidence_10
- Track 35 : Wrigley_10, BeeGee_10
- Track 36 : Pytheas_10, Jablanski_10
- Track 37 : Cashline_10
- Track 38 : Angelique_10
- Track 39 : PhorbesPhlower_9, Morkie_9
- Track 40 : Lucky10_9
- Track 41 : Ecliptus_10, ODay_10
- Track 42 : BearBQ_10, MortyNRick_10, Birdsong_10, Crater_10, Apricot_10
- Track 43 : BotCity_10, Leroy_10, Horus_10, Frickyeah_10, Asapag_10, BENTherdunthat_10
- Track 44 : Malisha_10
- Track 45 : Lutum_10, Kenna_10
- Track 46 : Whitney_10, Getalong_10
- Track 47 : CheeseTouch_10, Budski_10, Phabuloso_10, LitninMcQueen_10, Kamaru_10, Holliday_10
- Track 48 : Periwinkle_10
- Track 49 : ShawBrad_10
- Track 50 : Spooky_10
- Track 51 : Squiddly_11, Phistory_10
- Track 52 : Kuwabara_10
- Track 53 : Jabbawokkie_11, Avani_10, Yoshi_10, Soul22_10, Demsculpinboyz_10, Che9d_10, Zapner_11, Blarby_11
- Track 54 : Nebkiss_7, Gaia_7
- Track 55 : Sleepyhead_9

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

The start number called the most often in the published annotations is 39, it was called in 86 of the 114 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agatha_10, AikoCarson_9, Amok_9, AndPeggy_9, Angelique_10, Apricot_10, Avani_10, Axym_10, Azira_12, Bavailard_10, BearBQ_10, BeeGee_10, BigChungus_9, BillDoor_12, Birdsong_10, Biskit_11, Blarby_11, Blondies_10, Bradissa_10, BritBrat_10, Burnsey_10, Button_11, Buttrmlkdreams_10, CanesSauce_10, Cashline_10, Che9d_10, CherryonLim_11, ChickenTender_12, ChocoMunchkin_10, Cleo_10, Confidence_10, Cozz_10, Crater_10, Demsculpinboyz_10, Dre3_10, EMSquaredA_10, Elinal_11, Elliott_10, Emalyn_9, EnalisNailo_10, Feastonyeet_9, Floral_10, Fribs8_11, GTE2_08, GiKK_13, Gibbous_10, GoldHunter_11, Hexbug_12, HippoPololi_12, Horseradish_11, Jabbawokkie_11, Jablanski_10, Jamzy_13, KayGee_10, Kuwabara_10, Lauer_9, Lilas_10, LonelyBoi_10, Lucky10_9, MAnor_10, MScarn_12, MaVan_12, Margaret_13, Marteena_10, Mayweather_11, Morkie_9, MortyNRick_10, MunkgeeRoachy_10, Nibbles_12, Nina_11, Nodigi_12, Orla_12, PhorbesPhlower_9, Pollux_10, Pons_10, Posh_10, PotPie_10, PsychoKiller_10, Pytheas_10, Quasar_10, RanchParmCat_13, RedBaron_11, SheckWes_9, SketchMex_9, Sopespian_10, Soul22_10, Starburst_11, SteamedHams_12, SummitAcademy_9, Survivors_12,

SweatNTears_12, Tolls_12, Troje_10, Typhonmachy_11, Vine_11, Wrigley_10, Yakult_11, Yarn_9, Yoshi_10, Yucky_12, Yummy_11, Zapner_11,

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

- Carsonalex_11, Zareef_14,

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

- Asapag_10, BENtherdunthat_10, BotCity_10, Budski_10, CheeseTouch_10, Ecliptus_10, FF47_12, Frickyeah_10, Gaia_7, Getalong_10, Holliday_10, Horus_10, JacoRen57_9, Kamaru_10, Kenna_10, Leroy_10, LitninMcQueen_10, Lutum_10, Maco6_10, Malisha_10, Muddy_12, Nebkiss_7, NoShow_10, ODay_10, Periwinkle_10, Phabuloso_10, Phistory_10, ShawBrad_10, Sleepyhead_9, Spooky_10, Squiddly_11, Whitney_10,

Summary by start number:

Start 32:

- Found in 5 of 136 (3.7%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Zareef_14 (CT),

Start 33:

- Found in 1 of 136 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 114
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NoShow_10 (AB),

Start 34:

- Found in 6 of 136 (4.4%) of genes in pham
- Manual Annotations of this start: 5 of 114
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FF47_12 (AB), Gaia_7 (X), JacoRen57_9 (AB), Maco6_10 (AB), Muddy_12 (AB), Nebkiss_7 (X),

Start 35:

- Found in 1 of 136 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 114
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sleepyhead_9 (singleton),

Start 37:

- Found in 22 of 136 (16.2%) of genes in pham
- Manual Annotations of this start: 19 of 114
- 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), Frickyeah_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 38:

- Found in 2 of 136 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 114
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ecliptus_10 (DN), ODay_10 (DN),

Start 39:

- Found in 104 of 136 (76.5%) of genes in pham
- Manual Annotations of this start: 86 of 114
- Called 98.1% of time when present
- Phage (with cluster) where this start called: Agatha_10 (CT), AikoCarson_9 (CT), Amok_9 (CT), AndPeggy_9 (CT), Angelique_10 (CY1), Apricot_10 (DN3), Avani_10 (F2), Axym_10 (CT), Azira_12 (CT), Bavilard_10 (CT), BearBQ_10 (DN), BeeGee_10 (CY), BigChungus_9 (CT), BillDoor_12 (CT), Birdsong_10 (DN), Biskit_11 (CT), Blarby_11 (F), Blondies_10 (CT), Bradissa_10 (CY1), BritBrat_10 (CY2), Burnsey_10 (CT), Button_11 (CT), Buttermilkdreams_10 (CT), CanesSauce_10 (CT), Cashline_10 (CY), Che9d_10 (F2), CherryonLim_11 (CT), ChickenTender_12 (CT), ChocoMunchkin_10 (CT), Cleo_10 (CT), Confidence_10 (CY1), Cozz_10 (CT), Crater_10 (DN3), Demsculpinboyz_10 (F2), Dre3_10 (CT), EMSquaredA_10 (CY1), Elinal_11 (CT), Elliott_10 (CT), Emalyn_9 (CT), EnalisNailo_10 (CY1), Feastonyeet_9 (CT), Floral_10 (CY1), Fribs8_11 (CT), GTE2_08 (CT), GiKK_13 (CT), Gibbous_10 (CT), GoldHunter_11 (CT), Hexbug_12 (CT), HippoPololi_12 (CT), Horseradish_11 (CT), Jabbawokkie_11 (F2), Jablanski_10 (CY), Jamzy_13 (CT), KayGee_10 (CT), Kuwabara_10 (DN4), Lauer_9 (CT), Lilas_10 (CY1), LonelyBoi_10 (CY), Lucky10_9 (DH), MAnor_10 (CT), MScarn_12 (CT), MaVan_12 (CT), Margaret_13 (CT), Marteena_10 (CY1), Mayweather_11 (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), Pollux_10 (CY1), Pons_10 (CT), Posh_10 (CY), PotPie_10 (CT), PsychoKiller_10 (CT), Pytheas_10 (CY), Quasar_10 (CT), RanchParmCat_13 (CT), RedBaron_11 (CT), SheckWes_9 (CT), SketchMex_9 (CT), Sopespian_10 (CT), Soul22_10 (F2), Starburst_11 (CT), SteamedHams_12 (CT), SummitAcademy_9 (CT), Survivors_12 (CT), SweatNTears_12 (CT), Tolls_12 (CT), Troje_10 (CT), Typhonmarchy_11 (CT), Vine_11 (CT), Wrigley_10 (CY), Yakult_11 (CT), Yarn_9 (CT), Yoshi_10 (F2), Yucky_12 (CT), Yummy_11 (CT), Zapner_11 (F2),

Start 43:

- Found in 16 of 136 (11.8%) of genes in pham
- No Manual Annotations of this start.
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Carsonalex_11 (CT),

Summary by clusters:

There are 15 clusters represented in this pham: DN, CY2, CY1, AB, DH, F, F2, DN4, CY, DN1, DN3, DN2, X, singleton, CT,

Info for manual annotations of cluster AB:

- Start number 33 was manually annotated 1 time for cluster AB.
- Start number 34 was manually annotated 3 times for cluster AB.

Info for manual annotations of cluster CT:

- Start number 39 was manually annotated 54 times for cluster CT.

Info for manual annotations of cluster CY:

- Start number 39 was manually annotated 7 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 39 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 39 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DH:

- Start number 39 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 37 was manually annotated 2 times for cluster DN.
- Start number 38 was manually annotated 2 times for cluster DN.
- Start number 39 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 37 was manually annotated 15 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 37 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 39 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 39 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster F2:

- Start number 39 was manually annotated 7 times for cluster F2.

Info for manual annotations of cluster X:

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

Gene Information:

Gene: Agatha_10 Start: 6923, Stop: 7264, Start Num: 39

Candidate Starts for Agatha_10:

(Start: 39 @6923 has 86 MA's), (43, 6932), (51, 6992), (64, 7085), (83, 7187),

Gene: AikoCarson_9 Start: 6653, Stop: 6994, Start Num: 39

Candidate Starts for AikoCarson_9:

(Start: 39 @6653 has 86 MA's), (65, 6818), (83, 6917), (88, 6974),

Gene: Amok_9 Start: 6653, Stop: 6994, Start Num: 39

Candidate Starts for Amok_9:

(Start: 39 @6653 has 86 MA's), (65, 6818), (83, 6917), (88, 6974),

Gene: AndPeggy_9 Start: 6941, Stop: 7282, Start Num: 39

Candidate Starts for AndPeggy_9:

(Start: 39 @6941 has 86 MA's), (65, 7106), (87, 7256), (88, 7262),

Gene: Angelique_10 Start: 7476, Stop: 7823, Start Num: 39

Candidate Starts for Angelique_10:

(22, 7398), (Start: 39 @7476 has 86 MA's), (53, 7572), (57, 7584), (69, 7668), (78, 7731), (88, 7803),

Gene: Apricot_10 Start: 6791, Stop: 7132, Start Num: 39

Candidate Starts for Apricot_10:

(23, 6716), (31, 6758), (Start: 39 @6791 has 86 MA's), (44, 6812), (50, 6842), (64, 6956), (65, 6959), (66, 6965), (70, 6977), (80, 7043), (88, 7112), (90, 7118), (91, 7121),

Gene: Asapag_10 Start: 6480, Stop: 6827, Start Num: 37

Candidate Starts for Asapag_10:

(29, 6444), (Start: 37 @6480 has 19 MA's), (46, 6519), (51, 6561), (61, 6633), (64, 6654), (65, 6657), (72, 6690), (77, 6717), (79, 6735), (85, 6786), (87, 6801), (88, 6807), (91, 6816),

Gene: Avani_10 Start: 6438, Stop: 6791, Start Num: 39

Candidate Starts for Avani_10:

(27, 6387), (28, 6393), (Start: 39 @6438 has 86 MA's), (45, 6468), (52, 6519), (65, 6624), (70, 6642), (75, 6675), (87, 6765),

Gene: Axym_10 Start: 6923, Stop: 7264, Start Num: 39

Candidate Starts for Axym_10:

(Start: 39 @6923 has 86 MA's), (43, 6932), (51, 6992), (64, 7085), (83, 7187),

Gene: Azira_12 Start: 7820, Stop: 8170, Start Num: 39

Candidate Starts for Azira_12:

(24, 7760), (32, 7796), (Start: 39 @7820 has 86 MA's), (44, 7838), (49, 7862), (51, 7889), (64, 7985), (68, 8000), (73, 8030), (80, 8084), (86, 8141),

Gene: BENtherdunthat_10 Start: 6480, Stop: 6827, Start Num: 37

Candidate Starts for BENtherdunthat_10:

(29, 6444), (Start: 37 @6480 has 19 MA's), (46, 6519), (51, 6561), (61, 6633), (64, 6654), (65, 6657), (72, 6690), (77, 6717), (79, 6735), (85, 6786), (87, 6801), (88, 6807), (91, 6816),

Gene: Bavilard_10 Start: 7475, Stop: 7816, Start Num: 39

Candidate Starts for Bavilard_10:

(Start: 39 @7475 has 86 MA's), (47, 7511), (63, 7634), (88, 7796),

Gene: BearBQ_10 Start: 6791, Stop: 7132, Start Num: 39

Candidate Starts for BearBQ_10:

(23, 6716), (31, 6758), (Start: 39 @6791 has 86 MA's), (44, 6812), (50, 6842), (64, 6956), (65, 6959), (66, 6965), (70, 6977), (80, 7043), (88, 7112), (90, 7118), (91, 7121),

Gene: BeeGee_10 Start: 7478, Stop: 7825, Start Num: 39

Candidate Starts for BeeGee_10:

(22, 7400), (Start: 39 @7478 has 86 MA's), (57, 7586), (78, 7733), (88, 7805),

Gene: BigChungus_9 Start: 6720, Stop: 7061, Start Num: 39

Candidate Starts for BigChungus_9:

(Start: 39 @6720 has 86 MA's), (47, 6756), (48, 6759), (63, 6879), (67, 6894), (88, 7041),

Gene: BillDoor_12 Start: 6906, Stop: 7247, Start Num: 39

Candidate Starts for BillDoor_12:

(Start: 39 @6906 has 86 MA's), (65, 7071), (87, 7221), (88, 7227),

Gene: Birdsong_10 Start: 6791, Stop: 7132, Start Num: 39

Candidate Starts for Birdsong_10:

(23, 6716), (31, 6758), (Start: 39 @6791 has 86 MA's), (44, 6812), (50, 6842), (64, 6956), (65, 6959), (66, 6965), (70, 6977), (80, 7043), (88, 7112), (90, 7118), (91, 7121),

Gene: Biskit_11 Start: 6907, Stop: 7248, Start Num: 39

Candidate Starts for Biskit_11:

(Start: 39 @6907 has 86 MA's), (58, 7030), (83, 7171), (87, 7222), (88, 7228),

Gene: Blarby_11 Start: 6962, Stop: 7315, Start Num: 39

Candidate Starts for Blarby_11:

(27, 6911), (28, 6917), (Start: 39 @6962 has 86 MA's), (45, 6992), (52, 7043), (65, 7148), (70, 7166), (75, 7199), (87, 7289),

Gene: Blondies_10 Start: 6902, Stop: 7243, Start Num: 39

Candidate Starts for Blondies_10:

(Start: 39 @6902 has 86 MA's), (58, 7025), (83, 7166), (87, 7217), (88, 7223),

Gene: BotCity_10 Start: 6478, Stop: 6825, Start Num: 37

Candidate Starts for BotCity_10:

(29, 6442), (Start: 37 @6478 has 19 MA's), (46, 6517), (51, 6559), (61, 6631), (64, 6652), (65, 6655), (72, 6688), (77, 6715), (79, 6733), (85, 6784), (87, 6799), (88, 6805), (91, 6814),

Gene: Bradissa_10 Start: 7482, Stop: 7829, Start Num: 39

Candidate Starts for Bradissa_10:

(Start: 39 @7482 has 86 MA's), (57, 7590), (78, 7737), (88, 7809),

Gene: BritBrat_10 Start: 7484, Stop: 7831, Start Num: 39

Candidate Starts for BritBrat_10:

(Start: 39 @7484 has 86 MA's), (57, 7592), (78, 7739), (88, 7811),

Gene: Budski_10 Start: 6485, Stop: 6832, Start Num: 37

Candidate Starts for Budski_10:

(29, 6449), (Start: 37 @6485 has 19 MA's), (46, 6524), (64, 6659), (65, 6662), (72, 6695), (79, 6740), (85, 6791), (87, 6806), (91, 6821),

Gene: Burnsey_10 Start: 6924, Stop: 7265, Start Num: 39

Candidate Starts for Burnsey_10:

(Start: 39 @6924 has 86 MA's), (43, 6933), (51, 6993), (64, 7086), (83, 7188),

Gene: Button_11 Start: 6943, Stop: 7281, Start Num: 39

Candidate Starts for Button_11:

(18, 6853), (19, 6856), (21, 6862), (Start: 39 @6943 has 86 MA's), (69, 7123), (71, 7138), (75, 7162), (77, 7168), (88, 7261),

Gene: Buttrmlkdreams_10 Start: 6901, Stop: 7242, Start Num: 39

Candidate Starts for Buttrmlkdreams_10:

(Start: 39 @6901 has 86 MA's), (58, 7024), (83, 7165), (87, 7216), (88, 7222),

Gene: CanesSauce_10 Start: 6942, Stop: 7283, Start Num: 39

Candidate Starts for CanesSauce_10:
(Start: 39 @6942 has 86 MA's), (65, 7107), (87, 7257), (88, 7263),

Gene: Carsonalex_11 Start: 6989, Stop: 7321, Start Num: 43
Candidate Starts for Carsonalex_11:
(Start: 39 @6980 has 86 MA's), (43, 6989), (51, 7049), (64, 7142), (83, 7244),

Gene: Cashline_10 Start: 7331, Stop: 7678, Start Num: 39
Candidate Starts for Cashline_10:
(22, 7253), (Start: 39 @7331 has 86 MA's), (53, 7427), (57, 7439), (69, 7523), (88, 7658),

Gene: Che9d_10 Start: 6447, Stop: 6800, Start Num: 39
Candidate Starts for Che9d_10:
(27, 6396), (28, 6402), (Start: 39 @6447 has 86 MA's), (45, 6477), (52, 6528), (65, 6633), (70, 6651),
(75, 6684), (87, 6774),

Gene: CheeseTouch_10 Start: 6485, Stop: 6832, Start Num: 37
Candidate Starts for CheeseTouch_10:
(29, 6449), (Start: 37 @6485 has 19 MA's), (46, 6524), (64, 6659), (65, 6662), (72, 6695), (79, 6740),
(85, 6791), (87, 6806), (91, 6821),

Gene: CherryonLim_11 Start: 7446, Stop: 7787, Start Num: 39
Candidate Starts for CherryonLim_11:
(Start: 39 @7446 has 86 MA's), (47, 7482), (63, 7605), (67, 7620), (76, 7668), (88, 7767),

Gene: ChickenTender_12 Start: 6966, Stop: 7307, Start Num: 39
Candidate Starts for ChickenTender_12:
(Start: 39 @6966 has 86 MA's), (43, 6975), (51, 7035), (64, 7128), (83, 7230),

Gene: ChocoMunchkin_10 Start: 6942, Stop: 7283, Start Num: 39
Candidate Starts for ChocoMunchkin_10:
(Start: 39 @6942 has 86 MA's), (65, 7107), (87, 7257), (88, 7263),

Gene: Cleo_10 Start: 7123, Stop: 7470, Start Num: 39
Candidate Starts for Cleo_10:
(Start: 39 @7123 has 86 MA's), (64, 7285), (68, 7300), (69, 7303), (80, 7384),

Gene: Confidence_10 Start: 7478, Stop: 7825, Start Num: 39
Candidate Starts for Confidence_10:
(Start: 39 @7478 has 86 MA's), (57, 7586), (78, 7733), (88, 7805),

Gene: Cozz_10 Start: 6924, Stop: 7265, Start Num: 39
Candidate Starts for Cozz_10:
(Start: 39 @6924 has 86 MA's), (43, 6933), (51, 6993), (64, 7086), (83, 7188),

Gene: Crater_10 Start: 6791, Stop: 7132, Start Num: 39
Candidate Starts for Crater_10:
(23, 6716), (31, 6758), (Start: 39 @6791 has 86 MA's), (44, 6812), (50, 6842), (64, 6956), (65, 6959),
(66, 6965), (70, 6977), (80, 7043), (88, 7112), (90, 7118), (91, 7121),

Gene: Demsculpinboyz_10 Start: 6438, Stop: 6791, Start Num: 39
Candidate Starts for Demsculpinboyz_10:

(27, 6387), (28, 6393), (Start: 39 @6438 has 86 MA's), (45, 6468), (52, 6519), (65, 6624), (70, 6642), (75, 6675), (87, 6765),

Gene: Dre3_10 Start: 7070, Stop: 7417, Start Num: 39

Candidate Starts for Dre3_10:

(Start: 39 @7070 has 86 MA's), (64, 7232), (68, 7247), (69, 7250), (80, 7331),

Gene: EMSquaredA_10 Start: 7484, Stop: 7831, Start Num: 39

Candidate Starts for EMSquaredA_10:

(Start: 39 @7484 has 86 MA's), (57, 7592), (78, 7739), (88, 7811),

Gene: Ecliptus_10 Start: 6513, Stop: 6860, Start Num: 38

Candidate Starts for Ecliptus_10:

(4, 6228), (5, 6261), (26, 6462), (Start: 38 @6513 has 2 MA's), (57, 6624), (70, 6705), (74, 6726), (76, 6744), (80, 6771), (90, 6843), (91, 6846),

Gene: Elinal_11 Start: 6701, Stop: 7042, Start Num: 39

Candidate Starts for Elinal_11:

(Start: 39 @6701 has 86 MA's), (47, 6737), (63, 6860), (88, 7022),

Gene: Eliott_10 Start: 6923, Stop: 7264, Start Num: 39

Candidate Starts for Eliott_10:

(Start: 39 @6923 has 86 MA's), (43, 6932), (51, 6992), (64, 7085), (83, 7187),

Gene: Emalyn_9 Start: 6652, Stop: 6993, Start Num: 39

Candidate Starts for Emalyn_9:

(Start: 39 @6652 has 86 MA's), (65, 6817), (83, 6916), (88, 6973),

Gene: EnalisNailo_10 Start: 7484, Stop: 7831, Start Num: 39

Candidate Starts for EnalisNailo_10:

(Start: 39 @7484 has 86 MA's), (57, 7592), (78, 7739), (88, 7811),

Gene: FF47_12 Start: 8188, Stop: 8562, Start Num: 34

Candidate Starts for FF47_12:

(Start: 34 @8188 has 5 MA's), (44, 8227), (53, 8299), (62, 8374), (68, 8392), (69, 8395), (86, 8527), (89, 8539),

Gene: Feastonyeet_9 Start: 6720, Stop: 7061, Start Num: 39

Candidate Starts for Feastonyeet_9:

(Start: 39 @6720 has 86 MA's), (47, 6756), (48, 6759), (63, 6879), (67, 6894), (88, 7041),

Gene: Floral_10 Start: 7484, Stop: 7831, Start Num: 39

Candidate Starts for Floral_10:

(Start: 39 @7484 has 86 MA's), (57, 7592), (78, 7739), (88, 7811),

Gene: Fribs8_11 Start: 7633, Stop: 7983, Start Num: 39

Candidate Starts for Fribs8_11:

(24, 7573), (Start: 39 @7633 has 86 MA's), (44, 7651), (49, 7675), (64, 7798), (65, 7801), (68, 7813), (69, 7816), (80, 7897), (83, 7906),

Gene: Frickyeah_10 Start: 6480, Stop: 6827, Start Num: 37

Candidate Starts for Frickyeah_10:

(29, 6444), (Start: 37 @6480 has 19 MA's), (46, 6519), (51, 6561), (61, 6633), (64, 6654), (65, 6657), (72, 6690), (77, 6717), (79, 6735), (85, 6786), (87, 6801), (88, 6807), (91, 6816),

Gene: GTE2_08 Start: 6602, Stop: 6943, Start Num: 39

Candidate Starts for GTE2_08:

(Start: 39 @6602 has 86 MA's), (65, 6767), (87, 6917), (88, 6923),

Gene: Gaia_7 Start: 7028, Stop: 7366, Start Num: 34

Candidate Starts for Gaia_7:

(Start: 34 @7028 has 5 MA's), (40, 7049), (41, 7052), (54, 7130), (57, 7136), (58, 7157), (59, 7160), (60, 7169), (69, 7211), (77, 7256), (81, 7283), (82, 7286), (86, 7337), (91, 7355),

Gene: Getalong_10 Start: 6480, Stop: 6827, Start Num: 37

Candidate Starts for Getalong_10:

(29, 6444), (Start: 37 @6480 has 19 MA's), (46, 6519), (51, 6561), (61, 6633), (64, 6654), (65, 6657), (72, 6690), (79, 6735), (85, 6786), (87, 6801), (91, 6816),

Gene: GiKK_13 Start: 7246, Stop: 7584, Start Num: 39

Candidate Starts for GiKK_13:

(18, 7156), (19, 7159), (21, 7165), (Start: 39 @7246 has 86 MA's), (75, 7465), (76, 7468), (88, 7564),

Gene: Gibbous_10 Start: 7070, Stop: 7417, Start Num: 39

Candidate Starts for Gibbous_10:

(Start: 39 @7070 has 86 MA's), (64, 7232), (68, 7247), (69, 7250), (80, 7331),

Gene: GoldHunter_11 Start: 6924, Stop: 7265, Start Num: 39

Candidate Starts for GoldHunter_11:

(Start: 39 @6924 has 86 MA's), (43, 6933), (51, 6993), (64, 7086), (83, 7188),

Gene: Hexbug_12 Start: 7932, Stop: 8270, Start Num: 39

Candidate Starts for Hexbug_12:

(19, 7848), (Start: 39 @7932 has 86 MA's), (56, 8031), (75, 8151), (76, 8154), (87, 8244), (88, 8250),

Gene: HippoPololi_12 Start: 7722, Stop: 8069, Start Num: 39

Candidate Starts for HippoPololi_12:

(24, 7668), (Start: 39 @7722 has 86 MA's), (64, 7884), (68, 7899), (78, 7974), (80, 7983),

Gene: Holliday_10 Start: 6485, Stop: 6832, Start Num: 37

Candidate Starts for Holliday_10:

(29, 6449), (Start: 37 @6485 has 19 MA's), (46, 6524), (64, 6659), (65, 6662), (72, 6695), (79, 6740), (85, 6791), (87, 6806), (91, 6821),

Gene: Horseradish_11 Start: 6805, Stop: 7146, Start Num: 39

Candidate Starts for Horseradish_11:

(Start: 39 @6805 has 86 MA's), (58, 6928), (83, 7069), (87, 7120), (88, 7126),

Gene: Horus_10 Start: 6480, Stop: 6827, Start Num: 37

Candidate Starts for Horus_10:

(29, 6444), (Start: 37 @6480 has 19 MA's), (46, 6519), (51, 6561), (61, 6633), (64, 6654), (65, 6657), (72, 6690), (77, 6717), (79, 6735), (85, 6786), (87, 6801), (88, 6807), (91, 6816),

Gene: Jabbawokkie_11 Start: 6961, Stop: 7314, Start Num: 39

Candidate Starts for Jabbawokkie_11:

(27, 6910), (28, 6916), (Start: 39 @6961 has 86 MA's), (45, 6991), (52, 7042), (65, 7147), (70, 7165), (75, 7198), (87, 7288),

Gene: Jablanski_10 Start: 7331, Stop: 7678, Start Num: 39

Candidate Starts for Jablanski_10:

(Start: 39 @7331 has 86 MA's), (57, 7439), (61, 7484), (78, 7586), (88, 7658),

Gene: JacoRen57_9 Start: 7271, Stop: 7642, Start Num: 34

Candidate Starts for JacoRen57_9:

(13, 7157), (26, 7232), (Start: 34 @7271 has 5 MA's), (69, 7481), (70, 7484), (78, 7541), (91, 7625), (92, 7634),

Gene: Jamzy_13 Start: 7256, Stop: 7594, Start Num: 39

Candidate Starts for Jamzy_13:

(19, 7169), (21, 7175), (Start: 39 @7256 has 86 MA's), (69, 7436), (71, 7451), (75, 7475), (77, 7481), (88, 7574),

Gene: Kamaru_10 Start: 6485, Stop: 6832, Start Num: 37

Candidate Starts for Kamaru_10:

(29, 6449), (Start: 37 @6485 has 19 MA's), (46, 6524), (64, 6659), (65, 6662), (72, 6695), (79, 6740), (85, 6791), (87, 6806), (91, 6821),

Gene: KayGee_10 Start: 6701, Stop: 7042, Start Num: 39

Candidate Starts for KayGee_10:

(Start: 39 @6701 has 86 MA's), (47, 6737), (63, 6860), (88, 7022),

Gene: Kenna_10 Start: 6480, Stop: 6827, Start Num: 37

Candidate Starts for Kenna_10:

(29, 6444), (Start: 37 @6480 has 19 MA's), (46, 6519), (51, 6561), (64, 6654), (65, 6657), (72, 6690), (79, 6735), (87, 6801), (91, 6816),

Gene: Kuwabara_10 Start: 6791, Stop: 7132, Start Num: 39

Candidate Starts for Kuwabara_10:

(23, 6716), (31, 6758), (Start: 39 @6791 has 86 MA's), (44, 6812), (50, 6842), (64, 6956), (65, 6959), (66, 6965), (74, 6998), (80, 7043), (86, 7103), (88, 7112), (90, 7118), (91, 7121),

Gene: Lauer_9 Start: 6750, Stop: 7091, Start Num: 39

Candidate Starts for Lauer_9:

(Start: 39 @6750 has 86 MA's), (47, 6786), (63, 6909), (67, 6924),

Gene: Leroy_10 Start: 6481, Stop: 6828, Start Num: 37

Candidate Starts for Leroy_10:

(29, 6445), (Start: 37 @6481 has 19 MA's), (46, 6520), (51, 6562), (61, 6634), (64, 6655), (65, 6658), (72, 6691), (77, 6718), (79, 6736), (85, 6787), (87, 6802), (88, 6808), (91, 6817),

Gene: Lilas_10 Start: 7484, Stop: 7831, Start Num: 39

Candidate Starts for Lilas_10:

(Start: 39 @7484 has 86 MA's), (57, 7592), (78, 7739), (88, 7811),

Gene: LitninMcQueen_10 Start: 6485, Stop: 6832, Start Num: 37

Candidate Starts for LitninMcQueen_10:

(29, 6449), (Start: 37 @6485 has 19 MA's), (46, 6524), (64, 6659), (65, 6662), (72, 6695), (79, 6740), (85, 6791), (87, 6806), (91, 6821),

Gene: LonelyBoi_10 Start: 7331, Stop: 7678, Start Num: 39
Candidate Starts for LonelyBoi_10:
(Start: 39 @7331 has 86 MA's), (57, 7439), (78, 7586), (88, 7658),

Gene: Lucky10_9 Start: 6000, Stop: 6341, Start Num: 39
Candidate Starts for Lucky10_9:
(36, 5988), (Start: 39 @6000 has 86 MA's), (53, 6093), (58, 6126), (65, 6168), (68, 6180), (74, 6207),
(76, 6225), (77, 6228), (90, 6327), (91, 6330),

Gene: Lutum_10 Start: 6480, Stop: 6827, Start Num: 37
Candidate Starts for Lutum_10:
(29, 6444), (Start: 37 @6480 has 19 MA's), (46, 6519), (51, 6561), (64, 6654), (65, 6657), (72, 6690),
(79, 6735), (87, 6801), (91, 6816),

Gene: MAnor_10 Start: 6691, Stop: 7032, Start Num: 39
Candidate Starts for MAnor_10:
(Start: 39 @6691 has 86 MA's), (47, 6727), (63, 6850), (67, 6865), (76, 6913), (88, 7012),

Gene: MScarn_12 Start: 6901, Stop: 7242, Start Num: 39
Candidate Starts for MScarn_12:
(Start: 39 @6901 has 86 MA's), (58, 7024), (83, 7165), (87, 7216), (88, 7222),

Gene: MaVan_12 Start: 7820, Stop: 8170, Start Num: 39
Candidate Starts for MaVan_12:
(24, 7760), (32, 7796), (Start: 39 @7820 has 86 MA's), (44, 7838), (49, 7862), (51, 7889), (64, 7985),
(68, 8000), (73, 8030), (80, 8084), (86, 8141),

Gene: Maco6_10 Start: 7480, Stop: 7854, Start Num: 34
Candidate Starts for Maco6_10:
(Start: 34 @7480 has 5 MA's), (53, 7591), (69, 7687), (89, 7831),

Gene: Malisha_10 Start: 7530, Stop: 7877, Start Num: 37
Candidate Starts for Malisha_10:
(7, 7341), (11, 7398), (12, 7401), (25, 7479), (29, 7494), (30, 7497), (Start: 37 @7530 has 19 MA's),
(46, 7569), (51, 7611), (57, 7644), (64, 7704), (65, 7707), (72, 7740), (79, 7785), (91, 7866),

Gene: Margaret_13 Start: 7641, Stop: 7979, Start Num: 39
Candidate Starts for Margaret_13:
(18, 7551), (19, 7554), (21, 7560), (Start: 39 @7641 has 86 MA's), (47, 7677), (56, 7740), (75, 7860),
(88, 7959),

Gene: Marteena_10 Start: 7484, Stop: 7831, Start Num: 39
Candidate Starts for Marteena_10:
(Start: 39 @7484 has 86 MA's), (57, 7592), (78, 7739), (88, 7811),

Gene: Mayweather_11 Start: 7324, Stop: 7665, Start Num: 39
Candidate Starts for Mayweather_11:
(Start: 39 @7324 has 86 MA's), (47, 7360), (63, 7483), (67, 7498), (76, 7546), (88, 7645),

Gene: Morkie_9 Start: 5962, Stop: 6303, Start Num: 39
Candidate Starts for Morkie_9:

(10, 5809), (28, 5917), (36, 5950), (Start: 39 @5962 has 86 MA's), (53, 6055), (65, 6130), (68, 6142), (74, 6169), (76, 6187), (90, 6289), (91, 6292),

Gene: MortyNRick_10 Start: 6791, Stop: 7132, Start Num: 39

Candidate Starts for MortyNRick_10:

(23, 6716), (31, 6758), (Start: 39 @6791 has 86 MA's), (44, 6812), (50, 6842), (64, 6956), (65, 6959), (66, 6965), (70, 6977), (80, 7043), (88, 7112), (90, 7118), (91, 7121),

Gene: Muddy_12 Start: 8430, Stop: 8804, Start Num: 34

Candidate Starts for Muddy_12:

(Start: 34 @8430 has 5 MA's), (53, 8541), (69, 8637), (89, 8781), (92, 8796),

Gene: MunkgeeRoachy_10 Start: 6971, Stop: 7312, Start Num: 39

Candidate Starts for MunkgeeRoachy_10:

(Start: 39 @6971 has 86 MA's), (43, 6980), (51, 7040), (64, 7133), (77, 7196), (83, 7235),

Gene: Nebkiss_7 Start: 7029, Stop: 7367, Start Num: 34

Candidate Starts for Nebkiss_7:

(Start: 34 @7029 has 5 MA's), (40, 7050), (41, 7053), (54, 7131), (57, 7137), (58, 7158), (59, 7161), (60, 7170), (69, 7212), (77, 7257), (81, 7284), (82, 7287), (86, 7338), (91, 7356),

Gene: Nibbles_12 Start: 7820, Stop: 8170, Start Num: 39

Candidate Starts for Nibbles_12:

(24, 7760), (32, 7796), (Start: 39 @7820 has 86 MA's), (44, 7838), (49, 7862), (51, 7889), (64, 7985), (68, 8000), (73, 8030), (80, 8084), (86, 8141),

Gene: Nina_11 Start: 7957, Stop: 8298, Start Num: 39

Candidate Starts for Nina_11:

(Start: 39 @7957 has 86 MA's), (43, 7966), (51, 8026), (64, 8119), (78, 8203), (83, 8221),

Gene: NoShow_10 Start: 7573, Stop: 7956, Start Num: 33

Candidate Starts for NoShow_10:

(9, 7408), (15, 7483), (20, 7513), (Start: 33 @7573 has 1 MA's), (42, 7603), (51, 7666), (55, 7693), (64, 7771), (65, 7774), (66, 7780), (69, 7789), (77, 7834), (91, 7933),

Gene: Nodigi_12 Start: 7925, Stop: 8263, Start Num: 39

Candidate Starts for Nodigi_12:

(1, 7541), (2, 7628), (19, 7841), (Start: 39 @7925 has 86 MA's), (56, 8024), (75, 8144), (76, 8147), (87, 8237), (88, 8243),

Gene: ODay_10 Start: 6511, Stop: 6858, Start Num: 38

Candidate Starts for ODay_10:

(4, 6226), (5, 6259), (26, 6460), (Start: 38 @6511 has 2 MA's), (57, 6622), (70, 6703), (74, 6724), (76, 6742), (80, 6769), (90, 6841), (91, 6844),

Gene: Orla_12 Start: 7929, Stop: 8267, Start Num: 39

Candidate Starts for Orla_12:

(2, 7632), (19, 7845), (Start: 39 @7929 has 86 MA's), (56, 8028), (75, 8148), (76, 8151), (87, 8241), (88, 8247),

Gene: Periwinkle_10 Start: 6480, Stop: 6827, Start Num: 37

Candidate Starts for Periwinkle_10:

(29, 6444), (Start: 37 @6480 has 19 MA's), (46, 6519), (51, 6561), (61, 6633), (64, 6654), (65, 6657), (72, 6690), (79, 6735), (85, 6786), (91, 6816),

Gene: Phabuloso_10 Start: 6485, Stop: 6832, Start Num: 37

Candidate Starts for Phabuloso_10:

(29, 6449), (Start: 37 @6485 has 19 MA's), (46, 6524), (64, 6659), (65, 6662), (72, 6695), (79, 6740), (85, 6791), (87, 6806), (91, 6821),

Gene: Phistory_10 Start: 6469, Stop: 6816, Start Num: 37

Candidate Starts for Phistory_10:

(29, 6433), (Start: 37 @6469 has 19 MA's), (46, 6508), (51, 6550), (64, 6643), (65, 6646), (79, 6724), (85, 6775), (87, 6790), (91, 6805),

Gene: PhorbesPhlower_9 Start: 5962, Stop: 6303, Start Num: 39

Candidate Starts for PhorbesPhlower_9:

(10, 5809), (28, 5917), (36, 5950), (Start: 39 @5962 has 86 MA's), (53, 6055), (65, 6130), (68, 6142), (74, 6169), (76, 6187), (90, 6289), (91, 6292),

Gene: Pollux_10 Start: 7484, Stop: 7831, Start Num: 39

Candidate Starts for Pollux_10:

(Start: 39 @7484 has 86 MA's), (57, 7592), (78, 7739), (88, 7811),

Gene: Pons_10 Start: 6703, Stop: 7044, Start Num: 39

Candidate Starts for Pons_10:

(Start: 39 @6703 has 86 MA's), (47, 6739), (63, 6862), (67, 6877), (76, 6925), (88, 7024),

Gene: Posh_10 Start: 7478, Stop: 7825, Start Num: 39

Candidate Starts for Posh_10:

(Start: 39 @7478 has 86 MA's), (57, 7586), (78, 7733), (88, 7805),

Gene: PotPie_10 Start: 7554, Stop: 7895, Start Num: 39

Candidate Starts for PotPie_10:

(Start: 39 @7554 has 86 MA's), (47, 7590), (63, 7713), (88, 7875),

Gene: PsychoKiller_10 Start: 6923, Stop: 7264, Start Num: 39

Candidate Starts for PsychoKiller_10:

(Start: 39 @6923 has 86 MA's), (43, 6932), (51, 6992), (64, 7085), (83, 7187),

Gene: Pytheas_10 Start: 7331, Stop: 7678, Start Num: 39

Candidate Starts for Pytheas_10:

(Start: 39 @7331 has 86 MA's), (57, 7439), (61, 7484), (78, 7586), (88, 7658),

Gene: Quasar_10 Start: 7538, Stop: 7879, Start Num: 39

Candidate Starts for Quasar_10:

(Start: 39 @7538 has 86 MA's), (43, 7547), (51, 7607), (64, 7700), (83, 7802),

Gene: RanchParmCat_13 Start: 7641, Stop: 7979, Start Num: 39

Candidate Starts for RanchParmCat_13:

(Start: 39 @7641 has 86 MA's), (47, 7677), (56, 7740), (75, 7860), (88, 7959),

Gene: RedBaron_11 Start: 6968, Stop: 7309, Start Num: 39

Candidate Starts for RedBaron_11:

(Start: 39 @6968 has 86 MA's), (43, 6977), (51, 7037), (64, 7130), (83, 7232),

Gene: ShawBrad_10 Start: 6485, Stop: 6832, Start Num: 37

Candidate Starts for ShawBrad_10:

(29, 6449), (Start: 37 @6485 has 19 MA's), (46, 6524), (51, 6566), (61, 6638), (64, 6659), (65, 6662), (72, 6695), (79, 6740), (85, 6791), (87, 6806), (88, 6812), (91, 6821),

Gene: SheckWes_9 Start: 6691, Stop: 7032, Start Num: 39

Candidate Starts for SheckWes_9:

(Start: 39 @6691 has 86 MA's), (47, 6727), (56, 6790), (63, 6850), (67, 6865), (76, 6913), (88, 7012),

Gene: SketchMex_9 Start: 6907, Stop: 7248, Start Num: 39

Candidate Starts for SketchMex_9:

(Start: 39 @6907 has 86 MA's), (58, 7030), (83, 7171), (87, 7222), (88, 7228),

Gene: Sleepyhead_9 Start: 6893, Stop: 7246, Start Num: 35

Candidate Starts for Sleepyhead_9:

(Start: 35 @6893 has 1 MA's), (57, 7016), (84, 7196),

Gene: Sopespian_10 Start: 6923, Stop: 7264, Start Num: 39

Candidate Starts for Sopespian_10:

(Start: 39 @6923 has 86 MA's), (43, 6932), (51, 6992), (64, 7085), (83, 7187),

Gene: Soul22_10 Start: 6437, Stop: 6790, Start Num: 39

Candidate Starts for Soul22_10:

(27, 6386), (28, 6392), (Start: 39 @6437 has 86 MA's), (45, 6467), (52, 6518), (65, 6623), (70, 6641), (75, 6674), (87, 6764),

Gene: Spooky_10 Start: 6478, Stop: 6825, Start Num: 37

Candidate Starts for Spooky_10:

(3, 6193), (6, 6265), (8, 6292), (14, 6367), (25, 6427), (30, 6445), (Start: 37 @6478 has 19 MA's), (46, 6517), (51, 6559), (57, 6592), (64, 6652), (65, 6655), (79, 6733), (85, 6784), (91, 6814),

Gene: Squiddly_11 Start: 7165, Stop: 7512, Start Num: 37

Candidate Starts for Squiddly_11:

(29, 7129), (Start: 37 @7165 has 19 MA's), (46, 7204), (51, 7246), (64, 7339), (65, 7342), (79, 7420), (85, 7471), (87, 7486), (91, 7501),

Gene: Starburst_11 Start: 6923, Stop: 7264, Start Num: 39

Candidate Starts for Starburst_11:

(Start: 39 @6923 has 86 MA's), (43, 6932), (51, 6992), (64, 7085), (83, 7187),

Gene: SteamedHams_12 Start: 6942, Stop: 7283, Start Num: 39

Candidate Starts for SteamedHams_12:

(Start: 39 @6942 has 86 MA's), (65, 7107), (87, 7257), (88, 7263),

Gene: SummitAcademy_9 Start: 6769, Stop: 7110, Start Num: 39

Candidate Starts for SummitAcademy_9:

(Start: 39 @6769 has 86 MA's), (47, 6805), (63, 6928), (88, 7090),

Gene: Survivors_12 Start: 7674, Stop: 8024, Start Num: 39

Candidate Starts for Survivors_12:

(24, 7614), (32, 7650), (Start: 39 @7674 has 86 MA's), (44, 7692), (49, 7716), (51, 7743), (64, 7839), (68, 7854), (73, 7884), (80, 7938), (86, 7995),

Gene: SweatNTears_12 Start: 7427, Stop: 7768, Start Num: 39
Candidate Starts for SweatNTears_12:
(Start: 39 @7427 has 86 MA's), (58, 7550), (83, 7691), (87, 7742), (88, 7748),

Gene: Tolls_12 Start: 6945, Stop: 7286, Start Num: 39
Candidate Starts for Tolls_12:
(Start: 39 @6945 has 86 MA's), (65, 7110), (87, 7260), (88, 7266),

Gene: Troje_10 Start: 6901, Stop: 7242, Start Num: 39
Candidate Starts for Troje_10:
(Start: 39 @6901 has 86 MA's), (58, 7024), (83, 7165), (87, 7216), (88, 7222),

Gene: Typhonomachy_11 Start: 6923, Stop: 7264, Start Num: 39
Candidate Starts for Typhonomachy_11:
(16, 6824), (17, 6827), (18, 6833), (Start: 39 @6923 has 86 MA's), (43, 6932), (51, 6992), (64, 7085),
(83, 7187),

Gene: Vine_11 Start: 7698, Stop: 8039, Start Num: 39
Candidate Starts for Vine_11:
(Start: 39 @7698 has 86 MA's), (47, 7734), (63, 7857), (67, 7872), (88, 8019),

Gene: Whitney_10 Start: 6480, Stop: 6827, Start Num: 37
Candidate Starts for Whitney_10:
(29, 6444), (Start: 37 @6480 has 19 MA's), (46, 6519), (51, 6561), (61, 6633), (64, 6654), (65, 6657),
(72, 6690), (79, 6735), (85, 6786), (87, 6801), (91, 6816),

Gene: Wrigley_10 Start: 7328, Stop: 7675, Start Num: 39
Candidate Starts for Wrigley_10:
(22, 7250), (Start: 39 @7328 has 86 MA's), (57, 7436), (78, 7583), (88, 7655),

Gene: Yakult_11 Start: 6834, Stop: 7175, Start Num: 39
Candidate Starts for Yakult_11:
(18, 6744), (19, 6747), (21, 6753), (Start: 39 @6834 has 86 MA's), (48, 6876), (51, 6906), (56, 6936),
(75, 7056), (76, 7059), (88, 7155),

Gene: Yarn_9 Start: 6935, Stop: 7276, Start Num: 39
Candidate Starts for Yarn_9:
(Start: 39 @6935 has 86 MA's), (65, 7100), (87, 7250), (88, 7256),

Gene: Yoshi_10 Start: 6437, Stop: 6790, Start Num: 39
Candidate Starts for Yoshi_10:
(27, 6386), (28, 6392), (Start: 39 @6437 has 86 MA's), (45, 6467), (52, 6518), (65, 6623), (70, 6641),
(75, 6674), (87, 6764),

Gene: Yucky_12 Start: 7558, Stop: 7899, Start Num: 39
Candidate Starts for Yucky_12:
(Start: 39 @7558 has 86 MA's), (47, 7594), (63, 7717), (88, 7879),

Gene: Yummy_11 Start: 6805, Stop: 7146, Start Num: 39
Candidate Starts for Yummy_11:
(Start: 39 @6805 has 86 MA's), (58, 6928), (83, 7069), (87, 7120), (88, 7126),

Gene: Zapner_11 Start: 6962, Stop: 7315, Start Num: 39

Candidate Starts for Zapner_11:

(27, 6911), (28, 6917), (Start: 39 @6962 has 86 MA's), (45, 6992), (52, 7043), (65, 7148), (70, 7166), (75, 7199), (87, 7289),

Gene: Zareef_14 Start: 7797, Stop: 8171, Start Num: 32

Candidate Starts for Zareef_14:

(24, 7761), (32, 7797), (Start: 39 @7821 has 86 MA's), (44, 7839), (49, 7863), (51, 7890), (64, 7986), (68, 8001), (73, 8031), (80, 8085), (86, 8142),