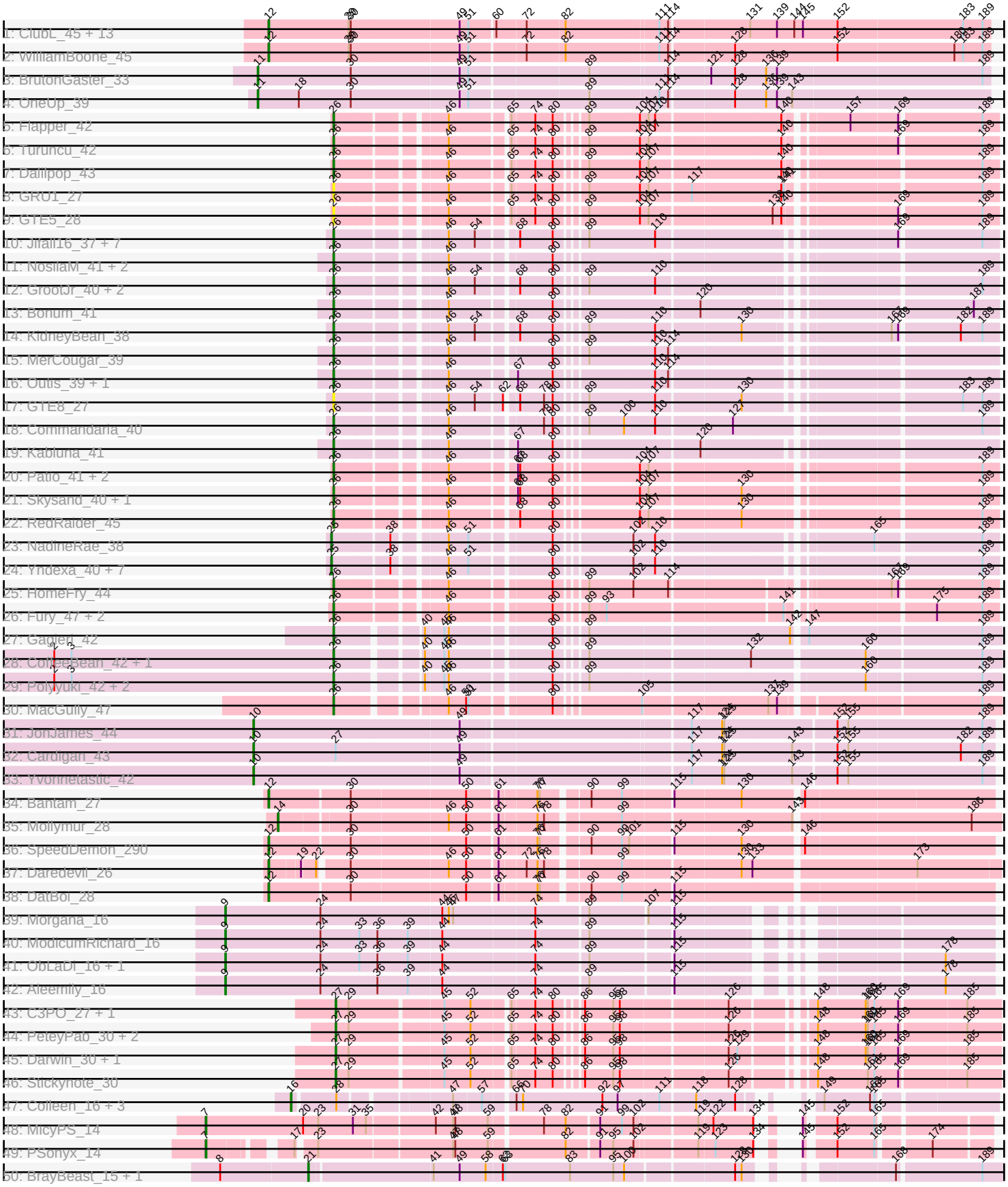
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1: ClubL_45 + 13
2: WilliamBoone_45
3: BrutonGaster_33
4: OneUp_39
5: Flapper_42
6: Turuncu_42
7: Dallipop_43
8: GRU1_27
9: GTE5_28
10: Jfall16_37 + 7
11: NosilaM_41 + 2
12: GrootJr_40 + 2
13: Bonum_41
14: KidneyBean_38
15: MerCougar_39
16: Outis_39 + 1
17: GTE8_27
18: Commandaria_40
19: Kabluna_41
20: Patio_41 + 2
21: Skysand_40 + 1
22: RedRaider_45
23: NadineRae_38
24: Yndexa_40 + 7
25: HomeFry_44
26: Fury_47 + 2
27: Gaglen_42
28: CoffeeBean_42 + 1
29: Polyyuki_42 + 2
30: MacGully_47
31: JonJames_44
32: Cardigan_43
33: Yvonnetastic_42
34: Bantam_27
35: Mollymur_28
36: SpeedDemon_290
37: Daredevil_26
38: DatBoi_28
39: Morgana_16
40: ModicumRichard_16
41: ObLaDi_16 + 1
42: Aleemily_16
43: C3PO_27 + 1
44: PeteyPab_30 + 2
45: Darwin_30 + 1
46: Stickynote_30
47: Colleen_16 + 3
48: MicyPS_14
49: PSonyx_14
50: BrayBeast_15 + 1

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51: Kumotta_16
52: Sarge_15
53: Pigu_14
54: Shoya_14
55: Alatato_14
56: Scotia_17
57: NoSwimming_17
58: Aoka_16 + 2
59: JanetJ_16
60: CocoCinnamon_19
61: Maja_15
62: Colossa_17
63: VanLee_17
64: Gala_11 + 1
65: GALI_17
66: Whack_15
67: REQ2_17
68: ChewyVm_53
69: GMA4_15

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 347401 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347401 has 121 members, 6 are drafts.

Phages represented in each track:
• Track 1 : ClubL_45, Dusty_44, Miskis_43, Bachita_47, Lozinak_45, Engineer_45, Abscondus_44, Toniann_45, Norvs_46, Smoothie_46, Cucurbita_47, Aphelion_45, Culver_45, PhinkBoden_45
• Track 2 : WilliamBoone_45
• Track 3 : BrutonGaster_33
• Track 4 : OneUp_39
• Track 5 : Flapper_42
• Track 6 : Turuncu_42
• Track 7 : Dalilpop_43
• Track 8 : GRU1_27
• Track 9 : GTE5_28
• Track 10 : Jifall16_37, Foxboro_39, NatB6_37, Tracker_38, Kurt_38, Phomeo_37, Emianna_38, Wheezy_38
• Track 11 : NosilaM_41, Buggaboo_39, SuperSulley_39
• Track 12 : GrootJr_40, NovumRegina_38, Arti_38
• Track 13 : Bonum_41
• Track 14 : KidneyBean_38
• Track 15 : MerCougar_39
• Track 16 : Outis_39, StarStruck_39
• Track 17 : GTE8_27
• Track 18 : Commandaria_40
• Track 19 : Kabluna_41
• Track 20 : Patio_41, Ennea_44, Lollipop1437_43
• Track 21 : Skysand_40, Float294_40
• Track 22 : RedRaider_45
• Track 23 : NadineRae_38
• Track 24 : Yndexa_40, BiPauneto_41, Pemberton_41, HubbaBubba_36, Sukkupi_40, IDyn_39, WhoseManz_40, Marietta_40
• Track 25 : HomeFry_44
• Track 26 : Fury_47, Pleakley_47, Scuba_47
• Track 27 : Gagieri_42
• Track 28 : CoffeeBean_42, Maselop_42
• Track 29 : Polyyuki_42, Apiary_42, Braxoaddie_42
• Track 30 : MacGully_47
• Track 31 : JonJames_44
• Track 32 : Cardigan_43
• Track 33 : Yvonnetastic_42

• Track 34 : Bantam_27
• Track 35 : Mollymur_28
• Track 36 : SpeedDemon_290
• Track 37 : Daredevil_26
• Track 38 : DatBoi_28
• Track 39 : Morgana_16
• Track 40 : ModicumRichard_16
• Track 41 : ObLaDi_16, Cafasso_16
• Track 42 : Aleemily_16
• Track 43 : C3PO_27, Cruella_28
• Track 44 : PeteyPab_30, PotatoChip_30, Zion_30
• Track 45 : Darwin_30, Kimchi1738_28
• Track 46 : Stickynote_30
• Track 47 : Colleen_16, Poushou_16, TouchMeNot_16, Arianna_16
• Track 48 : MicyPS_14
• Track 49 : PSonyx_14
• Track 50 : BrayBeast_15, Rooter_14
• Track 51 : Kumotta_16
• Track 52 : Sarge_15
• Track 53 : Pigu_14
• Track 54 : Shoya_14
• Track 55 : Alatato_14
• Track 56 : Scotia_17
• Track 57 : NoSwimming_17
• Track 58 : Aoka_16, PrairieDogTown_16, EvenBluerMoon_16
• Track 59 : JanetJ_16
• Track 60 : CocoCinnamon_19
• Track 61 : Maja_15
• Track 62 : Colossa_17
• Track 63 : VanLee_17
• Track 64 : Gaia_11, Nebkiss_12
• Track 65 : GAL1_17
• Track 66 : Whack_15
• Track 67 : REQ2_17
• Track 68 : ChewyVIII_53
• Track 69 : GMA4_15

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 42 of the 115 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Apiary_42, Arti_38, Bonum_41, Braxoaddie_42, Buggaboo_39, ChewyVIII_53, CoffeeBean_42, Commandaria_40, Dalilpop_43, Emianna_38, Ennea_44, Flapper_42, Float294_40, Foxboro_39, Fury_47, GRU1_27, GTE5_28, GTE8_27, Gagieri_42, GrootJr_40, HomeFry_44, Jifall16_37, Kabluna_41, KidneyBean_38, Kurt_38, Lollipop1437_43, MacGully_47, Maselop_42, MerCougar_39, NatB6_37, NosilaM_41, NovumRegina_38, Outis_39, Patio_41, Phomeo_37, Pleakley_47, Polyyuki_42, RedRaider_45, Scuba_47, Skysand_40, StarStruck_39,

SuperSulley_39, Tracker_38, Turuncu_42, Wheezy_38,

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

Genes that do not have the "Most Annotated" start:
• Abscondus_44, Alatato_14, Aleemily_16, Aoka_16, Aphelion_45, Arianna_16, Bachita_47, Bantam_27, BiPauneto_41, BrayBeast_15, BrutonGaster_33, C3PO_27, Cafasso_16, Cardigan_43, ClubL_45, CocoCinnamon_19, Colleen_16, Colossa_17, Cruella_28, Cucurbita_47, Culver_45, Daredevil_26, Darwin_30, DatBoi_28, Dusty_44, Engineer_45, EvenBluerMoon_16, GAL1_17, GMA4_15, Gaia_11, HubbaBubba_36, IDyn_39, JanetJ_16, JonJames_44, Kimchi1738_28, Kumotta_16, Lozinak_45, Maja_15, Marietta_40, MicyPS_14, Miskis_43, ModicumRichard_16, Mollymur_28, Morgana_16, NadineRae_38, Nebkiss_12, NoSwimming_17, Norvs_46, ObLaDi_16, OneUp_39, PSonyx_14, Pemberton_41, PeteyPab_30, PhinkBoden_45, Pigu_14, PotatoChip_30, Poushou_16, PrairieDogTown_16, REQ2_17, Rooter_14, Sarge_15, Scotia_17, Shoya_14, Smoothie_46, SpeedDemon_290, Stickynote_30, Sukkupi_40, Toniann_45, TouchMeNot_16, VanLee_17, Whack_15, WhoseManz_40, WilliamBoone_45, Yndexa_40, Yvonnetastic_42, Zion_30,

Summary by start number:

Start 7:
• Found in 2 of 121 (1.7%) of genes in pham
• Manual Annotations of this start: 2 of 115
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MicyPS_14 (EQ), PSonyx_14 (EQ),

Start 9:
• Found in 6 of 121 (5.0%) of genes in pham
• Manual Annotations of this start: 5 of 115
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Aleemily_16 (DZ), Cafasso_16 (DZ), ModicumRichard_16 (DZ), Morgana_16 (DZ), ObLaDi_16 (DZ),

Start 10:
• Found in 3 of 121 (2.5%) of genes in pham
• Manual Annotations of this start: 3 of 115
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cardigan_43 (DD), JonJames_44 (DD), Yvonnetastic_42 (DD),

Start 11:
• Found in 2 of 121 (1.7%) of genes in pham
• Manual Annotations of this start: 2 of 115
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BrutonGaster_33 (CQ2), OneUp_39 (CQ2),

Start 12:
• Found in 19 of 121 (15.7%) of genes in pham
• Manual Annotations of this start: 19 of 115

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abscondus_44 (CQ1), Aphelion_45 (CQ1), Bachita_47 (CQ1), Bantam_27 (DL), ClubL_45 (CQ1), Cucurbita_47 (CQ1), Culver_45 (CQ1), Daredevil_26 (DL), DatBoi_28 (DL), Dusty_44 (CQ1), Engineer_45 (CQ1), Lozinak_45 (CQ1), Miskis_43 (CQ1), Norvs_46 (CQ1), PhinkBoden_45 (CQ1), Smoothie_46 (CQ1), SpeedDemon_290 (DL), Toniann_45 (CQ1), WilliamBoone_45 (CQ1),

Start 13:
• Found in 1 of 121 (0.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GAL1_17 (singleton),

Start 14:
• Found in 1 of 121 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 115
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mollymur_28 (DL),

Start 15:
• Found in 2 of 121 (1.7%) of genes in pham
• Manual Annotations of this start: 2 of 115
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Colossa_17 (KA), VanLee_17 (KA),

Start 16:
• Found in 4 of 121 (3.3%) of genes in pham
• Manual Annotations of this start: 4 of 115
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arianna_16 (EO), Colleen_16 (EO), Poushou_16 (EO), TouchMeNot_16 (EO),

Start 21:
• Found in 15 of 121 (12.4%) of genes in pham
• Manual Annotations of this start: 15 of 115
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alatato_14 (FB), Aoka_16 (FO), BrayBeast_15 (FB), CocoCinnamon_19 (FO), EvenBluerMoon_16 (FO), JanetJ_16 (FO), Kumotta_16 (FB), Maja_15 (FO), NoSwimming_17 (FO), Pigu_14 (FB), PrairieDogTown_16 (FO), Rooter_14 (FB), Sarge_15 (FB), Scotia_17 (FO), Shoya_14 (FB),

Start 25:
• Found in 9 of 121 (7.4%) of genes in pham
• Manual Annotations of this start: 9 of 115
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BiPauneto_41 (CR4), HubbaBubba_36 (CR4), IDyn_39 (CR4), Marietta_40 (CR4), NadineRae_38 (CR4), Pemberton_41 (CR4), Sukkupi_40 (CR4), WhoseManz_40 (CR4), Yndexa_40 (CR4),

Start 26:
• Found in 45 of 121 (37.2%) of genes in pham

• Manual Annotations of this start: 42 of 115
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Apiary_42 (CR6), Arti_38 (CR2), Bonum_41 (CR2), Braxoaddie_42 (CR6), Buggaboo_39 (CR2), ChewyVIII_53 (singleton), CoffeeBean_42 (CR6), Commandaria_40 (CR2), Dalilpop_43 (CR1), Emianna_38 (CR2), Ennea_44 (CR3), Flapper_42 (CR1), Float294_40 (CR3), Foxboro_39 (CR2), Fury_47 (CR5), GRU1_27 (CR1), GTE5_28 (CR1), GTE8_27 (CR2), Gagieri_42 (CR6), GrootJr_40 (CR2), HomeFry_44 (CR5), Jifall16_37 (CR2), Kabluna_41 (CR2), KidneyBean_38 (CR2), Kurt_38 (CR2), Lollipop1437_43 (CR3), MacGully_47 (CR7), Maselop_42 (CR6), MerCougar_39 (CR2), NatB6_37 (CR2), NosilaM_41 (CR2), NovumRegina_38 (CR2), Outis_39 (CR2), Patio_41 (CR3), Phomeo_37 (CR2), Pleakley_47 (CR5), Polyyuki_42 (CR6), RedRaider_45 (CR3), Scuba_47 (CR5), Skysand_40 (CR3), StarStruck_39 (CR2), SuperSulley_39 (CR2), Tracker_38 (CR2), Turuncu_42 (CR1), Wheezy_38 (CR2),

Start 27:
• Found in 11 of 121 (9.1%) of genes in pham
• Manual Annotations of this start: 9 of 115
• Called 90.9% of time when present
• Phage (with cluster) where this start called: C3PO_27 (EN), Cruella_28 (EN), Darwin_30 (EN), Kimchi1738_28 (EN), PeteyPab_30 (EN), PotatoChip_30 (EN), REQ2_17 (singleton), Stickynote_30 (EN), Whack_15 (singleton), Zion_30 (EN),

Start 31:
• Found in 2 of 121 (1.7%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: GMA4_15 (singleton),

Start 39:
• Found in 6 of 121 (5.0%) of genes in pham
• Manual Annotations of this start: 2 of 115
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Gaia_11 (X), Nebkiss_12 (X),

Summary by clusters:

There are 20 clusters represented in this pham: CR2, CR3, KA, EN, CR6, CR7, CR4, CR5, DD, EO, singleton, FB, CR1, DZ, X, CQ2, CQ1, EQ, DL, FO,

Info for manual annotations of cluster CQ1:
•Start number 12 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 11 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CR1:
•Start number 26 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 26 was manually annotated 21 times for cluster CR2.

Info for manual annotations of cluster CR3:

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

Info for manual annotations of cluster CR4:
•Start number 25 was manually annotated 9 times for cluster CR4.

Info for manual annotations of cluster CR5:
•Start number 26 was manually annotated 4 times for cluster CR5.

Info for manual annotations of cluster CR6:
•Start number 26 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster CR7:
•Start number 26 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster DD:
•Start number 10 was manually annotated 3 times for cluster DD.

Info for manual annotations of cluster DL:
•Start number 12 was manually annotated 4 times for cluster DL.
•Start number 14 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DZ:
•Start number 9 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster EN:
•Start number 27 was manually annotated 8 times for cluster EN.

Info for manual annotations of cluster EO:
•Start number 16 was manually annotated 4 times for cluster EO.

Info for manual annotations of cluster EQ:
•Start number 7 was manually annotated 2 times for cluster EQ.

Info for manual annotations of cluster FB:
•Start number 21 was manually annotated 7 times for cluster FB.

Info for manual annotations of cluster FO:
•Start number 21 was manually annotated 8 times for cluster FO.

Info for manual annotations of cluster KA:
•Start number 15 was manually annotated 2 times for cluster KA.

Info for manual annotations of cluster X:
•Start number 39 was manually annotated 2 times for cluster X.

Gene Information:

Gene: Abscondus_44 Start: 18658, Stop: 19619, Start Num: 12
Candidate Starts for Abscondus_44:
(Start: 12 @18658 has 19 MA's), (29, 18769), (30, 18772), (49, 18919), (51, 18931), (60, 18964), (72, 19003), (82, 19054), (111, 19174), (114, 19186), (131, 19291), (139, 19327), (144, 19351), (145,

19363), (152, 19411), (183, 19582), (189, 19609),

Gene: Alatato_14 Start: 8514, Stop: 9367, Start Num: 21
Candidate Starts for Alatato_14:
(4, 8190), (5, 8259), (6, 8367), (Start: 21 @8514 has 15 MA's), (41, 8676), (58, 8748), (62, 8769), (63, 8772), (83, 8862), (95, 8922), (158, 9165), (176, 9270), (189, 9327),

Gene: Aleemily_16 Start: 9981, Stop: 10933, Start Num: 9
Candidate Starts for Aleemily_16:
(Start: 9 @9981 has 5 MA's), (24, 10113), (36, 10191), (Start: 39 @10233 has 2 MA's), (44, 10278), (74, 10401), (89, 10470), (115, 10575), (178, 10866),

Gene: Aoka_16 Start: 10072, Stop: 10934, Start Num: 21
Candidate Starts for Aoka_16:
(Start: 21 @10072 has 15 MA's), (41, 10243), (58, 10315), (62, 10336), (63, 10339), (84, 10432), (105, 10528), (107, 10534),

Gene: Aphelion_45 Start: 18927, Stop: 19888, Start Num: 12
Candidate Starts for Aphelion_45:
(Start: 12 @18927 has 19 MA's), (29, 19038), (30, 19041), (49, 19188), (51, 19200), (60, 19233), (72, 19272), (82, 19323), (111, 19443), (114, 19455), (131, 19560), (139, 19596), (144, 19620), (145, 19632), (152, 19680), (183, 19851), (189, 19878),

Gene: Apiary_42 Start: 24321, Stop: 25141, Start Num: 26
Candidate Starts for Apiary_42:
(2, 23934), (3, 23958), (Start: 26 @24321 has 42 MA's), (40, 24420), (45, 24444), (46, 24450), (80, 24576), (89, 24609), (160, 24963), (189, 25116),

Gene: Arianna_16 Start: 10804, Stop: 11615, Start Num: 16
Candidate Starts for Arianna_16:
(Start: 16 @10804 has 4 MA's), (28, 10858), (47, 10993), (57, 11029), (66, 11065), (70, 11074), (92, 11182), (97, 11203), (111, 11257), (118, 11302), (128, 11353), (149, 11395), (162, 11458), (165, 11464),

Gene: Arti_38 Start: 22581, Stop: 23383, Start Num: 26
Candidate Starts for Arti_38:
(Start: 26 @22581 has 42 MA's), (46, 22713), (54, 22749), (68, 22794), (80, 22839), (89, 22872), (110, 22962), (189, 23361),

Gene: Bachita_47 Start: 19360, Stop: 20321, Start Num: 12
Candidate Starts for Bachita_47:
(Start: 12 @19360 has 19 MA's), (29, 19471), (30, 19474), (49, 19621), (51, 19633), (60, 19666), (72, 19705), (82, 19756), (111, 19876), (114, 19888), (131, 19993), (139, 20029), (144, 20053), (145, 20065), (152, 20113), (183, 20284), (189, 20311),

Gene: Bantam_27 Start: 16393, Stop: 17321, Start Num: 12
Candidate Starts for Bantam_27:
(Start: 12 @16393 has 19 MA's), (30, 16501), (50, 16654), (61, 16693), (76, 16741), (77, 16744), (90, 16798), (99, 16840), (115, 16903), (130, 16993), (146, 17068),

Gene: BiPauneto_41 Start: 22337, Stop: 23145, Start Num: 25
Candidate Starts for BiPauneto_41:

(Start: 25 @22337 has 9 MA's), (38, 22412), (46, 22472), (51, 22499), (80, 22598), (102, 22691), (110, 22721), (189, 23123),

Gene: Bonum_41 Start: 22920, Stop: 23722, Start Num: 26
Candidate Starts for Bonum_41:
(Start: 26 @22920 has 42 MA's), (46, 23052), (80, 23178), (120, 23358), (187, 23688),

Gene: Braxoaddie_42 Start: 24310, Stop: 25130, Start Num: 26
Candidate Starts for Braxoaddie_42:
(2, 23923), (3, 23947), (Start: 26 @24310 has 42 MA's), (40, 24409), (45, 24433), (46, 24439), (80, 24565), (89, 24598), (160, 24952), (189, 25105),

Gene: BrayBeast_15 Start: 8914, Stop: 9761, Start Num: 21
Candidate Starts for BrayBeast_15:
(8, 8797), (Start: 21 @8914 has 15 MA's), (41, 9076), (49, 9112), (58, 9148), (62, 9169), (63, 9172), (83, 9262), (95, 9322), (100, 9337), (128, 9475), (130, 9484), (168, 9613), (189, 9724),

Gene: BrutonGaster_33 Start: 15537, Stop: 16510, Start Num: 11
Candidate Starts for BrutonGaster_33:
(Start: 11 @15537 has 2 MA's), (30, 15666), (49, 15813), (51, 15825), (89, 15978), (114, 16080), (121, 16131), (128, 16164), (136, 16206), (139, 16221), (189, 16500),

Gene: Buggaboo_39 Start: 23405, Stop: 24210, Start Num: 26
Candidate Starts for Buggaboo_39:
(Start: 26 @23405 has 42 MA's), (46, 23537), (80, 23663),

Gene: C3PO_27 Start: 20302, Stop: 21122, Start Num: 27
Candidate Starts for C3PO_27:
(Start: 27 @20302 has 9 MA's), (29, 20320), (45, 20440), (52, 20476), (65, 20521), (74, 20551), (80, 20575), (86, 20602), (95, 20641), (98, 20650), (126, 20788), (148, 20878), (160, 20944), (161, 20947), (165, 20956), (169, 20989), (185, 21076),

Gene: Cafasso_16 Start: 9969, Stop: 10921, Start Num: 9
Candidate Starts for Cafasso_16:
(Start: 9 @9969 has 5 MA's), (24, 10101), (33, 10155), (36, 10179), (Start: 39 @10221 has 2 MA's), (44, 10266), (74, 10389), (89, 10458), (115, 10563), (178, 10854),

Gene: Cardigan_43 Start: 20567, Stop: 21555, Start Num: 10
Candidate Starts for Cardigan_43:
(Start: 10 @20567 has 3 MA's), (Start: 27 @20681 has 9 MA's), (49, 20849), (117, 21146), (124, 21188), (125, 21191), (143, 21284), (152, 21341), (155, 21356), (182, 21509), (189, 21539),

Gene: ChewyVIII_53 Start: 31497, Stop: 32314, Start Num: 26
Candidate Starts for ChewyVIII_53:
(Start: 26 @31497 has 42 MA's), (55, 31674), (65, 31710), (80, 31764), (89, 31803), (109, 31887), (112, 31902), (157, 32127),

Gene: ClubL_45 Start: 18849, Stop: 19810, Start Num: 12
Candidate Starts for ClubL_45:
(Start: 12 @18849 has 19 MA's), (29, 18960), (30, 18963), (49, 19110), (51, 19122), (60, 19155), (72, 19194), (82, 19245), (111, 19365), (114, 19377), (131, 19482), (139, 19518), (144, 19542), (145, 19554), (152, 19602), (183, 19773), (189, 19800),

Gene: CocoCinnamon_19 Start: 10261, Stop: 11117, Start Num: 21
Candidate Starts for CocoCinnamon_19:
(Start: 21 @10261 has 15 MA's), (41, 10423), (42, 10426), (58, 10495), (62, 10516), (83, 10609), (84, 10612), (94, 10666), (95, 10669), (127, 10822),

Gene: CoffeeBean_42 Start: 24265, Stop: 25088, Start Num: 26
Candidate Starts for CoffeeBean_42:
(2, 23878), (3, 23902), (Start: 26 @24265 has 42 MA's), (40, 24364), (45, 24388), (46, 24394), (80, 24520), (89, 24553), (132, 24763), (160, 24910), (189, 25063),

Gene: Colleen_16 Start: 10804, Stop: 11615, Start Num: 16
Candidate Starts for Colleen_16:
(Start: 16 @10804 has 4 MA's), (28, 10858), (47, 10993), (57, 11029), (66, 11065), (70, 11074), (92, 11182), (97, 11203), (111, 11257), (118, 11302), (128, 11353), (149, 11395), (162, 11458), (165, 11464),

Gene: Colossa_17 Start: 10018, Stop: 10895, Start Num: 15
Candidate Starts for Colossa_17:
(1, 9658), (Start: 15 @10018 has 2 MA's), (32, 10114), (50, 10258), (56, 10276), (89, 10408), (99, 10453), (108, 10489),

Gene: Commandaria_40 Start: 23900, Stop: 24714, Start Num: 26
Candidate Starts for Commandaria_40:
(Start: 26 @23900 has 42 MA's), (46, 24032), (78, 24146), (80, 24158), (89, 24191), (100, 24239), (110, 24281), (127, 24380), (189, 24692),

Gene: Cruella_28 Start: 20302, Stop: 21122, Start Num: 27
Candidate Starts for Cruella_28:
(Start: 27 @20302 has 9 MA's), (29, 20320), (45, 20440), (52, 20476), (65, 20521), (74, 20551), (80, 20575), (86, 20602), (95, 20641), (98, 20650), (126, 20788), (148, 20878), (160, 20944), (161, 20947), (165, 20956), (169, 20989), (185, 21076),

Gene: Cucurbita_47 Start: 20219, Stop: 21180, Start Num: 12
Candidate Starts for Cucurbita_47:
(Start: 12 @20219 has 19 MA's), (29, 20330), (30, 20333), (49, 20480), (51, 20492), (60, 20525), (72, 20564), (82, 20615), (111, 20735), (114, 20747), (131, 20852), (139, 20888), (144, 20912), (145, 20924), (152, 20972), (183, 21143), (189, 21170),

Gene: Culver_45 Start: 18658, Stop: 19619, Start Num: 12
Candidate Starts for Culver_45:
(Start: 12 @18658 has 19 MA's), (29, 18769), (30, 18772), (49, 18919), (51, 18931), (60, 18964), (72, 19003), (82, 19054), (111, 19174), (114, 19186), (131, 19291), (139, 19327), (144, 19351), (145, 19363), (152, 19411), (183, 19582), (189, 19609),

Gene: Dalilpop_43 Start: 24905, Stop: 25716, Start Num: 26
Candidate Starts for Dalilpop_43:
(Start: 26 @24905 has 42 MA's), (46, 25037), (65, 25109), (74, 25139), (80, 25163), (89, 25196), (104, 25265), (107, 25277), (140, 25451), (189, 25694),

Gene: Daredevil_26 Start: 14796, Stop: 15721, Start Num: 12
Candidate Starts for Daredevil_26:
(Start: 12 @14796 has 19 MA's), (19, 14835), (22, 14853), (30, 14889), (46, 15018), (50, 15042), (61, 15081), (72, 15114), (76, 15129), (78, 15138), (99, 15228), (130, 15381), (133, 15396), (173, 15609),

Gene: Darwin_30 Start: 19987, Stop: 20807, Start Num: 27
Candidate Starts for Darwin_30:
(Start: 27 @19987 has 9 MA's), (29, 20005), (45, 20125), (52, 20161), (65, 20206), (74, 20236), (80, 20260), (86, 20287), (95, 20326), (98, 20335), (126, 20473), (129, 20485), (148, 20563), (160, 20629), (161, 20632), (165, 20641), (169, 20674), (185, 20761),

Gene: DatBoi_28 Start: 17182, Stop: 18110, Start Num: 12
Candidate Starts for DatBoi_28:
(Start: 12 @17182 has 19 MA's), (30, 17290), (50, 17443), (61, 17482), (76, 17530), (77, 17533), (90, 17587), (99, 17629), (115, 17692),

Gene: Dusty_44 Start: 18658, Stop: 19619, Start Num: 12
Candidate Starts for Dusty_44:
(Start: 12 @18658 has 19 MA's), (29, 18769), (30, 18772), (49, 18919), (51, 18931), (60, 18964), (72, 19003), (82, 19054), (111, 19174), (114, 19186), (131, 19291), (139, 19327), (144, 19351), (145, 19363), (152, 19411), (183, 19582), (189, 19609),

Gene: Emianna_38 Start: 23597, Stop: 24402, Start Num: 26
Candidate Starts for Emianna_38:
(Start: 26 @23597 has 42 MA's), (46, 23729), (54, 23765), (68, 23810), (80, 23855), (89, 23888), (110, 23978), (169, 24272), (189, 24380),

Gene: Engineer_45 Start: 18875, Stop: 19836, Start Num: 12
Candidate Starts for Engineer_45:
(Start: 12 @18875 has 19 MA's), (29, 18986), (30, 18989), (49, 19136), (51, 19148), (60, 19181), (72, 19220), (82, 19271), (111, 19391), (114, 19403), (131, 19508), (139, 19544), (144, 19568), (145, 19580), (152, 19628), (183, 19799), (189, 19826),

Gene: Ennea_44 Start: 24223, Stop: 25034, Start Num: 26
Candidate Starts for Ennea_44:
(Start: 26 @24223 has 42 MA's), (46, 24355), (67, 24433), (68, 24436), (80, 24481), (104, 24583), (107, 24595), (189, 25012),

Gene: EvenBluerMoon_16 Start: 10107, Stop: 10969, Start Num: 21
Candidate Starts for EvenBluerMoon_16:
(Start: 21 @10107 has 15 MA's), (41, 10278), (58, 10350), (62, 10371), (63, 10374), (84, 10467), (105, 10563), (107, 10569),

Gene: Flapper_42 Start: 23966, Stop: 24777, Start Num: 26
Candidate Starts for Flapper_42:
(Start: 26 @23966 has 42 MA's), (46, 24098), (65, 24170), (74, 24200), (80, 24224), (89, 24257), (104, 24326), (107, 24338), (110, 24347), (140, 24512), (157, 24584), (169, 24647), (189, 24755),

Gene: Float294_40 Start: 23662, Stop: 24473, Start Num: 26
Candidate Starts for Float294_40:
(Start: 26 @23662 has 42 MA's), (46, 23794), (67, 23872), (68, 23875), (80, 23920), (104, 24022), (107, 24034), (130, 24154), (189, 24451),

Gene: Foxboro_39 Start: 24103, Stop: 24908, Start Num: 26
Candidate Starts for Foxboro_39:
(Start: 26 @24103 has 42 MA's), (46, 24235), (54, 24271), (68, 24316), (80, 24361), (89, 24394), (110, 24484), (169, 24778), (189, 24886),

Gene: Fury_47 Start: 23325, Stop: 24127, Start Num: 26
Candidate Starts for Fury_47:
(Start: 26 @23325 has 42 MA's), (46, 23457), (80, 23583), (89, 23616), (93, 23640), (141, 23868), (175, 24042), (189, 24105),

Gene: GAL1_17 Start: 10786, Stop: 11669, Start Num: 13
Candidate Starts for GAL1_17:
(13, 10786), (40, 10990), (79, 11158), (89, 11218), (102, 11278), (107, 11296), (115, 11326), (118, 11356), (119, 11359), (120, 11362), (128, 11407), (130, 11416), (150, 11476), (151, 11482), (152, 11485), (171, 11575), (176, 11620), (180, 11638), (182, 11647), (184, 11653),

Gene: GMA4_15 Start: 9946, Stop: 10748, Start Num: 31
Candidate Starts for GMA4_15:
(Start: 9 @9769 has 5 MA's), (31, 9946), (40, 10039), (67, 10159), (72, 10171), (87, 10246), (99, 10294), (154, 10546), (181, 10699),

Gene: GRU1_27 Start: 15854, Stop: 16665, Start Num: 26
Candidate Starts for GRU1_27:
(Start: 26 @15854 has 42 MA's), (46, 15986), (65, 16058), (74, 16088), (80, 16112), (89, 16145), (104, 16214), (107, 16226), (117, 16280), (140, 16400), (141, 16403), (189, 16643),

Gene: GTE5_28 Start: 16818, Stop: 17629, Start Num: 26
Candidate Starts for GTE5_28:
(Start: 26 @16818 has 42 MA's), (46, 16950), (65, 17022), (74, 17052), (80, 17076), (89, 17109), (104, 17178), (107, 17190), (138, 17352), (140, 17364), (169, 17499), (189, 17607),

Gene: GTE8_27 Start: 16862, Stop: 17667, Start Num: 26
Candidate Starts for GTE8_27:
(Start: 26 @16862 has 42 MA's), (46, 16994), (54, 17030), (62, 17063), (68, 17075), (78, 17108), (80, 17120), (89, 17153), (110, 17243), (130, 17354), (183, 17618), (189, 17645),

Gene: Gagieri_42 Start: 24140, Stop: 24963, Start Num: 26
Candidate Starts for Gagieri_42:
(Start: 26 @24140 has 42 MA's), (40, 24239), (45, 24263), (46, 24269), (80, 24395), (89, 24428), (142, 24692), (147, 24707), (189, 24938),

Gene: Gaia_11 Start: 8760, Stop: 9442, Start Num: 39
Candidate Starts for Gaia_11:
(Start: 39 @8760 has 2 MA's), (43, 8805), (62, 8889), (64, 8898), (69, 8913), (75, 8934), (81, 8958), (91, 9018), (96, 9039), (98, 9045), (99, 9048), (100, 9051), (105, 9075), (116, 9123), (118, 9138), (123, 9156), (156, 9273), (164, 9306), (179, 9399), (185, 9423),

Gene: GrootJr_40 Start: 22976, Stop: 23778, Start Num: 26
Candidate Starts for GrootJr_40:
(Start: 26 @22976 has 42 MA's), (46, 23108), (54, 23144), (68, 23189), (80, 23234), (89, 23267), (110, 23357), (189, 23756),

Gene: HomeFry_44 Start: 21951, Stop: 22753, Start Num: 26
Candidate Starts for HomeFry_44:
(Start: 26 @21951 has 42 MA's), (46, 22083), (80, 22209), (89, 22242), (102, 22302), (114, 22350), (167, 22614), (169, 22623), (189, 22731),

Gene: HubbaBubba_36 Start: 19355, Stop: 20163, Start Num: 25
Candidate Starts for HubbaBubba_36:
(Start: 25 @19355 has 9 MA's), (38, 19430), (46, 19490), (51, 19517), (80, 19616), (102, 19709), (110, 19739), (189, 20141),

Gene: IDyn_39 Start: 20751, Stop: 21559, Start Num: 25
Candidate Starts for IDyn_39:
(Start: 25 @20751 has 9 MA's), (38, 20826), (46, 20886), (51, 20913), (80, 21012), (102, 21105), (110, 21135), (189, 21537),

Gene: JanetJ_16 Start: 9891, Stop: 10747, Start Num: 21
Candidate Starts for JanetJ_16:
(Start: 21 @9891 has 15 MA's), (41, 10056), (58, 10128), (62, 10149), (63, 10152), (72, 10182), (83, 10242), (95, 10302), (165, 10569),

Gene: Jifall16_37 Start: 23251, Stop: 24056, Start Num: 26
Candidate Starts for Jifall16_37:
(Start: 26 @23251 has 42 MA's), (46, 23383), (54, 23419), (68, 23464), (80, 23509), (89, 23542), (110, 23632), (169, 23926), (189, 24034),

Gene: JonJames_44 Start: 22784, Stop: 23772, Start Num: 10
Candidate Starts for JonJames_44:
(Start: 10 @22784 has 3 MA's), (49, 23066), (117, 23363), (124, 23405), (125, 23408), (152, 23558), (155, 23573), (189, 23756),

Gene: Kabluna_41 Start: 22320, Stop: 23125, Start Num: 26
Candidate Starts for Kabluna_41:
(Start: 26 @22320 has 42 MA's), (46, 22452), (67, 22530), (80, 22578), (120, 22758),

Gene: KidneyBean_38 Start: 23375, Stop: 24177, Start Num: 26
Candidate Starts for KidneyBean_38:
(Start: 26 @23375 has 42 MA's), (46, 23507), (54, 23543), (68, 23588), (80, 23633), (89, 23666), (110, 23756), (130, 23867), (167, 24038), (169, 24047), (182, 24125), (189, 24155),

Gene: Kimchi1738_28 Start: 19390, Stop: 20210, Start Num: 27
Candidate Starts for Kimchi1738_28:
(Start: 27 @19390 has 9 MA's), (29, 19408), (45, 19528), (52, 19564), (65, 19609), (74, 19639), (80, 19663), (86, 19690), (95, 19729), (98, 19738), (126, 19876), (129, 19888), (148, 19966), (160, 20032), (161, 20035), (165, 20044), (169, 20077), (185, 20164),

Gene: Kumotta_16 Start: 9768, Stop: 10615, Start Num: 21
Candidate Starts for Kumotta_16:
(Start: 21 @9768 has 15 MA's), (34, 9840), (41, 9933), (44, 9945), (58, 10005), (60, 10017), (62, 10026), (63, 10029), (83, 10119), (95, 10179), (101, 10200), (114, 10251), (128, 10335), (158, 10422), (159, 10425), (160, 10434),

Gene: Kurt_38 Start: 23612, Stop: 24417, Start Num: 26
Candidate Starts for Kurt_38:
(Start: 26 @23612 has 42 MA's), (46, 23744), (54, 23780), (68, 23825), (80, 23870), (89, 23903), (110, 23993), (169, 24287), (189, 24395),

Gene: Lollipop1437_43 Start: 24211, Stop: 25022, Start Num: 26
Candidate Starts for Lollipop1437_43:

(Start: 26 @24211 has 42 MA's), (46, 24343), (67, 24421), (68, 24424), (80, 24469), (104, 24571), (107, 24583), (189, 25000),

Gene: Lozinak_45 Start: 18930, Stop: 19891, Start Num: 12
Candidate Starts for Lozinak_45:
(Start: 12 @18930 has 19 MA's), (29, 19041), (30, 19044), (49, 19191), (51, 19203), (60, 19236), (72, 19275), (82, 19326), (111, 19446), (114, 19458), (131, 19563), (139, 19599), (144, 19623), (145, 19635), (152, 19683), (183, 19854), (189, 19881),

Gene: MacGully_47 Start: 24813, Stop: 25627, Start Num: 26
Candidate Starts for MacGully_47:
(Start: 26 @24813 has 42 MA's), (46, 24942), (50, 24966), (51, 24969), (80, 25068), (105, 25173), (137, 25335), (139, 25347), (189, 25602),

Gene: Maja_15 Start: 9389, Stop: 10245, Start Num: 21
Candidate Starts for Maja_15:
(Start: 21 @9389 has 15 MA's), (41, 9554), (58, 9626), (62, 9647), (63, 9650), (71, 9677), (95, 9800), (100, 9815), (114, 9869), (118, 9902), (169, 10097), (189, 10205),

Gene: Marietta_40 Start: 20667, Stop: 21475, Start Num: 25
Candidate Starts for Marietta_40:
(Start: 25 @20667 has 9 MA's), (38, 20742), (46, 20802), (51, 20829), (80, 20928), (102, 21021), (110, 21051), (189, 21453),

Gene: Maselop_42 Start: 24341, Stop: 25164, Start Num: 26
Candidate Starts for Maselop_42:
(2, 23954), (3, 23978), (Start: 26 @24341 has 42 MA's), (40, 24440), (45, 24464), (46, 24470), (80, 24596), (89, 24629), (132, 24839), (160, 24986), (189, 25139),

Gene: MerCougar_39 Start: 23519, Stop: 24324, Start Num: 26
Candidate Starts for MerCougar_39:
(Start: 26 @23519 has 42 MA's), (46, 23651), (80, 23777), (89, 23810), (110, 23900), (114, 23918),

Gene: MicyPS_14 Start: 9534, Stop: 10483, Start Num: 7
Candidate Starts for MicyPS_14:
(Start: 7 @9534 has 2 MA's), (20, 9669), (23, 9690), (31, 9738), (35, 9756), (42, 9843), (47, 9867), (48, 9870), (59, 9915), (78, 9981), (82, 10011), (91, 10053), (99, 10083), (102, 10098), (119, 10176), (122, 10194), (134, 10248), (145, 10260), (152, 10293), (165, 10344),

Gene: Miskis_43 Start: 18693, Stop: 19654, Start Num: 12
Candidate Starts for Miskis_43:
(Start: 12 @18693 has 19 MA's), (29, 18804), (30, 18807), (49, 18954), (51, 18966), (60, 18999), (72, 19038), (82, 19089), (111, 19209), (114, 19221), (131, 19326), (139, 19362), (144, 19386), (145, 19398), (152, 19446), (183, 19617), (189, 19644),

Gene: ModicumRichard_16 Start: 9969, Stop: 10921, Start Num: 9
Candidate Starts for ModicumRichard_16:
(Start: 9 @9969 has 5 MA's), (24, 10101), (33, 10155), (36, 10179), (Start: 39 @10221 has 2 MA's), (44, 10266), (74, 10389), (89, 10458), (115, 10563),

Gene: Mollymur_28 Start: 17282, Stop: 18201, Start Num: 14
Candidate Starts for Mollymur_28:

(Start: 14 @17282 has 1 MA's), (30, 17369), (46, 17498), (50, 17522), (61, 17561), (76, 17609), (78, 17618), (99, 17708), (143, 17930), (186, 18161),

Gene: Morgana_16 Start: 9973, Stop: 10925, Start Num: 9
Candidate Starts for Morgana_16:
(Start: 9 @9973 has 5 MA's), (24, 10105), (44, 10270), (46, 10279), (47, 10285), (74, 10393), (89, 10462), (107, 10537), (115, 10567),

Gene: NadineRae_38 Start: 19914, Stop: 20722, Start Num: 25
Candidate Starts for NadineRae_38:
(Start: 25 @19914 has 9 MA's), (38, 19989), (46, 20049), (51, 20076), (80, 20175), (102, 20268), (110, 20298), (165, 20562), (189, 20700),

Gene: NatB6_37 Start: 22648, Stop: 23453, Start Num: 26
Candidate Starts for NatB6_37:
(Start: 26 @22648 has 42 MA's), (46, 22780), (54, 22816), (68, 22861), (80, 22906), (89, 22939), (110, 23029), (169, 23323), (189, 23431),

Gene: Nebkiss_12 Start: 8761, Stop: 9443, Start Num: 39
Candidate Starts for Nebkiss_12:
(Start: 39 @8761 has 2 MA's), (43, 8806), (62, 8890), (64, 8899), (69, 8914), (75, 8935), (81, 8959), (91, 9019), (96, 9040), (98, 9046), (99, 9049), (100, 9052), (105, 9076), (116, 9124), (118, 9139), (123, 9157), (156, 9274), (164, 9307), (179, 9400), (185, 9424),

Gene: NoSwimming_17 Start: 11047, Stop: 11906, Start Num: 21
Candidate Starts for NoSwimming_17:
(Start: 21 @11047 has 15 MA's), (37, 11143), (41, 11215), (58, 11287), (62, 11308), (63, 11311), (73, 11344), (84, 11404), (88, 11425), (107, 11506), (111, 11521), (176, 11809),

Gene: Norvs_46 Start: 18932, Stop: 19893, Start Num: 12
Candidate Starts for Norvs_46:
(Start: 12 @18932 has 19 MA's), (29, 19043), (30, 19046), (49, 19193), (51, 19205), (60, 19238), (72, 19277), (82, 19328), (111, 19448), (114, 19460), (131, 19565), (139, 19601), (144, 19625), (145, 19637), (152, 19685), (183, 19856), (189, 19883),

Gene: NosilaM_41 Start: 23217, Stop: 24022, Start Num: 26
Candidate Starts for NosilaM_41:
(Start: 26 @23217 has 42 MA's), (46, 23349), (80, 23475),

Gene: NovumRegina_38 Start: 22975, Stop: 23777, Start Num: 26
Candidate Starts for NovumRegina_38:
(Start: 26 @22975 has 42 MA's), (46, 23107), (54, 23143), (68, 23188), (80, 23233), (89, 23266), (110, 23356), (189, 23755),

Gene: ObLaDi_16 Start: 9957, Stop: 10909, Start Num: 9
Candidate Starts for ObLaDi_16:
(Start: 9 @9957 has 5 MA's), (24, 10089), (33, 10143), (36, 10167), (Start: 39 @10209 has 2 MA's), (44, 10254), (74, 10377), (89, 10446), (115, 10551), (178, 10842),

Gene: OneUp_39 Start: 16642, Stop: 17615, Start Num: 11
Candidate Starts for OneUp_39:
(Start: 11 @16642 has 2 MA's), (18, 16699), (30, 16771), (49, 16918), (51, 16930), (89, 17083), (111, 17173), (114, 17185), (128, 17269), (136, 17311), (139, 17326), (143, 17347),

Gene: Outis_39 Start: 23207, Stop: 24012, Start Num: 26
Candidate Starts for Outis_39:
(Start: 26 @23207 has 42 MA's), (46, 23339), (67, 23417), (80, 23465), (110, 23588), (114, 23606),

Gene: PSonyx_14 Start: 9683, Stop: 10587, Start Num: 7
Candidate Starts for PSonyx_14:
(Start: 7 @9683 has 2 MA's), (17, 9773), (23, 9794), (47, 9971), (48, 9974), (59, 10019), (82, 10115), (91, 10157), (95, 10175), (102, 10202), (119, 10280), (123, 10301), (134, 10352), (145, 10364), (152, 10397), (165, 10448), (174, 10511),

Gene: Patio_41 Start: 23447, Stop: 24258, Start Num: 26
Candidate Starts for Patio_41:
(Start: 26 @23447 has 42 MA's), (46, 23579), (67, 23657), (68, 23660), (80, 23705), (104, 23807), (107, 23819), (189, 24236),

Gene: Pemberton_41 Start: 20654, Stop: 21462, Start Num: 25
Candidate Starts for Pemberton_41:
(Start: 25 @20654 has 9 MA's), (38, 20729), (46, 20789), (51, 20816), (80, 20915), (102, 21008), (110, 21038), (189, 21440),

Gene: PeteyPab_30 Start: 21147, Stop: 21967, Start Num: 27
Candidate Starts for PeteyPab_30:
(Start: 27 @21147 has 9 MA's), (29, 21165), (45, 21285), (52, 21321), (65, 21366), (74, 21396), (80, 21420), (86, 21447), (95, 21486), (98, 21495), (126, 21633), (148, 21723), (160, 21789), (161, 21792), (165, 21801), (169, 21834), (185, 21921),

Gene: PhinkBoden_45 Start: 19313, Stop: 20274, Start Num: 12
Candidate Starts for PhinkBoden_45:
(Start: 12 @19313 has 19 MA's), (29, 19424), (30, 19427), (49, 19574), (51, 19586), (60, 19619), (72, 19658), (82, 19709), (111, 19829), (114, 19841), (131, 19946), (139, 19982), (144, 20006), (145, 20018), (152, 20066), (183, 20237), (189, 20264),

Gene: Phomeo_37 Start: 23247, Stop: 24052, Start Num: 26
Candidate Starts for Phomeo_37:
(Start: 26 @23247 has 42 MA's), (46, 23379), (54, 23415), (68, 23460), (80, 23505), (89, 23538), (110, 23628), (169, 23922), (189, 24030),

Gene: Pigu_14 Start: 8468, Stop: 9312, Start Num: 21
Candidate Starts for Pigu_14:
(Start: 21 @8468 has 15 MA's), (41, 8630), (58, 8702), (62, 8723), (63, 8726), (83, 8816), (84, 8819), (95, 8876), (100, 8891), (114, 8945), (128, 9029), (130, 9038), (189, 9278),

Gene: Pleakley_47 Start: 23326, Stop: 24128, Start Num: 26
Candidate Starts for Pleakley_47:
(Start: 26 @23326 has 42 MA's), (46, 23458), (80, 23584), (89, 23617), (93, 23641), (141, 23869), (175, 24043), (189, 24106),

Gene: Polyyuki_42 Start: 24333, Stop: 25153, Start Num: 26
Candidate Starts for Polyyuki_42:
(2, 23946), (3, 23970), (Start: 26 @24333 has 42 MA's), (40, 24432), (45, 24456), (46, 24462), (80, 24588), (89, 24621), (160, 24975), (189, 25128),

Gene: PotatoChip_30 Start: 21149, Stop: 21969, Start Num: 27
Candidate Starts for PotatoChip_30:
(Start: 27 @21149 has 9 MA's), (29, 21167), (45, 21287), (52, 21323), (65, 21368), (74, 21398), (80, 21422), (86, 21449), (95, 21488), (98, 21497), (126, 21635), (148, 21725), (160, 21791), (161, 21794), (165, 21803), (169, 21836), (185, 21923),

Gene: Poushou_16 Start: 10804, Stop: 11615, Start Num: 16
Candidate Starts for Poushou_16:
(Start: 16 @10804 has 4 MA's), (28, 10858), (47, 10993), (57, 11029), (66, 11065), (70, 11074), (92, 11182), (97, 11203), (111, 11257), (118, 11302), (128, 11353), (149, 11395), (162, 11458), (165, 11464),

Gene: PrairieDogTown_16 Start: 10109, Stop: 10971, Start Num: 21
Candidate Starts for PrairieDogTown_16:
(Start: 21 @10109 has 15 MA's), (41, 10280), (58, 10352), (62, 10373), (63, 10376), (84, 10469), (105, 10565), (107, 10571),

Gene: REQ2_17 Start: 11626, Stop: 12441, Start Num: 27
Candidate Starts for REQ2_17:
(Start: 27 @11626 has 9 MA's), (37, 11674), (60, 11821), (103, 11983), (106, 11992), (140, 12175), (153, 12217), (154, 12220), (163, 12262), (172, 12316),

Gene: RedRaider_45 Start: 25472, Stop: 26283, Start Num: 26
Candidate Starts for RedRaider_45:
(Start: 26 @25472 has 42 MA's), (46, 25604), (68, 25685), (80, 25730), (104, 25832), (107, 25844), (130, 25964), (189, 26261),

Gene: Rooter_14 Start: 8458, Stop: 9305, Start Num: 21
Candidate Starts for Rooter_14:
(8, 8341), (Start: 21 @8458 has 15 MA's), (41, 8620), (49, 8656), (58, 8692), (62, 8713), (63, 8716), (83, 8806), (95, 8866), (100, 8881), (128, 9019), (130, 9028), (168, 9157), (189, 9268),

Gene: Sarge_15 Start: 8825, Stop: 9672, Start Num: 21
Candidate Starts for Sarge_15:
(8, 8708), (Start: 21 @8825 has 15 MA's), (41, 8987), (49, 9023), (58, 9059), (62, 9080), (63, 9083), (83, 9173), (95, 9233), (100, 9248), (128, 9386), (166, 9506), (168, 9524), (189, 9635),

Gene: Scotia_17 Start: 11047, Stop: 11906, Start Num: 21
Candidate Starts for Scotia_17:
(Start: 21 @11047 has 15 MA's), (37, 11143), (41, 11215), (58, 11287), (62, 11308), (63, 11311), (73, 11344), (84, 11404), (88, 11425), (128, 11617), (176, 11809),

Gene: Scuba_47 Start: 23403, Stop: 24205, Start Num: 26
Candidate Starts for Scuba_47:
(Start: 26 @23403 has 42 MA's), (46, 23535), (80, 23661), (89, 23694), (93, 23718), (141, 23946), (175, 24120), (189, 24183),

Gene: Shoya_14 Start: 8461, Stop: 9308, Start Num: 21
Candidate Starts for Shoya_14:
(8, 8344), (Start: 21 @8461 has 15 MA's), (41, 8623), (50, 8668), (58, 8695), (62, 8716), (63, 8719), (83, 8809), (95, 8869), (100, 8884), (128, 9022), (168, 9160), (189, 9271),

Gene: Skysand_40 Start: 23664, Stop: 24475, Start Num: 26

Candidate Starts for Skysand_40:
(Start: 26 @23664 has 42 MA's), (46, 23796), (67, 23874), (68, 23877), (80, 23922), (104, 24024), (107, 24036), (130, 24156), (189, 24453),

Gene: Smoothie_46 Start: 18930, Stop: 19891, Start Num: 12
Candidate Starts for Smoothie_46:
(Start: 12 @18930 has 19 MA's), (29, 19041), (30, 19044), (49, 19191), (51, 19203), (60, 19236), (72, 19275), (82, 19326), (111, 19446), (114, 19458), (131, 19563), (139, 19599), (144, 19623), (145, 19635), (152, 19683), (183, 19854), (189, 19881),

Gene: SpeedDemon_290 Start: 18239, Stop: 19167, Start Num: 12
Candidate Starts for SpeedDemon_290:
(Start: 12 @18239 has 19 MA's), (30, 18347), (50, 18500), (61, 18539), (76, 18587), (77, 18590), (90, 18644), (99, 18686), (101, 18695), (115, 18749), (130, 18839), (146, 18914),

Gene: StarStruck_39 Start: 23207, Stop: 24012, Start Num: 26
Candidate Starts for StarStruck_39:
(Start: 26 @23207 has 42 MA's), (46, 23339), (67, 23417), (80, 23465), (110, 23588), (114, 23606),

Gene: Stickynote_30 Start: 20569, Stop: 21389, Start Num: 27
Candidate Starts for Stickynote_30:
(Start: 27 @20569 has 9 MA's), (29, 20587), (45, 20707), (52, 20743), (65, 20788), (74, 20818), (80, 20842), (86, 20869), (95, 20908), (98, 20917), (126, 21055), (148, 21145), (161, 21214), (165, 21223), (169, 21256), (185, 21343),

Gene: Sukkupi_40 Start: 22228, Stop: 23036, Start Num: 25
Candidate Starts for Sukkupi_40:
(Start: 25 @22228 has 9 MA's), (38, 22303), (46, 22363), (51, 22390), (80, 22489), (102, 22582), (110, 22612), (189, 23014),

Gene: SuperSulley_39 Start: 23405, Stop: 24210, Start Num: 26
Candidate Starts for SuperSulley_39:
(Start: 26 @23405 has 42 MA's), (46, 23537), (80, 23663),

Gene: Toniann_45 Start: 18875, Stop: 19836, Start Num: 12
Candidate Starts for Toniann_45:
(Start: 12 @18875 has 19 MA's), (29, 18986), (30, 18989), (49, 19136), (51, 19148), (60, 19181), (72, 19220), (82, 19271), (111, 19391), (114, 19403), (131, 19508), (139, 19544), (144, 19568), (145, 19580), (152, 19628), (183, 19799), (189, 19826),

Gene: TouchMeNot_16 Start: 10804, Stop: 11615, Start Num: 16
Candidate Starts for TouchMeNot_16:
(Start: 16 @10804 has 4 MA's), (28, 10858), (47, 10993), (57, 11029), (66, 11065), (70, 11074), (92, 11182), (97, 11203), (111, 11257), (118, 11302), (128, 11353), (149, 11395), (162, 11458), (165, 11464),

Gene: Tracker_38 Start: 22375, Stop: 23180, Start Num: 26
Candidate Starts for Tracker_38:
(Start: 26 @22375 has 42 MA's), (46, 22507), (54, 22543), (68, 22588), (80, 22633), (89, 22666), (110, 22756), (169, 23050), (189, 23158),

Gene: Turuncu_42 Start: 23671, Stop: 24482, Start Num: 26
Candidate Starts for Turuncu_42:

(Start: 26 @23671 has 42 MA's), (46, 23803), (65, 23875), (74, 23905), (80, 23929), (89, 23962), (104, 24031), (107, 24043), (140, 24217), (169, 24352), (189, 24460),

Gene: VanLee_17 Start: 10020, Stop: 10897, Start Num: 15
Candidate Starts for VanLee_17:
(Start: 15 @10020 has 2 MA's), (32, 10116), (50, 10260), (56, 10278), (89, 10410), (99, 10455), (170, 10779),

Gene: Whack_15 Start: 9533, Stop: 10330, Start Num: 27
Candidate Starts for Whack_15:
(Start: 27 @9533 has 9 MA's), (40, 9635), (46, 9665), (53, 9698), (85, 9818), (113, 9923), (135, 10046), (177, 10256), (188, 10295),

Gene: Wheezy_38 Start: 22580, Stop: 23385, Start Num: 26
Candidate Starts for Wheezy_38:
(Start: 26 @22580 has 42 MA's), (46, 22712), (54, 22748), (68, 22793), (80, 22838), (89, 22871), (110, 22961), (169, 23255), (189, 23363),

Gene: WhoseManz_40 Start: 20280, Stop: 21088, Start Num: 25
Candidate Starts for WhoseManz_40:
(Start: 25 @20280 has 9 MA's), (38, 20355), (46, 20415), (51, 20442), (80, 20541), (102, 20634), (110, 20664), (189, 21066),

Gene: WilliamBoone_45 Start: 18239, Stop: 19200, Start Num: 12
Candidate Starts for WilliamBoone_45:
(Start: 12 @18239 has 19 MA's), (29, 18350), (30, 18353), (49, 18500), (51, 18512), (72, 18584), (82, 18635), (111, 18755), (114, 18767), (128, 18851), (152, 18992), (180, 19151), (183, 19163), (189, 19190),

Gene: Yndexa_40 Start: 22228, Stop: 23036, Start Num: 25
Candidate Starts for Yndexa_40:
(Start: 25 @22228 has 9 MA's), (38, 22303), (46, 22363), (51, 22390), (80, 22489), (102, 22582), (110, 22612), (189, 23014),

Gene: Yvonnetastic_42 Start: 20319, Stop: 21307, Start Num: 10
Candidate Starts for Yvonnetastic_42:
(Start: 10 @20319 has 3 MA's), (49, 20601), (117, 20898), (124, 20940), (125, 20943), (143, 21036), (152, 21093), (155, 21108), (189, 21291),

Gene: Zion_30 Start: 21147, Stop: 21967, Start Num: 27
Candidate Starts for Zion_30:
(Start: 27 @21147 has 9 MA's), (29, 21165), (45, 21285), (52, 21321), (65, 21366), (74, 21396), (80, 21420), (86, 21447), (95, 21486), (98, 21495), (126, 21633), (148, 21723), (160, 21789), (161, 21792), (165, 21801), (169, 21834), (185, 21921),