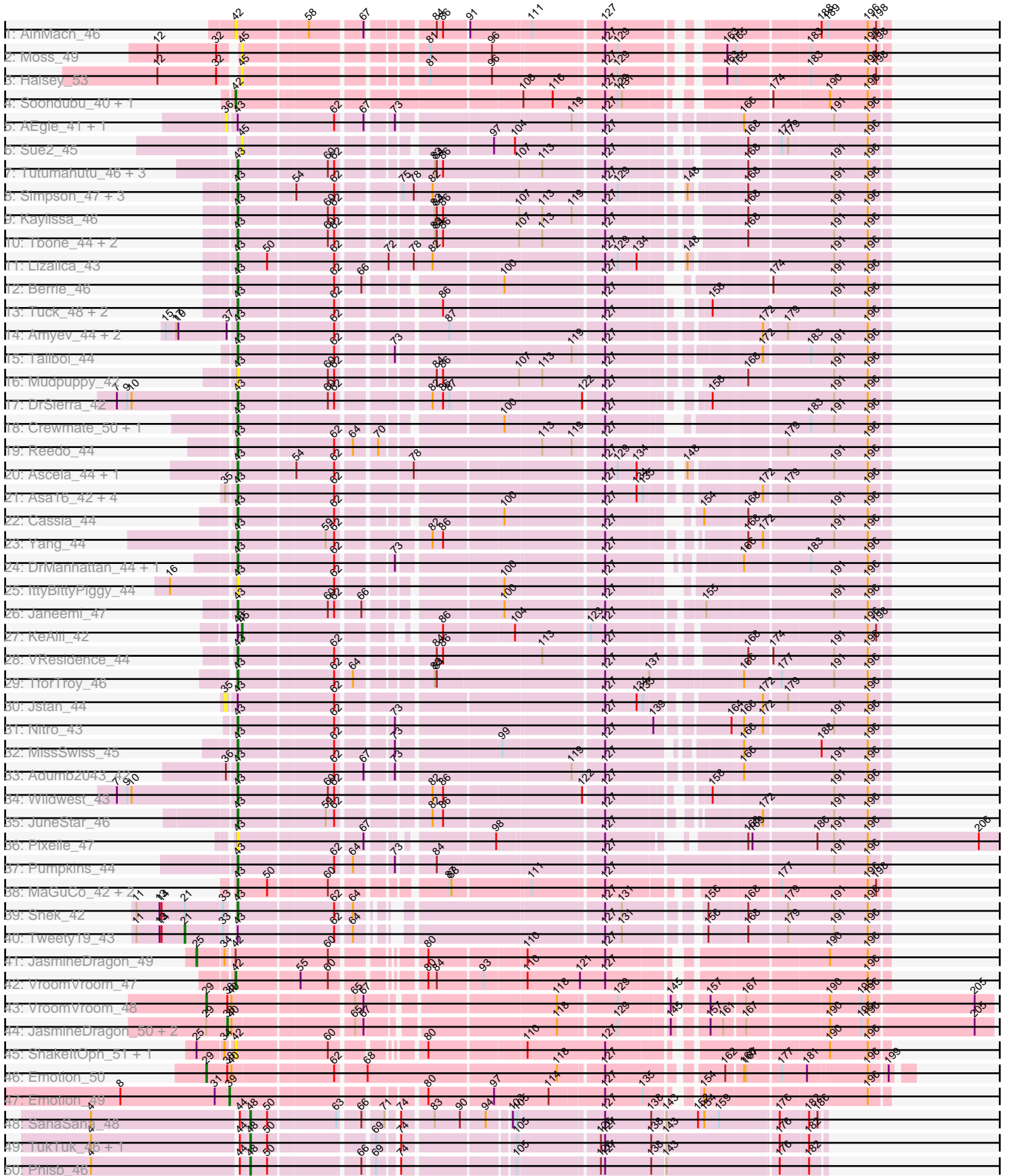
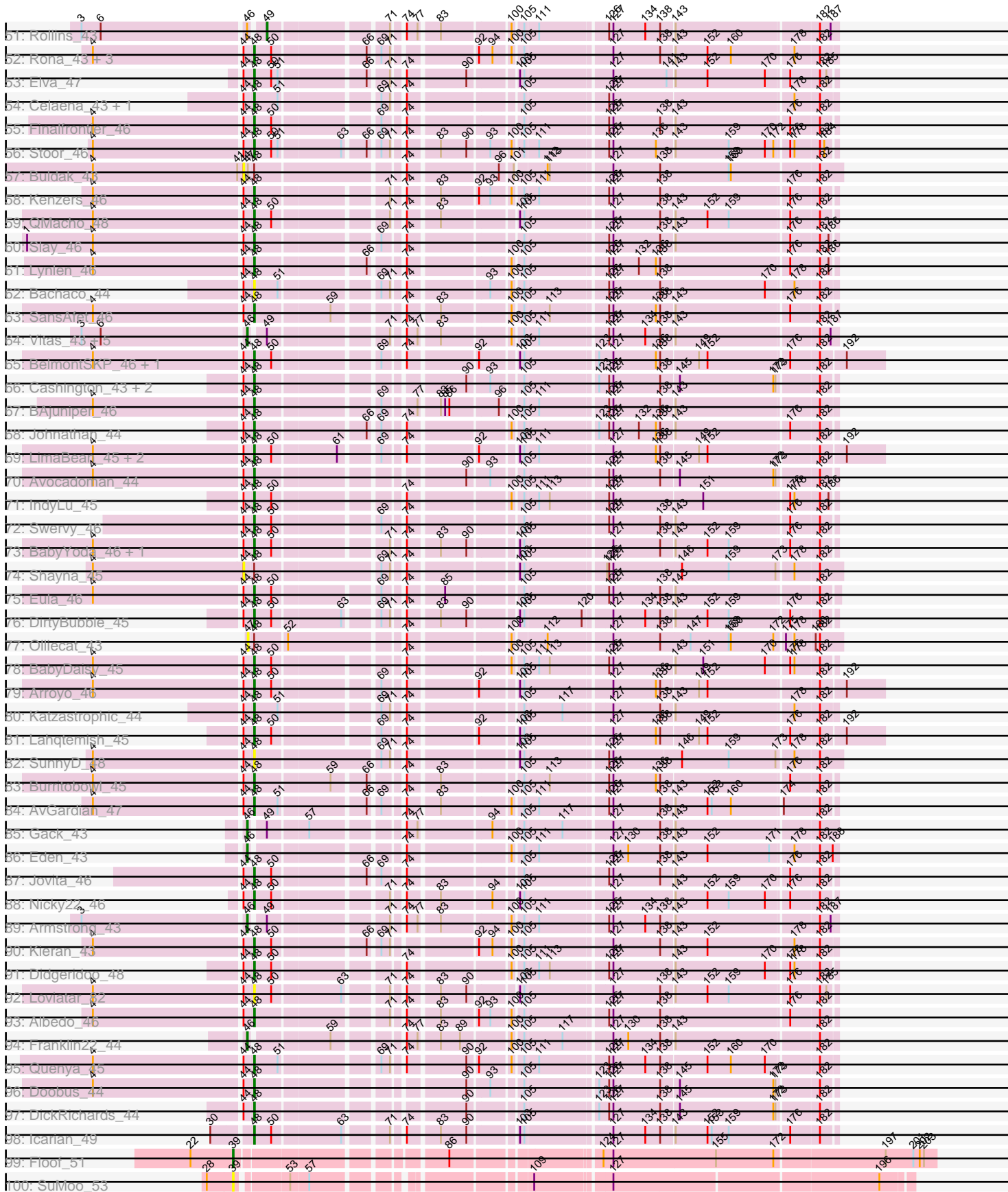


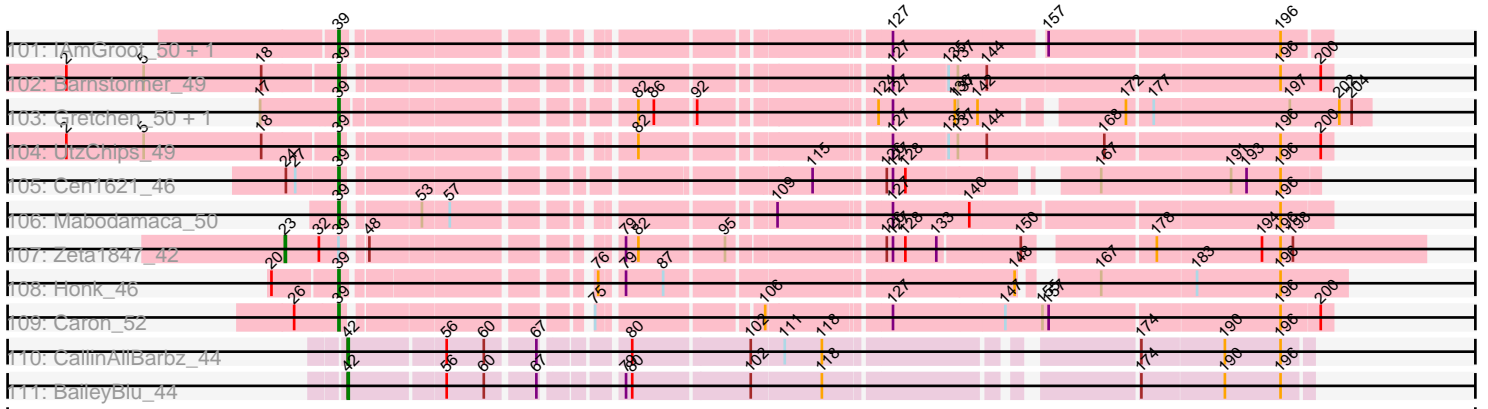
Pham 169781



Pham 169781



Pham 169781



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 169781 Report

This analysis was run 07/09/24 on database version 566.

Pham number 169781 has 155 members, 30 are drafts.

Phages represented in each track:

- Track 1 : AinMach_46
- Track 2 : Moss_49
- Track 3 : Halsey_53
- Track 4 : Soondubu_40, Exile_39
- Track 5 : AEgle_41, Turab_42
- Track 6 : Sue2_45
- Track 7 : Tutumahutu_46, Powerpuff_47, Lego_44, YesChef_45
- Track 8 : Simpson_47, Cyan_44, JohnDoe_45, Joemato_47
- Track 9 : Kaylissa_46
- Track 10 : Tbone_44, Warda_45, AGrandiflora_47
- Track 11 : Lizalica_43
- Track 12 : Berrie_46
- Track 13 : Tuck_48, Community_47, Phives_48
- Track 14 : Amyev_44, Pixelle_46, Tian_43
- Track 15 : Tallboi_44
- Track 16 : Mudpuppy_42
- Track 17 : DrSierra_42
- Track 18 : Crewmate_50, ObiToo_50
- Track 19 : Reedo_44
- Track 20 : Ascela_44, Iter_44
- Track 21 : Asa16_42, Niobe_42, Eraser_42, London_42, Elezi_42
- Track 22 : Cassia_44
- Track 23 : Yang_44
- Track 24 : DrManhattan_44, Adolin_45
- Track 25 : IttyBittyPiggy_44
- Track 26 : Janeemi_47
- Track 27 : KeAlii_42
- Track 28 : VResidence_44
- Track 29 : TforTroy_46
- Track 30 : Jstan_44
- Track 31 : Nitro_43
- Track 32 : MissSwiss_45
- Track 33 : Adumb2043_42
- Track 34 : Wildwest_43
- Track 35 : JuneStar_46
- Track 36 : Pixelle_47
- Track 37 : Pumpkins_44

- Track 38 : MaGuCo_42, Liebe_45, Maureen_45
- Track 39 : Snek_42
- Track 40 : Tweety19_43
- Track 41 : JasmineDragon_49
- Track 42 : VroomVroom_47
- Track 43 : VroomVroom_48
- Track 44 : JasmineDragon_50, ShakeltOph_52, MiniMommy_52
- Track 45 : ShakeltOph_51, MiniMommy_51
- Track 46 : Emotion_50
- Track 47 : Emotion_49
- Track 48 : SanaSana_48
- Track 49 : TukTuk_46, SarBear_45
- Track 50 : Phisb_46
- Track 51 : Rollins_43
- Track 52 : Rona_43, ChiliPepper_43, Dismas_43, Sharkboy_44
- Track 53 : Elva_47
- Track 54 : Celaena_43, FlameThrower_43
- Track 55 : Finalfrontier_46
- Track 56 : Stoor_46
- Track 57 : Buldak_43
- Track 58 : Kenzers_46
- Track 59 : QMacho_48
- Track 60 : Slay_46
- Track 61 : Lynlen_46
- Track 62 : Bachaco_44
- Track 63 : SansAfet_46
- Track 64 : Vitas_43, Bernstein_43, Skylord_43, Brahms_43, Coltrane_43, Clayda5_44
- Track 65 : BelmontSKP_46, AnnaLie_46
- Track 66 : Cashington_43, Albright_43, BubbaBear_44
- Track 67 : BAjuniper_46
- Track 68 : Johnathan_44
- Track 69 : LimaBean_45, Abigail_45, CroZenni_45
- Track 70 : Avocadoman_44
- Track 71 : IndyLu_45
- Track 72 : Swervy_46
- Track 73 : BabyYoda_46, Stromboli_46
- Track 74 : Shayna_45
- Track 75 : Eula_46
- Track 76 : DirtyBubble_45
- Track 77 : Olliecat_43
- Track 78 : BabyDaisy_45
- Track 79 : Arroyo_46
- Track 80 : Katzastrophic_44
- Track 81 : Lahqtemish_45
- Track 82 : SunnyD_48
- Track 83 : Burritobowl_45
- Track 84 : AvGardian_47
- Track 85 : Gack_43
- Track 86 : Eden_43
- Track 87 : Jovita_46
- Track 88 : Nicky22_46
- Track 89 : Armstrong_43

- Track 90 : Kieran_43
- Track 91 : Didgeridoo_48
- Track 92 : Loviatar_82
- Track 93 : Albedo_46
- Track 94 : Franklin22_44
- Track 95 : Quenya_45
- Track 96 : Doobus_44
- Track 97 : DickRichards_44
- Track 98 : Icarian_49
- Track 99 : Floof_51
- Track 100 : SuMoo_53
- Track 101 : IAmGroot_50, GardenState_50
- Track 102 : Barnstormer_49
- Track 103 : Gretchen_50, Percival_51
- Track 104 : UtzChips_49
- Track 105 : Cen1621_46
- Track 106 : Mabodamaca_50
- Track 107 : Zeta1847_42
- Track 108 : Honk_46
- Track 109 : Caron_52
- Track 110 : CallinAllBarbz_44
- Track 111 : BaileyBlu_44

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

The start number called the most often in the published annotations is 48, it was called in 49 of the 125 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abigail_45, Albedo_46, Albright_43, AnnaLie_46, Arroyo_46, AvGardian_47, Avocadoman_44, BAjuniper_46, BabyDaisy_45, BabyYoda_46, Bachaco_44, BelmontSKP_46, BubbaBear_44, Burritobowl_45, Cashington_43, Celaena_43, ChiliPepper_43, CroZenni_45, DickRichards_44, Didgeridoo_48, DirtyBubble_45, Dismas_43, Doobus_44, Elva_47, Eula_46, Finalfrontier_46, FlameThrower_43, Icarian_49, IndyLu_45, Johnathan_44, Jovita_46, Katzastrophic_44, Kenzers_46, Kieran_43, Lahqtemish_45, LimaBean_45, Loviatar_82, Lynlen_46, Nicky22_46, Phisb_46, QMacho_48, Quenya_45, Rona_43, SanaSana_48, SansAfet_46, SarBear_45, Sharkboy_44, Slay_46, Stoor_46, Stromboli_46, SunnyD_48, Swervy_46, TukTuk_46,

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

- Buldak_43, Olliecat_43, Shayna_45, Zeta1847_42,

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

- AEgle_41, AGrandiflora_47, Adolin_45, Adumb2043_42, AinMach_46, Amyev_44, Armstrong_43, Asa16_42, Ascela_44, BaileyBlu_44, Barnstormer_49, Bernstein_43, Berrie_46, Brahms_43, CallinAllBarbz_44, Caron_52, Cassia_44, Cen1621_46, Clayda5_44, Coltrane_43, Community_47, Crewmate_50, Cyan_44, DrManhattan_44, DrSierra_42, Eden_43, Elezi_42, Emotion_49, Emotion_50, Eraser_42, Exile_39, Floof_51, Franklin22_44, Gack_43, GardenState_50,

Gretchen_50, Halsey_53, Honk_46, IAmGroot_50, Iter_44, IttyBittyPiggy_44, Janeemi_47, JasmineDragon_49, JasmineDragon_50, Joemato_47, JohnDoe_45, Jstan_44, JuneStar_46, Kaylissa_46, KeAlii_42, Lego_44, Liebe_45, Lizalica_43, London_42, MaGuCo_42, Mabodamaca_50, Maureen_45, MiniMommy_51, MiniMommy_52, MissSwiss_45, Moss_49, Mudpuppy_42, Niobe_42, Nitro_43, ObiToo_50, Percival_51, Phives_48, Pixelle_46, Pixelle_47, Powerpuff_47, Pumpkins_44, Reedo_44, Rollins_43, ShakeltOph_51, ShakeltOph_52, Simpson_47, Skylord_43, Snek_42, Soondubu_40, SuMoo_53, Sue2_45, Tallboi_44, Tbone_44, TforTroy_46, Tian_43, Tuck_48, Turab_42, Tutumahutu_46, Tweety19_43, UtzChips_49, VResidence_44, Vitas_43, VroomVroom_47, VroomVroom_48, Warda_45, Wildwest_43, Yang_44, YesChef_45,

Summary by start number:

Start 21:

- Found in 2 of 155 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Tweety19_43 (AZ3),

Start 23:

- Found in 1 of 155 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Zeta1847_42 (EH),

Start 25:

- Found in 3 of 155 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 33.3% of time when present
- Phage (with cluster) where this start called: JasmineDragon_49 (AZ4),

Start 29:

- Found in 5 of 155 (3.2%) of genes in pham
- Manual Annotations of this start: 2 of 125
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Emotion_50 (AZ4), VroomVroom_48 (AZ4),

Start 35:

- Found in 6 of 155 (3.9%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Jstan_44 (AZ1),

Start 36:

- Found in 3 of 155 (1.9%) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: AEgle_41 (AZ1), Turab_42 (AZ1),

Start 38:

- Found in 5 of 155 (3.2%) of genes in pham

- Manual Annotations of this start: 1 of 125
- Called 60.0% of time when present
- Phage (with cluster) where this start called: JasmineDragon_50 (AZ4), MiniMommy_52 (AZ4), ShakeltOph_52 (AZ4),

Start 39:

- Found in 14 of 155 (9.0%) of genes in pham
- Manual Annotations of this start: 12 of 125
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Barnstormer_49 (EH), Caron_52 (EH), Cen1621_46 (EH), Emotion_49 (AZ4), Floof_51 (EH), GardenState_50 (EH), Gretchen_50 (EH), Honk_46 (EH), IAmGroot_50 (EH), Mabodamaca_50 (EH), Percival_51 (EH), SuMoo_53 (EH), UtzChips_49 (EH),

Start 42:

- Found in 9 of 155 (5.8%) of genes in pham
- Manual Annotations of this start: 4 of 125
- Called 88.9% of time when present
- Phage (with cluster) where this start called: AinMach_46 (AZ), BaileyBlu_44 (FP), CallinAllBarbz_44 (FP), Exile_39 (AZ), MiniMommy_51 (AZ4), ShakeltOph_51 (AZ4), Soondubu_40 (AZ), VroomVroom_47 (AZ4),

Start 43:

- Found in 57 of 155 (36.8%) of genes in pham
- Manual Annotations of this start: 42 of 125
- Called 91.2% of time when present
- Phage (with cluster) where this start called: AGrandiflora_47 (AZ1), Adolin_45 (AZ1), Adumb2043_42 (AZ1), Amyev_44 (AZ1), Asa16_42 (AZ1), Ascela_44 (AZ1), Berrie_46 (AZ1), Cassia_44 (AZ1), Community_47 (AZ1), Crewmate_50 (AZ1), Cyan_44 (AZ1), DrManhattan_44 (AZ1), DrSierra_42 (AZ1), Elezi_42 (AZ1), Eraser_42 (AZ1), Iter_44 (AZ1), IttyBittyPiggy_44 (AZ1), Janeemi_47 (AZ1), Joemato_47 (AZ1), JohnDoe_45 (AZ1), JuneStar_46 (AZ1), Kaylissa_46 (AZ1), Lego_44 (AZ1), Liebe_45 (AZ2), Lizalica_43 (AZ1), London_42 (AZ1), MaGuCo_42 (AZ2), Maureen_45 (AZ2), MissSwiss_45 (AZ1), Mudpuppy_42 (AZ1), Niobe_42 (AZ1), Nitro_43 (AZ1), ObiToo_50 (AZ1), Phives_48 (AZ1), Pixelle_46 (AZ1), Pixelle_47 (AZ1), Powerpuff_47 (AZ1), Pumpkins_44 (AZ1), Reedo_44 (AZ1), Simpson_47 (AZ1), Sneek_42 (AZ3), Tallboi_44 (AZ1), Tbone_44 (AZ1), TforTroy_46 (AZ1), Tian_43 (AZ1), Tuck_48 (AZ1), Tutumahutu_46 (AZ1), VResidence_44 (AZ1), Warda_45 (AZ1), Wildwest_43 (AZ1), Yang_44 (AZ1), YesChef_45 (AZ1),

Start 44:

- Found in 54 of 155 (34.8%) of genes in pham
- No Manual Annotations of this start.
- Called 3.7% of time when present
- Phage (with cluster) where this start called: Buldak_43 (EB), Shayna_45 (EB),

Start 45:

- Found in 4 of 155 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Halsey_53 (AZ), KeAlii_42 (AZ1), Moss_49 (AZ), Sue2_45 (AZ1),

Start 46:

- Found in 11 of 155 (7.1%) of genes in pham
- Manual Annotations of this start: 10 of 125
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Armstrong_43 (EB), Bernstein_43 (EB), Brahms_43 (EB), Clayda5_44 (EB), Coltrane_43 (EB), Eden_43 (EB), Franklin22_44 (EB), Gack_43 (EB), Skylord_43 (EB), Vitas_43 (EB),

Start 47:

- Found in 2 of 155 (1.3%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Olliecat_43 (EB),

Start 48:

- Found in 57 of 155 (36.8%) of genes in pham
- Manual Annotations of this start: 49 of 125
- Called 93.0% of time when present
- Phage (with cluster) where this start called: Abigail_45 (EB), Albedo_46 (EB), Albright_43 (EB), AnnaLie_46 (EB), Arroyo_46 (EB), AvGuardian_47 (EB), Avocadoman_44 (EB), BAjuniper_46 (EB), BabyDaisy_45 (EB), BabyYoda_46 (EB), Bachaco_44 (EB), BelmontSKP_46 (EB), BubbaBear_44 (EB), Burritobowl_45 (EB), Cashington_43 (EB), Celaena_43 (EB), ChiliPepper_43 (EB), CroZenni_45 (EB), DickRichards_44 (EB), Didgeridoo_48 (EB), DirtyBubble_45 (EB), Dismas_43 (EB), Doobus_44 (EB), Elva_47 (EB), Eula_46 (EB), Finalfrontier_46 (EB), FlameThrower_43 (EB), Icarian_49 (EB), IndyLu_45 (EB), Johnathan_44 (EB), Jovita_46 (EB), Katzastrophic_44 (EB), Kenzers_46 (EB), Kieran_43 (EB), Lahqtemish_45 (EB), LimaBean_45 (EB), Loviatar_82 (EB), Lynlen_46 (EB), Nicky22_46 (EB), Phisb_46 (EB), QMacho_48 (EB), Quenya_45 (EB), Rona_43 (EB), SanaSana_48 (EB), SansAfet_46 (EB), SarBear_45 (EB), Sharkboy_44 (EB), Slay_46 (EB), Stoor_46 (EB), Stromboli_46 (EB), SunnyD_48 (EB), Swervy_46 (EB), TukTuk_46 (EB),

Start 49:

- Found in 9 of 155 (5.8%) of genes in pham
- Manual Annotations of this start: 1 of 125
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Rollins_43 (EB),

Summary by clusters:

There are 8 clusters represented in this pham: FP, AZ, EH, EB, AZ1, AZ2, AZ3, AZ4,

Info for manual annotations of cluster AZ:

- Start number 42 was manually annotated 1 time for cluster AZ.

Info for manual annotations of cluster AZ1:

- Start number 43 was manually annotated 38 times for cluster AZ1.
- Start number 45 was manually annotated 1 time for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 43 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 21 was manually annotated 1 time for cluster AZ3.
- Start number 43 was manually annotated 1 time for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 25 was manually annotated 1 time for cluster AZ4.
- Start number 29 was manually annotated 2 times for cluster AZ4.
- Start number 38 was manually annotated 1 time for cluster AZ4.
- Start number 39 was manually annotated 1 time for cluster AZ4.
- Start number 42 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster EB:

- Start number 46 was manually annotated 10 times for cluster EB.
- Start number 48 was manually annotated 49 times for cluster EB.
- Start number 49 was manually annotated 1 time for cluster EB.

Info for manual annotations of cluster EH:

- Start number 23 was manually annotated 1 time for cluster EH.
- Start number 39 was manually annotated 11 times for cluster EH.

Info for manual annotations of cluster FP:

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

Gene Information:

Gene: AEgle_41 Start: 31604, Stop: 32437, Start Num: 36

Candidate Starts for AEgle_41:

(36, 31604), (Start: 43 @31616 has 42 MA's), (62, 31745), (67, 31778), (73, 31808), (119, 32036), (127, 32072), (166, 32240), (191, 32363), (196, 32411),

Gene: AGrandiflora_47 Start: 32890, Stop: 33708, Start Num: 43

Candidate Starts for AGrandiflora_47:

(Start: 43 @32890 has 42 MA's), (60, 33010), (62, 33019), (83, 33124), (84, 33127), (86, 33136), (107, 33244), (113, 33274), (127, 33352), (168, 33517), (191, 33634), (196, 33682),

Gene: Abigail_45 Start: 31658, Stop: 32443, Start Num: 48

Candidate Starts for Abigail_45:

(4, 31442), (44, 31646), (Start: 48 @31658 has 49 MA's), (50, 31682), (61, 31766), (69, 31811), (74, 31832), (92, 31919), (103, 31964), (105, 31970), (111, 31988), (127, 32081), (136, 32141), (138, 32147), (149, 32198), (152, 32210), (182, 32357), (192, 32390),

Gene: Adolin_45 Start: 31088, Stop: 31897, Start Num: 43

Candidate Starts for Adolin_45:

(Start: 43 @31088 has 42 MA's), (62, 31217), (73, 31280), (127, 31544), (166, 31700), (183, 31790), (196, 31871),

Gene: Adumb2043_42 Start: 31635, Stop: 32456, Start Num: 43

Candidate Starts for Adumb2043_42:

(36, 31623), (Start: 43 @31635 has 42 MA's), (62, 31764), (67, 31797), (73, 31827), (119, 32055), (127, 32091), (166, 32259), (191, 32382), (196, 32430),

Gene: AinMach_46 Start: 32886, Stop: 33686, Start Num: 42

Candidate Starts for AinMach_46:

(Start: 42 @32886 has 4 MA's), (58, 32982), (67, 33051), (84, 33126), (86, 33135), (91, 33168), (111, 33249), (127, 33342), (188, 33594), (189, 33603), (196, 33660), (198, 33672),

Gene: Albedo_46 Start: 32261, Stop: 32983, Start Num: 48

Candidate Starts for Albedo_46:

(4, 32045), (44, 32249), (Start: 48 @32261 has 49 MA's), (71, 32426), (74, 32435), (83, 32474), (92, 32522), (93, 32537), (100, 32561), (105, 32573), (126, 32678), (127, 32684), (138, 32750), (176, 32924), (182, 32963),

Gene: Albright_43 Start: 31191, Stop: 31910, Start Num: 48

Candidate Starts for Albright_43:

(44, 31179), (Start: 48 @31191 has 49 MA's), (90, 31440), (93, 31467), (105, 31503), (123, 31596), (126, 31608), (127, 31614), (138, 31680), (145, 31704), (172, 31836), (173, 31839), (182, 31890),

Gene: Amyev_44 Start: 33180, Stop: 33998, Start Num: 43

Candidate Starts for Amyev_44:

(15, 33087), (17, 33102), (19, 33105), (37, 33171), (Start: 43 @33180 has 42 MA's), (62, 33309), (87, 33441), (127, 33642), (172, 33831), (179, 33861), (196, 33972),

Gene: AnnaLie_46 Start: 32269, Stop: 33054, Start Num: 48

Candidate Starts for AnnaLie_46:

(4, 32053), (44, 32257), (Start: 48 @32269 has 49 MA's), (50, 32293), (69, 32422), (74, 32443), (92, 32530), (103, 32575), (105, 32581), (123, 32674), (127, 32692), (136, 32752), (138, 32758), (149, 32809), (152, 32821), (176, 32929), (182, 32968), (192, 33001),

Gene: Armstrong_43 Start: 29796, Stop: 30521, Start Num: 46

Candidate Starts for Armstrong_43:

(3, 29571), (Start: 46 @29796 has 10 MA's), (Start: 49 @29814 has 1 MA's), (71, 29961), (74, 29970), (77, 29985), (83, 30009), (100, 30096), (105, 30108), (111, 30126), (126, 30213), (127, 30219), (134, 30264), (138, 30285), (143, 30303), (182, 30495), (187, 30510),

Gene: Arroyo_46 Start: 32377, Stop: 33162, Start Num: 48

Candidate Starts for Arroyo_46:

(4, 32161), (44, 32365), (Start: 48 @32377 has 49 MA's), (50, 32401), (69, 32530), (74, 32551), (92, 32638), (103, 32683), (105, 32689), (127, 32800), (136, 32860), (138, 32866), (149, 32917), (152, 32929), (182, 33076), (192, 33109),

Gene: Asa16_42 Start: 32994, Stop: 33812, Start Num: 43

Candidate Starts for Asa16_42:

(35, 32982), (Start: 43 @32994 has 42 MA's), (62, 33123), (127, 33456), (134, 33501), (135, 33510), (172, 33645), (179, 33675), (196, 33786),

Gene: Ascela_44 Start: 32212, Stop: 33024, Start Num: 43

Candidate Starts for Ascela_44:

(Start: 43 @32212 has 42 MA's), (54, 32287), (62, 32341), (78, 32431), (127, 32677), (129, 32695), (134, 32722), (148, 32764), (191, 32950), (196, 32998),

Gene: AvGardian_47 Start: 32285, Stop: 33004, Start Num: 48

Candidate Starts for AvGardian_47:

(4, 32069), (44, 32273), (Start: 48 @32285 has 49 MA's), (51, 32318), (66, 32426), (69, 32438), (74, 32459), (83, 32498), (100, 32585), (105, 32597), (111, 32615), (126, 32702), (127, 32708), (138,

32774), (143, 32792), (152, 32837), (153, 32843), (160, 32870), (174, 32936), (182, 32984),

Gene: Avocadoman_44 Start: 31398, Stop: 32117, Start Num: 48

Candidate Starts for Avocadoman_44:

(4, 31182), (44, 31386), (Start: 48 @31398 has 49 MA's), (90, 31647), (93, 31674), (105, 31710), (126, 31815), (127, 31821), (138, 31887), (145, 31911), (172, 32043), (173, 32046), (182, 32097),

Gene: BAjuniper_46 Start: 33187, Stop: 33909, Start Num: 48

Candidate Starts for BAjuniper_46:

(4, 32971), (44, 33175), (Start: 48 @33187 has 49 MA's), (69, 33340), (77, 33376), (83, 33400), (85, 33406), (86, 33412), (96, 33475), (105, 33499), (111, 33517), (126, 33604), (127, 33610), (138, 33676), (143, 33694), (182, 33886),

Gene: BabyDaisy_45 Start: 32232, Stop: 32951, Start Num: 48

Candidate Starts for BabyDaisy_45:

(4, 32016), (44, 32220), (Start: 48 @32232 has 49 MA's), (50, 32256), (74, 32406), (100, 32532), (105, 32544), (111, 32562), (113, 32577), (126, 32649), (127, 32655), (143, 32739), (151, 32778), (170, 32865), (176, 32892), (178, 32898), (182, 32931),

Gene: BabyYoda_46 Start: 33001, Stop: 33720, Start Num: 48

Candidate Starts for BabyYoda_46:

(4, 32785), (44, 32989), (Start: 48 @33001 has 49 MA's), (50, 33025), (71, 33166), (74, 33175), (83, 33214), (90, 33250), (103, 33307), (105, 33313), (127, 33424), (138, 33490), (143, 33508), (152, 33553), (159, 33583), (176, 33661), (182, 33700),

Gene: Bachaco_44 Start: 32963, Stop: 33685, Start Num: 48

Candidate Starts for Bachaco_44:

(44, 32951), (Start: 48 @32963 has 49 MA's), (51, 32996), (69, 33116), (71, 33128), (74, 33137), (93, 33239), (100, 33263), (105, 33275), (126, 33380), (127, 33386), (138, 33452), (170, 33596), (178, 33629), (182, 33662),

Gene: BaileyBlu_44 Start: 31818, Stop: 32633, Start Num: 42

Candidate Starts for BaileyBlu_44:

(Start: 42 @31818 has 4 MA's), (56, 31905), (60, 31941), (67, 31983), (79, 32040), (80, 32046), (102, 32154), (118, 32220), (174, 32475), (190, 32553), (196, 32607),

Gene: Barnstormer_49 Start: 33593, Stop: 34432, Start Num: 39

Candidate Starts for Barnstormer_49:

(2, 33335), (5, 33410), (18, 33524), (Start: 39 @33593 has 12 MA's), (127, 34025), (135, 34076), (137, 34085), (144, 34109), (196, 34382), (200, 34421),

Gene: BelmontSKP_46 Start: 32269, Stop: 33054, Start Num: 48

Candidate Starts for BelmontSKP_46:

(4, 32053), (44, 32257), (Start: 48 @32269 has 49 MA's), (50, 32293), (69, 32422), (74, 32443), (92, 32530), (103, 32575), (105, 32581), (123, 32674), (127, 32692), (136, 32752), (138, 32758), (149, 32809), (152, 32821), (176, 32929), (182, 32968), (192, 33001),

Gene: Bernstein_43 Start: 29878, Stop: 30603, Start Num: 46

Candidate Starts for Bernstein_43:

(3, 29653), (6, 29680), (Start: 46 @29878 has 10 MA's), (Start: 49 @29896 has 1 MA's), (71, 30043), (74, 30052), (77, 30067), (83, 30091), (100, 30178), (105, 30190), (111, 30208), (126, 30295), (127, 30301), (134, 30346), (138, 30367), (143, 30385), (182, 30577), (187, 30592),

Gene: Berrie_46 Start: 33402, Stop: 34193, Start Num: 43

Candidate Starts for Berrie_46:

(Start: 43 @33402 has 42 MA's), (62, 33531), (66, 33561), (100, 33720), (127, 33849), (174, 34032), (191, 34119), (196, 34167),

Gene: Brahms_43 Start: 29798, Stop: 30523, Start Num: 46

Candidate Starts for Brahms_43:

(3, 29573), (6, 29600), (Start: 46 @29798 has 10 MA's), (Start: 49 @29816 has 1 MA's), (71, 29963), (74, 29972), (77, 29987), (83, 30011), (100, 30098), (105, 30110), (111, 30128), (126, 30215), (127, 30221), (134, 30266), (138, 30287), (143, 30305), (182, 30497), (187, 30512),

Gene: BubbaBear_44 Start: 31851, Stop: 32570, Start Num: 48

Candidate Starts for BubbaBear_44:

(44, 31839), (Start: 48 @31851 has 49 MA's), (90, 32100), (93, 32127), (105, 32163), (123, 32256), (126, 32268), (127, 32274), (138, 32340), (145, 32364), (172, 32496), (173, 32499), (182, 32550),

Gene: Buldak_43 Start: 30417, Stop: 31178, Start Num: 44

Candidate Starts for Buldak_43:

(4, 30204), (41, 30408), (44, 30417), (47, 30423), (Start: 48 @30429 has 49 MA's), (74, 30615), (96, 30729), (101, 30744), (112, 30783), (113, 30786), (127, 30864), (138, 30930), (159, 31026), (160, 31029), (182, 31146),

Gene: Burritobowl_45 Start: 31852, Stop: 32571, Start Num: 48

Candidate Starts for Burritobowl_45:

(4, 31636), (44, 31840), (Start: 48 @31852 has 49 MA's), (59, 31951), (66, 31993), (74, 32026), (83, 32065), (105, 32164), (113, 32197), (126, 32269), (127, 32275), (136, 32335), (138, 32341), (176, 32512), (182, 32551),

Gene: CallinAllBarbz_44 Start: 32005, Stop: 32820, Start Num: 42

Candidate Starts for CallinAllBarbz_44:

(Start: 42 @32005 has 4 MA's), (56, 32092), (60, 32128), (67, 32170), (80, 32233), (102, 32341), (111, 32371), (118, 32407), (174, 32662), (190, 32740), (196, 32794),

Gene: Caron_52 Start: 34597, Stop: 35439, Start Num: 39

Candidate Starts for Caron_52:

(26, 34555), (Start: 39 @34597 has 12 MA's), (75, 34789), (106, 34924), (127, 35029), (147, 35134), (155, 35170), (157, 35176), (196, 35392), (200, 35428),

Gene: Cashington_43 Start: 31231, Stop: 31950, Start Num: 48

Candidate Starts for Cashington_43:

(44, 31219), (Start: 48 @31231 has 49 MA's), (90, 31480), (93, 31507), (105, 31543), (123, 31636), (126, 31648), (127, 31654), (138, 31720), (145, 31744), (172, 31876), (173, 31879), (182, 31930),

Gene: Cassia_44 Start: 32176, Stop: 32967, Start Num: 43

Candidate Starts for Cassia_44:

(Start: 43 @32176 has 42 MA's), (62, 32305), (100, 32494), (127, 32623), (154, 32719), (168, 32776), (191, 32893), (196, 32941),

Gene: Celaena_43 Start: 32705, Stop: 33427, Start Num: 48

Candidate Starts for Celaena_43:

(44, 32693), (Start: 48 @32705 has 49 MA's), (51, 32738), (69, 32858), (71, 32870), (74, 32879), (105, 33017), (126, 33122), (127, 33128), (178, 33371), (182, 33404),

Gene: Cen1621_46 Start: 32188, Stop: 32991, Start Num: 39

Candidate Starts for Cen1621_46:

(24, 32140), (27, 32149), (Start: 39 @32188 has 12 MA's), (115, 32566), (126, 32626), (127, 32632), (128, 32644), (167, 32785), (191, 32908), (193, 32923), (196, 32956),

Gene: ChiliPepper_43 Start: 32335, Stop: 33057, Start Num: 48

Candidate Starts for ChiliPepper_43:

(4, 32119), (44, 32323), (Start: 48 @32335 has 49 MA's), (50, 32359), (66, 32476), (69, 32488), (71, 32500), (92, 32596), (94, 32614), (100, 32635), (105, 32647), (127, 32758), (138, 32824), (143, 32842), (152, 32887), (160, 32920), (178, 33001), (182, 33034),

Gene: Clayda5_44 Start: 29785, Stop: 30510, Start Num: 46

Candidate Starts for Clayda5_44:

(3, 29560), (6, 29587), (Start: 46 @29785 has 10 MA's), (Start: 49 @29803 has 1 MA's), (71, 29950), (74, 29959), (77, 29974), (83, 29998), (100, 30085), (105, 30097), (111, 30115), (126, 30202), (127, 30208), (134, 30253), (138, 30274), (143, 30292), (182, 30484), (187, 30499),

Gene: Coltrane_43 Start: 29798, Stop: 30523, Start Num: 46

Candidate Starts for Coltrane_43:

(3, 29573), (6, 29600), (Start: 46 @29798 has 10 MA's), (Start: 49 @29816 has 1 MA's), (71, 29963), (74, 29972), (77, 29987), (83, 30011), (100, 30098), (105, 30110), (111, 30128), (126, 30215), (127, 30221), (134, 30266), (138, 30287), (143, 30305), (182, 30497), (187, 30512),

Gene: Community_47 Start: 34215, Stop: 35021, Start Num: 43

Candidate Starts for Community_47:

(Start: 43 @34215 has 42 MA's), (62, 34344), (86, 34467), (127, 34674), (158, 34785), (191, 34947), (196, 34995),

Gene: Crewmate_50 Start: 32863, Stop: 33654, Start Num: 43

Candidate Starts for Crewmate_50:

(Start: 43 @32863 has 42 MA's), (100, 33181), (127, 33310), (183, 33547), (191, 33580), (196, 33628),

Gene: CroZenni_45 Start: 31772, Stop: 32557, Start Num: 48

Candidate Starts for CroZenni_45:

(4, 31556), (44, 31760), (Start: 48 @31772 has 49 MA's), (50, 31796), (61, 31880), (69, 31925), (74, 31946), (92, 32033), (103, 32078), (105, 32084), (111, 32102), (127, 32195), (136, 32255), (138, 32261), (149, 32312), (152, 32324), (182, 32471), (192, 32504),

Gene: Cyan_44 Start: 32495, Stop: 33307, Start Num: 43

Candidate Starts for Cyan_44:

(Start: 43 @32495 has 42 MA's), (54, 32570), (62, 32624), (75, 32699), (78, 32714), (82, 32738), (127, 32960), (129, 32978), (148, 33047), (168, 33116), (191, 33233), (196, 33281),

Gene: DickRichards_44 Start: 32211, Stop: 32930, Start Num: 48

Candidate Starts for DickRichards_44:

(44, 32199), (Start: 48 @32211 has 49 MA's), (90, 32460), (105, 32523), (123, 32616), (126, 32628), (127, 32634), (138, 32700), (145, 32724), (172, 32856), (173, 32859), (182, 32910),

Gene: Didgeridoo_48 Start: 32578, Stop: 33297, Start Num: 48

Candidate Starts for Didgeridoo_48:

(44, 32566), (Start: 48 @32578 has 49 MA's), (50, 32602), (74, 32752), (100, 32878), (105, 32890), (111, 32908), (113, 32923), (126, 32995), (127, 33001), (143, 33085), (170, 33211), (176, 33238),

(178, 33244), (182, 33277),

Gene: DirtyBubble_45 Start: 32669, Stop: 33388, Start Num: 48

Candidate Starts for DirtyBubble_45:

(44, 32657), (Start: 48 @32669 has 49 MA's), (50, 32693), (63, 32783), (69, 32822), (71, 32834), (74, 32843), (83, 32882), (90, 32918), (103, 32975), (105, 32981), (120, 33059), (127, 33092), (134, 33137), (138, 33158), (143, 33176), (152, 33221), (159, 33251), (176, 33329), (182, 33368),

Gene: Dismas_43 Start: 32288, Stop: 33010, Start Num: 48

Candidate Starts for Dismas_43:

(4, 32072), (44, 32276), (Start: 48 @32288 has 49 MA's), (50, 32312), (66, 32429), (69, 32441), (71, 32453), (92, 32549), (94, 32567), (100, 32588), (105, 32600), (127, 32711), (138, 32777), (143, 32795), (152, 32840), (160, 32873), (178, 32954), (182, 32987),

Gene: Doobus_44 Start: 31595, Stop: 32314, Start Num: 48

Candidate Starts for Doobus_44:

(4, 31379), (44, 31583), (Start: 48 @31595 has 49 MA's), (90, 31844), (93, 31871), (105, 31907), (123, 32000), (126, 32012), (127, 32018), (138, 32084), (145, 32108), (172, 32240), (173, 32243), (182, 32294),

Gene: DrManhattan_44 Start: 30654, Stop: 31463, Start Num: 43

Candidate Starts for DrManhattan_44:

(Start: 43 @30654 has 42 MA's), (62, 30783), (73, 30846), (127, 31110), (166, 31266), (183, 31356), (196, 31437),

Gene: DrSierra_42 Start: 30494, Stop: 31300, Start Num: 43

Candidate Starts for DrSierra_42:

(7, 30329), (9, 30344), (10, 30350), (Start: 43 @30494 has 42 MA's), (60, 30614), (62, 30623), (82, 30731), (86, 30746), (87, 30755), (122, 30929), (127, 30953), (158, 31064), (191, 31226), (196, 31274),

Gene: Eden_43 Start: 30525, Stop: 31250, Start Num: 46

Candidate Starts for Eden_43:

(Start: 46 @30525 has 10 MA's), (74, 30699), (100, 30825), (105, 30837), (111, 30855), (127, 30948), (130, 30969), (138, 31014), (143, 31032), (152, 31077), (171, 31164), (178, 31191), (182, 31224), (188, 31242),

Gene: Elezi_42 Start: 32991, Stop: 33809, Start Num: 43

Candidate Starts for Elezi_42:

(35, 32979), (Start: 43 @32991 has 42 MA's), (62, 33120), (127, 33453), (134, 33498), (135, 33507), (172, 33642), (179, 33672), (196, 33783),

Gene: Elva_47 Start: 32903, Stop: 33622, Start Num: 48

Candidate Starts for Elva_47:

(44, 32888), (Start: 48 @32903 has 49 MA's), (50, 32927), (51, 32936), (66, 33044), (71, 33068), (74, 33077), (90, 33152), (103, 33209), (105, 33215), (127, 33326), (141, 33401), (143, 33410), (152, 33455), (170, 33536), (176, 33563), (182, 33602), (185, 33611),

Gene: Emotion_50 Start: 34867, Stop: 35778, Start Num: 29

Candidate Starts for Emotion_50:

(Start: 29 @34867 has 2 MA's), (Start: 38 @34897 has 1 MA's), (40, 34903), (62, 35038), (68, 35077), (118, 35341), (127, 35398), (162, 35542), (166, 35563), (167, 35566), (177, 35611), (181, 35647), (196, 35728), (199, 35752),

Gene: Emotion_49 Start: 33922, Stop: 34743, Start Num: 39

Candidate Starts for Emotion_49:

(8, 33766), (31, 33901), (Start: 39 @33922 has 12 MA's), (80, 34159), (97, 34246), (114, 34318), (127, 34393), (135, 34447), (154, 34495), (196, 34717),

Gene: Eraser_42 Start: 33001, Stop: 33819, Start Num: 43

Candidate Starts for Eraser_42:

(35, 32989), (Start: 43 @33001 has 42 MA's), (62, 33130), (127, 33463), (134, 33508), (135, 33517), (172, 33652), (179, 33682), (196, 33793),

Gene: Eula_46 Start: 31944, Stop: 32666, Start Num: 48

Candidate Starts for Eula_46:

(4, 31728), (44, 31932), (Start: 48 @31944 has 49 MA's), (50, 31968), (69, 32097), (74, 32118), (85, 32163), (105, 32256), (126, 32361), (127, 32367), (138, 32433), (143, 32451), (182, 32643),

Gene: Exile_39 Start: 33484, Stop: 34293, Start Num: 42

Candidate Starts for Exile_39:

(Start: 42 @33484 has 4 MA's), (108, 33844), (116, 33886), (127, 33949), (129, 33967), (131, 33973), (174, 34135), (190, 34213), (196, 34267),

Gene: Finalfrontier_46 Start: 32803, Stop: 33522, Start Num: 48

Candidate Starts for Finalfrontier_46:

(4, 32587), (44, 32791), (Start: 48 @32803 has 49 MA's), (50, 32827), (69, 32956), (74, 32977), (105, 33115), (126, 33220), (127, 33226), (138, 33292), (143, 33310), (176, 33463), (182, 33502),

Gene: FlameThrower_43 Start: 32154, Stop: 32876, Start Num: 48

Candidate Starts for FlameThrower_43:

(44, 32142), (Start: 48 @32154 has 49 MA's), (51, 32187), (69, 32307), (71, 32319), (74, 32328), (105, 32466), (126, 32571), (127, 32577), (178, 32820), (182, 32853),

Gene: Floof_51 Start: 34481, Stop: 35374, Start Num: 39

Candidate Starts for Floof_51:

(22, 34421), (Start: 39 @34481 has 12 MA's), (86, 34733), (124, 34916), (127, 34928), (155, 35072), (172, 35153), (197, 35303), (201, 35342), (202, 35351), (203, 35357),

Gene: Franklin22_44 Start: 30400, Stop: 31122, Start Num: 46

Candidate Starts for Franklin22_44:

(Start: 46 @30400 has 10 MA's), (59, 30499), (74, 30574), (77, 30589), (83, 30613), (89, 30640), (100, 30700), (105, 30712), (117, 30763), (127, 30823), (130, 30844), (138, 30889), (143, 30907), (182, 31099),

Gene: Gack_43 Start: 30444, Stop: 31169, Start Num: 46

Candidate Starts for Gack_43:

(Start: 46 @30444 has 10 MA's), (Start: 49 @30462 has 1 MA's), (57, 30513), (74, 30618), (77, 30633), (94, 30723), (105, 30756), (117, 30807), (127, 30867), (138, 30933), (143, 30951), (182, 31143),

Gene: GardenState_50 Start: 33862, Stop: 34695, Start Num: 39

Candidate Starts for GardenState_50:

(Start: 39 @33862 has 12 MA's), (127, 34300), (157, 34435), (196, 34651),

Gene: Gretchen_50 Start: 35099, Stop: 35974, Start Num: 39

Candidate Starts for Gretchen_50:

(17, 35027), (Start: 39 @35099 has 12 MA's), (82, 35336), (86, 35351), (92, 35387), (124, 35534), (127, 35546), (136, 35606), (137, 35609), (142, 35627), (172, 35747), (177, 35768), (197, 35897), (202, 35945), (204, 35957),

Gene: Halsey_53 Start: 30458, Stop: 31258, Start Num: 45

Candidate Starts for Halsey_53:

(12, 30356), (32, 30440), (Start: 45 @30458 has 1 MA's), (81, 30680), (96, 30761), (127, 30905), (129, 30923), (163, 31040), (165, 31052), (183, 31151), (196, 31232), (198, 31244),

Gene: Honk_46 Start: 30645, Stop: 31490, Start Num: 39

Candidate Starts for Honk_46:

(20, 30585), (Start: 39 @30645 has 12 MA's), (76, 30843), (79, 30858), (87, 30894), (148, 31206), (167, 31257), (183, 31347), (196, 31428),

Gene: IAmGroot_50 Start: 34329, Stop: 35162, Start Num: 39

Candidate Starts for IAmGroot_50:

(Start: 39 @34329 has 12 MA's), (127, 34767), (157, 34902), (196, 35118),

Gene: Icarian_49 Start: 33677, Stop: 34396, Start Num: 48

Candidate Starts for Icarian_49:

(30, 33626), (Start: 48 @33677 has 49 MA's), (50, 33701), (63, 33791), (71, 33842), (74, 33851), (83, 33890), (90, 33926), (103, 33983), (105, 33989), (127, 34100), (134, 34145), (138, 34166), (143, 34184), (152, 34229), (153, 34235), (159, 34259), (176, 34337), (182, 34376),

Gene: IndyLu_45 Start: 32178, Stop: 32897, Start Num: 48

Candidate Starts for IndyLu_45:

(44, 32166), (Start: 48 @32178 has 49 MA's), (50, 32202), (74, 32352), (100, 32478), (105, 32490), (111, 32508), (113, 32523), (126, 32595), (127, 32601), (151, 32724), (176, 32838), (178, 32844), (182, 32877), (186, 32889),

Gene: Iter_44 Start: 32207, Stop: 33019, Start Num: 43

Candidate Starts for Iter_44:

(Start: 43 @32207 has 42 MA's), (54, 32282), (62, 32336), (78, 32426), (127, 32672), (129, 32690), (134, 32717), (148, 32759), (191, 32945), (196, 32993),

Gene: IttyBittyPiggy_44 Start: 31970, Stop: 32758, Start Num: 43

Candidate Starts for IttyBittyPiggy_44:

(16, 31886), (Start: 43 @31970 has 42 MA's), (62, 32099), (100, 32288), (127, 32417), (191, 32684), (196, 32732),

Gene: Janeemi_47 Start: 34214, Stop: 35026, Start Num: 43

Candidate Starts for Janeemi_47:

(Start: 43 @34214 has 42 MA's), (60, 34334), (62, 34343), (66, 34373), (100, 34532), (127, 34661), (155, 34781), (191, 34952), (196, 35000),

Gene: JasmineDragon_49 Start: 33132, Stop: 33989, Start Num: 25

Candidate Starts for JasmineDragon_49:

(Start: 25 @33132 has 1 MA's), (34, 33168), (Start: 42 @33177 has 4 MA's), (60, 33300), (80, 33399), (110, 33528), (127, 33639), (190, 33909), (196, 33963),

Gene: JasmineDragon_50 Start: 34166, Stop: 35137, Start Num: 38

Candidate Starts for JasmineDragon_50:

(Start: 29 @34136 has 2 MA's), (Start: 38 @34166 has 1 MA's), (40, 34172), (65, 34328), (67, 34340), (118, 34577), (129, 34652), (145, 34718), (157, 34754), (161, 34772), (167, 34799), (190, 34910), (195, 34955), (196, 34964), (205, 35111),

Gene: Joemato_47 Start: 32522, Stop: 33334, Start Num: 43

Candidate Starts for Joemato_47:

(Start: 43 @32522 has 42 MA's), (54, 32597), (62, 32651), (75, 32726), (78, 32741), (82, 32765), (127, 32987), (129, 33005), (148, 33074), (168, 33143), (191, 33260), (196, 33308),

Gene: JohnDoe_45 Start: 32518, Stop: 33330, Start Num: 43

Candidate Starts for JohnDoe_45:

(Start: 43 @32518 has 42 MA's), (54, 32593), (62, 32647), (75, 32722), (78, 32737), (82, 32761), (127, 32983), (129, 33001), (148, 33070), (168, 33139), (191, 33256), (196, 33304),

Gene: Johnathan_44 Start: 31234, Stop: 31953, Start Num: 48

Candidate Starts for Johnathan_44:

(44, 31222), (Start: 48 @31234 has 49 MA's), (66, 31375), (69, 31387), (74, 31408), (100, 31534), (105, 31546), (123, 31639), (126, 31651), (127, 31657), (132, 31693), (136, 31717), (138, 31723), (143, 31741), (176, 31894), (182, 31933),

Gene: Jovita_46 Start: 31973, Stop: 32692, Start Num: 48

Candidate Starts for Jovita_46:

(44, 31961), (Start: 48 @31973 has 49 MA's), (50, 31997), (66, 32114), (69, 32126), (74, 32147), (105, 32285), (126, 32390), (127, 32396), (138, 32462), (143, 32480), (176, 32633), (182, 32672),

Gene: Jstan_44 Start: 32983, Stop: 33813, Start Num: 35

Candidate Starts for Jstan_44:

(35, 32983), (Start: 43 @32995 has 42 MA's), (62, 33124), (127, 33457), (134, 33502), (135, 33511), (172, 33646), (179, 33676), (196, 33787),

Gene: JuneStar_46 Start: 34096, Stop: 34911, Start Num: 43

Candidate Starts for JuneStar_46:

(Start: 43 @34096 has 42 MA's), (59, 34213), (62, 34225), (82, 34333), (86, 34348), (127, 34555), (172, 34735), (191, 34831), (196, 34879),

Gene: Katzastrophic_44 Start: 32284, Stop: 33006, Start Num: 48

Candidate Starts for Katzastrophic_44:

(44, 32272), (Start: 48 @32284 has 49 MA's), (51, 32317), (69, 32437), (71, 32449), (74, 32458), (105, 32596), (117, 32647), (127, 32707), (138, 32773), (143, 32791), (178, 32950), (182, 32983),

Gene: Kaylissa_46 Start: 32908, Stop: 33726, Start Num: 43

Candidate Starts for Kaylissa_46:

(Start: 43 @32908 has 42 MA's), (60, 33028), (62, 33037), (83, 33142), (84, 33145), (86, 33154), (107, 33262), (113, 33292), (119, 33334), (127, 33370), (168, 33535), (191, 33652), (196, 33700),

Gene: KeAlii_42 Start: 32155, Stop: 32934, Start Num: 45

Candidate Starts for KeAlii_42:

(Start: 43 @32149 has 42 MA's), (Start: 45 @32155 has 1 MA's), (86, 32374), (104, 32467), (123, 32563), (127, 32581), (196, 32908), (198, 32920),

Gene: Kenzers_46 Start: 32014, Stop: 32736, Start Num: 48

Candidate Starts for Kenzers_46:

(4, 31798), (44, 32002), (Start: 48 @32014 has 49 MA's), (71, 32179), (74, 32188), (83, 32227), (92, 32275), (93, 32290), (100, 32314), (105, 32326), (111, 32344), (126, 32431), (127, 32437), (138, 32503), (176, 32677), (182, 32716),

Gene: Kieran_43 Start: 32296, Stop: 33018, Start Num: 48

Candidate Starts for Kieran_43:

(4, 32080), (44, 32284), (Start: 48 @32296 has 49 MA's), (50, 32320), (66, 32437), (69, 32449), (71, 32461), (92, 32557), (94, 32575), (100, 32596), (105, 32608), (127, 32719), (138, 32785), (143, 32803), (152, 32848), (178, 32962), (182, 32995),

Gene: Lahqtemish_45 Start: 32204, Stop: 32989, Start Num: 48

Candidate Starts for Lahqtemish_45:

(44, 32192), (Start: 48 @32204 has 49 MA's), (50, 32228), (69, 32357), (74, 32378), (92, 32465), (103, 32510), (105, 32516), (127, 32627), (136, 32687), (138, 32693), (149, 32744), (152, 32756), (176, 32864), (182, 32903), (192, 32936),

Gene: Lego_44 Start: 32226, Stop: 33044, Start Num: 43

Candidate Starts for Lego_44:

(Start: 43 @32226 has 42 MA's), (60, 32346), (62, 32355), (83, 32460), (84, 32463), (86, 32472), (107, 32580), (113, 32610), (127, 32688), (168, 32853), (191, 32970), (196, 33018),

Gene: Liebe_45 Start: 33847, Stop: 34644, Start Num: 43

Candidate Starts for Liebe_45:

(Start: 43 @33847 has 42 MA's), (50, 33889), (60, 33967), (87, 34096), (88, 34099), (111, 34201), (127, 34294), (177, 34498), (196, 34618), (198, 34630),

Gene: LimaBean_45 Start: 31536, Stop: 32321, Start Num: 48

Candidate Starts for LimaBean_45:

(4, 31320), (44, 31524), (Start: 48 @31536 has 49 MA's), (50, 31560), (61, 31644), (69, 31689), (74, 31710), (92, 31797), (103, 31842), (105, 31848), (111, 31866), (127, 31959), (136, 32019), (138, 32025), (149, 32076), (152, 32088), (182, 32235), (192, 32268),

Gene: Lizalica_43 Start: 31676, Stop: 32488, Start Num: 43

Candidate Starts for Lizalica_43:

(Start: 43 @31676 has 42 MA's), (50, 31718), (62, 31805), (72, 31865), (78, 31895), (82, 31919), (127, 32141), (129, 32159), (134, 32186), (148, 32228), (191, 32414), (196, 32462),

Gene: London_42 Start: 32991, Stop: 33809, Start Num: 43

Candidate Starts for London_42:

(35, 32979), (Start: 43 @32991 has 42 MA's), (62, 33120), (127, 33453), (134, 33498), (135, 33507), (172, 33642), (179, 33672), (196, 33783),

Gene: Loviatar_82 Start: 33899, Stop: 34618, Start Num: 48

Candidate Starts for Loviatar_82:

(4, 33683), (44, 33887), (Start: 48 @33899 has 49 MA's), (50, 33923), (63, 34013), (71, 34064), (74, 34073), (83, 34112), (90, 34148), (103, 34205), (105, 34211), (127, 34322), (138, 34388), (143, 34406), (152, 34451), (159, 34481), (176, 34559), (182, 34598), (185, 34607),

Gene: Lynlen_46 Start: 32014, Stop: 32733, Start Num: 48

Candidate Starts for Lynlen_46:

(4, 31798), (44, 32002), (Start: 48 @32014 has 49 MA's), (66, 32155), (74, 32188), (100, 32314), (105, 32326), (126, 32431), (127, 32437), (132, 32473), (136, 32497), (138, 32503), (176, 32674), (182, 32713), (186, 32725),

Gene: MaGuCo_42 Start: 32331, Stop: 33128, Start Num: 43

Candidate Starts for MaGuCo_42:

(Start: 43 @32331 has 42 MA's), (50, 32373), (60, 32451), (87, 32580), (88, 32583), (111, 32685), (127, 32778), (177, 32982), (196, 33102), (198, 33114),

Gene: Mabodamaca_50 Start: 35098, Stop: 35934, Start Num: 39

Candidate Starts for Mabodamaca_50:

(Start: 39 @35098 has 12 MA's), (53, 35161), (57, 35185), (109, 35434), (127, 35530), (140, 35602), (196, 35887),

Gene: Maureen_45 Start: 33847, Stop: 34644, Start Num: 43

Candidate Starts for Maureen_45:

(Start: 43 @33847 has 42 MA's), (50, 33889), (60, 33967), (87, 34096), (88, 34099), (111, 34201), (127, 34294), (177, 34498), (196, 34618), (198, 34630),

Gene: MiniMommy_52 Start: 34167, Stop: 35138, Start Num: 38

Candidate Starts for MiniMommy_52:

(Start: 29 @34137 has 2 MA's), (Start: 38 @34167 has 1 MA's), (40, 34173), (65, 34329), (67, 34341), (118, 34578), (129, 34653), (145, 34719), (157, 34755), (161, 34773), (167, 34800), (190, 34911), (195, 34956), (196, 34965), (205, 35112),

Gene: MiniMommy_51 Start: 33178, Stop: 33990, Start Num: 42

Candidate Starts for MiniMommy_51:

(Start: 25 @33133 has 1 MA's), (34, 33169), (Start: 42 @33178 has 4 MA's), (60, 33301), (80, 33400), (110, 33529), (127, 33640), (190, 33910), (196, 33964),

Gene: MissSwiss_45 Start: 31166, Stop: 31975, Start Num: 43

Candidate Starts for MissSwiss_45:

(Start: 43 @31166 has 42 MA's), (62, 31295), (73, 31358), (99, 31493), (127, 31622), (166, 31778), (188, 31883), (196, 31949),

Gene: Moss_49 Start: 30398, Stop: 31198, Start Num: 45

Candidate Starts for Moss_49:

(12, 30296), (32, 30380), (Start: 45 @30398 has 1 MA's), (81, 30620), (96, 30701), (127, 30845), (129, 30863), (163, 30980), (165, 30992), (183, 31091), (196, 31172), (198, 31184),

Gene: Mudpuppy_42 Start: 32165, Stop: 32983, Start Num: 43

Candidate Starts for Mudpuppy_42:

(Start: 43 @32165 has 42 MA's), (60, 32285), (62, 32294), (84, 32402), (86, 32411), (107, 32519), (113, 32549), (127, 32627), (168, 32792), (191, 32909), (196, 32957),

Gene: Nicky22_46 Start: 32406, Stop: 33125, Start Num: 48

Candidate Starts for Nicky22_46:

(44, 32394), (Start: 48 @32406 has 49 MA's), (50, 32430), (71, 32571), (74, 32580), (83, 32619), (94, 32685), (103, 32712), (105, 32718), (127, 32829), (143, 32913), (152, 32958), (159, 32988), (170, 33039), (176, 33066), (182, 33105),

Gene: Niobe_42 Start: 32995, Stop: 33813, Start Num: 43

Candidate Starts for Niobe_42:

(35, 32983), (Start: 43 @32995 has 42 MA's), (62, 33124), (127, 33457), (134, 33502), (135, 33511), (172, 33646), (179, 33676), (196, 33787),

Gene: Nitro_43 Start: 32794, Stop: 33615, Start Num: 43

Candidate Starts for Nitro_43:

(Start: 43 @32794 has 42 MA's), (62, 32923), (73, 32986), (127, 33250), (139, 33316), (164, 33406), (166, 33418), (172, 33445), (191, 33541), (196, 33589),

Gene: ObiToo_50 Start: 33306, Stop: 34097, Start Num: 43

Candidate Starts for ObiToo_50:

(Start: 43 @33306 has 42 MA's), (100, 33624), (127, 33753), (183, 33990), (191, 34023), (196, 34071),

Gene: Olliecat_43 Start: 30489, Stop: 31241, Start Num: 47

Candidate Starts for Olliecat_43:

(47, 30489), (Start: 48 @30495 has 49 MA's), (52, 30537), (74, 30681), (100, 30807), (112, 30849), (127, 30930), (138, 30996), (147, 31038), (159, 31092), (160, 31095), (172, 31155), (175, 31167), (178, 31176), (180, 31203), (182, 31209),

Gene: Percival_51 Start: 34934, Stop: 35809, Start Num: 39

Candidate Starts for Percival_51:

(17, 34862), (Start: 39 @34934 has 12 MA's), (82, 35171), (86, 35186), (92, 35222), (124, 35369), (127, 35381), (136, 35441), (137, 35444), (142, 35462), (172, 35582), (177, 35603), (197, 35732), (202, 35780), (204, 35792),

Gene: Phisb_46 Start: 32003, Stop: 32722, Start Num: 48

Candidate Starts for Phisb_46:

(4, 31787), (44, 31991), (Start: 48 @32003 has 49 MA's), (50, 32027), (66, 32144), (69, 32156), (74, 32177), (105, 32315), (126, 32420), (127, 32426), (138, 32492), (143, 32510), (176, 32663), (182, 32702),

Gene: Phives_48 Start: 34043, Stop: 34849, Start Num: 43

Candidate Starts for Phives_48:

(Start: 43 @34043 has 42 MA's), (62, 34172), (86, 34295), (127, 34502), (158, 34613), (191, 34775), (196, 34823),

Gene: Pixelle_47 Start: 34066, Stop: 35172, Start Num: 43

Candidate Starts for Pixelle_47:

(Start: 43 @34066 has 42 MA's), (67, 34228), (98, 34363), (127, 34498), (168, 34642), (169, 34648), (186, 34735), (191, 34759), (196, 34807), (206, 34960),

Gene: Pixelle_46 Start: 33205, Stop: 34023, Start Num: 43

Candidate Starts for Pixelle_46:

(15, 33112), (17, 33127), (19, 33130), (37, 33196), (Start: 43 @33205 has 42 MA's), (62, 33334), (87, 33466), (127, 33667), (172, 33856), (179, 33886), (196, 33997),

Gene: Powerpuff_47 Start: 33614, Stop: 34432, Start Num: 43

Candidate Starts for Powerpuff_47:

(Start: 43 @33614 has 42 MA's), (60, 33734), (62, 33743), (83, 33848), (84, 33851), (86, 33860), (107, 33968), (113, 33998), (127, 34076), (168, 34241), (191, 34358), (196, 34406),

Gene: Pumpkins_44 Start: 32640, Stop: 33479, Start Num: 43

Candidate Starts for Pumpkins_44:

(Start: 43 @32640 has 42 MA's), (62, 32769), (64, 32787), (73, 32832), (84, 32877), (127, 33099), (191, 33405), (196, 33453),

Gene: QMacho_48 Start: 32641, Stop: 33360, Start Num: 48

Candidate Starts for QMacho_48:

(4, 32425), (44, 32629), (Start: 48 @32641 has 49 MA's), (50, 32665), (71, 32806), (74, 32815), (83, 32854), (103, 32947), (105, 32953), (127, 33064), (138, 33130), (143, 33148), (152, 33193), (159, 33223), (176, 33301), (182, 33340),

Gene: Quenya_45 Start: 32476, Stop: 33198, Start Num: 48

Candidate Starts for Quenya_45:

(4, 32260), (44, 32464), (Start: 48 @32476 has 49 MA's), (51, 32509), (69, 32629), (71, 32641), (74, 32650), (90, 32725), (92, 32737), (100, 32776), (105, 32788), (111, 32806), (126, 32893), (127, 32899), (134, 32944), (138, 32965), (152, 33028), (160, 33061), (170, 33109), (182, 33175),

Gene: Reedo_44 Start: 30708, Stop: 31547, Start Num: 43

Candidate Starts for Reedo_44:

(Start: 43 @30708 has 42 MA's), (62, 30837), (64, 30855), (70, 30882), (113, 31092), (119, 31134), (127, 31170), (179, 31410), (196, 31521),

Gene: Rollins_43 Start: 29896, Stop: 30603, Start Num: 49

Candidate Starts for Rollins_43:

(3, 29653), (6, 29680), (Start: 46 @29878 has 10 MA's), (Start: 49 @29896 has 1 MA's), (71, 30043), (74, 30052), (77, 30067), (83, 30091), (100, 30178), (105, 30190), (111, 30208), (126, 30295), (127, 30301), (134, 30346), (138, 30367), (143, 30385), (182, 30577), (187, 30592),

Gene: Rona_43 Start: 32279, Stop: 33001, Start Num: 48

Candidate Starts for Rona_43:

(4, 32063), (44, 32267), (Start: 48 @32279 has 49 MA's), (50, 32303), (66, 32420), (69, 32432), (71, 32444), (92, 32540), (94, 32558), (100, 32579), (105, 32591), (127, 32702), (138, 32768), (143, 32786), (152, 32831), (160, 32864), (178, 32945), (182, 32978),

Gene: SanaSana_48 Start: 33508, Stop: 34227, Start Num: 48

Candidate Starts for SanaSana_48:

(4, 33292), (44, 33496), (Start: 48 @33508 has 49 MA's), (50, 33532), (63, 33622), (66, 33649), (71, 33673), (74, 33682), (83, 33721), (90, 33757), (94, 33787), (103, 33814), (105, 33820), (127, 33931), (138, 33997), (143, 34015), (152, 34060), (154, 34069), (159, 34090), (176, 34168), (182, 34207), (186, 34219),

Gene: SansAfet_46 Start: 31865, Stop: 32584, Start Num: 48

Candidate Starts for SansAfet_46:

(4, 31649), (44, 31853), (Start: 48 @31865 has 49 MA's), (59, 31964), (74, 32039), (83, 32078), (100, 32165), (105, 32177), (113, 32210), (126, 32282), (127, 32288), (136, 32348), (138, 32354), (143, 32372), (176, 32525), (182, 32564),

Gene: SarBear_45 Start: 31651, Stop: 32370, Start Num: 48

Candidate Starts for SarBear_45:

(4, 31435), (44, 31639), (Start: 48 @31651 has 49 MA's), (50, 31675), (69, 31804), (74, 31825), (105, 31963), (126, 32068), (127, 32074), (138, 32140), (143, 32158), (176, 32311), (182, 32350),

Gene: ShakeltOph_52 Start: 34166, Stop: 35137, Start Num: 38

Candidate Starts for ShakeltOph_52:

(Start: 29 @34136 has 2 MA's), (Start: 38 @34166 has 1 MA's), (40, 34172), (65, 34328), (67, 34340), (118, 34577), (129, 34652), (145, 34718), (157, 34754), (161, 34772), (167, 34799), (190, 34910), (195, 34955), (196, 34964), (205, 35111),

Gene: ShakeltOph_51 Start: 33177, Stop: 33989, Start Num: 42

Candidate Starts for ShakeltOph_51:

(Start: 25 @33132 has 1 MA's), (34, 33168), (Start: 42 @33177 has 4 MA's), (60, 33300), (80, 33399), (110, 33528), (127, 33639), (190, 33909), (196, 33963),

Gene: Sharkboy_44 Start: 32378, Stop: 33100, Start Num: 48

Candidate Starts for Sharkboy_44:

(4, 32162), (44, 32366), (Start: 48 @32378 has 49 MA's), (50, 32402), (66, 32519), (69, 32531), (71, 32543), (92, 32639), (94, 32657), (100, 32678), (105, 32690), (127, 32801), (138, 32867), (143, 32885), (152, 32930), (160, 32963), (178, 33044), (182, 33077),

Gene: Shayna_45 Start: 31203, Stop: 31955, Start Num: 44

Candidate Starts for Shayna_45:

(4, 30999), (44, 31203), (Start: 48 @31215 has 49 MA's), (69, 31377), (71, 31389), (74, 31398), (103, 31530), (105, 31536), (125, 31638), (126, 31641), (127, 31647), (146, 31740), (159, 31806), (173, 31872), (178, 31890), (182, 31923),

Gene: Simpson_47 Start: 32526, Stop: 33338, Start Num: 43

Candidate Starts for Simpson_47:

(Start: 43 @32526 has 42 MA's), (54, 32601), (62, 32655), (75, 32730), (78, 32745), (82, 32769), (127, 32991), (129, 33009), (148, 33078), (168, 33147), (191, 33264), (196, 33312),

Gene: Skylord_43 Start: 29809, Stop: 30534, Start Num: 46

Candidate Starts for Skylord_43:

(3, 29584), (6, 29611), (Start: 46 @29809 has 10 MA's), (Start: 49 @29827 has 1 MA's), (71, 29974), (74, 29983), (77, 29998), (83, 30022), (100, 30109), (105, 30121), (111, 30139), (126, 30226), (127, 30232), (134, 30277), (138, 30298), (143, 30316), (182, 30508), (187, 30523),

Gene: Slay_46 Start: 32379, Stop: 33098, Start Num: 48

Candidate Starts for Slay_46:

(1, 32070), (4, 32163), (44, 32367), (Start: 48 @32379 has 49 MA's), (69, 32532), (74, 32553), (105, 32691), (126, 32796), (127, 32802), (138, 32868), (143, 32886), (176, 33039), (182, 33078), (186, 33090),

Gene: Snek_42 Start: 30604, Stop: 31398, Start Num: 43

Candidate Starts for Snek_42:

(11, 30475), (13, 30508), (14, 30511), (Start: 21 @30544 has 1 MA's), (33, 30595), (Start: 43 @30604 has 42 MA's), (62, 30733), (64, 30751), (127, 31039), (131, 31063), (156, 31156), (168, 31207), (179, 31258), (191, 31324), (196, 31372),

Gene: Soondubu_40 Start: 33487, Stop: 34296, Start Num: 42

Candidate Starts for Soondubu_40:

(Start: 42 @33487 has 4 MA's), (108, 33847), (116, 33889), (127, 33952), (129, 33970), (131, 33976), (174, 34138), (190, 34216), (196, 34270),

Gene: Stoor_46 Start: 33177, Stop: 33896, Start Num: 48

Candidate Starts for Stoor_46:

(4, 32961), (44, 33165), (Start: 48 @33177 has 49 MA's), (50, 33201), (51, 33210), (63, 33291), (66, 33318), (69, 33330), (71, 33342), (74, 33351), (83, 33390), (90, 33426), (93, 33453), (100, 33477), (105, 33489), (111, 33507), (126, 33594), (127, 33600), (136, 33660), (143, 33684), (159, 33759), (170, 33810), (172, 33822), (176, 33837), (178, 33843), (182, 33876), (184, 33882),

Gene: Stromboli_46 Start: 33039, Stop: 33758, Start Num: 48

Candidate Starts for Stromboli_46:

(4, 32823), (44, 33027), (Start: 48 @33039 has 49 MA's), (50, 33063), (71, 33204), (74, 33213), (83, 33252), (90, 33288), (103, 33345), (105, 33351), (127, 33462), (138, 33528), (143, 33546), (152, 33591), (159, 33621), (176, 33699), (182, 33738),

Gene: SuMoo_53 Start: 34756, Stop: 35586, Start Num: 39

Candidate Starts for SuMoo_53:

(28, 34720), (Start: 39 @34756 has 12 MA's), (53, 34819), (57, 34843), (109, 35092), (127, 35188), (196, 35545),

Gene: Sue2_45 Start: 32968, Stop: 33750, Start Num: 45

Candidate Starts for Sue2_45:

(Start: 45 @32968 has 1 MA's), (97, 33265), (104, 33292), (127, 33406), (168, 33562), (177, 33604), (179, 33613), (196, 33724),

Gene: SunnyD_48 Start: 31220, Stop: 31960, Start Num: 48

Candidate Starts for SunnyD_48:

(4, 31004), (44, 31208), (Start: 48 @31220 has 49 MA's), (69, 31382), (71, 31394), (74, 31403), (103, 31535), (105, 31541), (126, 31646), (127, 31652), (146, 31745), (159, 31811), (173, 31877), (178, 31895), (182, 31928),

Gene: Swervy_46 Start: 31923, Stop: 32642, Start Num: 48

Candidate Starts for Swervy_46:

(44, 31911), (Start: 48 @31923 has 49 MA's), (50, 31947), (69, 32076), (74, 32097), (105, 32235), (126, 32340), (127, 32346), (138, 32412), (143, 32430), (176, 32583), (182, 32622),

Gene: Tallboi_44 Start: 33369, Stop: 34190, Start Num: 43

Candidate Starts for Tallboi_44:

(Start: 43 @33369 has 42 MA's), (62, 33498), (73, 33561), (119, 33789), (127, 33825), (172, 34020), (183, 34083), (191, 34116), (196, 34164),

Gene: Tbone_44 Start: 32394, Stop: 33212, Start Num: 43

Candidate Starts for Tbone_44:

(Start: 43 @32394 has 42 MA's), (60, 32514), (62, 32523), (83, 32628), (84, 32631), (86, 32640), (107, 32748), (113, 32778), (127, 32856), (168, 33021), (191, 33138), (196, 33186),

Gene: TforTroy_46 Start: 32506, Stop: 33342, Start Num: 43

Candidate Starts for TforTroy_46:

(Start: 43 @32506 has 42 MA's), (62, 32635), (64, 32653), (83, 32740), (84, 32743), (127, 32965), (137, 33028), (166, 33145), (177, 33193), (191, 33268), (196, 33316),

Gene: Tian_43 Start: 33180, Stop: 33998, Start Num: 43

Candidate Starts for Tian_43:

(15, 33087), (17, 33102), (19, 33105), (37, 33171), (Start: 43 @33180 has 42 MA's), (62, 33309), (87, 33441), (127, 33642), (172, 33831), (179, 33861), (196, 33972),

Gene: Tuck_48 Start: 34596, Stop: 35402, Start Num: 43

Candidate Starts for Tuck_48:

(Start: 43 @34596 has 42 MA's), (62, 34725), (86, 34848), (127, 35055), (158, 35166), (191, 35328), (196, 35376),

Gene: TukTuk_46 Start: 31931, Stop: 32650, Start Num: 48

Candidate Starts for TukTuk_46:

(4, 31715), (44, 31919), (Start: 48 @31931 has 49 MA's), (50, 31955), (69, 32084), (74, 32105), (105, 32243), (126, 32348), (127, 32354), (138, 32420), (143, 32438), (176, 32591), (182, 32630),

Gene: Turab_42 Start: 31623, Stop: 32456, Start Num: 36

Candidate Starts for Turab_42:

(36, 31623), (Start: 43 @31635 has 42 MA's), (62, 31764), (67, 31797), (73, 31827), (119, 32055), (127, 32091), (166, 32259), (191, 32382), (196, 32430),

Gene: Tutumahutu_46 Start: 32497, Stop: 33315, Start Num: 43

Candidate Starts for Tutumahutu_46:

(Start: 43 @32497 has 42 MA's), (60, 32617), (62, 32626), (83, 32731), (84, 32734), (86, 32743), (107, 32851), (113, 32881), (127, 32959), (168, 33124), (191, 33241), (196, 33289),

Gene: Tweety19_43 Start: 30544, Stop: 31398, Start Num: 21

Candidate Starts for Tweety19_43:

(11, 30475), (13, 30508), (14, 30511), (Start: 21 @30544 has 1 MA's), (33, 30595), (Start: 43 @30604 has 42 MA's), (62, 30733), (64, 30751), (127, 31039), (131, 31063), (156, 31156), (168, 31207), (179, 31258), (191, 31324), (196, 31372),

Gene: UtzChips_49 Start: 33579, Stop: 34418, Start Num: 39

Candidate Starts for UtzChips_49:

(2, 33321), (5, 33396), (18, 33510), (Start: 39 @33579 has 12 MA's), (82, 33801), (127, 34011), (135, 34062), (137, 34071), (144, 34095), (168, 34206), (196, 34368), (200, 34407),

Gene: VResidence_44 Start: 31752, Stop: 32570, Start Num: 43

Candidate Starts for VResidence_44:

(Start: 43 @31752 has 42 MA's), (62, 31881), (84, 31989), (86, 31998), (113, 32136), (127, 32214), (168, 32379), (174, 32409), (191, 32496), (196, 32544),

Gene: Vitas_43 Start: 29791, Stop: 30516, Start Num: 46

Candidate Starts for Vitas_43:

(3, 29566), (6, 29593), (Start: 46 @29791 has 10 MA's), (Start: 49 @29809 has 1 MA's), (71, 29956), (74, 29965), (77, 29980), (83, 30004), (100, 30091), (105, 30103), (111, 30121), (126, 30208), (127, 30214), (134, 30259), (138, 30280), (143, 30298), (182, 30490), (187, 30505),

Gene: VroomVroom_47 Start: 33099, Stop: 33911, Start Num: 42

Candidate Starts for VroomVroom_47:

(Start: 42 @33099 has 4 MA's), (55, 33183), (60, 33222), (80, 33321), (84, 33333), (93, 33393), (110, 33450), (121, 33525), (127, 33561), (196, 33885),

Gene: VroomVroom_48 Start: 34057, Stop: 35061, Start Num: 29

Candidate Starts for VroomVroom_48:

(Start: 29 @34057 has 2 MA's), (Start: 38 @34087 has 1 MA's), (40, 34093), (65, 34252), (67, 34264), (118, 34501), (129, 34576), (145, 34642), (157, 34678), (167, 34723), (190, 34834), (195, 34879), (196, 34888), (205, 35035),

Gene: Warda_45 Start: 32571, Stop: 33389, Start Num: 43

Candidate Starts for Warda_45:

(Start: 43 @32571 has 42 MA's), (60, 32691), (62, 32700), (83, 32805), (84, 32808), (86, 32817), (107, 32925), (113, 32955), (127, 33033), (168, 33198), (191, 33315), (196, 33363),

Gene: Wildwest_43 Start: 31833, Stop: 32639, Start Num: 43

Candidate Starts for Wildwest_43:

(7, 31668), (9, 31683), (10, 31689), (Start: 43 @31833 has 42 MA's), (60, 31953), (62, 31962), (82, 32070), (86, 32085), (122, 32268), (127, 32292), (158, 32403), (191, 32565), (196, 32613),

Gene: Yang_44 Start: 31815, Stop: 32630, Start Num: 43

Candidate Starts for Yang_44:

(Start: 43 @31815 has 42 MA's), (59, 31932), (62, 31944), (82, 32052), (86, 32067), (127, 32274), (168, 32433), (172, 32454), (191, 32550), (196, 32598),

Gene: YesChef_45 Start: 32473, Stop: 33291, Start Num: 43

Candidate Starts for YesChef_45:

(Start: 43 @32473 has 42 MA's), (60, 32593), (62, 32602), (83, 32707), (84, 32710), (86, 32719), (107, 32827), (113, 32857), (127, 32935), (168, 33100), (191, 33217), (196, 33265),

Gene: Zeta1847_42 Start: 31621, Stop: 32589, Start Num: 23

Candidate Starts for Zeta1847_42:

(Start: 23 @31621 has 1 MA's), (32, 31654), (Start: 39 @31672 has 12 MA's), (Start: 48 @31687 has 49 MA's), (79, 31882), (82, 31894), (95, 31972), (126, 32104), (127, 32110), (128, 32122), (133, 32152), (150, 32227), (178, 32332), (194, 32431), (196, 32449), (198, 32461),