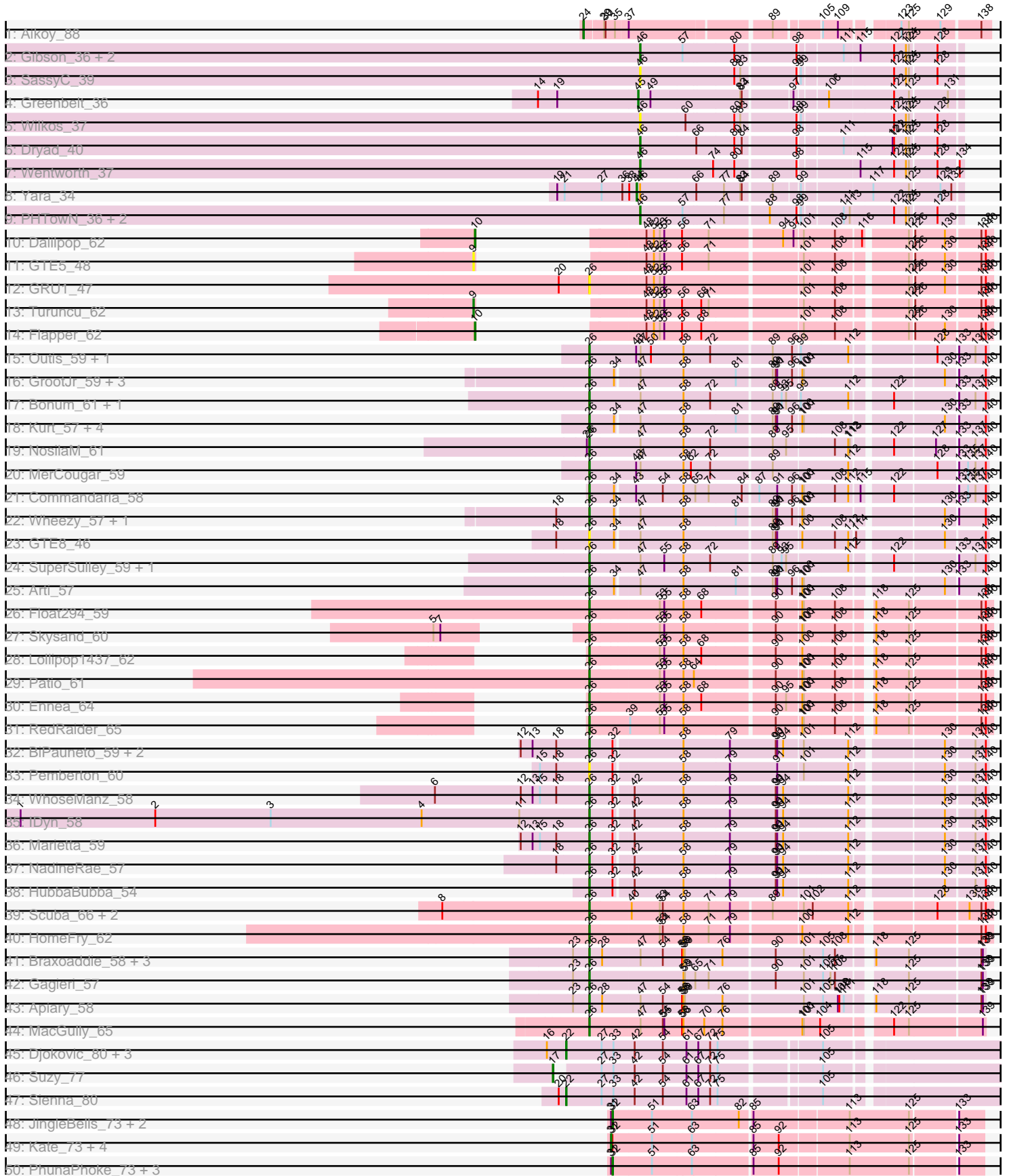


Pham 311384



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 311384 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311384 has 118 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Aikoy_88
- Track 2 : Gibson_36, Virizion_40, Rooney_36
- Track 3 : SassyC_39
- Track 4 : Greenbelt_36
- Track 5 : Wilkos_37
- Track 6 : Dryad_40
- Track 7 : Wentworth_37
- Track 8 : Yara_34
- Track 9 : PHTowN_36, Lizz_36, ShakeNBake_36
- Track 10 : Dalilpop_62
- Track 11 : GTE5_48
- Track 12 : GRU1_47
- Track 13 : Turuncu_62
- Track 14 : Flapper_62
- Track 15 : Outis_59, StarStruck_59
- Track 16 : GrootJr_59, NovumRegina_57, NatB6_57, Foxboro_58
- Track 17 : Bonum_61, Kabluna_61
- Track 18 : Kurt_57, KidneyBean_57, Jifall16_56, Emianna_57, Phomeo_56
- Track 19 : NosilaM_61
- Track 20 : MerCougar_59
- Track 21 : Commandaria_58
- Track 22 : Wheezy_57, Tracker_57
- Track 23 : GTE8_46
- Track 24 : SuperSulley_59, Buggaboo_59
- Track 25 : Arti_57
- Track 26 : Float294_59
- Track 27 : Skysand_60
- Track 28 : Lollipop1437_62
- Track 29 : Patio_61
- Track 30 : Ennea_64
- Track 31 : RedRaider_65
- Track 32 : BiPauneto_59, Sukkupi_58, Yndexa_58
- Track 33 : Pemberton_60
- Track 34 : WhoseManz_58
- Track 35 : IDyn_58
- Track 36 : Marietta_59
- Track 37 : NadineRae_57

- Track 38 : HubbaBubba_54
- Track 39 : Scuba_66, Fury_65, Pleakley_65
- Track 40 : HomeFry_62
- Track 41 : Braxoaddie_58, Maselop_58, CoffeeBean_58, Polyyuki_58
- Track 42 : Gagieri_57
- Track 43 : Apiary_58
- Track 44 : MacGully_65
- Track 45 : Djokovic_80, Terapin_81, BiteSize_80, Beyonccage_80
- Track 46 : Suzy_77
- Track 47 : Sienna_80
- Track 48 : JingleBells_73, JDawG_72, SilentWarrior_74
- Track 49 : Kate_73, AnnaSerena_73, NarutoRun_73, Krampus_73, Anakin_73
- Track 50 : PhunaPhoke_73, Gilda_73, Karate_72, Rachella_73
- Track 51 : OverHedge_72, Cybele_73, Artiphact_73, Pharpay_72
- Track 52 : FreddieHg_74, Chivey_74, Hiddenleaf_74
- Track 53 : Bramble_77, LordBart_77, TinyMiny_77, Ajin_77
- Track 54 : Potty_72, Neptune_73
- Track 55 : Annapurna_74, Aesir_72
- Track 56 : Crestdrop_74
- Track 57 : Tedro_73
- Track 58 : OhDear_73, Tiggy93_72
- Track 59 : MortySmith_71, Dauntless_72, Erudite_72, Snakehole_74
- Track 60 : RikSengupta_77, Sparcetus_77
- Track 61 : Tongui_74
- Track 62 : CoolCookie_72
- Track 63 : DannyDe_74
- Track 64 : Haunter_74
- Track 65 : FountainFog_73
- Track 66 : Poultruss_72
- Track 67 : Rie18_73
- Track 68 : Kors_77
- Track 69 : Hager_75

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

The start number called the most often in the published annotations is 26, it was called in 45 of the 106 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Apiary_58, Arti_57, BiPauneto_59, Bonum_61, Braxoaddie_58, Buggaboo_59, CoffeeBean_58, Commandaria_58, Emianna_57, Ennea_64, Float294_59, Foxboro_58, Fury_65, GRU1_47, GTE8_46, Gagieri_57, GrootJr_59, HomeFry_62, HubbaBubba_54, IDyn_58, Jifall16_56, Kabluna_61, KidneyBean_57, Kurt_57, Lollipop1437_62, MacGully_65, Marietta_59, Maselop_58, MerCougar_59, NadineRae_57, NatB6_57, NosilaM_61, NovumRegina_57, Outis_59, Patio_61, Pemberton_60, Phomeo_56, Pleakley_65, Polyyuki_58, RedRaider_65, Scuba_66, Skysand_60, StarStruck_59, Sukkupi_58, SuperSulley_59, Tracker_57, Wheezy_57, WhoseManz_58, Yndexa_58,

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

•

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

• Aesir_72, Aikoy_88, Ajin_77, Anakin_73, AnnaSerena_73, Annapurna_74, Artiphact_73, Beyoncage_80, BiteSize_80, Bramble_77, Chivey_74, CoolCookie_72, Crestdrop_74, Cybele_73, Dalilpop_62, DannyDe_74, Dauntless_72, Djokovic_80, Dryad_40, Erudite_72, Flapper_62, FountainFog_73, FreddieHg_74, GTE5_48, Gibson_36, Gilda_73, Greenbelt_36, Hager_75, Haunter_74, Hiddenleaf_74, JDawG_72, JingleBells_73, Karate_72, Kate_73, Kors_77, Krampus_73, Lizz_36, LordBart_77, MortySmith_71, NarutoRun_73, Neptune_73, OhDear_73, OverHedge_72, PHTowN_36, Pharpay_72, PhunaPhoke_73, Potty_72, Poultruss_72, Rachella_73, Rie18_73, RikSengupta_77, Rooney_36, SassyC_39, ShakeNBake_36, Sienna_80, SilentWarrior_74, Snakehole_74, Sparcetus_77, Suzy_77, Tedro_73, Terapin_81, Tiggy93_72, TinyMiny_77, Tongui_74, Turuncu_62, Virizion_40, Wentworth_37, Wilkos_37, Yara_34,

Summary by start number:

Start 9:

- Found in 2 of 118 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GTE5_48 (CR1), Turuncu_62 (CR1),

Start 10:

- Found in 2 of 118 (1.7%) of genes in pham
- Manual Annotations of this start: 2 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dalilpop_62 (CR1), Flapper_62 (CR1),

Start 17:

- Found in 1 of 118 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Suzy_77 (DG1),

Start 22:

- Found in 5 of 118 (4.2%) of genes in pham
- Manual Annotations of this start: 5 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beyoncage_80 (DG1), BiteSize_80 (DG1), Djokovic_80 (DG1), Sienna_80 (DG1), Terapin_81 (DG1),

Start 24:

- Found in 1 of 118 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aikoy_88 (AE),

Start 26:

- Found in 49 of 118 (41.5%) of genes in pham
- Manual Annotations of this start: 45 of 106
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Apiary_58 (CR6), Arti_57 (CR2), BiPauneto_59 (CR4), Bonum_61 (CR2), Braxoaddie_58 (CR6), Buggaboo_59 (CR2), CoffeeBean_58 (CR6), Commandaria_58 (CR2), Emianna_57 (CR2), Ennea_64 (CR3), Float294_59 (CR3), Foxboro_58 (CR2), Fury_65 (CR5), GRU1_47 (CR1), GTE8_46 (CR2), Gagieri_57 (CR6), GrootJr_59 (CR2), HomeFry_62 (CR5), HubbaBubba_54 (CR4), IDyn_58 (CR4), Jifall16_56 (CR2), Kabluna_61 (CR2), KidneyBean_57 (CR2), Kurt_57 (CR2), Lollipop1437_62 (CR3), MacGully_65 (CR7), Marietta_59 (CR4), Maselop_58 (CR6), MerCougar_59 (CR2), NadineRae_57 (CR4), NatB6_57 (CR2), NosilaM_61 (CR2), NovumRegina_57 (CR2), Outis_59 (CR2), Patio_61 (CR3), Pemberton_60 (CR4), Phomeo_56 (CR2), Pleakley_65 (CR5), Polyyuki_58 (CR6), RedRaider_65 (CR3), Scuba_66 (CR5), Skysand_60 (CR3), StarStruck_59 (CR2), Sukkupi_58 (CR4), SuperSulley_59 (CR2), Tracker_57 (CR2), Wheezy_57 (CR2), WhoseManz_58 (CR4), Yndexa_58 (CR4),

Start 31:

- Found in 39 of 118 (33.1%) of genes in pham
- Manual Annotations of this start: 11 of 106
- Called 28.2% of time when present
- Phage (with cluster) where this start called: Anakin_73 (EF), AnnaSerena_73 (EF), Chivey_74 (EF), FreddieHg_74 (EF), Hiddenleaf_74 (EF), Kate_73 (EF), Krampus_73 (EF), NarutoRun_73 (EF), Neptune_73 (EF), Potty_72 (EF), Rie18_73 (EF),

Start 32:

- Found in 55 of 118 (46.6%) of genes in pham
- Manual Annotations of this start: 29 of 106
- Called 54.5% of time when present
- Phage (with cluster) where this start called: Aesir_72 (EF), Ajin_77 (EF), Annapurna_74 (EF), Artiphact_73 (EF), Bramble_77 (EF), CoolCookie_72 (EF), Crestdrop_74 (EF), Cybele_73 (EF), DannyDe_74 (EF), Dauntless_72 (EF), Erudite_72 (EF), Gilda_73 (EF), Hager_75 (EF), Haunter_74 (EF), JDawG_72 (EF), JingleBells_73 (EF), Karate_72 (EF), Kors_77 (EF), LordBart_77 (EF), MortySmith_71 (EF), OverHedge_72 (EF), Pharpay_72 (EF), PhunaPhoke_73 (EF), Poultruss_72 (EF), Rachella_73 (EF), SilentWarrior_74 (EF), Snakehole_74 (EF), Tedro_73 (EF), TinyMiny_77 (EF), Tongui_74 (EF),

Start 44:

- Found in 1 of 118 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yara_34 (BN),

Start 45:

- Found in 1 of 118 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Greenbelt_36 (BN),

Start 46:

- Found in 11 of 118 (9.3%) of genes in pham
- Manual Annotations of this start: 7 of 106
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Dryad_40 (BN), Gibson_36 (BN), Lizz_36 (BN), PHTowN_36 (BN), Rooney_36 (BN), SassyC_39 (BN),

ShakeNBake_36 (BN), Virizion_40 (BN), Wentworth_37 (BN), Wilkos_37 (BN),

Start 51:

- Found in 46 of 118 (39.0%) of genes in pham
- Manual Annotations of this start: 2 of 106
- Called 10.9% of time when present
- Phage (with cluster) where this start called: FountainFog_73 (EF), OhDear_73 (EF), RikSengupta_77 (EF), Sparcetus_77 (EF), Tiggy93_72 (EF),

Summary by clusters:

There are 11 clusters represented in this pham: CR2, CR3, CR1, CR6, CR7, CR4, CR5, BN, EF, DG1, AE,

Info for manual annotations of cluster AE:

- Start number 24 was manually annotated 1 time for cluster AE.

Info for manual annotations of cluster BN:

- Start number 44 was manually annotated 1 time for cluster BN.
- Start number 45 was manually annotated 1 time for cluster BN.
- Start number 46 was manually annotated 7 times for cluster BN.

Info for manual annotations of cluster CR1:

- Start number 9 was manually annotated 1 time for cluster CR1.
- Start number 10 was manually annotated 2 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 26 was manually annotated 21 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 26 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 26 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 26 was manually annotated 3 times for cluster CR5.

Info for manual annotations of cluster CR6:

- Start number 26 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster CR7:

- Start number 26 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster DG1:

- Start number 17 was manually annotated 1 time for cluster DG1.
- Start number 22 was manually annotated 5 times for cluster DG1.

Info for manual annotations of cluster EF:

- Start number 31 was manually annotated 11 times for cluster EF.
- Start number 32 was manually annotated 29 times for cluster EF.
- Start number 51 was manually annotated 2 times for cluster EF.

Gene Information:

Gene: Aesir_72 Start: 51638, Stop: 52348, Start Num: 32

Candidate Starts for Aesir_72:

(Start: 31 @51635 has 11 MA's), (Start: 32 @51638 has 29 MA's), (Start: 51 @51716 has 2 MA's), (63, 51794), (82, 51887), (85, 51908), (113, 52091), (117, 52139), (125, 52211), (133, 52298),

Gene: Aikoy_88 Start: 61398, Stop: 62117, Start Num: 24

Candidate Starts for Aikoy_88:

(Start: 24 @61398 has 1 MA's), (29, 61434), (30, 61437), (35, 61455), (37, 61479), (89, 61746), (105, 61827), (109, 61857), (123, 61953), (125, 61968), (129, 62031), (138, 62100),

Gene: Ajin_77 Start: 52086, Stop: 52784, Start Num: 32

Candidate Starts for Ajin_77:

(Start: 32 @52086 has 29 MA's), (Start: 51 @52158 has 2 MA's), (69, 52257), (73, 52275), (84, 52335), (103, 52467), (113, 52533), (119, 52596), (120, 52602), (125, 52650), (135, 52752),

Gene: Anakin_73 Start: 51949, Stop: 52662, Start Num: 31

Candidate Starts for Anakin_73:

(Start: 31 @51949 has 11 MA's), (Start: 32 @51952 has 29 MA's), (Start: 51 @52030 has 2 MA's), (63, 52108), (85, 52222), (92, 52273), (113, 52405), (125, 52525), (133, 52612),

Gene: AnnaSerena_73 Start: 51983, Stop: 52696, Start Num: 31

Candidate Starts for AnnaSerena_73:

(Start: 31 @51983 has 11 MA's), (Start: 32 @51986 has 29 MA's), (Start: 51 @52064 has 2 MA's), (63, 52142), (85, 52256), (92, 52307), (113, 52439), (125, 52559), (133, 52646),

Gene: Annapurna_74 Start: 51541, Stop: 52251, Start Num: 32

Candidate Starts for Annapurna_74:

(Start: 31 @51538 has 11 MA's), (Start: 32 @51541 has 29 MA's), (Start: 51 @51619 has 2 MA's), (63, 51697), (82, 51790), (85, 51811), (113, 51994), (117, 52042), (125, 52114), (133, 52201),

Gene: Apiary_58 Start: 42343, Stop: 41603, Start Num: 26

Candidate Starts for Apiary_58:

(23, 42370), (Start: 26 @42343 has 45 MA's), (28, 42319), (47, 42244), (54, 42202), (56, 42163), (58, 42160), (59, 42157), (76, 42082), (101, 41926), (105, 41893), (109, 41863), (110, 41860), (111, 41851), (118, 41815), (125, 41749), (138, 41611), (139, 41608),

Gene: Arti_57 Start: 44353, Stop: 43622, Start Num: 26

Candidate Starts for Arti_57:

(Start: 26 @44353 has 45 MA's), (34, 44305), (47, 44263), (58, 44176), (81, 44071), (89, 44005), (90, 43999), (91, 43996), (96, 43966), (100, 43951), (101, 43948), (130, 43702), (133, 43681), (140, 43627),

Gene: Artiphact_73 Start: 51976, Stop: 52686, Start Num: 32

Candidate Starts for Artiphact_73:

(Start: 31 @51973 has 11 MA's), (Start: 32 @51976 has 29 MA's), (Start: 51 @52054 has 2 MA's), (63, 52132), (85, 52246), (112, 52426), (113, 52429), (125, 52549), (133, 52636),

Gene: Beyoncage_80 Start: 55697, Stop: 56518, Start Num: 22

Candidate Starts for Beyoncage_80:

(16, 55658), (Start: 22 @55697 has 5 MA's), (27, 55769), (33, 55793), (42, 55835), (54, 55889), (61, 55937), (67, 55961), (72, 55985), (75, 56000), (105, 56186),

Gene: BiPauneto_59 Start: 43866, Stop: 43126, Start Num: 26

Candidate Starts for BiPauneto_59:

(12, 43998), (13, 43974), (18, 43929), (Start: 26 @43866 has 45 MA's), (Start: 32 @43821 has 29 MA's), (58, 43689), (79, 43596), (90, 43503), (91, 43500), (94, 43488), (101, 43452), (112, 43368), (130, 43206), (137, 43152), (140, 43131),

Gene: BiteSize_80 Start: 55783, Stop: 56604, Start Num: 22

Candidate Starts for BiteSize_80:

(16, 55744), (Start: 22 @55783 has 5 MA's), (27, 55855), (33, 55879), (42, 55921), (54, 55975), (61, 56023), (67, 56047), (72, 56071), (75, 56086), (105, 56272),

Gene: Bonum_61 Start: 45017, Stop: 44271, Start Num: 26

Candidate Starts for Bonum_61:

(Start: 26 @45017 has 45 MA's), (47, 44915), (58, 44828), (72, 44774), (89, 44657), (93, 44639), (95, 44630), (99, 44606), (112, 44516), (122, 44447), (133, 44330), (137, 44297), (140, 44276),

Gene: Bramble_77 Start: 52053, Stop: 52751, Start Num: 32

Candidate Starts for Bramble_77:

(Start: 32 @52053 has 29 MA's), (Start: 51 @52125 has 2 MA's), (69, 52224), (73, 52242), (84, 52302), (103, 52434), (113, 52500), (119, 52563), (120, 52569), (125, 52617), (135, 52719),

Gene: Braxoaddie_58 Start: 42332, Stop: 41592, Start Num: 26

Candidate Starts for Braxoaddie_58:

(23, 42359), (Start: 26 @42332 has 45 MA's), (28, 42308), (47, 42233), (54, 42191), (56, 42152), (58, 42149), (59, 42146), (76, 42071), (90, 41972), (101, 41915), (105, 41882), (108, 41858), (118, 41804), (125, 41738), (138, 41600), (139, 41597),

Gene: Buggaboo_59 Start: 45496, Stop: 44750, Start Num: 26

Candidate Starts for Buggaboo_59:

(Start: 26 @45496 has 45 MA's), (47, 45394), (55, 45346), (58, 45307), (72, 45253), (89, 45136), (93, 45118), (95, 45109), (112, 44995), (122, 44926), (133, 44809), (137, 44776), (140, 44755),

Gene: Chivey_74 Start: 51437, Stop: 52150, Start Num: 31

Candidate Starts for Chivey_74:

(Start: 31 @51437 has 11 MA's), (Start: 32 @51440 has 29 MA's), (Start: 51 @51518 has 2 MA's), (63, 51596), (82, 51689), (85, 51710), (113, 51893), (125, 52013), (133, 52100),

Gene: CoffeeBean_58 Start: 42290, Stop: 41550, Start Num: 26

Candidate Starts for CoffeeBean_58:

(23, 42317), (Start: 26 @42290 has 45 MA's), (28, 42266), (47, 42191), (54, 42149), (56, 42110), (58, 42107), (59, 42104), (76, 42029), (90, 41930), (101, 41873), (105, 41840), (108, 41816), (118, 41762), (125, 41696), (138, 41558), (139, 41555),

Gene: Commandaria_58 Start: 45467, Stop: 44736, Start Num: 26

Candidate Starts for Commandaria_58:

(Start: 26 @45467 has 45 MA's), (34, 45419), (43, 45386), (54, 45332), (58, 45290), (65, 45266), (71, 45239), (84, 45173), (87, 45146), (91, 45110), (96, 45080), (100, 45065), (101, 45062), (108, 45005), (112, 44978), (115, 44960), (122, 44912), (133, 44795), (135, 44777), (137, 44762), (140, 44741),

Gene: CoolCookie_72 Start: 52040, Stop: 52750, Start Num: 32

Candidate Starts for CoolCookie_72:

(Start: 31 @52037 has 11 MA's), (Start: 32 @52040 has 29 MA's), (41, 52079), (Start: 51 @52118 has 2 MA's), (63, 52196), (82, 52289), (85, 52310), (113, 52493), (117, 52541), (125, 52613), (133, 52700),

Gene: Crestdrop_74 Start: 51864, Stop: 52574, Start Num: 32

Candidate Starts for Crestdrop_74:

(Start: 31 @51861 has 11 MA's), (Start: 32 @51864 has 29 MA's), (Start: 51 @51942 has 2 MA's), (63, 52020), (82, 52113), (85, 52134), (113, 52317), (117, 52365), (125, 52437), (128, 52488), (133, 52524),

Gene: Cybele_73 Start: 51982, Stop: 52692, Start Num: 32

Candidate Starts for Cybele_73:

(Start: 31 @51979 has 11 MA's), (Start: 32 @51982 has 29 MA's), (Start: 51 @52060 has 2 MA's), (63, 52138), (85, 52252), (112, 52432), (113, 52435), (125, 52555), (133, 52642),

Gene: Dalilpop_62 Start: 46648, Stop: 45902, Start Num: 10

Candidate Starts for Dalilpop_62:

(Start: 10 @46648 has 2 MA's), (48, 46537), (52, 46522), (53, 46510), (55, 46501), (56, 46465), (71, 46411), (94, 46276), (97, 46255), (101, 46240), (108, 46183), (116, 46135), (125, 46057), (126, 46051), (130, 45991), (138, 45925), (140, 45916),

Gene: DannyDe_74 Start: 51442, Stop: 52152, Start Num: 32

Candidate Starts for DannyDe_74:

(Start: 31 @51439 has 11 MA's), (Start: 32 @51442 has 29 MA's), (Start: 51 @51520 has 2 MA's), (82, 51691), (85, 51712), (113, 51895), (117, 51943), (124, 52009), (125, 52015), (133, 52102),

Gene: Dauntless_72 Start: 51573, Stop: 52283, Start Num: 32

Candidate Starts for Dauntless_72:

(Start: 31 @51570 has 11 MA's), (Start: 32 @51573 has 29 MA's), (Start: 51 @51651 has 2 MA's), (63, 51729), (82, 51822), (85, 51843), (113, 52026), (117, 52074), (124, 52140), (125, 52146), (133, 52233),

Gene: Djokovic_80 Start: 55696, Stop: 56517, Start Num: 22

Candidate Starts for Djokovic_80:

(16, 55657), (Start: 22 @55696 has 5 MA's), (27, 55768), (33, 55792), (42, 55834), (54, 55888), (61, 55936), (67, 55960), (72, 55984), (75, 55999), (105, 56185),

Gene: Dryad_40 Start: 31376, Stop: 30774, Start Num: 46

Candidate Starts for Dryad_40:

(Start: 46 @31376 has 7 MA's), (66, 31265), (80, 31190), (84, 31175), (98, 31073), (111, 30995), (121, 30902), (122, 30899), (124, 30875), (125, 30869), (128, 30818),

Gene: Emianna_57 Start: 45345, Stop: 44614, Start Num: 26

Candidate Starts for Emianna_57:

(Start: 26 @45345 has 45 MA's), (34, 45297), (47, 45255), (58, 45168), (81, 45063), (89, 44997), (90, 44991), (91, 44988), (96, 44958), (100, 44943), (101, 44940), (130, 44694), (133, 44673), (140, 44619),

Gene: Ennea_64 Start: 46346, Stop: 45609, Start Num: 26

Candidate Starts for Ennea_64:

(Start: 26 @46346 has 45 MA's), (53, 46211), (55, 46202), (58, 46163), (68, 46127), (90, 45992), (95, 45971), (100, 45944), (101, 45941), (108, 45884), (118, 45830), (125, 45764), (138, 45632), (140, 45623),

Gene: Erudite_72 Start: 51573, Stop: 52283, Start Num: 32

Candidate Starts for Erudite_72:

(Start: 31 @51570 has 11 MA's), (Start: 32 @51573 has 29 MA's), (Start: 51 @51651 has 2 MA's), (63, 51729), (82, 51822), (85, 51843), (113, 52026), (117, 52074), (124, 52140), (125, 52146), (133, 52233),

Gene: Flapper_62 Start: 46080, Stop: 45334, Start Num: 10

Candidate Starts for Flapper_62:

(Start: 10 @46080 has 2 MA's), (48, 45969), (52, 45954), (53, 45942), (55, 45933), (56, 45897), (68, 45858), (101, 45672), (108, 45615), (125, 45489), (126, 45483), (130, 45423), (138, 45357), (140, 45348),

Gene: Float294_59 Start: 45788, Stop: 45051, Start Num: 26

Candidate Starts for Float294_59:

(Start: 26 @45788 has 45 MA's), (53, 45653), (55, 45644), (58, 45605), (68, 45569), (90, 45434), (100, 45386), (101, 45383), (108, 45326), (118, 45272), (125, 45206), (138, 45074), (140, 45065),

Gene: FountainFog_73 Start: 51494, Stop: 52126, Start Num: 51

Candidate Starts for FountainFog_73:

(Start: 31 @51413 has 11 MA's), (Start: 32 @51416 has 29 MA's), (41, 51455), (Start: 51 @51494 has 2 MA's), (63, 51572), (78, 51641), (85, 51686), (112, 51866), (113, 51869), (125, 51989), (133, 52076),

Gene: Foxboro_58 Start: 45851, Stop: 45120, Start Num: 26

Candidate Starts for Foxboro_58:

(Start: 26 @45851 has 45 MA's), (34, 45803), (47, 45761), (58, 45674), (81, 45569), (89, 45503), (90, 45497), (91, 45494), (96, 45464), (100, 45449), (101, 45446), (130, 45200), (133, 45179), (140, 45125),

Gene: FreddieHg_74 Start: 51454, Stop: 52167, Start Num: 31

Candidate Starts for FreddieHg_74:

(Start: 31 @51454 has 11 MA's), (Start: 32 @51457 has 29 MA's), (Start: 51 @51535 has 2 MA's), (63, 51613), (82, 51706), (85, 51727), (113, 51910), (125, 52030), (133, 52117),

Gene: Fury_65 Start: 44523, Stop: 43777, Start Num: 26

Candidate Starts for Fury_65:

(8, 44583), (Start: 26 @44523 has 45 MA's), (40, 44442), (53, 44385), (54, 44379), (58, 44337), (71, 44286), (79, 44244), (89, 44166), (101, 44109), (102, 44091), (112, 44025), (128, 43881), (136, 43824), (138, 43800), (140, 43791),

Gene: GRU1_47 Start: 37626, Stop: 36880, Start Num: 26

Candidate Starts for GRU1_47:

(20, 37686), (Start: 26 @37626 has 45 MA's), (48, 37515), (52, 37500), (53, 37488), (55, 37479), (101, 37218), (108, 37161), (125, 37035), (126, 37029), (130, 36969), (138, 36903), (140, 36894),

Gene: GTE5_48 Start: 38936, Stop: 38190, Start Num: 9

Candidate Starts for GTE5_48:

(Start: 9 @38936 has 1 MA's), (48, 38825), (52, 38810), (53, 38798), (55, 38789), (56, 38753), (71, 38699), (101, 38528), (108, 38471), (125, 38345), (126, 38339), (130, 38279), (138, 38213), (140, 38204),

Gene: GTE8_46 Start: 38609, Stop: 37878, Start Num: 26

Candidate Starts for GTE8_46:

(18, 38672), (Start: 26 @38609 has 45 MA's), (34, 38561), (47, 38519), (58, 38432), (89, 38261), (90, 38255), (91, 38252), (100, 38207), (108, 38147), (112, 38120), (114, 38111), (130, 37958), (140, 37883),

Gene: Gagieri_57 Start: 42526, Stop: 41783, Start Num: 26

Candidate Starts for Gagieri_57:

(23, 42553), (Start: 26 @42526 has 45 MA's), (58, 42340), (59, 42337), (65, 42316), (71, 42289), (90, 42163), (101, 42106), (105, 42073), (107, 42058), (108, 42049), (125, 41929), (138, 41791), (139, 41788),

Gene: Gibson_36 Start: 30882, Stop: 30280, Start Num: 46

Candidate Starts for Gibson_36:

(Start: 46 @30882 has 7 MA's), (57, 30798), (80, 30696), (98, 30579), (111, 30501), (115, 30471), (122, 30405), (124, 30381), (125, 30375), (128, 30324),

Gene: Gilda_73 Start: 51974, Stop: 52684, Start Num: 32

Candidate Starts for Gilda_73:

(Start: 31 @51971 has 11 MA's), (Start: 32 @51974 has 29 MA's), (Start: 51 @52052 has 2 MA's), (63, 52130), (85, 52244), (92, 52295), (113, 52427), (125, 52547), (133, 52634),

Gene: Greenbelt_36 Start: 27579, Stop: 26983, Start Num: 45

Candidate Starts for Greenbelt_36:

(14, 27780), (19, 27741), (Start: 45 @27579 has 1 MA's), (49, 27558), (83, 27381), (84, 27378), (97, 27288), (106, 27234), (122, 27108), (125, 27078), (131, 27006),

Gene: GrootJr_59 Start: 44727, Stop: 43996, Start Num: 26

Candidate Starts for GrootJr_59:

(Start: 26 @44727 has 45 MA's), (34, 44679), (47, 44637), (58, 44550), (81, 44445), (89, 44379), (90, 44373), (91, 44370), (96, 44340), (100, 44325), (101, 44322), (130, 44076), (133, 44055), (140, 44001),

Gene: Hager_75 Start: 51440, Stop: 52150, Start Num: 32

Candidate Starts for Hager_75:

(Start: 31 @51437 has 11 MA's), (Start: 32 @51440 has 29 MA's), (41, 51479), (Start: 51 @51518 has 2 MA's), (63, 51596), (78, 51665), (85, 51710), (112, 51890), (113, 51893), (117, 51941), (125, 52013), (133, 52100),

Gene: Haunter_74 Start: 51350, Stop: 52060, Start Num: 32

Candidate Starts for Haunter_74:

(Start: 31 @51347 has 11 MA's), (Start: 32 @51350 has 29 MA's), (41, 51389), (Start: 51 @51428 has 2 MA's), (63, 51506), (69, 51527), (82, 51599), (85, 51620), (113, 51803), (117, 51851), (124, 51917), (125, 51923), (133, 52010),

Gene: Hiddenleaf_74 Start: 51437, Stop: 52150, Start Num: 31

Candidate Starts for Hiddenleaf_74:

(Start: 31 @51437 has 11 MA's), (Start: 32 @51440 has 29 MA's), (Start: 51 @51518 has 2 MA's), (63, 51596), (82, 51689), (85, 51710), (113, 51893), (125, 52013), (133, 52100),

Gene: HomeFry_62 Start: 43222, Stop: 42476, Start Num: 26

Candidate Starts for HomeFry_62:

(Start: 26 @43222 has 45 MA's), (53, 43084), (54, 43078), (58, 43036), (71, 42985), (79, 42943), (100, 42811), (112, 42724), (138, 42499), (140, 42490),

Gene: HubbaBubba_54 Start: 40875, Stop: 40135, Start Num: 26

Candidate Starts for HubbaBubba_54:

(Start: 26 @40875 has 45 MA's), (Start: 32 @40830 has 29 MA's), (42, 40797), (58, 40698), (79, 40605), (90, 40512), (91, 40509), (94, 40497), (112, 40377), (130, 40215), (137, 40161), (140, 40140),

Gene: IDyn_58 Start: 42307, Stop: 41567, Start Num: 26

Candidate Starts for IDyn_58:

(1, 43456), (2, 43183), (3, 42949), (4, 42643), (11, 42445), (Start: 26 @42307 has 45 MA's), (Start: 32 @42262 has 29 MA's), (42, 42229), (58, 42130), (79, 42037), (90, 41944), (91, 41941), (94, 41929), (112, 41809), (130, 41647), (137, 41593), (140, 41572),

Gene: JDawG_72 Start: 51633, Stop: 52343, Start Num: 32

Candidate Starts for JDawG_72:

(Start: 31 @51630 has 11 MA's), (Start: 32 @51633 has 29 MA's), (Start: 51 @51711 has 2 MA's), (63, 51789), (82, 51882), (85, 51903), (113, 52086), (125, 52206), (133, 52293),

Gene: Jifall16_56 Start: 44999, Stop: 44268, Start Num: 26

Candidate Starts for Jifall16_56:

(Start: 26 @44999 has 45 MA's), (34, 44951), (47, 44909), (58, 44822), (81, 44717), (89, 44651), (90, 44645), (91, 44642), (96, 44612), (100, 44597), (101, 44594), (130, 44348), (133, 44327), (140, 44273),

Gene: JingleBells_73 Start: 51545, Stop: 52255, Start Num: 32

Candidate Starts for JingleBells_73:

(Start: 31 @51542 has 11 MA's), (Start: 32 @51545 has 29 MA's), (Start: 51 @51623 has 2 MA's), (63, 51701), (82, 51794), (85, 51815), (113, 51998), (125, 52118), (133, 52205),

Gene: Kabluna_61 Start: 44432, Stop: 43686, Start Num: 26

Candidate Starts for Kabluna_61:

(Start: 26 @44432 has 45 MA's), (47, 44330), (58, 44243), (72, 44189), (89, 44072), (93, 44054), (95, 44045), (99, 44021), (112, 43931), (122, 43862), (133, 43745), (137, 43712), (140, 43691),

Gene: Karate_72 Start: 51686, Stop: 52396, Start Num: 32

Candidate Starts for Karate_72:

(Start: 31 @51683 has 11 MA's), (Start: 32 @51686 has 29 MA's), (Start: 51 @51764 has 2 MA's), (63, 51842), (85, 51956), (92, 52007), (113, 52139), (125, 52259), (133, 52346),

Gene: Kate_73 Start: 51888, Stop: 52601, Start Num: 31

Candidate Starts for Kate_73:

(Start: 31 @51888 has 11 MA's), (Start: 32 @51891 has 29 MA's), (Start: 51 @51969 has 2 MA's), (63, 52047), (85, 52161), (92, 52212), (113, 52344), (125, 52464), (133, 52551),

Gene: KidneyBean_57 Start: 45123, Stop: 44392, Start Num: 26

Candidate Starts for KidneyBean_57:

(Start: 26 @45123 has 45 MA's), (34, 45075), (47, 45033), (58, 44946), (81, 44841), (89, 44775), (90, 44769), (91, 44766), (96, 44736), (100, 44721), (101, 44718), (130, 44472), (133, 44451), (140, 44397),

Gene: Kors_77 Start: 52158, Stop: 52856, Start Num: 32

Candidate Starts for Kors_77:

(Start: 32 @52158 has 29 MA's), (Start: 51 @52230 has 2 MA's), (69, 52329), (73, 52347), (84, 52407), (103, 52539), (113, 52605), (119, 52668), (125, 52722), (135, 52824),

Gene: Krampus_73 Start: 51984, Stop: 52697, Start Num: 31

Candidate Starts for Krampus_73:

(Start: 31 @51984 has 11 MA's), (Start: 32 @51987 has 29 MA's), (Start: 51 @52065 has 2 MA's), (63, 52143), (85, 52257), (92, 52308), (113, 52440), (125, 52560), (133, 52647),

Gene: Kurt_57 Start: 45360, Stop: 44629, Start Num: 26

Candidate Starts for Kurt_57:

(Start: 26 @45360 has 45 MA's), (34, 45312), (47, 45270), (58, 45183), (81, 45078), (89, 45012), (90, 45006), (91, 45003), (96, 44973), (100, 44958), (101, 44955), (130, 44709), (133, 44688), (140, 44634),

Gene: Lizz_36 Start: 30696, Stop: 30094, Start Num: 46

Candidate Starts for Lizz_36:

(Start: 46 @30696 has 7 MA's), (57, 30612), (77, 30531), (88, 30447), (98, 30393), (99, 30390), (111, 30315), (113, 30303), (122, 30219), (124, 30195), (125, 30189), (128, 30138),

Gene: Lollipop1437_62 Start: 46334, Stop: 45597, Start Num: 26

Candidate Starts for Lollipop1437_62:

(Start: 26 @46334 has 45 MA's), (53, 46199), (55, 46190), (58, 46151), (68, 46115), (90, 45980), (100, 45932), (108, 45872), (118, 45818), (125, 45752), (138, 45620), (140, 45611),

Gene: LordBart_77 Start: 52068, Stop: 52766, Start Num: 32

Candidate Starts for LordBart_77:

(Start: 32 @52068 has 29 MA's), (Start: 51 @52140 has 2 MA's), (69, 52239), (73, 52257), (84, 52317), (103, 52449), (113, 52515), (119, 52578), (120, 52584), (125, 52632), (135, 52734),

Gene: MacGully_65 Start: 44606, Stop: 43860, Start Num: 26

Candidate Starts for MacGully_65:

(Start: 26 @44606 has 45 MA's), (47, 44507), (54, 44465), (55, 44462), (56, 44426), (58, 44423), (70, 44381), (76, 44345), (100, 44192), (101, 44189), (104, 44156), (122, 44036), (125, 44006), (139, 43865),

Gene: Marietta_59 Start: 42201, Stop: 41461, Start Num: 26

Candidate Starts for Marietta_59:

(12, 42333), (13, 42309), (15, 42297), (18, 42264), (Start: 26 @42201 has 45 MA's), (Start: 32 @42156 has 29 MA's), (42, 42123), (58, 42024), (79, 41931), (90, 41838), (91, 41835), (94, 41823), (112, 41703), (130, 41541), (137, 41487), (140, 41466),

Gene: Maselop_58 Start: 42366, Stop: 41626, Start Num: 26

Candidate Starts for Maselop_58:

(23, 42393), (Start: 26 @42366 has 45 MA's), (28, 42342), (47, 42267), (54, 42225), (56, 42186), (58, 42183), (59, 42180), (76, 42105), (90, 42006), (101, 41949), (105, 41916), (108, 41892), (118, 41838), (125, 41772), (138, 41634), (139, 41631),

Gene: MerCougar_59 Start: 45623, Stop: 44877, Start Num: 26

Candidate Starts for MerCougar_59:

(Start: 26 @45623 has 45 MA's), (43, 45530), (47, 45521), (58, 45434), (62, 45419), (72, 45380), (89, 45263), (112, 45122), (128, 44972), (133, 44936), (135, 44918), (137, 44903), (140, 44882),

Gene: MortySmith_71 Start: 51047, Stop: 51757, Start Num: 32

Candidate Starts for MortySmith_71:

(Start: 31 @51044 has 11 MA's), (Start: 32 @51047 has 29 MA's), (Start: 51 @51125 has 2 MA's), (63, 51203), (82, 51296), (85, 51317), (113, 51500), (117, 51548), (124, 51614), (125, 51620), (133,

51707),

Gene: NadineRae_57 Start: 41445, Stop: 40705, Start Num: 26

Candidate Starts for NadineRae_57:

(18, 41508), (Start: 26 @41445 has 45 MA's), (Start: 32 @41400 has 29 MA's), (42, 41367), (58, 41268), (79, 41175), (90, 41082), (91, 41079), (94, 41067), (112, 40947), (130, 40785), (137, 40731), (140, 40710),

Gene: NarutoRun_73 Start: 51949, Stop: 52662, Start Num: 31

Candidate Starts for NarutoRun_73:

(Start: 31 @51949 has 11 MA's), (Start: 32 @51952 has 29 MA's), (Start: 51 @52030 has 2 MA's), (63, 52108), (85, 52222), (92, 52273), (113, 52405), (125, 52525), (133, 52612),

Gene: NatB6_57 Start: 44417, Stop: 43686, Start Num: 26

Candidate Starts for NatB6_57:

(Start: 26 @44417 has 45 MA's), (34, 44369), (47, 44327), (58, 44240), (81, 44135), (89, 44069), (90, 44063), (91, 44060), (96, 44030), (100, 44015), (101, 44012), (130, 43766), (133, 43745), (140, 43691),

Gene: Neptune_73 Start: 51979, Stop: 52692, Start Num: 31

Candidate Starts for Neptune_73:

(Start: 31 @51979 has 11 MA's), (Start: 32 @51982 has 29 MA's), (Start: 51 @52060 has 2 MA's), (63, 52138), (85, 52252), (112, 52432), (113, 52435), (125, 52555), (133, 52642),

Gene: NosilaM_61 Start: 45330, Stop: 44584, Start Num: 26

Candidate Starts for NosilaM_61:

(25, 45333), (Start: 26 @45330 has 45 MA's), (47, 45228), (58, 45141), (72, 45087), (89, 44970), (95, 44943), (108, 44856), (112, 44829), (113, 44826), (122, 44760), (127, 44682), (133, 44643), (137, 44610), (140, 44589),

Gene: NovumRegina_57 Start: 44726, Stop: 43995, Start Num: 26

Candidate Starts for NovumRegina_57:

(Start: 26 @44726 has 45 MA's), (34, 44678), (47, 44636), (58, 44549), (81, 44444), (89, 44378), (90, 44372), (91, 44369), (96, 44339), (100, 44324), (101, 44321), (130, 44075), (133, 44054), (140, 44000),

Gene: OhDear_73 Start: 52028, Stop: 52660, Start Num: 51

Candidate Starts for OhDear_73:

(Start: 31 @51947 has 11 MA's), (Start: 32 @51950 has 29 MA's), (Start: 51 @52028 has 2 MA's), (63, 52106), (85, 52220), (112, 52400), (113, 52403), (125, 52523), (133, 52610),

Gene: Outis_59 Start: 45317, Stop: 44571, Start Num: 26

Candidate Starts for Outis_59:

(Start: 26 @45317 has 45 MA's), (43, 45224), (47, 45215), (50, 45194), (58, 45128), (72, 45074), (89, 44957), (96, 44918), (99, 44906), (112, 44816), (128, 44666), (133, 44630), (137, 44597), (140, 44576),

Gene: OverHedge_72 Start: 51848, Stop: 52558, Start Num: 32

Candidate Starts for OverHedge_72:

(Start: 31 @51845 has 11 MA's), (Start: 32 @51848 has 29 MA's), (Start: 51 @51926 has 2 MA's), (63, 52004), (85, 52118), (112, 52298), (113, 52301), (125, 52421), (133, 52508),

Gene: PHTowN_36 Start: 30694, Stop: 30092, Start Num: 46

Candidate Starts for PHTown_36:

(Start: 46 @30694 has 7 MA's), (57, 30610), (77, 30529), (88, 30445), (98, 30391), (99, 30388), (111, 30313), (113, 30301), (122, 30217), (124, 30193), (125, 30187), (128, 30136),

Gene: Patio_61 Start: 45570, Stop: 44833, Start Num: 26

Candidate Starts for Patio_61:

(Start: 26 @45570 has 45 MA's), (53, 45435), (55, 45426), (58, 45387), (64, 45366), (90, 45216), (100, 45168), (101, 45165), (108, 45108), (118, 45054), (125, 44988), (138, 44856), (140, 44847),

Gene: Pemberton_60 Start: 42183, Stop: 41443, Start Num: 26

Candidate Starts for Pemberton_60:

(15, 42279), (18, 42246), (Start: 26 @42183 has 45 MA's), (Start: 32 @42138 has 29 MA's), (58, 42006), (79, 41913), (91, 41817), (101, 41769), (112, 41685), (130, 41523), (137, 41469), (140, 41448),

Gene: Pharpay_72 Start: 51997, Stop: 52707, Start Num: 32

Candidate Starts for Pharpay_72:

(Start: 31 @51994 has 11 MA's), (Start: 32 @51997 has 29 MA's), (Start: 51 @52075 has 2 MA's), (63, 52153), (85, 52267), (112, 52447), (113, 52450), (125, 52570), (133, 52657),

Gene: Phomeo_56 Start: 44995, Stop: 44264, Start Num: 26

Candidate Starts for Phomeo_56:

(Start: 26 @44995 has 45 MA's), (34, 44947), (47, 44905), (58, 44818), (81, 44713), (89, 44647), (90, 44641), (91, 44638), (96, 44608), (100, 44593), (101, 44590), (130, 44344), (133, 44323), (140, 44269),

Gene: PhunaPhoke_73 Start: 51967, Stop: 52677, Start Num: 32

Candidate Starts for PhunaPhoke_73:

(Start: 31 @51964 has 11 MA's), (Start: 32 @51967 has 29 MA's), (Start: 51 @52045 has 2 MA's), (63, 52123), (85, 52237), (92, 52288), (113, 52420), (125, 52540), (133, 52627),

Gene: Pleakley_65 Start: 44524, Stop: 43778, Start Num: 26

Candidate Starts for Pleakley_65:

(8, 44584), (Start: 26 @44524 has 45 MA's), (40, 44443), (53, 44386), (54, 44380), (58, 44338), (71, 44287), (79, 44245), (89, 44167), (101, 44110), (102, 44092), (112, 44026), (128, 43882), (136, 43825), (138, 43801), (140, 43792),

Gene: Polyuki_58 Start: 42355, Stop: 41615, Start Num: 26

Candidate Starts for Polyuki_58:

(23, 42382), (Start: 26 @42355 has 45 MA's), (28, 42331), (47, 42256), (54, 42214), (56, 42175), (58, 42172), (59, 42169), (76, 42094), (90, 41995), (101, 41938), (105, 41905), (108, 41881), (118, 41827), (125, 41761), (138, 41623), (139, 41620),

Gene: Potty_72 Start: 51894, Stop: 52607, Start Num: 31

Candidate Starts for Potty_72:

(Start: 31 @51894 has 11 MA's), (Start: 32 @51897 has 29 MA's), (Start: 51 @51975 has 2 MA's), (63, 52053), (85, 52167), (112, 52347), (113, 52350), (125, 52470), (133, 52557),

Gene: Poultruss_72 Start: 52242, Stop: 52952, Start Num: 32

Candidate Starts for Poultruss_72:

(Start: 31 @52239 has 11 MA's), (Start: 32 @52242 has 29 MA's), (Start: 51 @52320 has 2 MA's), (63, 52398), (82, 52491), (85, 52512), (86, 52518), (113, 52695), (125, 52815),

Gene: Rachella_73 Start: 51978, Stop: 52688, Start Num: 32

Candidate Starts for Rachella_73:

(Start: 31 @51975 has 11 MA's), (Start: 32 @51978 has 29 MA's), (Start: 51 @52056 has 2 MA's), (63, 52134), (85, 52248), (92, 52299), (113, 52431), (125, 52551), (133, 52638),

Gene: RedRaider_65 Start: 47592, Stop: 46855, Start Num: 26

Candidate Starts for RedRaider_65:

(Start: 26 @47592 has 45 MA's), (39, 47517), (53, 47457), (55, 47448), (58, 47409), (90, 47238), (100, 47190), (101, 47187), (108, 47130), (118, 47076), (125, 47010), (138, 46878), (140, 46869),

Gene: Rie18_73 Start: 51765, Stop: 52478, Start Num: 31

Candidate Starts for Rie18_73:

(Start: 31 @51765 has 11 MA's), (Start: 32 @51768 has 29 MA's), (41, 51807), (Start: 51 @51846 has 2 MA's), (63, 51924), (85, 52038), (112, 52218), (113, 52221), (125, 52341), (133, 52428),

Gene: RikSengupta_77 Start: 52261, Stop: 52887, Start Num: 51

Candidate Starts for RikSengupta_77:

(Start: 32 @52189 has 29 MA's), (Start: 51 @52261 has 2 MA's), (69, 52360), (73, 52378), (84, 52438), (103, 52570), (113, 52636), (119, 52699), (120, 52705), (125, 52753), (135, 52855),

Gene: Rooney_36 Start: 30879, Stop: 30277, Start Num: 46

Candidate Starts for Rooney_36:

(Start: 46 @30879 has 7 MA's), (57, 30795), (80, 30693), (98, 30576), (111, 30498), (115, 30468), (122, 30402), (124, 30378), (125, 30372), (128, 30321),

Gene: SassyC_39 Start: 31477, Stop: 30875, Start Num: 46

Candidate Starts for SassyC_39:

(Start: 46 @31477 has 7 MA's), (80, 31291), (83, 31279), (98, 31174), (99, 31171), (122, 31000), (124, 30976), (125, 30970), (128, 30919),

Gene: Scuba_66 Start: 44598, Stop: 43852, Start Num: 26

Candidate Starts for Scuba_66:

(8, 44658), (Start: 26 @44598 has 45 MA's), (40, 44517), (53, 44460), (54, 44454), (58, 44412), (71, 44361), (79, 44319), (89, 44241), (101, 44184), (102, 44166), (112, 44100), (128, 43956), (136, 43899), (138, 43875), (140, 43866),

Gene: ShakeNBake_36 Start: 30712, Stop: 30110, Start Num: 46

Candidate Starts for ShakeNBake_36:

(Start: 46 @30712 has 7 MA's), (57, 30628), (77, 30547), (88, 30463), (98, 30409), (99, 30406), (111, 30331), (113, 30319), (122, 30235), (124, 30211), (125, 30205), (128, 30154),

Gene: Sienna_80 Start: 55774, Stop: 56595, Start Num: 22

Candidate Starts for Sienna_80:

(20, 55759), (Start: 22 @55774 has 5 MA's), (27, 55846), (33, 55870), (42, 55912), (54, 55966), (61, 56014), (67, 56038), (72, 56062), (75, 56077), (105, 56263),

Gene: SilentWarrior_74 Start: 51406, Stop: 52116, Start Num: 32

Candidate Starts for SilentWarrior_74:

(Start: 31 @51403 has 11 MA's), (Start: 32 @51406 has 29 MA's), (Start: 51 @51484 has 2 MA's), (63, 51562), (82, 51655), (85, 51676), (113, 51859), (125, 51979), (133, 52066),

Gene: Skysand_60 Start: 45790, Stop: 45053, Start Num: 26

Candidate Starts for Skysand_60:

(5, 45910), (7, 45898), (Start: 26 @45790 has 45 MA's), (53, 45655), (55, 45646), (58, 45607), (90, 45436), (100, 45388), (101, 45385), (108, 45328), (118, 45274), (125, 45208), (138, 45076), (140, 45067),

Gene: Snakehole_74 Start: 51389, Stop: 52099, Start Num: 32

Candidate Starts for Snakehole_74:

(Start: 31 @51386 has 11 MA's), (Start: 32 @51389 has 29 MA's), (Start: 51 @51467 has 2 MA's), (63, 51545), (82, 51638), (85, 51659), (113, 51842), (117, 51890), (124, 51956), (125, 51962), (133, 52049),

Gene: Sparcetus_77 Start: 52075, Stop: 52701, Start Num: 51

Candidate Starts for Sparcetus_77:

(Start: 32 @52003 has 29 MA's), (Start: 51 @52075 has 2 MA's), (69, 52174), (73, 52192), (84, 52252), (103, 52384), (113, 52450), (119, 52513), (120, 52519), (125, 52567), (135, 52669),

Gene: StarStruck_59 Start: 45317, Stop: 44571, Start Num: 26

Candidate Starts for StarStruck_59:

(Start: 26 @45317 has 45 MA's), (43, 45224), (47, 45215), (50, 45194), (58, 45128), (72, 45074), (89, 44957), (96, 44918), (99, 44906), (112, 44816), (128, 44666), (133, 44630), (137, 44597), (140, 44576),

Gene: Sukkupi_58 Start: 43757, Stop: 43017, Start Num: 26

Candidate Starts for Sukkupi_58:

(12, 43889), (13, 43865), (18, 43820), (Start: 26 @43757 has 45 MA's), (Start: 32 @43712 has 29 MA's), (58, 43580), (79, 43487), (90, 43394), (91, 43391), (94, 43379), (101, 43343), (112, 43259), (130, 43097), (137, 43043), (140, 43022),

Gene: SuperSulley_59 Start: 45496, Stop: 44750, Start Num: 26

Candidate Starts for SuperSulley_59:

(Start: 26 @45496 has 45 MA's), (47, 45394), (55, 45346), (58, 45307), (72, 45253), (89, 45136), (93, 45118), (95, 45109), (112, 44995), (122, 44926), (133, 44809), (137, 44776), (140, 44755),

Gene: Suzy_77 Start: 55845, Stop: 56666, Start Num: 17

Candidate Starts for Suzy_77:

(Start: 17 @55845 has 1 MA's), (27, 55917), (33, 55941), (42, 55983), (54, 56037), (61, 56085), (67, 56109), (72, 56133), (75, 56148), (105, 56334),

Gene: Tedro_73 Start: 51437, Stop: 52147, Start Num: 32

Candidate Starts for Tedro_73:

(Start: 31 @51434 has 11 MA's), (Start: 32 @51437 has 29 MA's), (41, 51476), (Start: 51 @51515 has 2 MA's), (63, 51593), (64, 51596), (85, 51707), (112, 51887), (113, 51890), (125, 52010), (133, 52097),

Gene: Terapin_81 Start: 55698, Stop: 56519, Start Num: 22

Candidate Starts for Terapin_81:

(16, 55659), (Start: 22 @55698 has 5 MA's), (27, 55770), (33, 55794), (42, 55836), (54, 55890), (61, 55938), (67, 55962), (72, 55986), (75, 56001), (105, 56187),

Gene: Tiggy93_72 Start: 52074, Stop: 52706, Start Num: 51

Candidate Starts for Tiggy93_72:

(Start: 31 @51993 has 11 MA's), (Start: 32 @51996 has 29 MA's), (Start: 51 @52074 has 2 MA's), (63, 52152), (85, 52266), (112, 52446), (113, 52449), (125, 52569), (133, 52656),

Gene: TinyMiny_77 Start: 52093, Stop: 52791, Start Num: 32

Candidate Starts for TinyMiny_77:

(Start: 32 @52093 has 29 MA's), (Start: 51 @52165 has 2 MA's), (69, 52264), (73, 52282), (84, 52342), (103, 52474), (113, 52540), (119, 52603), (120, 52609), (125, 52657), (135, 52759),

Gene: Tongui_74 Start: 51880, Stop: 52590, Start Num: 32

Candidate Starts for Tongui_74:

(Start: 31 @51877 has 11 MA's), (Start: 32 @51880 has 29 MA's), (41, 51919), (Start: 51 @51958 has 2 MA's), (63, 52036), (78, 52105), (85, 52150), (112, 52330), (113, 52333), (125, 52453), (133, 52540),

Gene: Tracker_57 Start: 44141, Stop: 43410, Start Num: 26

Candidate Starts for Tracker_57:

(18, 44204), (Start: 26 @44141 has 45 MA's), (34, 44093), (47, 44051), (58, 43964), (81, 43859), (89, 43793), (90, 43787), (91, 43784), (96, 43754), (100, 43739), (101, 43736), (130, 43490), (133, 43469), (140, 43415),

Gene: Turuncu_62 Start: 45742, Stop: 44996, Start Num: 9

Candidate Starts for Turuncu_62:

(Start: 9 @45742 has 1 MA's), (48, 45631), (52, 45616), (53, 45604), (55, 45595), (56, 45559), (68, 45520), (71, 45505), (101, 45334), (108, 45277), (125, 45151), (126, 45145), (138, 45019), (140, 45010),

Gene: Virizion_40 Start: 31078, Stop: 30476, Start Num: 46

Candidate Starts for Virizion_40:

(Start: 46 @31078 has 7 MA's), (57, 30994), (80, 30892), (98, 30775), (111, 30697), (115, 30667), (122, 30601), (124, 30577), (125, 30571), (128, 30520),

Gene: Wentworth_37 Start: 31184, Stop: 30582, Start Num: 46

Candidate Starts for Wentworth_37:

(Start: 46 @31184 has 7 MA's), (74, 31040), (80, 30998), (98, 30881), (115, 30773), (122, 30707), (124, 30683), (125, 30677), (128, 30626), (134, 30590),

Gene: Wheezy_57 Start: 44349, Stop: 43618, Start Num: 26

Candidate Starts for Wheezy_57:

(18, 44412), (Start: 26 @44349 has 45 MA's), (34, 44301), (47, 44259), (58, 44172), (81, 44067), (89, 44001), (90, 43995), (91, 43992), (96, 43962), (100, 43947), (101, 43944), (130, 43698), (133, 43677), (140, 43623),

Gene: WhoseManz_58 Start: 41814, Stop: 41074, Start Num: 26

Candidate Starts for WhoseManz_58:

(6, 42120), (12, 41946), (13, 41922), (15, 41910), (18, 41877), (Start: 26 @41814 has 45 MA's), (Start: 32 @41769 has 29 MA's), (42, 41736), (58, 41637), (79, 41544), (90, 41451), (91, 41448), (94, 41436), (112, 41316), (130, 41154), (137, 41100), (140, 41079),

Gene: Wilkos_37 Start: 30999, Stop: 30397, Start Num: 46

Candidate Starts for Wilkos_37:

(Start: 46 @30999 has 7 MA's), (60, 30909), (80, 30813), (83, 30801), (98, 30696), (99, 30693), (122, 30522), (124, 30498), (125, 30492), (128, 30441),

Gene: Yara_34 Start: 30376, Stop: 29774, Start Num: 44

Candidate Starts for Yara_34:

(19, 30535), (21, 30520), (27, 30445), (36, 30403), (38, 30391), (Start: 44 @30376 has 1 MA's), (Start: 46 @30370 has 7 MA's), (66, 30259), (77, 30205), (83, 30172), (84, 30169), (89, 30115), (99, 30070), (117, 29941), (125, 29869), (129, 29812), (132, 29791),

Gene: Yndexa_58 Start: 43757, Stop: 43017, Start Num: 26

Candidate Starts for Yndexa_58:

(12, 43889), (13, 43865), (18, 43820), (Start: 26 @43757 has 45 MA's), (Start: 32 @43712 has 29 MA's), (58, 43580), (79, 43487), (90, 43394), (91, 43391), (94, 43379), (101, 43343), (112, 43259), (130, 43097), (137, 43043), (140, 43022),