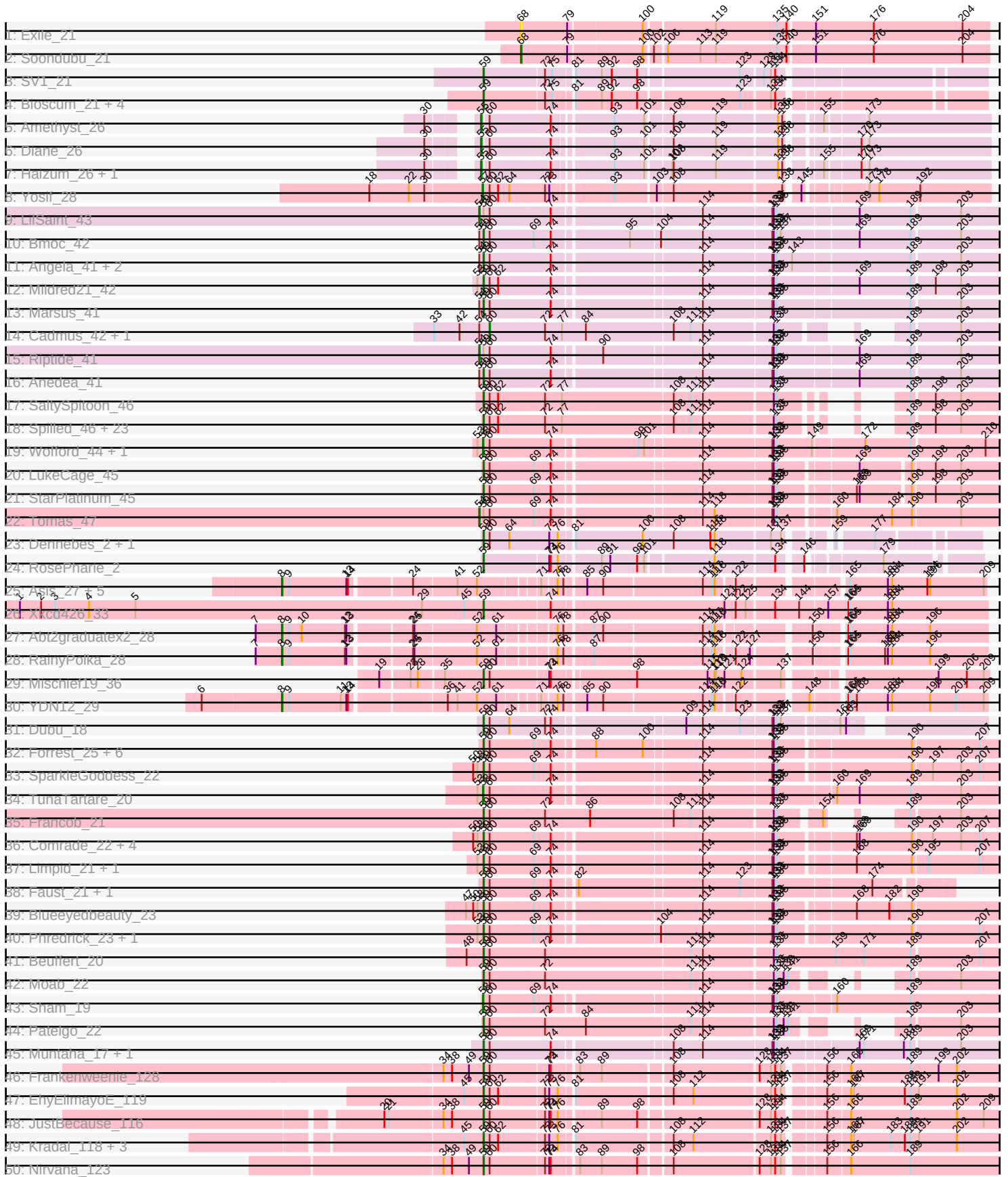
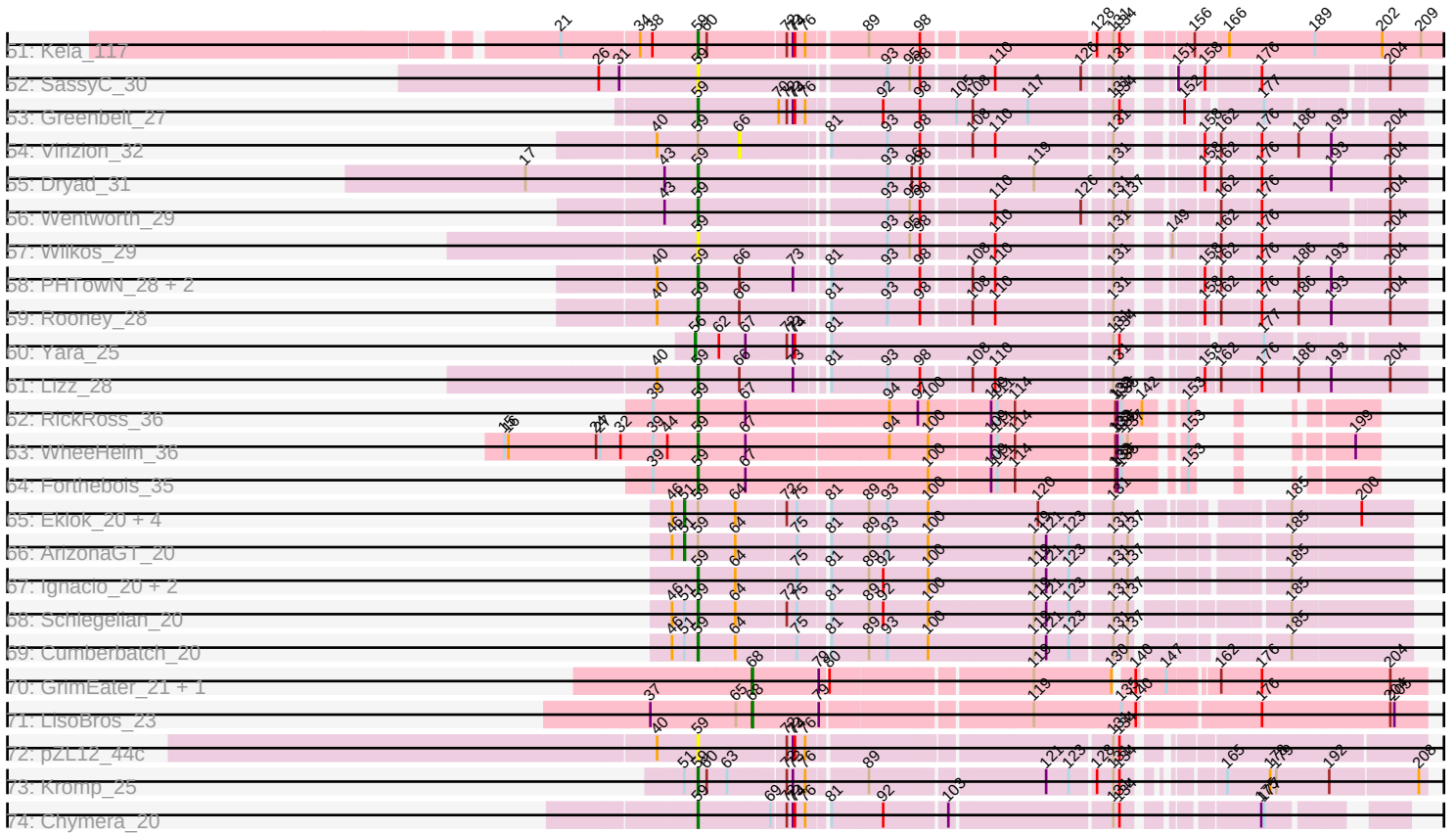


Pham 330590



Pham 330590



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 330590 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330590 has 138 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Exile_21
- Track 2 : Soondubu_21
- Track 3 : SV1_21
- Track 4 : Bioscum_21, PapayaSalad_21, Austintatious_21, Lishka_21, Ididsumtinwong_21
- Track 5 : Amethyst_26
- Track 6 : Diane_26
- Track 7 : Haizum_26, Nishikigoi_26
- Track 8 : Yosif_28
- Track 9 : LilSaint_43
- Track 10 : Bmoc_42
- Track 11 : Angela_41, MulchMansion_41, LilMartin_41
- Track 12 : Mildred21_42
- Track 13 : Marsus_41
- Track 14 : Cadmus_42, Daubenski_45
- Track 15 : Riptide_41
- Track 16 : Anedea_41
- Track 17 : SaltySpittoon_46
- Track 18 : Spilled_46, CeilingFan_45, Jollison_45, Karimac_45, Brizzy_45, TomSawyer_44, Rikishi_46, Gibbi_49, AcciDwight_50, Wipeout_44, JimJam_46, Bordeaux_44, Birchlyn_43, KentuckyRacer_46, Amabiko_46, Daisy123_50, Starbow_44, MindFlayer_44, Spelly_46, Quarant19_46, IchabodCrane_43, PumpkinSpice_45, Battuta_44, Tuesday_50
- Track 19 : Wofford_44, Elmer_48
- Track 20 : LukeCage_45
- Track 21 : StarPlatinum_45
- Track 22 : Tomas_47
- Track 23 : Dennebes_2, Rideau_3
- Track 24 : RosePharie_2
- Track 25 : Asis_27, BayC_27, Maih_27, Salete_27, TP1604_27, BabyGotBac_27
- Track 26 : Xkcd426_33
- Track 27 : Abt2graduatex2_28
- Track 28 : RainyPolka_28
- Track 29 : Mischief19_36
- Track 30 : YDN12_29
- Track 31 : Dubu_18

- Track 32 : Forrest_25, Maupel_25, MeganTheeKilla_23, Gilson_25, DeluluLabubu_23, Jada_23, Emma1919_25
- Track 33 : SparkleGoddess_22
- Track 34 : TunaTartare_20
- Track 35 : Francob_21
- Track 36 : Comrade_22, Karp_21, Belfort_23, Stigma_22, Westy_22
- Track 37 : Limpid_21, Annadreamy_21
- Track 38 : Faust_21, SeresaTree_21
- Track 39 : Blueeyedbeauty_23
- Track 40 : Phredrick_23, Kenrey_25
- Track 41 : Beuffert_20
- Track 42 : Moab_22
- Track 43 : Sham_19
- Track 44 : Patelgo_22
- Track 45 : Muntaha_17, Wakanda_17
- Track 46 : Frankenweenie_128
- Track 47 : EhyElimayoE_119
- Track 48 : JustBecause_116
- Track 49 : Kradal_118, Satis_118, Quantum_117, Sarkar_118
- Track 50 : Nirvana_123
- Track 51 : Kela_117
- Track 52 : SassyC_30
- Track 53 : Greenbelt_27
- Track 54 : Virizion_32
- Track 55 : Dryad_31
- Track 56 : Wentworth_29
- Track 57 : Wilkos_29
- Track 58 : PHTowN_28, Gibson_28, ShakeNBake_28
- Track 59 : Rooney_28
- Track 60 : Yara_25
- Track 61 : Lizz_28
- Track 62 : RickRoss_36
- Track 63 : WheeHeim_36
- Track 64 : Forthebois_35
- Track 65 : Eklok_20, AxeJC_20, FrumpyGal_20, Piccadilly_20, Eastland_20
- Track 66 : ArizonaGT_20
- Track 67 : Ignacio_20, Vondra_20, HFrancette_20
- Track 68 : Schlegelian_20
- Track 69 : Cumberbatch_20
- Track 70 : GrimEater_21, Jankie_21
- Track 71 : LisoBros_23
- Track 72 : pZL12_44c
- Track 73 : Kromp_25
- Track 74 : Chymera_20

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

The start number called the most often in the published annotations is 59, it was called in 92 of the 126 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AcciDwight_50, Amabiko_46, Anedea_41, Angela_41, Annadreamy_21, Austintatious_21, Battuta_44, Belfort_23, Beuffert_20, Bioscum_21, Birchlyn_43, Blueeyedbeauty_23, Bmoc_42, Bordeaux_44, Brizzy_45, CeilingFan_45, Chymera_20, Comrade_22, Cumberbatch_20, Daisy123_50, DeluluLabubu_23, Dennebes_2, Dryad_31, Dubu_18, EhyElimayoE_119, Emma1919_25, Faust_21, Forrest_25, Forthebois_35, Francob_21, Frankenweenie_128, Gibbi_49, Gibson_28, Gilson_25, Greenbelt_27, HFrancette_20, IchabodCrane_43, Ididsumtinwong_21, Ignacio_20, Jada_23, JimJam_46, Jollison_45, JustBecause_116, Karimac_45, Karp_21, Kela_117, Kenrey_25, KentuckyRacer_46, Kradal_118, Kromp_25, LilMartin_41, Limpid_21, Lishka_21, Lizz_28, LukeCage_45, Marsus_41, Maupel_25, MeganTheeKilla_23, Mildred21_42, MindFlayer_44, Mischief19_36, Moab_22, MulchMansion_41, Muntaha_17, Nirvana_123, PHTown_28, PapayaSalad_21, Patelgo_22, Phredrick_23, PumpkinSpice_45, Quantum_117, Quarant19_46, RickRoss_36, Rideau_3, Rikishi_46, Rooney_28, RosePharie_2, SV1_21, SaltySpittoon_46, Sarkar_118, SassyC_30, Satis_118, Schlegelian_20, SeresaTree_21, ShakeNBake_28, SparkleGoddess_22, Spelly_46, Spilled_46, StarPlatinum_45, Starbow_44, Stigma_22, TomSawyer_44, Tuesday_50, Vondra_20, Wakanda_17, Wentworth_29, Westy_22, WheeHeim_36, Wilkos_29, Wipeout_44, Xkcd426_33, pZL12_44c,

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

- ArizonaGT_20, AxeJC_20, Eastland_20, Eklok_20, FrumpyGal_20, LilSaint_43, Piccadilly_20, Riptide_41, Tomas_47, Virizion_32,

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

- Abt2graduatex2_28, Amethyst_26, Asis_27, BabyGotBac_27, BayC_27, Cadmus_42, Daubenski_45, Diane_26, Elmer_48, Exile_21, GrimEater_21, Haizum_26, Jankie_21, LisoBros_23, Maih_27, Nishikigoi_26, RainyPolka_28, Salete_27, Sham_19, Soondubu_21, TP1604_27, TunaTartare_20, Wofford_44, YDN12_29, Yara_25, Yosif_28,

Summary by start number:

Start 8:

- Found in 9 of 138 (6.5%) of genes in pham
- Manual Annotations of this start: 9 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abt2graduatex2_28 (BG), Asis_27 (BG), BabyGotBac_27 (BG), BayC_27 (BG), Maih_27 (BG), RainyPolka_28 (BG), Salete_27 (BG), TP1604_27 (BG), YDN12_29 (BG),

Start 51:

- Found in 9 of 138 (6.5%) of genes in pham
- Manual Annotations of this start: 6 of 126
- Called 66.7% of time when present
- Phage (with cluster) where this start called: ArizonaGT_20 (BP), AxeJC_20 (BP), Eastland_20 (BP), Eklok_20 (BP), FrumpyGal_20 (BP), Piccadilly_20 (BP),

Start 54:

- Found in 11 of 138 (8.0%) of genes in pham
- Manual Annotations of this start: 3 of 126
- Called 27.3% of time when present

- Phage (with cluster) where this start called: LilSaint_43 (BE1), Riptide_41 (BE1), Tomas_47 (BE2),

Start 55:

- Found in 4 of 138 (2.9%) of genes in pham
- Manual Annotations of this start: 4 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amethyst_26 (BD2), Diane_26 (BD2), Haizum_26 (BD2), Nishikigoi_26 (BD2),

Start 56:

- Found in 1 of 138 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yara_25 (BN),

Start 57:

- Found in 1 of 138 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yosif_28 (BD3),

Start 58:

- Found in 4 of 138 (2.9%) of genes in pham
- Manual Annotations of this start: 4 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elmer_48 (BE2), Sham_19 (BK1), TunaTartare_20 (BK1), Wofford_44 (BE2),

Start 59:

- Found in 112 of 138 (81.2%) of genes in pham
- Manual Annotations of this start: 92 of 126
- Called 91.1% of time when present
- Phage (with cluster) where this start called: AcciDwight_50 (BE2), Amabiko_46 (BE2), Anedea_41 (BE1), Angela_41 (BE1), Annadreamy_21 (BK1), Austintatious_21 (BC3), Battuta_44 (BE2), Belfort_23 (BK1), Beuffert_20 (BK1), Bioscum_21 (BC3), Birchlyn_43 (BE2), Blueeyedbeauty_23 (BK1), Bmoc_42 (BE1), Bordeaux_44 (BE2), Brizzy_45 (BE2), CeilingFan_45 (BE2), Chymera_20 (singleton), Comrade_22 (BK1), Cumberbatch_20 (BP), Daisy123_50 (BE2), DeluluLabubu_23 (BK1), Dennebes_2 (BF), Dryad_31 (BN), Dubu_18 (BJ), EhyElimayoE_119 (BM), Emma1919_25 (BK1), Faust_21 (BK1), Forrest_25 (BK1), Forthebois_35 (BO), Francob_21 (BK1), Frankenweenie_128 (BM), Gibbi_49 (BE2), Gibson_28 (BN), Gilson_25 (BK1), Greenbelt_27 (BN), HFrancette_20 (BP), IchabodCrane_43 (BE2), Ididsumtinwong_21 (BC3), Ignacio_20 (BP), Jada_23 (BK1), JimJam_46 (BE2), Jollison_45 (BE2), JustBecause_116 (BM), Karimac_45 (BE2), Karp_21 (BK1), Kela_117 (BM), Kenrey_25 (BK1), KentuckyRacer_46 (BE2), Kradal_118 (BM), Kromp_25 (singleton), LilMartin_41 (BE1), Limpid_21 (BK1), Lishka_21 (BC3), Lizz_28 (BN), LukeCage_45 (BE2), Marsus_41 (BE1), Maupel_25 (BK1), MeganTheeKilla_23 (BK1), Mildred21_42 (BE1), MindFlayer_44 (BE2), Mischief19_36 (BG), Moab_22 (BK1), MulchMansion_41 (BE1), Muntaha_17 (BK2), Nirvana_123 (BM), PHTowN_28 (BN), PapayaSalad_21 (BC3), Patelgo_22 (BK1), Phredrick_23 (BK1), PumpkinSpice_45 (BE2), Quantum_117 (BM), Quarant19_46 (BE2), RickRoss_36 (BO), Rideau_3 (BF), Rikishi_46 (BE2), Rooney_28 (BN),

RosePharie_2 (BF), SV1_21 (BC1), SaltySpittoon_46 (BE2), Sarkar_118 (BM), SassyC_30 (BN), Satis_118 (BM), Schlegelian_20 (BP), SeresaTree_21 (BK1), ShakeNBake_28 (BN), SparkleGoddess_22 (BK1), Spelly_46 (BE2), Spilled_46 (BE2), StarPlatinum_45 (BE2), Starbow_44 (BE2), Stigma_22 (BK1), TomSawyer_44 (BE2), Tuesday_50 (BE2), Vondra_20 (BP), Wakanda_17 (BK2), Wentworth_29 (BN), Westy_22 (BK1), WheeHeim_36 (BO), Wilkos_29 (BN), Wipeout_44 (BE2), Xkcd426_33 (BG), pZL12_44c (singleton),

Start 60:

- Found in 88 of 138 (63.8%) of genes in pham
- Manual Annotations of this start: 2 of 126
- Called 2.3% of time when present
- Phage (with cluster) where this start called: Cadmus_42 (BE1), Daubenski_45 (BE1),

Start 66:

- Found in 6 of 138 (4.3%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Virizion_32 (BN),

Start 68:

- Found in 5 of 138 (3.6%) of genes in pham
- Manual Annotations of this start: 4 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Exile_21 (AZ6), GrimEater_21 (FP), Jankie_21 (FP), LisoBros_23 (FP), Soondubu_21 (AZ6),

Summary by clusters:

There are 18 clusters represented in this pham: FP, singleton, BG, BK2, BM, BN, BO, BF, BJ, BP, BK1, BD3, BD2, BE2, BE1, BC1, AZ6, BC3,

Info for manual annotations of cluster AZ6:

- Start number 68 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster BC1:

- Start number 59 was manually annotated 1 time for cluster BC1.

Info for manual annotations of cluster BC3:

- Start number 59 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BD2:

- Start number 55 was manually annotated 4 times for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 57 was manually annotated 1 time for cluster BD3.

Info for manual annotations of cluster BE1:

- Start number 54 was manually annotated 2 times for cluster BE1.
- Start number 59 was manually annotated 7 times for cluster BE1.
- Start number 60 was manually annotated 2 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 54 was manually annotated 1 time for cluster BE2.
- Start number 58 was manually annotated 2 times for cluster BE2.
- Start number 59 was manually annotated 23 times for cluster BE2.

Info for manual annotations of cluster BF:

- Start number 59 was manually annotated 2 times for cluster BF.

Info for manual annotations of cluster BG:

- Start number 8 was manually annotated 9 times for cluster BG.
- Start number 59 was manually annotated 2 times for cluster BG.

Info for manual annotations of cluster BJ:

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

Info for manual annotations of cluster BK1:

- Start number 58 was manually annotated 2 times for cluster BK1.
- Start number 59 was manually annotated 22 times for cluster BK1.

Info for manual annotations of cluster BK2:

- Start number 59 was manually annotated 2 times for cluster BK2.

Info for manual annotations of cluster BM:

- Start number 59 was manually annotated 9 times for cluster BM.

Info for manual annotations of cluster BN:

- Start number 56 was manually annotated 1 time for cluster BN.
- Start number 59 was manually annotated 8 times for cluster BN.

Info for manual annotations of cluster BO:

- Start number 59 was manually annotated 3 times for cluster BO.

Info for manual annotations of cluster BP:

- Start number 51 was manually annotated 6 times for cluster BP.
- Start number 59 was manually annotated 5 times for cluster BP.

Info for manual annotations of cluster FP:

- Start number 68 was manually annotated 3 times for cluster FP.

Gene Information:

Gene: Abt2graduatex2_28 Start: 26138, Stop: 27415, Start Num: 8

Candidate Starts for Abt2graduatex2_28:

(7, 26084), (Start: 8 @26138 has 9 MA's), (9, 26153), (10, 26180), (12, 26270), (13, 26273), (24, 26384), (25, 26387), (52, 26510), (61, 26546), (76, 26642), (78, 26651), (87, 26699), (90, 26714), (114, 26900), (117, 26918), (118, 26924), (150, 27077), (164, 27128), (165, 27131), (181, 27209), (184, 27218), (196, 27293),

Gene: AcciDwight_50 Start: 21515, Stop: 22396, Start Num: 59

Candidate Starts for AcciDwight_50:

(Start: 59 @21515 has 92 MA's), (Start: 60 @21527 has 2 MA's), (62, 21545), (72, 21635), (77, 21671), (108, 21899), (111, 21935), (114, 21956), (133, 22097), (135, 22103), (189, 22214), (198, 22259), (203, 22313),

Gene: Amabiko_46 Start: 21560, Stop: 22441, Start Num: 59

Candidate Starts for Amabiko_46:

(Start: 59 @21560 has 92 MA's), (Start: 60 @21572 has 2 MA's), (62, 21590), (72, 21680), (77, 21716), (108, 21944), (111, 21980), (114, 22001), (133, 22142), (135, 22148), (189, 22259), (198, 22304), (203, 22358),

Gene: Amethyst_26 Start: 21581, Stop: 22531, Start Num: 55

Candidate Starts for Amethyst_26:

(30, 21512), (Start: 55 @21581 has 4 MA's), (Start: 60 @21593 has 2 MA's), (74, 21722), (93, 21833), (101, 21893), (108, 21941), (119, 22031), (136, 22154), (138, 22163), (155, 22208), (173, 22280),

Gene: Anedea_41 Start: 20439, Stop: 21461, Start Num: 59

Candidate Starts for Anedea_41:

(Start: 54 @20430 has 3 MA's), (Start: 59 @20439 has 92 MA's), (Start: 60 @20451 has 2 MA's), (74, 20571), (114, 20856), (132, 20997), (133, 21000), (135, 21006), (169, 21168), (189, 21270), (203, 21369),

Gene: Angela_41 Start: 20420, Stop: 21442, Start Num: 59

Candidate Starts for Angela_41:

(Start: 54 @20411 has 3 MA's), (Start: 59 @20420 has 92 MA's), (Start: 60 @20432 has 2 MA's), (74, 20552), (114, 20837), (132, 20978), (133, 20981), (135, 20987), (143, 21020), (189, 21251), (203, 21350),

Gene: Annadreamy_21 Start: 9808, Stop: 10824, Start Num: 59

Candidate Starts for Annadreamy_21:

(53, 9796), (Start: 59 @9808 has 92 MA's), (Start: 60 @9820 has 2 MA's), (69, 9910), (74, 9940), (114, 10225), (132, 10366), (133, 10369), (135, 10375), (168, 10519), (190, 10630), (195, 10660), (207, 10768),

Gene: ArizonaGT_20 Start: 16980, Stop: 17939, Start Num: 51

Candidate Starts for ArizonaGT_20:

(46, 16962), (Start: 51 @16980 has 6 MA's), (Start: 59 @16995 has 92 MA's), (64, 17049), (75, 17130), (81, 17166), (89, 17220), (93, 17247), (100, 17307), (119, 17457), (121, 17475), (123, 17508), (131, 17562), (137, 17583), (185, 17766),

Gene: Asis_27 Start: 25552, Stop: 26814, Start Num: 8

Candidate Starts for Asis_27:

(Start: 8 @25552 has 9 MA's), (9, 25564), (13, 25684), (14, 25687), (24, 25795), (41, 25882), (52, 25921), (71, 26029), (76, 26053), (78, 26062), (85, 26095), (90, 26125), (114, 26302), (117, 26320), (118, 26326), (122, 26356), (165, 26533), (181, 26611), (184, 26620), (194, 26689), (196, 26695), (209, 26809),

Gene: Austintatious_21 Start: 16123, Stop: 17064, Start Num: 59

Candidate Starts for Austintatious_21:

(Start: 59 @16123 has 92 MA's), (72, 16243), (75, 16258), (81, 16294), (89, 16348), (92, 16369), (98, 16423), (123, 16618), (131, 16672), (134, 16681),

Gene: AxeJC_20 Start: 16979, Stop: 17923, Start Num: 51

Candidate Starts for AxeJC_20:

(46, 16961), (Start: 51 @16979 has 6 MA's), (Start: 59 @16994 has 92 MA's), (64, 17048), (72, 17114), (75, 17129), (81, 17165), (89, 17219), (93, 17246), (100, 17306), (120, 17462), (131, 17561), (185, 17750), (200, 17849),

Gene: BabyGotBac_27 Start: 25552, Stop: 26814, Start Num: 8

Candidate Starts for BabyGotBac_27:

(Start: 8 @25552 has 9 MA's), (9, 25564), (13, 25684), (14, 25687), (24, 25795), (41, 25882), (52, 25921), (71, 26029), (76, 26053), (78, 26062), (85, 26095), (90, 26125), (114, 26302), (117, 26320), (118, 26326), (122, 26356), (165, 26533), (181, 26611), (184, 26620), (194, 26689), (196, 26695), (209, 26809),

Gene: Battuta_44 Start: 21536, Stop: 22417, Start Num: 59

Candidate Starts for Battuta_44:

(Start: 59 @21536 has 92 MA's), (Start: 60 @21548 has 2 MA's), (62, 21566), (72, 21656), (77, 21692), (108, 21920), (111, 21956), (114, 21977), (133, 22118), (135, 22124), (189, 22235), (198, 22280), (203, 22334),

Gene: BayC_27 Start: 25552, Stop: 26814, Start Num: 8

Candidate Starts for BayC_27:

(Start: 8 @25552 has 9 MA's), (9, 25564), (13, 25684), (14, 25687), (24, 25795), (41, 25882), (52, 25921), (71, 26029), (76, 26053), (78, 26062), (85, 26095), (90, 26125), (114, 26302), (117, 26320), (118, 26326), (122, 26356), (165, 26533), (181, 26611), (184, 26620), (194, 26689), (196, 26695), (209, 26809),

Gene: Belfort_23 Start: 10560, Stop: 11573, Start Num: 59

Candidate Starts for Belfort_23:

(50, 10539), (53, 10548), (Start: 59 @10560 has 92 MA's), (Start: 60 @10572 has 2 MA's), (69, 10662), (74, 10692), (114, 10977), (132, 11118), (133, 11121), (135, 11127), (168, 11271), (169, 11277), (190, 11379), (197, 11418), (203, 11478), (207, 11517),

Gene: Beuffert_20 Start: 9455, Stop: 10507, Start Num: 59

Candidate Starts for Beuffert_20:

(48, 9419), (Start: 59 @9455 has 92 MA's), (Start: 60 @9467 has 2 MA's), (72, 9575), (111, 9875), (114, 9896), (133, 10037), (135, 10043), (159, 10166), (171, 10226), (189, 10313), (207, 10451),

Gene: Bioscum_21 Start: 16159, Stop: 17100, Start Num: 59

Candidate Starts for Bioscum_21:

(Start: 59 @16159 has 92 MA's), (72, 16279), (75, 16294), (81, 16330), (89, 16384), (92, 16405), (98, 16459), (123, 16654), (131, 16708), (134, 16717),

Gene: Birchlyn_43 Start: 19417, Stop: 20298, Start Num: 59

Candidate Starts for Birchlyn_43:

(Start: 59 @19417 has 92 MA's), (Start: 60 @19429 has 2 MA's), (62, 19447), (72, 19537), (77, 19573), (108, 19801), (111, 19837), (114, 19858), (133, 19999), (135, 20005), (189, 20116), (198, 20161), (203, 20215),

Gene: Blueeyedbeauty_23 Start: 10302, Stop: 11318, Start Num: 59

Candidate Starts for Blueeyedbeauty_23:

(47, 10266), (50, 10281), (53, 10290), (Start: 59 @10302 has 92 MA's), (Start: 60 @10314 has 2 MA's), (69, 10404), (74, 10434), (114, 10719), (132, 10860), (133, 10863), (135, 10869), (168, 11013), (182, 11079), (190, 11124),

Gene: Bmoc_42 Start: 20722, Stop: 21744, Start Num: 59

Candidate Starts for Bmoc_42:

(Start: 54 @20713 has 3 MA's), (Start: 59 @20722 has 92 MA's), (Start: 60 @20734 has 2 MA's), (69, 20824), (74, 20854), (95, 21004), (104, 21064), (114, 21139), (132, 21280), (133, 21283), (135, 21289), (137, 21298), (169, 21451), (189, 21553), (203, 21652),

Gene: Bordeaux_44 Start: 21689, Stop: 22570, Start Num: 59

Candidate Starts for Bordeaux_44:

(Start: 59 @21689 has 92 MA's), (Start: 60 @21701 has 2 MA's), (62, 21719), (72, 21809), (77, 21845), (108, 22073), (111, 22109), (114, 22130), (133, 22271), (135, 22277), (189, 22388), (198, 22433), (203, 22487),

Gene: Brizzy_45 Start: 21210, Stop: 22091, Start Num: 59

Candidate Starts for Brizzy_45:

(Start: 59 @21210 has 92 MA's), (Start: 60 @21222 has 2 MA's), (62, 21240), (72, 21330), (77, 21366), (108, 21594), (111, 21630), (114, 21651), (133, 21792), (135, 21798), (189, 21909), (198, 21954), (203, 22008),

Gene: Cadmus_42 Start: 21195, Stop: 22091, Start Num: 60

Candidate Starts for Cadmus_42:

(33, 21078), (42, 21132), (Start: 54 @21174 has 3 MA's), (Start: 60 @21195 has 2 MA's), (72, 21303), (77, 21339), (84, 21390), (108, 21567), (111, 21603), (114, 21624), (133, 21765), (135, 21771), (189, 21897), (203, 21996),

Gene: CeilingFan_45 Start: 21449, Stop: 22330, Start Num: 59

Candidate Starts for CeilingFan_45:

(Start: 59 @21449 has 92 MA's), (Start: 60 @21461 has 2 MA's), (62, 21479), (72, 21569), (77, 21605), (108, 21833), (111, 21869), (114, 21890), (133, 22031), (135, 22037), (189, 22148), (198, 22193), (203, 22247),

Gene: Chymera_20 Start: 16278, Stop: 17153, Start Num: 59

Candidate Starts for Chymera_20:

(Start: 59 @16278 has 92 MA's), (69, 16380), (72, 16398), (73, 16407), (74, 16410), (76, 16425), (81, 16449), (92, 16524), (103, 16608), (131, 16827), (134, 16836), (175, 16989), (177, 16992),

Gene: Comrade_22 Start: 10175, Stop: 11188, Start Num: 59

Candidate Starts for Comrade_22:

(50, 10154), (53, 10163), (Start: 59 @10175 has 92 MA's), (Start: 60 @10187 has 2 MA's), (69, 10277), (74, 10307), (114, 10592), (132, 10733), (133, 10736), (135, 10742), (168, 10886), (169, 10892), (190, 10994), (197, 11033), (203, 11093), (207, 11132),

Gene: Cumberbatch_20 Start: 16995, Stop: 17939, Start Num: 59

Candidate Starts for Cumberbatch_20:

(46, 16962), (Start: 51 @16980 has 6 MA's), (Start: 59 @16995 has 92 MA's), (64, 17049), (75, 17130), (81, 17166), (89, 17220), (93, 17247), (100, 17307), (119, 17457), (121, 17475), (123, 17508), (131, 17562), (137, 17583), (185, 17766),

Gene: Daisy123_50 Start: 21308, Stop: 22189, Start Num: 59

Candidate Starts for Daisy123_50:

(Start: 59 @21308 has 92 MA's), (Start: 60 @21320 has 2 MA's), (62, 21338), (72, 21428), (77, 21464), (108, 21692), (111, 21728), (114, 21749), (133, 21890), (135, 21896), (189, 22007), (198, 22052), (203, 22106),

Gene: Daubenski_45 Start: 21959, Stop: 22855, Start Num: 60

Candidate Starts for Daubenski_45:

(33, 21842), (42, 21896), (Start: 54 @21938 has 3 MA's), (Start: 60 @21959 has 2 MA's), (72, 22067), (77, 22103), (84, 22154), (108, 22331), (111, 22367), (114, 22388), (133, 22529), (135, 22535), (189, 22661), (203, 22760),

Gene: DeluluLabubu_23 Start: 10056, Stop: 11072, Start Num: 59

Candidate Starts for DeluluLabubu_23:

(Start: 59 @10056 has 92 MA's), (Start: 60 @10068 has 2 MA's), (69, 10158), (74, 10188), (88, 10266), (100, 10365), (114, 10473), (132, 10614), (133, 10617), (135, 10623), (190, 10878), (207, 11016),

Gene: Dennebes_2 Start: 2618, Stop: 3529, Start Num: 59

Candidate Starts for Dennebes_2:

(Start: 59 @2618 has 92 MA's), (Start: 60 @2630 has 2 MA's), (64, 2672), (73, 2753), (76, 2771), (81, 2795), (100, 2936), (108, 3002), (116, 3080), (118, 3089), (131, 3197), (137, 3218), (159, 3278), (177, 3344),

Gene: Diane_26 Start: 21914, Stop: 22867, Start Num: 55

Candidate Starts for Diane_26:

(30, 21845), (Start: 55 @21914 has 4 MA's), (Start: 60 @21926 has 2 MA's), (74, 22055), (93, 22166), (101, 22226), (108, 22274), (119, 22364), (136, 22487), (138, 22496), (170, 22604), (173, 22616),

Gene: Dryad_31 Start: 20705, Stop: 21643, Start Num: 59

Candidate Starts for Dryad_31:

(17, 20459), (43, 20657), (Start: 59 @20705 has 92 MA's), (93, 20954), (96, 20990), (98, 21002), (119, 21149), (131, 21251), (158, 21344), (162, 21362), (176, 21413), (193, 21506), (204, 21590),

Gene: Dubu_18 Start: 16543, Stop: 17481, Start Num: 59

Candidate Starts for Dubu_18:

(Start: 59 @16543 has 92 MA's), (Start: 60 @16555 has 2 MA's), (64, 16597), (72, 16663), (74, 16675), (109, 16930), (114, 16960), (123, 17038), (132, 17101), (133, 17104), (135, 17110), (137, 17119), (161, 17227), (163, 17239),

Gene: Eastland_20 Start: 16964, Stop: 17908, Start Num: 51

Candidate Starts for Eastland_20:

(46, 16946), (Start: 51 @16964 has 6 MA's), (Start: 59 @16979 has 92 MA's), (64, 17033), (72, 17099), (75, 17114), (81, 17150), (89, 17204), (93, 17231), (100, 17291), (120, 17447), (131, 17546), (185, 17735), (200, 17834),

Gene: EhyElimayoE_119 Start: 77532, Stop: 78617, Start Num: 59

Candidate Starts for EhyElimayoE_119:

(45, 77493), (Start: 59 @77532 has 92 MA's), (Start: 60 @77544 has 2 MA's), (62, 77562), (72, 77652), (73, 77661), (76, 77679), (81, 77703), (108, 77886), (112, 77928), (131, 78081), (134, 78090), (137, 78102), (156, 78171), (166, 78216), (167, 78222), (188, 78327), (189, 78339), (191, 78357), (202, 78438),

Gene: Eklok_20 Start: 16979, Stop: 17923, Start Num: 51

Candidate Starts for Eklok_20:

(46, 16961), (Start: 51 @16979 has 6 MA's), (Start: 59 @16994 has 92 MA's), (64, 17048), (72, 17114), (75, 17129), (81, 17165), (89, 17219), (93, 17246), (100, 17306), (120, 17462), (131, 17561), (185, 17750), (200, 17849),

Gene: Elmer_48 Start: 22460, Stop: 23479, Start Num: 58

Candidate Starts for Elmer_48:

(53, 22448), (Start: 58 @22460 has 4 MA's), (Start: 60 @22472 has 2 MA's), (74, 22592), (99, 22760), (101, 22772), (114, 22877), (132, 23018), (133, 23021), (135, 23027), (149, 23099), (172, 23201), (189, 23285), (210, 23435),

Gene: Emma1919_25 Start: 10751, Stop: 11767, Start Num: 59

Candidate Starts for Emma1919_25:

(Start: 59 @10751 has 92 MA's), (Start: 60 @10763 has 2 MA's), (69, 10853), (74, 10883), (88, 10961), (100, 11060), (114, 11168), (132, 11309), (133, 11312), (135, 11318), (190, 11573), (207, 11711),

Gene: Exile_21 Start: 20646, Stop: 21581, Start Num: 68

Candidate Starts for Exile_21:

(Start: 68 @20646 has 4 MA's), (79, 20739), (100, 20886), (119, 21021), (135, 21147), (140, 21168), (151, 21222), (176, 21342), (204, 21525),

Gene: Faust_21 Start: 10072, Stop: 10977, Start Num: 59

Candidate Starts for Faust_21:

(Start: 59 @10072 has 92 MA's), (Start: 60 @10084 has 2 MA's), (69, 10174), (74, 10204), (82, 10246), (114, 10489), (123, 10567), (132, 10630), (133, 10633), (135, 10639), (174, 10828),

Gene: Forrest_25 Start: 10874, Stop: 11890, Start Num: 59

Candidate Starts for Forrest_25:

(Start: 59 @10874 has 92 MA's), (Start: 60 @10886 has 2 MA's), (69, 10976), (74, 11006), (88, 11084), (100, 11183), (114, 11291), (132, 11432), (133, 11435), (135, 11441), (190, 11696), (207, 11834),

Gene: Forthebois_35 Start: 16763, Stop: 17539, Start Num: 59

Candidate Starts for Forthebois_35:

(39, 16697), (Start: 59 @16763 has 92 MA's), (67, 16832), (100, 17090), (109, 17174), (111, 17183), (114, 17204), (132, 17342), (133, 17345), (135, 17351), (153, 17420),

Gene: Francob_21 Start: 9667, Stop: 10566, Start Num: 59

Candidate Starts for Francob_21:

(Start: 59 @9667 has 92 MA's), (Start: 60 @9679 has 2 MA's), (72, 9787), (86, 9883), (108, 10051), (111, 10087), (114, 10108), (133, 10249), (135, 10255), (154, 10330), (189, 10372), (203, 10471),

Gene: Frankenweenie_128 Start: 82432, Stop: 83532, Start Num: 59

Candidate Starts for Frankenweenie_128:

(34, 82351), (38, 82369), (49, 82405), (Start: 59 @82432 has 92 MA's), (Start: 60 @82444 has 2 MA's), (73, 82561), (74, 82564), (83, 82612), (89, 82657), (108, 82786), (128, 82960), (131, 82981), (134, 82990), (137, 83002), (156, 83071), (166, 83116), (189, 83239), (199, 83299), (202, 83338),

Gene: FrumpyGal_20 Start: 16964, Stop: 17908, Start Num: 51

Candidate Starts for FrumpyGal_20:

(46, 16946), (Start: 51 @16964 has 6 MA's), (Start: 59 @16979 has 92 MA's), (64, 17033), (72, 17099), (75, 17114), (81, 17150), (89, 17204), (93, 17231), (100, 17291), (120, 17447), (131, 17546), (185, 17735), (200, 17834),

Gene: Gibbi_49 Start: 21309, Stop: 22190, Start Num: 59

Candidate Starts for Gibbi_49:

(Start: 59 @21309 has 92 MA's), (Start: 60 @21321 has 2 MA's), (62, 21339), (72, 21429), (77, 21465), (108, 21693), (111, 21729), (114, 21750), (133, 21891), (135, 21897), (189, 22008), (198, 22053), (203, 22107),

Gene: Gibson_28 Start: 19877, Stop: 20806, Start Num: 59

Candidate Starts for Gibson_28:

(40, 19820), (Start: 59 @19877 has 92 MA's), (66, 19937), (73, 20012), (81, 20045), (93, 20126), (98, 20174), (108, 20228), (110, 20261), (131, 20420), (158, 20507), (162, 20525), (176, 20576), (186, 20624), (193, 20669), (204, 20753),

Gene: Gilson_25 Start: 10704, Stop: 11720, Start Num: 59

Candidate Starts for Gilson_25:

(Start: 59 @10704 has 92 MA's), (Start: 60 @10716 has 2 MA's), (69, 10806), (74, 10836), (88, 10914), (100, 11013), (114, 11121), (132, 11262), (133, 11265), (135, 11271), (190, 11526), (207, 11664),

Gene: Greenbelt_27 Start: 19143, Stop: 20069, Start Num: 59

Candidate Starts for Greenbelt_27:

(Start: 59 @19143 has 92 MA's), (70, 19257), (72, 19269), (73, 19278), (74, 19281), (76, 19296), (92, 19395), (98, 19449), (105, 19503), (108, 19527), (117, 19608), (131, 19722), (134, 19731), (152, 19791), (177, 19878),

Gene: GrimEater_21 Start: 18277, Stop: 19182, Start Num: 68

Candidate Starts for GrimEater_21:

(Start: 68 @18277 has 4 MA's), (79, 18370), (80, 18379), (119, 18652), (130, 18763), (140, 18784), (147, 18820), (162, 18880), (176, 18940), (204, 19129),

Gene: HFrancette_20 Start: 17010, Stop: 17954, Start Num: 59

Candidate Starts for HFrancette_20:

(Start: 59 @17010 has 92 MA's), (64, 17064), (75, 17145), (81, 17181), (89, 17235), (92, 17256), (100, 17322), (119, 17472), (121, 17490), (123, 17523), (131, 17577), (137, 17598), (185, 17781),

Gene: Haizum_26 Start: 21588, Stop: 22541, Start Num: 55

Candidate Starts for Haizum_26:

(30, 21519), (Start: 55 @21588 has 4 MA's), (Start: 60 @21600 has 2 MA's), (74, 21729), (93, 21840), (101, 21900), (107, 21945), (108, 21948), (119, 22038), (136, 22161), (138, 22170), (155, 22215), (170, 22278), (173, 22290),

Gene: IchabodCrane_43 Start: 21263, Stop: 22144, Start Num: 59

Candidate Starts for IchabodCrane_43:

(Start: 59 @21263 has 92 MA's), (Start: 60 @21275 has 2 MA's), (62, 21293), (72, 21383), (77, 21419), (108, 21647), (111, 21683), (114, 21704), (133, 21845), (135, 21851), (189, 21962), (198, 22007), (203, 22061),

Gene: Ididsumtinwong_21 Start: 16159, Stop: 17100, Start Num: 59

Candidate Starts for Ididsumtinwong_21:

(Start: 59 @16159 has 92 MA's), (72, 16279), (75, 16294), (81, 16330), (89, 16384), (92, 16405), (98, 16459), (123, 16654), (131, 16708), (134, 16717),

Gene: Ignacio_20 Start: 17010, Stop: 17954, Start Num: 59

Candidate Starts for Ignacio_20:

(Start: 59 @17010 has 92 MA's), (64, 17064), (75, 17145), (81, 17181), (89, 17235), (92, 17256), (100, 17322), (119, 17472), (121, 17490), (123, 17523), (131, 17577), (137, 17598), (185, 17781),

Gene: Jada_23 Start: 10056, Stop: 11072, Start Num: 59

Candidate Starts for Jada_23:

(Start: 59 @10056 has 92 MA's), (Start: 60 @10068 has 2 MA's), (69, 10158), (74, 10188), (88, 10266), (100, 10365), (114, 10473), (132, 10614), (133, 10617), (135, 10623), (190, 10878), (207, 11016),

Gene: Jankie_21 Start: 18276, Stop: 19181, Start Num: 68

Candidate Starts for Jankie_21:

(Start: 68 @18276 has 4 MA's), (79, 18369), (80, 18378), (119, 18651), (130, 18762), (140, 18783), (147, 18819), (162, 18879), (176, 18939), (204, 19128),

Gene: JimJam_46 Start: 21637, Stop: 22518, Start Num: 59

Candidate Starts for JimJam_46:

(Start: 59 @21637 has 92 MA's), (Start: 60 @21649 has 2 MA's), (62, 21667), (72, 21757), (77, 21793), (108, 22021), (111, 22057), (114, 22078), (133, 22219), (135, 22225), (189, 22336), (198, 22381), (203, 22435),

Gene: Jollison_45 Start: 21517, Stop: 22398, Start Num: 59

Candidate Starts for Jollison_45:

(Start: 59 @21517 has 92 MA's), (Start: 60 @21529 has 2 MA's), (62, 21547), (72, 21637), (77, 21673), (108, 21901), (111, 21937), (114, 21958), (133, 22099), (135, 22105), (189, 22216), (198, 22261), (203, 22315),

Gene: JustBecause_116 Start: 76599, Stop: 77684, Start Num: 59

Candidate Starts for JustBecause_116:

(20, 76401), (21, 76410), (34, 76518), (38, 76536), (Start: 59 @76599 has 92 MA's), (Start: 60 @76611 has 2 MA's), (72, 76719), (73, 76728), (74, 76731), (76, 76746), (89, 76824), (98, 76899), (128, 77127), (131, 77148), (134, 77157), (156, 77238), (166, 77283), (189, 77406), (202, 77505), (209, 77562),

Gene: Karimac_45 Start: 21666, Stop: 22547, Start Num: 59

Candidate Starts for Karimac_45:

(Start: 59 @21666 has 92 MA's), (Start: 60 @21678 has 2 MA's), (62, 21696), (72, 21786), (77, 21822), (108, 22050), (111, 22086), (114, 22107), (133, 22248), (135, 22254), (189, 22365), (198, 22410), (203, 22464),

Gene: Karp_21 Start: 9776, Stop: 10789, Start Num: 59

Candidate Starts for Karp_21:

(50, 9755), (53, 9764), (Start: 59 @9776 has 92 MA's), (Start: 60 @9788 has 2 MA's), (69, 9878), (74, 9908), (114, 10193), (132, 10334), (133, 10337), (135, 10343), (168, 10487), (169, 10493), (190, 10595), (197, 10634), (203, 10694), (207, 10733),

Gene: Kela_117 Start: 76479, Stop: 77564, Start Num: 59

Candidate Starts for Kela_117:

(21, 76290), (34, 76398), (38, 76416), (Start: 59 @76479 has 92 MA's), (Start: 60 @76491 has 2 MA's), (72, 76599), (73, 76608), (74, 76611), (76, 76626), (89, 76704), (98, 76779), (128, 77007), (131, 77028), (134, 77037), (156, 77118), (166, 77163), (189, 77286), (202, 77385), (209, 77442),

Gene: Kenrey_25 Start: 10757, Stop: 11773, Start Num: 59

Candidate Starts for Kenrey_25:

(53, 10745), (Start: 59 @10757 has 92 MA's), (Start: 60 @10769 has 2 MA's), (69, 10859), (74, 10889), (104, 11099), (114, 11174), (132, 11315), (133, 11318), (135, 11324), (190, 11579), (207, 11717),

Gene: KentuckyRacer_46 Start: 21450, Stop: 22331, Start Num: 59

Candidate Starts for KentuckyRacer_46:

(Start: 59 @21450 has 92 MA's), (Start: 60 @21462 has 2 MA's), (62, 21480), (72, 21570), (77, 21606), (108, 21834), (111, 21870), (114, 21891), (133, 22032), (135, 22038), (189, 22149), (198, 22194), (203, 22248),

Gene: Kradal_118 Start: 77529, Stop: 78614, Start Num: 59

Candidate Starts for Kradal_118:

(45, 77490), (Start: 59 @77529 has 92 MA's), (Start: 60 @77541 has 2 MA's), (62, 77559), (72, 77649), (73, 77658), (76, 77676), (81, 77700), (108, 77883), (112, 77925), (131, 78078), (134, 78087), (137, 78099), (156, 78168), (166, 78213), (167, 78219), (183, 78294), (188, 78324), (189, 78336), (191, 78354), (202, 78435),

Gene: Kromp_25 Start: 22282, Stop: 23208, Start Num: 59

Candidate Starts for Kromp_25:

(Start: 51 @22267 has 6 MA's), (Start: 59 @22282 has 92 MA's), (Start: 60 @22294 has 2 MA's), (63, 22324), (72, 22402), (73, 22411), (76, 22429), (89, 22507), (121, 22744), (123, 22777), (128, 22810), (131, 22831), (134, 22840), (165, 22933), (178, 22990), (179, 22999), (192, 23071), (208, 23197),

Gene: LilMartin_41 Start: 20368, Stop: 21390, Start Num: 59

Candidate Starts for LilMartin_41:

(Start: 54 @20359 has 3 MA's), (Start: 59 @20368 has 92 MA's), (Start: 60 @20380 has 2 MA's), (74, 20500), (114, 20785), (132, 20926), (133, 20929), (135, 20935), (143, 20968), (189, 21199), (203, 21298),

Gene: LilSaint_43 Start: 20604, Stop: 21635, Start Num: 54

Candidate Starts for LilSaint_43:

(Start: 54 @20604 has 3 MA's), (Start: 59 @20613 has 92 MA's), (Start: 60 @20625 has 2 MA's), (74, 20745), (114, 21030), (132, 21171), (133, 21174), (135, 21180), (169, 21342), (189, 21444), (203, 21543),

Gene: Limpid_21 Start: 9807, Stop: 10823, Start Num: 59

Candidate Starts for Limpid_21:

(53, 9795), (Start: 59 @9807 has 92 MA's), (Start: 60 @9819 has 2 MA's), (69, 9909), (74, 9939), (114, 10224), (132, 10365), (133, 10368), (135, 10374), (168, 10518), (190, 10629), (195, 10659), (207, 10767),

Gene: Lishka_21 Start: 16123, Stop: 17064, Start Num: 59

Candidate Starts for Lishka_21:

(Start: 59 @16123 has 92 MA's), (72, 16243), (75, 16258), (81, 16294), (89, 16348), (92, 16369), (98, 16423), (123, 16618), (131, 16672), (134, 16681),

Gene: LisoBros_23 Start: 20284, Stop: 21207, Start Num: 68

Candidate Starts for LisoBros_23:

(37, 20134), (65, 20260), (Start: 68 @20284 has 4 MA's), (79, 20377), (119, 20659), (135, 20779), (140, 20800), (176, 20965), (204, 21154), (205, 21160),

Gene: Lizz_28 Start: 19686, Stop: 20615, Start Num: 59

Candidate Starts for Lizz_28:

(40, 19629), (Start: 59 @19686 has 92 MA's), (66, 19746), (73, 19821), (81, 19854), (93, 19935), (98, 19983), (108, 20037), (110, 20070), (131, 20229), (158, 20316), (162, 20334), (176, 20385), (186, 20433), (193, 20478), (204, 20562),

Gene: LukeCage_45 Start: 21302, Stop: 22297, Start Num: 59

Candidate Starts for LukeCage_45:

(Start: 59 @21302 has 92 MA's), (Start: 60 @21314 has 2 MA's), (69, 21404), (74, 21434), (114, 21719), (132, 21860), (133, 21863), (135, 21869), (169, 22019), (190, 22115), (198, 22160), (203, 22214),

Gene: Maih_27 Start: 25551, Stop: 26813, Start Num: 8

Candidate Starts for Maih_27:

(Start: 8 @25551 has 9 MA's), (9, 25563), (13, 25683), (14, 25686), (24, 25794), (41, 25881), (52, 25920), (71, 26028), (76, 26052), (78, 26061), (85, 26094), (90, 26124), (114, 26301), (117, 26319), (118, 26325), (122, 26355), (165, 26532), (181, 26610), (184, 26619), (194, 26688), (196, 26694), (209, 26808),

Gene: Marsus_41 Start: 20139, Stop: 21161, Start Num: 59

Candidate Starts for Marsus_41:

(Start: 54 @20130 has 3 MA's), (Start: 59 @20139 has 92 MA's), (Start: 60 @20151 has 2 MA's), (74, 20271), (114, 20556), (132, 20697), (133, 20700), (135, 20706), (189, 20970), (203, 21069),

Gene: Maupel_25 Start: 10704, Stop: 11720, Start Num: 59

Candidate Starts for Maupel_25:

(Start: 59 @10704 has 92 MA's), (Start: 60 @10716 has 2 MA's), (69, 10806), (74, 10836), (88, 10914), (100, 11013), (114, 11121), (132, 11262), (133, 11265), (135, 11271), (190, 11526), (207, 11664),

Gene: MeganTheeKilla_23 Start: 10065, Stop: 11081, Start Num: 59

Candidate Starts for MeganTheeKilla_23:

(Start: 59 @10065 has 92 MA's), (Start: 60 @10077 has 2 MA's), (69, 10167), (74, 10197), (88, 10275), (100, 10374), (114, 10482), (132, 10623), (133, 10626), (135, 10632), (190, 10887), (207, 11025),

Gene: Mildred21_42 Start: 20566, Stop: 21576, Start Num: 59

Candidate Starts for Mildred21_42:

(53, 20554), (Start: 59 @20566 has 92 MA's), (Start: 60 @20578 has 2 MA's), (62, 20596), (74, 20698), (114, 20983), (132, 21124), (133, 21127), (135, 21133), (169, 21295), (189, 21394), (198, 21439), (203, 21493),

Gene: MindFlayer_44 Start: 21170, Stop: 22051, Start Num: 59

Candidate Starts for MindFlayer_44:

(Start: 59 @21170 has 92 MA's), (Start: 60 @21182 has 2 MA's), (62, 21200), (72, 21290), (77, 21326), (108, 21554), (111, 21590), (114, 21611), (133, 21752), (135, 21758), (189, 21869), (198, 21914), (203, 21968),

Gene: Mischief19_36 Start: 37234, Stop: 38199, Start Num: 59

Candidate Starts for Mischief19_36:

(19, 37042), (23, 37096), (28, 37111), (35, 37159), (Start: 59 @37234 has 92 MA's), (Start: 60 @37246 has 2 MA's), (73, 37363), (74, 37366), (98, 37525), (115, 37669), (118, 37684), (119, 37687), (121, 37705), (124, 37741), (137, 37813), (199, 38092), (206, 38152), (209, 38188),

Gene: Moab_22 Start: 10215, Stop: 11114, Start Num: 59

Candidate Starts for Moab_22:

(Start: 59 @10215 has 92 MA's), (Start: 60 @10227 has 2 MA's), (72, 10335), (111, 10635), (114, 10656), (133, 10797), (135, 10803), (139, 10818), (141, 10827), (189, 10920), (203, 11019),

Gene: MulchMansion_41 Start: 20368, Stop: 21390, Start Num: 59

Candidate Starts for MulchMansion_41:

(Start: 54 @20359 has 3 MA's), (Start: 59 @20368 has 92 MA's), (Start: 60 @20380 has 2 MA's), (74, 20500), (114, 20785), (132, 20926), (133, 20929), (135, 20935), (143, 20968), (189, 21199), (203, 21298),

Gene: Muntaha_17 Start: 8933, Stop: 9943, Start Num: 59

Candidate Starts for Muntaha_17:

(Start: 59 @8933 has 92 MA's), (Start: 60 @8945 has 2 MA's), (74, 9071), (108, 9299), (114, 9356), (132, 9497), (133, 9500), (135, 9506), (169, 9665), (171, 9674), (187, 9752), (189, 9761), (203, 9860),

Gene: Nirvana_123 Start: 80829, Stop: 81929, Start Num: 59

Candidate Starts for Nirvana_123:

(34, 80748), (38, 80766), (49, 80802), (Start: 59 @80829 has 92 MA's), (Start: 60 @80841 has 2 MA's), (72, 80949), (73, 80958), (74, 80961), (83, 81009), (89, 81054), (98, 81129), (108, 81183), (128, 81357), (131, 81378), (134, 81387), (137, 81399), (156, 81468), (166, 81513), (189, 81636),

Gene: Nishikigoi_26 Start: 21588, Stop: 22541, Start Num: 55

Candidate Starts for Nishikigoi_26:

(30, 21519), (Start: 55 @21588 has 4 MA's), (Start: 60 @21600 has 2 MA's), (74, 21729), (93, 21840), (101, 21900), (107, 21945), (108, 21948), (119, 22038), (136, 22161), (138, 22170), (155, 22215), (170, 22278), (173, 22290),

Gene: PHTown_28 Start: 19684, Stop: 20613, Start Num: 59

Candidate Starts for PHTown_28:

(40, 19627), (Start: 59 @19684 has 92 MA's), (66, 19744), (73, 19819), (81, 19852), (93, 19933), (98, 19981), (108, 20035), (110, 20068), (131, 20227), (158, 20314), (162, 20332), (176, 20383), (186, 20431), (193, 20476), (204, 20560),

Gene: PapayaSalad_21 Start: 16134, Stop: 17075, Start Num: 59

Candidate Starts for PapayaSalad_21:

(Start: 59 @16134 has 92 MA's), (72, 16254), (75, 16269), (81, 16305), (89, 16359), (92, 16380), (98, 16434), (123, 16629), (131, 16683), (134, 16692),

Gene: Patelgo_22 Start: 9829, Stop: 10728, Start Num: 59

Candidate Starts for Patelgo_22:

(Start: 59 @9829 has 92 MA's), (Start: 60 @9841 has 2 MA's), (72, 9949), (84, 10036), (111, 10249), (114, 10270), (133, 10411), (135, 10417), (139, 10432), (141, 10441), (189, 10534), (203, 10633),

Gene: Phredrick_23 Start: 9963, Stop: 10979, Start Num: 59

Candidate Starts for Phredrick_23:

(53, 9951), (Start: 59 @9963 has 92 MA's), (Start: 60 @9975 has 2 MA's), (69, 10065), (74, 10095), (104, 10305), (114, 10380), (132, 10521), (133, 10524), (135, 10530), (190, 10785), (207, 10923),

Gene: Piccadilly_20 Start: 16963, Stop: 17907, Start Num: 51

Candidate Starts for Piccadilly_20:

(46, 16945), (Start: 51 @16963 has 6 MA's), (Start: 59 @16978 has 92 MA's), (64, 17032), (72, 17098), (75, 17113), (81, 17149), (89, 17203), (93, 17230), (100, 17290), (120, 17446), (131, 17545), (185, 17734), (200, 17833),

Gene: PumpkinSpice_45 Start: 21560, Stop: 22441, Start Num: 59

Candidate Starts for PumpkinSpice_45:

(Start: 59 @21560 has 92 MA's), (Start: 60 @21572 has 2 MA's), (62, 21590), (72, 21680), (77, 21716), (108, 21944), (111, 21980), (114, 22001), (133, 22142), (135, 22148), (189, 22259), (198, 22304), (203, 22358),

Gene: Quantum_117 Start: 77529, Stop: 78614, Start Num: 59

Candidate Starts for Quantum_117:

(45, 77490), (Start: 59 @77529 has 92 MA's), (Start: 60 @77541 has 2 MA's), (62, 77559), (72, 77649), (73, 77658), (76, 77676), (81, 77700), (108, 77883), (112, 77925), (131, 78078), (134, 78087), (137, 78099), (156, 78168), (166, 78213), (167, 78219), (183, 78294), (188, 78324), (189, 78336), (191,

78354), (202, 78435),

Gene: Quarant19_46 Start: 21551, Stop: 22432, Start Num: 59

Candidate Starts for Quarant19_46:

(Start: 59 @21551 has 92 MA's), (Start: 60 @21563 has 2 MA's), (62, 21581), (72, 21671), (77, 21707), (108, 21935), (111, 21971), (114, 21992), (133, 22133), (135, 22139), (189, 22250), (198, 22295), (203, 22349),

Gene: RainyPolka_28 Start: 26004, Stop: 27281, Start Num: 8

Candidate Starts for RainyPolka_28:

(7, 25950), (Start: 8 @26004 has 9 MA's), (9, 26019), (12, 26136), (13, 26139), (24, 26250), (25, 26253), (52, 26376), (61, 26412), (76, 26508), (78, 26517), (87, 26565), (114, 26766), (117, 26784), (118, 26790), (122, 26820), (127, 26847), (150, 26943), (164, 26994), (165, 26997), (180, 27069), (181, 27075), (184, 27084), (196, 27159),

Gene: RickRoss_36 Start: 16891, Stop: 17667, Start Num: 59

Candidate Starts for RickRoss_36:

(39, 16825), (Start: 59 @16891 has 92 MA's), (67, 16960), (94, 17161), (97, 17203), (100, 17218), (109, 17302), (111, 17311), (114, 17332), (132, 17470), (133, 17473), (135, 17479), (142, 17509), (153, 17548),

Gene: Rideau_3 Start: 2618, Stop: 3529, Start Num: 59

Candidate Starts for Rideau_3:

(Start: 59 @2618 has 92 MA's), (Start: 60 @2630 has 2 MA's), (64, 2672), (73, 2753), (76, 2771), (81, 2795), (100, 2936), (108, 3002), (116, 3080), (118, 3089), (131, 3197), (137, 3218), (159, 3278), (177, 3344),

Gene: Rikishi_46 Start: 21466, Stop: 22347, Start Num: 59

Candidate Starts for Rikishi_46:

(Start: 59 @21466 has 92 MA's), (Start: 60 @21478 has 2 MA's), (62, 21496), (72, 21586), (77, 21622), (108, 21850), (111, 21886), (114, 21907), (133, 22048), (135, 22054), (189, 22165), (198, 22210), (203, 22264),

Gene: Riptide_41 Start: 20156, Stop: 21187, Start Num: 54

Candidate Starts for Riptide_41:

(Start: 54 @20156 has 3 MA's), (Start: 59 @20165 has 92 MA's), (Start: 60 @20177 has 2 MA's), (74, 20297), (90, 20390), (114, 20582), (132, 20723), (133, 20726), (135, 20732), (169, 20894), (189, 20996), (203, 21095),

Gene: Rooney_28 Start: 19874, Stop: 20803, Start Num: 59

Candidate Starts for Rooney_28:

(40, 19817), (Start: 59 @19874 has 92 MA's), (66, 19934), (81, 20042), (93, 20123), (98, 20171), (108, 20225), (110, 20258), (131, 20417), (158, 20504), (162, 20522), (176, 20573), (186, 20621), (193, 20666), (204, 20750),

Gene: RosePharie_2 Start: 2633, Stop: 3526, Start Num: 59

Candidate Starts for RosePharie_2:

(Start: 59 @2633 has 92 MA's), (73, 2762), (74, 2765), (76, 2780), (89, 2858), (91, 2876), (98, 2933), (101, 2945), (118, 3074), (134, 3191), (146, 3230), (179, 3353),

Gene: SV1_21 Start: 16368, Stop: 17315, Start Num: 59

Candidate Starts for SV1_21:

(Start: 59 @16368 has 92 MA's), (72, 16488), (75, 16503), (81, 16539), (89, 16593), (92, 16614), (98, 16668), (123, 16863), (129, 16905), (131, 16917), (134, 16926),

Gene: Salete_27 Start: 25552, Stop: 26814, Start Num: 8

Candidate Starts for Salete_27:

(Start: 8 @25552 has 9 MA's), (9, 25564), (13, 25684), (14, 25687), (24, 25795), (41, 25882), (52, 25921), (71, 26029), (76, 26053), (78, 26062), (85, 26095), (90, 26125), (114, 26302), (117, 26320), (118, 26326), (122, 26356), (165, 26533), (181, 26611), (184, 26620), (194, 26689), (196, 26695), (209, 26809),

Gene: SaltySpittoon_46 Start: 21560, Stop: 22441, Start Num: 59

Candidate Starts for SaltySpittoon_46:

(Start: 59 @21560 has 92 MA's), (Start: 60 @21572 has 2 MA's), (62, 21590), (72, 21680), (77, 21716), (108, 21944), (111, 21980), (114, 22001), (133, 22142), (135, 22148), (189, 22259), (198, 22304), (203, 22358),

Gene: Sarkar_118 Start: 77529, Stop: 78614, Start Num: 59

Candidate Starts for Sarkar_118:

(45, 77490), (Start: 59 @77529 has 92 MA's), (Start: 60 @77541 has 2 MA's), (62, 77559), (72, 77649), (73, 77658), (76, 77676), (81, 77700), (108, 77883), (112, 77925), (131, 78078), (134, 78087), (137, 78099), (156, 78168), (166, 78213), (167, 78219), (183, 78294), (188, 78324), (189, 78336), (191, 78354), (202, 78435),

Gene: SassyC_30 Start: 20015, Stop: 20932, Start Num: 59

Candidate Starts for SassyC_30:

(26, 19877), (31, 19907), (Start: 59 @20015 has 92 MA's), (93, 20264), (95, 20297), (98, 20312), (110, 20402), (126, 20528), (131, 20561), (151, 20621), (158, 20648), (176, 20717), (204, 20879),

Gene: Satis_118 Start: 77525, Stop: 78610, Start Num: 59

Candidate Starts for Satis_118:

(45, 77486), (Start: 59 @77525 has 92 MA's), (Start: 60 @77537 has 2 MA's), (62, 77555), (72, 77645), (73, 77654), (76, 77672), (81, 77696), (108, 77879), (112, 77921), (131, 78074), (134, 78083), (137, 78095), (156, 78164), (166, 78209), (167, 78215), (183, 78290), (188, 78320), (189, 78332), (191, 78350), (202, 78431),

Gene: Schlegelian_20 Start: 16993, Stop: 17943, Start Num: 59

Candidate Starts for Schlegelian_20:

(46, 16960), (Start: 51 @16978 has 6 MA's), (Start: 59 @16993 has 92 MA's), (64, 17047), (72, 17113), (75, 17128), (81, 17164), (89, 17218), (92, 17239), (100, 17305), (119, 17455), (121, 17473), (123, 17506), (131, 17560), (137, 17581), (185, 17770),

Gene: SeresaTree_21 Start: 9462, Stop: 10367, Start Num: 59

Candidate Starts for SeresaTree_21:

(Start: 59 @9462 has 92 MA's), (Start: 60 @9474 has 2 MA's), (69, 9564), (74, 9594), (82, 9636), (114, 9879), (123, 9957), (132, 10020), (133, 10023), (135, 10029), (174, 10218),

Gene: ShakeNBake_28 Start: 19702, Stop: 20631, Start Num: 59

Candidate Starts for ShakeNBake_28:

(40, 19645), (Start: 59 @19702 has 92 MA's), (66, 19762), (73, 19837), (81, 19870), (93, 19951), (98, 19999), (108, 20053), (110, 20086), (131, 20245), (158, 20332), (162, 20350), (176, 20401), (186, 20449), (193, 20494), (204, 20578),

Gene: Sham_19 Start: 9266, Stop: 10291, Start Num: 58

Candidate Starts for Sham_19:

(Start: 58 @9266 has 4 MA's), (Start: 60 @9278 has 2 MA's), (69, 9368), (74, 9398), (114, 9683), (132, 9824), (133, 9827), (135, 9833), (160, 9947), (189, 10100),

Gene: Soondubu_21 Start: 20650, Stop: 21585, Start Num: 68

Candidate Starts for Soondubu_21:

(Start: 68 @20650 has 4 MA's), (79, 20743), (100, 20890), (102, 20905), (106, 20926), (113, 20995), (119, 21025), (135, 21151), (140, 21172), (151, 21226), (176, 21346), (204, 21529),

Gene: SparkleGoddess_22 Start: 10174, Stop: 11190, Start Num: 59

Candidate Starts for SparkleGoddess_22:

(50, 10153), (53, 10162), (Start: 59 @10174 has 92 MA's), (Start: 60 @10186 has 2 MA's), (69, 10276), (74, 10306), (114, 10591), (132, 10732), (133, 10735), (135, 10741), (190, 10996), (197, 11035), (203, 11095), (207, 11134),

Gene: Spelly_46 Start: 21515, Stop: 22396, Start Num: 59

Candidate Starts for Spelly_46:

(Start: 59 @21515 has 92 MA's), (Start: 60 @21527 has 2 MA's), (62, 21545), (72, 21635), (77, 21671), (108, 21899), (111, 21935), (114, 21956), (133, 22097), (135, 22103), (189, 22214), (198, 22259), (203, 22313),

Gene: Spilled_46 Start: 21269, Stop: 22150, Start Num: 59

Candidate Starts for Spilled_46:

(Start: 59 @21269 has 92 MA's), (Start: 60 @21281 has 2 MA's), (62, 21299), (72, 21389), (77, 21425), (108, 21653), (111, 21689), (114, 21710), (133, 21851), (135, 21857), (189, 21968), (198, 22013), (203, 22067),

Gene: StarPlatinum_45 Start: 21511, Stop: 22506, Start Num: 59

Candidate Starts for StarPlatinum_45:

(Start: 59 @21511 has 92 MA's), (Start: 60 @21523 has 2 MA's), (69, 21613), (74, 21643), (114, 21928), (132, 22069), (133, 22072), (135, 22078), (168, 22222), (169, 22228), (190, 22324), (198, 22369), (203, 22423),

Gene: Starbow_44 Start: 21536, Stop: 22417, Start Num: 59

Candidate Starts for Starbow_44:

(Start: 59 @21536 has 92 MA's), (Start: 60 @21548 has 2 MA's), (62, 21566), (72, 21656), (77, 21692), (108, 21920), (111, 21956), (114, 21977), (133, 22118), (135, 22124), (189, 22235), (198, 22280), (203, 22334),

Gene: Stigma_22 Start: 10178, Stop: 11191, Start Num: 59

Candidate Starts for Stigma_22:

(50, 10157), (53, 10166), (Start: 59 @10178 has 92 MA's), (Start: 60 @10190 has 2 MA's), (69, 10280), (74, 10310), (114, 10595), (132, 10736), (133, 10739), (135, 10745), (168, 10889), (169, 10895), (190, 10997), (197, 11036), (203, 11096), (207, 11135),

Gene: TP1604_27 Start: 25552, Stop: 26814, Start Num: 8

Candidate Starts for TP1604_27:

(Start: 8 @25552 has 9 MA's), (9, 25564), (13, 25684), (14, 25687), (24, 25795), (41, 25882), (52, 25921), (71, 26029), (76, 26053), (78, 26062), (85, 26095), (90, 26125), (114, 26302), (117, 26320), (118, 26326), (122, 26356), (165, 26533), (181, 26611), (184, 26620), (194, 26689), (196, 26695), (209, 26809),

Gene: TomSawyer_44 Start: 21154, Stop: 22035, Start Num: 59

Candidate Starts for TomSawyer_44:

(Start: 59 @21154 has 92 MA's), (Start: 60 @21166 has 2 MA's), (62, 21184), (72, 21274), (77, 21310), (108, 21538), (111, 21574), (114, 21595), (133, 21736), (135, 21742), (189, 21853), (198, 21898), (203, 21952),

Gene: Tomas_47 Start: 23372, Stop: 24385, Start Num: 54

Candidate Starts for Tomas_47:

(Start: 54 @23372 has 3 MA's), (Start: 59 @23381 has 92 MA's), (Start: 60 @23393 has 2 MA's), (69, 23483), (74, 23513), (114, 23798), (118, 23822), (132, 23939), (133, 23942), (135, 23948), (160, 24050), (184, 24164), (190, 24206), (203, 24305),

Gene: Tuesday_50 Start: 21698, Stop: 22579, Start Num: 59

Candidate Starts for Tuesday_50:

(Start: 59 @21698 has 92 MA's), (Start: 60 @21710 has 2 MA's), (62, 21728), (72, 21818), (77, 21854), (108, 22082), (111, 22118), (114, 22139), (133, 22280), (135, 22286), (189, 22397), (198, 22442), (203, 22496),

Gene: TunaTartare_20 Start: 9544, Stop: 10569, Start Num: 58

Candidate Starts for TunaTartare_20:

(53, 9532), (Start: 58 @9544 has 4 MA's), (Start: 60 @9556 has 2 MA's), (74, 9676), (114, 9961), (132, 10102), (133, 10105), (135, 10111), (160, 10225), (169, 10273), (189, 10378), (203, 10486),

Gene: Virizion_32 Start: 20133, Stop: 21002, Start Num: 66

Candidate Starts for Virizion_32:

(40, 20016), (Start: 59 @20073 has 92 MA's), (66, 20133), (81, 20241), (93, 20322), (98, 20370), (108, 20424), (110, 20457), (131, 20616), (158, 20703), (162, 20721), (176, 20772), (186, 20820), (193, 20865), (204, 20949),

Gene: Vondra_20 Start: 17009, Stop: 17959, Start Num: 59

Candidate Starts for Vondra_20:

(Start: 59 @17009 has 92 MA's), (64, 17063), (75, 17144), (81, 17180), (89, 17234), (92, 17255), (100, 17321), (119, 17471), (121, 17489), (123, 17522), (131, 17576), (137, 17597), (185, 17786),

Gene: Wakanda_17 Start: 9090, Stop: 10106, Start Num: 59

Candidate Starts for Wakanda_17:

(Start: 59 @9090 has 92 MA's), (Start: 60 @9102 has 2 MA's), (74, 9228), (108, 9456), (114, 9513), (132, 9654), (133, 9657), (135, 9663), (169, 9828), (171, 9837), (187, 9915), (189, 9924), (203, 10023),

Gene: Wentworth_29 Start: 20065, Stop: 20982, Start Num: 59

Candidate Starts for Wentworth_29:

(43, 20017), (Start: 59 @20065 has 92 MA's), (93, 20314), (95, 20347), (98, 20362), (110, 20452), (126, 20578), (131, 20611), (137, 20632), (162, 20716), (176, 20767), (204, 20929),

Gene: Westy_22 Start: 10178, Stop: 11191, Start Num: 59

Candidate Starts for Westy_22:

(50, 10157), (53, 10166), (Start: 59 @10178 has 92 MA's), (Start: 60 @10190 has 2 MA's), (69, 10280), (74, 10310), (114, 10595), (132, 10736), (133, 10739), (135, 10745), (168, 10889), (169, 10895), (190, 10997), (197, 11036), (203, 11096), (207, 11135),

Gene: WheeHeim_36 Start: 16771, Stop: 17556, Start Num: 59

Candidate Starts for WheeHeim_36:

(15, 16486), (16, 16492), (24, 16621), (27, 16627), (32, 16657), (39, 16705), (44, 16726), (Start: 59 @16771 has 92 MA's), (67, 16840), (94, 17041), (100, 17098), (109, 17182), (111, 17191), (114,

17212), (132, 17350), (133, 17353), (135, 17359), (137, 17368), (153, 17428), (199, 17521),

Gene: Wilkos_29 Start: 19977, Stop: 20894, Start Num: 59

Candidate Starts for Wilkos_29:

(Start: 59 @19977 has 92 MA's), (93, 20226), (95, 20259), (98, 20274), (110, 20364), (131, 20523), (149, 20580), (162, 20628), (176, 20679), (204, 20841),

Gene: Wipeout_44 Start: 21905, Stop: 22786, Start Num: 59

Candidate Starts for Wipeout_44:

(Start: 59 @21905 has 92 MA's), (Start: 60 @21917 has 2 MA's), (62, 21935), (72, 22025), (77, 22061), (108, 22289), (111, 22325), (114, 22346), (133, 22487), (135, 22493), (189, 22604), (198, 22649), (203, 22703),

Gene: Wofford_44 Start: 21938, Stop: 22957, Start Num: 58

Candidate Starts for Wofford_44:

(53, 21926), (Start: 58 @21938 has 4 MA's), (Start: 60 @21950 has 2 MA's), (74, 22070), (99, 22238), (101, 22250), (114, 22355), (132, 22496), (133, 22499), (135, 22505), (149, 22577), (172, 22679), (189, 22763), (210, 22913),

Gene: Xkcd426_33 Start: 33252, Stop: 34259, Start Num: 59

Candidate Starts for Xkcd426_33:

(1, 32271), (2, 32316), (3, 32346), (4, 32418), (5, 32517), (29, 33123), (45, 33213), (Start: 59 @33252 has 92 MA's), (74, 33384), (121, 33729), (122, 33753), (125, 33774), (134, 33825), (144, 33876), (157, 33930), (164, 33972), (165, 33975), (181, 34053), (184, 34062),

Gene: YDN12_29 Start: 25515, Stop: 26783, Start Num: 8

Candidate Starts for YDN12_29:

(6, 25356), (Start: 8 @25515 has 9 MA's), (9, 25527), (11, 25635), (13, 25647), (14, 25650), (36, 25824), (41, 25845), (52, 25884), (61, 25920), (71, 25992), (76, 26016), (78, 26025), (85, 26058), (90, 26088), (114, 26268), (117, 26286), (118, 26292), (122, 26322), (148, 26439), (164, 26496), (165, 26499), (168, 26514), (181, 26577), (184, 26586), (196, 26661), (201, 26715), (209, 26775),

Gene: Yara_25 Start: 19303, Stop: 20226, Start Num: 56

Candidate Starts for Yara_25:

(Start: 56 @19303 has 1 MA's), (62, 19333), (67, 19372), (72, 19429), (73, 19438), (74, 19441), (81, 19480), (131, 19879), (134, 19888), (177, 20041),

Gene: Yosif_28 Start: 22917, Stop: 23870, Start Num: 57

Candidate Starts for Yosif_28:

(18, 22689), (22, 22770), (30, 22803), (Start: 57 @22917 has 1 MA's), (Start: 60 @22932 has 2 MA's), (62, 22950), (64, 22974), (72, 23049), (73, 23058), (93, 23172), (103, 23250), (108, 23280), (138, 23496), (145, 23517), (173, 23619), (178, 23637), (192, 23721),

Gene: pZL12_44c Start: 32427, Stop: 31489, Start Num: 59

Candidate Starts for pZL12_44c:

(40, 32484), (Start: 59 @32427 has 92 MA's), (72, 32307), (73, 32298), (74, 32295), (76, 32280), (131, 31875), (134, 31866),