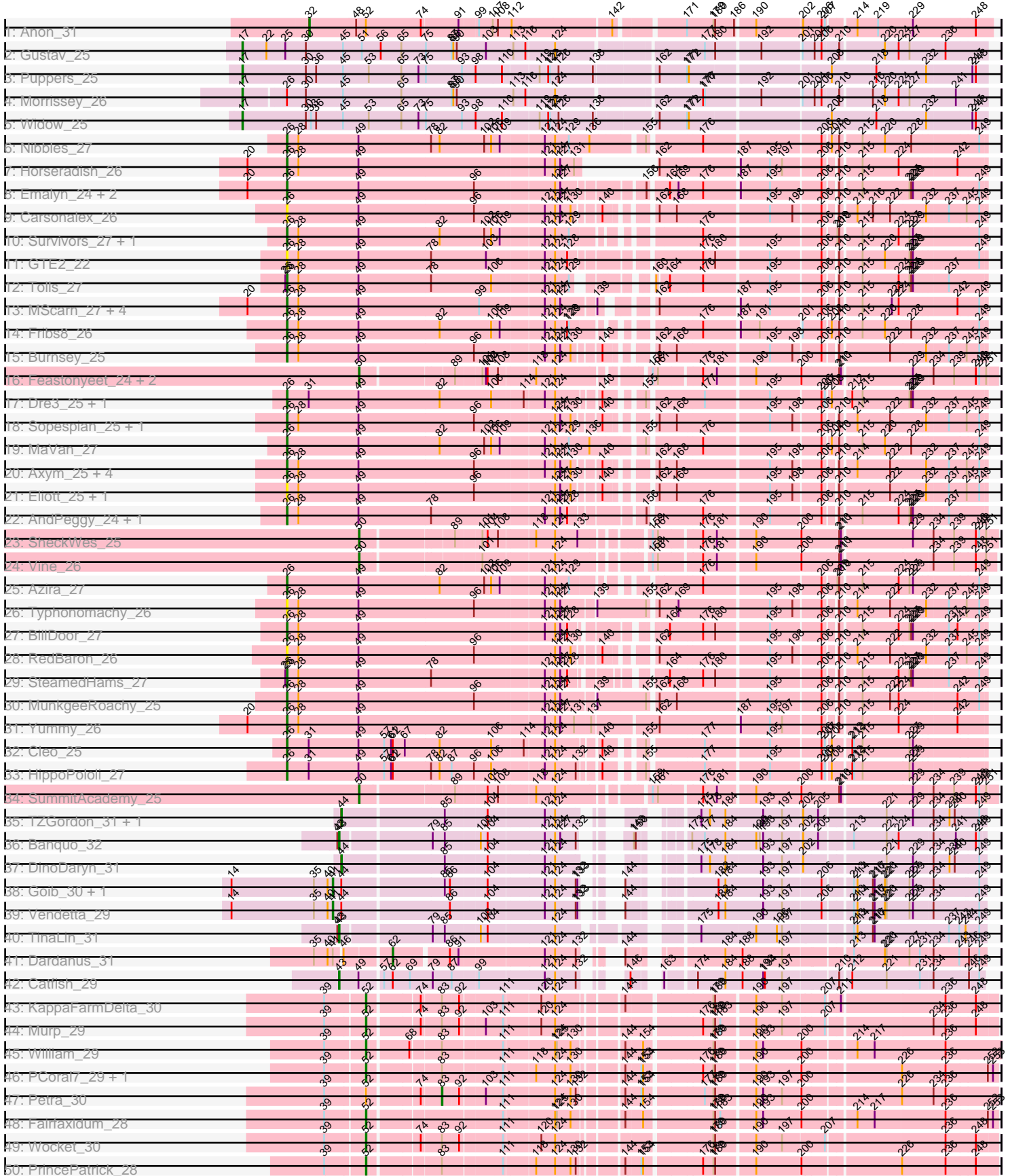
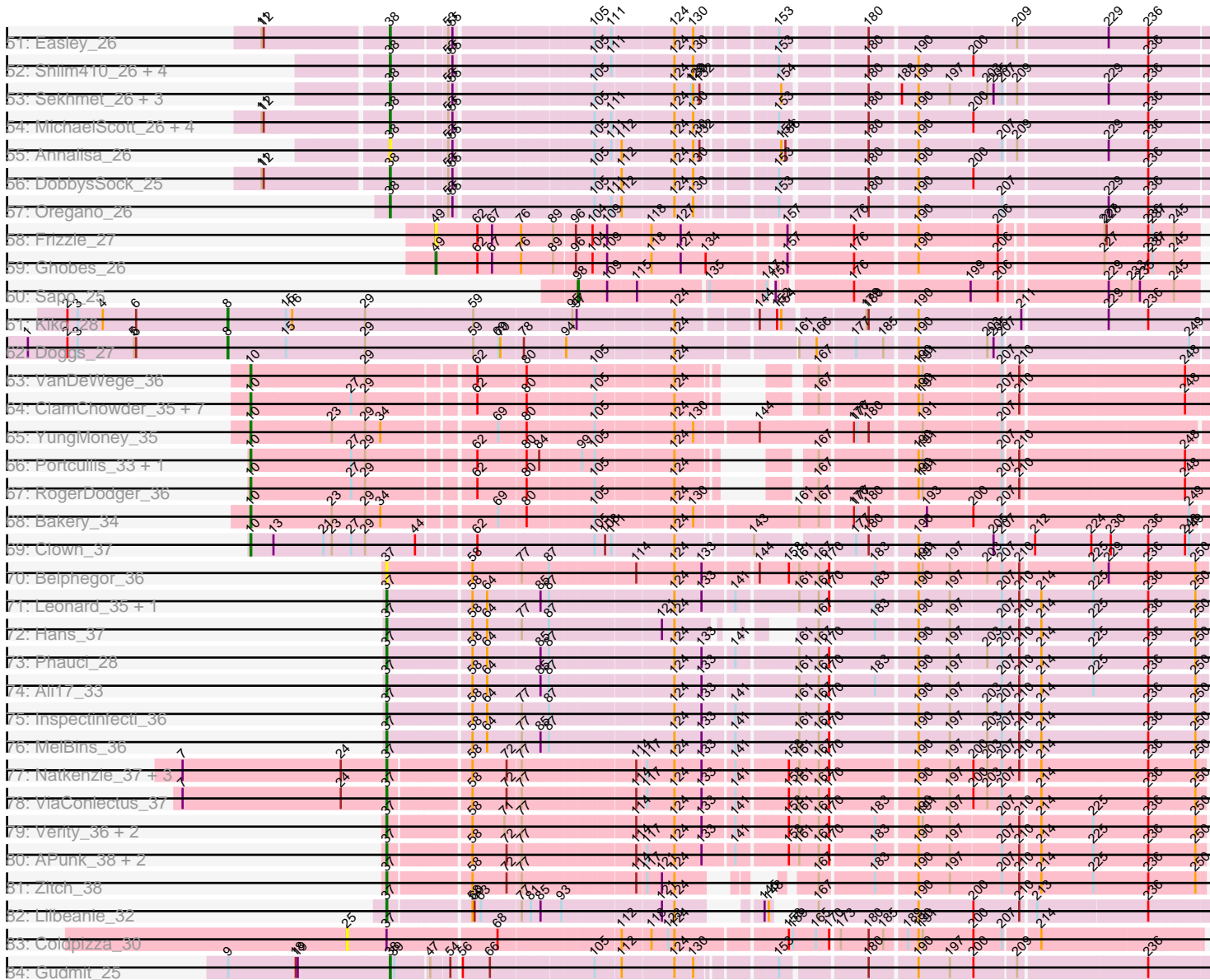


Pham 193826



Pham 193826



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 193826 Report

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

Pham number 193826 has 131 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Anon_31
- Track 2 : Gustav_25
- Track 3 : Poppers_25
- Track 4 : Morrissey_26
- Track 5 : Widow_25
- Track 6 : Nibbles_27
- Track 7 : Horseradish_26
- Track 8 : Emalyn_24, Amok_24, AikoCarson_24
- Track 9 : Carsonalex_26
- Track 10 : Survivors_27, Zareef_29
- Track 11 : GTE2_22
- Track 12 : Tolls_27
- Track 13 : MScarn_27, Biskit_26, Buttrmlkdreams_25, SketchMex_24, Troje_25
- Track 14 : Fribs8_26
- Track 15 : Burnsey_25
- Track 16 : Feastonyeet_24, PotPie_25, BigChungus_24
- Track 17 : Dre3_25, Gibbous_25
- Track 18 : Sopespian_25, Nina_26
- Track 19 : MaVan_27
- Track 20 : Axym_25, Agatha_25, GoldHunter_26, Cozz_25, Quasar_25
- Track 21 : Elliott_25, PsychoKiller_25
- Track 22 : AndPeggy_24, Yarn_24
- Track 23 : SheckWes_25
- Track 24 : Vine_26
- Track 25 : Azira_27
- Track 26 : Typhonomachy_26
- Track 27 : BillDoor_27
- Track 28 : RedBaron_26
- Track 29 : SteamedHams_27
- Track 30 : MunkgeeRoachy_25
- Track 31 : Yummy_26
- Track 32 : Cleo_25
- Track 33 : HippoPololi_27
- Track 34 : SummitAcademy_25
- Track 35 : TZGordon_31, Huffy_31
- Track 36 : Banquo_32
- Track 37 : DinoDaryn_31

- Track 38 : Goib_30, Splinter_29
- Track 39 : Vendetta_29
- Track 40 : TinaLin_31
- Track 41 : Dardanus_31
- Track 42 : Catfish_29
- Track 43 : KappaFarmDelta_30
- Track 44 : Murp_29
- Track 45 : William_29
- Track 46 : PCoral7_29, Toast_29
- Track 47 : Petra_30
- Track 48 : Fairfaxidum_28
- Track 49 : Wocket_30
- Track 50 : PrincePatrick_28
- Track 51 : Easley_26
- Track 52 : Shlim410_26, Adora_26, Howe_26, Twinkle_26, Hortense_26
- Track 53 : Sekhmet_26, Dorito_25, Samman98_26, PhriskyACE_25
- Track 54 : MichaelScott_26, Dolores_26, WinkNick_26, Mcklovin_26, Clark_26
- Track 55 : Annalisa_26
- Track 56 : DobbysSock_25
- Track 57 : Oregano_26
- Track 58 : Frizzle_27
- Track 59 : Ghobes_26
- Track 60 : Sapo_25
- Track 61 : Kiko_28
- Track 62 : Doggs_27
- Track 63 : VanDeWege_36
- Track 64 : ClamChowder_35, Fugax_35, PinkCoffee_35, Barb_35, CoveyB_36, Twister6_35, Arri_36, Danyall_35
- Track 65 : YungMoney_35
- Track 66 : Portcullis_33, Shinji_33
- Track 67 : RogerDodger_36
- Track 68 : Bakery_34
- Track 69 : Clown_37
- Track 70 : Belphegor_36
- Track 71 : Leonard_35, Phinally_35
- Track 72 : Hans_37
- Track 73 : Phauci_28
- Track 74 : Ali17_33
- Track 75 : Inspectinfecti_36
- Track 76 : MelBins_36
- Track 77 : Natkenzie_37, Abblin_37, Sampson_37, Scioto_37
- Track 78 : ViaConlectus_37
- Track 79 : Verity_36, Delrey21_36, DoctorFroggo_36
- Track 80 : APunk_38, Tardus_38, Zipp_36
- Track 81 : Zitch_38
- Track 82 : Lilbeanie_32
- Track 83 : Coldpizza_30
- Track 84 : 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 26, it was called in 31 of the 112 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:

- Morrissey_26,

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

- APunk_38, Abblin_37, Adora_26, Ali17_33, Annalisa_26, Anon_31, Arri_36, Bakery_34, Banquo_32, Barb_35, Belphegor_36, BigChungus_24, Catfish_29, ClamChowder_35, Clark_26, 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, Frizzle_27, Fugax_35, Ghobes_26, Goib_30, Gudmit_25, Gustav_25, Hans_37, Hortense_26, Howe_26, Huffy_31, Inspectinfecti_36, KappaFarmDelta_30, Kiko_28, Leonard_35, Lilbeanie_32, Mcklovin_26, MelBins_36, MichaelScott_26, Murp_29, Natkenzie_37, Oregano_26, PCoral7_29, Petra_30, Phauci_28, Phinally_35, PhriskyACE_25, PinkCoffee_35, Portcullis_33, PotPie_25, PrincePatrick_28, Puppies_25, RogerDodger_36, Samman98_26, Sampson_37, Sapo_25, Scioto_37, Sekhmet_26, SheckWes_25, Shinji_33, Shlim410_26, 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, Widow_25, William_29, WinkNick_26, Wocket_30, YungMoney_35, Zipp_36, Zitch_38,

Summary by start number:

Start 8:

- Found in 2 of 131 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 112
- 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 131 (11.5%) of genes in pham
- Manual Annotations of this start: 13 of 112
- 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 17:

- Found in 4 of 131 (3.1%) of genes in pham
- Manual Annotations of this start: 4 of 112
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gustav_25 (CD), Morrissey_26 (CD), Poppers_25 (CD), Widow_25 (CD),

Start 25:

- Found in 4 of 131 (3.1%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Coldpizza_30 (DR),

Start 26:

- Found in 41 of 131 (31.3%) of genes in pham
- Manual Annotations of this start: 31 of 112
- Called 97.6% 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 1 of 131 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 112
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anon_31 (A15),

Start 37:

- Found in 22 of 131 (16.8%) of genes in pham
- Manual Annotations of this start: 17 of 112
- Called 95.5% 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 38:

- Found in 19 of 131 (14.5%) of genes in pham
- Manual Annotations of this start: 17 of 112
- 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 41:

- Found in 4 of 131 (3.1%) of genes in pham
- Manual Annotations of this start: 3 of 112
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Goib_30 (CU1), Splinter_29 (CU1), Vendetta_29 (CU1),

Start 43:

- Found in 3 of 131 (2.3%) of genes in pham
- Manual Annotations of this start: 3 of 112
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Banquo_32 (CU1), Catfish_29 (CU5), TinaLin_31 (CU1),

Start 44:

- Found in 7 of 131 (5.3%) of genes in pham
- Manual Annotations of this start: 3 of 112
- Called 42.9% of time when present
- Phage (with cluster) where this start called: DinoDaryn_31 (CU1), Huffy_31 (CU1), TZGordon_31 (CU1),

Start 49:

- Found in 43 of 131 (32.8%) of genes in pham
- Manual Annotations of this start: 1 of 112
- Called 4.7% of time when present
- Phage (with cluster) where this start called: Frizzle_27 (DA), Ghobes_26 (DA),

Start 50:

- Found in 6 of 131 (4.6%) of genes in pham
- Manual Annotations of this start: 6 of 112
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigChungus_24 (CT), Feastonyeet_24 (CT), PotPie_25 (CT), SheckWes_25 (CT), SummitAcademy_25 (CT), Vine_26 (CT),

Start 52:

- Found in 10 of 131 (7.6%) of genes in pham
- Manual Annotations of this start: 8 of 112
- Called 80.0% 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 62:

- Found in 19 of 131 (14.5%) of genes in pham
- Manual Annotations of this start: 1 of 112
- Called 5.3% of time when present
- Phage (with cluster) where this start called: Dardanus_31 (CU3),

Start 83:

- Found in 8 of 131 (6.1%) of genes in pham
- Manual Annotations of this start: 1 of 112

- Called 12.5% of time when present
- Phage (with cluster) where this start called: Petra_30 (CV),

Start 98:

- Found in 3 of 131 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 112
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Sapo_25 (DA),

Summary by clusters:

There are 18 clusters represented in this pham: A15, singleton, DA, CU1, DB, DE2, DE, DE4, DE5, CZ4, CD, DC2, CU5, CU3, CT, DR, CV, DC1,

Info for manual annotations of cluster A15:

- Start number 32 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster CD:

- Start number 17 was manually annotated 4 times for cluster CD.

Info for manual annotations of cluster CT:

- Start number 26 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 41 was manually annotated 3 times for cluster CU1.
- Start number 43 was manually annotated 2 times for cluster CU1.
- Start number 44 was manually annotated 3 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 62 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU5:

- Start number 43 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster CV:

- Start number 52 was manually annotated 8 times for cluster CV.
- Start number 83 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ4:

- Start number 38 was manually annotated 16 times for cluster CZ4.

Info for manual annotations of cluster DA:

- Start number 49 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 37 was manually annotated 7 times for cluster DE2.

Info for manual annotations of cluster DE4:

- Start number 37 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 37 was manually annotated 1 time for cluster DE5.

Gene Information:

Gene: APunk_38 Start: 32541, Stop: 33617, Start Num: 37

Candidate Starts for APunk_38:

(Start: 37 @32541 has 17 MA's), (58, 32649), (72, 32697), (77, 32715), (114, 32862), (117, 32874), (124, 32913), (133, 32952), (141, 32994), (158, 33060), (161, 33075), (167, 33102), (170, 33117), (183, 33174), (190, 33228), (197, 33273), (207, 33342), (210, 33363), (214, 33387), (225, 33462), (236, 33540), (250, 33606),

Gene: Abblin_37 Start: 33084, Stop: 34160, Start Num: 37

Candidate Starts for Abblin_37:

(7, 32790), (24, 33018), (Start: 37 @33084 has 17 MA's), (58, 33192), (72, 33240), (77, 33258), (114, 33405), (117, 33417), (124, 33456), (133, 33495), (141, 33537), (158, 33603), (161, 33618), (167, 33645), (170, 33660), (190, 33771), (197, 33816), (200, 33846), (203, 33864), (207, 33885), (210, 33906), (214, 33930), (236, 34083), (250, 34149),

Gene: Adora_26 Start: 22572, Stop: 23609, Start Num: 38

Candidate Starts for Adora_26:

(Start: 38 @22572 has 17 MA's), (53, 22641), (55, 22647), (105, 22827), (111, 22848), (124, 22929), (130, 22956), (153, 23049), (180, 23157), (190, 23220), (200, 23295), (236, 23526),

Gene: Agatha_25 Start: 20517, Stop: 21614, Start Num: 26

Candidate Starts for Agatha_25:

(Start: 26 @20517 has 31 MA's), (28, 20535), (Start: 49 @20640 has 1 MA's), (96, 20838), (121, 20952), (124, 20970), (127, 20979), (130, 20997), (140, 21033), (162, 21093), (168, 21123), (195, 21273), (198, 21312), (206, 21357), (210, 21375), (214, 21399), (222, 21456), (232, 21516), (237, 21552), (245, 21582), (249, 21603),

Gene: AikoCarson_24 Start: 19778, Stop: 20890, Start Num: 26

Candidate Starts for AikoCarson_24:

(20, 19709), (Start: 26 @19778 has 31 MA's), (Start: 49 @19901 has 1 MA's), (96, 20099), (124, 20231), (127, 20240), (156, 20357), (164, 20387), (169, 20402), (176, 20441), (187, 20498), (195, 20549), (206, 20633), (210, 20651), (215, 20684), (227, 20765), (228, 20768), (229, 20771), (249, 20879),

Gene: Ali17_33 Start: 30788, Stop: 31876, Start Num: 37

Candidate Starts for Ali17_33:

(Start: 37 @30788 has 17 MA's), (58, 30902), (64, 30923), (85, 30992), (87, 31004), (124, 31169), (133, 31208), (161, 31331), (167, 31358), (170, 31373), (183, 31430), (190, 31484), (197, 31529), (207, 31598), (210, 31619), (214, 31643), (225, 31718), (236, 31796), (250, 31862),

Gene: Amok_24 Start: 19775, Stop: 20848, Start Num: 26

Candidate Starts for Amok_24:

(20, 19706), (Start: 26 @19775 has 31 MA's), (Start: 49 @19898 has 1 MA's), (96, 20096), (124, 20228), (127, 20237), (156, 20315), (164, 20345), (169, 20360), (176, 20399), (187, 20456), (195, 20507), (206, 20591), (210, 20609), (215, 20642), (227, 20723), (228, 20726), (229, 20729), (249, 20837),

Gene: AndPeggy_24 Start: 20180, Stop: 21292, Start Num: 26

Candidate Starts for AndPeggy_24:

(Start: 26 @20180 has 31 MA's), (28, 20198), (Start: 49 @20303 has 1 MA's), (78, 20426), (121, 20615), (124, 20633), (127, 20642), (128, 20654), (156, 20759), (176, 20843), (195, 20951), (206, 21035), (210, 21053), (215, 21086), (224, 21149), (227, 21167), (228, 21170), (229, 21173), (237, 21230),

Gene: Annalisa_26 Start: 22034, Stop: 23074, Start Num: 38

Candidate Starts for Annalisa_26:

(Start: 38 @22034 has 17 MA's), (53, 22103), (55, 22109), (105, 22289), (111, 22310), (112, 22319), (124, 22391), (130, 22418), (132, 22427), (154, 22514), (156, 22520), (180, 22619), (190, 22682), (207, 22796), (209, 22811), (229, 22934), (236, 22991),

Gene: Anon_31 Start: 22310, Stop: 23416, Start Num: 32

Candidate Starts for Anon_31:

(Start: 32 @22310 has 1 MA's), (48, 22391), (Start: 52 @22406 has 8 MA's), (74, 22499), (91, 22559), (99, 22589), (107, 22613), (108, 22622), (112, 22646), (142, 22814), (171, 22919), (179, 22964), (180, 22967), (186, 23000), (190, 23030), (202, 23108), (206, 23138), (207, 23144), (214, 23186), (219, 23222), (229, 23279), (248, 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), (29, 29075), (Start: 62 @29210 has 1 MA's), (80, 29276), (105, 29363), (124, 29465), (167, 29570), (190, 29696), (191, 29702), (207, 29810), (210, 29828), (248, 30053),

Gene: Axym_25 Start: 20517, Stop: 21614, Start Num: 26

Candidate Starts for Axym_25:

(Start: 26 @20517 has 31 MA's), (28, 20535), (Start: 49 @20640 has 1 MA's), (96, 20838), (121, 20952), (124, 20970), (127, 20979), (130, 20997), (140, 21033), (162, 21093), (168, 21123), (195, 21273), (198, 21312), (206, 21357), (210, 21375), (214, 21399), (222, 21456), (232, 21516), (237, 21552), (245, 21582), (249, 21603),

Gene: Azira_27 Start: 21488, Stop: 22588, Start Num: 26

Candidate Starts for Azira_27:

(Start: 26 @21488 has 31 MA's), (Start: 49 @21611 has 1 MA's), (82, 21749), (102, 21827), (106, 21839), (109, 21854), (121, 21923), (124, 21941), (129, 21965), (176, 22133), (206, 22325), (209, 22346), (210, 22349), (215, 22382), (224, 22445), (227, 22463), (229, 22469), (249, 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), (29, 28286), (34, 28307), (69, 28451), (80, 28487), (105, 28574), (124, 28676), (130, 28703), (161, 28838), (167, 28865), (176, 28907), (177, 28910), (180, 28928), (193, 29003), (200, 29066), (207, 29105), (249, 29354),

Gene: Banquo_32 Start: 23108, Stop: 24055, Start Num: 43

Candidate Starts for Banquo_32:

(42, 23105), (Start: 43 @23108 has 3 MA's), (79, 23255), (85, 23276), (100, 23333), (104, 23345), (121, 23438), (124, 23456), (127, 23465), (132, 23492), (149, 23525), (150, 23528), (173, 23576), (177, 23597), (184, 23633), (190, 23684), (191, 23690), (193, 23696), (197, 23729), (202, 23762), (205, 23786), (213, 23834), (221, 23891), (224, 23912), (234, 23969), (241, 24008), (248, 24041), (249, 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), (29, 29093), (Start: 62 @29228 has 1 MA's), (80, 29294), (105, 29381), (124, 29483), (167, 29588), (190, 29714), (191, 29720), (207, 29828), (210, 29846), (248, 30071),

Gene: Belphegor_36 Start: 32996, Stop: 34081, Start Num: 37

Candidate Starts for Belphegor_36:

(Start: 37 @32996 has 17 MA's), (58, 33110), (77, 33176), (87, 33212), (114, 33326), (124, 33377), (133, 33416), (144, 33485), (158, 33524), (161, 33539), (167, 33566), (170, 33581), (183, 33638), (190, 33692), (191, 33698), (197, 33737), (203, 33785), (207, 33806), (210, 33824), (225, 33923), (229, 33944), (236, 34001), (250, 34067),

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

Candidate Starts for BigChungus_24:

(Start: 50 @20320 has 6 MA's), (89, 20467), (101, 20509), (103, 20515), (104, 20518), (108, 20536), (118, 20593), (124, 20626), (159, 20755), (161, 20764), (176, 20833), (181, 20857), (190, 20917), (200, 20992), (210, 21052), (211, 21055), (229, 21172), (234, 21205), (239, 21241), (248, 21277), (249, 21283), (251, 21295),

Gene: BillDoor_27 Start: 20148, Stop: 21239, Start Num: 26

Candidate Starts for BillDoor_27:

(Start: 26 @20148 has 31 MA's), (28, 20166), (Start: 49 @20271 has 1 MA's), (121, 20583), (124, 20601), (127, 20610), (128, 20622), (164, 20736), (176, 20790), (180, 20811), (195, 20898), (206, 20982), (210, 21000), (215, 21033), (224, 21096), (227, 21114), (228, 21117), (229, 21120), (237, 21177), (242, 21192), (249, 21228),

Gene: Biskit_26 Start: 20168, Stop: 21265, Start Num: 26

Candidate Starts for Biskit_26:

(20, 20099), (Start: 26 @20168 has 31 MA's), (28, 20186), (Start: 49 @20291 has 1 MA's), (99, 20498), (121, 20603), (124, 20621), (127, 20630), (139, 20684), (162, 20744), (187, 20873), (195, 20924), (206, 21008), (210, 21026), (215, 21059), (223, 21110), (224, 21122), (242, 21218), (249, 21254),

Gene: Burnsey_25 Start: 20518, Stop: 21615, Start Num: 26

Candidate Starts for Burnsey_25:

(Start: 26 @20518 has 31 MA's), (28, 20536), (Start: 49 @20641 has 1 MA's), (96, 20839), (121, 20953), (124, 20971), (127, 20980), (130, 20998), (140, 21034), (162, 21094), (168, 21124), (195, 21274), (198, 21313), (206, 21358), (210, 21376), (222, 21457), (232, 21517), (237, 21553), (245, 21583), (249, 21604),

Gene: Buttrmlkdreams_25 Start: 20150, Stop: 21247, Start Num: 26

Candidate Starts for Buttrmlkdreams_25:

(20, 20081), (Start: 26 @20150 has 31 MA's), (28, 20168), (Start: 49 @20273 has 1 MA's), (99, 20480), (121, 20585), (124, 20603), (127, 20612), (139, 20666), (162, 20726), (187, 20855), (195, 20906), (206, 20990), (210, 21008), (215, 21041), (223, 21092), (224, 21104), (242, 21200), (249, 21236),

Gene: Carsonalex_26 Start: 20575, Stop: 21672, Start Num: 26

Candidate Starts for Carsonalex_26:

(Start: 26 @20575 has 31 MA's), (Start: 49 @20698 has 1 MA's), (96, 20896), (121, 21010), (124, 21028), (127, 21037), (130, 21055), (140, 21091), (162, 21151), (168, 21181), (195, 21331), (198, 21370), (206, 21415), (210, 21433), (214, 21457), (216, 21484), (222, 21514), (232, 21574), (237, 21610), (245, 21640), (249, 21661),

Gene: Catfish_29 Start: 24416, Stop: 25366, Start Num: 43

Candidate Starts for Catfish_29:

(Start: 43 @24416 has 3 MA's), (Start: 49 @24446 has 1 MA's), (57, 24482), (Start: 62 @24497 has 1 MA's), (69, 24527), (79, 24566), (87, 24599), (99, 24641), (121, 24749), (124, 24767), (132, 24803), (146, 24830), (163, 24854), (174, 24896), (184, 24944), (188, 24971), (193, 25007), (194, 25010), (197, 25040), (210, 25127), (212, 25142), (221, 25202), (231, 25259), (234, 25280), (246, 25340), (249, 25358),

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

Candidate Starts for ClamChowder_35:

(Start: 10 @28934 has 13 MA's), (27, 29075), (29, 29093), (Start: 62 @29228 has 1 MA's), (80, 29294), (105, 29381), (124, 29483), (167, 29588), (190, 29714), (191, 29720), (207, 29828), (210, 29846), (248, 30071),

Gene: Clark_26 Start: 22034, Stop: 23071, Start Num: 38

Candidate Starts for Clark_26:

(11, 21863), (12, 21866), (Start: 38 @22034 has 17 MA's), (53, 22103), (55, 22109), (105, 22289), (111, 22310), (124, 22391), (130, 22418), (153, 22511), (180, 22619), (190, 22682), (200, 22757), (236, 22988),

Gene: Cleo_25 Start: 20832, Stop: 21935, Start Num: 26

Candidate Starts for Cleo_25:

(Start: 26 @20832 has 31 MA's), (31, 20868), (Start: 49 @20955 has 1 MA's), (57, 21000), (61, 21012), (Start: 62 @21015 has 1 MA's), (67, 21036), (82, 21093), (106, 21183), (114, 21234), (121, 21267), (124, 21285), (140, 21348), (155, 21396), (177, 21483), (195, 21588), (206, 21672), (207, 21678), (208, 21684), (212, 21711), (213, 21714), (215, 21729), (227, 21810), (229, 21816),

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

Candidate Starts for Clown_37:

(Start: 10 @30957 has 13 MA's), (13, 30987), (21, 31059), (23, 31071), (27, 31098), (29, 31116), (Start: 44 @31185 has 3 MA's), (Start: 62 @31251 has 1 MA's), (105, 31404), (108, 31416), (111, 31425), (124, 31506), (143, 31602), (177, 31719), (180, 31737), (190, 31800), (205, 31902), (207, 31914), (212, 31947), (224, 32028), (230, 32052), (236, 32106), (248, 32157), (249, 32163),

Gene: Coldpizza_30 Start: 30502, Stop: 31638, Start Num: 25

Candidate Starts for Coldpizza_30:

(25, 30502), (Start: 37 @30559 has 17 MA's), (68, 30706), (112, 30868), (118, 30907), (123, 30931), (124, 30940), (158, 31090), (159, 31096), (165, 31129), (170, 31147), (173, 31156), (180, 31195), (185, 31216), (189, 31243), (190, 31258), (191, 31264), (200, 31333), (207, 31372), (214, 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), (29, 28893), (Start: 62 @29028 has 1 MA's), (80, 29094), (105, 29181), (124, 29283), (167, 29388), (190, 29514), (191, 29520), (207, 29628), (210, 29646), (248, 29871),

Gene: Cozz_25 Start: 20518, Stop: 21615, Start Num: 26

Candidate Starts for Cozz_25:

(Start: 26 @20518 has 31 MA's), (28, 20536), (Start: 49 @20641 has 1 MA's), (96, 20839), (121, 20953), (124, 20971), (127, 20980), (130, 20998), (140, 21034), (162, 21094), (168, 21124), (195, 21274), (198, 21313), (206, 21358), (210, 21376), (214, 21400), (222, 21457), (232, 21517), (237, 21553), (245, 21583), (249, 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), (29, 28893), (Start: 62 @29028 has 1 MA's), (80, 29094), (105, 29181), (124, 29283), (167, 29388), (190, 29514), (191, 29520), (207, 29628), (210, 29646), (248, 29871),

Gene: Dardanus_31 Start: 23524, Stop: 24384, Start Num: 62

Candidate Starts for Dardanus_31:

(35, 23410), (40, 23434), (Start: 41 @23443 has 3 MA's), (46, 23455), (Start: 62 @23524 has 1 MA's), (86, 23611), (91, 23626), (121, 23764), (124, 23782), (132, 23818), (144, 23836), (184, 23959), (188, 23986), (197, 24055), (213, 24160), (220, 24214), (221, 24217), (227, 24256), (231, 24274), (234, 24295), (243, 24340), (246, 24355), (249, 24373),

Gene: Delrey21_36 Start: 33271, Stop: 34347, Start Num: 37

Candidate Starts for Delrey21_36:

(Start: 37 @33271 has 17 MA's), (58, 33379), (71, 33424), (77, 33445), (114, 33592), (124, 33643), (133, 33682), (141, 33724), (158, 33790), (161, 33805), (167, 33832), (170, 33847), (183, 33904), (190, 33958), (191, 33964), (197, 34003), (207, 34072), (210, 34093), (214, 34117), (225, 34192), (236, 34270), (250, 34336),

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

Candidate Starts for DinoDaryn_31:

(Start: 44 @22562 has 3 MA's), (85, 22733), (104, 22802), (121, 22895), (124, 22913), (175, 23045), (178, 23060), (184, 23087), (193, 23150), (197, 23183), (202, 23216), (221, 23345), (229, 23390), (234, 23420), (238, 23447), (240, 23456), (249, 23498),

Gene: DobbysSock_25 Start: 21508, Stop: 22545, Start Num: 38

Candidate Starts for DobbysSock_25:

(11, 21337), (12, 21340), (Start: 38 @21508 has 17 MA's), (53, 21577), (55, 21583), (105, 21763), (112, 21793), (124, 21865), (130, 21892), (153, 21985), (180, 22093), (190, 22156), (200, 22231), (236, 22462),

Gene: DoctorFroggo_36 Start: 33271, Stop: 34347, Start Num: 37

Candidate Starts for DoctorFroggo_36:

(Start: 37 @33271 has 17 MA's), (58, 33379), (71, 33424), (77, 33445), (114, 33592), (124, 33643), (133, 33682), (141, 33724), (158, 33790), (161, 33805), (167, 33832), (170, 33847), (183, 33904), (190, 33958), (191, 33964), (197, 34003), (207, 34072), (210, 34093), (214, 34117), (225, 34192), (236, 34270), (250, 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), (15, 23015), (29, 23129), (59, 23282), (69, 23318), (70, 23321), (78, 23351), (94, 23405), (124, 23549), (161, 23705), (166, 23729), (177, 23777), (185, 23816), (190, 23858), (203, 23951), (205, 23960), (207, 23972), (249, 24221),

Gene: Dolores_26 Start: 22010, Stop: 23047, Start Num: 38

Candidate Starts for Dolores_26:

(11, 21839), (12, 21842), (Start: 38 @22010 has 17 MA's), (53, 22079), (55, 22085), (105, 22265), (111, 22286), (124, 22367), (130, 22394), (153, 22487), (180, 22595), (190, 22658), (200, 22733), (236, 22964),

Gene: Dorito_25 Start: 21473, Stop: 22513, Start Num: 38

Candidate Starts for Dorito_25:

(Start: 38 @21473 has 17 MA's), (53, 21542), (55, 21548), (105, 21728), (124, 21830), (129, 21854), (130, 21857), (132, 21866), (154, 21953), (180, 22058), (188, 22097), (190, 22121), (197, 22166), (203, 22214), (205, 22223), (207, 22235), (209, 22250), (229, 22373), (236, 22430),

Gene: Dre3_25 Start: 20758, Stop: 21861, Start Num: 26

Candidate Starts for Dre3_25:

(Start: 26 @20758 has 31 MA's), (31, 20794), (Start: 49 @20881 has 1 MA's), (82, 21019), (106, 21109), (114, 21160), (121, 21193), (124, 21211), (140, 21274), (155, 21322), (177, 21409), (195, 21514), (206, 21598), (207, 21604), (208, 21610), (212, 21637), (215, 21655), (227, 21736), (228, 21739), (229, 21742),

Gene: Easley_26 Start: 22020, Stop: 23057, Start Num: 38

Candidate Starts for Easley_26:

(11, 21849), (12, 21852), (Start: 38 @22020 has 17 MA's), (53, 22089), (55, 22095), (105, 22275), (111, 22296), (124, 22377), (130, 22404), (153, 22497), (180, 22605), (209, 22797), (229, 22917), (236, 22974),

Gene: Elliott_25 Start: 20517, Stop: 21614, Start Num: 26

Candidate Starts for Elliott_25:

(Start: 26 @20517 has 31 MA's), (28, 20535), (Start: 49 @20640 has 1 MA's), (96, 20838), (124, 20970), (127, 20979), (130, 20997), (140, 21033), (162, 21093), (168, 21123), (195, 21273), (198, 21312), (206, 21357), (210, 21375), (222, 21456), (232, 21516), (237, 21552), (245, 21582), (249, 21603),

Gene: Emalyn_24 Start: 19777, Stop: 20889, Start Num: 26

Candidate Starts for Emalyn_24:

(20, 19708), (Start: 26 @19777 has 31 MA's), (Start: 49 @19900 has 1 MA's), (96, 20098), (124, 20230), (127, 20239), (156, 20356), (164, 20386), (169, 20401), (176, 20440), (187, 20497), (195, 20548), (206, 20632), (210, 20650), (215, 20683), (227, 20764), (228, 20767), (229, 20770), (249, 20878),

Gene: Fairfaxidum_28 Start: 23698, Stop: 24678, Start Num: 52

Candidate Starts for Fairfaxidum_28:

(39, 23638), (Start: 52 @23698 has 8 MA's), (111, 23905), (124, 23986), (125, 23989), (130, 24013), (144, 24082), (154, 24109), (179, 24217), (180, 24220), (183, 24229), (190, 24283), (193, 24295), (200, 24358), (214, 24439), (217, 24469), (236, 24589), (252, 24661), (253, 24670),

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

Candidate Starts for Feastonyeet_24:

(Start: 50 @20320 has 6 MA's), (89, 20467), (101, 20509), (103, 20515), (104, 20518), (108, 20536), (118, 20593), (124, 20626), (159, 20755), (161, 20764), (176, 20833), (181, 20857), (190, 20917), (200, 20992), (210, 21052), (211, 21055), (229, 21172), (234, 21205), (239, 21241), (248, 21277), (249, 21283), (251, 21295),

Gene: Fribs8_26 Start: 21343, Stop: 22440, Start Num: 26

Candidate Starts for Fribs8_26:

(Start: 26 @21343 has 31 MA's), (28, 21361), (Start: 49 @21466 has 1 MA's), (82, 21604), (106, 21694), (109, 21709), (121, 21778), (124, 21796), (128, 21817), (129, 21820), (176, 21985), (187, 22042), (191, 22075), (201, 22144), (206, 22177), (208, 22189), (210, 22201), (215, 22234), (220, 22273), (228, 22318), (249, 22429),

Gene: Frizzle_27 Start: 21406, Stop: 22404, Start Num: 49

Candidate Starts for Frizzle_27:

(Start: 49 @21406 has 1 MA's), (Start: 62 @21466 has 1 MA's), (67, 21487), (76, 21523), (89, 21568), (96, 21595), (104, 21619), (109, 21640), (118, 21694), (127, 21736), (157, 21868), (176, 21952), (190, 22036), (206, 22144), (227, 22276), (228, 22279), (236, 22333), (237, 22339), (245, 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), (29, 29093), (Start: 62 @29228 has 1 MA's), (80, 29294), (105, 29381), (124, 29483), (167, 29588), (190, 29714), (191, 29720), (207, 29828), (210, 29846), (248, 30071),

Gene: GTE2_22 Start: 19853, Stop: 20965, Start Num: 26

Candidate Starts for GTE2_22:

(Start: 26 @19853 has 31 MA's), (28, 19871), (Start: 49 @19976 has 1 MA's), (78, 20099), (103, 20195), (121, 20288), (124, 20306), (128, 20327), (176, 20516), (180, 20537), (195, 20624), (206, 20708), (210, 20726), (215, 20759), (220, 20798), (227, 20840), (228, 20843), (229, 20846), (249, 20954),

Gene: Ghobes_26 Start: 21406, Stop: 22404, Start Num: 49

Candidate Starts for Ghobes_26:

(Start: 49 @21406 has 1 MA's), (Start: 62 @21466 has 1 MA's), (67, 21487), (76, 21523), (89, 21568), (96, 21595), (104, 21619), (109, 21640), (118, 21694), (127, 21736), (134, 21772), (157, 21868), (176, 21952), (190, 22036), (206, 22144), (227, 22276), (236, 22333), (237, 22339), (245, 22369),

Gene: Gibbous_25 Start: 20758, Stop: 21861, Start Num: 26

Candidate Starts for Gibbous_25:

(Start: 26 @20758 has 31 MA's), (31, 20794), (Start: 49 @20881 has 1 MA's), (82, 21019), (106, 21109), (114, 21160), (121, 21193), (124, 21211), (140, 21274), (155, 21322), (177, 21409), (195, 21514), (206, 21598), (207, 21604), (208, 21610), (212, 21637), (215, 21655), (227, 21736), (228, 21739), (229, 21742),

Gene: Goib_30 Start: 22610, Stop: 23578, Start Num: 41

Candidate Starts for Goib_30:

(14, 22433), (35, 22577), (40, 22601), (Start: 41 @22610 has 3 MA's), (Start: 44 @22625 has 3 MA's), (85, 22796), (86, 22805), (104, 22865), (121, 22958), (124, 22976), (132, 23012), (133, 23015), (144, 23030), (182, 23138), (184, 23150), (193, 23216), (197, 23249), (206, 23312), (213, 23354), (214, 23360), (216, 23387), (217, 23390), (220, 23408), (221, 23411), (227, 23450), (229, 23456), (234, 23489), (249, 23567),

Gene: GoldHunter_26 Start: 20518, Stop: 21615, Start Num: 26

Candidate Starts for GoldHunter_26:

(Start: 26 @20518 has 31 MA's), (28, 20536), (Start: 49 @20641 has 1 MA's), (96, 20839), (121, 20953), (124, 20971), (127, 20980), (130, 20998), (140, 21034), (162, 21094), (168, 21124), (195, 21274), (198, 21313), (206, 21358), (210, 21376), (214, 21400), (222, 21457), (232, 21517), (237, 21553), (245, 21583), (249, 21604),

Gene: Gudmit_25 Start: 20321, Stop: 21364, Start Num: 38

Candidate Starts for Gudmit_25:

(9, 20090), (18, 20186), (19, 20189), (Start: 38 @20321 has 17 MA's), (39, 20327), (47, 20372), (54, 20396), (56, 20405), (66, 20444), (105, 20579), (112, 20609), (124, 20681), (130, 20708), (153, 20801), (180, 20909), (190, 20972), (197, 21017), (200, 21047), (209, 21101), (236, 21278),

Gene: Gustav_25 Start: 19979, Stop: 21202, Start Num: 17

Candidate Starts for Gustav_25:

(Start: 17 @19979 has 4 MA's), (22, 20021), (25, 20051), (30, 20087), (45, 20150), (51, 20183), (56, 20216), (65, 20252), (75, 20294), (87, 20339), (88, 20342), (90, 20348), (103, 20399), (113, 20444), (116, 20465), (124, 20513), (177, 20741), (180, 20759), (192, 20831), (201, 20897), (204, 20918), (206, 20930), (210, 20957), (220, 21029), (224, 21053), (227, 21071), (236, 21131),

Gene: Hans_37 Start: 31512, Stop: 32516, Start Num: 37

Candidate Starts for Hans_37:

(Start: 37 @31512 has 17 MA's), (58, 31626), (64, 31647), (77, 31692), (87, 31728), (121, 31875), (124, 31893), (167, 31998), (183, 32070), (190, 32124), (197, 32169), (207, 32238), (210, 32259), (214, 32283), (225, 32358), (236, 32436), (250, 32502),

Gene: HippoPololi_27 Start: 21407, Stop: 22510, Start Num: 26

Candidate Starts for HippoPololi_27:

(Start: 26 @21407 has 31 MA's), (31, 21443), (Start: 49 @21530 has 1 MA's), (57, 21575), (61, 21587), (Start: 62 @21590 has 1 MA's), (78, 21653), (82, 21668), (87, 21689), (96, 21728), (106, 21758), (121, 21842), (124, 21860), (132, 21896), (140, 21923), (155, 21971), (177, 22058), (195, 22163), (206, 22247), (207, 22253), (208, 22259), (212, 22286), (213, 22289), (215, 22304), (227, 22385), (229, 22391),

Gene: Horseradish_26 Start: 20064, Stop: 21086, Start Num: 26

Candidate Starts for Horseradish_26:

(20, 19995), (Start: 26 @20064 has 31 MA's), (28, 20082), (Start: 49 @20187 has 1 MA's), (121, 20499), (124, 20517), (127, 20526), (131, 20550), (162, 20565), (187, 20694), (195, 20745), (197, 20766), (206, 20829), (210, 20847), (215, 20880), (224, 20943), (242, 21039),

Gene: Hortense_26 Start: 22619, Stop: 23656, Start Num: 38

Candidate Starts for Hortense_26:

(Start: 38 @22619 has 17 MA's), (53, 22688), (55, 22694), (105, 22874), (111, 22895), (124, 22976), (130, 23003), (153, 23096), (180, 23204), (190, 23267), (200, 23342), (236, 23573),

Gene: Howe_26 Start: 22619, Stop: 23656, Start Num: 38

Candidate Starts for Howe_26:

(Start: 38 @22619 has 17 MA's), (53, 22688), (55, 22694), (105, 22874), (111, 22895), (124, 22976), (130, 23003), (153, 23096), (180, 23204), (190, 23267), (200, 23342), (236, 23573),

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

Candidate Starts for Huffy_31:

(Start: 44 @22562 has 3 MA's), (85, 22733), (104, 22802), (121, 22895), (124, 22913), (175, 23045), (178, 23060), (184, 23087), (193, 23150), (197, 23183), (202, 23216), (205, 23240), (221, 23345), (229, 23390), (234, 23420), (238, 23447), (240, 23456), (249, 23498),

Gene: Inspectinfecti_36 Start: 31874, Stop: 32962, Start Num: 37

Candidate Starts for Inspectinfecti_36:

(Start: 37 @31874 has 17 MA's), (58, 31988), (64, 32009), (77, 32054), (87, 32090), (124, 32255), (133, 32294), (141, 32336), (161, 32417), (167, 32444), (170, 32459), (190, 32570), (197, 32615), (203, 32663), (207, 32684), (210, 32705), (214, 32729), (236, 32882), (250, 32948),

Gene: KappaFarmDelta_30 Start: 23868, Stop: 24845, Start Num: 52

Candidate Starts for KappaFarmDelta_30:

(39, 23808), (Start: 52 @23868 has 8 MA's), (74, 23949), (Start: 83 @23982 has 1 MA's), (92, 24009), (111, 24075), (120, 24132), (124, 24156), (144, 24252), (179, 24387), (180, 24390), (190, 24453), (197, 24498), (207, 24567), (211, 24588), (236, 24759), (248, 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), (15, 22198), (16, 22207), (29, 22309), (59, 22462), (95, 22594), (97, 22600), (124, 22729), (144, 22825), (152, 22849), (154, 22852), (179, 22957), (180, 22960), (190, 23023), (211, 23158), (229, 23272), (236, 23329),

Gene: Leonard_35 Start: 31510, Stop: 32598, Start Num: 37

Candidate Starts for Leonard_35:

(Start: 37 @31510 has 17 MA's), (58, 31624), (64, 31645), (85, 31714), (87, 31726), (124, 31891), (133, 31930), (141, 31972), (161, 32053), (167, 32080), (170, 32095), (183, 32152), (190, 32206), (197, 32251), (207, 32320), (210, 32341), (214, 32365), (225, 32440), (236, 32518), (250, 32584),

Gene: Lilbeanie_32 Start: 26757, Stop: 27755, Start Num: 37

Candidate Starts for Lilbeanie_32:

(Start: 37 @26757 has 17 MA's), (58, 26865), (60, 26868), (63, 26877), (77, 26931), (81, 26943), (85, 26955), (93, 26985), (121, 27114), (124, 27132), (145, 27198), (148, 27204), (167, 27234), (190, 27360), (200, 27435), (210, 27495), (213, 27513), (236, 27669),

Gene: MScarn_27 Start: 20153, Stop: 21250, Start Num: 26

Candidate Starts for MScarn_27:

(20, 20084), (Start: 26 @20153 has 31 MA's), (28, 20171), (Start: 49 @20276 has 1 MA's), (99, 20483), (121, 20588), (124, 20606), (127, 20615), (139, 20669), (162, 20729), (187, 20858), (195, 20909), (206, 20993), (210, 21011), (215, 21044), (223, 21095), (224, 21107), (242, 21203), (249, 21239),

Gene: MaVan_27 Start: 21488, Stop: 22621, Start Num: 26

Candidate Starts for MaVan_27:

(Start: 26 @21488 has 31 MA's), (Start: 49 @21611 has 1 MA's), (82, 21749), (102, 21827), (106, 21839), (109, 21854), (121, 21923), (124, 21941), (129, 21965), (136, 22001), (155, 22082), (176, 22166), (206, 22358), (208, 22370), (210, 22382), (215, 22415), (220, 22454), (228, 22499), (249, 22610),

Gene: Mcklovin_26 Start: 24788, Stop: 25825, Start Num: 38

Candidate Starts for Mcklovin_26:

(11, 24617), (12, 24620), (Start: 38 @24788 has 17 MA's), (53, 24857), (55, 24863), (105, 25043), (111, 25064), (124, 25145), (130, 25172), (153, 25265), (180, 25373), (190, 25436), (200, 25511), (236, 25742),

Gene: MelBins_36 Start: 31659, Stop: 32747, Start Num: 37

Candidate Starts for MelBins_36:

(Start: 37 @31659 has 17 MA's), (58, 31773), (64, 31794), (77, 31839), (85, 31863), (87, 31875), (124, 32040), (133, 32079), (141, 32121), (161, 32202), (167, 32229), (170, 32244), (190, 32355), (197, 32400), (203, 32448), (207, 32469), (210, 32490), (214, 32514), (236, 32667), (250, 32733),

Gene: MichaelScott_26 Start: 22391, Stop: 23428, Start Num: 38

Candidate Starts for MichaelScott_26:

(11, 22220), (12, 22223), (Start: 38 @22391 has 17 MA's), (53, 22460), (55, 22466), (105, 22646), (111, 22667), (124, 22748), (130, 22775), (153, 22868), (180, 22976), (190, 23039), (200, 23114), (236, 23345),

Gene: Morrissey_26 Start: 20856, Stop: 22073, Start Num: 17

Candidate Starts for Morrissey_26:

(Start: 17 @20856 has 4 MA's), (Start: 26 @20922 has 31 MA's), (30, 20955), (45, 21018), (65, 21120), (87, 21207), (88, 21210), (90, 21216), (113, 21312), (116, 21333), (124, 21381), (176, 21609), (177, 21612), (192, 21702), (201, 21768), (204, 21789), (206, 21801), (210, 21828), (216, 21879), (220, 21900), (224, 21924), (227, 21942), (241, 22020),

Gene: MunkgeeRoachy_25 Start: 20565, Stop: 21695, Start Num: 26

Candidate Starts for MunkgeeRoachy_25:

(Start: 26 @20565 has 31 MA's), (28, 20583), (Start: 49 @20688 has 1 MA's), (96, 20886), (121, 21000), (124, 21018), (127, 21027), (139, 21081), (155, 21162), (162, 21174), (168, 21204), (195, 21354), (206, 21438), (210, 21456), (215, 21489), (222, 21537), (224, 21552), (242, 21648), (249, 21684),

Gene: Murp_29 Start: 23645, Stop: 24622, Start Num: 52

Candidate Starts for Murp_29:

(39, 23585), (Start: 52 @23645 has 8 MA's), (74, 23726), (Start: 83 @23759 has 1 MA's), (92, 23786), (103, 23825), (111, 23852), (120, 23909), (124, 23933), (176, 24146), (179, 24164), (180, 24167), (183, 24176), (190, 24230), (197, 24275), (207, 24344), (234, 24515), (236, 24536), (248, 24587),

Gene: Natkenzie_37 Start: 33084, Stop: 34160, Start Num: 37

Candidate Starts for Natkenzie_37:

(7, 32790), (24, 33018), (Start: 37 @33084 has 17 MA's), (58, 33192), (72, 33240), (77, 33258), (114, 33405), (117, 33417), (124, 33456), (133, 33495), (141, 33537), (158, 33603), (161, 33618), (167, 33645), (170, 33660), (190, 33771), (197, 33816), (200, 33846), (203, 33864), (207, 33885), (210, 33906), (214, 33930), (236, 34083), (250, 34149),

Gene: Nibbles_27 Start: 21488, Stop: 22621, Start Num: 26

Candidate Starts for Nibbles_27:

(Start: 26 @21488 has 31 MA's), (28, 21506), (Start: 49 @21611 has 1 MA's), (78, 21734), (82, 21749), (102, 21827), (106, 21839), (109, 21854), (121, 21923), (124, 21941), (129, 21965), (136, 22001), (155, 22082), (176, 22166), (206, 22358), (208, 22370), (210, 22382), (215, 22415), (220, 22454), (228, 22499), (249, 22610),

Gene: Nina_26 Start: 21560, Stop: 22657, Start Num: 26

Candidate Starts for Nina_26:

(Start: 26 @21560 has 31 MA's), (28, 21578), (Start: 49 @21683 has 1 MA's), (96, 21881), (124, 22013), (127, 22022), (130, 22040), (140, 22076), (162, 22136), (168, 22166), (195, 22316), (198, 22355), (206, 22400), (210, 22418), (214, 22442), (222, 22499), (232, 22559), (237, 22595), (245, 22625), (249, 22646),

Gene: Oregano_26 Start: 22056, Stop: 23096, Start Num: 38

Candidate Starts for Oregano_26:

(Start: 38 @22056 has 17 MA's), (53, 22125), (55, 22131), (105, 22311), (111, 22332), (112, 22341), (124, 22413), (130, 22440), (153, 22533), (180, 22641), (190, 22704), (207, 22818), (229, 22956), (236, 23013),

Gene: PCoral7_29 Start: 23615, Stop: 24595, Start Num: 52

Candidate Starts for PCoral7_29:

(39, 23555), (Start: 52 @23615 has 8 MA's), (Start: 83 @23726 has 1 MA's), (111, 23822), (118, 23870), (124, 23903), (130, 23930), (144, 23999), (153, 24023), (154, 24026), (176, 24116), (179, 24134), (180, 24137), (190, 24200), (200, 24275), (226, 24431), (236, 24506), (252, 24578), (253, 24587),

Gene: Petra_30 Start: 23485, Stop: 24351, Start Num: 83

Candidate Starts for Petra_30:

(39, 23311), (Start: 52 @23371 has 8 MA's), (74, 23452), (Start: 83 @23485 has 1 MA's), (92, 23512), (103, 23551), (111, 23578), (124, 23659), (130, 23686), (132, 23695), (144, 23755), (153, 23779), (154, 23782), (177, 23875), (179, 23890), (180, 23893), (190, 23956), (193, 23968), (197, 24001), (200, 24031), (226, 24187), (234, 24241), (236, 24262),

Gene: Phauci_28 Start: 28099, Stop: 29187, Start Num: 37

Candidate Starts for Phauci_28:

(Start: 37 @28099 has 17 MA's), (58, 28213), (64, 28234), (85, 28303), (87, 28315), (124, 28480), (133, 28519), (141, 28561), (161, 28642), (167, 28669), (170, 28684), (190, 28795), (197, 28840), (203, 28888), (207, 28909), (210, 28930), (214, 28954), (225, 29029), (236, 29107), (250, 29173),

Gene: Phinally_35 Start: 31507, Stop: 32595, Start Num: 37

Candidate Starts for Phinally_35:

(Start: 37 @31507 has 17 MA's), (58, 31621), (64, 31642), (85, 31711), (87, 31723), (124, 31888), (133, 31927), (141, 31969), (161, 32050), (167, 32077), (170, 32092), (183, 32149), (190, 32203), (197, 32248), (207, 32317), (210, 32338), (214, 32362), (225, 32437), (236, 32515), (250, 32581),

Gene: PhriskyACE_25 Start: 21473, Stop: 22513, Start Num: 38

Candidate Starts for PhriskyACE_25:

(Start: 38 @21473 has 17 MA's), (53, 21542), (55, 21548), (105, 21728), (124, 21830), (129, 21854), (130, 21857), (132, 21866), (154, 21953), (180, 22058), (188, 22097), (190, 22121), (197, 22166), (203, 22214), (205, 22223), (207, 22235), (209, 22250), (229, 22373), (236, 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), (29, 29102), (Start: 62 @29237 has 1 MA's), (80, 29303), (105, 29390), (124, 29492), (167, 29597), (190, 29723), (191, 29729), (207, 29837), (210, 29855), (248, 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), (29, 28412), (Start: 62 @28547 has 1 MA's), (80, 28613), (84, 28631), (99, 28682), (105, 28700), (124, 28802), (167, 28907), (190, 29033), (191, 29039), (207, 29147), (210, 29165), (248, 29390),

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

Candidate Starts for PotPie_25:

(Start: 50 @21139 has 6 MA's), (89, 21286), (101, 21328), (103, 21334), (104, 21337), (108, 21355), (118, 21412), (124, 21445), (159, 21574), (161, 21583), (176, 21652), (181, 21676), (190, 21736), (200, 21811), (210, 21871), (211, 21874), (229, 21991), (234, 22024), (239, 22060), (248, 22096), (249, 22102), (251, 22114),

Gene: PrincePatrick_28 Start: 23694, Stop: 24674, Start Num: 52

Candidate Starts for PrincePatrick_28:

(39, 23634), (Start: 52 @23694 has 8 MA's), (Start: 83 @23805 has 1 MA's), (111, 23901), (118, 23949), (124, 23982), (130, 24009), (132, 24018), (144, 24078), (153, 24102), (154, 24105), (176, 24195), (179, 24213), (180, 24216), (190, 24279), (200, 24354), (226, 24510), (236, 24585), (248, 24636),

Gene: PsychoKiller_25 Start: 20517, Stop: 21614, Start Num: 26

Candidate Starts for PsychoKiller_25:

(Start: 26 @20517 has 31 MA's), (28, 20535), (Start: 49 @20640 has 1 MA's), (96, 20838), (124, 20970), (127, 20979), (130, 20997), (140, 21033), (162, 21093), (168, 21123), (195, 21273), (198, 21312), (206, 21357), (210, 21375), (222, 21456), (232, 21516), (237, 21552), (245, 21582), (249, 21603),

Gene: Puppies_25 Start: 19683, Stop: 20918, Start Num: 17

Candidate Starts for Puppies_25:

(Start: 17 @19683 has 4 MA's), (30, 19794), (36, 19812), (45, 19857), (53, 19902), (65, 19959), (73, 19989), (75, 20001), (93, 20064), (Start: 98 @20088 has 1 MA's), (110, 20133), (119, 20187), (122, 20202), (123, 20205), (126, 20220), (138, 20280), (162, 20376), (171, 20424), (172, 20427), (208, 20658), (218, 20733), (232, 20817), (247, 20892), (248, 20898),

Gene: Quasar_25 Start: 21126, Stop: 22223, Start Num: 26

Candidate Starts for Quasar_25:

(Start: 26 @21126 has 31 MA's), (28, 21144), (Start: 49 @21249 has 1 MA's), (96, 21447), (121, 21561), (124, 21579), (127, 21588), (130, 21606), (140, 21642), (162, 21702), (168, 21732), (195, 21882), (198, 21921), (206, 21966), (210, 21984), (214, 22008), (222, 22065), (232, 22125), (237, 22161), (245, 22191), (249, 22212),

Gene: RedBaron_26 Start: 20561, Stop: 21658, Start Num: 26

Candidate Starts for RedBaron_26:

(Start: 26 @20561 has 31 MA's), (28, 20579), (Start: 49 @20684 has 1 MA's), (96, 20882), (124, 21014), (127, 21023), (130, 21041), (140, 21077), (162, 21137), (195, 21317), (198, 21356), (206, 21401), (210, 21419), (214, 21443), (222, 21500), (232, 21560), (237, 21596), (245, 21626), (249, 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), (29, 29241), (Start: 62 @29376 has 1 MA's), (80, 29442), (105, 29529), (124, 29631), (167, 29736), (190, 29862), (191, 29868), (207, 29976), (210, 29994), (248, 30219),

Gene: Samman98_26 Start: 22025, Stop: 23065, Start Num: 38

Candidate Starts for Samman98_26:

(Start: 38 @22025 has 17 MA's), (53, 22094), (55, 22100), (105, 22280), (124, 22382), (129, 22406), (130, 22409), (132, 22418), (154, 22505), (180, 22610), (188, 22649), (190, 22673), (197, 22718), (203, 22766), (205, 22775), (207, 22787), (209, 22802), (229, 22925), (236, 22982),

Gene: Sampson_37 Start: 33029, Stop: 34105, Start Num: 37

Candidate Starts for Sampson_37:

(7, 32735), (24, 32963), (Start: 37 @33029 has 17 MA's), (58, 33137), (72, 33185), (77, 33203), (114, 33350), (117, 33362), (124, 33401), (133, 33440), (141, 33482), (158, 33548), (161, 33563), (167, 33590), (170, 33605), (190, 33716), (197, 33761), (200, 33791), (203, 33809), (207, 33830), (210, 33851), (214, 33875), (236, 34028), (250, 34094),

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

Candidate Starts for Sapo_25:

(Start: 98 @21383 has 1 MA's), (109, 21425), (115, 21461), (135, 21551), (147, 21626), (151, 21629), (176, 21722), (199, 21878), (206, 21917), (229, 22055), (233, 22085), (235, 22094), (245, 22142),

Gene: Scioto_37 Start: 33084, Stop: 34160, Start Num: 37

Candidate Starts for Scioto_37:

(7, 32790), (24, 33018), (Start: 37 @33084 has 17 MA's), (58, 33192), (72, 33240), (77, 33258), (114, 33405), (117, 33417), (124, 33456), (133, 33495), (141, 33537), (158, 33603), (161, 33618), (167, 33645), (170, 33660), (190, 33771), (197, 33816), (200, 33846), (203, 33864), (207, 33885), (210, 33906), (214, 33930), (236, 34083), (250, 34149),

Gene: Sekhmet_26 Start: 22385, Stop: 23425, Start Num: 38

Candidate Starts for Sekhmet_26:

(Start: 38 @22385 has 17 MA's), (53, 22454), (55, 22460), (105, 22640), (124, 22742), (129, 22766), (130, 22769), (132, 22778), (154, 22865), (180, 22970), (188, 23009), (190, 23033), (197, 23078), (203, 23126), (205, 23135), (207, 23147), (209, 23162), (229, 23285), (236, 23342),

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

Candidate Starts for SheckWes_25:

(Start: 50 @20283 has 6 MA's), (89, 20430), (101, 20472), (104, 20481), (108, 20499), (118, 20556), (124, 20589), (133, 20628), (159, 20718), (161, 20727), (176, 20796), (181, 20820), (190, 20880), (200, 20955), (210, 21015), (211, 21018), (229, 21135), (234, 21168), (239, 21204), (248, 21240), (249, 21246), (251, 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), (29, 28353), (Start: 62 @28488 has 1 MA's), (80, 28554), (84, 28572), (99, 28623), (105, 28641), (124, 28743), (167, 28848), (190, 28974), (191, 28980), (207, 29088), (210, 29106), (248, 29331),

Gene: Shlim410_26 Start: 22619, Stop: 23656, Start Num: 38

Candidate Starts for Shlim410_26:

(Start: 38 @22619 has 17 MA's), (53, 22688), (55, 22694), (105, 22874), (111, 22895), (124, 22976), (130, 23003), (153, 23096), (180, 23204), (190, 23267), (200, 23342), (236, 23573),

Gene: SketchMex_24 Start: 20168, Stop: 21265, Start Num: 26

Candidate Starts for SketchMex_24:

(20, 20099), (Start: 26 @20168 has 31 MA's), (28, 20186), (Start: 49 @20291 has 1 MA's), (99, 20498), (121, 20603), (124, 20621), (127, 20630), (139, 20684), (162, 20744), (187, 20873), (195, 20924), (206, 21008), (210, 21026), (215, 21059), (223, 21110), (224, 21122), (242, 21218), (249, 21254),

Gene: Sopespian_25 Start: 20518, Stop: 21615, Start Num: 26

Candidate Starts for Sopespian_25:

(Start: 26 @20518 has 31 MA's), (28, 20536), (Start: 49 @20641 has 1 MA's), (96, 20839), (124, 20971), (127, 20980), (130, 20998), (140, 21034), (162, 21094), (168, 21124), (195, 21274), (198,

21313), (206, 21358), (210, 21376), (214, 21400), (222, 21457), (232, 21517), (237, 21553), (245, 21583), (249, 21604),

Gene: Splinter_29 Start: 22610, Stop: 23578, Start Num: 41

Candidate Starts for Splinter_29:

(14, 22433), (35, 22577), (40, 22601), (Start: 41 @22610 has 3 MA's), (Start: 44 @22625 has 3 MA's), (85, 22796), (86, 22805), (104, 22865), (121, 22958), (124, 22976), (132, 23012), (133, 23015), (144, 23030), (182, 23138), (184, 23150), (193, 23216), (197, 23249), (206, 23312), (213, 23354), (214, 23360), (216, 23387), (217, 23390), (220, 23408), (221, 23411), (227, 23450), (229, 23456), (234, 23489), (249, 23567),

Gene: SteamedHams_27 Start: 20181, Stop: 21269, Start Num: 26

Candidate Starts for SteamedHams_27:

(25, 20178), (Start: 26 @20181 has 31 MA's), (28, 20199), (Start: 49 @20304 has 1 MA's), (78, 20427), (121, 20616), (124, 20634), (127, 20643), (128, 20655), (164, 20766), (176, 20820), (180, 20841), (195, 20928), (206, 21012), (210, 21030), (215, 21063), (224, 21126), (227, 21144), (228, 21147), (229, 21150), (237, 21207), (249, 21258),

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

Candidate Starts for SummitAcademy_25:

(Start: 50 @20359 has 6 MA's), (89, 20506), (104, 20557), (108, 20575), (118, 20632), (124, 20665), (159, 20794), (161, 20803), (176, 20872), (181, 20896), (190, 20956), (200, 21031), (210, 21091), (211, 21094), (229, 21211), (234, 21244), (239, 21280), (248, 21316), (249, 21322), (251, 21334),

Gene: Survivors_27 Start: 21337, Stop: 22437, Start Num: 26

Candidate Starts for Survivors_27:

(Start: 26 @21337 has 31 MA's), (28, 21355), (Start: 49 @21460 has 1 MA's), (82, 21598), (102, 21676), (106, 21688), (109, 21703), (121, 21772), (124, 21790), (129, 21814), (176, 21982), (206, 22174), (209, 22195), (210, 22198), (215, 22231), (224, 22294), (227, 22312), (229, 22318), (249, 22426),

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

Candidate Starts for TZGordon_31:

(Start: 44 @22485 has 3 MA's), (85, 22656), (104, 22725), (121, 22818), (124, 22836), (175, 22968), (178, 22983), (184, 23010), (193, 23073), (197, 23106), (202, 23139), (205, 23163), (221, 23268), (229, 23313), (234, 23343), (238, 23370), (240, 23379), (249, 23421),

Gene: Tardus_38 Start: 32448, Stop: 33524, Start Num: 37

Candidate Starts for Tardus_38:

(Start: 37 @32448 has 17 MA's), (58, 32556), (72, 32604), (77, 32622), (114, 32769), (117, 32781), (124, 32820), (133, 32859), (141, 32901), (158, 32967), (161, 32982), (167, 33009), (170, 33024), (183, 33081), (190, 33135), (197, 33180), (207, 33249), (210, 33270), (214, 33294), (225, 33369), (236, 33447), (250, 33513),

Gene: TinaLin_31 Start: 22732, Stop: 23730, Start Num: 43

Candidate Starts for TinaLin_31:

(42, 22729), (Start: 43 @22732 has 3 MA's), (79, 22879), (85, 22900), (100, 22957), (104, 22969), (124, 23080), (175, 23263), (190, 23356), (196, 23392), (197, 23401), (213, 23506), (214, 23512), (216, 23539), (217, 23542), (237, 23668), (243, 23686), (244, 23695), (249, 23719),

Gene: Toast_29 Start: 23615, Stop: 24595, Start Num: 52

Candidate Starts for Toast_29:

(39, 23555), (Start: 52 @23615 has 8 MA's), (Start: 83 @23726 has 1 MA's), (111, 23822), (118, 23870), (124, 23903), (130, 23930), (144, 23999), (153, 24023), (154, 24026), (176, 24116), (179, 24134), (180, 24137), (190, 24200), (200, 24275), (226, 24431), (236, 24506), (252, 24578), (253, 24587),

Gene: Tolls_27 Start: 20184, Stop: 21263, Start Num: 26

Candidate Starts for Tolls_27:

(25, 20181), (Start: 26 @20184 has 31 MA's), (28, 20202), (Start: 49 @20307 has 1 MA's), (78, 20430), (106, 20535), (121, 20619), (124, 20637), (129, 20661), (160, 20742), (164, 20760), (176, 20814), (195, 20922), (206, 21006), (210, 21024), (215, 21057), (224, 21120), (227, 21138), (228, 21141), (229, 21144), (237, 21201),

Gene: Troje_25 Start: 20150, Stop: 21247, Start Num: 26

Candidate Starts for Troje_25:

(20, 20081), (Start: 26 @20150 has 31 MA's), (28, 20168), (Start: 49 @20273 has 1 MA's), (99, 20480), (121, 20585), (124, 20603), (127, 20612), (139, 20666), (162, 20726), (187, 20855), (195, 20906), (206, 20990), (210, 21008), (215, 21041), (223, 21092), (224, 21104), (242, 21200), (249, 21236),

Gene: Twinkle_26 Start: 23678, Stop: 24715, Start Num: 38

Candidate Starts for Twinkle_26:

(Start: 38 @23678 has 17 MA's), (53, 23747), (55, 23753), (105, 23933), (111, 23954), (124, 24035), (130, 24062), (153, 24155), (180, 24263), (190, 24326), (200, 24401), (236, 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), (29, 28804), (Start: 62 @28939 has 1 MA's), (80, 29005), (105, 29092), (124, 29194), (167, 29299), (190, 29425), (191, 29431), (207, 29539), (210, 29557), (248, 29782),

Gene: Typhonomachy_26 Start: 20517, Stop: 21647, Start Num: 26

Candidate Starts for Typhonomachy_26:

(Start: 26 @20517 has 31 MA's), (28, 20535), (Start: 49 @20640 has 1 MA's), (96, 20838), (121, 20952), (124, 20970), (127, 20979), (139, 21033), (155, 21114), (162, 21126), (169, 21159), (195, 21306), (198, 21345), (206, 21390), (210, 21408), (214, 21432), (222, 21489), (232, 21549), (237, 21585), (245, 21615), (249, 21636),

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

Candidate Starts for VanDeWege_36:

(Start: 10 @28981 has 13 MA's), (29, 29140), (Start: 62 @29275 has 1 MA's), (80, 29341), (105, 29428), (124, 29530), (167, 29635), (190, 29761), (191, 29767), (207, 29875), (210, 29893), (248, 30118),

Gene: Vendetta_29 Start: 22610, Stop: 23578, Start Num: 41

Candidate Starts for Vendetta_29:

(14, 22433), (35, 22577), (40, 22601), (Start: 41 @22610 has 3 MA's), (Start: 44 @22625 has 3 MA's), (86, 22805), (104, 22865), (121, 22958), (124, 22976), (132, 23012), (133, 23015), (144, 23030), (182, 23138), (184, 23150), (193, 23216), (197, 23249), (206, 23312), (213, 23354), (214, 23360), (216, 23387), (217, 23390), (220, 23408), (221, 23411), (227, 23450), (229, 23456), (234, 23489), (249, 23567),

Gene: Verity_36 Start: 33271, Stop: 34347, Start Num: 37

Candidate Starts for Verity_36:

(Start: 37 @33271 has 17 MA's), (58, 33379), (71, 33424), (77, 33445), (114, 33592), (124, 33643), (133, 33682), (141, 33724), (158, 33790), (161, 33805), (167, 33832), (170, 33847), (183, 33904), (190, 33958), (191, 33964), (197, 34003), (207, 34072), (210, 34093), (214, 34117), (225, 34192), (236, 34270), (250, 34336),

Gene: ViaConlectus_37 Start: 31720, Stop: 32796, Start Num: 37

Candidate Starts for ViaConlectus_37:

(7, 31426), (24, 31654), (Start: 37 @31720 has 17 MA's), (58, 31828), (72, 31876), (77, 31894), (114, 32041), (117, 32053), (124, 32092), (133, 32131), (141, 32173), (158, 32239), (161, 32254), (167, 32281), (170, 32296), (190, 32407), (197, 32452), (200, 32482), (203, 32500), (207, 32521), (214, 32566), (236, 32719), (250, 32785),

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

Candidate Starts for Vine_26:

(Start: 50 @21286 has 6 MA's), (101, 21475), (124, 21592), (159, 21721), (161, 21730), (176, 21799), (181, 21823), (190, 21883), (200, 21958), (210, 22018), (211, 22021), (234, 22168), (239, 22204), (248, 22240), (251, 22258),

Gene: Widow_25 Start: 19674, Stop: 20909, Start Num: 17

Candidate Starts for Widow_25:

(Start: 17 @19674 has 4 MA's), (30, 19785), (33, 19794), (36, 19803), (45, 19848), (53, 19893), (65, 19950), (73, 19980), (75, 19992), (93, 20055), (Start: 98 @20079 has 1 MA's), (110, 20124), (119, 20178), (122, 20193), (123, 20196), (126, 20211), (138, 20271), (162, 20367), (171, 20415), (172, 20418), (208, 20649), (218, 20724), (232, 20808), (247, 20883), (248, 20889),

Gene: William_29 Start: 23441, Stop: 24427, Start Num: 52

Candidate Starts for William_29:

(39, 23381), (Start: 52 @23441 has 8 MA's), (68, 23504), (Start: 83 @23552 has 1 MA's), (111, 23648), (124, 23729), (125, 23732), (130, 23756), (144, 23825), (154, 23852), (179, 23960), (180, 23963), (190, 24026), (193, 24038), (200, 24101), (214, 24182), (217, 24212), (236, 24332),

Gene: WinkNick_26 Start: 22010, Stop: 23047, Start Num: 38

Candidate Starts for WinkNick_26:

(11, 21839), (12, 21842), (Start: 38 @22010 has 17 MA's), (53, 22079), (55, 22085), (105, 22265), (111, 22286), (124, 22367), (130, 22394), (153, 22487), (180, 22595), (190, 22658), (200, 22733), (236, 22964),

Gene: Wocket_30 Start: 24063, Stop: 25040, Start Num: 52

Candidate Starts for Wocket_30:

(39, 24003), (Start: 52 @24063 has 8 MA's), (74, 24144), (Start: 83 @24177 has 1 MA's), (92, 24204), (111, 24270), (120, 24327), (124, 24351), (179, 24582), (180, 24585), (190, 24648), (197, 24693), (207, 24762), (236, 24954), (248, 25005),

Gene: Yarn_24 Start: 20174, Stop: 21286, Start Num: 26

Candidate Starts for Yarn_24:

(Start: 26 @20174 has 31 MA's), (28, 20192), (Start: 49 @20297 has 1 MA's), (78, 20420), (121, 20609), (124, 20627), (127, 20636), (128, 20648), (156, 20753), (176, 20837), (195, 20945), (206, 21029), (210, 21047), (215, 21080), (224, 21143), (227, 21161), (228, 21164), (229, 21167), (237, 21224),

Gene: Yummy_26 Start: 20064, Stop: 21200, Start Num: 26

Candidate Starts for Yummy_26:

(20, 19995), (Start: 26 @20064 has 31 MA's), (28, 20082), (Start: 49 @20187 has 1 MA's), (121, 20499), (124, 20517), (127, 20526), (131, 20550), (137, 20577), (162, 20679), (187, 20808), (195, 20859), (197, 20880), (206, 20943), (210, 20961), (215, 20994), (224, 21057), (242, 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), (29, 29859), (34, 29880), (69, 30024), (80, 30060), (105, 30147), (124, 30249), (130, 30276), (144, 30357), (176, 30480), (177, 30483), (180, 30501), (191, 30570), (207, 30678),

Gene: Zareef_29 Start: 21489, Stop: 22589, Start Num: 26

Candidate Starts for Zareef_29:

(Start: 26 @21489 has 31 MA's), (28, 21507), (Start: 49 @21612 has 1 MA's), (82, 21750), (102, 21828), (106, 21840), (109, 21855), (121, 21924), (124, 21942), (129, 21966), (176, 22134), (206, 22326), (209, 22347), (210, 22350), (215, 22383), (224, 22446), (227, 22464), (229, 22470), (249, 22578),

Gene: Zipp_36 Start: 33174, Stop: 34250, Start Num: 37

Candidate Starts for Zipp_36:

(Start: 37 @33174 has 17 MA's), (58, 33282), (72, 33330), (77, 33348), (114, 33495), (117, 33507), (124, 33546), (133, 33585), (141, 33627), (158, 33693), (161, 33708), (167, 33735), (170, 33750), (183, 33807), (190, 33861), (197, 33906), (207, 33975), (210, 33996), (214, 34020), (225, 34095), (236, 34173), (250, 34239),

Gene: Zitch_38 Start: 31061, Stop: 32053, Start Num: 37

Candidate Starts for Zitch_38:

(Start: 37 @31061 has 17 MA's), (58, 31169), (72, 31217), (77, 31235), (114, 31382), (117, 31394), (121, 31415), (124, 31433), (167, 31538), (183, 31610), (190, 31664), (197, 31709), (207, 31778), (210, 31799), (214, 31823), (225, 31898), (236, 31976), (250, 32042),