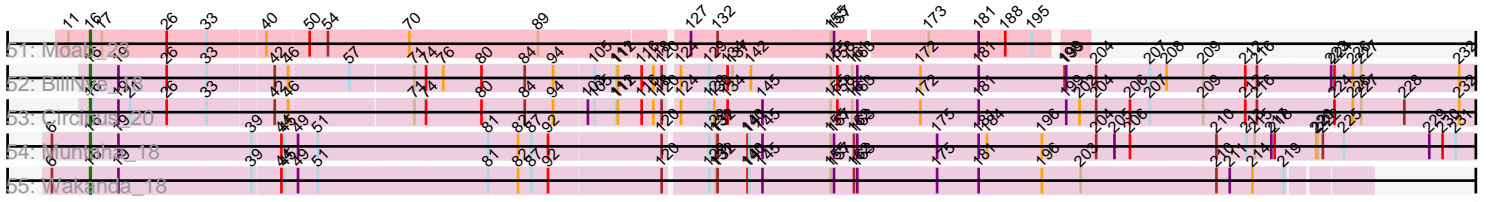


Pham 193906

1. Hanglip_45	6	21	36	51	66	81	96	111	126	141	156	171	186	201
2. Pepperwocul_45	6	21	36	51	66	81	96	111	126	141	156	171	186	201
3. Tribut_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
4. Teuts_45	6	21	36	51	66	81	96	111	126	141	156	171	186	201
5. Liand_44	6	21	36	51	66	81	96	111	126	141	156	171	186	201
6. Sush_45	6	21	36	51	66	81	96	111	126	141	156	171	186	201
7. EGole_46	6	21	36	51	66	81	96	111	126	141	156	171	186	201
8. Persinon_44	6	21	36	51	66	81	96	111	126	141	156	171	186	201
9. Angel_42	6	21	36	51	66	81	96	111	126	141	156	171	186	201
10. War_49	6	21	36	51	66	81	96	111	126	141	156	171	186	201
11. Evi_66	6	21	36	51	66	81	96	111	126	141	156	171	186	201
12. Bart_31	6	21	36	51	66	81	96	111	126	141	156	171	186	201
13. Peet_44	6	21	36	51	66	81	96	111	126	141	156	171	186	201
14. Jay_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
15. Mul_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
16. Sche_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
17. Bmo_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
18. Targ_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
19. Lan_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
20. Miod_21	6	21	36	51	66	81	96	111	126	141	156	171	186	201
21. Nav_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
22. Para_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
23. Amer_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
24. Jago_46	6	21	36	51	66	81	96	111	126	141	156	171	186	201
25. Salk_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
26. Sp_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
27. Kar_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
28. Stak_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
29. Lait_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
30. K_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
31. St_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
32. Tom_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
33. W_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
34. Sp_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
35. Jim_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
36. Tom_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
37. Mu_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
38. Mi_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
39. Lu_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
40. E_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
41. P_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
42. S_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
43. M_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
44. F_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
45. L_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
46. P_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
47. F_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
48. B_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
49. B_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201
50. S_43	6	21	36	51	66	81	96	111	126	141	156	171	186	201

Pham 193906



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 193906 Report

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

Pham number 193906 has 95 members, 5 are drafts.

Phages represented in each track:

- Track 1 : HangryHippo_45, PacManQ_44, Cross_45, BlueOtter_45, Lululemon_44, Watermoore_45, Cursive_43, Leo04_46
- Track 2 : Pepperwood_45
- Track 3 : Tribute_43
- Track 4 : Teutsch_45, Samisti12_45
- Track 5 : Liandry_44, Squillium_44, PinkiePie_43, Braelyn_44, NootNoot_41
- Track 6 : Sushi23_45
- Track 7 : EGole_46
- Track 8 : Persimmon_41
- Track 9 : Angela_42
- Track 10 : Warpy_49
- Track 11 : Evy_46
- Track 12 : Bartholomune_43, WhereRU_42
- Track 13 : Peebs_44
- Track 14 : Jay2Jay_50
- Track 15 : MulchMansion_42, LilMartin_42
- Track 16 : Scheme_46
- Track 17 : Bmoc_43
- Track 18 : Targaryen_46
- Track 19 : Larnav_45
- Track 20 : Mildred21_43
- Track 21 : Navo_43
- Track 22 : Paradiddles_41
- Track 23 : Anedea_43
- Track 24 : Daubenski_46
- Track 25 : SaltySpittoon_47, Jollison_46, Bordeaux_45, Starbow_45, Quaran19_47, PumpkinSpice_46
- Track 26 : Spilled_48, IchabodCrane_44
- Track 27 : Karimac_46
- Track 28 : StarPlatinum_47
- Track 29 : Gibbi_51
- Track 30 : KentuckyRacer_47, CeilingFan_49
- Track 31 : Stanimal_47, Yaboi_47, Genie2_47, Sollertia_47, BoomerJR_47
- Track 32 : TomSawyer_45, Amabiko_47, Wipeout_45, Birchlyn_44
- Track 33 : Wofford_46, Elmer_49
- Track 34 : Spelly_47
- Track 35 : JimJam_47, Battuta_45

- Track 36 : Tomas_49
- Track 37 : Mugiwara_48
- Track 38 : MindFlayer_45
- Track 39 : LukeCage_46
- Track 40 : Enygma_44
- Track 41 : Phredrick_24, Kenrey_26
- Track 42 : SparkleGoddess_23, Karp_22, Belfort_24, Stigma_23, Comrade_23
- Track 43 : MeganTheeKilla_24, Forrest_26, Jada_24, Gilson_26, Emma1919_26
- Track 44 : Francob_22
- Track 45 : Limpid_22, Annadreamy_22
- Track 46 : Patelgo_23
- Track 47 : Faust_22
- Track 48 : Blueeyedbeauty_24
- Track 49 : Beuffert_21
- Track 50 : SeresaTree_22
- Track 51 : Moab_23
- Track 52 : BillNye_18
- Track 53 : Circinus_20
- Track 54 : Muntaha_18
- Track 55 : Wakanda_18

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

The start number called the most often in the published annotations is 16, it was called in 89 of the 90 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko_47, Anedea_43, Angela_42, Annadreamy_22, Bartholomune_43, Battuta_45, Belfort_24, Beuffert_21, BillNye_18, Birchlyn_44, BlueOtter_45, Bmoc_43, BoomerJR_47, Bordeaux_45, Braelyn_44, CeilingFan_49, Circinus_20, Comrade_23, Cross_45, Cursive_43, Daubenski_46, EGole_46, Elmer_49, Emma1919_26, Enygma_44, Evy_46, Faust_22, Forrest_26, Francob_22, Genie2_47, Gibbi_51, Gilson_26, HangryHippo_45, IchabodCrane_44, Jada_24, Jay2Jay_50, JimJam_47, Jollison_46, Karimac_46, Karp_22, Kenrey_26, KentuckyRacer_47, Larnav_45, Leo04_46, Liandry_44, LilMartin_42, Limpid_22, LukeCage_46, Lululemon_44, MeganTheeKilla_24, Mildred21_43, MindFlayer_45, Moab_23, MulchMansion_42, Muntaha_18, Navo_43, NootNoot_41, PacManQ_44, Paradiddles_41, Patelgo_23, Peebs_44, Pepperwood_45, Persimmon_41, Phredrick_24, PinkiePie_43, PumpkinSpice_46, Quarant19_47, SaltySpittoon_47, Samisti12_45, Scheme_46, SeresaTree_22, Sollertia_47, SparkleGoddess_23, Spelly_47, Spilled_48, Squillium_44, Stanimal_47, StarPlatinum_47, Starbow_45, Stigma_23, Sushi23_45, Targaryen_46, Teutsch_45, TomSawyer_45, Tomas_49, Tribute_43, Wakanda_18, Warpy_49, Watermoore_45, WhereRU_42, Wipeout_45, Wofford_46, Yaboi_47,

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

- Blueeyedbeauty_24, Mugiwara_48,

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

-

Summary by start number:

Start 16:

- Found in 95 of 95 (100.0%) of genes in pham
- Manual Annotations of this start: 89 of 90
- Called 97.9% of time when present
- Phage (with cluster) where this start called: Amabiko_47 (BE2), Anedea_43 (BE1), Angela_42 (BE1), Annadreamy_22 (BK1), Bartholomune_43 (BE1), Battuta_45 (BE2), Belfort_24 (BK1), Beuffert_21 (BK1), BillNye_18 (BK2), Birchlyn_44 (BE2), BlueOtter_45 (BE1), Bmoc_43 (BE1), BoomerJR_47 (BE2), Bordeaux_45 (BE2), Braelyn_44 (BE1), CeilingFan_49 (BE2), Circinus_20 (BK2), Comrade_23 (BK1), Cross_45 (BE1), Cursive_43 (BE1), Daubenski_46 (BE1), EGole_46 (BE1), Elmer_49 (BE2), Emma1919_26 (BK1), Enygma_44 (BE2), Evy_46 (BE1), Faust_22 (BK1), Forrest_26 (BK1), Francob_22 (BK1), Genie2_47 (BE2), Gibbi_51 (BE2), Gilson_26 (BK1), HangryHippo_45 (BE1), IchabodCrane_44 (BE2), Jada_24 (BK1), Jay2Jay_50 (BE1), JimJam_47 (BE2), Jollison_46 (BE2), Karimac_46 (BE2), Karp_22 (BK1), Kenrey_26 (BK1), KentuckyRacer_47 (BE2), Larnav_45 (BE1), Leo04_46 (BE1), Liandry_44 (BE1), LilMartin_42 (BE1), Limpid_22 (BK1), LukeCage_46 (BE2), Lululemon_44 (BE1), MeganTheeKilla_24 (BK1), Mildred21_43 (BE1), MindFlayer_45 (BE2), Moab_23 (BK1), MulchMansion_42 (BE1), Muntaha_18 (BK2), Navo_43 (BE1), NootNoot_41 (BE1), PacManQ_44 (BE1), Paradiddles_41 (BE1), Patelgo_23 (BK1), Peebs_44 (BE1), Pepperwood_45 (BE1), Persimmon_41 (BE1), Phredrick_24 (BK1), PinkiePie_43 (BE1), PumpkinSpice_46 (BE2), Quarant19_47 (BE2), SaltySpittoon_47 (BE2), Samisti12_45 (BE1), Scheme_46 (BE1), SeresaTree_22 (BK1), Sollertia_47 (BE2), SparkleGoddess_23 (BK1), Spelly_47 (BE2), Spilled_48 (BE2), Squillium_44 (BE1), Stanimal_47 (BE2), StarPlatinum_47 (BE2), Starbow_45 (BE2), Stigma_23 (BK1), Sushi23_45 (BE1), Targaryen_46 (BE1), Teutsch_45 (BE1), TomSawyer_45 (BE2), Tomas_49 (BE2), Tribute_43 (BE1), Wakanda_18 (BK2), Warpy_49 (BE1), Watermoore_45 (BE1), WhereRU_42 (BE1), Wipeout_45 (BE2), Wofford_46 (BE2), Yaboi_47 (BE2),

Start 18:

- Found in 4 of 95 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 90
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Blueeyedbeauty_24 (BK1),

Start 32:

- Found in 70 of 95 (73.7%) of genes in pham
- No Manual Annotations of this start.
- Called 1.4% of time when present
- Phage (with cluster) where this start called: Mugiwara_48 (BE2),

Summary by clusters:

There are 4 clusters represented in this pham: BE2, BE1, BK1, BK2,

Info for manual annotations of cluster BE1:

- Start number 16 was manually annotated 37 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 16 was manually annotated 29 times for cluster BE2.

Info for manual annotations of cluster BK1:

- Start number 16 was manually annotated 19 times for cluster BK1.
- Start number 18 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster BK2:

- Start number 16 was manually annotated 4 times for cluster BK2.

Gene Information:

Gene: Amabiko_47 Start: 22589, Stop: 24325, Start Num: 16

Candidate Starts for Amabiko_47:

(2, 22478), (5, 22511), (7, 22529), (12, 22565), (14, 22571), (Start: 16 @22589 has 89 MA's), (20, 22658), (30, 22757), (32, 22781), (34, 22841), (39, 22877), (48, 22958), (61, 23072), (65, 23120), (83, 23354), (105, 23486), (106, 23492), (107, 23498), (126, 23651), (128, 23672), (129, 23690), (145, 23780), (154, 23855), (159, 23921), (161, 23936), (172, 24056), (190, 24200), (201, 24287),

Gene: Anedea_43 Start: 22107, Stop: 23849, Start Num: 16

Candidate Starts for Anedea_43:

(Start: 16 @22107 has 89 MA's), (22, 22200), (24, 22218), (30, 22275), (32, 22299), (34, 22359), (39, 22395), (86, 22890), (101, 22983), (106, 23013), (109, 23037), (111, 23046), (117, 23094), (141, 23286), (156, 23424), (159, 23445), (166, 23520), (168, 23541), (171, 23562), (178, 23643), (183, 23670), (187, 23706), (189, 23715),

Gene: Angela_42 Start: 21587, Stop: 23329, Start Num: 16

Candidate Starts for Angela_42:

(Start: 16 @21587 has 89 MA's), (22, 21680), (24, 21698), (30, 21755), (32, 21779), (34, 21839), (37, 21866), (38, 21872), (39, 21875), (58, 22052), (70, 22157), (95, 22418), (111, 22526), (117, 22574), (141, 22766), (159, 22925), (165, 22976), (170, 23036), (171, 23042), (186, 23180), (189, 23195), (194, 23237),

Gene: Annadreamy_22 Start: 10975, Stop: 12696, Start Num: 16

Candidate Starts for Annadreamy_22:

(15, 10954), (Start: 16 @10975 has 89 MA's), (Start: 18 @11017 has 1 MA's), (33, 11179), (39, 11254), (50, 11347), (55, 11404), (56, 11410), (58, 11422), (62, 11452), (64, 11458), (67, 11500), (69, 11512), (70, 11518), (73, 11533), (83, 11716), (89, 11749), (109, 11878), (136, 12067), (138, 12088), (149, 12175), (167, 12346), (181, 12496), (188, 12544),

Gene: Bartholomune_43 Start: 21893, Stop: 23629, Start Num: 16

Candidate Starts for Bartholomune_43:

(Start: 16 @21893 has 89 MA's), (22, 21986), (24, 22004), (30, 22061), (32, 22085), (38, 22178), (39, 22181), (58, 22358), (59, 22361), (83, 22655), (99, 22733), (106, 22793), (140, 23063), (147, 23123), (150, 23138), (159, 23225), (160, 23231), (171, 23342), (178, 23423), (192, 23525),

Gene: Battuta_45 Start: 22563, Stop: 24299, Start Num: 16

Candidate Starts for Battuta_45:

(15, 22545), (Start: 16 @22563 has 89 MA's), (20, 22632), (30, 22731), (32, 22755), (34, 22815), (39, 22851), (61, 23046), (65, 23094), (83, 23328), (105, 23460), (106, 23466), (107, 23472), (126, 23625), (128, 23646), (129, 23664), (141, 23736), (145, 23754), (154, 23829), (159, 23895), (161, 23910), (172, 24030), (190, 24174), (201, 24261),

Gene: Belfort_24 Start: 11726, Stop: 13420, Start Num: 16

Candidate Starts for Belfort_24:

(1, 11609), (3, 11615), (4, 11624), (Start: 16 @11726 has 89 MA's), (26, 11861), (29, 11888), (33, 11930), (45, 12059), (50, 12098), (66, 12239), (89, 12500), (98, 12545), (104, 12596), (108, 12626), (136, 12815), (148, 12920), (149, 12923), (155, 12992), (163, 13040), (173, 13154), (177, 13199), (181, 13241), (188, 13289), (195, 13337),

Gene: Beuffert_21 Start: 10658, Stop: 12379, Start Num: 16

Candidate Starts for Beuffert_21:

(15, 10637), (Start: 16 @10658 has 89 MA's), (Start: 18 @10700 has 1 MA's), (33, 10862), (39, 10937), (50, 11030), (58, 11105), (67, 11183), (69, 11195), (70, 11201), (83, 11399), (87, 11420), (100, 11498), (109, 11561), (125, 11669), (127, 11681), (136, 11750), (138, 11771), (150, 11861), (157, 11933), (161, 11966), (171, 12059), (181, 12179), (185, 12200), (188, 12227), (191, 12254),

Gene: BillNye_18 Start: 10685, Stop: 13117, Start Num: 16

Candidate Starts for BillNye_18:

(Start: 16 @10685 has 89 MA's), (19, 10736), (26, 10820), (33, 10889), (42, 11000), (46, 11024), (57, 11129), (71, 11228), (74, 11249), (76, 11279), (80, 11348), (84, 11426), (94, 11474), (105, 11540), (111, 11579), (112, 11582), (116, 11621), (118, 11642), (120, 11657), (124, 11675), (129, 11720), (134, 11753), (137, 11762), (142, 11795), (155, 11939), (158, 11951), (161, 11978), (163, 11987), (172, 12101), (181, 12200), (198, 12350), (199, 12353), (204, 12407), (207, 12503), (208, 12533), (209, 12596), (212, 12671), (216, 12689), (223, 12821), (224, 12827), (226, 12860), (227, 12875), (232, 13052),

Gene: Birchlyn_44 Start: 20446, Stop: 22182, Start Num: 16

Candidate Starts for Birchlyn_44:

(2, 20335), (5, 20368), (7, 20386), (12, 20422), (14, 20428), (Start: 16 @20446 has 89 MA's), (20, 20515), (30, 20614), (32, 20638), (34, 20698), (39, 20734), (48, 20815), (61, 20929), (65, 20977), (83, 21211), (105, 21343), (106, 21349), (107, 21355), (126, 21508), (128, 21529), (129, 21547), (145, 21637), (154, 21712), (159, 21778), (161, 21793), (172, 21913), (190, 22057), (201, 22144),

Gene: BlueOtter_45 Start: 23243, Stop: 24979, Start Num: 16

Candidate Starts for BlueOtter_45:

(Start: 16 @23243 has 89 MA's), (22, 23336), (30, 23411), (32, 23435), (34, 23495), (39, 23531), (59, 23711), (87, 24023), (99, 24083), (132, 24359), (140, 24413), (141, 24416), (152, 24500), (156, 24554), (159, 24575), (169, 24677), (178, 24773), (182, 24797), (184, 24809), (190, 24854), (201, 24941),

Gene: Blueeyedbeauty_24 Start: 11510, Stop: 13189, Start Num: 18

Candidate Starts for Blueeyedbeauty_24:

(15, 11447), (Start: 16 @11468 has 89 MA's), (Start: 18 @11510 has 1 MA's), (33, 11672), (39, 11747), (50, 11840), (53, 11867), (58, 11915), (64, 11951), (67, 11993), (69, 12005), (70, 12011), (76, 12071), (83, 12209), (89, 12242), (126, 12485), (127, 12491), (149, 12668), (157, 12743), (163, 12785), (175, 12914), (181, 12989), (188, 13037), (192, 13070),

Gene: Bmoc_43 Start: 21892, Stop: 23634, Start Num: 16

Candidate Starts for Bmoc_43:

(Start: 16 @21892 has 89 MA's), (22, 21985), (24, 22003), (30, 22060), (32, 22084), (34, 22144), (39, 22180), (86, 22675), (101, 22768), (106, 22798), (111, 22831), (117, 22879), (122, 22930), (141, 23071), (151, 23146), (156, 23209), (159, 23230), (168, 23326), (171, 23347), (178, 23428), (179, 23434), (183, 23455), (189, 23500), (192, 23530), (195, 23545),

Gene: BoomerJR_47 Start: 22444, Stop: 24180, Start Num: 16

Candidate Starts for BoomerJR_47:

(9, 22402), (15, 22426), (Start: 16 @22444 has 89 MA's), (20, 22513), (30, 22612), (32, 22636), (34, 22696), (35, 22705), (39, 22732), (65, 22975), (74, 23044), (83, 23209), (90, 23242), (105, 23341), (119, 23452), (135, 23581), (145, 23635), (156, 23755), (161, 23791), (171, 23893), (176, 23947), (179, 23980), (190, 24055), (201, 24142),

Gene: Bordeaux_45 Start: 22718, Stop: 24454, Start Num: 16

Candidate Starts for Bordeaux_45:

(2, 22607), (5, 22640), (7, 22658), (12, 22694), (14, 22700), (Start: 16 @22718 has 89 MA's), (20, 22787), (30, 22886), (32, 22910), (34, 22970), (39, 23006), (61, 23201), (65, 23249), (83, 23483), (105, 23615), (106, 23621), (107, 23627), (126, 23780), (128, 23801), (129, 23819), (141, 23891), (145, 23909), (154, 23984), (159, 24050), (161, 24065), (172, 24185), (190, 24329), (201, 24416),

Gene: Braelyn_44 Start: 22660, Stop: 24396, Start Num: 16

Candidate Starts for Braelyn_44:

(Start: 16 @22660 has 89 MA's), (22, 22753), (24, 22771), (30, 22828), (32, 22852), (34, 22912), (36, 22927), (38, 22945), (39, 22948), (58, 23125), (59, 23128), (83, 23422), (99, 23500), (105, 23554), (140, 23830), (147, 23890), (150, 23905), (159, 23992), (160, 23998), (171, 24109), (178, 24190), (192, 24292),

Gene: CeilingFan_49 Start: 22478, Stop: 24214, Start Num: 16

Candidate Starts for CeilingFan_49:

(2, 22367), (5, 22400), (7, 22418), (12, 22454), (14, 22460), (Start: 16 @22478 has 89 MA's), (20, 22547), (30, 22646), (32, 22670), (34, 22730), (39, 22766), (61, 22961), (65, 23009), (83, 23243), (105, 23375), (106, 23381), (107, 23387), (126, 23540), (128, 23561), (129, 23579), (145, 23669), (154, 23744), (159, 23810), (161, 23825), (172, 23945), (190, 24089), (201, 24176),

Gene: Circinus_20 Start: 10821, Stop: 13253, Start Num: 16

Candidate Starts for Circinus_20:

(Start: 16 @10821 has 89 MA's), (19, 10872), (21, 10890), (26, 10956), (33, 11025), (42, 11136), (46, 11160), (71, 11364), (74, 11385), (80, 11484), (84, 11562), (94, 11610), (103, 11664), (105, 11676), (111, 11715), (112, 11718), (116, 11757), (118, 11778), (120, 11793), (124, 11811), (129, 11856), (130, 11865), (134, 11889), (145, 11952), (155, 12075), (158, 12087), (161, 12114), (163, 12123), (172, 12237), (181, 12336), (199, 12489), (202, 12513), (204, 12543), (206, 12603), (207, 12639), (209, 12732), (212, 12807), (216, 12825), (224, 12963), (226, 12996), (227, 13011), (228, 13089), (232, 13188),

Gene: Comrade_23 Start: 11341, Stop: 13035, Start Num: 16

Candidate Starts for Comrade_23:

(1, 11224), (3, 11230), (4, 11239), (Start: 16 @11341 has 89 MA's), (26, 11476), (29, 11503), (33, 11545), (45, 11674), (50, 11713), (66, 11854), (89, 12115), (98, 12160), (104, 12211), (108, 12241), (136, 12430), (148, 12535), (149, 12538), (155, 12607), (163, 12655), (173, 12769), (177, 12814), (181, 12856), (188, 12904), (195, 12952),

Gene: Cross_45 Start: 23244, Stop: 24980, Start Num: 16

Candidate Starts for Cross_45:

(Start: 16 @23244 has 89 MA's), (22, 23337), (30, 23412), (32, 23436), (34, 23496), (39, 23532), (59, 23712), (87, 24024), (99, 24084), (132, 24360), (140, 24414), (141, 24417), (152, 24501), (156, 24555), (159, 24576), (169, 24678), (178, 24774), (182, 24798), (184, 24810), (190, 24855), (201, 24942),

Gene: Cursive_43 Start: 22769, Stop: 24505, Start Num: 16

Candidate Starts for Cursive_43:

(Start: 16 @22769 has 89 MA's), (22, 22862), (30, 22937), (32, 22961), (34, 23021), (39, 23057), (59, 23237), (87, 23549), (99, 23609), (132, 23885), (140, 23939), (141, 23942), (152, 24026), (156, 24080), (159, 24101), (169, 24203), (178, 24299), (182, 24323), (184, 24335), (190, 24380), (201, 24467),

Gene: Daubenski_46 Start: 22995, Stop: 24737, Start Num: 16

Candidate Starts for Daubenski_46:

(Start: 16 @22995 has 89 MA's), (19, 23046), (24, 23106), (30, 23163), (32, 23187), (34, 23247), (38, 23280), (39, 23283), (101, 23871), (117, 23982), (141, 24174), (148, 24240), (150, 24246), (159, 24333), (164, 24378), (171, 24450), (178, 24531), (190, 24612), (192, 24633), (201, 24699),

Gene: EGole_46 Start: 24148, Stop: 25884, Start Num: 16

Candidate Starts for EGole_46:

(Start: 16 @24148 has 89 MA's), (22, 24241), (24, 24259), (27, 24289), (30, 24316), (32, 24340), (37, 24427), (39, 24436), (59, 24616), (87, 24928), (99, 24988), (117, 25129), (132, 25264), (140, 25318), (141, 25321), (152, 25405), (156, 25459), (159, 25480), (169, 25582), (178, 25678), (182, 25702), (184, 25714), (190, 25759), (201, 25846),

Gene: Elmer_49 Start: 23620, Stop: 25359, Start Num: 16

Candidate Starts for Elmer_49:

(Start: 16 @23620 has 89 MA's), (20, 23689), (30, 23788), (32, 23812), (39, 23908), (74, 24220), (106, 24526), (107, 24532), (122, 24655), (126, 24685), (159, 24955), (168, 25051), (176, 25126), (200, 25318),

Gene: Emma1919_26 Start: 11923, Stop: 13617, Start Num: 16

Candidate Starts for Emma1919_26:

(8, 11875), (10, 11884), (Start: 16 @11923 has 89 MA's), (31, 12103), (33, 12127), (39, 12202), (41, 12229), (42, 12238), (50, 12295), (56, 12358), (83, 12664), (85, 12676), (89, 12697), (98, 12742), (118, 12895), (120, 12910), (142, 13048), (144, 13063), (149, 13120), (153, 13141), (155, 13189), (157, 13195), (173, 13351), (174, 13363), (181, 13438), (188, 13486),

Gene: Enygma_44 Start: 22539, Stop: 24275, Start Num: 16

Candidate Starts for Enygma_44:

(Start: 16 @22539 has 89 MA's), (20, 22608), (30, 22707), (32, 22731), (39, 22827), (48, 22908), (60, 23016), (83, 23304), (101, 23412), (105, 23436), (107, 23448), (121, 23568), (141, 23712), (159, 23871), (161, 23886), (178, 24069), (180, 24081), (190, 24150), (191, 24165), (201, 24237),

Gene: Evy_46 Start: 23255, Stop: 24991, Start Num: 16

Candidate Starts for Evy_46:

(Start: 16 @23255 has 89 MA's), (22, 23348), (24, 23366), (30, 23423), (32, 23447), (34, 23507), (37, 23534), (39, 23543), (40, 23570), (58, 23720), (101, 24125), (133, 24383), (141, 24428), (153, 24515), (159, 24587), (166, 24662), (178, 24785),

Gene: Faust_22 Start: 11130, Stop: 12848, Start Num: 16

Candidate Starts for Faust_22:

(Start: 16 @11130 has 89 MA's), (33, 11334), (42, 11445), (45, 11463), (67, 11655), (69, 11667), (70, 11673), (77, 11736), (78, 11742), (89, 11904), (114, 12051), (139, 12246), (144, 12273), (145, 12279), (149, 12330), (150, 12333), (155, 12399), (175, 12576), (181, 12648), (185, 12669), (191, 12723),

Gene: Forrest_26 Start: 12046, Stop: 13740, Start Num: 16

Candidate Starts for Forrest_26:

(8, 11998), (10, 12007), (Start: 16 @12046 has 89 MA's), (31, 12226), (33, 12250), (39, 12325), (41, 12352), (42, 12361), (50, 12418), (56, 12481), (83, 12787), (85, 12799), (89, 12820), (98, 12865),

(118, 13018), (120, 13033), (142, 13171), (144, 13186), (149, 13243), (153, 13264), (155, 13312), (157, 13318), (173, 13474), (174, 13486), (181, 13561), (188, 13609),

Gene: Francob_22 Start: 10713, Stop: 12398, Start Num: 16

Candidate Starts for Francob_22:

(Start: 16 @10713 has 89 MA's), (33, 10917), (42, 11028), (43, 11034), (52, 11109), (53, 11112), (69, 11241), (70, 11247), (89, 11478), (112, 11619), (139, 11817), (146, 11865), (149, 11901), (155, 11970), (163, 12018), (167, 12072), (173, 12132), (181, 12219), (185, 12240), (188, 12267), (195, 12315),

Gene: Genie2_47 Start: 22558, Stop: 24294, Start Num: 16

Candidate Starts for Genie2_47:

(9, 22516), (15, 22540), (Start: 16 @22558 has 89 MA's), (20, 22627), (30, 22726), (32, 22750), (34, 22810), (35, 22819), (39, 22846), (65, 23089), (74, 23158), (83, 23323), (90, 23356), (105, 23455), (119, 23566), (135, 23695), (145, 23749), (156, 23869), (161, 23905), (171, 24007), (176, 24061), (179, 24094), (190, 24169), (201, 24256),

Gene: Gibbi_51 Start: 22701, Stop: 24437, Start Num: 16

Candidate Starts for Gibbi_51:

(15, 22683), (Start: 16 @22701 has 89 MA's), (20, 22770), (30, 22869), (32, 22893), (34, 22953), (39, 22989), (48, 23070), (61, 23184), (65, 23232), (83, 23466), (105, 23598), (106, 23604), (107, 23610), (126, 23763), (128, 23784), (129, 23802), (145, 23892), (154, 23967), (159, 24033), (161, 24048), (172, 24168), (190, 24312), (201, 24399),

Gene: Gilson_26 Start: 11876, Stop: 13570, Start Num: 16

Candidate Starts for Gilson_26:

(8, 11828), (10, 11837), (Start: 16 @11876 has 89 MA's), (31, 12056), (33, 12080), (39, 12155), (41, 12182), (42, 12191), (50, 12248), (56, 12311), (83, 12617), (85, 12629), (89, 12650), (98, 12695), (118, 12848), (120, 12863), (142, 13001), (144, 13016), (149, 13073), (153, 13094), (155, 13142), (157, 13148), (173, 13304), (174, 13316), (181, 13391), (188, 13439),

Gene: HangryHippo_45 Start: 23243, Stop: 24979, Start Num: 16

Candidate Starts for HangryHippo_45:

(Start: 16 @23243 has 89 MA's), (22, 23336), (30, 23411), (32, 23435), (34, 23495), (39, 23531), (59, 23711), (87, 24023), (99, 24083), (132, 24359), (140, 24413), (141, 24416), (152, 24500), (156, 24554), (159, 24575), (169, 24677), (178, 24773), (182, 24797), (184, 24809), (190, 24854), (201, 24941),

Gene: IchabodCrane_44 Start: 22290, Stop: 24026, Start Num: 16

Candidate Starts for IchabodCrane_44:

(15, 22272), (Start: 16 @22290 has 89 MA's), (20, 22359), (25, 22413), (30, 22458), (32, 22482), (34, 22542), (39, 22578), (61, 22773), (65, 22821), (83, 23055), (105, 23187), (107, 23199), (128, 23373), (145, 23481), (154, 23556), (159, 23622), (161, 23637), (172, 23757), (180, 23832), (190, 23901), (201, 23988),

Gene: Jada_24 Start: 11228, Stop: 12922, Start Num: 16

Candidate Starts for Jada_24:

(8, 11180), (10, 11189), (Start: 16 @11228 has 89 MA's), (31, 11408), (33, 11432), (39, 11507), (41, 11534), (42, 11543), (50, 11600), (56, 11663), (83, 11969), (85, 11981), (89, 12002), (98, 12047), (118, 12200), (120, 12215), (142, 12353), (144, 12368), (149, 12425), (153, 12446), (155, 12494), (157, 12500), (173, 12656), (174, 12668), (181, 12743), (188, 12791),

Gene: Jay2Jay_50 Start: 24078, Stop: 25814, Start Num: 16

Candidate Starts for Jay2Jay_50:

(Start: 16 @24078 has 89 MA's), (22, 24171), (24, 24189), (30, 24246), (32, 24270), (34, 24330), (37, 24357), (39, 24366), (40, 24393), (58, 24543), (78, 24711), (86, 24855), (90, 24873), (95, 24903), (101, 24948), (115, 25026), (122, 25110), (133, 25206), (141, 25251), (159, 25410), (166, 25485), (178, 25608),

Gene: JimJam_47 Start: 22664, Stop: 24400, Start Num: 16

Candidate Starts for JimJam_47:

(15, 22646), (Start: 16 @22664 has 89 MA's), (20, 22733), (30, 22832), (32, 22856), (34, 22916), (39, 22952), (61, 23147), (65, 23195), (83, 23429), (105, 23561), (106, 23567), (107, 23573), (126, 23726), (128, 23747), (129, 23765), (141, 23837), (145, 23855), (154, 23930), (159, 23996), (161, 24011), (172, 24131), (190, 24275), (201, 24362),

Gene: Jollison_46 Start: 22546, Stop: 24282, Start Num: 16

Candidate Starts for Jollison_46:

(2, 22435), (5, 22468), (7, 22486), (12, 22522), (14, 22528), (Start: 16 @22546 has 89 MA's), (20, 22615), (30, 22714), (32, 22738), (34, 22798), (39, 22834), (61, 23029), (65, 23077), (83, 23311), (105, 23443), (106, 23449), (107, 23455), (126, 23608), (128, 23629), (129, 23647), (141, 23719), (145, 23737), (154, 23812), (159, 23878), (161, 23893), (172, 24013), (190, 24157), (201, 24244),

Gene: Karimac_46 Start: 22695, Stop: 24431, Start Num: 16

Candidate Starts for Karimac_46:

(2, 22584), (5, 22617), (7, 22635), (12, 22671), (14, 22677), (Start: 16 @22695 has 89 MA's), (20, 22764), (25, 22818), (30, 22863), (32, 22887), (34, 22947), (39, 22983), (48, 23064), (61, 23178), (65, 23226), (83, 23460), (105, 23592), (107, 23604), (128, 23778), (145, 23886), (154, 23961), (159, 24027), (161, 24042), (172, 24162), (180, 24237), (190, 24306), (201, 24393),

Gene: Karp_22 Start: 10942, Stop: 12636, Start Num: 16

Candidate Starts for Karp_22:

(1, 10825), (3, 10831), (4, 10840), (Start: 16 @10942 has 89 MA's), (26, 11077), (29, 11104), (33, 11146), (45, 11275), (50, 11314), (66, 11455), (89, 11716), (98, 11761), (104, 11812), (108, 11842), (136, 12031), (148, 12136), (149, 12139), (155, 12208), (163, 12256), (173, 12370), (177, 12415), (181, 12457), (188, 12505), (195, 12553),

Gene: Kenrey_26 Start: 11925, Stop: 13619, Start Num: 16

Candidate Starts for Kenrey_26:

(4, 11826), (8, 11877), (10, 11886), (Start: 16 @11925 has 89 MA's), (33, 12129), (42, 12240), (50, 12297), (59, 12375), (82, 12663), (83, 12666), (89, 12699), (110, 12834), (115, 12852), (116, 12876), (120, 12912), (125, 12936), (138, 13035), (142, 13050), (143, 13059), (145, 13071), (150, 13125), (153, 13143), (155, 13191), (172, 13341), (173, 13353), (174, 13365), (181, 13440), (185, 13461), (188, 13488), (195, 13536),

Gene: KentuckyRacer_47 Start: 22479, Stop: 24215, Start Num: 16

Candidate Starts for KentuckyRacer_47:

(2, 22368), (5, 22401), (7, 22419), (12, 22455), (14, 22461), (Start: 16 @22479 has 89 MA's), (20, 22548), (30, 22647), (32, 22671), (34, 22731), (39, 22767), (61, 22962), (65, 23010), (83, 23244), (105, 23376), (106, 23382), (107, 23388), (126, 23541), (128, 23562), (129, 23580), (145, 23670), (154, 23745), (159, 23811), (161, 23826), (172, 23946), (190, 24090), (201, 24177),

Gene: Larnav_45 Start: 23228, Stop: 24964, Start Num: 16

Candidate Starts for Larnav_45:

(Start: 16 @23228 has 89 MA's), (22, 23321), (28, 23372), (30, 23396), (32, 23420), (34, 23480), (39, 23516), (59, 23696), (87, 24008), (99, 24068), (132, 24344), (140, 24398), (141, 24401), (152, 24485),

(156, 24539), (159, 24560), (169, 24662), (178, 24758), (182, 24782), (184, 24794), (190, 24839), (201, 24926),

Gene: Leo04_46 Start: 23743, Stop: 25479, Start Num: 16

Candidate Starts for Leo04_46:

(Start: 16 @23743 has 89 MA's), (22, 23836), (30, 23911), (32, 23935), (34, 23995), (39, 24031), (59, 24211), (87, 24523), (99, 24583), (132, 24859), (140, 24913), (141, 24916), (152, 25000), (156, 25054), (159, 25075), (169, 25177), (178, 25273), (182, 25297), (184, 25309), (190, 25354), (201, 25441),

Gene: Liandry_44 Start: 22598, Stop: 24334, Start Num: 16

Candidate Starts for Liandry_44:

(Start: 16 @22598 has 89 MA's), (22, 22691), (24, 22709), (30, 22766), (32, 22790), (34, 22850), (36, 22865), (38, 22883), (39, 22886), (58, 23063), (59, 23066), (83, 23360), (99, 23438), (105, 23492), (140, 23768), (147, 23828), (150, 23843), (159, 23930), (160, 23936), (171, 24047), (178, 24128), (192, 24230),

Gene: LilMartin_42 Start: 21535, Stop: 23277, Start Num: 16

Candidate Starts for LilMartin_42:

(Start: 16 @21535 has 89 MA's), (22, 21628), (24, 21646), (30, 21703), (32, 21727), (34, 21787), (37, 21814), (38, 21820), (39, 21823), (58, 22000), (95, 22366), (111, 22474), (117, 22522), (141, 22714), (159, 22873), (165, 22924), (170, 22984), (171, 22990), (186, 23128), (189, 23143), (194, 23185),

Gene: Limpid_22 Start: 10974, Stop: 12695, Start Num: 16

Candidate Starts for Limpid_22:

(15, 10953), (Start: 16 @10974 has 89 MA's), (Start: 18 @11016 has 1 MA's), (33, 11178), (39, 11253), (50, 11346), (55, 11403), (56, 11409), (58, 11421), (62, 11451), (64, 11457), (67, 11499), (69, 11511), (70, 11517), (73, 11532), (83, 11715), (89, 11748), (109, 11877), (136, 12066), (138, 12087), (149, 12174), (167, 12345), (181, 12495), (188, 12543),

Gene: LukeCage_46 Start: 22443, Stop: 24179, Start Num: 16

Candidate Starts for LukeCage_46:

(13, 22422), (15, 22425), (Start: 16 @22443 has 89 MA's), (20, 22512), (30, 22611), (32, 22635), (39, 22731), (40, 22758), (48, 22812), (53, 22860), (61, 22926), (79, 23088), (83, 23208), (88, 23235), (101, 23316), (105, 23340), (107, 23352), (122, 23475), (125, 23499), (141, 23616), (145, 23634), (154, 23709), (159, 23775), (161, 23790), (178, 23973), (179, 23979), (180, 23985), (190, 24054),

Gene: Lululemon_44 Start: 22624, Stop: 24360, Start Num: 16

Candidate Starts for Lululemon_44:

(Start: 16 @22624 has 89 MA's), (22, 22717), (30, 22792), (32, 22816), (34, 22876), (39, 22912), (59, 23092), (87, 23404), (99, 23464), (132, 23740), (140, 23794), (141, 23797), (152, 23881), (156, 23935), (159, 23956), (169, 24058), (178, 24154), (182, 24178), (184, 24190), (190, 24235), (201, 24322),

Gene: MeganTheeKilla_24 Start: 11237, Stop: 12931, Start Num: 16

Candidate Starts for MeganTheeKilla_24:

(8, 11189), (10, 11198), (Start: 16 @11237 has 89 MA's), (31, 11417), (33, 11441), (39, 11516), (41, 11543), (42, 11552), (50, 11609), (56, 11672), (83, 11978), (85, 11990), (89, 12011), (98, 12056), (118, 12209), (120, 12224), (142, 12362), (144, 12377), (149, 12434), (153, 12455), (155, 12503), (157, 12509), (173, 12665), (174, 12677), (181, 12752), (188, 12800),

Gene: Mildred21_43 Start: 21720, Stop: 23462, Start Num: 16

Candidate Starts for Mildred21_43:

(Start: 16 @21720 has 89 MA's), (22, 21813), (24, 21831), (30, 21888), (32, 21912), (34, 21972), (39, 22008), (83, 22488), (106, 22626), (111, 22659), (123, 22773), (141, 22899), (159, 23058), (165, 23109), (178, 23256), (182, 23280), (189, 23328), (192, 23358), (195, 23373), (201, 23424),

Gene: MindFlayer_45 Start: 22197, Stop: 23933, Start Num: 16

Candidate Starts for MindFlayer_45:

(15, 22179), (Start: 16 @22197 has 89 MA's), (20, 22266), (30, 22365), (32, 22389), (34, 22449), (39, 22485), (61, 22680), (65, 22728), (83, 22962), (105, 23094), (106, 23100), (107, 23106), (126, 23259), (128, 23280), (129, 23298), (145, 23388), (154, 23463), (159, 23529), (161, 23544), (172, 23664), (190, 23808), (201, 23895),

Gene: Moab_23 Start: 11265, Stop: 12956, Start Num: 16

Candidate Starts for Moab_23:

(11, 11226), (Start: 16 @11265 has 89 MA's), (17, 11286), (26, 11400), (33, 11469), (40, 11565), (50, 11637), (54, 11670), (70, 11808), (89, 12036), (127, 12285), (132, 12327), (155, 12528), (157, 12534), (173, 12690), (181, 12777), (188, 12825), (195, 12873),

Gene: Mugiwara_48 Start: 23134, Stop: 24678, Start Num: 32

Candidate Starts for Mugiwara_48:

(13, 22921), (15, 22924), (Start: 16 @22942 has 89 MA's), (20, 23011), (30, 23110), (32, 23134), (34, 23194), (39, 23230), (40, 23257), (48, 23311), (61, 23425), (65, 23473), (74, 23542), (83, 23707), (101, 23815), (107, 23851), (122, 23974), (126, 24004), (145, 24133), (154, 24208), (159, 24274), (161, 24289), (178, 24472), (180, 24484), (190, 24553), (193, 24583), (197, 24613), (201, 24640),

Gene: MulchMansion_42 Start: 21535, Stop: 23277, Start Num: 16

Candidate Starts for MulchMansion_42:

(Start: 16 @21535 has 89 MA's), (22, 21628), (24, 21646), (30, 21703), (32, 21727), (34, 21787), (37, 21814), (38, 21820), (39, 21823), (58, 22000), (95, 22366), (111, 22474), (117, 22522), (141, 22714), (159, 22873), (165, 22924), (170, 22984), (171, 22990), (186, 23128), (189, 23143), (194, 23185),

Gene: Muntaha_18 Start: 10101, Stop: 12536, Start Num: 16

Candidate Starts for Muntaha_18:

(6, 10032), (Start: 16 @10101 has 89 MA's), (19, 10152), (39, 10383), (44, 10431), (45, 10437), (49, 10461), (51, 10497), (81, 10794), (82, 10848), (87, 10872), (92, 10902), (120, 11094), (129, 11160), (131, 11172), (132, 11175), (140, 11229), (141, 11232), (145, 11256), (155, 11379), (157, 11385), (162, 11421), (163, 11427), (175, 11568), (181, 11640), (184, 11655), (196, 11754), (204, 11850), (205, 11883), (206, 11910), (210, 12051), (213, 12105), (215, 12120), (217, 12150), (218, 12156), (220, 12231), (221, 12234), (222, 12243), (225, 12279), (229, 12426), (230, 12450), (231, 12468),

Gene: Navo_43 Start: 22555, Stop: 24291, Start Num: 16

Candidate Starts for Navo_43:

(Start: 16 @22555 has 89 MA's), (22, 22648), (24, 22666), (30, 22723), (32, 22747), (36, 22822), (38, 22840), (39, 22843), (58, 23020), (59, 23023), (83, 23317), (99, 23395), (105, 23449), (140, 23725), (147, 23785), (150, 23800), (159, 23887), (160, 23893), (171, 24004), (178, 24085), (192, 24187),

Gene: NootNoot_41 Start: 21512, Stop: 23248, Start Num: 16

Candidate Starts for NootNoot_41:

(Start: 16 @21512 has 89 MA's), (22, 21605), (24, 21623), (30, 21680), (32, 21704), (34, 21764), (36, 21779), (38, 21797), (39, 21800), (58, 21977), (59, 21980), (83, 22274), (99, 22352), (105, 22406), (140, 22682), (147, 22742), (150, 22757), (159, 22844), (160, 22850), (171, 22961), (178, 23042), (192, 23144),

Gene: PacManQ_44 Start: 22624, Stop: 24360, Start Num: 16

Candidate Starts for PacManQ_44:

(Start: 16 @22624 has 89 MA's), (22, 22717), (30, 22792), (32, 22816), (34, 22876), (39, 22912), (59, 23092), (87, 23404), (99, 23464), (132, 23740), (140, 23794), (141, 23797), (152, 23881), (156, 23935), (159, 23956), (169, 24058), (178, 24154), (182, 24178), (184, 24190), (190, 24235), (201, 24322),

Gene: Paradiddles_41 Start: 21772, Stop: 23508, Start Num: 16

Candidate Starts for Paradiddles_41:

(Start: 16 @21772 has 89 MA's), (22, 21865), (23, 21880), (24, 21883), (30, 21940), (32, 21964), (36, 22039), (39, 22060), (47, 22129), (59, 22240), (60, 22249), (61, 22255), (63, 22273), (68, 22327), (86, 22549), (96, 22600), (102, 22651), (141, 22945), (159, 23104), (165, 23155), (172, 23239), (178, 23302), (184, 23338), (186, 23359), (190, 23383),

Gene: Patelgo_23 Start: 10879, Stop: 12570, Start Num: 16

Candidate Starts for Patelgo_23:

(11, 10840), (Start: 16 @10879 has 89 MA's), (17, 10900), (26, 11014), (33, 11083), (40, 11179), (50, 11251), (70, 11422), (89, 11650), (96, 11686), (127, 11899), (132, 11941), (155, 12142), (157, 12148), (173, 12304), (181, 12391), (183, 12397), (185, 12412), (188, 12439), (195, 12487),

Gene: Peebs_44 Start: 22981, Stop: 24717, Start Num: 16

Candidate Starts for Peebs_44:

(Start: 16 @22981 has 89 MA's), (22, 23074), (30, 23149), (32, 23173), (34, 23233), (39, 23269), (59, 23449), (87, 23761), (99, 23821), (140, 24151), (141, 24154), (152, 24238), (156, 24292), (159, 24313), (169, 24415), (178, 24511), (182, 24535), (184, 24547), (190, 24592), (192, 24613), (201, 24679),

Gene: Pepperwood_45 Start: 23114, Stop: 24850, Start Num: 16

Candidate Starts for Pepperwood_45:

(Start: 16 @23114 has 89 MA's), (22, 23207), (30, 23282), (32, 23306), (34, 23366), (39, 23402), (59, 23582), (83, 23876), (99, 23954), (140, 24284), (141, 24287), (152, 24371), (156, 24425), (159, 24446), (169, 24548), (178, 24644), (182, 24668), (184, 24680), (190, 24725), (201, 24812),

Gene: Persimmon_41 Start: 21487, Stop: 23223, Start Num: 16

Candidate Starts for Persimmon_41:

(Start: 16 @21487 has 89 MA's), (22, 21580), (24, 21598), (30, 21655), (32, 21679), (38, 21772), (39, 21775), (58, 21952), (59, 21955), (83, 22249), (99, 22327), (105, 22381), (140, 22657), (147, 22717), (150, 22732), (159, 22819), (160, 22825), (171, 22936), (178, 23017), (192, 23119),

Gene: Phredrick_24 Start: 11131, Stop: 12825, Start Num: 16

Candidate Starts for Phredrick_24:

(4, 11032), (8, 11083), (10, 11092), (Start: 16 @11131 has 89 MA's), (33, 11335), (42, 11446), (50, 11503), (59, 11581), (82, 11869), (83, 11872), (89, 11905), (110, 12040), (115, 12058), (116, 12082), (120, 12118), (125, 12142), (138, 12241), (142, 12256), (143, 12265), (145, 12277), (150, 12331), (153, 12349), (155, 12397), (172, 12547), (173, 12559), (174, 12571), (181, 12646), (185, 12667), (188, 12694), (195, 12742),

Gene: PinkiePie_43 Start: 22598, Stop: 24334, Start Num: 16

Candidate Starts for PinkiePie_43:

(Start: 16 @22598 has 89 MA's), (22, 22691), (24, 22709), (30, 22766), (32, 22790), (34, 22850), (36, 22865), (38, 22883), (39, 22886), (58, 23063), (59, 23066), (83, 23360), (99, 23438), (105, 23492), (140, 23768), (147, 23828), (150, 23843), (159, 23930), (160, 23936), (171, 24047), (178, 24128), (192, 24230),

Gene: PumpkinSpice_46 Start: 22589, Stop: 24325, Start Num: 16

Candidate Starts for PumpkinSpice_46:

(2, 22478), (5, 22511), (7, 22529), (12, 22565), (14, 22571), (Start: 16 @22589 has 89 MA's), (20, 22658), (30, 22757), (32, 22781), (34, 22841), (39, 22877), (61, 23072), (65, 23120), (83, 23354), (105, 23486), (106, 23492), (107, 23498), (126, 23651), (128, 23672), (129, 23690), (141, 23762), (145, 23780), (154, 23855), (159, 23921), (161, 23936), (172, 24056), (190, 24200), (201, 24287),

Gene: Quaran19_47 Start: 22580, Stop: 24316, Start Num: 16

Candidate Starts for Quaran19_47:

(2, 22469), (5, 22502), (7, 22520), (12, 22556), (14, 22562), (Start: 16 @22580 has 89 MA's), (20, 22649), (30, 22748), (32, 22772), (34, 22832), (39, 22868), (61, 23063), (65, 23111), (83, 23345), (105, 23477), (106, 23483), (107, 23489), (126, 23642), (128, 23663), (129, 23681), (141, 23753), (145, 23771), (154, 23846), (159, 23912), (161, 23927), (172, 24047), (190, 24191), (201, 24278),

Gene: SaltySpittoon_47 Start: 22589, Stop: 24325, Start Num: 16

Candidate Starts for SaltySpittoon_47:

(2, 22478), (5, 22511), (7, 22529), (12, 22565), (14, 22571), (Start: 16 @22589 has 89 MA's), (20, 22658), (30, 22757), (32, 22781), (34, 22841), (39, 22877), (61, 23072), (65, 23120), (83, 23354), (105, 23486), (106, 23492), (107, 23498), (126, 23651), (128, 23672), (129, 23690), (141, 23762), (145, 23780), (154, 23855), (159, 23921), (161, 23936), (172, 24056), (190, 24200), (201, 24287),

Gene: Samisti12_45 Start: 24417, Stop: 26153, Start Num: 16

Candidate Starts for Samisti12_45:

(Start: 16 @24417 has 89 MA's), (22, 24510), (30, 24585), (32, 24609), (34, 24669), (39, 24705), (59, 24885), (78, 25050), (83, 25179), (87, 25197), (99, 25257), (132, 25533), (140, 25587), (141, 25590), (152, 25674), (156, 25728), (159, 25749), (169, 25851), (178, 25947), (182, 25971), (184, 25983), (190, 26028), (201, 26115),

Gene: Scheme_46 Start: 23828, Stop: 25564, Start Num: 16

Candidate Starts for Scheme_46:

(Start: 16 @23828 has 89 MA's), (22, 23921), (24, 23939), (30, 23996), (32, 24020), (34, 24080), (39, 24116), (59, 24296), (83, 24590), (99, 24668), (140, 24998), (141, 25001), (152, 25085), (156, 25139), (159, 25160), (169, 25262), (178, 25358), (182, 25382), (184, 25394), (190, 25439), (192, 25460), (201, 25526),

Gene: SeresaTree_22 Start: 10520, Stop: 12238, Start Num: 16

Candidate Starts for SeresaTree_22:

(Start: 16 @10520 has 89 MA's), (33, 10724), (42, 10835), (45, 10853), (67, 11045), (69, 11057), (70, 11063), (77, 11126), (85, 11273), (91, 11303), (114, 11441), (139, 11636), (144, 11663), (145, 11669), (149, 11720), (150, 11723), (155, 11789), (175, 11966), (181, 12038), (185, 12059), (191, 12113),

Gene: Sollertia_47 Start: 22558, Stop: 24294, Start Num: 16

Candidate Starts for Sollertia_47:

(9, 22516), (15, 22540), (Start: 16 @22558 has 89 MA's), (20, 22627), (30, 22726), (32, 22750), (34, 22810), (35, 22819), (39, 22846), (65, 23089), (74, 23158), (83, 23323), (90, 23356), (105, 23455), (119, 23566), (135, 23695), (145, 23749), (156, 23869), (161, 23905), (171, 24007), (176, 24061), (179, 24094), (190, 24169), (201, 24256),

Gene: SparkleGoddess_23 Start: 11343, Stop: 13037, Start Num: 16

Candidate Starts for SparkleGoddess_23:

(1, 11226), (3, 11232), (4, 11241), (Start: 16 @11343 has 89 MA's), (26, 11478), (29, 11505), (33, 11547), (45, 11676), (50, 11715), (66, 11856), (89, 12117), (98, 12162), (104, 12213), (108, 12243), (136, 12432), (148, 12537), (149, 12540), (155, 12609), (163, 12657), (173, 12771), (177, 12816),

(181, 12858), (188, 12906), (195, 12954),

Gene: Spelly_47 Start: 22544, Stop: 24280, Start Num: 16

Candidate Starts for Spelly_47:

(2, 22433), (5, 22466), (7, 22484), (12, 22520), (14, 22526), (Start: 16 @22544 has 89 MA's), (20, 22613), (30, 22712), (32, 22736), (34, 22796), (39, 22832), (60, 23021), (61, 23027), (65, 23075), (83, 23309), (105, 23441), (106, 23447), (107, 23453), (126, 23606), (128, 23627), (129, 23645), (145, 23735), (154, 23810), (159, 23876), (161, 23891), (172, 24011), (190, 24155), (201, 24242),

Gene: Spilled_48 Start: 22661, Stop: 24397, Start Num: 16

Candidate Starts for Spilled_48:

(15, 22643), (Start: 16 @22661 has 89 MA's), (20, 22730), (25, 22784), (30, 22829), (32, 22853), (34, 22913), (39, 22949), (61, 23144), (65, 23192), (83, 23426), (105, 23558), (107, 23570), (128, 23744), (145, 23852), (154, 23927), (159, 23993), (161, 24008), (172, 24128), (180, 24203), (190, 24272), (201, 24359),

Gene: Squillium_44 Start: 22599, Stop: 24335, Start Num: 16

Candidate Starts for Squillium_44:

(Start: 16 @22599 has 89 MA's), (22, 22692), (24, 22710), (30, 22767), (32, 22791), (34, 22851), (36, 22866), (38, 22884), (39, 22887), (58, 23064), (59, 23067), (83, 23361), (99, 23439), (105, 23493), (140, 23769), (147, 23829), (150, 23844), (159, 23931), (160, 23937), (171, 24048), (178, 24129), (192, 24231),

Gene: Stanimal_47 Start: 22447, Stop: 24183, Start Num: 16

Candidate Starts for Stanimal_47:

(9, 22405), (15, 22429), (Start: 16 @22447 has 89 MA's), (20, 22516), (30, 22615), (32, 22639), (34, 22699), (35, 22708), (39, 22735), (65, 22978), (74, 23047), (83, 23212), (90, 23245), (105, 23344), (119, 23455), (135, 23584), (145, 23638), (156, 23758), (161, 23794), (171, 23896), (176, 23950), (179, 23983), (190, 24058), (201, 24145),

Gene: StarPlatinum_47 Start: 23085, Stop: 24821, Start Num: 16

Candidate Starts for StarPlatinum_47:

(13, 23064), (15, 23067), (Start: 16 @23085 has 89 MA's), (20, 23154), (30, 23253), (32, 23277), (39, 23373), (40, 23400), (61, 23568), (65, 23616), (83, 23850), (88, 23877), (101, 23958), (105, 23982), (107, 23994), (119, 24093), (122, 24117), (125, 24141), (126, 24147), (135, 24222), (141, 24258), (145, 24276), (156, 24396), (159, 24417), (161, 24432), (178, 24615), (179, 24621), (180, 24627), (190, 24696),

Gene: Starbow_45 Start: 22565, Stop: 24301, Start Num: 16

Candidate Starts for Starbow_45:

(2, 22454), (5, 22487), (7, 22505), (12, 22541), (14, 22547), (Start: 16 @22565 has 89 MA's), (20, 22634), (30, 22733), (32, 22757), (34, 22817), (39, 22853), (61, 23048), (65, 23096), (83, 23330), (105, 23462), (106, 23468), (107, 23474), (126, 23627), (128, 23648), (129, 23666), (141, 23738), (145, 23756), (154, 23831), (159, 23897), (161, 23912), (172, 24032), (190, 24176), (201, 24263),

Gene: Stigma_23 Start: 11344, Stop: 13038, Start Num: 16

Candidate Starts for Stigma_23:

(1, 11227), (3, 11233), (4, 11242), (Start: 16 @11344 has 89 MA's), (26, 11479), (29, 11506), (33, 11548), (45, 11677), (50, 11716), (66, 11857), (89, 12118), (98, 12163), (104, 12214), (108, 12244), (136, 12433), (148, 12538), (149, 12541), (155, 12610), (163, 12658), (173, 12772), (177, 12817), (181, 12859), (188, 12907), (195, 12955),

Gene: Sushi23_45 Start: 23339, Stop: 25075, Start Num: 16

Candidate Starts for Sushi23_45:

(Start: 16 @23339 has 89 MA's), (22, 23432), (30, 23507), (32, 23531), (34, 23591), (39, 23627), (59, 23807), (83, 24101), (99, 24179), (140, 24509), (141, 24512), (152, 24596), (156, 24650), (159, 24671), (169, 24773), (178, 24869), (182, 24893), (184, 24905), (190, 24950), (192, 24971), (201, 25037),

Gene: Targaryen_46 Start: 24112, Stop: 25848, Start Num: 16

Candidate Starts for Targaryen_46:

(Start: 16 @24112 has 89 MA's), (22, 24205), (24, 24223), (30, 24280), (32, 24304), (34, 24364), (37, 24391), (39, 24400), (40, 24427), (58, 24577), (86, 24889), (95, 24937), (101, 24982), (128, 25195), (141, 25285), (159, 25444), (166, 25519), (178, 25642),

Gene: Teutsch_45 Start: 23608, Stop: 25344, Start Num: 16

Candidate Starts for Teutsch_45:

(Start: 16 @23608 has 89 MA's), (22, 23701), (30, 23776), (32, 23800), (34, 23860), (39, 23896), (59, 24076), (78, 24241), (83, 24370), (87, 24388), (99, 24448), (132, 24724), (140, 24778), (141, 24781), (152, 24865), (156, 24919), (159, 24940), (169, 25042), (178, 25138), (182, 25162), (184, 25174), (190, 25219), (201, 25306),

Gene: TomSawyer_45 Start: 22183, Stop: 23919, Start Num: 16

Candidate Starts for TomSawyer_45:

(2, 22072), (5, 22105), (7, 22123), (12, 22159), (14, 22165), (Start: 16 @22183 has 89 MA's), (20, 22252), (30, 22351), (32, 22375), (34, 22435), (39, 22471), (48, 22552), (61, 22666), (65, 22714), (83, 22948), (105, 23080), (106, 23086), (107, 23092), (126, 23245), (128, 23266), (129, 23284), (145, 23374), (154, 23449), (159, 23515), (161, 23530), (172, 23650), (190, 23794), (201, 23881),

Gene: Tomas_49 Start: 24898, Stop: 26640, Start Num: 16

Candidate Starts for Tomas_49:

(Start: 16 @24898 has 89 MA's), (25, 25021), (27, 25039), (30, 25066), (32, 25090), (34, 25150), (39, 25186), (58, 25363), (65, 25429), (72, 25480), (75, 25516), (83, 25666), (93, 25717), (97, 25735), (107, 25810), (113, 25843), (126, 25966), (148, 26143), (176, 26407), (178, 26434), (189, 26506), (190, 26515), (193, 26545), (201, 26602),

Gene: Tribute_43 Start: 22808, Stop: 24544, Start Num: 16

Candidate Starts for Tribute_43:

(Start: 16 @22808 has 89 MA's), (22, 22901), (30, 22976), (32, 23000), (34, 23060), (39, 23096), (59, 23276), (83, 23570), (87, 23588), (99, 23648), (132, 23924), (140, 23978), (141, 23981), (152, 24065), (156, 24119), (159, 24140), (169, 24242), (178, 24338), (182, 24362), (184, 24374), (190, 24419), (192, 24440), (201, 24506),

Gene: Wakanda_18 Start: 10264, Stop: 12462, Start Num: 16

Candidate Starts for Wakanda_18:

(6, 10195), (Start: 16 @10264 has 89 MA's), (19, 10315), (39, 10546), (44, 10594), (45, 10600), (49, 10624), (51, 10660), (81, 10957), (82, 11011), (87, 11035), (92, 11065), (120, 11257), (129, 11323), (131, 11335), (132, 11338), (140, 11392), (141, 11395), (145, 11419), (155, 11542), (157, 11548), (162, 11584), (163, 11590), (175, 11731), (181, 11803), (196, 11917), (203, 11983), (210, 12217), (211, 12241), (214, 12280), (219, 12334),

Gene: Warpy_49 Start: 23576, Stop: 25312, Start Num: 16

Candidate Starts for Warpy_49:

(Start: 16 @23576 has 89 MA's), (22, 23669), (24, 23687), (30, 23744), (32, 23768), (34, 23828), (37, 23855), (39, 23864), (40, 23891), (57, 24038), (58, 24041), (86, 24353), (95, 24401), (101, 24446), (141, 24749), (159, 24908), (166, 24983), (178, 25106),

Gene: Watermoore_45 Start: 23815, Stop: 25551, Start Num: 16

Candidate Starts for Watermoore_45:

(Start: 16 @23815 has 89 MA's), (22, 23908), (30, 23983), (32, 24007), (34, 24067), (39, 24103), (59, 24283), (87, 24595), (99, 24655), (132, 24931), (140, 24985), (141, 24988), (152, 25072), (156, 25126), (159, 25147), (169, 25249), (178, 25345), (182, 25369), (184, 25381), (190, 25426), (201, 25513),

Gene: WhereRU_42 Start: 22077, Stop: 23813, Start Num: 16

Candidate Starts for WhereRU_42:

(Start: 16 @22077 has 89 MA's), (22, 22170), (24, 22188), (30, 22245), (32, 22269), (38, 22362), (39, 22365), (58, 22542), (59, 22545), (83, 22839), (99, 22917), (106, 22977), (140, 23247), (147, 23307), (150, 23322), (159, 23409), (160, 23415), (171, 23526), (178, 23607), (192, 23709),

Gene: Wipeout_45 Start: 22934, Stop: 24670, Start Num: 16

Candidate Starts for Wipeout_45:

(2, 22823), (5, 22856), (7, 22874), (12, 22910), (14, 22916), (Start: 16 @22934 has 89 MA's), (20, 23003), (30, 23102), (32, 23126), (34, 23186), (39, 23222), (48, 23303), (61, 23417), (65, 23465), (83, 23699), (105, 23831), (106, 23837), (107, 23843), (126, 23996), (128, 24017), (129, 24035), (145, 24125), (154, 24200), (159, 24266), (161, 24281), (172, 24401), (190, 24545), (201, 24632),

Gene: Wofford_46 Start: 23583, Stop: 25322, Start Num: 16

Candidate Starts for Wofford_46:

(Start: 16 @23583 has 89 MA's), (20, 23652), (30, 23751), (32, 23775), (39, 23871), (74, 24183), (106, 24489), (107, 24495), (122, 24618), (126, 24648), (159, 24918), (168, 25014), (176, 25089), (200, 25281),

Gene: Yaboi_47 Start: 22535, Stop: 24271, Start Num: 16

Candidate Starts for Yaboi_47:

(9, 22493), (15, 22517), (Start: 16 @22535 has 89 MA's), (20, 22604), (30, 22703), (32, 22727), (34, 22787), (35, 22796), (39, 22823), (65, 23066), (74, 23135), (83, 23300), (90, 23333), (105, 23432), (119, 23543), (135, 23672), (145, 23726), (156, 23846), (161, 23882), (171, 23984), (176, 24038), (179, 24071), (190, 24146), (201, 24233),