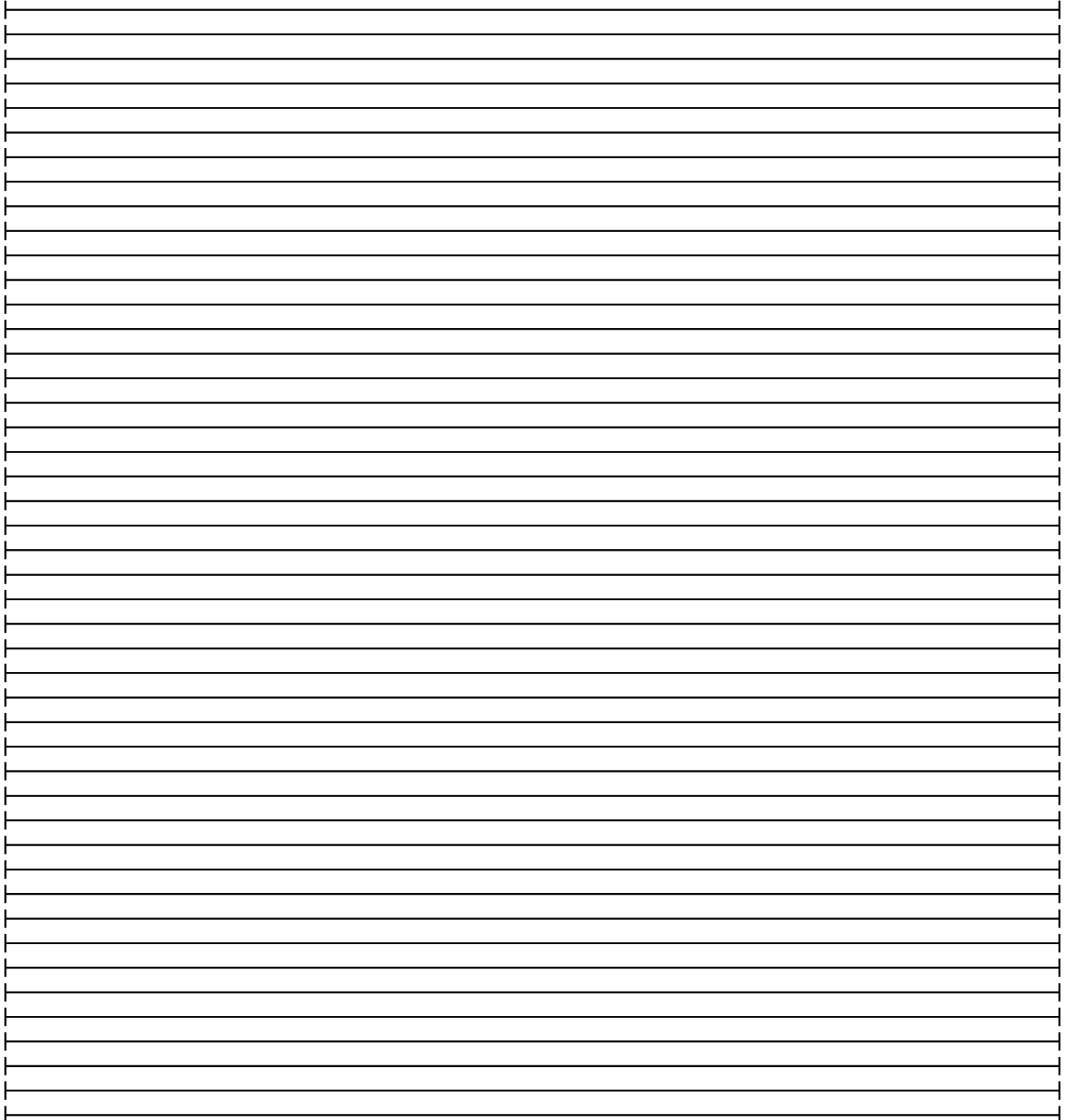
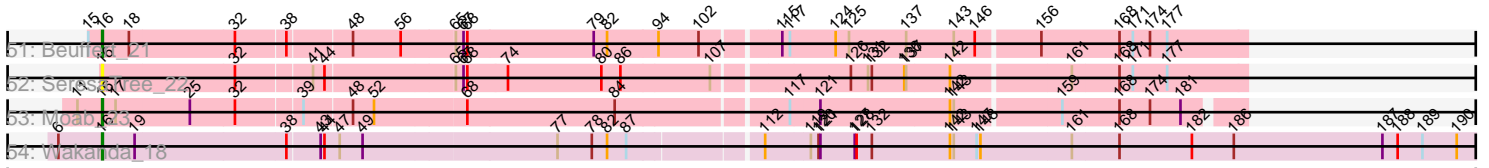


Pham 219608



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 219608 Report

This analysis was run 03/28/25 on database version 593.

Pham number 219608 has 98 members, 10 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 : Deutsch_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 : Marsus_44
- Track 12 : Evy_46
- Track 13 : Bartholomune_43, WhereRU_42
- Track 14 : Peebs_44, Shuckle_43
- Track 15 : Jay2Jay_50
- Track 16 : MulchMansion_42, LilMartin_42
- Track 17 : Scheme_46
- Track 18 : Bmoc_43
- Track 19 : Cadmus_46, Daubenski_46
- Track 20 : Targaryen_46
- Track 21 : Larnav_45
- Track 22 : Riptide_43
- Track 23 : Mildred21_43
- Track 24 : Navo_43
- Track 25 : Paradiddles_41
- Track 26 : Anedea_43
- Track 27 : SaltySpittoon_47, Jollison_46, Rikishi_50, Bordeaux_45, Starbow_45, Quaran19_47, PumpkinSpice_46
- Track 28 : Spilled_48, IchabodCrane_44
- Track 29 : Karimac_46
- Track 30 : StarPlatinum_47
- Track 31 : Gibbi_51
- Track 32 : KentuckyRacer_47, CeilingFan_46
- Track 33 : Stanimal_47, Yaboi_47, Genie2_47, Sollertia_47, BoomerJR_47
- Track 34 : TomSawyer_45, Amabiko_47, Wipeout_45, Birchlyn_44
- Track 35 : Wofford_46, Elmer_49

- Track 36 : Spelly_47
- Track 37 : JimJam_47, Battuta_45
- Track 38 : Tomas_49
- Track 39 : Mugiwara_48
- Track 40 : MindFlayer_45
- Track 41 : LukeCage_46
- Track 42 : Enygma_44
- Track 43 : Phredrick_24, Kenrey_26
- Track 44 : SparkleGoddess_23, Karp_22, Belfort_24, Stigma_23, Westy_23, Comrade_23
- Track 45 : MeganTheeKilla_24, Forrest_26, Jada_24, Gilson_26, Emma1919_26
- Track 46 : Francob_22
- Track 47 : Limpid_22, Annadreamy_22
- Track 48 : Patelgo_23
- Track 49 : Faust_22
- Track 50 : Blueeyedbeauty_24
- Track 51 : Beuffert_21
- Track 52 : SeresaTree_22
- Track 53 : Moab_23
- Track 54 : 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 87 of the 88 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko_47, Anedeaa_43, Angela_42, Annadreamy_22, Bartholomune_43, Battuta_45, Belfort_24, Beuffert_21, Birchlyn_44, BlueOtter_45, Bmoc_43, BoomerJR_47, Bordeaux_45, Braelyn_44, Cadmus_46, CeilingFan_46, 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, Navo_43, NootNoot_41, PacManQ_44, Paradiddles_41, Patelgo_23, Peebs_44, Pepperwood_45, Persimmon_41, Phredrick_24, PinkiePie_43, PumpkinSpice_46, Quarant19_47, Rikishi_50, Riptide_43, SaltySpittoon_47, Samisti12_45, Scheme_46, SeresaTree_22, Shuckle_43, 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, Westy_23, WhereRU_42, Wipeout_45, Wofford_46, Yaboi_47,

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

- Blueeyedbeauty_24, Marsus_44, Mugiwara_48,

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

-

Summary by start number:

Start 16:

- Found in 98 of 98 (100.0%) of genes in pham
- Manual Annotations of this start: 87 of 88
- Called 96.9% 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), Birchlyn_44 (BE2), BlueOtter_45 (BE1), Bmoc_43 (BE1), BoomerJR_47 (BE2), Bordeaux_45 (BE2), Braelyn_44 (BE1), Cadmus_46 (BE1), CeilingFan_46 (BE2), 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), 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), Rikishi_50 (BE2), Riptide_43 (BE1), SaltySpittoon_47 (BE2), Samisti12_45 (BE1), Scheme_46 (BE1), SeresaTree_22 (BK1), Shuckle_43 (BE1), 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), Westy_23 (BK1), WhereRU_42 (BE1), Wipeout_45 (BE2), Wofford_46 (BE2), Yaboi_47 (BE2),

Start 18:

- Found in 4 of 98 (4.1%) of genes in pham
- Manual Annotations of this start: 1 of 88
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Blueeyedbeauty_24 (BK1),

Start 23:

- Found in 26 of 98 (26.5%) of genes in pham
- No Manual Annotations of this start.
- Called 3.8% of time when present
- Phage (with cluster) where this start called: Marsus_44 (BE1),

Start 31:

- Found in 75 of 98 (76.5%) of genes in pham
- No Manual Annotations of this start.
- Called 1.3% 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 30 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 1 time 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 87 MA's), (20, 22658), (29, 22757), (31, 22781), (33, 22841), (38, 22877), (46, 22958), (59, 23072), (63, 23120), (79, 23354), (98, 23486), (99, 23492), (100, 23498), (116, 23651), (118, 23672), (119, 23690), (132, 23780), (141, 23855), (144, 23921), (146, 23936), (157, 24056), (176, 24200), (185, 24287),

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

Candidate Starts for Anedea_43:

(Start: 16 @22107 has 87 MA's), (21, 22200), (23, 22218), (29, 22275), (31, 22299), (33, 22359), (38, 22395), (81, 22890), (95, 22983), (99, 23013), (102, 23037), (104, 23046), (109, 23094), (128, 23286), (142, 23424), (144, 23445), (151, 23520), (153, 23541), (156, 23562), (164, 23643), (168, 23670), (173, 23706), (175, 23715),

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

Candidate Starts for Angela_42:

(Start: 16 @21587 has 87 MA's), (21, 21680), (23, 21698), (29, 21755), (31, 21779), (33, 21839), (36, 21866), (37, 21872), (38, 21875), (56, 22052), (68, 22157), (89, 22418), (104, 22526), (109, 22574), (128, 22766), (144, 22925), (150, 22976), (155, 23036), (156, 23042), (172, 23180), (175, 23195), (180, 23237),

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

Candidate Starts for Annadreamy_22:

(15, 10954), (Start: 16 @10975 has 87 MA's), (Start: 18 @11017 has 1 MA's), (32, 11179), (38, 11254), (48, 11347), (53, 11404), (54, 11410), (56, 11422), (60, 11452), (62, 11458), (65, 11500), (67, 11512), (68, 11518), (70, 11533), (79, 11716), (84, 11749), (102, 11878), (124, 12067), (125, 12088), (136, 12175), (152, 12346), (168, 12496), (174, 12544),

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

Candidate Starts for Bartholomune_43:

(Start: 16 @21893 has 87 MA's), (21, 21986), (23, 22004), (29, 22061), (31, 22085), (37, 22178), (38, 22181), (56, 22358), (57, 22361), (79, 22655), (93, 22733), (99, 22793), (127, 23063), (134, 23123), (137, 23138), (144, 23225), (145, 23231), (156, 23342), (164, 23423), (178, 23525),

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

Candidate Starts for Battuta_45:

(15, 22545), (Start: 16 @22563 has 87 MA's), (20, 22632), (29, 22731), (31, 22755), (33, 22815), (38, 22851), (59, 23046), (63, 23094), (79, 23328), (98, 23460), (99, 23466), (100, 23472), (116, 23625), (118, 23646), (119, 23664), (128, 23736), (132, 23754), (141, 23829), (144, 23895), (146, 23910), (157, 24030), (176, 24174), (185, 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 87 MA's), (25, 11861), (28, 11888), (32, 11930), (44, 12059), (48, 12098), (64, 12239), (84, 12500), (92, 12545), (97, 12596), (101, 12626), (124, 12815), (135, 12920), (136, 12923), (142, 12992), (148, 13040), (159, 13154), (163, 13199), (168, 13241), (174, 13289), (181, 13337),

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

Candidate Starts for Beuffert_21:

(15, 10637), (Start: 16 @10658 has 87 MA's), (Start: 18 @10700 has 1 MA's), (32, 10862), (38, 10937), (48, 11030), (56, 11105), (65, 11183), (67, 11195), (68, 11201), (79, 11399), (82, 11420), (94, 11498), (102, 11561), (115, 11669), (117, 11681), (124, 11750), (125, 11771), (137, 11861), (143, 11933), (146, 11966), (156, 12059), (168, 12179), (171, 12200), (174, 12227), (177, 12254),

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 87 MA's), (20, 20515), (29, 20614), (31, 20638), (33, 20698), (38, 20734), (46, 20815), (59, 20929), (63, 20977), (79, 21211), (98, 21343), (99, 21349), (100, 21355), (116, 21508), (118, 21529), (119, 21547), (132, 21637), (141, 21712), (144, 21778), (146, 21793), (157, 21913), (176, 22057), (185, 22144),

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

Candidate Starts for BlueOtter_45:

(Start: 16 @23243 has 87 MA's), (21, 23336), (29, 23411), (31, 23435), (33, 23495), (38, 23531), (57, 23711), (82, 24023), (93, 24083), (121, 24359), (127, 24413), (128, 24416), (139, 24500), (142, 24554), (144, 24575), (154, 24677), (164, 24773), (167, 24797), (170, 24809), (176, 24854), (185, 24941),

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

Candidate Starts for Blueeyedbeauty_24:

(15, 11447), (Start: 16 @11468 has 87 MA's), (Start: 18 @11510 has 1 MA's), (32, 11672), (38, 11747), (48, 11840), (51, 11867), (56, 11915), (62, 11951), (65, 11993), (67, 12005), (68, 12011), (73, 12071), (79, 12209), (84, 12242), (116, 12485), (117, 12491), (136, 12668), (143, 12743), (148, 12785), (161, 12914), (168, 12989), (174, 13037), (178, 13070),

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

Candidate Starts for Bmoc_43:

(Start: 16 @21892 has 87 MA's), (21, 21985), (23, 22003), (29, 22060), (31, 22084), (33, 22144), (38, 22180), (81, 22675), (95, 22768), (99, 22798), (104, 22831), (109, 22879), (113, 22930), (128, 23071), (138, 23146), (142, 23209), (144, 23230), (153, 23326), (156, 23347), (164, 23428), (165, 23434), (168, 23455), (175, 23500), (178, 23530), (181, 23545),

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

Candidate Starts for BoomerJR_47:

(9, 22402), (15, 22426), (Start: 16 @22444 has 87 MA's), (20, 22513), (29, 22612), (31, 22636), (33, 22696), (34, 22705), (38, 22732), (63, 22975), (71, 23044), (79, 23209), (85, 23242), (98, 23341), (110,

23452), (123, 23581), (132, 23635), (142, 23755), (146, 23791), (156, 23893), (162, 23947), (165, 23980), (176, 24055), (185, 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 87 MA's), (20, 22787), (29, 22886), (31, 22910), (33, 22970), (38, 23006), (59, 23201), (63, 23249), (79, 23483), (98, 23615), (99, 23621), (100, 23627), (116, 23780), (118, 23801), (119, 23819), (128, 23891), (132, 23909), (141, 23984), (144, 24050), (146, 24065), (157, 24185), (176, 24329), (185, 24416),

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

Candidate Starts for Braelyn_44:

(Start: 16 @22660 has 87 MA's), (21, 22753), (23, 22771), (29, 22828), (31, 22852), (33, 22912), (35, 22927), (37, 22945), (38, 22948), (56, 23125), (57, 23128), (79, 23422), (93, 23500), (98, 23554), (127, 23830), (134, 23890), (137, 23905), (144, 23992), (145, 23998), (156, 24109), (164, 24190), (178, 24292),

Gene: Cadmus_46 Start: 22231, Stop: 23973, Start Num: 16

Candidate Starts for Cadmus_46:

(Start: 16 @22231 has 87 MA's), (19, 22282), (23, 22342), (29, 22399), (31, 22423), (33, 22483), (37, 22516), (38, 22519), (95, 23107), (109, 23218), (128, 23410), (135, 23476), (137, 23482), (144, 23569), (149, 23614), (156, 23686), (164, 23767), (176, 23848), (178, 23869), (185, 23935),

Gene: CeilingFan_46 Start: 22478, Stop: 24214, Start Num: 16

Candidate Starts for CeilingFan_46:

(2, 22367), (5, 22400), (7, 22418), (12, 22454), (14, 22460), (Start: 16 @22478 has 87 MA's), (20, 22547), (29, 22646), (31, 22670), (33, 22730), (38, 22766), (59, 22961), (63, 23009), (79, 23243), (98, 23375), (99, 23381), (100, 23387), (116, 23540), (118, 23561), (119, 23579), (132, 23669), (141, 23744), (144, 23810), (146, 23825), (157, 23945), (176, 24089), (185, 24176),

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 87 MA's), (25, 11476), (28, 11503), (32, 11545), (44, 11674), (48, 11713), (64, 11854), (84, 12115), (92, 12160), (97, 12211), (101, 12241), (124, 12430), (135, 12535), (136, 12538), (142, 12607), (148, 12655), (159, 12769), (163, 12814), (168, 12856), (174, 12904), (181, 12952),

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

Candidate Starts for Cross_45:

(Start: 16 @23244 has 87 MA's), (21, 23337), (29, 23412), (31, 23436), (33, 23496), (38, 23532), (57, 23712), (82, 24024), (93, 24084), (121, 24360), (127, 24414), (128, 24417), (139, 24501), (142, 24555), (144, 24576), (154, 24678), (164, 24774), (167, 24798), (170, 24810), (176, 24855), (185, 24942),

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

Candidate Starts for Cursive_43:

(Start: 16 @22769 has 87 MA's), (21, 22862), (29, 22937), (31, 22961), (33, 23021), (38, 23057), (57, 23237), (82, 23549), (93, 23609), (121, 23885), (127, 23939), (128, 23942), (139, 24026), (142, 24080), (144, 24101), (154, 24203), (164, 24299), (167, 24323), (170, 24335), (176, 24380), (185, 24467),

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

Candidate Starts for Daubenski_46:

(Start: 16 @22995 has 87 MA's), (19, 23046), (23, 23106), (29, 23163), (31, 23187), (33, 23247), (37, 23280), (38, 23283), (95, 23871), (109, 23982), (128, 24174), (135, 24240), (137, 24246), (144, 24333), (149, 24378), (156, 24450), (164, 24531), (176, 24612), (178, 24633), (185, 24699),

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

Candidate Starts for EGole_46:

(Start: 16 @24148 has 87 MA's), (21, 24241), (23, 24259), (26, 24289), (29, 24316), (31, 24340), (36, 24427), (38, 24436), (57, 24616), (82, 24928), (93, 24988), (109, 25129), (121, 25264), (127, 25318), (128, 25321), (139, 25405), (142, 25459), (144, 25480), (154, 25582), (164, 25678), (167, 25702), (170, 25714), (176, 25759), (185, 25846),

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

Candidate Starts for Elmer_49:

(Start: 16 @23620 has 87 MA's), (20, 23689), (29, 23788), (31, 23812), (38, 23908), (71, 24220), (99, 24526), (100, 24532), (113, 24655), (116, 24685), (144, 24955), (153, 25051), (162, 25126), (184, 25318),

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

Candidate Starts for Emma1919_26:

(8, 11875), (10, 11884), (Start: 16 @11923 has 87 MA's), (30, 12103), (32, 12127), (38, 12202), (40, 12229), (41, 12238), (48, 12295), (54, 12358), (79, 12664), (80, 12676), (84, 12697), (92, 12742), (111, 12895), (112, 12910), (129, 13048), (131, 13063), (136, 13120), (141, 13141), (142, 13189), (143, 13195), (159, 13351), (160, 13363), (168, 13438), (174, 13486),

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

Candidate Starts for Enygma_44:

(Start: 16 @22539 has 87 MA's), (20, 22608), (29, 22707), (31, 22731), (38, 22827), (46, 22908), (58, 23016), (79, 23304), (95, 23412), (98, 23436), (100, 23448), (112, 23568), (128, 23712), (144, 23871), (146, 23886), (164, 24069), (166, 24081), (176, 24150), (177, 24165), (185, 24237),

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

Candidate Starts for Evy_46:

(Start: 16 @23255 has 87 MA's), (21, 23348), (23, 23366), (29, 23423), (31, 23447), (33, 23507), (36, 23534), (38, 23543), (39, 23570), (56, 23720), (95, 24125), (122, 24383), (128, 24428), (140, 24515), (144, 24587), (151, 24662), (164, 24785),

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

Candidate Starts for Faust_22:

(Start: 16 @11130 has 87 MA's), (32, 11334), (41, 11445), (44, 11463), (65, 11655), (67, 11667), (68, 11673), (74, 11736), (75, 11742), (84, 11904), (107, 12051), (126, 12246), (131, 12273), (132, 12279), (136, 12330), (137, 12333), (142, 12399), (161, 12576), (168, 12648), (171, 12669), (177, 12723),

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

Candidate Starts for Forrest_26:

(8, 11998), (10, 12007), (Start: 16 @12046 has 87 MA's), (30, 12226), (32, 12250), (38, 12325), (40, 12352), (41, 12361), (48, 12418), (54, 12481), (79, 12787), (80, 12799), (84, 12820), (92, 12865), (111, 13018), (112, 13033), (129, 13171), (131, 13186), (136, 13243), (141, 13264), (142, 13312), (143, 13318), (159, 13474), (160, 13486), (168, 13561), (174, 13609),

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

Candidate Starts for Francob_22:

(Start: 16 @10713 has 87 MA's), (32, 10917), (41, 11028), (42, 11034), (50, 11109), (51, 11112), (67, 11241), (68, 11247), (84, 11478), (105, 11619), (126, 11817), (133, 11865), (136, 11901), (142,

11970), (148, 12018), (152, 12072), (159, 12132), (168, 12219), (171, 12240), (174, 12267), (181, 12315),

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

Candidate Starts for Genie2_47:

(9, 22516), (15, 22540), (Start: 16 @22558 has 87 MA's), (20, 22627), (29, 22726), (31, 22750), (33, 22810), (34, 22819), (38, 22846), (63, 23089), (71, 23158), (79, 23323), (85, 23356), (98, 23455), (110, 23566), (123, 23695), (132, 23749), (142, 23869), (146, 23905), (156, 24007), (162, 24061), (165, 24094), (176, 24169), (185, 24256),

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

Candidate Starts for Gibbi_51:

(15, 22683), (Start: 16 @22701 has 87 MA's), (20, 22770), (29, 22869), (31, 22893), (33, 22953), (38, 22989), (46, 23070), (59, 23184), (63, 23232), (79, 23466), (98, 23598), (99, 23604), (100, 23610), (116, 23763), (118, 23784), (119, 23802), (132, 23892), (141, 23967), (144, 24033), (146, 24048), (157, 24168), (176, 24312), (185, 24399),

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

Candidate Starts for Gilson_26:

(8, 11828), (10, 11837), (Start: 16 @11876 has 87 MA's), (30, 12056), (32, 12080), (38, 12155), (40, 12182), (41, 12191), (48, 12248), (54, 12311), (79, 12617), (80, 12629), (84, 12650), (92, 12695), (111, 12848), (112, 12863), (129, 13001), (131, 13016), (136, 13073), (141, 13094), (142, 13142), (143, 13148), (159, 13304), (160, 13316), (168, 13391), (174, 13439),

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

Candidate Starts for HangryHippo_45:

(Start: 16 @23243 has 87 MA's), (21, 23336), (29, 23411), (31, 23435), (33, 23495), (38, 23531), (57, 23711), (82, 24023), (93, 24083), (121, 24359), (127, 24413), (128, 24416), (139, 24500), (142, 24554), (144, 24575), (154, 24677), (164, 24773), (167, 24797), (170, 24809), (176, 24854), (185, 24941),

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

Candidate Starts for IchabodCrane_44:

(15, 22272), (Start: 16 @22290 has 87 MA's), (20, 22359), (24, 22413), (29, 22458), (31, 22482), (33, 22542), (38, 22578), (59, 22773), (63, 22821), (79, 23055), (98, 23187), (100, 23199), (118, 23373), (132, 23481), (141, 23556), (144, 23622), (146, 23637), (157, 23757), (166, 23832), (176, 23901), (185, 23988),

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

Candidate Starts for Jada_24:

(8, 11180), (10, 11189), (Start: 16 @11228 has 87 MA's), (30, 11408), (32, 11432), (38, 11507), (40, 11534), (41, 11543), (48, 11600), (54, 11663), (79, 11969), (80, 11981), (84, 12002), (92, 12047), (111, 12200), (112, 12215), (129, 12353), (131, 12368), (136, 12425), (141, 12446), (142, 12494), (143, 12500), (159, 12656), (160, 12668), (168, 12743), (174, 12791),

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

Candidate Starts for Jay2Jay_50:

(Start: 16 @24078 has 87 MA's), (21, 24171), (23, 24189), (29, 24246), (31, 24270), (33, 24330), (36, 24357), (38, 24366), (39, 24393), (56, 24543), (75, 24711), (81, 24855), (85, 24873), (89, 24903), (95, 24948), (108, 25026), (113, 25110), (122, 25206), (128, 25251), (144, 25410), (151, 25485), (164, 25608),

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

Candidate Starts for JimJam_47:

(15, 22646), (Start: 16 @22664 has 87 MA's), (20, 22733), (29, 22832), (31, 22856), (33, 22916), (38, 22952), (59, 23147), (63, 23195), (79, 23429), (98, 23561), (99, 23567), (100, 23573), (116, 23726), (118, 23747), (119, 23765), (128, 23837), (132, 23855), (141, 23930), (144, 23996), (146, 24011), (157, 24131), (176, 24275), (185, 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 87 MA's), (20, 22615), (29, 22714), (31, 22738), (33, 22798), (38, 22834), (59, 23029), (63, 23077), (79, 23311), (98, 23443), (99, 23449), (100, 23455), (116, 23608), (118, 23629), (119, 23647), (128, 23719), (132, 23737), (141, 23812), (144, 23878), (146, 23893), (157, 24013), (176, 24157), (185, 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 87 MA's), (20, 22764), (24, 22818), (29, 22863), (31, 22887), (33, 22947), (38, 22983), (46, 23064), (59, 23178), (63, 23226), (79, 23460), (98, 23592), (100, 23604), (118, 23778), (132, 23886), (141, 23961), (144, 24027), (146, 24042), (157, 24162), (166, 24237), (176, 24306), (185, 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 87 MA's), (25, 11077), (28, 11104), (32, 11146), (44, 11275), (48, 11314), (64, 11455), (84, 11716), (92, 11761), (97, 11812), (101, 11842), (124, 12031), (135, 12136), (136, 12139), (142, 12208), (148, 12256), (159, 12370), (163, 12415), (168, 12457), (174, 12505), (181, 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 87 MA's), (32, 12129), (41, 12240), (48, 12297), (57, 12375), (78, 12663), (79, 12666), (84, 12699), (103, 12834), (108, 12852), (109, 12876), (112, 12912), (115, 12936), (125, 13035), (129, 13050), (130, 13059), (132, 13071), (137, 13125), (141, 13143), (142, 13191), (158, 13341), (159, 13353), (160, 13365), (168, 13440), (171, 13461), (174, 13488), (181, 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 87 MA's), (20, 22548), (29, 22647), (31, 22671), (33, 22731), (38, 22767), (59, 22962), (63, 23010), (79, 23244), (98, 23376), (99, 23382), (100, 23388), (116, 23541), (118, 23562), (119, 23580), (132, 23670), (141, 23745), (144, 23811), (146, 23826), (157, 23946), (176, 24090), (185, 24177),

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

Candidate Starts for Larnav_45:

(Start: 16 @23228 has 87 MA's), (21, 23321), (27, 23372), (29, 23396), (31, 23420), (33, 23480), (38, 23516), (57, 23696), (82, 24008), (93, 24068), (121, 24344), (127, 24398), (128, 24401), (139, 24485), (142, 24539), (144, 24560), (154, 24662), (164, 24758), (167, 24782), (170, 24794), (176, 24839), (185, 24926),

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

Candidate Starts for Leo04_46:

(Start: 16 @23743 has 87 MA's), (21, 23836), (29, 23911), (31, 23935), (33, 23995), (38, 24031), (57, 24211), (82, 24523), (93, 24583), (121, 24859), (127, 24913), (128, 24916), (139, 25000), (142,

25054), (144, 25075), (154, 25177), (164, 25273), (167, 25297), (170, 25309), (176, 25354), (185, 25441),

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

Candidate Starts for Liandry_44:

(Start: 16 @22598 has 87 MA's), (21, 22691), (23, 22709), (29, 22766), (31, 22790), (33, 22850), (35, 22865), (37, 22883), (38, 22886), (56, 23063), (57, 23066), (79, 23360), (93, 23438), (98, 23492), (127, 23768), (134, 23828), (137, 23843), (144, 23930), (145, 23936), (156, 24047), (164, 24128), (178, 24230),

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

Candidate Starts for LilMartin_42:

(Start: 16 @21535 has 87 MA's), (21, 21628), (23, 21646), (29, 21703), (31, 21727), (33, 21787), (36, 21814), (37, 21820), (38, 21823), (56, 22000), (89, 22366), (104, 22474), (109, 22522), (128, 22714), (144, 22873), (150, 22924), (155, 22984), (156, 22990), (172, 23128), (175, 23143), (180, 23185),

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

Candidate Starts for Limpid_22:

(15, 10953), (Start: 16 @10974 has 87 MA's), (Start: 18 @11016 has 1 MA's), (32, 11178), (38, 11253), (48, 11346), (53, 11403), (54, 11409), (56, 11421), (60, 11451), (62, 11457), (65, 11499), (67, 11511), (68, 11517), (70, 11532), (79, 11715), (84, 11748), (102, 11877), (124, 12066), (125, 12087), (136, 12174), (152, 12345), (168, 12495), (174, 12543),

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

Candidate Starts for LukeCage_46:

(13, 22422), (15, 22425), (Start: 16 @22443 has 87 MA's), (20, 22512), (29, 22611), (31, 22635), (38, 22731), (39, 22758), (46, 22812), (51, 22860), (59, 22926), (76, 23088), (79, 23208), (83, 23235), (95, 23316), (98, 23340), (100, 23352), (113, 23475), (115, 23499), (128, 23616), (132, 23634), (141, 23709), (144, 23775), (146, 23790), (164, 23973), (165, 23979), (166, 23985), (176, 24054),

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

Candidate Starts for Lululemon_44:

(Start: 16 @22624 has 87 MA's), (21, 22717), (29, 22792), (31, 22816), (33, 22876), (38, 22912), (57, 23092), (82, 23404), (93, 23464), (121, 23740), (127, 23794), (128, 23797), (139, 23881), (142, 23935), (144, 23956), (154, 24058), (164, 24154), (167, 24178), (170, 24190), (176, 24235), (185, 24322),

Gene: Marsus_44 Start: 21918, Stop: 23549, Start Num: 23

Candidate Starts for Marsus_44:

(Start: 16 @21807 has 87 MA's), (21, 21900), (23, 21918), (29, 21975), (31, 21999), (33, 22059), (36, 22086), (37, 22092), (38, 22095), (96, 22692), (104, 22746), (109, 22794), (128, 22986), (138, 23061), (144, 23145), (150, 23196), (172, 23400), (175, 23415), (180, 23457),

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

Candidate Starts for MeganTheeKilla_24:

(8, 11189), (10, 11198), (Start: 16 @11237 has 87 MA's), (30, 11417), (32, 11441), (38, 11516), (40, 11543), (41, 11552), (48, 11609), (54, 11672), (79, 11978), (80, 11990), (84, 12011), (92, 12056), (111, 12209), (112, 12224), (129, 12362), (131, 12377), (136, 12434), (141, 12455), (142, 12503), (143, 12509), (159, 12665), (160, 12677), (168, 12752), (174, 12800),

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

Candidate Starts for Mildred21_43:

(Start: 16 @21720 has 87 MA's), (21, 21813), (23, 21831), (29, 21888), (31, 21912), (33, 21972), (38, 22008), (79, 22488), (99, 22626), (104, 22659), (114, 22773), (128, 22899), (144, 23058), (150, 23109), (164, 23256), (167, 23280), (175, 23328), (178, 23358), (181, 23373), (185, 23424),

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

Candidate Starts for MindFlayer_45:

(15, 22179), (Start: 16 @22197 has 87 MA's), (20, 22266), (29, 22365), (31, 22389), (33, 22449), (38, 22485), (59, 22680), (63, 22728), (79, 22962), (98, 23094), (99, 23100), (100, 23106), (116, 23259), (118, 23280), (119, 23298), (132, 23388), (141, 23463), (144, 23529), (146, 23544), (157, 23664), (176, 23808), (185, 23895),

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

Candidate Starts for Moab_23:

(11, 11226), (Start: 16 @11265 has 87 MA's), (17, 11286), (25, 11400), (32, 11469), (39, 11565), (48, 11637), (52, 11670), (68, 11808), (84, 12036), (117, 12285), (121, 12327), (142, 12528), (143, 12534), (159, 12690), (168, 12777), (174, 12825), (181, 12873),

Gene: Mugiwara_48 Start: 23134, Stop: 24678, Start Num: 31

Candidate Starts for Mugiwara_48:

(13, 22921), (15, 22924), (Start: 16 @22942 has 87 MA's), (20, 23011), (29, 23110), (31, 23134), (33, 23194), (38, 23230), (39, 23257), (46, 23311), (59, 23425), (63, 23473), (71, 23542), (79, 23707), (95, 23815), (100, 23851), (113, 23974), (116, 24004), (132, 24133), (141, 24208), (144, 24274), (146, 24289), (164, 24472), (166, 24484), (176, 24553), (179, 24583), (183, 24613), (185, 24640),

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

Candidate Starts for MulchMansion_42:

(Start: 16 @21535 has 87 MA's), (21, 21628), (23, 21646), (29, 21703), (31, 21727), (33, 21787), (36, 21814), (37, 21820), (38, 21823), (56, 22000), (89, 22366), (104, 22474), (109, 22522), (128, 22714), (144, 22873), (150, 22924), (155, 22984), (156, 22990), (172, 23128), (175, 23143), (180, 23185),

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

Candidate Starts for Navo_43:

(Start: 16 @22555 has 87 MA's), (21, 22648), (23, 22666), (29, 22723), (31, 22747), (35, 22822), (37, 22840), (38, 22843), (56, 23020), (57, 23023), (79, 23317), (93, 23395), (98, 23449), (127, 23725), (134, 23785), (137, 23800), (144, 23887), (145, 23893), (156, 24004), (164, 24085), (178, 24187),

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

Candidate Starts for NootNoot_41:

(Start: 16 @21512 has 87 MA's), (21, 21605), (23, 21623), (29, 21680), (31, 21704), (33, 21764), (35, 21779), (37, 21797), (38, 21800), (56, 21977), (57, 21980), (79, 22274), (93, 22352), (98, 22406), (127, 22682), (134, 22742), (137, 22757), (144, 22844), (145, 22850), (156, 22961), (164, 23042), (178, 23144),

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

Candidate Starts for PacManQ_44:

(Start: 16 @22624 has 87 MA's), (21, 22717), (29, 22792), (31, 22816), (33, 22876), (38, 22912), (57, 23092), (82, 23404), (93, 23464), (121, 23740), (127, 23794), (128, 23797), (139, 23881), (142, 23935), (144, 23956), (154, 24058), (164, 24154), (167, 24178), (170, 24190), (176, 24235), (185, 24322),

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

Candidate Starts for Paradiddles_41:

(Start: 16 @21772 has 87 MA's), (21, 21865), (22, 21880), (23, 21883), (29, 21940), (31, 21964), (35, 22039), (38, 22060), (45, 22129), (57, 22240), (58, 22249), (59, 22255), (61, 22273), (66, 22327), (81, 22549), (90, 22600), (96, 22651), (128, 22945), (144, 23104), (150, 23155), (157, 23239), (164, 23302), (170, 23338), (172, 23359), (176, 23383),

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

Candidate Starts for Patelgo_23:

(11, 10840), (Start: 16 @10879 has 87 MA's), (17, 10900), (25, 11014), (32, 11083), (39, 11179), (48, 11251), (68, 11422), (84, 11650), (90, 11686), (117, 11899), (121, 11941), (142, 12142), (143, 12148), (159, 12304), (168, 12391), (169, 12397), (171, 12412), (174, 12439), (181, 12487),

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

Candidate Starts for Peebs_44:

(Start: 16 @22981 has 87 MA's), (21, 23074), (29, 23149), (31, 23173), (33, 23233), (38, 23269), (57, 23449), (82, 23761), (93, 23821), (127, 24151), (128, 24154), (139, 24238), (142, 24292), (144, 24313), (154, 24415), (164, 24511), (167, 24535), (170, 24547), (176, 24592), (178, 24613), (185, 24679),

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

Candidate Starts for Pepperwood_45:

(Start: 16 @23114 has 87 MA's), (21, 23207), (29, 23282), (31, 23306), (33, 23366), (38, 23402), (57, 23582), (79, 23876), (93, 23954), (127, 24284), (128, 24287), (139, 24371), (142, 24425), (144, 24446), (154, 24548), (164, 24644), (167, 24668), (170, 24680), (176, 24725), (185, 24812),

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

Candidate Starts for Persimmon_41:

(Start: 16 @21487 has 87 MA's), (21, 21580), (23, 21598), (29, 21655), (31, 21679), (37, 21772), (38, 21775), (56, 21952), (57, 21955), (79, 22249), (93, 22327), (98, 22381), (127, 22657), (134, 22717), (137, 22732), (144, 22819), (145, 22825), (156, 22936), (164, 23017), (178, 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 87 MA's), (32, 11335), (41, 11446), (48, 11503), (57, 11581), (78, 11869), (79, 11872), (84, 11905), (103, 12040), (108, 12058), (109, 12082), (112, 12118), (115, 12142), (125, 12241), (129, 12256), (130, 12265), (132, 12277), (137, 12331), (141, 12349), (142, 12397), (158, 12547), (159, 12559), (160, 12571), (168, 12646), (171, 12667), (174, 12694), (181, 12742),

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

Candidate Starts for PinkiePie_43:

(Start: 16 @22598 has 87 MA's), (21, 22691), (23, 22709), (29, 22766), (31, 22790), (33, 22850), (35, 22865), (37, 22883), (38, 22886), (56, 23063), (57, 23066), (79, 23360), (93, 23438), (98, 23492), (127, 23768), (134, 23828), (137, 23843), (144, 23930), (145, 23936), (156, 24047), (164, 24128), (178, 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 87 MA's), (20, 22658), (29, 22757), (31, 22781), (33, 22841), (38, 22877), (59, 23072), (63, 23120), (79, 23354), (98, 23486), (99, 23492), (100, 23498), (116, 23651), (118, 23672), (119, 23690), (128, 23762), (132, 23780), (141, 23855), (144, 23921), (146, 23936), (157, 24056), (176, 24200), (185, 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 87 MA's), (20, 22649), (29, 22748), (31, 22772), (33, 22832), (38, 22868), (59, 23063), (63, 23111), (79, 23345), (98, 23477), (99, 23483), (100, 23489), (116, 23642), (118, 23663), (119, 23681), (128, 23753), (132, 23771), (141, 23846), (144, 23912), (146, 23927), (157, 24047), (176, 24191), (185, 24278),

Gene: Rikishi_50 Start: 22495, Stop: 24231, Start Num: 16

Candidate Starts for Rikishi_50:

(2, 22384), (5, 22417), (7, 22435), (12, 22471), (14, 22477), (Start: 16 @22495 has 87 MA's), (20, 22564), (29, 22663), (31, 22687), (33, 22747), (38, 22783), (59, 22978), (63, 23026), (79, 23260), (98, 23392), (99, 23398), (100, 23404), (116, 23557), (118, 23578), (119, 23596), (128, 23668), (132, 23686), (141, 23761), (144, 23827), (146, 23842), (157, 23962), (176, 24106), (185, 24193),

Gene: Riptide_43 Start: 21328, Stop: 23070, Start Num: 16

Candidate Starts for Riptide_43:

(Start: 16 @21328 has 87 MA's), (21, 21421), (23, 21439), (29, 21496), (31, 21520), (33, 21580), (38, 21616), (81, 22111), (95, 22204), (99, 22234), (102, 22258), (104, 22267), (109, 22315), (128, 22507), (142, 22645), (144, 22666), (151, 22741), (152, 22753), (153, 22762), (156, 22783), (164, 22864), (168, 22891), (173, 22927), (175, 22936),

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 87 MA's), (20, 22658), (29, 22757), (31, 22781), (33, 22841), (38, 22877), (59, 23072), (63, 23120), (79, 23354), (98, 23486), (99, 23492), (100, 23498), (116, 23651), (118, 23672), (119, 23690), (128, 23762), (132, 23780), (141, 23855), (144, 23921), (146, 23936), (157, 24056), (176, 24200), (185, 24287),

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

Candidate Starts for Samisti12_45:

(Start: 16 @24417 has 87 MA's), (21, 24510), (29, 24585), (31, 24609), (33, 24669), (38, 24705), (57, 24885), (75, 25050), (79, 25179), (82, 25197), (93, 25257), (121, 25533), (127, 25587), (128, 25590), (139, 25674), (142, 25728), (144, 25749), (154, 25851), (164, 25947), (167, 25971), (170, 25983), (176, 26028), (185, 26115),

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

Candidate Starts for Scheme_46:

(Start: 16 @23828 has 87 MA's), (21, 23921), (23, 23939), (29, 23996), (31, 24020), (33, 24080), (38, 24116), (57, 24296), (79, 24590), (93, 24668), (127, 24998), (128, 25001), (139, 25085), (142, 25139), (144, 25160), (154, 25262), (164, 25358), (167, 25382), (170, 25394), (176, 25439), (178, 25460), (185, 25526),

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

Candidate Starts for SeresaTree_22:

(Start: 16 @10520 has 87 MA's), (32, 10724), (41, 10835), (44, 10853), (65, 11045), (67, 11057), (68, 11063), (74, 11126), (80, 11273), (86, 11303), (107, 11441), (126, 11636), (131, 11663), (132, 11669), (136, 11720), (137, 11723), (142, 11789), (161, 11966), (168, 12038), (171, 12059), (177, 12113),

Gene: Shuckle_43 Start: 23434, Stop: 25170, Start Num: 16

Candidate Starts for Shuckle_43:

(Start: 16 @23434 has 87 MA's), (21, 23527), (29, 23602), (31, 23626), (33, 23686), (38, 23722), (57, 23902), (82, 24214), (93, 24274), (127, 24604), (128, 24607), (139, 24691), (142, 24745), (144, 24766), (154, 24868), (164, 24964), (167, 24988), (170, 25000), (176, 25045), (178, 25066), (185, 25132),

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

Candidate Starts for Sollertia_47:

(9, 22516), (15, 22540), (Start: 16 @22558 has 87 MA's), (20, 22627), (29, 22726), (31, 22750), (33, 22810), (34, 22819), (38, 22846), (63, 23089), (71, 23158), (79, 23323), (85, 23356), (98, 23455), (110, 23566), (123, 23695), (132, 23749), (142, 23869), (146, 23905), (156, 24007), (162, 24061), (165, 24094), (176, 24169), (185, 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 87 MA's), (25, 11478), (28, 11505), (32, 11547), (44, 11676), (48, 11715), (64, 11856), (84, 12117), (92, 12162), (97, 12213), (101, 12243), (124, 12432), (135, 12537), (136, 12540), (142, 12609), (148, 12657), (159, 12771), (163, 12816), (168, 12858), (174, 12906), (181, 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 87 MA's), (20, 22613), (29, 22712), (31, 22736), (33, 22796), (38, 22832), (58, 23021), (59, 23027), (63, 23075), (79, 23309), (98, 23441), (99, 23447), (100, 23453), (116, 23606), (118, 23627), (119, 23645), (132, 23735), (141, 23810), (144, 23876), (146, 23891), (157, 24011), (176, 24155), (185, 24242),

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

Candidate Starts for Spilled_48:

(15, 22643), (Start: 16 @22661 has 87 MA's), (20, 22730), (24, 22784), (29, 22829), (31, 22853), (33, 22913), (38, 22949), (59, 23144), (63, 23192), (79, 23426), (98, 23558), (100, 23570), (118, 23744), (132, 23852), (141, 23927), (144, 23993), (146, 24008), (157, 24128), (166, 24203), (176, 24272), (185, 24359),

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

Candidate Starts for Squillium_44:

(Start: 16 @22599 has 87 MA's), (21, 22692), (23, 22710), (29, 22767), (31, 22791), (33, 22851), (35, 22866), (37, 22884), (38, 22887), (56, 23064), (57, 23067), (79, 23361), (93, 23439), (98, 23493), (127, 23769), (134, 23829), (137, 23844), (144, 23931), (145, 23937), (156, 24048), (164, 24129), (178, 24231),

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

Candidate Starts for Stanimal_47:

(9, 22405), (15, 22429), (Start: 16 @22447 has 87 MA's), (20, 22516), (29, 22615), (31, 22639), (33, 22699), (34, 22708), (38, 22735), (63, 22978), (71, 23047), (79, 23212), (85, 23245), (98, 23344), (110, 23455), (123, 23584), (132, 23638), (142, 23758), (146, 23794), (156, 23896), (162, 23950), (165, 23983), (176, 24058), (185, 24145),

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

Candidate Starts for StarPlatinum_47:

(13, 23064), (15, 23067), (Start: 16 @23085 has 87 MA's), (20, 23154), (29, 23253), (31, 23277), (38, 23373), (39, 23400), (59, 23568), (63, 23616), (79, 23850), (83, 23877), (95, 23958), (98, 23982), (100, 23994), (110, 24093), (113, 24117), (115, 24141), (116, 24147), (123, 24222), (128, 24258), (132, 24276), (142, 24396), (144, 24417), (146, 24432), (164, 24615), (165, 24621), (166, 24627), (176, 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 87 MA's), (20, 22634), (29, 22733), (31, 22757), (33, 22817), (38, 22853), (59, 23048), (63, 23096), (79, 23330), (98, 23462), (99, 23468), (100, 23474), (116, 23627), (118, 23648), (119, 23666), (128, 23738), (132, 23756), (141, 23831), (144, 23897), (146, 23912), (157, 24032), (176, 24176), (185, 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 87 MA's), (25, 11479), (28, 11506), (32, 11548), (44, 11677), (48, 11716), (64, 11857), (84, 12118), (92, 12163), (97, 12214), (101, 12244), (124, 12433), (135, 12538), (136, 12541), (142, 12610), (148, 12658), (159, 12772), (163, 12817), (168, 12859), (174, 12907), (181, 12955),

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

Candidate Starts for Sushi23_45:

(Start: 16 @23339 has 87 MA's), (21, 23432), (29, 23507), (31, 23531), (33, 23591), (38, 23627), (57, 23807), (79, 24101), (93, 24179), (127, 24509), (128, 24512), (139, 24596), (142, 24650), (144, 24671), (154, 24773), (164, 24869), (167, 24893), (170, 24905), (176, 24950), (178, 24971), (185, 25037),

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

Candidate Starts for Targaryen_46:

(Start: 16 @24112 has 87 MA's), (21, 24205), (23, 24223), (29, 24280), (31, 24304), (33, 24364), (36, 24391), (38, 24400), (39, 24427), (56, 24577), (81, 24889), (89, 24937), (95, 24982), (118, 25195), (128, 25285), (144, 25444), (151, 25519), (164, 25642),

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

Candidate Starts for Teutsch_45:

(Start: 16 @23608 has 87 MA's), (21, 23701), (29, 23776), (31, 23800), (33, 23860), (38, 23896), (57, 24076), (75, 24241), (79, 24370), (82, 24388), (93, 24448), (121, 24724), (127, 24778), (128, 24781), (139, 24865), (142, 24919), (144, 24940), (154, 25042), (164, 25138), (167, 25162), (170, 25174), (176, 25219), (185, 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 87 MA's), (20, 22252), (29, 22351), (31, 22375), (33, 22435), (38, 22471), (46, 22552), (59, 22666), (63, 22714), (79, 22948), (98, 23080), (99, 23086), (100, 23092), (116, 23245), (118, 23266), (119, 23284), (132, 23374), (141, 23449), (144, 23515), (146, 23530), (157, 23650), (176, 23794), (185, 23881),

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

Candidate Starts for Tomas_49:

(Start: 16 @24898 has 87 MA's), (24, 25021), (26, 25039), (29, 25066), (31, 25090), (33, 25150), (38, 25186), (56, 25363), (63, 25429), (69, 25480), (72, 25516), (79, 25666), (88, 25717), (91, 25735), (100, 25810), (106, 25843), (116, 25966), (135, 26143), (162, 26407), (164, 26434), (175, 26506), (176, 26515), (179, 26545), (185, 26602),

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

Candidate Starts for Tribute_43:

(Start: 16 @22808 has 87 MA's), (21, 22901), (29, 22976), (31, 23000), (33, 23060), (38, 23096), (57, 23276), (79, 23570), (82, 23588), (93, 23648), (121, 23924), (127, 23978), (128, 23981), (139, 24065), (142, 24119), (144, 24140), (154, 24242), (164, 24338), (167, 24362), (170, 24374), (176, 24419), (178, 24440), (185, 24506),

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

Candidate Starts for Wakanda_18:

(6, 10195), (Start: 16 @10264 has 87 MA's), (19, 10315), (38, 10546), (43, 10594), (44, 10600), (47, 10624), (49, 10660), (77, 10957), (78, 11011), (82, 11035), (87, 11065), (112, 11257), (119, 11323), (120, 11335), (121, 11338), (127, 11392), (128, 11395), (132, 11419), (142, 11542), (143, 11548), (147, 11584), (148, 11590), (161, 11731), (168, 11803), (182, 11917), (186, 11983), (187, 12217), (188, 12241), (189, 12280), (190, 12334),

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

Candidate Starts for Warpy_49:

(Start: 16 @23576 has 87 MA's), (21, 23669), (23, 23687), (29, 23744), (31, 23768), (33, 23828), (36, 23855), (38, 23864), (39, 23891), (55, 24038), (56, 24041), (81, 24353), (89, 24401), (95, 24446), (128, 24749), (144, 24908), (151, 24983), (164, 25106),

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

Candidate Starts for Watermoore_45:

(Start: 16 @23815 has 87 MA's), (21, 23908), (29, 23983), (31, 24007), (33, 24067), (38, 24103), (57, 24283), (82, 24595), (93, 24655), (121, 24931), (127, 24985), (128, 24988), (139, 25072), (142, 25126), (144, 25147), (154, 25249), (164, 25345), (167, 25369), (170, 25381), (176, 25426), (185, 25513),

Gene: Westy_23 Start: 11344, Stop: 13038, Start Num: 16

Candidate Starts for Westy_23:

(1, 11227), (3, 11233), (4, 11242), (Start: 16 @11344 has 87 MA's), (25, 11479), (28, 11506), (32, 11548), (44, 11677), (48, 11716), (64, 11857), (84, 12118), (92, 12163), (97, 12214), (101, 12244), (124, 12433), (135, 12538), (136, 12541), (142, 12610), (148, 12658), (159, 12772), (163, 12817), (168, 12859), (174, 12907), (181, 12955),

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

Candidate Starts for WhereRU_42:

(Start: 16 @22077 has 87 MA's), (21, 22170), (23, 22188), (29, 22245), (31, 22269), (37, 22362), (38, 22365), (56, 22542), (57, 22545), (79, 22839), (93, 22917), (99, 22977), (127, 23247), (134, 23307), (137, 23322), (144, 23409), (145, 23415), (156, 23526), (164, 23607), (178, 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 87 MA's), (20, 23003), (29, 23102), (31, 23126), (33, 23186), (38, 23222), (46, 23303), (59, 23417), (63, 23465), (79, 23699), (98, 23831), (99, 23837), (100, 23843), (116, 23996), (118, 24017), (119, 24035), (132, 24125), (141, 24200), (144, 24266), (146, 24281), (157, 24401), (176, 24545), (185, 24632),

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

Candidate Starts for Wofford_46:

(Start: 16 @23583 has 87 MA's), (20, 23652), (29, 23751), (31, 23775), (38, 23871), (71, 24183), (99, 24489), (100, 24495), (113, 24618), (116, 24648), (144, 24918), (153, 25014), (162, 25089), (184, 25281),

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

Candidate Starts for Yaboi_47:

(9, 22493), (15, 22517), (Start: 16 @22535 has 87 MA's), (20, 22604), (29, 22703), (31, 22727), (33, 22787), (34, 22796), (38, 22823), (63, 23066), (71, 23135), (79, 23300), (85, 23333), (98, 23432), (110, 23543), (123, 23672), (132, 23726), (142, 23846), (146, 23882), (156, 23984), (162, 24038), (165, 24071), (176, 24146), (185, 24233),

