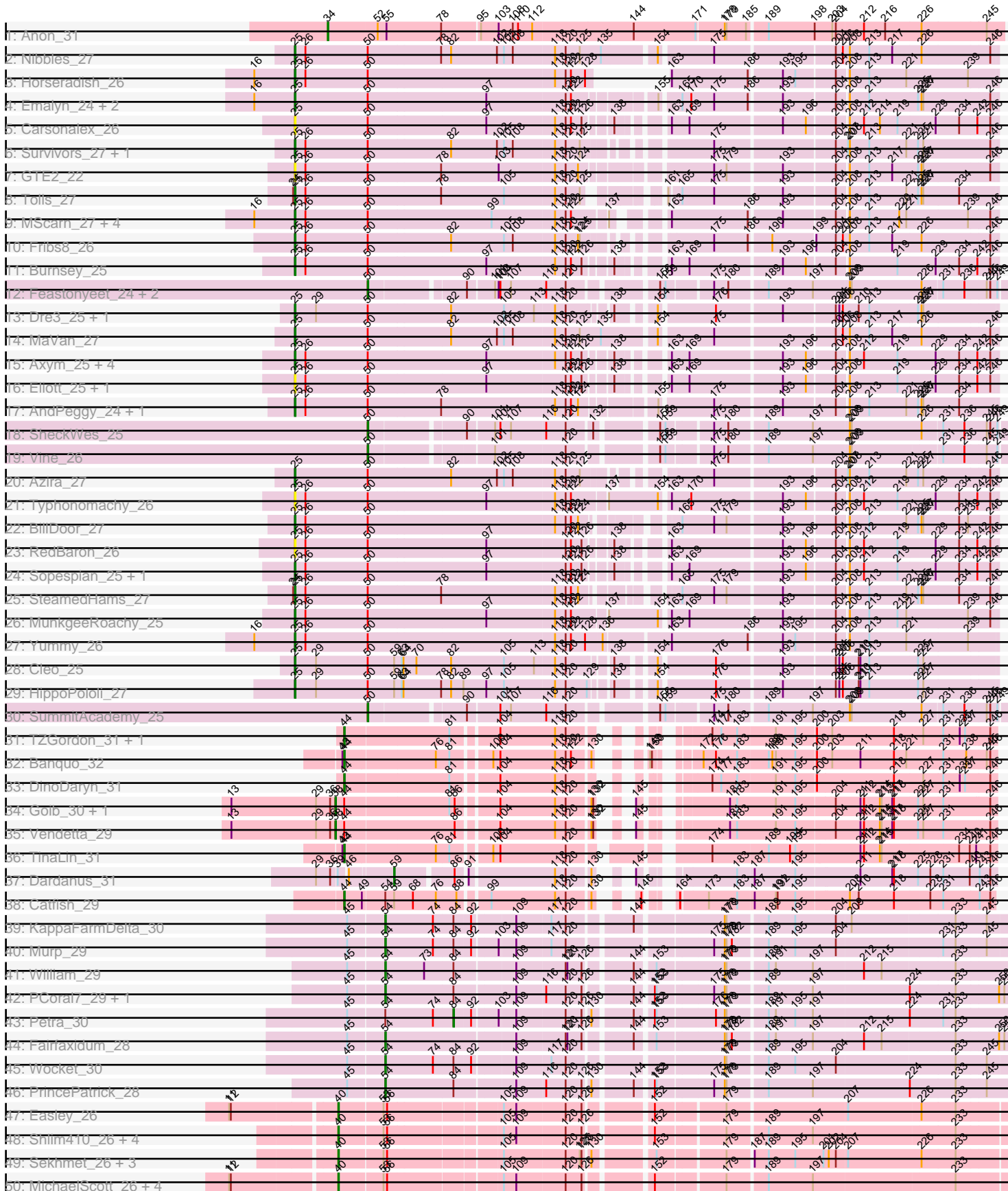
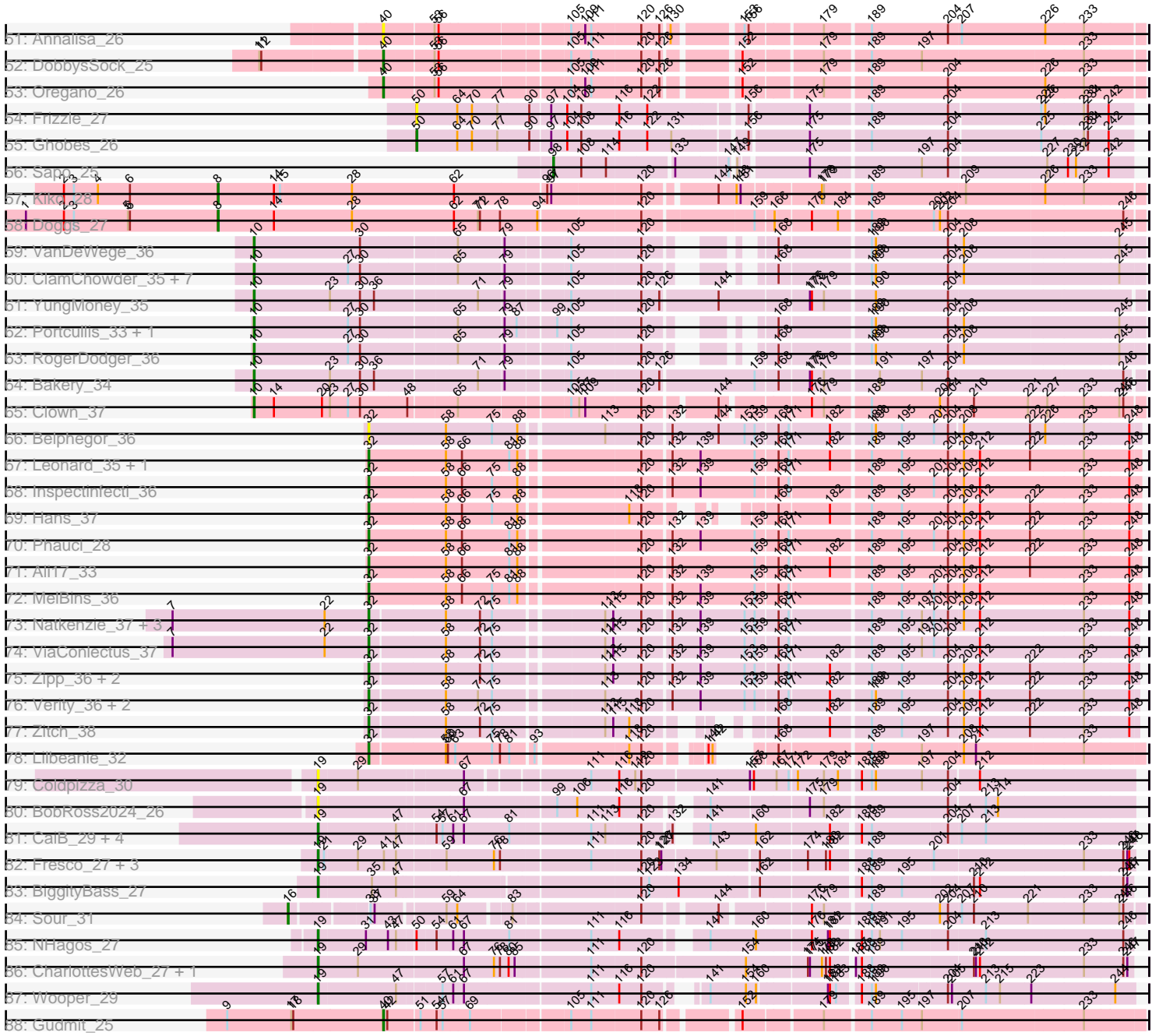


Pham 196351



Pham 196351



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 196351 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196351 has 143 members, 21 are drafts.

Phages represented in each track:

- Track 1 : Anon_31
- Track 2 : Nibbles_27
- Track 3 : Horseradish_26
- Track 4 : Emalyn_24, Amok_24, AikoCarson_24
- Track 5 : Carsonalex_26
- Track 6 : Survivors_27, Zareef_29
- Track 7 : GTE2_22
- Track 8 : Tolls_27
- Track 9 : MScarn_27, Biskit_26, Buttrmlkdreams_25, SketchMex_24, Troje_25
- Track 10 : Fribs8_26
- Track 11 : Burnsey_25
- Track 12 : Feastonyeet_24, PotPie_25, BigChungus_24
- Track 13 : Dre3_25, Gibbous_25
- Track 14 : MaVan_27
- Track 15 : Axym_25, Agatha_25, GoldHunter_26, Cozz_25, Quasar_25
- Track 16 : Elliott_25, PsychoKiller_25
- Track 17 : AndPeggy_24, Yarn_24
- Track 18 : SheckWes_25
- Track 19 : Vine_26
- Track 20 : Azira_27
- Track 21 : Typhonomachy_26
- Track 22 : BillDoor_27
- Track 23 : RedBaron_26
- Track 24 : Sopespian_25, Nina_26
- Track 25 : SteamedHams_27
- Track 26 : MunkgeeRoachy_25
- Track 27 : Yummy_26
- Track 28 : Cleo_25
- Track 29 : HippoPololi_27
- Track 30 : SummitAcademy_25
- Track 31 : TZGordon_31, Huffy_31
- Track 32 : Banquo_32
- Track 33 : DinoDaryn_31
- Track 34 : Goib_30, Splinter_29
- Track 35 : Vendetta_29
- Track 36 : TinaLin_31
- Track 37 : Dardanus_31

- Track 38 : Catfish_29
- Track 39 : KappaFarmDelta_30
- Track 40 : Murp_29
- Track 41 : William_29
- Track 42 : PCoral7_29, Toast_29
- Track 43 : Petra_30
- Track 44 : Fairfaxidum_28
- Track 45 : Wocket_30
- Track 46 : PrincePatrick_28
- Track 47 : Easley_26
- Track 48 : Shlim410_26, Adora_26, Howe_26, Hortense_26, Twinkle_26
- Track 49 : Sekhmet_26, Dorito_25, Samman98_26, PhriskyACE_25
- Track 50 : MichaelScott_26, Dolores_26, WinkNick_26, Mcklovin_26, Clark_26
- Track 51 : Annalisa_26
- Track 52 : DobbysSock_25
- Track 53 : Oregano_26
- Track 54 : Frizzle_27
- Track 55 : Ghobes_26
- Track 56 : Sapo_25
- Track 57 : Kiko_28
- Track 58 : Doggs_27
- Track 59 : VanDeWege_36
- Track 60 : ClamChowder_35, Fugax_35, PinkCoffee_35, Barb_35, CoveyB_36, Twister6_35, Arri_36, Danyall_35
- Track 61 : YungMoney_35
- Track 62 : Portcullis_33, Shinji_33
- Track 63 : RogerDodger_36
- Track 64 : Bakery_34
- Track 65 : Clown_37
- Track 66 : Belphegor_36
- Track 67 : Leonard_35, Phinally_35
- Track 68 : Inspectinfecti_36
- Track 69 : Hans_37
- Track 70 : Phauci_28
- Track 71 : Ali17_33
- Track 72 : MelBins_36
- Track 73 : Natkenzie_37, Abblin_37, Sampson_37, Scioto_37
- Track 74 : ViaConlectus_37
- Track 75 : Zipp_36, APunk_38, Tardus_38
- Track 76 : Verity_36, Delrey21_36, DoctorFroggo_36
- Track 77 : Zitch_38
- Track 78 : Lilbeanie_32
- Track 79 : Coldpizza_30
- Track 80 : BobRoss2024_26
- Track 81 : CaiB_29, CloverMinnie_29, MossRose_29, MakoManhole_29, AnarQue_29
- Track 82 : Fresco_27, Ligma_27, Axumite_27, Shatter_27
- Track 83 : BiggityBass_27
- Track 84 : Sour_31
- Track 85 : NHagos_27
- Track 86 : CharlottesWeb_27, Mariokart_27
- Track 87 : Wooper_29
- Track 88 : Gudmit_25

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

The start number called the most often in the published annotations is 25, it was called in 31 of the 122 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agatha_25, AikoCarson_24, Amok_24, AndPeggy_24, Axym_25, Azira_27, BillDoor_27, Biskit_26, Burnsey_25, Buttrmlkdreams_25, Carsonalex_26, Cleo_25, Cozz_25, Dre3_25, Elliott_25, Emalyn_24, Fribs8_26, GTE2_22, Gibbous_25, GoldHunter_26, HippoPololi_27, Horseradish_26, MScarn_27, MaVan_27, MunkgeeRoachy_25, Nibbles_27, Nina_26, PsychoKiller_25, Quasar_25, RedBaron_26, SketchMex_24, Sopespian_25, SteamedHams_27, Survivors_27, Tolls_27, Troje_25, Typhonmarchy_26, Yarn_24, Yummy_26, Zareef_29,

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

-

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

- APunk_38, Abblin_37, Adora_26, Ali17_33, AnarQue_29, Annalisa_26, Anon_31, Arri_36, Axumite_27, Bakery_34, Banquo_32, Barb_35, Belphegor_36, BigChungus_24, BiggityBass_27, BobRoss2024_26, CaiB_29, Catfish_29, CharlottesWeb_27, ClamChowder_35, Clark_26, CloverMinnie_29, Clown_37, Coldpizza_30, CoveyB_36, Danyall_35, Dardanus_31, Delrey21_36, DinoDaryn_31, DobbysSock_25, DoctorFroggo_36, Doggs_27, Dolores_26, Dorito_25, Easley_26, Fairfaxidum_28, Feastonyeet_24, Fresco_27, Frizzle_27, Fugax_35, Ghobes_26, Goib_30, Gudmit_25, Hans_37, Hortense_26, Howe_26, Huffy_31, Inspectinfecti_36, KappaFarmDelta_30, Kiko_28, Leonard_35, Ligma_27, Lilbeanie_32, MakoManhole_29, Mariokart_27, Mcklovin_26, MelBins_36, MichaelScott_26, MossRose_29, Murp_29, NHagos_27, Natkenzie_37, Oregano_26, PCoral7_29, Petra_30, Phauci_28, Phinally_35, PhriskyACE_25, PinkCoffee_35, Portcullis_33, PotPie_25, PrincePatrick_28, RogerDodger_36, Samman98_26, Sampson_37, Sapo_25, Scioto_37, Sekhmet_26, Shatter_27, SheckWes_25, Shinji_33, Shlim410_26, Sour_31, Splinter_29, SummitAcademy_25, TZGordon_31, Tardus_38, TinaLin_31, Toast_29, Twinkle_26, Twister6_35, VanDeWege_36, Vendetta_29, Verity_36, ViaConlectus_37, Vine_26, William_29, WinkNick_26, Wocket_30, Wooper_29, YungMoney_35, Zipp_36, Zitch_38,

Summary by start number:

Start 8:

- Found in 2 of 143 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Doggs_27 (DB), Kiko_28 (DB),

Start 10:

- Found in 15 of 143 (10.5%) of genes in pham
- Manual Annotations of this start: 13 of 122
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Arri_36 (DC1), Bakery_34 (DC1), Barb_35 (DC1), ClamChowder_35 (DC1), Clown_37 (DC2), CoveyB_36 (DC1), Danyall_35 (DC1), Fugax_35 (DC1), PinkCoffee_35 (DC1), Portcullis_33 (DC1), RogerDodger_36 (DC1), Shinji_33 (DC1), Twister6_35 (DC1), VanDeWege_36 (DC1), YungMoney_35 (DC1),

Start 16:

- Found in 11 of 143 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 122
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Sour_31 (DR),

Start 19:

- Found in 16 of 143 (11.2%) of genes in pham
- Manual Annotations of this start: 13 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnarQue_29 (DR), Axumite_27 (DR), BiggityBass_27 (DR), BobRoss2024_26 (DR), CaiB_29 (DR), CharlottesWeb_27 (DR), CloverMinnie_29 (DR), Coldpizza_30 (DR), Fresco_27 (DR), Ligma_27 (DR), MakoManhole_29 (DR), Mariokart_27 (DR), MossRose_29 (DR), NHagos_27 (DR), Shatter_27 (DR), Wooper_29 (DR),

Start 25:

- Found in 40 of 143 (28.0%) of genes in pham
- Manual Annotations of this start: 31 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agatha_25 (CT), AikoCarson_24 (CT), Amok_24 (CT), AndPeggy_24 (CT), Axym_25 (CT), Azira_27 (CT), BillDoor_27 (CT), Biskit_26 (CT), Burnsey_25 (CT), Buttrmlkdreams_25 (CT), Carsonalex_26 (CT), Cleo_25 (CT), Cozz_25 (CT), Dre3_25 (CT), Elliott_25 (CT), Emalyn_24 (CT), Fribs8_26 (CT), GTE2_22 (CT), Gibbous_25 (CT), GoldHunter_26 (CT), HippoPololi_27 (CT), Horseradish_26 (CT), MScarn_27 (CT), MaVan_27 (CT), MunkgeeRoachy_25 (CT), Nibbles_27 (CT), Nina_26 (CT), PsychoKiller_25 (CT), Quasar_25 (CT), RedBaron_26 (CT), SketchMex_24 (CT), Sopespian_25 (CT), SteamedHams_27 (CT), Survivors_27 (CT), Tolls_27 (CT), Troje_25 (CT), Typhonomachy_26 (CT), Yarn_24 (CT), Yummy_26 (CT), Zareef_29 (CT),

Start 32:

- Found in 21 of 143 (14.7%) of genes in pham
- Manual Annotations of this start: 17 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: APunk_38 (DE4), Abblin_37 (DE4), Ali17_33 (DE2), Belphegor_36 (DE), Delrey21_36 (DE4), DoctorFroggo_36 (DE4), Hans_37 (DE2), Inspectinfecti_36 (DE2), Leonard_35 (DE2), Lilbeanie_32 (DE5), MelBins_36 (DE2), Natkenzie_37 (DE4), Phauci_28 (DE2), Phinally_35 (DE2), Sampson_37 (DE4), Scioto_37 (DE4), Tardus_38 (DE4), Verity_36 (DE4), ViaConlectus_37 (DE4), Zipp_36 (DE4), Zitch_38 (DE4),

Start 34:

- Found in 1 of 143 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anon_31 (A15),

Start 38:

- Found in 3 of 143 (2.1%) of genes in pham
- Manual Annotations of this start: 3 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Goib_30 (CU1), Splinter_29 (CU1), Vendetta_29 (CU1),

Start 40:

- Found in 19 of 143 (13.3%) of genes in pham
- Manual Annotations of this start: 17 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adora_26 (CZ4), Annalisa_26 (CZ4), Clark_26 (CZ4), DobbysSock_25 (CZ4), Dolores_26 (CZ4), Dorito_25 (CZ4), Easley_26 (CZ4), Gudmit_25 (singleton), Hortense_26 (CZ4), Howe_26 (CZ4), Mcklovin_26 (CZ4), MichaelScott_26 (CZ4), Oregano_26 (CZ4), PhriskyACE_25 (CZ4), Samman98_26 (CZ4), Sekhmet_26 (CZ4), Shlim410_26 (CZ4), Twinkle_26 (CZ4), WinkNick_26 (CZ4),

Start 44:

- Found in 9 of 143 (6.3%) of genes in pham
- Manual Annotations of this start: 6 of 122
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Banquo_32 (CU1), Catfish_29 (CU5), DinoDaryn_31 (CU1), Huffy_31 (CU1), TZGordon_31 (CU1), TinaLin_31 (CU1),

Start 50:

- Found in 49 of 143 (34.3%) of genes in pham
- Manual Annotations of this start: 7 of 122
- Called 16.3% of time when present
- Phage (with cluster) where this start called: BigChungus_24 (CT), Feastonyeet_24 (CT), Frizzle_27 (DA), Ghobes_26 (DA), PotPie_25 (CT), SheckWes_25 (CT), SummitAcademy_25 (CT), Vine_26 (CT),

Start 54:

- Found in 17 of 143 (11.9%) of genes in pham
- Manual Annotations of this start: 8 of 122
- Called 47.1% of time when present
- Phage (with cluster) where this start called: Fairfaxidum_28 (CV), KappaFarmDelta_30 (CV), Murp_29 (CV), PCoral7_29 (CV), PrincePatrick_28 (CV), Toast_29 (CV), William_29 (CV), Wocket_30 (CV),

Start 59:

- Found in 9 of 143 (6.3%) of genes in pham
- Manual Annotations of this start: 1 of 122
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Dardanus_31 (CU3),

Start 84:

- Found in 8 of 143 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 122
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Petra_30 (CV),

Start 98:

- Found in 1 of 143 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 122
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sapo_25 (DA),

Summary by clusters:

There are 17 clusters represented in this pham: A15, singleton, CU3, CU1, DB, DE2, DE, DE4, DE5, CZ4, DA, DC2, CU5, CT, DR, CV, DC1,

Info for manual annotations of cluster A15:

- Start number 34 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster CT:

- Start number 25 was manually annotated 31 times for cluster CT.
- Start number 50 was manually annotated 6 times for cluster CT.

Info for manual annotations of cluster CU1:

- Start number 38 was manually annotated 3 times for cluster CU1.
- Start number 44 was manually annotated 5 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 59 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU5:

- Start number 44 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster CV:

- Start number 54 was manually annotated 8 times for cluster CV.
- Start number 84 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ4:

- Start number 40 was manually annotated 16 times for cluster CZ4.

Info for manual annotations of cluster DA:

- Start number 50 was manually annotated 1 time for cluster DA.
- Start number 98 was manually annotated 1 time for cluster DA.

Info for manual annotations of cluster DB:

- Start number 8 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster DC1:

- Start number 10 was manually annotated 12 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 10 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE2:

- Start number 32 was manually annotated 7 times for cluster DE2.

Info for manual annotations of cluster DE4:

- Start number 32 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 32 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DR:

- Start number 16 was manually annotated 1 time for cluster DR.
- Start number 19 was manually annotated 13 times for cluster DR.

Gene Information:

Gene: APunk_38 Start: 32541, Stop: 33617, Start Num: 32

Candidate Starts for APunk_38:

(Start: 32 @32541 has 17 MA's), (58, 32649), (72, 32697), (75, 32715), (113, 32862), (115, 32874), (120, 32913), (132, 32952), (139, 32994), (153, 33060), (159, 33075), (168, 33102), (171, 33117), (182, 33174), (189, 33228), (195, 33273), (204, 33342), (208, 33363), (212, 33387), (222, 33462), (233, 33540), (248, 33606),

Gene: Abblin_37 Start: 33084, Stop: 34160, Start Num: 32

Candidate Starts for Abblin_37:

(7, 32790), (22, 33018), (Start: 32 @33084 has 17 MA's), (58, 33192), (72, 33240), (75, 33258), (113, 33405), (115, 33417), (120, 33456), (132, 33495), (139, 33537), (153, 33603), (159, 33618), (168, 33645), (171, 33660), (189, 33771), (195, 33816), (197, 33846), (201, 33864), (204, 33885), (208, 33906), (212, 33930), (233, 34083), (248, 34149),

Gene: Adora_26 Start: 22572, Stop: 23609, Start Num: 40

Candidate Starts for Adora_26:

(Start: 40 @22572 has 17 MA's), (53, 22641), (56, 22647), (105, 22827), (109, 22848), (120, 22929), (126, 22956), (152, 23049), (179, 23157), (189, 23220), (197, 23295), (233, 23526),

Gene: Agatha_25 Start: 20517, Stop: 21614, Start Num: 25

Candidate Starts for Agatha_25:

(Start: 25 @20517 has 31 MA's), (26, 20535), (Start: 50 @20640 has 7 MA's), (97, 20838), (118, 20952), (120, 20970), (122, 20979), (126, 20997), (138, 21033), (163, 21093), (169, 21123), (193, 21273), (196, 21312), (204, 21357), (208, 21375), (212, 21399), (219, 21456), (229, 21516), (234, 21552), (242, 21582), (246, 21603),

Gene: AikoCarson_24 Start: 19778, Stop: 20890, Start Num: 25

Candidate Starts for AikoCarson_24:

(Start: 16 @19709 has 1 MA's), (Start: 25 @19778 has 31 MA's), (Start: 50 @19901 has 7 MA's), (97, 20099), (120, 20231), (122, 20240), (155, 20357), (165, 20387), (170, 20402), (175, 20441), (186, 20498), (193, 20549), (204, 20633), (208, 20651), (213, 20684), (225, 20765), (226, 20768), (227, 20771), (246, 20879),

Gene: Ali17_33 Start: 30788, Stop: 31876, Start Num: 32

Candidate Starts for Ali17_33:

(Start: 32 @30788 has 17 MA's), (58, 30902), (66, 30923), (81, 30992), (88, 31004), (120, 31169), (132, 31208), (159, 31331), (168, 31358), (171, 31373), (182, 31430), (189, 31484), (195, 31529), (204, 31598), (208, 31619), (212, 31643), (222, 31718), (233, 31796), (248, 31862),

Gene: Amok_24 Start: 19775, Stop: 20848, Start Num: 25

Candidate Starts for Amok_24:

(Start: 16 @19706 has 1 MA's), (Start: 25 @19775 has 31 MA's), (Start: 50 @19898 has 7 MA's), (97, 20096), (120, 20228), (122, 20237), (155, 20315), (165, 20345), (170, 20360), (175, 20399), (186, 20456), (193, 20507), (204, 20591), (208, 20609), (213, 20642), (225, 20723), (226, 20726), (227, 20729), (246, 20837),

Gene: AnarQue_29 Start: 28071, Stop: 29183, Start Num: 19

Candidate Starts for AnarQue_29:

(Start: 19 @28071 has 13 MA's), (47, 28185), (Start: 54 @28236 has 8 MA's), (57, 28245), (61, 28260), (67, 28275), (81, 28341), (111, 28455), (113, 28476), (120, 28527), (132, 28566), (141, 28590), (160, 28650), (182, 28752), (188, 28788), (189, 28803), (204, 28914), (207, 28932), (213, 28968),

Gene: AndPeggy_24 Start: 20180, Stop: 21292, Start Num: 25

Candidate Starts for AndPeggy_24:

(Start: 25 @20180 has 31 MA's), (26, 20198), (Start: 50 @20303 has 7 MA's), (78, 20426), (118, 20615), (120, 20633), (122, 20642), (124, 20654), (155, 20759), (175, 20843), (193, 20951), (204, 21035), (208, 21053), (213, 21086), (221, 21149), (225, 21167), (226, 21170), (227, 21173), (234, 21230),

Gene: Annalisa_26 Start: 22034, Stop: 23074, Start Num: 40

Candidate Starts for Annalisa_26:

(Start: 40 @22034 has 17 MA's), (53, 22103), (56, 22109), (105, 22289), (109, 22310), (111, 22319), (120, 22391), (126, 22418), (130, 22427), (153, 22514), (156, 22520), (179, 22619), (189, 22682), (204, 22796), (207, 22811), (226, 22934), (233, 22991),

Gene: Anon_31 Start: 22310, Stop: 23416, Start Num: 34

Candidate Starts for Anon_31:

(Start: 34 @22310 has 1 MA's), (52, 22391), (55, 22406), (78, 22499), (95, 22559), (103, 22589), (108, 22613), (110, 22622), (112, 22646), (144, 22814), (171, 22919), (178, 22964), (179, 22967), (185, 23000), (189, 23030), (198, 23108), (203, 23138), (204, 23144), (212, 23186), (216, 23222), (226, 23279), (245, 23387),

Gene: Arri_36 Start: 28916, Stop: 30088, Start Num: 10

Candidate Starts for Arri_36:

(Start: 10 @28916 has 13 MA's), (27, 29057), (30, 29075), (65, 29210), (79, 29276), (105, 29363), (120, 29465), (168, 29570), (189, 29696), (190, 29702), (204, 29810), (208, 29828), (245, 30053),

Gene: Axumite_27 Start: 26078, Stop: 27217, Start Num: 19

Candidate Starts for Axumite_27:

(Start: 19 @26078 has 13 MA's), (21, 26087), (29, 26135), (41, 26174), (47, 26192), (Start: 59 @26261 has 1 MA's), (76, 26330), (78, 26339), (111, 26465), (120, 26537), (126, 26564), (127, 26567), (143, 26639), (162, 26693), (174, 26756), (180, 26783), (182, 26789), (189, 26840), (201, 26930), (233, 27143), (246, 27200), (247, 27206), (248, 27209),

Gene: Axym_25 Start: 20517, Stop: 21614, Start Num: 25

Candidate Starts for Axym_25:

(Start: 25 @20517 has 31 MA's), (26, 20535), (Start: 50 @20640 has 7 MA's), (97, 20838), (118, 20952), (120, 20970), (122, 20979), (126, 20997), (138, 21033), (163, 21093), (169, 21123), (193, 21273), (196, 21312), (204, 21357), (208, 21375), (212, 21399), (219, 21456), (229, 21516), (234, 21552), (242, 21582), (246, 21603),

Gene: Azira_27 Start: 21488, Stop: 22588, Start Num: 25

Candidate Starts for Azira_27:

(Start: 25 @21488 has 31 MA's), (Start: 50 @21611 has 7 MA's), (82, 21749), (102, 21827), (105, 21839), (108, 21854), (118, 21923), (120, 21941), (125, 21965), (175, 22133), (204, 22325), (207, 22346), (208, 22349), (213, 22382), (221, 22445), (225, 22463), (227, 22469), (246, 22577),

Gene: Bakery_34 Start: 28127, Stop: 29377, Start Num: 10

Candidate Starts for Bakery_34:

(Start: 10 @28127 has 13 MA's), (23, 28241), (30, 28286), (36, 28307), (71, 28451), (79, 28487), (105, 28574), (120, 28676), (126, 28703), (159, 28838), (168, 28865), (175, 28907), (176, 28910), (179, 28928), (191, 29003), (197, 29066), (204, 29105), (246, 29354),

Gene: Banquo_32 Start: 23108, Stop: 24055, Start Num: 44

Candidate Starts for Banquo_32:

(43, 23105), (Start: 44 @23108 has 6 MA's), (76, 23255), (81, 23276), (100, 23333), (104, 23345), (118, 23438), (120, 23456), (122, 23465), (130, 23492), (149, 23525), (150, 23528), (172, 23576), (176, 23597), (183, 23633), (189, 23684), (190, 23690), (191, 23696), (195, 23729), (200, 23762), (203, 23786), (211, 23834), (218, 23891), (221, 23912), (231, 23969), (238, 24008), (245, 24041), (246, 24047),

Gene: Barb_35 Start: 28934, Stop: 30106, Start Num: 10

Candidate Starts for Barb_35:

(Start: 10 @28934 has 13 MA's), (27, 29075), (30, 29093), (65, 29228), (79, 29294), (105, 29381), (120, 29483), (168, 29588), (189, 29714), (190, 29720), (204, 29828), (208, 29846), (245, 30071),

Gene: Belphegor_36 Start: 32996, Stop: 34081, Start Num: 32

Candidate Starts for Belphegor_36:

(Start: 32 @32996 has 17 MA's), (58, 33110), (75, 33176), (88, 33212), (113, 33326), (120, 33377), (132, 33416), (144, 33485), (153, 33524), (159, 33539), (168, 33566), (171, 33581), (182, 33638), (189, 33692), (190, 33698), (195, 33737), (201, 33785), (204, 33806), (208, 33824), (222, 33923), (226, 33944), (233, 34001), (248, 34067),

Gene: BigChungus_24 Start: 20320, Stop: 21312, Start Num: 50

Candidate Starts for BigChungus_24:

(Start: 50 @20320 has 7 MA's), (90, 20467), (101, 20509), (103, 20515), (104, 20518), (107, 20536), (116, 20593), (120, 20626), (156, 20755), (159, 20764), (175, 20833), (180, 20857), (189, 20917), (197, 20992), (208, 21052), (209, 21055), (226, 21172), (231, 21205), (236, 21241), (245, 21277), (246, 21283), (249, 21295),

Gene: BiggityBass_27 Start: 28347, Stop: 29480, Start Num: 19

Candidate Starts for BiggityBass_27:

(Start: 19 @28347 has 13 MA's), (35, 28425), (47, 28461), (120, 28797), (123, 28809), (134, 28851), (162, 28959), (188, 29091), (189, 29106), (195, 29151), (210, 29250), (212, 29259), (246, 29466), (247, 29472),

Gene: BillDoor_27 Start: 20148, Stop: 21239, Start Num: 25

Candidate Starts for BillDoor_27:

(Start: 25 @20148 has 31 MA's), (26, 20166), (Start: 50 @20271 has 7 MA's), (118, 20583), (120, 20601), (122, 20610), (124, 20622), (165, 20736), (175, 20790), (179, 20811), (193, 20898), (204, 20982), (208, 21000), (213, 21033), (221, 21096), (225, 21114), (226, 21117), (227, 21120), (234, 21177), (239, 21192), (246, 21228),

Gene: Biskit_26 Start: 20168, Stop: 21265, Start Num: 25

Candidate Starts for Biskit_26:

(Start: 16 @20099 has 1 MA's), (Start: 25 @20168 has 31 MA's), (26, 20186), (Start: 50 @20291 has 7 MA's), (99, 20498), (118, 20603), (120, 20621), (122, 20630), (137, 20684), (163, 20744), (186, 20873), (193, 20924), (204, 21008), (208, 21026), (213, 21059), (220, 21110), (221, 21122), (239, 21218), (246, 21254),

Gene: BobRoss2024_26 Start: 26114, Stop: 27235, Start Num: 19

Candidate Starts for BobRoss2024_26:

(Start: 19 @26114 has 13 MA's), (67, 26321), (99, 26450), (106, 26480), (116, 26540), (120, 26573), (141, 26636), (175, 26768), (179, 26789), (204, 26966), (213, 27017), (214, 27035),

Gene: Burnsey_25 Start: 20518, Stop: 21615, Start Num: 25

Candidate Starts for Burnsey_25:

(Start: 25 @20518 has 31 MA's), (26, 20536), (Start: 50 @20641 has 7 MA's), (97, 20839), (118, 20953), (120, 20971), (122, 20980), (126, 20998), (138, 21034), (163, 21094), (169, 21124), (193, 21274), (196, 21313), (204, 21358), (208, 21376), (219, 21457), (229, 21517), (234, 21553), (242, 21583), (246, 21604),

Gene: Buttrmlkdreams_25 Start: 20150, Stop: 21247, Start Num: 25

Candidate Starts for Buttrmlkdreams_25:

(Start: 16 @20081 has 1 MA's), (Start: 25 @20150 has 31 MA's), (26, 20168), (Start: 50 @20273 has 7 MA's), (99, 20480), (118, 20585), (120, 20603), (122, 20612), (137, 20666), (163, 20726), (186, 20855), (193, 20906), (204, 20990), (208, 21008), (213, 21041), (220, 21092), (221, 21104), (239, 21200), (246, 21236),

Gene: CaiB_29 Start: 28057, Stop: 29169, Start Num: 19

Candidate Starts for CaiB_29:

(Start: 19 @28057 has 13 MA's), (47, 28171), (Start: 54 @28222 has 8 MA's), (57, 28231), (61, 28246), (67, 28261), (81, 28327), (111, 28441), (113, 28462), (120, 28513), (132, 28552), (141, 28576), (160, 28636), (182, 28738), (188, 28774), (189, 28789), (204, 28900), (207, 28918), (213, 28954),

Gene: Carsonalex_26 Start: 20575, Stop: 21672, Start Num: 25

Candidate Starts for Carsonalex_26:

(Start: 25 @20575 has 31 MA's), (Start: 50 @20698 has 7 MA's), (97, 20896), (118, 21010), (120, 21028), (122, 21037), (126, 21055), (138, 21091), (163, 21151), (169, 21181), (193, 21331), (196, 21370), (204, 21415), (208, 21433), (212, 21457), (214, 21484), (219, 21514), (229, 21574), (234, 21610), (242, 21640), (246, 21661),

Gene: Catfish_29 Start: 24416, Stop: 25366, Start Num: 44

Candidate Starts for Catfish_29:

(Start: 44 @24416 has 6 MA's), (49, 24446), (Start: 54 @24482 has 8 MA's), (Start: 59 @24497 has 1 MA's), (68, 24527), (76, 24566), (88, 24599), (99, 24641), (118, 24749), (120, 24767), (130, 24803), (146, 24830), (164, 24854), (173, 24896), (183, 24944), (187, 24971), (191, 25007), (192, 25010), (195, 25040), (208, 25127), (210, 25142), (218, 25202), (228, 25259), (231, 25280), (243, 25340), (246, 25358),

Gene: CharlottesWeb_27 Start: 26001, Stop: 27152, Start Num: 19

Candidate Starts for CharlottesWeb_27:

(Start: 19 @26001 has 13 MA's), (29, 26061), (67, 26211), (76, 26256), (78, 26265), (80, 26277), (85, 26286), (111, 26391), (120, 26463), (154, 26610), (174, 26694), (175, 26697), (178, 26715), (180, 26721), (182, 26727), (187, 26754), (188, 26763), (189, 26778), (210, 26922), (211, 26925), (212, 26931), (233, 27081), (246, 27138), (247, 27144),

Gene: ClamChowder_35 Start: 28934, Stop: 30106, Start Num: 10

Candidate Starts for ClamChowder_35:

(Start: 10 @28934 has 13 MA's), (27, 29075), (30, 29093), (65, 29228), (79, 29294), (105, 29381), (120, 29483), (168, 29588), (189, 29714), (190, 29720), (204, 29828), (208, 29846), (245, 30071),

Gene: Clark_26 Start: 22034, Stop: 23071, Start Num: 40

Candidate Starts for Clark_26:

(11, 21863), (12, 21866), (Start: 40 @22034 has 17 MA's), (53, 22103), (56, 22109), (105, 22289), (109, 22310), (120, 22391), (126, 22418), (152, 22511), (179, 22619), (189, 22682), (197, 22757), (233, 22988),

Gene: Cleo_25 Start: 20832, Stop: 21935, Start Num: 25

Candidate Starts for Cleo_25:

(Start: 25 @20832 has 31 MA's), (29, 20868), (Start: 50 @20955 has 7 MA's), (Start: 59 @21000 has 1 MA's), (63, 21012), (64, 21015), (70, 21036), (82, 21093), (105, 21183), (113, 21234), (118, 21267), (120, 21285), (138, 21348), (154, 21396), (176, 21483), (193, 21588), (204, 21672), (205, 21678), (206, 21684), (210, 21711), (211, 21714), (213, 21729), (225, 21810), (227, 21816),

Gene: CloverMinnie_29 Start: 27997, Stop: 29109, Start Num: 19

Candidate Starts for CloverMinnie_29:

(Start: 19 @27997 has 13 MA's), (47, 28111), (Start: 54 @28162 has 8 MA's), (57, 28171), (61, 28186), (67, 28201), (81, 28267), (111, 28381), (113, 28402), (120, 28453), (132, 28492), (141, 28516), (160, 28576), (182, 28678), (188, 28714), (189, 28729), (204, 28840), (207, 28858), (213, 28894),

Gene: Clown_37 Start: 30957, Stop: 32189, Start Num: 10

Candidate Starts for Clown_37:

(Start: 10 @30957 has 13 MA's), (14, 30987), (20, 31059), (23, 31071), (27, 31098), (30, 31116), (48, 31185), (65, 31251), (105, 31404), (107, 31416), (109, 31425), (120, 31506), (144, 31602), (176, 31719), (179, 31737), (189, 31800), (202, 31902), (204, 31914), (210, 31947), (221, 32028), (227, 32052), (233, 32106), (245, 32157), (246, 32163),

Gene: Coldpizza_30 Start: 30502, Stop: 31638, Start Num: 19

Candidate Starts for Coldpizza_30:

(Start: 19 @30502 has 13 MA's), (29, 30559), (67, 30706), (111, 30868), (116, 30907), (119, 30931), (120, 30940), (157, 31090), (158, 31096), (167, 31129), (171, 31147), (172, 31156), (179, 31195), (184, 31216), (188, 31243), (189, 31258), (190, 31264), (197, 31333), (204, 31372), (212, 31414),

Gene: CoveyB_36 Start: 28734, Stop: 29906, Start Num: 10

Candidate Starts for CoveyB_36:

(Start: 10 @28734 has 13 MA's), (27, 28875), (30, 28893), (65, 29028), (79, 29094), (105, 29181), (120, 29283), (168, 29388), (189, 29514), (190, 29520), (204, 29628), (208, 29646), (245, 29871),

Gene: Cozz_25 Start: 20518, Stop: 21615, Start Num: 25

Candidate Starts for Cozz_25:

(Start: 25 @20518 has 31 MA's), (26, 20536), (Start: 50 @20641 has 7 MA's), (97, 20839), (118, 20953), (120, 20971), (122, 20980), (126, 20998), (138, 21034), (163, 21094), (169, 21124), (193, 21274), (196, 21313), (204, 21358), (208, 21376), (212, 21400), (219, 21457), (229, 21517), (234, 21553), (242, 21583), (246, 21604),

Gene: Danyall_35 Start: 28734, Stop: 29906, Start Num: 10

Candidate Starts for Danyall_35:

(Start: 10 @28734 has 13 MA's), (27, 28875), (30, 28893), (65, 29028), (79, 29094), (105, 29181), (120, 29283), (168, 29388), (189, 29514), (190, 29520), (204, 29628), (208, 29646), (245, 29871),

Gene: Dardanus_31 Start: 23524, Stop: 24384, Start Num: 59

Candidate Starts for Dardanus_31:

(29, 23410), (36, 23434), (39, 23443), (46, 23455), (Start: 59 @23524 has 1 MA's), (86, 23611), (91, 23626), (118, 23764), (120, 23782), (130, 23818), (145, 23836), (183, 23959), (187, 23986), (195, 24055), (211, 24160), (217, 24214), (218, 24217), (225, 24256), (228, 24274), (231, 24295), (240, 24340), (243, 24355), (246, 24373),

Gene: Delrey21_36 Start: 33271, Stop: 34347, Start Num: 32

Candidate Starts for Delrey21_36:

(Start: 32 @33271 has 17 MA's), (58, 33379), (71, 33424), (75, 33445), (113, 33592), (120, 33643), (132, 33682), (139, 33724), (153, 33790), (159, 33805), (168, 33832), (171, 33847), (182, 33904), (189, 33958), (190, 33964), (195, 34003), (204, 34072), (208, 34093), (212, 34117), (222, 34192), (233, 34270), (248, 34336),

Gene: DinoDaryn_31 Start: 22562, Stop: 23509, Start Num: 44

Candidate Starts for DinoDaryn_31:

(Start: 44 @22562 has 6 MA's), (81, 22733), (104, 22802), (118, 22895), (120, 22913), (174, 23045), (177, 23060), (183, 23087), (191, 23150), (195, 23183), (200, 23216), (218, 23345), (227, 23390), (231, 23420), (235, 23447), (237, 23456), (246, 23498),

Gene: DobbysSock_25 Start: 21508, Stop: 22545, Start Num: 40

Candidate Starts for DobbysSock_25:

(11, 21337), (12, 21340), (Start: 40 @21508 has 17 MA's), (53, 21577), (56, 21583), (105, 21763), (111, 21793), (120, 21865), (126, 21892), (152, 21985), (179, 22093), (189, 22156), (197, 22231), (233, 22462),

Gene: DoctorFroggo_36 Start: 33271, Stop: 34347, Start Num: 32

Candidate Starts for DoctorFroggo_36:

(Start: 32 @33271 has 17 MA's), (58, 33379), (71, 33424), (75, 33445), (113, 33592), (120, 33643), (132, 33682), (139, 33724), (153, 33790), (159, 33805), (168, 33832), (171, 33847), (182, 33904), (189, 33958), (190, 33964), (195, 34003), (204, 34072), (208, 34093), (212, 34117), (222, 34192), (233, 34270), (248, 34336),

Gene: Doggs_27 Start: 22931, Stop: 24244, Start Num: 8

Candidate Starts for Doggs_27:

(1, 22643), (2, 22700), (3, 22715), (5, 22796), (6, 22799), (Start: 8 @22931 has 2 MA's), (14, 23015), (28, 23129), (62, 23282), (71, 23318), (72, 23321), (78, 23351), (94, 23405), (120, 23549), (159, 23705), (166, 23729), (176, 23777), (184, 23816), (189, 23858), (201, 23951), (202, 23960), (204, 23972), (246, 24221),

Gene: Dolores_26 Start: 22010, Stop: 23047, Start Num: 40

Candidate Starts for Dolores_26:

(11, 21839), (12, 21842), (Start: 40 @22010 has 17 MA's), (53, 22079), (56, 22085), (105, 22265), (109, 22286), (120, 22367), (126, 22394), (152, 22487), (179, 22595), (189, 22658), (197, 22733), (233, 22964),

Gene: Dorito_25 Start: 21473, Stop: 22513, Start Num: 40

Candidate Starts for Dorito_25:

(Start: 40 @21473 has 17 MA's), (53, 21542), (56, 21548), (105, 21728), (120, 21830), (125, 21854), (126, 21857), (130, 21866), (153, 21953), (179, 22058), (187, 22097), (189, 22121), (195, 22166),

(201, 22214), (202, 22223), (204, 22235), (207, 22250), (226, 22373), (233, 22430),

Gene: Dre3_25 Start: 20758, Stop: 21861, Start Num: 25

Candidate Starts for Dre3_25:

(Start: 25 @20758 has 31 MA's), (29, 20794), (Start: 50 @20881 has 7 MA's), (82, 21019), (105, 21109), (113, 21160), (118, 21193), (120, 21211), (138, 21274), (154, 21322), (176, 21409), (193, 21514), (204, 21598), (205, 21604), (206, 21610), (210, 21637), (213, 21655), (225, 21736), (226, 21739), (227, 21742),

Gene: Easley_26 Start: 22020, Stop: 23057, Start Num: 40

Candidate Starts for Easley_26:

(11, 21849), (12, 21852), (Start: 40 @22020 has 17 MA's), (53, 22089), (56, 22095), (105, 22275), (109, 22296), (120, 22377), (126, 22404), (152, 22497), (179, 22605), (207, 22797), (226, 22917), (233, 22974),

Gene: Elliott_25 Start: 20517, Stop: 21614, Start Num: 25

Candidate Starts for Elliott_25:

(Start: 25 @20517 has 31 MA's), (26, 20535), (Start: 50 @20640 has 7 MA's), (97, 20838), (120, 20970), (122, 20979), (126, 20997), (138, 21033), (163, 21093), (169, 21123), (193, 21273), (196, 21312), (204, 21357), (208, 21375), (219, 21456), (229, 21516), (234, 21552), (242, 21582), (246, 21603),

Gene: Emalyn_24 Start: 19777, Stop: 20889, Start Num: 25

Candidate Starts for Emalyn_24:

(Start: 16 @19708 has 1 MA's), (Start: 25 @19777 has 31 MA's), (Start: 50 @19900 has 7 MA's), (97, 20098), (120, 20230), (122, 20239), (155, 20356), (165, 20386), (170, 20401), (175, 20440), (186, 20497), (193, 20548), (204, 20632), (208, 20650), (213, 20683), (225, 20764), (226, 20767), (227, 20770), (246, 20878),

Gene: Fairfaxidum_28 Start: 23698, Stop: 24678, Start Num: 54

Candidate Starts for Fairfaxidum_28:

(45, 23638), (Start: 54 @23698 has 8 MA's), (109, 23905), (120, 23986), (121, 23989), (126, 24013), (144, 24082), (153, 24109), (178, 24217), (179, 24220), (182, 24229), (189, 24283), (191, 24295), (197, 24358), (212, 24439), (215, 24469), (233, 24589), (250, 24661), (251, 24670),

Gene: Feastonyeet_24 Start: 20320, Stop: 21312, Start Num: 50

Candidate Starts for Feastonyeet_24:

(Start: 50 @20320 has 7 MA's), (90, 20467), (101, 20509), (103, 20515), (104, 20518), (107, 20536), (116, 20593), (120, 20626), (156, 20755), (159, 20764), (175, 20833), (180, 20857), (189, 20917), (197, 20992), (208, 21052), (209, 21055), (226, 21172), (231, 21205), (236, 21241), (245, 21277), (246, 21283), (249, 21295),

Gene: Fresco_27 Start: 26078, Stop: 27217, Start Num: 19

Candidate Starts for Fresco_27:

(Start: 19 @26078 has 13 MA's), (21, 26087), (29, 26135), (41, 26174), (47, 26192), (Start: 59 @26261 has 1 MA's), (76, 26330), (78, 26339), (111, 26465), (120, 26537), (126, 26564), (127, 26567), (143, 26639), (162, 26693), (174, 26756), (180, 26783), (182, 26789), (189, 26840), (201, 26930), (233, 27143), (246, 27200), (247, 27206), (248, 27209),

Gene: Fribs8_26 Start: 21343, Stop: 22440, Start Num: 25

Candidate Starts for Fribs8_26:

(Start: 25 @21343 has 31 MA's), (26, 21361), (Start: 50 @21466 has 7 MA's), (82, 21604), (105, 21694), (108, 21709), (118, 21778), (120, 21796), (124, 21817), (125, 21820), (175, 21985), (186,

22042), (190, 22075), (199, 22144), (204, 22177), (206, 22189), (208, 22201), (213, 22234), (217, 22273), (226, 22318), (246, 22429),

Gene: Frizzle_27 Start: 21406, Stop: 22404, Start Num: 50

Candidate Starts for Frizzle_27:

(Start: 50 @21406 has 7 MA's), (64, 21466), (70, 21487), (77, 21523), (90, 21568), (97, 21595), (104, 21619), (108, 21640), (116, 21694), (122, 21736), (156, 21868), (175, 21952), (189, 22036), (204, 22144), (225, 22276), (226, 22279), (233, 22333), (234, 22339), (242, 22369),

Gene: Fugax_35 Start: 28934, Stop: 30106, Start Num: 10

Candidate Starts for Fugax_35:

(Start: 10 @28934 has 13 MA's), (27, 29075), (30, 29093), (65, 29228), (79, 29294), (105, 29381), (120, 29483), (168, 29588), (189, 29714), (190, 29720), (204, 29828), (208, 29846), (245, 30071),

Gene: GTE2_22 Start: 19853, Stop: 20965, Start Num: 25

Candidate Starts for GTE2_22:

(Start: 25 @19853 has 31 MA's), (26, 19871), (Start: 50 @19976 has 7 MA's), (78, 20099), (103, 20195), (118, 20288), (120, 20306), (124, 20327), (175, 20516), (179, 20537), (193, 20624), (204, 20708), (208, 20726), (213, 20759), (217, 20798), (225, 20840), (226, 20843), (227, 20846), (246, 20954),

Gene: Ghobes_26 Start: 21406, Stop: 22404, Start Num: 50

Candidate Starts for Ghobes_26:

(Start: 50 @21406 has 7 MA's), (64, 21466), (70, 21487), (77, 21523), (90, 21568), (97, 21595), (104, 21619), (108, 21640), (116, 21694), (122, 21736), (131, 21772), (156, 21868), (175, 21952), (189, 22036), (204, 22144), (225, 22276), (233, 22333), (234, 22339), (242, 22369),

Gene: Gibbous_25 Start: 20758, Stop: 21861, Start Num: 25

Candidate Starts for Gibbous_25:

(Start: 25 @20758 has 31 MA's), (29, 20794), (Start: 50 @20881 has 7 MA's), (82, 21019), (105, 21109), (113, 21160), (118, 21193), (120, 21211), (138, 21274), (154, 21322), (176, 21409), (193, 21514), (204, 21598), (205, 21604), (206, 21610), (210, 21637), (213, 21655), (225, 21736), (226, 21739), (227, 21742),

Gene: Goib_30 Start: 22610, Stop: 23578, Start Num: 38

Candidate Starts for Goib_30:

(13, 22433), (29, 22577), (36, 22601), (Start: 38 @22610 has 3 MA's), (Start: 44 @22625 has 6 MA's), (81, 22796), (86, 22805), (104, 22865), (118, 22958), (120, 22976), (130, 23012), (132, 23015), (145, 23030), (181, 23138), (183, 23150), (191, 23216), (195, 23249), (204, 23312), (211, 23354), (212, 23360), (214, 23387), (215, 23390), (217, 23408), (218, 23411), (225, 23450), (227, 23456), (231, 23489), (246, 23567),

Gene: GoldHunter_26 Start: 20518, Stop: 21615, Start Num: 25

Candidate Starts for GoldHunter_26:

(Start: 25 @20518 has 31 MA's), (26, 20536), (Start: 50 @20641 has 7 MA's), (97, 20839), (118, 20953), (120, 20971), (122, 20980), (126, 20998), (138, 21034), (163, 21094), (169, 21124), (193, 21274), (196, 21313), (204, 21358), (208, 21376), (212, 21400), (219, 21457), (229, 21517), (234, 21553), (242, 21583), (246, 21604),

Gene: Gudmit_25 Start: 20321, Stop: 21364, Start Num: 40

Candidate Starts for Gudmit_25:

(9, 20090), (17, 20186), (18, 20189), (Start: 40 @20321 has 17 MA's), (42, 20327), (51, 20372), (Start: 54 @20396 has 8 MA's), (57, 20405), (69, 20444), (105, 20579), (111, 20609), (120, 20681), (126,

20708), (152, 20801), (179, 20909), (189, 20972), (195, 21017), (197, 21047), (207, 21101), (233, 21278),

Gene: Hans_37 Start: 31512, Stop: 32516, Start Num: 32

Candidate Starts for Hans_37:

(Start: 32 @31512 has 17 MA's), (58, 31626), (66, 31647), (75, 31692), (88, 31728), (118, 31875), (120, 31893), (168, 31998), (182, 32070), (189, 32124), (195, 32169), (204, 32238), (208, 32259), (212, 32283), (222, 32358), (233, 32436), (248, 32502),

Gene: HippoPololi_27 Start: 21407, Stop: 22510, Start Num: 25

Candidate Starts for HippoPololi_27:

(Start: 25 @21407 has 31 MA's), (29, 21443), (Start: 50 @21530 has 7 MA's), (Start: 59 @21575 has 1 MA's), (63, 21587), (64, 21590), (78, 21653), (82, 21668), (89, 21689), (97, 21728), (105, 21758), (118, 21842), (120, 21860), (129, 21896), (138, 21923), (154, 21971), (176, 22058), (193, 22163), (204, 22247), (205, 22253), (206, 22259), (210, 22286), (211, 22289), (213, 22304), (225, 22385), (227, 22391),

Gene: Horseradish_26 Start: 20064, Stop: 21086, Start Num: 25

Candidate Starts for Horseradish_26:

(Start: 16 @19995 has 1 MA's), (Start: 25 @20064 has 31 MA's), (26, 20082), (Start: 50 @20187 has 7 MA's), (118, 20499), (120, 20517), (122, 20526), (128, 20550), (163, 20565), (186, 20694), (193, 20745), (195, 20766), (204, 20829), (208, 20847), (213, 20880), (221, 20943), (239, 21039),

Gene: Hortense_26 Start: 22619, Stop: 23656, Start Num: 40

Candidate Starts for Hortense_26:

(Start: 40 @22619 has 17 MA's), (53, 22688), (56, 22694), (105, 22874), (109, 22895), (120, 22976), (126, 23003), (152, 23096), (179, 23204), (189, 23267), (197, 23342), (233, 23573),

Gene: Howe_26 Start: 22619, Stop: 23656, Start Num: 40

Candidate Starts for Howe_26:

(Start: 40 @22619 has 17 MA's), (53, 22688), (56, 22694), (105, 22874), (109, 22895), (120, 22976), (126, 23003), (152, 23096), (179, 23204), (189, 23267), (197, 23342), (233, 23573),

Gene: Huffy_31 Start: 22562, Stop: 23509, Start Num: 44

Candidate Starts for Huffy_31:

(Start: 44 @22562 has 6 MA's), (81, 22733), (104, 22802), (118, 22895), (120, 22913), (174, 23045), (177, 23060), (183, 23087), (191, 23150), (195, 23183), (200, 23216), (203, 23240), (218, 23345), (227, 23390), (231, 23420), (235, 23447), (237, 23456), (246, 23498),

Gene: Inspectinfecti_36 Start: 31874, Stop: 32962, Start Num: 32

Candidate Starts for Inspectinfecti_36:

(Start: 32 @31874 has 17 MA's), (58, 31988), (66, 32009), (75, 32054), (88, 32090), (120, 32255), (132, 32294), (139, 32336), (159, 32417), (168, 32444), (171, 32459), (189, 32570), (195, 32615), (201, 32663), (204, 32684), (208, 32705), (212, 32729), (233, 32882), (248, 32948),

Gene: KappaFarmDelta_30 Start: 23868, Stop: 24845, Start Num: 54

Candidate Starts for KappaFarmDelta_30:

(45, 23808), (Start: 54 @23868 has 8 MA's), (74, 23949), (Start: 84 @23982 has 1 MA's), (92, 24009), (109, 24075), (117, 24132), (120, 24156), (144, 24252), (178, 24387), (179, 24390), (189, 24453), (195, 24498), (204, 24567), (209, 24588), (233, 24759), (245, 24810),

Gene: Kiko_28 Start: 22114, Stop: 23412, Start Num: 8

Candidate Starts for Kiko_28:

(2, 21883), (3, 21898), (4, 21934), (6, 21982), (Start: 8 @22114 has 2 MA's), (14, 22198), (15, 22207), (28, 22309), (62, 22462), (96, 22594), (97, 22600), (120, 22729), (144, 22825), (148, 22849), (151, 22852), (178, 22957), (179, 22960), (189, 23023), (209, 23158), (226, 23272), (233, 23329),

Gene: Leonard_35 Start: 31510, Stop: 32598, Start Num: 32

Candidate Starts for Leonard_35:

(Start: 32 @31510 has 17 MA's), (58, 31624), (66, 31645), (81, 31714), (88, 31726), (120, 31891), (132, 31930), (139, 31972), (159, 32053), (168, 32080), (171, 32095), (182, 32152), (189, 32206), (195, 32251), (204, 32320), (208, 32341), (212, 32365), (222, 32440), (233, 32518), (248, 32584),

Gene: Ligma_27 Start: 26078, Stop: 27217, Start Num: 19

Candidate Starts for Ligma_27:

(Start: 19 @26078 has 13 MA's), (21, 26087), (29, 26135), (41, 26174), (47, 26192), (Start: 59 @26261 has 1 MA's), (76, 26330), (78, 26339), (111, 26465), (120, 26537), (126, 26564), (127, 26567), (143, 26639), (162, 26693), (174, 26756), (180, 26783), (182, 26789), (189, 26840), (201, 26930), (233, 27143), (246, 27200), (247, 27206), (248, 27209),

Gene: Lilbeanie_32 Start: 26757, Stop: 27755, Start Num: 32

Candidate Starts for Lilbeanie_32:

(Start: 32 @26757 has 17 MA's), (58, 26865), (60, 26868), (63, 26877), (75, 26931), (78, 26943), (81, 26955), (93, 26985), (118, 27114), (120, 27132), (140, 27198), (142, 27204), (168, 27234), (189, 27360), (197, 27435), (208, 27495), (211, 27513), (233, 27669),

Gene: MScarn_27 Start: 20153, Stop: 21250, Start Num: 25

Candidate Starts for MScarn_27:

(Start: 16 @20084 has 1 MA's), (Start: 25 @20153 has 31 MA's), (26, 20171), (Start: 50 @20276 has 7 MA's), (99, 20483), (118, 20588), (120, 20606), (122, 20615), (137, 20669), (163, 20729), (186, 20858), (193, 20909), (204, 20993), (208, 21011), (213, 21044), (220, 21095), (221, 21107), (239, 21203), (246, 21239),

Gene: MaVan_27 Start: 21488, Stop: 22621, Start Num: 25

Candidate Starts for MaVan_27:

(Start: 25 @21488 has 31 MA's), (Start: 50 @21611 has 7 MA's), (82, 21749), (102, 21827), (105, 21839), (108, 21854), (118, 21923), (120, 21941), (125, 21965), (135, 22001), (154, 22082), (175, 22166), (204, 22358), (206, 22370), (208, 22382), (213, 22415), (217, 22454), (226, 22499), (246, 22610),

Gene: MakoManhole_29 Start: 28075, Stop: 29187, Start Num: 19

Candidate Starts for MakoManhole_29:

(Start: 19 @28075 has 13 MA's), (47, 28189), (Start: 54 @28240 has 8 MA's), (57, 28249), (61, 28264), (67, 28279), (81, 28345), (111, 28459), (113, 28480), (120, 28531), (132, 28570), (141, 28594), (160, 28654), (182, 28756), (188, 28792), (189, 28807), (204, 28918), (207, 28936), (213, 28972),

Gene: Mariokart_27 Start: 26000, Stop: 27151, Start Num: 19

Candidate Starts for Mariokart_27:

(Start: 19 @26000 has 13 MA's), (29, 26060), (67, 26210), (76, 26255), (78, 26264), (80, 26276), (85, 26285), (111, 26390), (120, 26462), (154, 26609), (174, 26693), (175, 26696), (178, 26714), (180, 26720), (182, 26726), (187, 26753), (188, 26762), (189, 26777), (210, 26921), (211, 26924), (212, 26930), (233, 27080), (246, 27137), (247, 27143),

Gene: Mcklovin_26 Start: 24788, Stop: 25825, Start Num: 40

Candidate Starts for Mcklovin_26:

(11, 24617), (12, 24620), (Start: 40 @24788 has 17 MA's), (53, 24857), (56, 24863), (105, 25043), (109, 25064), (120, 25145), (126, 25172), (152, 25265), (179, 25373), (189, 25436), (197, 25511), (233, 25742),

Gene: MelBins_36 Start: 31659, Stop: 32747, Start Num: 32

Candidate Starts for MelBins_36:

(Start: 32 @31659 has 17 MA's), (58, 31773), (66, 31794), (75, 31839), (81, 31863), (88, 31875), (120, 32040), (132, 32079), (139, 32121), (159, 32202), (168, 32229), (171, 32244), (189, 32355), (195, 32400), (201, 32448), (204, 32469), (208, 32490), (212, 32514), (233, 32667), (248, 32733),

Gene: MichaelScott_26 Start: 22391, Stop: 23428, Start Num: 40

Candidate Starts for MichaelScott_26:

(11, 22220), (12, 22223), (Start: 40 @22391 has 17 MA's), (53, 22460), (56, 22466), (105, 22646), (109, 22667), (120, 22748), (126, 22775), (152, 22868), (179, 22976), (189, 23039), (197, 23114), (233, 23345),

Gene: MossRose_29 Start: 28054, Stop: 29166, Start Num: 19

Candidate Starts for MossRose_29:

(Start: 19 @28054 has 13 MA's), (47, 28168), (Start: 54 @28219 has 8 MA's), (57, 28228), (61, 28243), (67, 28258), (81, 28324), (111, 28438), (113, 28459), (120, 28510), (132, 28549), (141, 28573), (160, 28633), (182, 28735), (188, 28771), (189, 28786), (204, 28897), (207, 28915), (213, 28951),

Gene: MunkgeeRoachy_25 Start: 20565, Stop: 21695, Start Num: 25

Candidate Starts for MunkgeeRoachy_25:

(Start: 25 @20565 has 31 MA's), (26, 20583), (Start: 50 @20688 has 7 MA's), (97, 20886), (118, 21000), (120, 21018), (122, 21027), (137, 21081), (154, 21162), (163, 21174), (169, 21204), (193, 21354), (204, 21438), (208, 21456), (213, 21489), (219, 21537), (221, 21552), (239, 21648), (246, 21684),

Gene: Murp_29 Start: 23645, Stop: 24622, Start Num: 54

Candidate Starts for Murp_29:

(45, 23585), (Start: 54 @23645 has 8 MA's), (74, 23726), (Start: 84 @23759 has 1 MA's), (92, 23786), (103, 23825), (109, 23852), (117, 23909), (120, 23933), (175, 24146), (178, 24164), (179, 24167), (182, 24176), (189, 24230), (195, 24275), (204, 24344), (231, 24515), (233, 24536), (245, 24587),

Gene: NHagos_27 Start: 26589, Stop: 27701, Start Num: 19

Candidate Starts for NHagos_27:

(Start: 19 @26589 has 13 MA's), (31, 26658), (43, 26691), (47, 26703), (Start: 50 @26727 has 7 MA's), (Start: 54 @26754 has 8 MA's), (61, 26778), (67, 26793), (81, 26859), (111, 26973), (116, 27012), (141, 27111), (160, 27171), (176, 27246), (181, 27270), (182, 27273), (188, 27309), (189, 27324), (191, 27336), (195, 27369), (204, 27435), (213, 27489), (246, 27687),

Gene: Natkenzie_37 Start: 33084, Stop: 34160, Start Num: 32

Candidate Starts for Natkenzie_37:

(7, 32790), (22, 33018), (Start: 32 @33084 has 17 MA's), (58, 33192), (72, 33240), (75, 33258), (113, 33405), (115, 33417), (120, 33456), (132, 33495), (139, 33537), (153, 33603), (159, 33618), (168, 33645), (171, 33660), (189, 33771), (195, 33816), (197, 33846), (201, 33864), (204, 33885), (208, 33906), (212, 33930), (233, 34083), (248, 34149),

Gene: Nibbles_27 Start: 21488, Stop: 22621, Start Num: 25

Candidate Starts for Nibbles_27:

(Start: 25 @21488 has 31 MA's), (26, 21506), (Start: 50 @21611 has 7 MA's), (78, 21734), (82, 21749), (102, 21827), (105, 21839), (108, 21854), (118, 21923), (120, 21941), (125, 21965), (135, 22001), (154, 22082), (175, 22166), (204, 22358), (206, 22370), (208, 22382), (213, 22415), (217, 22454), (226, 22499), (246, 22610),

Gene: Nina_26 Start: 21560, Stop: 22657, Start Num: 25

Candidate Starts for Nina_26:

(Start: 25 @21560 has 31 MA's), (26, 21578), (Start: 50 @21683 has 7 MA's), (97, 21881), (120, 22013), (122, 22022), (126, 22040), (138, 22076), (163, 22136), (169, 22166), (193, 22316), (196, 22355), (204, 22400), (208, 22418), (212, 22442), (219, 22499), (229, 22559), (234, 22595), (242, 22625), (246, 22646),

Gene: Oregano_26 Start: 22056, Stop: 23096, Start Num: 40

Candidate Starts for Oregano_26:

(Start: 40 @22056 has 17 MA's), (53, 22125), (56, 22131), (105, 22311), (109, 22332), (111, 22341), (120, 22413), (126, 22440), (152, 22533), (179, 22641), (189, 22704), (204, 22818), (226, 22956), (233, 23013),

Gene: PCoral7_29 Start: 23615, Stop: 24595, Start Num: 54

Candidate Starts for PCoral7_29:

(45, 23555), (Start: 54 @23615 has 8 MA's), (Start: 84 @23726 has 1 MA's), (109, 23822), (116, 23870), (120, 23903), (126, 23930), (144, 23999), (152, 24023), (153, 24026), (175, 24116), (178, 24134), (179, 24137), (189, 24200), (197, 24275), (224, 24431), (233, 24506), (250, 24578), (251, 24587),

Gene: Petra_30 Start: 23485, Stop: 24351, Start Num: 84

Candidate Starts for Petra_30:

(45, 23311), (Start: 54 @23371 has 8 MA's), (74, 23452), (Start: 84 @23485 has 1 MA's), (92, 23512), (103, 23551), (109, 23578), (120, 23659), (126, 23686), (130, 23695), (144, 23755), (152, 23779), (153, 23782), (176, 23875), (178, 23890), (179, 23893), (189, 23956), (191, 23968), (195, 24001), (197, 24031), (224, 24187), (231, 24241), (233, 24262),

Gene: Phauci_28 Start: 28099, Stop: 29187, Start Num: 32

Candidate Starts for Phauci_28:

(Start: 32 @28099 has 17 MA's), (58, 28213), (66, 28234), (81, 28303), (88, 28315), (120, 28480), (132, 28519), (139, 28561), (159, 28642), (168, 28669), (171, 28684), (189, 28795), (195, 28840), (201, 28888), (204, 28909), (208, 28930), (212, 28954), (222, 29029), (233, 29107), (248, 29173),

Gene: Phinally_35 Start: 31507, Stop: 32595, Start Num: 32

Candidate Starts for Phinally_35:

(Start: 32 @31507 has 17 MA's), (58, 31621), (66, 31642), (81, 31711), (88, 31723), (120, 31888), (132, 31927), (139, 31969), (159, 32050), (168, 32077), (171, 32092), (182, 32149), (189, 32203), (195, 32248), (204, 32317), (208, 32338), (212, 32362), (222, 32437), (233, 32515), (248, 32581),

Gene: PhriskyACE_25 Start: 21473, Stop: 22513, Start Num: 40

Candidate Starts for PhriskyACE_25:

(Start: 40 @21473 has 17 MA's), (53, 21542), (56, 21548), (105, 21728), (120, 21830), (125, 21854), (126, 21857), (130, 21866), (153, 21953), (179, 22058), (187, 22097), (189, 22121), (195, 22166), (201, 22214), (202, 22223), (204, 22235), (207, 22250), (226, 22373), (233, 22430),

Gene: PinkCoffee_35 Start: 28943, Stop: 30115, Start Num: 10

Candidate Starts for PinkCoffee_35:

(Start: 10 @28943 has 13 MA's), (27, 29084), (30, 29102), (65, 29237), (79, 29303), (105, 29390), (120, 29492), (168, 29597), (189, 29723), (190, 29729), (204, 29837), (208, 29855), (245, 30080),

Gene: Portcullis_33 Start: 28253, Stop: 29425, Start Num: 10

Candidate Starts for Portcullis_33:

(Start: 10 @28253 has 13 MA's), (27, 28394), (30, 28412), (65, 28547), (79, 28613), (87, 28631), (99, 28682), (105, 28700), (120, 28802), (168, 28907), (189, 29033), (190, 29039), (204, 29147), (208, 29165), (245, 29390),

Gene: PotPie_25 Start: 21139, Stop: 22131, Start Num: 50

Candidate Starts for PotPie_25:

(Start: 50 @21139 has 7 MA's), (90, 21286), (101, 21328), (103, 21334), (104, 21337), (107, 21355), (116, 21412), (120, 21445), (156, 21574), (159, 21583), (175, 21652), (180, 21676), (189, 21736), (197, 21811), (208, 21871), (209, 21874), (226, 21991), (231, 22024), (236, 22060), (245, 22096), (246, 22102), (249, 22114),

Gene: PrincePatrick_28 Start: 23694, Stop: 24674, Start Num: 54

Candidate Starts for PrincePatrick_28:

(45, 23634), (Start: 54 @23694 has 8 MA's), (Start: 84 @23805 has 1 MA's), (109, 23901), (116, 23949), (120, 23982), (126, 24009), (130, 24018), (144, 24078), (152, 24102), (153, 24105), (175, 24195), (178, 24213), (179, 24216), (189, 24279), (197, 24354), (224, 24510), (233, 24585), (245, 24636),

Gene: PsychoKiller_25 Start: 20517, Stop: 21614, Start Num: 25

Candidate Starts for PsychoKiller_25:

(Start: 25 @20517 has 31 MA's), (26, 20535), (Start: 50 @20640 has 7 MA's), (97, 20838), (120, 20970), (122, 20979), (126, 20997), (138, 21033), (163, 21093), (169, 21123), (193, 21273), (196, 21312), (204, 21357), (208, 21375), (219, 21456), (229, 21516), (234, 21552), (242, 21582), (246, 21603),

Gene: Quasar_25 Start: 21126, Stop: 22223, Start Num: 25

Candidate Starts for Quasar_25:

(Start: 25 @21126 has 31 MA's), (26, 21144), (Start: 50 @21249 has 7 MA's), (97, 21447), (118, 21561), (120, 21579), (122, 21588), (126, 21606), (138, 21642), (163, 21702), (169, 21732), (193, 21882), (196, 21921), (204, 21966), (208, 21984), (212, 22008), (219, 22065), (229, 22125), (234, 22161), (242, 22191), (246, 22212),

Gene: RedBaron_26 Start: 20561, Stop: 21658, Start Num: 25

Candidate Starts for RedBaron_26:

(Start: 25 @20561 has 31 MA's), (26, 20579), (Start: 50 @20684 has 7 MA's), (97, 20882), (120, 21014), (122, 21023), (126, 21041), (138, 21077), (163, 21137), (193, 21317), (196, 21356), (204, 21401), (208, 21419), (212, 21443), (219, 21500), (229, 21560), (234, 21596), (242, 21626), (246, 21647),

Gene: RogerDodger_36 Start: 29082, Stop: 30254, Start Num: 10

Candidate Starts for RogerDodger_36:

(Start: 10 @29082 has 13 MA's), (27, 29223), (30, 29241), (65, 29376), (79, 29442), (105, 29529), (120, 29631), (168, 29736), (189, 29862), (190, 29868), (204, 29976), (208, 29994), (245, 30219),

Gene: Samman98_26 Start: 22025, Stop: 23065, Start Num: 40

Candidate Starts for Samman98_26:

(Start: 40 @22025 has 17 MA's), (53, 22094), (56, 22100), (105, 22280), (120, 22382), (125, 22406), (126, 22409), (130, 22418), (153, 22505), (179, 22610), (187, 22649), (189, 22673), (195, 22718),

(201, 22766), (202, 22775), (204, 22787), (207, 22802), (226, 22925), (233, 22982),

Gene: Sampson_37 Start: 33029, Stop: 34105, Start Num: 32

Candidate Starts for Sampson_37:

(7, 32735), (22, 32963), (Start: 32 @33029 has 17 MA's), (58, 33137), (72, 33185), (75, 33203), (113, 33350), (115, 33362), (120, 33401), (132, 33440), (139, 33482), (153, 33548), (159, 33563), (168, 33590), (171, 33605), (189, 33716), (195, 33761), (197, 33791), (201, 33809), (204, 33830), (208, 33851), (212, 33875), (233, 34028), (248, 34094),

Gene: Sapo_25 Start: 21383, Stop: 22177, Start Num: 98

Candidate Starts for Sapo_25:

(Start: 98 @21383 has 1 MA's), (108, 21425), (114, 21461), (133, 21551), (147, 21626), (149, 21629), (175, 21722), (197, 21878), (204, 21917), (227, 22055), (230, 22085), (232, 22094), (242, 22142),

Gene: Scioto_37 Start: 33084, Stop: 34160, Start Num: 32

Candidate Starts for Scioto_37:

(7, 32790), (22, 33018), (Start: 32 @33084 has 17 MA's), (58, 33192), (72, 33240), (75, 33258), (113, 33405), (115, 33417), (120, 33456), (132, 33495), (139, 33537), (153, 33603), (159, 33618), (168, 33645), (171, 33660), (189, 33771), (195, 33816), (197, 33846), (201, 33864), (204, 33885), (208, 33906), (212, 33930), (233, 34083), (248, 34149),

Gene: Sekhmet_26 Start: 22385, Stop: 23425, Start Num: 40

Candidate Starts for Sekhmet_26:

(Start: 40 @22385 has 17 MA's), (53, 22454), (56, 22460), (105, 22640), (120, 22742), (125, 22766), (126, 22769), (130, 22778), (153, 22865), (179, 22970), (187, 23009), (189, 23033), (195, 23078), (201, 23126), (202, 23135), (204, 23147), (207, 23162), (226, 23285), (233, 23342),

Gene: Shatter_27 Start: 26078, Stop: 27217, Start Num: 19

Candidate Starts for Shatter_27:

(Start: 19 @26078 has 13 MA's), (21, 26087), (29, 26135), (41, 26174), (47, 26192), (Start: 59 @26261 has 1 MA's), (76, 26330), (78, 26339), (111, 26465), (120, 26537), (126, 26564), (127, 26567), (143, 26639), (162, 26693), (174, 26756), (180, 26783), (182, 26789), (189, 26840), (201, 26930), (233, 27143), (246, 27200), (247, 27206), (248, 27209),

Gene: SheckWes_25 Start: 20283, Stop: 21275, Start Num: 50

Candidate Starts for SheckWes_25:

(Start: 50 @20283 has 7 MA's), (90, 20430), (101, 20472), (104, 20481), (107, 20499), (116, 20556), (120, 20589), (132, 20628), (156, 20718), (159, 20727), (175, 20796), (180, 20820), (189, 20880), (197, 20955), (208, 21015), (209, 21018), (226, 21135), (231, 21168), (236, 21204), (245, 21240), (246, 21246), (249, 21258),

Gene: Shinji_33 Start: 28194, Stop: 29366, Start Num: 10

Candidate Starts for Shinji_33:

(Start: 10 @28194 has 13 MA's), (27, 28335), (30, 28353), (65, 28488), (79, 28554), (87, 28572), (99, 28623), (105, 28641), (120, 28743), (168, 28848), (189, 28974), (190, 28980), (204, 29088), (208, 29106), (245, 29331),

Gene: Shlim410_26 Start: 22619, Stop: 23656, Start Num: 40

Candidate Starts for Shlim410_26:

(Start: 40 @22619 has 17 MA's), (53, 22688), (56, 22694), (105, 22874), (109, 22895), (120, 22976), (126, 23003), (152, 23096), (179, 23204), (189, 23267), (197, 23342), (233, 23573),

Gene: SketchMex_24 Start: 20168, Stop: 21265, Start Num: 25

Candidate Starts for SketchMex_24:

(Start: 16 @20099 has 1 MA's), (Start: 25 @20168 has 31 MA's), (26, 20186), (Start: 50 @20291 has 7 MA's), (99, 20498), (118, 20603), (120, 20621), (122, 20630), (137, 20684), (163, 20744), (186, 20873), (193, 20924), (204, 21008), (208, 21026), (213, 21059), (220, 21110), (221, 21122), (239, 21218), (246, 21254),

Gene: Sopespian_25 Start: 20518, Stop: 21615, Start Num: 25

Candidate Starts for Sopespian_25:

(Start: 25 @20518 has 31 MA's), (26, 20536), (Start: 50 @20641 has 7 MA's), (97, 20839), (120, 20971), (122, 20980), (126, 20998), (138, 21034), (163, 21094), (169, 21124), (193, 21274), (196, 21313), (204, 21358), (208, 21376), (212, 21400), (219, 21457), (229, 21517), (234, 21553), (242, 21583), (246, 21604),

Gene: Sour_31 Start: 30307, Stop: 31437, Start Num: 16

Candidate Starts for Sour_31:

(Start: 16 @30307 has 1 MA's), (33, 30400), (37, 30406), (Start: 59 @30496 has 1 MA's), (64, 30511), (83, 30577), (120, 30754), (144, 30850), (176, 30967), (179, 30985), (189, 31048), (202, 31150), (204, 31162), (207, 31177), (210, 31195), (221, 31276), (233, 31354), (245, 31405), (246, 31411),

Gene: Splinter_29 Start: 22610, Stop: 23578, Start Num: 38

Candidate Starts for Splinter_29:

(13, 22433), (29, 22577), (36, 22601), (Start: 38 @22610 has 3 MA's), (Start: 44 @22625 has 6 MA's), (81, 22796), (86, 22805), (104, 22865), (118, 22958), (120, 22976), (130, 23012), (132, 23015), (145, 23030), (181, 23138), (183, 23150), (191, 23216), (195, 23249), (204, 23312), (211, 23354), (212, 23360), (214, 23387), (215, 23390), (217, 23408), (218, 23411), (225, 23450), (227, 23456), (231, 23489), (246, 23567),

Gene: SteamedHams_27 Start: 20181, Stop: 21269, Start Num: 25

Candidate Starts for SteamedHams_27:

(24, 20178), (Start: 25 @20181 has 31 MA's), (26, 20199), (Start: 50 @20304 has 7 MA's), (78, 20427), (118, 20616), (120, 20634), (122, 20643), (124, 20655), (165, 20766), (175, 20820), (179, 20841), (193, 20928), (204, 21012), (208, 21030), (213, 21063), (221, 21126), (225, 21144), (226, 21147), (227, 21150), (234, 21207), (246, 21258),

Gene: SummitAcademy_25 Start: 20359, Stop: 21351, Start Num: 50

Candidate Starts for SummitAcademy_25:

(Start: 50 @20359 has 7 MA's), (90, 20506), (104, 20557), (107, 20575), (116, 20632), (120, 20665), (156, 20794), (159, 20803), (175, 20872), (180, 20896), (189, 20956), (197, 21031), (208, 21091), (209, 21094), (226, 21211), (231, 21244), (236, 21280), (245, 21316), (246, 21322), (249, 21334),

Gene: Survivors_27 Start: 21337, Stop: 22437, Start Num: 25

Candidate Starts for Survivors_27:

(Start: 25 @21337 has 31 MA's), (26, 21355), (Start: 50 @21460 has 7 MA's), (82, 21598), (102, 21676), (105, 21688), (108, 21703), (118, 21772), (120, 21790), (125, 21814), (175, 21982), (204, 22174), (207, 22195), (208, 22198), (213, 22231), (221, 22294), (225, 22312), (227, 22318), (246, 22426),

Gene: TZGordon_31 Start: 22485, Stop: 23432, Start Num: 44

Candidate Starts for TZGordon_31:

(Start: 44 @22485 has 6 MA's), (81, 22656), (104, 22725), (118, 22818), (120, 22836), (174, 22968), (177, 22983), (183, 23010), (191, 23073), (195, 23106), (200, 23139), (203, 23163), (218, 23268), (227, 23313), (231, 23343), (235, 23370), (237, 23379), (246, 23421),

Gene: Tardus_38 Start: 32448, Stop: 33524, Start Num: 32

Candidate Starts for Tardus_38:

(Start: 32 @32448 has 17 MA's), (58, 32556), (72, 32604), (75, 32622), (113, 32769), (115, 32781), (120, 32820), (132, 32859), (139, 32901), (153, 32967), (159, 32982), (168, 33009), (171, 33024), (182, 33081), (189, 33135), (195, 33180), (204, 33249), (208, 33270), (212, 33294), (222, 33369), (233, 33447), (248, 33513),

Gene: TinaLin_31 Start: 22732, Stop: 23730, Start Num: 44

Candidate Starts for TinaLin_31:

(43, 22729), (Start: 44 @22732 has 6 MA's), (76, 22879), (81, 22900), (100, 22957), (104, 22969), (120, 23080), (174, 23263), (189, 23356), (194, 23392), (195, 23401), (211, 23506), (212, 23512), (214, 23539), (215, 23542), (234, 23668), (240, 23686), (241, 23695), (246, 23719),

Gene: Toast_29 Start: 23615, Stop: 24595, Start Num: 54

Candidate Starts for Toast_29:

(45, 23555), (Start: 54 @23615 has 8 MA's), (Start: 84 @23726 has 1 MA's), (109, 23822), (116, 23870), (120, 23903), (126, 23930), (144, 23999), (152, 24023), (153, 24026), (175, 24116), (178, 24134), (179, 24137), (189, 24200), (197, 24275), (224, 24431), (233, 24506), (250, 24578), (251, 24587),

Gene: Tolls_27 Start: 20184, Stop: 21263, Start Num: 25

Candidate Starts for Tolls_27:

(24, 20181), (Start: 25 @20184 has 31 MA's), (26, 20202), (Start: 50 @20307 has 7 MA's), (78, 20430), (105, 20535), (118, 20619), (120, 20637), (125, 20661), (161, 20742), (165, 20760), (175, 20814), (193, 20922), (204, 21006), (208, 21024), (213, 21057), (221, 21120), (225, 21138), (226, 21141), (227, 21144), (234, 21201),

Gene: Troje_25 Start: 20150, Stop: 21247, Start Num: 25

Candidate Starts for Troje_25:

(Start: 16 @20081 has 1 MA's), (Start: 25 @20150 has 31 MA's), (26, 20168), (Start: 50 @20273 has 7 MA's), (99, 20480), (118, 20585), (120, 20603), (122, 20612), (137, 20666), (163, 20726), (186, 20855), (193, 20906), (204, 20990), (208, 21008), (213, 21041), (220, 21092), (221, 21104), (239, 21200), (246, 21236),

Gene: Twinkle_26 Start: 23678, Stop: 24715, Start Num: 40

Candidate Starts for Twinkle_26:

(Start: 40 @23678 has 17 MA's), (53, 23747), (56, 23753), (105, 23933), (109, 23954), (120, 24035), (126, 24062), (152, 24155), (179, 24263), (189, 24326), (197, 24401), (233, 24632),

Gene: Twister6_35 Start: 28645, Stop: 29817, Start Num: 10

Candidate Starts for Twister6_35:

(Start: 10 @28645 has 13 MA's), (27, 28786), (30, 28804), (65, 28939), (79, 29005), (105, 29092), (120, 29194), (168, 29299), (189, 29425), (190, 29431), (204, 29539), (208, 29557), (245, 29782),

Gene: Typhonomachy_26 Start: 20517, Stop: 21647, Start Num: 25

Candidate Starts for Typhonomachy_26:

(Start: 25 @20517 has 31 MA's), (26, 20535), (Start: 50 @20640 has 7 MA's), (97, 20838), (118, 20952), (120, 20970), (122, 20979), (137, 21033), (154, 21114), (163, 21126), (170, 21159), (193, 21306), (196, 21345), (204, 21390), (208, 21408), (212, 21432), (219, 21489), (229, 21549), (234, 21585), (242, 21615), (246, 21636),

Gene: VanDeWege_36 Start: 28981, Stop: 30153, Start Num: 10

Candidate Starts for VanDeWege_36:

(Start: 10 @28981 has 13 MA's), (30, 29140), (65, 29275), (79, 29341), (105, 29428), (120, 29530), (168, 29635), (189, 29761), (190, 29767), (204, 29875), (208, 29893), (245, 30118),

Gene: Vendetta_29 Start: 22610, Stop: 23578, Start Num: 38

Candidate Starts for Vendetta_29:

(13, 22433), (29, 22577), (36, 22601), (Start: 38 @22610 has 3 MA's), (Start: 44 @22625 has 6 MA's), (86, 22805), (104, 22865), (118, 22958), (120, 22976), (130, 23012), (132, 23015), (145, 23030), (181, 23138), (183, 23150), (191, 23216), (195, 23249), (204, 23312), (211, 23354), (212, 23360), (214, 23387), (215, 23390), (217, 23408), (218, 23411), (225, 23450), (227, 23456), (231, 23489), (246, 23567),

Gene: Verity_36 Start: 33271, Stop: 34347, Start Num: 32

Candidate Starts for Verity_36:

(Start: 32 @33271 has 17 MA's), (58, 33379), (71, 33424), (75, 33445), (113, 33592), (120, 33643), (132, 33682), (139, 33724), (153, 33790), (159, 33805), (168, 33832), (171, 33847), (182, 33904), (189, 33958), (190, 33964), (195, 34003), (204, 34072), (208, 34093), (212, 34117), (222, 34192), (233, 34270), (248, 34336),

Gene: ViaConlectus_37 Start: 31720, Stop: 32796, Start Num: 32

Candidate Starts for ViaConlectus_37:

(7, 31426), (22, 31654), (Start: 32 @31720 has 17 MA's), (58, 31828), (72, 31876), (75, 31894), (113, 32041), (115, 32053), (120, 32092), (132, 32131), (139, 32173), (153, 32239), (159, 32254), (168, 32281), (171, 32296), (189, 32407), (195, 32452), (197, 32482), (201, 32500), (204, 32521), (212, 32566), (233, 32719), (248, 32785),

Gene: Vine_26 Start: 21286, Stop: 22272, Start Num: 50

Candidate Starts for Vine_26:

(Start: 50 @21286 has 7 MA's), (101, 21475), (120, 21592), (156, 21721), (159, 21730), (175, 21799), (180, 21823), (189, 21883), (197, 21958), (208, 22018), (209, 22021), (231, 22168), (236, 22204), (245, 22240), (249, 22258),

Gene: William_29 Start: 23441, Stop: 24427, Start Num: 54

Candidate Starts for William_29:

(45, 23381), (Start: 54 @23441 has 8 MA's), (73, 23504), (Start: 84 @23552 has 1 MA's), (109, 23648), (120, 23729), (121, 23732), (126, 23756), (144, 23825), (153, 23852), (178, 23960), (179, 23963), (189, 24026), (191, 24038), (197, 24101), (212, 24182), (215, 24212), (233, 24332),

Gene: WinkNick_26 Start: 22010, Stop: 23047, Start Num: 40

Candidate Starts for WinkNick_26:

(11, 21839), (12, 21842), (Start: 40 @22010 has 17 MA's), (53, 22079), (56, 22085), (105, 22265), (109, 22286), (120, 22367), (126, 22394), (152, 22487), (179, 22595), (189, 22658), (197, 22733), (233, 22964),

Gene: Wocket_30 Start: 24063, Stop: 25040, Start Num: 54

Candidate Starts for Wocket_30:

(45, 24003), (Start: 54 @24063 has 8 MA's), (74, 24144), (Start: 84 @24177 has 1 MA's), (92, 24204), (109, 24270), (117, 24327), (120, 24351), (178, 24582), (179, 24585), (189, 24648), (195, 24693), (204, 24762), (233, 24954), (245, 25005),

Gene: Wooper_29 Start: 28066, Stop: 29163, Start Num: 19

Candidate Starts for Wooper_29:

(Start: 19 @28066 has 13 MA's), (47, 28180), (57, 28240), (61, 28255), (67, 28270), (111, 28450), (116, 28489), (120, 28522), (141, 28579), (154, 28627), (160, 28639), (181, 28732), (182, 28735),

(183, 28744), (188, 28771), (189, 28786), (190, 28792), (204, 28891), (205, 28897), (213, 28948), (215, 28969), (223, 29014), (244, 29134),

Gene: Yarn_24 Start: 20174, Stop: 21286, Start Num: 25

Candidate Starts for Yarn_24:

(Start: 25 @20174 has 31 MA's), (26, 20192), (Start: 50 @20297 has 7 MA's), (78, 20420), (118, 20609), (120, 20627), (122, 20636), (124, 20648), (155, 20753), (175, 20837), (193, 20945), (204, 21029), (208, 21047), (213, 21080), (221, 21143), (225, 21161), (226, 21164), (227, 21167), (234, 21224),

Gene: Yummy_26 Start: 20064, Stop: 21200, Start Num: 25

Candidate Starts for Yummy_26:

(Start: 16 @19995 has 1 MA's), (Start: 25 @20064 has 31 MA's), (26, 20082), (Start: 50 @20187 has 7 MA's), (118, 20499), (120, 20517), (122, 20526), (128, 20550), (136, 20577), (163, 20679), (186, 20808), (193, 20859), (195, 20880), (204, 20943), (208, 20961), (213, 20994), (221, 21057), (239, 21153),

Gene: YungMoney_35 Start: 29700, Stop: 30950, Start Num: 10

Candidate Starts for YungMoney_35:

(Start: 10 @29700 has 13 MA's), (23, 29814), (30, 29859), (36, 29880), (71, 30024), (79, 30060), (105, 30147), (120, 30249), (126, 30276), (144, 30357), (175, 30480), (176, 30483), (179, 30501), (190, 30570), (204, 30678),

Gene: Zareef_29 Start: 21489, Stop: 22589, Start Num: 25

Candidate Starts for Zareef_29:

(Start: 25 @21489 has 31 MA's), (26, 21507), (Start: 50 @21612 has 7 MA's), (82, 21750), (102, 21828), (105, 21840), (108, 21855), (118, 21924), (120, 21942), (125, 21966), (175, 22134), (204, 22326), (207, 22347), (208, 22350), (213, 22383), (221, 22446), (225, 22464), (227, 22470), (246, 22578),

Gene: Zipp_36 Start: 33174, Stop: 34250, Start Num: 32

Candidate Starts for Zipp_36:

(Start: 32 @33174 has 17 MA's), (58, 33282), (72, 33330), (75, 33348), (113, 33495), (115, 33507), (120, 33546), (132, 33585), (139, 33627), (153, 33693), (159, 33708), (168, 33735), (171, 33750), (182, 33807), (189, 33861), (195, 33906), (204, 33975), (208, 33996), (212, 34020), (222, 34095), (233, 34173), (248, 34239),

Gene: Zitch_38 Start: 31061, Stop: 32053, Start Num: 32

Candidate Starts for Zitch_38:

(Start: 32 @31061 has 17 MA's), (58, 31169), (72, 31217), (75, 31235), (113, 31382), (115, 31394), (118, 31415), (120, 31433), (168, 31538), (182, 31610), (189, 31664), (195, 31709), (204, 31778), (208, 31799), (212, 31823), (222, 31898), (233, 31976), (248, 32042),