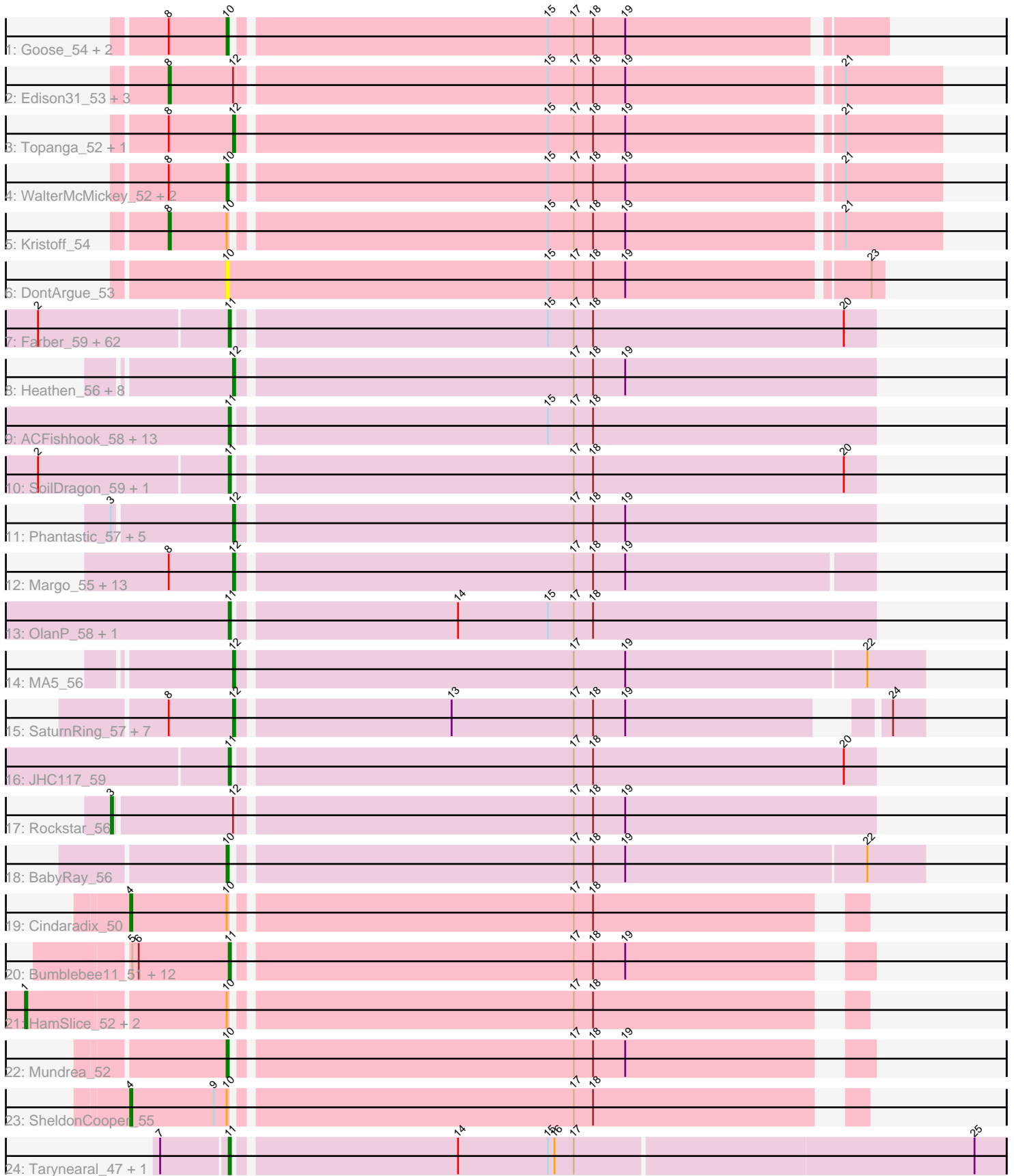


Pham 193789



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 193789 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193789 has 157 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Goose_54, Chupacabra_53, OKCentral2016_53
- Track 2 : Edison31_53, DustyMartin_58, Shapes_58, Rowdy_58
- Track 3 : Topanga_52, RhynO_55
- Track 4 : WalterMcMickey_52, Rebeuca_54, Twister_52
- Track 5 : Kristoff_54
- Track 6 : DontArgue_53
- Track 7 : Farber_59, Phoxy_59, Wooldri_61, Malinsilva_61, Hercules11_59, Aglet_60, Fernando_59, Spike509_59, GtownJaz_59, Phoebe_60, GingkoMaracino_59, Grum1_59, Sabia_59, AgronaGT15_58, AugsMagnumOpus_62, Dieselweasel_60, Zetzy_58, Microwolf_59, Beauxregard13_59, SoYo_59, Vix_59, Taurus_60, Watson_59, Lilith_60, DaHudson_59, LBerry_60, Snickers_59, MadMarie_59, StepMih_59, Grub_59, BreSam8_59, MuchMore_62, Penny1_60, KADY_59, MoneyMay_59, Soshari_61, Methuselah_55, HashRod_60, Tiffany_59, BuzzBuzz_57, Grif_59, Marie_59, Anubis_62, Colbster_59, Sabinator_58, LugYA_62, Stagni_59, Rummer_58, Bxz2_55, EpicPhail_60, JenCasNa_60, LarryKay_59, Misomonster_60, Louie6_58, PGHhamlin_61, MarQuardt_59, Mainiac_59, PotatoSplit_61, P28Green_60, Daishi_58, Cullens_59, Pembroke_59, Ollie_59
- Track 8 : Heathen_56, BabyJohn_54, Scout_56, Fred313_56, DropBear_56, Kachowdy_56, Chiqui_54, Marchesa_56, HelDan_56
- Track 9 : ACFishhook_58, Heliosoles_58, Manu_59, Phranny_60, Reba_59, Kalnoky_60, Marius_60, Groupthink_60, HaveUMetTed_60, Pawn_59, PhishRPhriends_57, PurpleHaze_59, Kalb97_60, JeppNRM_60
- Track 10 : SoilDragon_59, Jobu08_58
- Track 11 : Phantastic_57, JF2_54, MK4_56, B1_51, JF4_54, Isca_55
- Track 12 : Margo_55, Panamaxus_53, Lambert1_55, QuinnKiro_54, Caviar_55, Todacoro_55, Norbert_54, Hookmount_55, Veracruz_54, Noella_55, ResDef_55, Texage_54, Popcicle_55, Pocahontas_55
- Track 13 : OlanP_58, Gemma_58
- Track 14 : MA5_56
- Track 15 : SaturnRing_57, Giroux_57, Bugatti_57, Idleandcovert_57, TNguyen7_57, BlueBird_58, Pistachio_58, Puppy_58
- Track 16 : JHC117_59
- Track 17 : Rockstar_56
- Track 18 : BabyRay_56
- Track 19 : Cindaradix_50

- Track 20 : Bumblebee11_51, Cici_52, Xena_51, Datway_52, Wile_52, PetiteSangsue_52, AbbysRanger_52, Backyardigan_51, Perplexer_52, Katalie136_52, Achebe_51, Badger_51, Morpher26_52
- Track 21 : HamSlice_52, Kampy_53, TinaFeyge_53
- Track 22 : Mundrea_52
- Track 23 : SheldonCooper_55
- Track 24 : Tarynearal_47, Swirley_51

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

The start number called the most often in the published annotations is 11, it was called in 95 of the 143 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ACFishhook_58, AbbysRanger_52, Achebe_51, Aglet_60, AgronaGT15_58, Anubis_62, AugsMagnumOpus_62, Backyardigan_51, Badger_51, Beauxregard13_59, BreSam8_59, Bumblebee11_51, BuzzBuzz_57, Bxz2_55, Cici_52, Colbster_59, Cullens_59, DaHudson_59, Daishi_58, Datway_52, Dieselweasel_60, EpicPhail_60, Farber_59, Fernando_59, Gemma_58, GingkoMaracino_59, Grif_59, Groupthink_60, Grub_59, Grum1_59, GtownJaz_59, HashRod_60, HaveUMetTed_60, Heliosoles_58, Hercules11_59, JHC117_59, JenCasNa_60, JeppNRM_60, Jobu08_58, KADY_59, Kalb97_60, Kalnoky_60, Katalie136_52, LBerry_60, LarryKay_59, Lilith_60, Louie6_58, LugYA_62, MadMarie_59, Mainiac_59, Malinsilva_61, Manu_59, MarQuardt_59, Marie_59, Marius_60, Methuselah_55, Microwolf_59, Misomonster_60, MoneyMay_59, Morpher26_52, MuchMore_62, OlanP_58, Ollie_59, P28Green_60, PGHhamlin_61, Pawn_59, Pembroke_59, Penny1_60, Perplexer_52, PetiteSangsue_52, PhishRPhriends_57, Phoebe_60, Phoxy_59, Phranny_60, PotatoSplit_61, PurpleHaze_59, Reba_59, Rummer_58, Sabia_59, Sabinator_58, Snickers_59, SoYo_59, SoilDragon_59, Soshari_61, Spike509_59, Stagni_59, StepMih_59, Swirley_51, Tarynearal_47, Taurus_60, Tiffany_59, Vix_59, Watson_59, Wile_52, Wooldri_61, Xena_51, Zetzy_58,

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

-

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

- B1_51, BabyJohn_54, BabyRay_56, BlueBird_58, Bugatti_57, Caviar_55, Chiqui_54, Chupacabra_53, Cindaradix_50, DontArgue_53, DropBear_56, DustyMartin_58, Edison31_53, Fred313_56, Giroux_57, Goose_54, HamSlice_52, Heathen_56, HelDan_56, Hookmount_55, Idleandcovert_57, Isca_55, JF2_54, JF4_54, Kachowdy_56, Kampy_53, Kristoff_54, Lambert1_55, MA5_56, MK4_56, Marchesa_56, Margo_55, Mundrea_52, Noella_55, Norbert_54, OKCentral2016_53, Panamaxus_53, Phantastic_57, Pistachio_58, Pocahontas_55, Popcicle_55, Puppy_58, QuinnKiro_54, Rebeuca_54, ResDef_55, RhynO_55, Rockstar_56, Rowdy_58, SaturnRing_57, Scout_56, Shapes_58, SheldonCooper_55, TNguyen7_57, Texage_54, TinaFeyge_53, Todacoro_55, Topanga_52, Twister_52, Veracruz_54, WalterMcMickey_52,

Summary by start number:

Start 1:

- Found in 3 of 157 (1.9%) of genes in pham
- Manual Annotations of this start: 3 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HamSlice_52 (A4), Kamy_53 (A4), TinaFeyge_53 (A4),

Start 3:

- Found in 7 of 157 (4.5%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Rockstar_56 (A3),

Start 4:

- Found in 2 of 157 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cindaradix_50 (A4), SheldonCooper_55 (A4),

Start 8:

- Found in 35 of 157 (22.3%) of genes in pham
- Manual Annotations of this start: 2 of 143
- Called 14.3% of time when present
- Phage (with cluster) where this start called: DustyMartin_58 (A10), Edison31_53 (A10), Kristoff_54 (A10), Rowdy_58 (A10), Shapes_58 (A10),

Start 10:

- Found in 15 of 157 (9.6%) of genes in pham
- Manual Annotations of this start: 8 of 143
- Called 60.0% of time when present
- Phage (with cluster) where this start called: BabyRay_56 (A3), Chupacabra_53 (A10), DontArgue_53 (A10), Goose_54 (A10), Mundrea_52 (A4), OKCentral2016_53 (A10), Rebeuca_54 (A10), Twister_52 (A10), WalterMcMickey_52 (A10),

Start 11:

- Found in 97 of 157 (61.8%) of genes in pham
- Manual Annotations of this start: 95 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ACFishhook_58 (A3), AbbysRanger_52 (A4), Achebe_51 (A4), Aglet_60 (A3), AgronaGT15_58 (A3), Anubis_62 (A3), AugsMagnumOpus_62 (A3), Backyardigan_51 (A4), Badger_51 (A4), Beauxregard13_59 (A3), BreSam8_59 (A3), Bumblebee11_51 (A4), BuzzBuzz_57 (A3), Bxz2_55 (A3), Cici_52 (A4), Colbster_59 (A3), Cullens_59 (A3), DaHudson_59 (A3), Daishi_58 (A3), Datway_52 (A4), Dieselweasel_60 (A3), EpicPhail_60 (A3), Farber_59 (A3), Fernando_59 (A3), Gemma_58 (A3), GingkoMaracino_59 (A3), Grif_59 (A3), Groupthink_60 (A3), Grub_59 (A3), Grum1_59 (A3), GtownJaz_59 (A3), HashRod_60 (A3), HaveUMetTed_60 (A3), Heliosoles_58 (A3), Hercules11_59 (A3), JHC117_59 (A3), JenCasNa_60 (A3), JeppNRM_60 (A3), Jobu08_58 (A3), KADY_59 (A3), Kalb97_60 (A3), Kalnoky_60 (A3), Katalie136_52 (A4), LBerry_60 (A3), LarryKay_59 (A3), Lilith_60 (A3), Louie6_58 (A3), LugYA_62 (A3), MadMarie_59 (A3), Mainiac_59 (A3), Malinsilva_61 (A3), Manu_59 (A3), MarQuardt_59 (A3),

Marie_59 (A3), Marius_60 (A3), Methuselah_55 (A3), Microwolf_59 (A3), Misomonster_60 (A3), MoneyMay_59 (A3), Morpher26_52 (A4), MuchMore_62 (A3), OlanP_58 (A3), Ollie_59 (A3), P28Green_60 (A3), PGHhamlin_61 (A3), Pawn_59 (A3), Pembroke_59 (A3), Penny1_60 (A3), Perplexer_52 (A4), PetiteSangsue_52 (A4), PhishRPhriends_57 (A3), Phoebe_60 (A3), Phoxy_59 (A3), Phranny_60 (A3), PotatoSplit_61 (A3), PurpleHaze_59 (A3), Reba_59 (A3), Rummer_58 (A3), Sabia_59 (A3), Sabinator_58 (A3), Snickers_59 (A3), SoYo_59 (A3), SoilDragon_59 (A3), Soshari_61 (A3), Spike509_59 (A3), Stagni_59 (A3), StepMih_59 (A3), Swirley_51 (A5), Tarynearal_47 (A5), Taurus_60 (A3), Tiffany_59 (A3), Vix_59 (A3), Watson_59 (A3), Wile_52 (A4), Wooldri_61 (A3), Xena_51 (A4), Zetzy_58 (A3),

Start 12:

- Found in 45 of 157 (28.7%) of genes in pham
- Manual Annotations of this start: 32 of 143
- Called 88.9% of time when present
- Phage (with cluster) where this start called: B1_51 (A3), BabyJohn_54 (A3), BlueBird_58 (A3), Bugatti_57 (A3), Caviar_55 (A3), Chiqui_54 (A3), DropBear_56 (A3), Fred313_56 (A3), Giroux_57 (A3), Heathen_56 (A3), HelDan_56 (A3), Hookmount_55 (A3), Idleandcovert_57 (A3), Isca_55 (A3), JF2_54 (A3), JF4_54 (A3), Kachowdy_56 (A3), Lambert1_55 (A3), MA5_56 (A3), MK4_56 (A3), Marchesa_56 (A3), Margo_55 (A3), Noella_55 (A3), Norbert_54 (A3), Panamaxus_53 (A3), Phantastic_57 (A3), Pistachio_58 (A3), Pocahontas_55 (A3), Popcicle_55 (A3), Puppy_58 (A3), QuinnKiro_54 (A3), ResDef_55 (A3), RhynO_55 (A10), SaturnRing_57 (A3), Scout_56 (A3), TNguyen7_57 (A3), Texage_54 (A3), Todacoro_55 (A3), Topanga_52 (A10), Veracruz_54 (A3),

Summary by clusters:

There are 4 clusters represented in this pham: A3, A5, A4, A10,

Info for manual annotations of cluster A10:

- Start number 8 was manually annotated 2 times for cluster A10.
- Start number 10 was manually annotated 6 times for cluster A10.
- Start number 12 was manually annotated 2 times for cluster A10.

Info for manual annotations of cluster A3:

- Start number 3 was manually annotated 1 time for cluster A3.
- Start number 10 was manually annotated 1 time for cluster A3.
- Start number 11 was manually annotated 80 times for cluster A3.
- Start number 12 was manually annotated 30 times for cluster A3.

Info for manual annotations of cluster A4:

- Start number 1 was manually annotated 3 times for cluster A4.
- Start number 4 was manually annotated 2 times for cluster A4.
- Start number 10 was manually annotated 1 time for cluster A4.
- Start number 11 was manually annotated 13 times for cluster A4.

Info for manual annotations of cluster A5:

- Start number 11 was manually annotated 2 times for cluster A5.

Gene Information:

Gene: ACFishhook_58 Start: 37950, Stop: 37657, Start Num: 11
Candidate Starts for ACFishhook_58:
(Start: 11 @37950 has 95 MA's), (15, 37809), (17, 37797), (18, 37788),

Gene: AbbysRanger_52 Start: 37346, Stop: 37068, Start Num: 11
Candidate Starts for AbbysRanger_52:
(5, 37391), (6, 37388), (Start: 11 @37346 has 95 MA's), (17, 37193), (18, 37184), (19, 37169),

Gene: Achebe_51 Start: 37329, Stop: 37051, Start Num: 11
Candidate Starts for Achebe_51:
(5, 37374), (6, 37371), (Start: 11 @37329 has 95 MA's), (17, 37176), (18, 37167), (19, 37152),

Gene: Aglet_60 Start: 37993, Stop: 37700, Start Num: 11
Candidate Starts for Aglet_60:
(2, 38080), (Start: 11 @37993 has 95 MA's), (15, 37852), (17, 37840), (18, 37831), (20, 37714),

Gene: AgronaGT15_58 Start: 37841, Stop: 37548, Start Num: 11
Candidate Starts for AgronaGT15_58:
(2, 37928), (Start: 11 @37841 has 95 MA's), (15, 37700), (17, 37688), (18, 37679), (20, 37562),

Gene: Anubis_62 Start: 37879, Stop: 37586, Start Num: 11
Candidate Starts for Anubis_62:
(2, 37966), (Start: 11 @37879 has 95 MA's), (15, 37738), (17, 37726), (18, 37717), (20, 37600),

Gene: AugsMagnumOpus_62 Start: 37984, Stop: 37691, Start Num: 11
Candidate Starts for AugsMagnumOpus_62:
(2, 38071), (Start: 11 @37984 has 95 MA's), (15, 37843), (17, 37831), (18, 37822), (20, 37705),

Gene: B1_51 Start: 35979, Stop: 35686, Start Num: 12
Candidate Starts for B1_51:
(Start: 3 @36033 has 1 MA's), (Start: 12 @35979 has 32 MA's), (17, 35826), (18, 35817), (19, 35802),

Gene: BabyJohn_54 Start: 37800, Stop: 37507, Start Num: 12
Candidate Starts for BabyJohn_54:
(Start: 12 @37800 has 32 MA's), (17, 37647), (18, 37638), (19, 37623),

Gene: BabyRay_56 Start: 37770, Stop: 37456, Start Num: 10
Candidate Starts for BabyRay_56:
(Start: 10 @37770 has 8 MA's), (17, 37617), (18, 37608), (19, 37593), (22, 37482),

Gene: Backyardigan_51 Start: 37362, Stop: 37084, Start Num: 11
Candidate Starts for Backyardigan_51:
(5, 37407), (6, 37404), (Start: 11 @37362 has 95 MA's), (17, 37209), (18, 37200), (19, 37185),

Gene: Badger_51 Start: 37330, Stop: 37052, Start Num: 11
Candidate Starts for Badger_51:
(5, 37375), (6, 37372), (Start: 11 @37330 has 95 MA's), (17, 37177), (18, 37168), (19, 37153),

Gene: Beauxregard13_59 Start: 37996, Stop: 37703, Start Num: 11
Candidate Starts for Beauxregard13_59:
(2, 38083), (Start: 11 @37996 has 95 MA's), (15, 37855), (17, 37843), (18, 37834), (20, 37717),

Gene: BlueBird_58 Start: 37811, Stop: 37518, Start Num: 12

Candidate Starts for BlueBird_58:

(Start: 8 @37841 has 2 MA's), (Start: 12 @37811 has 32 MA's), (13, 37715), (17, 37658), (18, 37649), (19, 37634), (24, 37532),

Gene: BreSam8_59 Start: 37986, Stop: 37693, Start Num: 11

Candidate Starts for BreSam8_59:

(2, 38073), (Start: 11 @37986 has 95 MA's), (15, 37845), (17, 37833), (18, 37824), (20, 37707),

Gene: Bugatti_57 Start: 37811, Stop: 37518, Start Num: 12

Candidate Starts for Bugatti_57:

(Start: 8 @37841 has 2 MA's), (Start: 12 @37811 has 32 MA's), (13, 37715), (17, 37658), (18, 37649), (19, 37634), (24, 37532),

Gene: Bumblebee11_51 Start: 37332, Stop: 37054, Start Num: 11

Candidate Starts for Bumblebee11_51:

(5, 37377), (6, 37374), (Start: 11 @37332 has 95 MA's), (17, 37179), (18, 37170), (19, 37155),

Gene: BuzzBuzz_57 Start: 38020, Stop: 37727, Start Num: 11

Candidate Starts for BuzzBuzz_57:

(2, 38107), (Start: 11 @38020 has 95 MA's), (15, 37879), (17, 37867), (18, 37858), (20, 37741),

Gene: Bxz2_55 Start: 38027, Stop: 37734, Start Num: 11

Candidate Starts for Bxz2_55:

(2, 38114), (Start: 11 @38027 has 95 MA's), (15, 37886), (17, 37874), (18, 37865), (20, 37748),

Gene: Caviar_55 Start: 37764, Stop: 37474, Start Num: 12

Candidate Starts for Caviar_55:

(Start: 8 @37794 has 2 MA's), (Start: 12 @37764 has 32 MA's), (17, 37611), (18, 37602), (19, 37587),

Gene: Chiqui_54 Start: 37809, Stop: 37516, Start Num: 12

Candidate Starts for Chiqui_54:

(Start: 12 @37809 has 32 MA's), (17, 37656), (18, 37647), (19, 37632),

Gene: Chupacabra_53 Start: 37296, Stop: 37006, Start Num: 10

Candidate Starts for Chupacabra_53:

(Start: 8 @37323 has 2 MA's), (Start: 10 @37296 has 8 MA's), (15, 37155), (17, 37143), (18, 37134), (19, 37119),

Gene: Cici_52 Start: 37347, Stop: 37069, Start Num: 11

Candidate Starts for Cici_52:

(5, 37392), (6, 37389), (Start: 11 @37347 has 95 MA's), (17, 37194), (18, 37185), (19, 37170),

Gene: Cindaradix_50 Start: 37055, Stop: 36735, Start Num: 4

Candidate Starts for Cindaradix_50:

(Start: 4 @37055 has 2 MA's), (Start: 10 @37010 has 8 MA's), (17, 36857), (18, 36848),

Gene: Colbster_59 Start: 37996, Stop: 37703, Start Num: 11

Candidate Starts for Colbster_59:

(2, 38083), (Start: 11 @37996 has 95 MA's), (15, 37855), (17, 37843), (18, 37834), (20, 37717),

Gene: Cullens_59 Start: 37992, Stop: 37699, Start Num: 11

Candidate Starts for Cullens_59:

(2, 38079), (Start: 11 @37992 has 95 MA's), (15, 37851), (17, 37839), (18, 37830), (20, 37713),

Gene: DaHudson_59 Start: 37985, Stop: 37692, Start Num: 11
Candidate Starts for DaHudson_59:
(2, 38072), (Start: 11 @37985 has 95 MA's), (15, 37844), (17, 37832), (18, 37823), (20, 37706),

Gene: Daishi_58 Start: 36861, Stop: 36568, Start Num: 11
Candidate Starts for Daishi_58:
(2, 36948), (Start: 11 @36861 has 95 MA's), (15, 36720), (17, 36708), (18, 36699), (20, 36582),

Gene: Datway_52 Start: 37318, Stop: 37040, Start Num: 11
Candidate Starts for Datway_52:
(5, 37363), (6, 37360), (Start: 11 @37318 has 95 MA's), (17, 37165), (18, 37156), (19, 37141),

Gene: Dieselweasel_60 Start: 37995, Stop: 37702, Start Num: 11
Candidate Starts for Dieselweasel_60:
(2, 38082), (Start: 11 @37995 has 95 MA's), (15, 37854), (17, 37842), (18, 37833), (20, 37716),

Gene: DontArgue_53 Start: 36479, Stop: 36180, Start Num: 10
Candidate Starts for DontArgue_53:
(Start: 10 @36479 has 8 MA's), (15, 36329), (17, 36317), (18, 36308), (19, 36293), (23, 36185),

Gene: DropBear_56 Start: 37707, Stop: 37414, Start Num: 12
Candidate Starts for DropBear_56:
(Start: 12 @37707 has 32 MA's), (17, 37554), (18, 37545), (19, 37530),

Gene: DustyMartin_58 Start: 37428, Stop: 37081, Start Num: 8
Candidate Starts for DustyMartin_58:
(Start: 8 @37428 has 2 MA's), (Start: 12 @37398 has 32 MA's), (15, 37257), (17, 37245), (18, 37236),
(19, 37221), (21, 37125),

Gene: Edison31_53 Start: 37356, Stop: 37009, Start Num: 8
Candidate Starts for Edison31_53:
(Start: 8 @37356 has 2 MA's), (Start: 12 @37326 has 32 MA's), (15, 37185), (17, 37173), (18, 37164),
(19, 37149), (21, 37053),

Gene: EpicPhail_60 Start: 37996, Stop: 37703, Start Num: 11
Candidate Starts for EpicPhail_60:
(2, 38083), (Start: 11 @37996 has 95 MA's), (15, 37855), (17, 37843), (18, 37834), (20, 37717),

Gene: Farber_59 Start: 37982, Stop: 37689, Start Num: 11
Candidate Starts for Farber_59:
(2, 38069), (Start: 11 @37982 has 95 MA's), (15, 37841), (17, 37829), (18, 37820), (20, 37703),

Gene: Fernando_59 Start: 37992, Stop: 37699, Start Num: 11
Candidate Starts for Fernando_59:
(2, 38079), (Start: 11 @37992 has 95 MA's), (15, 37851), (17, 37839), (18, 37830), (20, 37713),

Gene: Fred313_56 Start: 37398, Stop: 37105, Start Num: 12
Candidate Starts for Fred313_56:
(Start: 12 @37398 has 32 MA's), (17, 37245), (18, 37236), (19, 37221),

Gene: Gemma_58 Start: 37874, Stop: 37581, Start Num: 11
Candidate Starts for Gemma_58:

(Start: 11 @37874 has 95 MA's), (14, 37775), (15, 37733), (17, 37721), (18, 37712),

Gene: GingkoMaracino_59 Start: 37878, Stop: 37585, Start Num: 11

Candidate Starts for GingkoMaracino_59:

(2, 37965), (Start: 11 @37878 has 95 MA's), (15, 37737), (17, 37725), (18, 37716), (20, 37599),

Gene: Giroux_57 Start: 37810, Stop: 37517, Start Num: 12

Candidate Starts for Giroux_57:

(Start: 8 @37840 has 2 MA's), (Start: 12 @37810 has 32 MA's), (13, 37714), (17, 37657), (18, 37648), (19, 37633), (24, 37531),

Gene: Goose_54 Start: 37112, Stop: 36822, Start Num: 10

Candidate Starts for Goose_54:

(Start: 8 @37139 has 2 MA's), (Start: 10 @37112 has 8 MA's), (15, 36971), (17, 36959), (18, 36950), (19, 36935),

Gene: Grif_59 Start: 38067, Stop: 37774, Start Num: 11

Candidate Starts for Grif_59:

(2, 38154), (Start: 11 @38067 has 95 MA's), (15, 37926), (17, 37914), (18, 37905), (20, 37788),

Gene: Groupthink_60 Start: 37878, Stop: 37585, Start Num: 11

Candidate Starts for Groupthink_60:

(Start: 11 @37878 has 95 MA's), (15, 37737), (17, 37725), (18, 37716),

Gene: Grub_59 Start: 37984, Stop: 37691, Start Num: 11

Candidate Starts for Grub_59:

(2, 38071), (Start: 11 @37984 has 95 MA's), (15, 37843), (17, 37831), (18, 37822), (20, 37705),

Gene: Grum1_59 Start: 37992, Stop: 37699, Start Num: 11

Candidate Starts for Grum1_59:

(2, 38079), (Start: 11 @37992 has 95 MA's), (15, 37851), (17, 37839), (18, 37830), (20, 37713),

Gene: GtownJaz_59 Start: 37994, Stop: 37701, Start Num: 11

Candidate Starts for GtownJaz_59:

(2, 38081), (Start: 11 @37994 has 95 MA's), (15, 37853), (17, 37841), (18, 37832), (20, 37715),

Gene: HamSlice_52 Start: 37468, Stop: 37103, Start Num: 1

Candidate Starts for HamSlice_52:

(Start: 1 @37468 has 3 MA's), (Start: 10 @37378 has 8 MA's), (17, 37225), (18, 37216),

Gene: HashRod_60 Start: 38020, Stop: 37727, Start Num: 11

Candidate Starts for HashRod_60:

(2, 38107), (Start: 11 @38020 has 95 MA's), (15, 37879), (17, 37867), (18, 37858), (20, 37741),

Gene: HaveUMetTed_60 Start: 37863, Stop: 37570, Start Num: 11

Candidate Starts for HaveUMetTed_60:

(Start: 11 @37863 has 95 MA's), (15, 37722), (17, 37710), (18, 37701),

Gene: Heathen_56 Start: 37496, Stop: 37203, Start Num: 12

Candidate Starts for Heathen_56:

(Start: 12 @37496 has 32 MA's), (17, 37343), (18, 37334), (19, 37319),

Gene: HelDan_56 Start: 37712, Stop: 37419, Start Num: 12

Candidate Starts for HelDan_56:

(Start: 12 @37712 has 32 MA's), (17, 37559), (18, 37550), (19, 37535),

Gene: Heliosoles_58 Start: 37881, Stop: 37588, Start Num: 11

Candidate Starts for Heliosoles_58:

(Start: 11 @37881 has 95 MA's), (15, 37740), (17, 37728), (18, 37719),

Gene: Hercules11_59 Start: 38001, Stop: 37708, Start Num: 11

Candidate Starts for Hercules11_59:

(2, 38088), (Start: 11 @38001 has 95 MA's), (15, 37860), (17, 37848), (18, 37839), (20, 37722),

Gene: Hookmount_55 Start: 37765, Stop: 37475, Start Num: 12

Candidate Starts for Hookmount_55:

(Start: 8 @37795 has 2 MA's), (Start: 12 @37765 has 32 MA's), (17, 37612), (18, 37603), (19, 37588),

Gene: Idleandcovert_57 Start: 37811, Stop: 37518, Start Num: 12

Candidate Starts for Idleandcovert_57:

(Start: 8 @37841 has 2 MA's), (Start: 12 @37811 has 32 MA's), (13, 37715), (17, 37658), (18, 37649), (19, 37634), (24, 37532),

Gene: Isca_55 Start: 37278, Stop: 36985, Start Num: 12

Candidate Starts for Isca_55:

(Start: 3 @37332 has 1 MA's), (Start: 12 @37278 has 32 MA's), (17, 37125), (18, 37116), (19, 37101),

Gene: JF2_54 Start: 35979, Stop: 35686, Start Num: 12

Candidate Starts for JF2_54:

(Start: 3 @36033 has 1 MA's), (Start: 12 @35979 has 32 MA's), (17, 35826), (18, 35817), (19, 35802),

Gene: JF4_54 Start: 35979, Stop: 35686, Start Num: 12

Candidate Starts for JF4_54:

(Start: 3 @36033 has 1 MA's), (Start: 12 @35979 has 32 MA's), (17, 35826), (18, 35817), (19, 35802),

Gene: JHC117_59 Start: 37991, Stop: 37698, Start Num: 11

Candidate Starts for JHC117_59:

(Start: 11 @37991 has 95 MA's), (17, 37838), (18, 37829), (20, 37712),

Gene: JenCasNa_60 Start: 37992, Stop: 37699, Start Num: 11

Candidate Starts for JenCasNa_60:

(2, 38079), (Start: 11 @37992 has 95 MA's), (15, 37851), (17, 37839), (18, 37830), (20, 37713),

Gene: JeppNRM_60 Start: 37879, Stop: 37586, Start Num: 11

Candidate Starts for JeppNRM_60:

(Start: 11 @37879 has 95 MA's), (15, 37738), (17, 37726), (18, 37717),

Gene: Jobu08_58 Start: 37824, Stop: 37531, Start Num: 11

Candidate Starts for Jobu08_58:

(2, 37911), (Start: 11 @37824 has 95 MA's), (17, 37671), (18, 37662), (20, 37545),

Gene: KADY_59 Start: 38020, Stop: 37727, Start Num: 11

Candidate Starts for KADY_59:

(2, 38107), (Start: 11 @38020 has 95 MA's), (15, 37879), (17, 37867), (18, 37858), (20, 37741),

Gene: Kachowdy_56 Start: 37748, Stop: 37455, Start Num: 12

Candidate Starts for Kachowdy_56:

(Start: 12 @37748 has 32 MA's), (17, 37595), (18, 37586), (19, 37571),

Gene: Kalb97_60 Start: 37877, Stop: 37584, Start Num: 11

Candidate Starts for Kalb97_60:

(Start: 11 @37877 has 95 MA's), (15, 37736), (17, 37724), (18, 37715),

Gene: Kalnoky_60 Start: 37875, Stop: 37582, Start Num: 11

Candidate Starts for Kalnoky_60:

(Start: 11 @37875 has 95 MA's), (15, 37734), (17, 37722), (18, 37713),

Gene: Kamy_53 Start: 37472, Stop: 37107, Start Num: 1

Candidate Starts for Kamy_53:

(Start: 1 @37472 has 3 MA's), (Start: 10 @37382 has 8 MA's), (17, 37229), (18, 37220),

Gene: Katalie136_52 Start: 37332, Stop: 37054, Start Num: 11

Candidate Starts for Katalie136_52:

(5, 37377), (6, 37374), (Start: 11 @37332 has 95 MA's), (17, 37179), (18, 37170), (19, 37155),

Gene: Kristoff_54 Start: 37714, Stop: 37370, Start Num: 8

Candidate Starts for Kristoff_54:

(Start: 8 @37714 has 2 MA's), (Start: 10 @37687 has 8 MA's), (15, 37546), (17, 37534), (18, 37525), (19, 37510), (21, 37414),

Gene: LBerry_60 Start: 37996, Stop: 37703, Start Num: 11

Candidate Starts for LBerry_60:

(2, 38083), (Start: 11 @37996 has 95 MA's), (15, 37855), (17, 37843), (18, 37834), (20, 37717),

Gene: Lambert1_55 Start: 37764, Stop: 37474, Start Num: 12

Candidate Starts for Lambert1_55:

(Start: 8 @37794 has 2 MA's), (Start: 12 @37764 has 32 MA's), (17, 37611), (18, 37602), (19, 37587),

Gene: LarryKay_59 Start: 38022, Stop: 37729, Start Num: 11

Candidate Starts for LarryKay_59:

(2, 38109), (Start: 11 @38022 has 95 MA's), (15, 37881), (17, 37869), (18, 37860), (20, 37743),

Gene: Lilith_60 Start: 37985, Stop: 37692, Start Num: 11

Candidate Starts for Lilith_60:

(2, 38072), (Start: 11 @37985 has 95 MA's), (15, 37844), (17, 37832), (18, 37823), (20, 37706),

Gene: Louie6_58 Start: 38021, Stop: 37728, Start Num: 11

Candidate Starts for Louie6_58:

(2, 38108), (Start: 11 @38021 has 95 MA's), (15, 37880), (17, 37868), (18, 37859), (20, 37742),

Gene: LugYA_62 Start: 37993, Stop: 37700, Start Num: 11

Candidate Starts for LugYA_62:

(2, 38080), (Start: 11 @37993 has 95 MA's), (15, 37852), (17, 37840), (18, 37831), (20, 37714),

Gene: MA5_56 Start: 37182, Stop: 36868, Start Num: 12

Candidate Starts for MA5_56:

(Start: 12 @37182 has 32 MA's), (17, 37029), (19, 37005), (22, 36894),

Gene: MK4_56 Start: 37263, Stop: 36970, Start Num: 12

Candidate Starts for MK4_56:

(Start: 3 @37317 has 1 MA's), (Start: 12 @37263 has 32 MA's), (17, 37110), (18, 37101), (19, 37086),

Gene: MadMarie_59 Start: 37994, Stop: 37701, Start Num: 11

Candidate Starts for MadMarie_59:

(2, 38081), (Start: 11 @37994 has 95 MA's), (15, 37853), (17, 37841), (18, 37832), (20, 37715),

Gene: Mainiac_59 Start: 37986, Stop: 37693, Start Num: 11

Candidate Starts for Mainiac_59:

(2, 38073), (Start: 11 @37986 has 95 MA's), (15, 37845), (17, 37833), (18, 37824), (20, 37707),

Gene: Malinsilva_61 Start: 37984, Stop: 37691, Start Num: 11

Candidate Starts for Malinsilva_61:

(2, 38071), (Start: 11 @37984 has 95 MA's), (15, 37843), (17, 37831), (18, 37822), (20, 37705),

Gene: Manu_59 Start: 37878, Stop: 37585, Start Num: 11

Candidate Starts for Manu_59:

(Start: 11 @37878 has 95 MA's), (15, 37737), (17, 37725), (18, 37716),

Gene: MarQuardt_59 Start: 37994, Stop: 37701, Start Num: 11

Candidate Starts for MarQuardt_59:

(2, 38081), (Start: 11 @37994 has 95 MA's), (15, 37853), (17, 37841), (18, 37832), (20, 37715),

Gene: Marchesa_56 Start: 37698, Stop: 37405, Start Num: 12

Candidate Starts for Marchesa_56:

(Start: 12 @37698 has 32 MA's), (17, 37545), (18, 37536), (19, 37521),

Gene: Margo_55 Start: 37790, Stop: 37500, Start Num: 12

Candidate Starts for Margo_55:

(Start: 8 @37820 has 2 MA's), (Start: 12 @37790 has 32 MA's), (17, 37637), (18, 37628), (19, 37613),

Gene: Marie_59 Start: 37992, Stop: 37699, Start Num: 11

Candidate Starts for Marie_59:

(2, 38079), (Start: 11 @37992 has 95 MA's), (15, 37851), (17, 37839), (18, 37830), (20, 37713),

Gene: Marius_60 Start: 37875, Stop: 37582, Start Num: 11

Candidate Starts for Marius_60:

(Start: 11 @37875 has 95 MA's), (15, 37734), (17, 37722), (18, 37713),

Gene: Methuselah_55 Start: 38016, Stop: 37723, Start Num: 11

Candidate Starts for Methuselah_55:

(2, 38103), (Start: 11 @38016 has 95 MA's), (15, 37875), (17, 37863), (18, 37854), (20, 37737),

Gene: Microwolf_59 Start: 38008, Stop: 37715, Start Num: 11

Candidate Starts for Microwolf_59:

(2, 38095), (Start: 11 @38008 has 95 MA's), (15, 37867), (17, 37855), (18, 37846), (20, 37729),

Gene: Misomonster_60 Start: 38019, Stop: 37726, Start Num: 11

Candidate Starts for Misomonster_60:

(2, 38106), (Start: 11 @38019 has 95 MA's), (15, 37878), (17, 37866), (18, 37857), (20, 37740),

Gene: MoneyMay_59 Start: 37992, Stop: 37699, Start Num: 11

Candidate Starts for MoneyMay_59:

(2, 38079), (Start: 11 @37992 has 95 MA's), (15, 37851), (17, 37839), (18, 37830), (20, 37713),

Gene: Morpher26_52 Start: 37353, Stop: 37075, Start Num: 11

Candidate Starts for Morpher26_52:

(5, 37398), (6, 37395), (Start: 11 @37353 has 95 MA's), (17, 37200), (18, 37191), (19, 37176),

Gene: MuchMore_62 Start: 37984, Stop: 37691, Start Num: 11

Candidate Starts for MuchMore_62:

(2, 38071), (Start: 11 @37984 has 95 MA's), (15, 37843), (17, 37831), (18, 37822), (20, 37705),

Gene: Mundrea_52 Start: 37379, Stop: 37101, Start Num: 10

Candidate Starts for Mundrea_52:

(Start: 10 @37379 has 8 MA's), (17, 37226), (18, 37217), (19, 37202),

Gene: Noella_55 Start: 37765, Stop: 37475, Start Num: 12

Candidate Starts for Noella_55:

(Start: 8 @37795 has 2 MA's), (Start: 12 @37765 has 32 MA's), (17, 37612), (18, 37603), (19, 37588),

Gene: Norbert_54 Start: 37764, Stop: 37474, Start Num: 12

Candidate Starts for Norbert_54:

(Start: 8 @37794 has 2 MA's), (Start: 12 @37764 has 32 MA's), (17, 37611), (18, 37602), (19, 37587),

Gene: OKCentral2016_53 Start: 37015, Stop: 36725, Start Num: 10

Candidate Starts for OKCentral2016_53:

(Start: 8 @37042 has 2 MA's), (Start: 10 @37015 has 8 MA's), (15, 36874), (17, 36862), (18, 36853), (19, 36838),

Gene: OlanP_58 Start: 38051, Stop: 37758, Start Num: 11

Candidate Starts for OlanP_58:

(Start: 11 @38051 has 95 MA's), (14, 37952), (15, 37910), (17, 37898), (18, 37889),

Gene: Ollie_59 Start: 37863, Stop: 37570, Start Num: 11

Candidate Starts for Ollie_59:

(2, 37950), (Start: 11 @37863 has 95 MA's), (15, 37722), (17, 37710), (18, 37701), (20, 37584),

Gene: P28Green_60 Start: 37995, Stop: 37702, Start Num: 11

Candidate Starts for P28Green_60:

(2, 38082), (Start: 11 @37995 has 95 MA's), (15, 37854), (17, 37842), (18, 37833), (20, 37716),

Gene: PGHhamlin_61 Start: 37984, Stop: 37691, Start Num: 11

Candidate Starts for PGHhamlin_61:

(2, 38071), (Start: 11 @37984 has 95 MA's), (15, 37843), (17, 37831), (18, 37822), (20, 37705),

Gene: Panamaxus_53 Start: 37764, Stop: 37474, Start Num: 12

Candidate Starts for Panamaxus_53:

(Start: 8 @37794 has 2 MA's), (Start: 12 @37764 has 32 MA's), (17, 37611), (18, 37602), (19, 37587),

Gene: Pawn_59 Start: 37882, Stop: 37589, Start Num: 11

Candidate Starts for Pawn_59:

(Start: 11 @37882 has 95 MA's), (15, 37741), (17, 37729), (18, 37720),

Gene: Pembroke_59 Start: 37993, Stop: 37700, Start Num: 11

Candidate Starts for Pembroke_59:

(2, 38080), (Start: 11 @37993 has 95 MA's), (15, 37852), (17, 37840), (18, 37831), (20, 37714),

Gene: Penny1_60 Start: 37996, Stop: 37703, Start Num: 11

Candidate Starts for Penny1_60:

(2, 38083), (Start: 11 @37996 has 95 MA's), (15, 37855), (17, 37843), (18, 37834), (20, 37717),

Gene: Perplexer_52 Start: 37329, Stop: 37051, Start Num: 11

Candidate Starts for Perplexer_52:

(5, 37374), (6, 37371), (Start: 11 @37329 has 95 MA's), (17, 37176), (18, 37167), (19, 37152),

Gene: PetiteSangsue_52 Start: 37332, Stop: 37054, Start Num: 11

Candidate Starts for PetiteSangsue_52:

(5, 37377), (6, 37374), (Start: 11 @37332 has 95 MA's), (17, 37179), (18, 37170), (19, 37155),

Gene: Phantastic_57 Start: 37440, Stop: 37147, Start Num: 12

Candidate Starts for Phantastic_57:

(Start: 3 @37494 has 1 MA's), (Start: 12 @37440 has 32 MA's), (17, 37287), (18, 37278), (19, 37263),

Gene: PhishRPhriends_57 Start: 37059, Stop: 36766, Start Num: 11

Candidate Starts for PhishRPhriends_57:

(Start: 11 @37059 has 95 MA's), (15, 36918), (17, 36906), (18, 36897),

Gene: Phoebe_60 Start: 37985, Stop: 37692, Start Num: 11

Candidate Starts for Phoebe_60:

(2, 38072), (Start: 11 @37985 has 95 MA's), (15, 37844), (17, 37832), (18, 37823), (20, 37706),

Gene: Phoxy_59 Start: 38017, Stop: 37724, Start Num: 11

Candidate Starts for Phoxy_59:

(2, 38104), (Start: 11 @38017 has 95 MA's), (15, 37876), (17, 37864), (18, 37855), (20, 37738),

Gene: Phranny_60 Start: 37864, Stop: 37571, Start Num: 11

Candidate Starts for Phranny_60:

(Start: 11 @37864 has 95 MA's), (15, 37723), (17, 37711), (18, 37702),

Gene: Pistachio_58 Start: 37358, Stop: 37065, Start Num: 12

Candidate Starts for Pistachio_58:

(Start: 8 @37388 has 2 MA's), (Start: 12 @37358 has 32 MA's), (13, 37262), (17, 37205), (18, 37196), (19, 37181), (24, 37079),

Gene: Pocahontas_55 Start: 37761, Stop: 37471, Start Num: 12

Candidate Starts for Pocahontas_55:

(Start: 8 @37791 has 2 MA's), (Start: 12 @37761 has 32 MA's), (17, 37608), (18, 37599), (19, 37584),

Gene: Popcicle_55 Start: 37761, Stop: 37471, Start Num: 12

Candidate Starts for Popcicle_55:

(Start: 8 @37791 has 2 MA's), (Start: 12 @37761 has 32 MA's), (17, 37608), (18, 37599), (19, 37584),

Gene: PotatoSplit_61 Start: 37996, Stop: 37703, Start Num: 11

Candidate Starts for PotatoSplit_61:

(2, 38083), (Start: 11 @37996 has 95 MA's), (15, 37855), (17, 37843), (18, 37834), (20, 37717),

Gene: Puppy_58 Start: 37430, Stop: 37137, Start Num: 12

Candidate Starts for Puppy_58:

(Start: 8 @37460 has 2 MA's), (Start: 12 @37430 has 32 MA's), (13, 37334), (17, 37277), (18, 37268), (19, 37253), (24, 37151),

Gene: PurpleHaze_59 Start: 37877, Stop: 37584, Start Num: 11
Candidate Starts for PurpleHaze_59:
(Start: 11 @37877 has 95 MA's), (15, 37736), (17, 37724), (18, 37715),

Gene: QuinnKiro_54 Start: 37764, Stop: 37474, Start Num: 12
Candidate Starts for QuinnKiro_54:
(Start: 8 @37794 has 2 MA's), (Start: 12 @37764 has 32 MA's), (17, 37611), (18, 37602), (19, 37587),

Gene: Reba_59 Start: 37537, Stop: 37244, Start Num: 11
Candidate Starts for Reba_59:
(Start: 11 @37537 has 95 MA's), (15, 37396), (17, 37384), (18, 37375),

Gene: Rebeuca_54 Start: 37688, Stop: 37371, Start Num: 10
Candidate Starts for Rebeuca_54:
(Start: 8 @37715 has 2 MA's), (Start: 10 @37688 has 8 MA's), (15, 37547), (17, 37535), (18, 37526), (19, 37511), (21, 37415),

Gene: ResDef_55 Start: 37764, Stop: 37474, Start Num: 12
Candidate Starts for ResDef_55:
(Start: 8 @37794 has 2 MA's), (Start: 12 @37764 has 32 MA's), (17, 37611), (18, 37602), (19, 37587),

Gene: RhynO_55 Start: 37487, Stop: 37170, Start Num: 12
Candidate Starts for RhynO_55:
(Start: 8 @37517 has 2 MA's), (Start: 12 @37487 has 32 MA's), (15, 37346), (17, 37334), (18, 37325), (19, 37310), (21, 37214),

Gene: Rockstar_56 Start: 37326, Stop: 36979, Start Num: 3
Candidate Starts for Rockstar_56:
(Start: 3 @37326 has 1 MA's), (Start: 12 @37272 has 32 MA's), (17, 37119), (18, 37110), (19, 37095),

Gene: Rowdy_58 Start: 37428, Stop: 37081, Start Num: 8
Candidate Starts for Rowdy_58:
(Start: 8 @37428 has 2 MA's), (Start: 12 @37398 has 32 MA's), (15, 37257), (17, 37245), (18, 37236), (19, 37221), (21, 37125),

Gene: Rummer_58 Start: 38020, Stop: 37727, Start Num: 11
Candidate Starts for Rummer_58:
(2, 38107), (Start: 11 @38020 has 95 MA's), (15, 37879), (17, 37867), (18, 37858), (20, 37741),

Gene: Sabia_59 Start: 38001, Stop: 37708, Start Num: 11
Candidate Starts for Sabia_59:
(2, 38088), (Start: 11 @38001 has 95 MA's), (15, 37860), (17, 37848), (18, 37839), (20, 37722),

Gene: Sabinator_58 Start: 37991, Stop: 37698, Start Num: 11
Candidate Starts for Sabinator_58:
(2, 38078), (Start: 11 @37991 has 95 MA's), (15, 37850), (17, 37838), (18, 37829), (20, 37712),

Gene: SaturnRing_57 Start: 37811, Stop: 37518, Start Num: 12
Candidate Starts for SaturnRing_57:

(Start: 8 @37841 has 2 MA's), (Start: 12 @37811 has 32 MA's), (13, 37715), (17, 37658), (18, 37649), (19, 37634), (24, 37532),

Gene: Scout_56 Start: 36959, Stop: 36666, Start Num: 12

Candidate Starts for Scout_56:

(Start: 12 @36959 has 32 MA's), (17, 36806), (18, 36797), (19, 36782),

Gene: Shapes_58 Start: 37428, Stop: 37081, Start Num: 8

Candidate Starts for Shapes_58:

(Start: 8 @37428 has 2 MA's), (Start: 12 @37398 has 32 MA's), (15, 37257), (17, 37245), (18, 37236), (19, 37221), (21, 37125),

Gene: SheldonCooper_55 Start: 37862, Stop: 37542, Start Num: 4

Candidate Starts for SheldonCooper_55:

(Start: 4 @37862 has 2 MA's), (9, 37823), (Start: 10 @37817 has 8 MA's), (17, 37664), (18, 37655),

Gene: Snickers_59 Start: 37966, Stop: 37673, Start Num: 11

Candidate Starts for Snickers_59:

(2, 38053), (Start: 11 @37966 has 95 MA's), (15, 37825), (17, 37813), (18, 37804), (20, 37687),

Gene: SoYo_59 Start: 37904, Stop: 37611, Start Num: 11

Candidate Starts for SoYo_59:

(2, 37991), (Start: 11 @37904 has 95 MA's), (15, 37763), (17, 37751), (18, 37742), (20, 37625),

Gene: SoilDragon_59 Start: 37440, Stop: 37147, Start Num: 11

Candidate Starts for SoilDragon_59:

(2, 37527), (Start: 11 @37440 has 95 MA's), (17, 37287), (18, 37278), (20, 37161),

Gene: Soshari_61 Start: 38016, Stop: 37723, Start Num: 11

Candidate Starts for Soshari_61:

(2, 38103), (Start: 11 @38016 has 95 MA's), (15, 37875), (17, 37863), (18, 37854), (20, 37737),

Gene: Spike509_59 Start: 38017, Stop: 37724, Start Num: 11

Candidate Starts for Spike509_59:

(2, 38104), (Start: 11 @38017 has 95 MA's), (15, 37876), (17, 37864), (18, 37855), (20, 37738),

Gene: Stagni_59 Start: 37995, Stop: 37702, Start Num: 11

Candidate Starts for Stagni_59:

(2, 38082), (Start: 11 @37995 has 95 MA's), (15, 37854), (17, 37842), (18, 37833), (20, 37716),

Gene: StepMih_59 Start: 37986, Stop: 37693, Start Num: 11

Candidate Starts for StepMih_59:

(2, 38073), (Start: 11 @37986 has 95 MA's), (15, 37845), (17, 37833), (18, 37824), (20, 37707),

Gene: Swirley_51 Start: 37021, Stop: 36671, Start Num: 11

Candidate Starts for Swirley_51:

(7, 37051), (Start: 11 @37021 has 95 MA's), (14, 36922), (15, 36880), (16, 36877), (17, 36868), (25, 36685),

Gene: TNguyen7_57 Start: 37777, Stop: 37484, Start Num: 12

Candidate Starts for TNguyen7_57:

(Start: 8 @37807 has 2 MA's), (Start: 12 @37777 has 32 MA's), (13, 37681), (17, 37624), (18, 37615), (19, 37600), (24, 37498),

Gene: Tarynearal_47 Start: 36463, Stop: 36113, Start Num: 11

Candidate Starts for Tarynearal_47:

(7, 36493), (Start: 11 @36463 has 95 MA's), (14, 36364), (15, 36322), (16, 36319), (17, 36310), (25, 36127),

Gene: Taurus_60 Start: 37992, Stop: 37699, Start Num: 11

Candidate Starts for Taurus_60:

(2, 38079), (Start: 11 @37992 has 95 MA's), (15, 37851), (17, 37839), (18, 37830), (20, 37713),

Gene: Texage_54 Start: 37765, Stop: 37475, Start Num: 12

Candidate Starts for Texage_54:

(Start: 8 @37795 has 2 MA's), (Start: 12 @37765 has 32 MA's), (17, 37612), (18, 37603), (19, 37588),

Gene: Tiffany_59 Start: 37878, Stop: 37585, Start Num: 11

Candidate Starts for Tiffany_59:

(2, 37965), (Start: 11 @37878 has 95 MA's), (15, 37737), (17, 37725), (18, 37716), (20, 37599),

Gene: TinaFeyge_53 Start: 37465, Stop: 37100, Start Num: 1

Candidate Starts for TinaFeyge_53:

(Start: 1 @37465 has 3 MA's), (Start: 10 @37375 has 8 MA's), (17, 37222), (18, 37213),

Gene: Todacoro_55 Start: 37764, Stop: 37474, Start Num: 12

Candidate Starts for Todacoro_55:

(Start: 8 @37794 has 2 MA's), (Start: 12 @37764 has 32 MA's), (17, 37611), (18, 37602), (19, 37587),

Gene: Topanga_52 Start: 37329, Stop: 37012, Start Num: 12

Candidate Starts for Topanga_52:

(Start: 8 @37359 has 2 MA's), (Start: 12 @37329 has 32 MA's), (15, 37188), (17, 37176), (18, 37167), (19, 37152), (21, 37056),

Gene: Twister_52 Start: 37249, Stop: 36932, Start Num: 10

Candidate Starts for Twister_52:

(Start: 8 @37276 has 2 MA's), (Start: 10 @37249 has 8 MA's), (15, 37108), (17, 37096), (18, 37087), (19, 37072), (21, 36976),

Gene: Veracruz_54 Start: 37764, Stop: 37474, Start Num: 12

Candidate Starts for Veracruz_54:

(Start: 8 @37794 has 2 MA's), (Start: 12 @37764 has 32 MA's), (17, 37611), (18, 37602), (19, 37587),

Gene: Vix_59 Start: 38075, Stop: 37782, Start Num: 11

Candidate Starts for Vix_59:

(2, 38162), (Start: 11 @38075 has 95 MA's), (15, 37934), (17, 37922), (18, 37913), (20, 37796),

Gene: WalterMcMickey_52 Start: 37249, Stop: 36932, Start Num: 10

Candidate Starts for WalterMcMickey_52:

(Start: 8 @37276 has 2 MA's), (Start: 10 @37249 has 8 MA's), (15, 37108), (17, 37096), (18, 37087), (19, 37072), (21, 36976),

Gene: Watson_59 Start: 37984, Stop: 37691, Start Num: 11

Candidate Starts for Watson_59:

(2, 38071), (Start: 11 @37984 has 95 MA's), (15, 37843), (17, 37831), (18, 37822), (20, 37705),

Gene: Wile_52 Start: 37363, Stop: 37085, Start Num: 11

Candidate Starts for Wile_52:

(5, 37408), (6, 37405), (Start: 11 @37363 has 95 MA's), (17, 37210), (18, 37201), (19, 37186),

Gene: Wooldri_61 Start: 37904, Stop: 37611, Start Num: 11

Candidate Starts for Wooldri_61:

(2, 37991), (Start: 11 @37904 has 95 MA's), (15, 37763), (17, 37751), (18, 37742), (20, 37625),

Gene: Xena_51 Start: 37329, Stop: 37051, Start Num: 11

Candidate Starts for Xena_51:

(5, 37374), (6, 37371), (Start: 11 @37329 has 95 MA's), (17, 37176), (18, 37167), (19, 37152),

Gene: Zetzy_58 Start: 37555, Stop: 37262, Start Num: 11

Candidate Starts for Zetzy_58:

(2, 37642), (Start: 11 @37555 has 95 MA's), (15, 37414), (17, 37402), (18, 37393), (20, 37276),