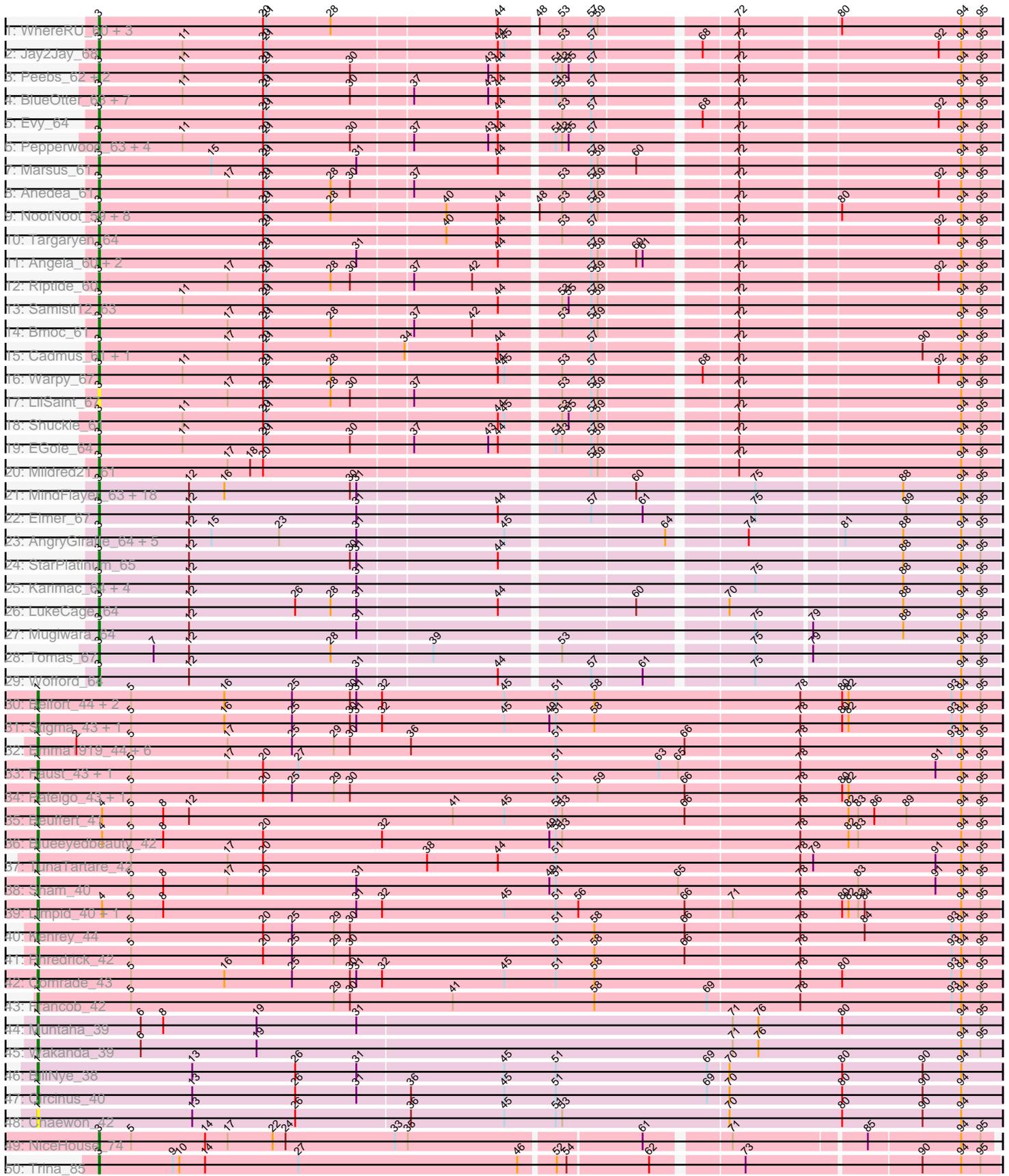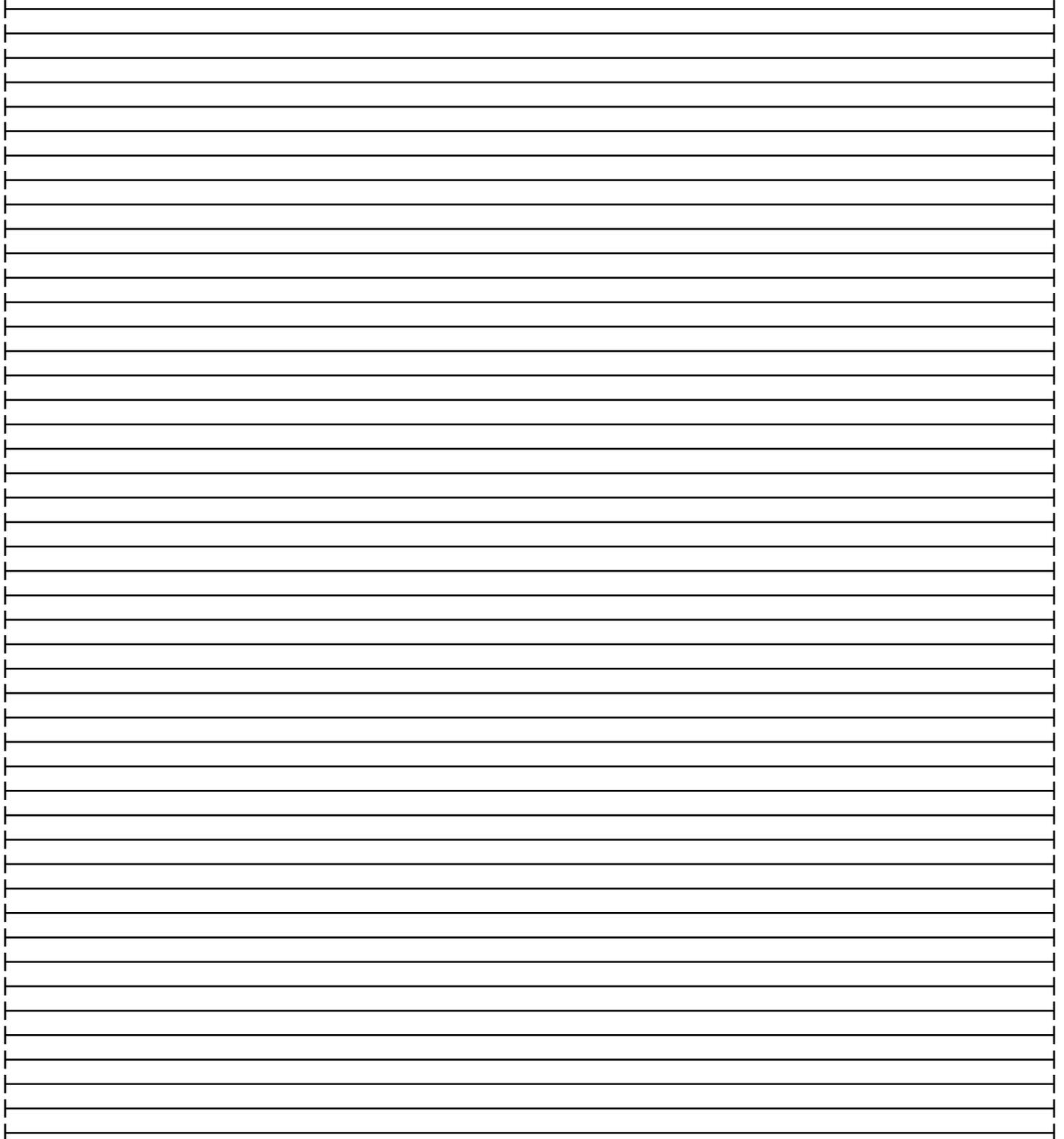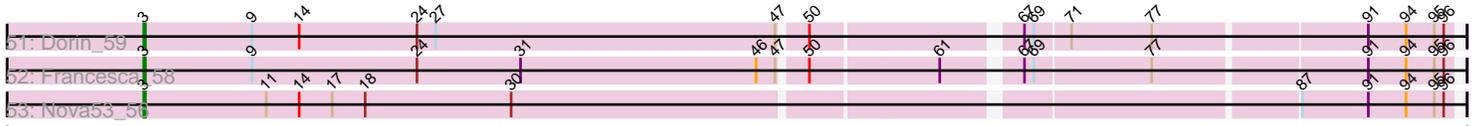# Pham 283621

Pham 283621

51: Dorin_59

52: Francesca_58

53: Nova53_50

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 283621 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283621 has 119 members, 9 are drafts.

Phages represented in each track:
• Track 1 : WhereRU_60, Persimmon_59, Davielle_60, Bartholomune_61
• Track 2 : Jay2Jay_68
• Track 3 : Peebs_62, Scheme_64, Teutsch_63
• Track 4 : BlueOtter_63, Cursive_61, Leo04_64, PacManQ_62, Watermoore_63, Cross_63, HangryHippo_63, Lululemon_62
• Track 5 : Evy_64
• Track 6 : Pepperwood_63, Tribute_61, Coogler_63, Larnav_63, Sushi23_63
• Track 7 : Marsus_61
• Track 8 : Anedea_61
• Track 9 : NootNoot_59, Eliot67_60, Braelyn_62, Squillium_62, FreddyDRoo_60, Navo_61, Paradiddles_59, PinkiePie_61, Liandry_62
• Track 10 : Targaryen_64
• Track 11 : Angela_60, MulchMansion_60, LilMartin_60
• Track 12 : Riptide_60
• Track 13 : Samisti12_63
• Track 14 : Bmoc_61
• Track 15 : Cadmus_61, Daubenski_64
• Track 16 : Warpy_67
• Track 17 : LilSaint_67
• Track 18 : Shuckle_61
• Track 19 : EGole_64
• Track 20 : Mildred21_61
• Track 21 : MindFlayer_63, Wipeout_63, Bordeaux_63, Battuta_63, Birchlyn_62, SaltySpitoon_65, Amabiko_65, TomSawyer_63, Spelly_65, Gibbi_69, Spilled_66, JimJam_65, KentuckyRacer_65, Jollison_64, PumpkinSpice_64, Starbow_63, AcciDwight_69, Rikishi_65, Quaran19_65
• Track 22 : Elmer_67
• Track 23 : AngryGiraffe_64, Genie2_65, Stanimal_65, Sollertia_65, BoomerJR_65, Yaboi_65
• Track 24 : StarPlatinum_65
• Track 25 : Karimac_64, IchabodCrane_62, Enygma_65, Brizzy_64, CeilingFan_64
• Track 26 : LukeCage_64
• Track 27 : Mugiwara_64
• Track 28 : Tomas_67
• Track 29 : Wofford_64
• Track 30 : Belfort_44, Karp_42, Westy_43
• Track 31 : Stigma_43, SparkleGoddess_43

• Track 32 : Emma1919_44, Maupel_43, Jada_42, Gilson_44, DeluluLabubu_41, Forrest_44, MeganTheeKilla_42
• Track 33 : Faust_43, SeresaTree_42
• Track 34 : Patelgo_43, Moab_43
• Track 35 : Beuffert_41
• Track 36 : Blueeyedbeauty_42
• Track 37 : TunaTartare_42
• Track 38 : Sham_40
• Track 39 : Limpid_40, Annadreamy_40
• Track 40 : Kenrey_44
• Track 41 : Phredrick_42
• Track 42 : Comrade_43
• Track 43 : Francob_42
• Track 44 : Muntaha_39
• Track 45 : Wakanda_39
• Track 46 : BillNye_38
• Track 47 : Circinus_40
• Track 48 : Chaewon_42
• Track 49 : NiceHouse_74
• Track 50 : Trina_85
• Track 51 : Dorin_59
• Track 52 : Francesca_58
• Track 53 : Nova53_56

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

The start number called the most often in the published annotations is 3, it was called in 83 of the 110 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AcciDwight_69, Amabiko_65, Anedea_61, Angela_60, AngryGiraffe_64, Bartholomune_61, Battuta_63, Birchlyn_62, BlueOtter_63, Bmoc_61, BoomerJR_65, Bordeaux_63, Braelyn_62, Brizzy_64, Cadmus_61, CeilingFan_64, Coogler_63, Cross_63, Cursive_61, Daubenski_64, Davielle_60, Dorin_59, EGole_64, Eliot67_60, Elmer_67, Enygma_65, Evy_64, Francesca_58, FreddyDRoo_60, Genie2_65, Gibbi_69, HangryHippo_63, IchabodCrane_62, Jay2Jay_68, JimJam_65, Jollison_64, Karimac_64, KentuckyRacer_65, Larnav_63, Leo04_64, Liandry_62, LilMartin_60, LilSaint_67, LukeCage_64, Lululemon_62, Marsus_61, Mildred21_61, MindFlayer_63, Mugiwara_64, MulchMansion_60, Navo_61, NiceHouse_74, NootNoot_59, Nova53_56, PacManQ_62, Paradiddles_59, Peebs_62, Pepperwood_63, Persimmon_59, PinkiePie_61, PumpkinSpice_64, Quaran19_65, Rikishi_65, Riptide_60, SaltySpitoon_65, Samisti12_63, Scheme_64, Shuckle_61, Sollertia_65, Spelly_65, Spilled_66, Squillium_62, Stanimal_65, StarPlatinum_65, Starbow_63, Sushi23_63, Targaryen_64, Teutsch_63, TomSawyer_63, Tomas_67, Tribute_61, Trina_85, Warpy_67, Watermoore_63, WhereRU_60, Wipeout_63, Wofford_64, Yaboi_65,

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

Genes that do not have the "Most Annotated" start:
• Annadreamy_40, Belfort_44, Beuffert_41, BillNye_38, Blueeyedbeauty_42, Chaewon_42, Circinus_40, Comrade_43, DeluluLabubu_41, Emma1919_44, Faust_43, Forrest_44, Francob_42, Gilson_44, Jada_42, Karp_42, Kenrey_44, Limpid_40, Maupel_43, MeganTheeKilla_42, Moab_43, Muntaha_39, Patelgo_43, Phredrick_42, SeresaTree_42, Sham_40, SparkleGoddess_43, Stigma_43, TunaTartare_42, Wakanda_39, Westy_43,

Summary by start number:

Start 1:
• Found in 31 of 119 (26.1%) of genes in pham
• Manual Annotations of this start: 27 of 110
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Annadreamy_40 (BK1), Belfort_44 (BK1), Beuffert_41 (BK1), BillNye_38 (BK2), Blueeyedbeauty_42 (BK1), Chaewon_42 (BK2), Circinus_40 (BK2), Comrade_43 (BK1), DeluluLabubu_41 (BK1), Emma1919_44 (BK1), Faust_43 (BK1), Forrest_44 (BK1), Francob_42 (BK1), Gilson_44 (BK1), Jada_42 (BK1), Karp_42 (BK1), Kenrey_44 (BK1), Limpid_40 (BK1), Maupel_43 (BK1), MeganTheeKilla_42 (BK1), Moab_43 (BK1), Muntaha_39 (BK2), Patelgo_43 (BK1), Phredrick_42 (BK1), SeresaTree_42 (BK1), Sham_40 (BK1), SparkleGoddess_43 (BK1), Stigma_43 (BK1), TunaTartare_42 (BK1), Wakanda_39 (BK2), Westy_43 (BK1),

Start 3:
• Found in 88 of 119 (73.9%) of genes in pham
• Manual Annotations of this start: 83 of 110
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AcciDwight_69 (BE2), Amabiko_65 (BE2), Anedea_61 (BE1), Angela_60 (BE1), AngryGiraffe_64 (BE2), Bartholomune_61 (BE1), Battuta_63 (BE2), Birchlyn_62 (BE2), BlueOtter_63 (BE1), Bmoc_61 (BE1), BoomerJR_65 (BE2), Bordeaux_63 (BE2), Braelyn_62 (BE1), Brizzy_64 (BE2), Cadmus_61 (BE1), CeilingFan_64 (BE2), Coogler_63 (BE1), Cross_63 (BE1), Cursive_61 (BE1), Daubenski_64 (BE1), Davielle_60 (BE1), Dorin_59 (CG), EGole_64 (BE1), Eliot67_60 (BE1), Elmer_67 (BE2), Enygma_65 (BE2), Evy_64 (BE1), Francesca_58 (CG), FreddyDRoo_60 (BE1), Genie2_65 (BE2), Gibbi_69 (BE2), HangryHippo_63 (BE1), IchabodCrane_62 (BE2), Jay2Jay_68 (BE1), JimJam_65 (BE2), Jollison_64 (BE2), Karimac_64 (BE2), KentuckyRacer_65 (BE2), Larnav_63 (BE1), Leo04_64 (BE1), Liandry_62 (BE1), LilMartin_60 (BE1), LilSaint_67 (BE1), LukeCage_64 (BE2), Lululemon_62 (BE1), Marsus_61 (BE1), Mildred21_61 (BE1), MindFlayer_63 (BE2), Mugiwara_64 (BE2), MulchMansion_60 (BE1), Navo_61 (BE1), NiceHouse_74 (CE), NootNoot_59 (BE1), Nova53_56 (CG), PacManQ_62 (BE1), Paradiddles_59 (BE1), Peebs_62 (BE1), Pepperwood_63 (BE1), Persimmon_59 (BE1), PinkiePie_61 (BE1), PumpkinSpice_64 (BE2), Quaran19_65 (BE2), Rikishi_65 (BE2), Riptide_60 (BE1), SaltySpitoon_65 (BE2), Samisti12_63 (BE1), Scheme_64 (BE1), Shuckle_61 (BE1), Sollertia_65 (BE2), Spelly_65 (BE2), Spilled_66 (BE2), Squillium_62 (BE1), Stanimal_65 (BE2), StarPlatinum_65 (BE2), Starbow_63 (BE2), Sushi23_63 (BE1), Targaryen_64 (BE1), Teutsch_63 (BE1), TomSawyer_63 (BE2), Tomas_67 (BE2), Tribute_61 (BE1), Trina_85 (CE), Warpy_67 (BE1), Watermoore_63 (BE1), WhereRU_60 (BE1), Wipeout_63 (BE2), Wofford_64 (BE2), Yaboi_65 (BE2),

Summary by clusters:

There are 6 clusters represented in this pham: CG, CE, BK1, BK2, BE2, BE1,

Info for manual annotations of cluster BE1:
•Start number 3 was manually annotated 44 times for cluster BE1.

Info for manual annotations of cluster BE2:
•Start number 3 was manually annotated 34 times for cluster BE2.

Info for manual annotations of cluster BK1:
•Start number 1 was manually annotated 23 times for cluster BK1.

Info for manual annotations of cluster BK2:
•Start number 1 was manually annotated 4 times for cluster BK2.

Info for manual annotations of cluster CE:
•Start number 3 was manually annotated 2 times for cluster CE.

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

Gene Information:

Gene: AcciDwight_69 Start: 44045, Stop: 44842, Start Num: 3
Candidate Starts for AcciDwight_69:
(Start: 3 @44045 has 83 MA's), (12, 44129), (16, 44162), (30, 44279), (31, 44285), (60, 44528), (75, 44624), (88, 44753), (94, 44807), (95, 44825),

Gene: Amabiko_65 Start: 44090, Stop: 44887, Start Num: 3
Candidate Starts for Amabiko_65:
(Start: 3 @44090 has 83 MA's), (12, 44174), (16, 44207), (30, 44324), (31, 44330), (60, 44573), (75, 44669), (88, 44798), (94, 44852), (95, 44870),

Gene: Anedea_61 Start: 43637, Stop: 44434, Start Num: 3
Candidate Starts for Anedea_61:
(Start: 3 @43637 has 83 MA's), (17, 43757), (20, 43790), (21, 43793), (28, 43853), (30, 43871), (37, 43925), (53, 44054), (57, 44081), (59, 44087), (72, 44201), (92, 44378), (94, 44399), (95, 44417),

Gene: Angela_60 Start: 43095, Stop: 43892, Start Num: 3
Candidate Starts for Angela_60:
(Start: 3 @43095 has 83 MA's), (20, 43248), (21, 43251), (31, 43335), (44, 43461), (57, 43539), (59, 43545), (60, 43578), (61, 43584), (72, 43659), (94, 43857), (95, 43875),

Gene: AngryGiraffe_64 Start: 44052, Stop: 44849, Start Num: 3
Candidate Starts for AngryGiraffe_64:
(Start: 3 @44052 has 83 MA's), (12, 44136), (15, 44157), (23, 44220), (31, 44292), (45, 44424), (64, 44562), (74, 44625), (81, 44706), (88, 44760), (94, 44814), (95, 44832),

Gene: Annadreamy_40 Start: 32790, Stop: 33683, Start Num: 1
Candidate Starts for Annadreamy_40:

(Start: 1 @32790 has 27 MA's), (4, 32850), (5, 32877), (8, 32907), (31, 33087), (32, 33111), (45, 33225), (51, 33273), (56, 33294), (66, 33393), (71, 33435), (78, 33498), (80, 33537), (82, 33543), (83, 33552), (84, 33558), (94, 33648), (95, 33666),

Gene: Bartholomune_61 Start: 43401, Stop: 44198, Start Num: 3
Candidate Starts for Bartholomune_61:
(Start: 3 @43401 has 83 MA's), (20, 43554), (21, 43557), (28, 43617), (44, 43767), (48, 43797), (53, 43818), (57, 43845), (59, 43851), (72, 43965), (80, 44052), (94, 44163), (95, 44181),

Gene: Battuta_63 Start: 44064, Stop: 44861, Start Num: 3
Candidate Starts for Battuta_63:
(Start: 3 @44064 has 83 MA's), (12, 44148), (16, 44181), (30, 44298), (31, 44304), (60, 44547), (75, 44643), (88, 44772), (94, 44826), (95, 44844),

Gene: Belfort_44 Start: 35282, Stop: 36178, Start Num: 1
Candidate Starts for Belfort_44:
(Start: 1 @35282 has 27 MA's), (5, 35369), (16, 35456), (25, 35519), (30, 35573), (31, 35579), (32, 35603), (45, 35717), (51, 35765), (58, 35801), (78, 35990), (80, 36029), (82, 36035), (93, 36131), (94, 36140), (95, 36158),

Gene: Beuffert_41 Start: 33886, Stop: 34779, Start Num: 1
Candidate Starts for Beuffert_41:
(Start: 1 @33886 has 27 MA's), (4, 33946), (5, 33973), (8, 34003), (12, 34027), (41, 34273), (45, 34321), (51, 34369), (53, 34375), (66, 34489), (78, 34594), (82, 34639), (83, 34648), (86, 34663), (89, 34693), (94, 34744), (95, 34762),

Gene: BillNye_38 Start: 36153, Stop: 37046, Start Num: 1
Candidate Starts for BillNye_38:
(Start: 1 @36153 has 27 MA's), (13, 36297), (26, 36393), (31, 36450), (45, 36585), (51, 36633), (69, 36774), (70, 36792), (80, 36897), (90, 36972), (94, 37008),

Gene: Birchlyn_62 Start: 41947, Stop: 42744, Start Num: 3
Candidate Starts for Birchlyn_62:
(Start: 3 @41947 has 83 MA's), (12, 42031), (16, 42064), (30, 42181), (31, 42187), (60, 42430), (75, 42526), (88, 42655), (94, 42709), (95, 42727),

Gene: BlueOtter_63 Start: 44775, Stop: 45572, Start Num: 3
Candidate Starts for BlueOtter_63:
(Start: 3 @44775 has 83 MA's), (11, 44853), (20, 44928), (21, 44931), (30, 45009), (37, 45063), (43, 45132), (44, 45141), (51, 45186), (53, 45192), (57, 45219), (72, 45339), (94, 45537), (95, 45555),

Gene: Blueeyedbeauty_42 Start: 33278, Stop: 34171, Start Num: 1
Candidate Starts for Blueeyedbeauty_42:
(Start: 1 @33278 has 27 MA's), (4, 33338), (5, 33365), (8, 33395), (20, 33488), (32, 33599), (49, 33755), (51, 33761), (53, 33767), (78, 33986), (82, 34031), (83, 34040), (94, 34136), (95, 34154),

Gene: Bmoc_61 Start: 43422, Stop: 44219, Start Num: 3
Candidate Starts for Bmoc_61:
(Start: 3 @43422 has 83 MA's), (17, 43542), (20, 43575), (21, 43578), (28, 43638), (37, 43710), (42, 43764), (53, 43839), (57, 43866), (59, 43872), (72, 43986), (94, 44184), (95, 44202),

Gene: BoomerJR_65 Start: 43941, Stop: 44738, Start Num: 3
Candidate Starts for BoomerJR_65:

(Start: 3 @43941 has 83 MA's), (12, 44025), (15, 44046), (23, 44109), (31, 44181), (45, 44313), (64, 44451), (74, 44514), (81, 44595), (88, 44649), (94, 44703), (95, 44721),

Gene: Bordeaux_63 Start: 44219, Stop: 45016, Start Num: 3
Candidate Starts for Bordeaux_63:
(Start: 3 @44219 has 83 MA's), (12, 44303), (16, 44336), (30, 44453), (31, 44459), (60, 44702), (75, 44798), (88, 44927), (94, 44981), (95, 44999),

Gene: Braelyn_62 Start: 44168, Stop: 44965, Start Num: 3
Candidate Starts for Braelyn_62:
(Start: 3 @44168 has 83 MA's), (20, 44321), (21, 44324), (28, 44384), (40, 44486), (44, 44534), (48, 44564), (53, 44585), (57, 44612), (59, 44618), (72, 44732), (80, 44819), (94, 44930), (95, 44948),

Gene: Brizzy_64 Start: 43738, Stop: 44535, Start Num: 3
Candidate Starts for Brizzy_64:
(Start: 3 @43738 has 83 MA's), (12, 43822), (31, 43978), (75, 44317), (88, 44446), (94, 44500), (95, 44518),

Gene: Cadmus_61 Start: 43742, Stop: 44539, Start Num: 3
Candidate Starts for Cadmus_61:
(Start: 3 @43742 has 83 MA's), (17, 43862), (20, 43895), (21, 43898), (34, 44024), (44, 44108), (57, 44186), (72, 44306), (90, 44468), (94, 44504), (95, 44522),

Gene: CeilingFan_64 Start: 43979, Stop: 44776, Start Num: 3
Candidate Starts for CeilingFan_64:
(Start: 3 @43979 has 83 MA's), (12, 44063), (31, 44219), (75, 44558), (88, 44687), (94, 44741), (95, 44759),

Gene: Chaewon_42 Start: 36296, Stop: 37189, Start Num: 1
Candidate Starts for Chaewon_42:
(Start: 1 @36296 has 27 MA's), (13, 36440), (26, 36536), (36, 36641), (45, 36728), (51, 36776), (53, 36782), (70, 36935), (80, 37040), (90, 37115), (94, 37151),

Gene: Circinus_40 Start: 36289, Stop: 37182, Start Num: 1
Candidate Starts for Circinus_40:
(Start: 1 @36289 has 27 MA's), (13, 36433), (26, 36529), (31, 36586), (36, 36634), (45, 36721), (51, 36769), (69, 36910), (70, 36928), (80, 37033), (90, 37108), (94, 37144),

Gene: Comrade_43 Start: 34897, Stop: 35793, Start Num: 1
Candidate Starts for Comrade_43:
(Start: 1 @34897 has 27 MA's), (5, 34984), (16, 35071), (25, 35134), (30, 35188), (31, 35194), (32, 35218), (45, 35332), (51, 35380), (58, 35416), (78, 35605), (80, 35644), (93, 35746), (94, 35755), (95, 35773),

Gene: Coogler_63 Start: 44801, Stop: 45598, Start Num: 3
Candidate Starts for Coogler_63:
(Start: 3 @44801 has 83 MA's), (11, 44879), (20, 44954), (21, 44957), (30, 45035), (37, 45089), (43, 45158), (44, 45167), (51, 45212), (53, 45218), (55, 45224), (57, 45245), (72, 45365), (94, 45563), (95, 45581),

Gene: Cross_63 Start: 44776, Stop: 45573, Start Num: 3
Candidate Starts for Cross_63:

(Start: 3 @44776 has 83 MA's), (11, 44854), (20, 44929), (21, 44932), (30, 45010), (37, 45064), (43, 45133), (44, 45142), (51, 45187), (53, 45193), (57, 45220), (72, 45340), (94, 45538), (95, 45556),

Gene: Cursive_61 Start: 44301, Stop: 45098, Start Num: 3
Candidate Starts for Cursive_61:
(Start: 3 @44301 has 83 MA's), (11, 44379), (20, 44454), (21, 44457), (30, 44535), (37, 44589), (43, 44658), (44, 44667), (51, 44712), (53, 44718), (57, 44745), (72, 44865), (94, 45063), (95, 45081),

Gene: Daubenski_64 Start: 44506, Stop: 45303, Start Num: 3
Candidate Starts for Daubenski_64:
(Start: 3 @44506 has 83 MA's), (17, 44626), (20, 44659), (21, 44662), (34, 44788), (44, 44872), (57, 44950), (72, 45070), (90, 45232), (94, 45268), (95, 45286),

Gene: Davielle_60 Start: 43585, Stop: 44382, Start Num: 3
Candidate Starts for Davielle_60:
(Start: 3 @43585 has 83 MA's), (20, 43738), (21, 43741), (28, 43801), (44, 43951), (48, 43981), (53, 44002), (57, 44029), (59, 44035), (72, 44149), (80, 44236), (94, 44347), (95, 44365),

Gene: DeluluLabubu_41 Start: 33005, Stop: 33901, Start Num: 1
Candidate Starts for DeluluLabubu_41:
(Start: 1 @33005 has 27 MA's), (2, 33041), (5, 33092), (17, 33182), (25, 33242), (29, 33281), (30, 33296), (36, 33353), (51, 33488), (66, 33608), (78, 33713), (93, 33854), (94, 33863), (95, 33881),

Gene: Dorin_59 Start: 46441, Stop: 47238, Start Num: 3
Candidate Starts for Dorin_59:
(Start: 3 @46441 has 83 MA's), (9, 46510), (14, 46540), (24, 46615), (27, 46627), (47, 46843), (50, 46858), (67, 46978), (69, 46984), (71, 47005), (77, 47056), (91, 47185), (94, 47209), (95, 47227), (96, 47233),

Gene: EGole_64 Start: 45725, Stop: 46522, Start Num: 3
Candidate Starts for EGole_64:
(Start: 3 @45725 has 83 MA's), (11, 45803), (20, 45878), (21, 45881), (30, 45959), (37, 46013), (43, 46082), (44, 46091), (51, 46136), (53, 46142), (57, 46169), (59, 46175), (72, 46289), (94, 46487), (95, 46505),

Gene: Eliot67_60 Start: 43443, Stop: 44240, Start Num: 3
Candidate Starts for Eliot67_60:
(Start: 3 @43443 has 83 MA's), (20, 43596), (21, 43599), (28, 43659), (40, 43761), (44, 43809), (48, 43839), (53, 43860), (57, 43887), (59, 43893), (72, 44007), (80, 44094), (94, 44205), (95, 44223),

Gene: Elmer_67 Start: 45154, Stop: 45951, Start Num: 3
Candidate Starts for Elmer_67:
(Start: 3 @45154 has 83 MA's), (12, 45238), (31, 45394), (44, 45520), (57, 45598), (61, 45643), (75, 45733), (89, 45865), (94, 45916), (95, 45934),

Gene: Emma1919_44 Start: 33688, Stop: 34584, Start Num: 1
Candidate Starts for Emma1919_44:
(Start: 1 @33688 has 27 MA's), (2, 33724), (5, 33775), (17, 33865), (25, 33925), (29, 33964), (30, 33979), (36, 34036), (51, 34171), (66, 34291), (78, 34396), (93, 34537), (94, 34546), (95, 34564),

Gene: Enygma_65 Start: 45891, Stop: 46688, Start Num: 3
Candidate Starts for Enygma_65:

(Start: 3 @45891 has 83 MA's), (12, 45975), (31, 46131), (75, 46470), (88, 46599), (94, 46653), (95, 46671),

Gene: Evy_64 Start: 44764, Stop: 45561, Start Num: 3
Candidate Starts for Evy_64:
(Start: 3 @44764 has 83 MA's), (20, 44917), (21, 44920), (44, 45130), (53, 45181), (57, 45208), (68, 45298), (72, 45328), (92, 45505), (94, 45526), (95, 45544),

Gene: Faust_43 Start: 34266, Stop: 35162, Start Num: 1
Candidate Starts for Faust_43:
(Start: 1 @34266 has 27 MA's), (5, 34353), (17, 34443), (20, 34476), (27, 34509), (51, 34749), (63, 34845), (65, 34863), (78, 34974), (91, 35100), (94, 35124), (95, 35142),

Gene: Forrest_44 Start: 33823, Stop: 34719, Start Num: 1
Candidate Starts for Forrest_44:
(Start: 1 @33823 has 27 MA's), (2, 33859), (5, 33910), (17, 34000), (25, 34060), (29, 34099), (30, 34114), (36, 34171), (51, 34306), (66, 34426), (78, 34531), (93, 34672), (94, 34681), (95, 34699),

Gene: Francesca_58 Start: 46582, Stop: 47379, Start Num: 3
Candidate Starts for Francesca_58:
(Start: 3 @46582 has 83 MA's), (9, 46651), (24, 46756), (31, 46822), (46, 46972), (47, 46984), (50, 46999), (61, 47077), (67, 47119), (69, 47125), (77, 47197), (91, 47326), (94, 47350), (95, 47368), (96, 47374),

Gene: Francob_42 Start: 33811, Stop: 34707, Start Num: 1
Candidate Starts for Francob_42:
(Start: 1 @33811 has 27 MA's), (5, 33898), (29, 34087), (30, 34102), (41, 34198), (58, 34330), (69, 34435), (78, 34519), (93, 34660), (94, 34669), (95, 34687),

Gene: FreddyDRoo_60 Start: 43443, Stop: 44240, Start Num: 3
Candidate Starts for FreddyDRoo_60:
(Start: 3 @43443 has 83 MA's), (20, 43596), (21, 43599), (28, 43659), (40, 43761), (44, 43809), (48, 43839), (53, 43860), (57, 43887), (59, 43893), (72, 44007), (80, 44094), (94, 44205), (95, 44223),

Gene: Genie2_65 Start: 44055, Stop: 44852, Start Num: 3
Candidate Starts for Genie2_65:
(Start: 3 @44055 has 83 MA's), (12, 44139), (15, 44160), (23, 44223), (31, 44295), (45, 44427), (64, 44565), (74, 44628), (81, 44709), (88, 44763), (94, 44817), (95, 44835),

Gene: Gibbi_69 Start: 44202, Stop: 44999, Start Num: 3
Candidate Starts for Gibbi_69:
(Start: 3 @44202 has 83 MA's), (12, 44286), (16, 44319), (30, 44436), (31, 44442), (60, 44685), (75, 44781), (88, 44910), (94, 44964), (95, 44982),

Gene: Gilson_44 Start: 33641, Stop: 34537, Start Num: 1
Candidate Starts for Gilson_44:
(Start: 1 @33641 has 27 MA's), (2, 33677), (5, 33728), (17, 33818), (25, 33878), (29, 33917), (30, 33932), (36, 33989), (51, 34124), (66, 34244), (78, 34349), (93, 34490), (94, 34499), (95, 34517),

Gene: HangryHippo_63 Start: 44775, Stop: 45572, Start Num: 3
Candidate Starts for HangryHippo_63:
(Start: 3 @44775 has 83 MA's), (11, 44853), (20, 44928), (21, 44931), (30, 45009), (37, 45063), (43, 45132), (44, 45141), (51, 45186), (53, 45192), (57, 45219), (72, 45339), (94, 45537), (95, 45555),

Gene: IchabodCrane_62 Start: 43791, Stop: 44588, Start Num: 3
Candidate Starts for IchabodCrane_62:
(Start: 3 @43791 has 83 MA's), (12, 43875), (31, 44031), (75, 44370), (88, 44499), (94, 44553), (95, 44571),

Gene: Jada_42 Start: 33005, Stop: 33901, Start Num: 1
Candidate Starts for Jada_42:
(Start: 1 @33005 has 27 MA's), (2, 33041), (5, 33092), (17, 33182), (25, 33242), (29, 33281), (30, 33296), (36, 33353), (51, 33488), (66, 33608), (78, 33713), (93, 33854), (94, 33863), (95, 33881),

Gene: Jay2Jay_68 Start: 45617, Stop: 46414, Start Num: 3
Candidate Starts for Jay2Jay_68:
(Start: 3 @45617 has 83 MA's), (11, 45695), (20, 45770), (21, 45773), (44, 45983), (45, 45989), (53, 46034), (57, 46061), (68, 46151), (72, 46181), (92, 46358), (94, 46379), (95, 46397),

Gene: JimJam_65 Start: 44165, Stop: 44962, Start Num: 3
Candidate Starts for JimJam_65:
(Start: 3 @44165 has 83 MA's), (12, 44249), (16, 44282), (30, 44399), (31, 44405), (60, 44648), (75, 44744), (88, 44873), (94, 44927), (95, 44945),

Gene: Jollison_64 Start: 44047, Stop: 44844, Start Num: 3
Candidate Starts for Jollison_64:
(Start: 3 @44047 has 83 MA's), (12, 44131), (16, 44164), (30, 44281), (31, 44287), (60, 44530), (75, 44626), (88, 44755), (94, 44809), (95, 44827),

Gene: Karimac_64 Start: 44196, Stop: 44993, Start Num: 3
Candidate Starts for Karimac_64:
(Start: 3 @44196 has 83 MA's), (12, 44280), (31, 44436), (75, 44775), (88, 44904), (94, 44958), (95, 44976),

Gene: Karp_42 Start: 34497, Stop: 35393, Start Num: 1
Candidate Starts for Karp_42:
(Start: 1 @34497 has 27 MA's), (5, 34584), (16, 34671), (25, 34734), (30, 34788), (31, 34794), (32, 34818), (45, 34932), (51, 34980), (58, 35016), (78, 35205), (80, 35244), (82, 35250), (93, 35346), (94, 35355), (95, 35373),

Gene: Kenrey_44 Start: 33834, Stop: 34730, Start Num: 1
Candidate Starts for Kenrey_44:
(Start: 1 @33834 has 27 MA's), (5, 33921), (20, 34044), (25, 34071), (29, 34110), (30, 34125), (51, 34317), (58, 34353), (66, 34437), (78, 34542), (84, 34602), (93, 34683), (94, 34692), (95, 34710),

Gene: KentuckyRacer_65 Start: 43980, Stop: 44777, Start Num: 3
Candidate Starts for KentuckyRacer_65:
(Start: 3 @43980 has 83 MA's), (12, 44064), (16, 44097), (30, 44214), (31, 44220), (60, 44463), (75, 44559), (88, 44688), (94, 44742), (95, 44760),

Gene: Larnav_63 Start: 44760, Stop: 45557, Start Num: 3
Candidate Starts for Larnav_63:
(Start: 3 @44760 has 83 MA's), (11, 44838), (20, 44913), (21, 44916), (30, 44994), (37, 45048), (43, 45117), (44, 45126), (51, 45171), (53, 45177), (55, 45183), (57, 45204), (72, 45324), (94, 45522), (95, 45540),

Gene: Leo04_64 Start: 45275, Stop: 46072, Start Num: 3
Candidate Starts for Leo04_64:
(Start: 3 @45275 has 83 MA's), (11, 45353), (20, 45428), (21, 45431), (30, 45509), (37, 45563), (43, 45632), (44, 45641), (51, 45686), (53, 45692), (57, 45719), (72, 45839), (94, 46037), (95, 46055),

Gene: Liandry_62 Start: 44150, Stop: 44947, Start Num: 3
Candidate Starts for Liandry_62:
(Start: 3 @44150 has 83 MA's), (20, 44303), (21, 44306), (28, 44366), (40, 44468), (44, 44516), (48, 44546), (53, 44567), (57, 44594), (59, 44600), (72, 44714), (80, 44801), (94, 44912), (95, 44930),

Gene: LilMartin_60 Start: 43043, Stop: 43840, Start Num: 3
Candidate Starts for LilMartin_60:
(Start: 3 @43043 has 83 MA's), (20, 43196), (21, 43199), (31, 43283), (44, 43409), (57, 43487), (59, 43493), (60, 43526), (61, 43532), (72, 43607), (94, 43805), (95, 43823),

Gene: LilSaint_67 Start: 43309, Stop: 44106, Start Num: 3
Candidate Starts for LilSaint_67:
(Start: 3 @43309 has 83 MA's), (17, 43429), (20, 43462), (21, 43465), (28, 43525), (30, 43543), (37, 43597), (53, 43726), (57, 43753), (59, 43759), (72, 43873), (94, 44071), (95, 44089),

Gene: Limpid_40 Start: 32789, Stop: 33682, Start Num: 1
Candidate Starts for Limpid_40:
(Start: 1 @32789 has 27 MA's), (4, 32849), (5, 32876), (8, 32906), (31, 33086), (32, 33110), (45, 33224), (51, 33272), (56, 33293), (66, 33392), (71, 33434), (78, 33497), (80, 33536), (82, 33542), (83, 33551), (84, 33557), (94, 33647), (95, 33665),

Gene: LukeCage_64 Start: 43953, Stop: 44750, Start Num: 3
Candidate Starts for LukeCage_64:
(Start: 3 @43953 has 83 MA's), (12, 44037), (26, 44136), (28, 44169), (31, 44193), (44, 44319), (60, 44436), (70, 44508), (88, 44661), (94, 44715), (95, 44733),

Gene: Lululemon_62 Start: 44156, Stop: 44953, Start Num: 3
Candidate Starts for Lululemon_62:
(Start: 3 @44156 has 83 MA's), (11, 44234), (20, 44309), (21, 44312), (30, 44390), (37, 44444), (43, 44513), (44, 44522), (51, 44567), (53, 44573), (57, 44600), (72, 44720), (94, 44918), (95, 44936),

Gene: Marsus_61 Start: 43315, Stop: 44112, Start Num: 3
Candidate Starts for Marsus_61:
(Start: 3 @43315 has 83 MA's), (15, 43420), (20, 43468), (21, 43471), (31, 43555), (44, 43681), (57, 43759), (59, 43765), (60, 43798), (72, 43879), (94, 44077), (95, 44095),

Gene: Maupel_43 Start: 33641, Stop: 34537, Start Num: 1
Candidate Starts for Maupel_43:
(Start: 1 @33641 has 27 MA's), (2, 33677), (5, 33728), (17, 33818), (25, 33878), (29, 33917), (30, 33932), (36, 33989), (51, 34124), (66, 34244), (78, 34349), (93, 34490), (94, 34499), (95, 34517),

Gene: MeganTheeKilla_42 Start: 33002, Stop: 33898, Start Num: 1
Candidate Starts for MeganTheeKilla_42:
(Start: 1 @33002 has 27 MA's), (2, 33038), (5, 33089), (17, 33179), (25, 33239), (29, 33278), (30, 33293), (36, 33350), (51, 33485), (66, 33605), (78, 33710), (93, 33851), (94, 33860), (95, 33878),

Gene: Mildred21_61 Start: 43235, Stop: 44032, Start Num: 3
Candidate Starts for Mildred21_61:

(Start: 3 @43235 has 83 MA's), (17, 43355), (18, 43376), (20, 43388), (57, 43679), (59, 43685), (72, 43799), (94, 43997), (95, 44015),

Gene: MindFlayer_63 Start: 43698, Stop: 44495, Start Num: 3
Candidate Starts for MindFlayer_63:
(Start: 3 @43698 has 83 MA's), (12, 43782), (16, 43815), (30, 43932), (31, 43938), (60, 44181), (75, 44277), (88, 44406), (94, 44460), (95, 44478),

Gene: Moab_43 Start: 34860, Stop: 35756, Start Num: 1
Candidate Starts for Moab_43:
(Start: 1 @34860 has 27 MA's), (5, 34947), (20, 35070), (25, 35097), (29, 35136), (30, 35151), (51, 35343), (59, 35382), (66, 35463), (78, 35568), (80, 35607), (82, 35613), (94, 35718), (95, 35736),

Gene: Mugiwara_64 Start: 44434, Stop: 45231, Start Num: 3
Candidate Starts for Mugiwara_64:
(Start: 3 @44434 has 83 MA's), (12, 44518), (31, 44674), (75, 45013), (79, 45061), (88, 45142), (94, 45196), (95, 45214),

Gene: MulchMansion_60 Start: 43043, Stop: 43840, Start Num: 3
Candidate Starts for MulchMansion_60:
(Start: 3 @43043 has 83 MA's), (20, 43196), (21, 43199), (31, 43283), (44, 43409), (57, 43487), (59, 43493), (60, 43526), (61, 43532), (72, 43607), (94, 43805), (95, 43823),

Gene: Muntaha_39 Start: 34605, Stop: 35501, Start Num: 1
Candidate Starts for Muntaha_39:
(Start: 1 @34605 has 27 MA's), (6, 34701), (8, 34722), (19, 34809), (31, 34902), (71, 35250), (76, 35274), (80, 35352), (94, 35463), (95, 35481),

Gene: Navo_61 Start: 44069, Stop: 44866, Start Num: 3
Candidate Starts for Navo_61:
(Start: 3 @44069 has 83 MA's), (20, 44222), (21, 44225), (28, 44285), (40, 44387), (44, 44435), (48, 44465), (53, 44486), (57, 44513), (59, 44519), (72, 44633), (80, 44720), (94, 44831), (95, 44849),

Gene: NiceHouse_74 Start: 51836, Stop: 52630, Start Num: 3
Candidate Starts for NiceHouse_74:
(Start: 3 @51836 has 83 MA's), (5, 51866), (14, 51935), (17, 51956), (22, 51998), (24, 52010), (33, 52112), (35, 52124), (61, 52331), (71, 52400), (85, 52517), (94, 52601), (95, 52619),

Gene: NootNoot_59 Start: 43064, Stop: 43861, Start Num: 3
Candidate Starts for NootNoot_59:
(Start: 3 @43064 has 83 MA's), (20, 43217), (21, 43220), (28, 43280), (40, 43382), (44, 43430), (48, 43460), (53, 43481), (57, 43508), (59, 43514), (72, 43628), (80, 43715), (94, 43826), (95, 43844),

Gene: Nova53_56 Start: 46634, Stop: 47431, Start Num: 3
Candidate Starts for Nova53_56:
(Start: 3 @46634 has 83 MA's), (11, 46712), (14, 46733), (17, 46754), (18, 46775), (30, 46868), (87, 47336), (91, 47378), (94, 47402), (95, 47420), (96, 47426),

Gene: PacManQ_62 Start: 44156, Stop: 44953, Start Num: 3
Candidate Starts for PacManQ_62:
(Start: 3 @44156 has 83 MA's), (11, 44234), (20, 44309), (21, 44312), (30, 44390), (37, 44444), (43, 44513), (44, 44522), (51, 44567), (53, 44573), (57, 44600), (72, 44720), (94, 44918), (95, 44936),

Gene: Paradiddles_59 Start: 43325, Stop: 44122, Start Num: 3
Candidate Starts for Paradiddles_59:
(Start: 3 @43325 has 83 MA's), (20, 43478), (21, 43481), (28, 43541), (40, 43643), (44, 43691), (48, 43721), (53, 43742), (57, 43769), (59, 43775), (72, 43889), (80, 43976), (94, 44087), (95, 44105),

Gene: Patelgo_43 Start: 35050, Stop: 35946, Start Num: 1
Candidate Starts for Patelgo_43:
(Start: 1 @35050 has 27 MA's), (5, 35137), (20, 35260), (25, 35287), (29, 35326), (30, 35341), (51, 35533), (59, 35572), (66, 35653), (78, 35758), (80, 35797), (82, 35803), (94, 35908), (95, 35926),

Gene: Peebs_62 Start: 44513, Stop: 45310, Start Num: 3
Candidate Starts for Peebs_62:
(Start: 3 @44513 has 83 MA's), (11, 44591), (20, 44666), (21, 44669), (30, 44747), (43, 44870), (44, 44879), (51, 44924), (53, 44930), (55, 44936), (57, 44957), (72, 45077), (94, 45275), (95, 45293),

Gene: Pepperwood_63 Start: 44646, Stop: 45443, Start Num: 3
Candidate Starts for Pepperwood_63:
(Start: 3 @44646 has 83 MA's), (11, 44724), (20, 44799), (21, 44802), (30, 44880), (37, 44934), (43, 45003), (44, 45012), (51, 45057), (53, 45063), (55, 45069), (57, 45090), (72, 45210), (94, 45408), (95, 45426),

Gene: Persimmon_59 Start: 42994, Stop: 43791, Start Num: 3
Candidate Starts for Persimmon_59:
(Start: 3 @42994 has 83 MA's), (20, 43147), (21, 43150), (28, 43210), (44, 43360), (48, 43390), (53, 43411), (57, 43438), (59, 43444), (72, 43558), (80, 43645), (94, 43756), (95, 43774),

Gene: Phredrick_42 Start: 32908, Stop: 33804, Start Num: 1
Candidate Starts for Phredrick_42:
(Start: 1 @32908 has 27 MA's), (5, 32995), (20, 33118), (25, 33145), (29, 33184), (30, 33199), (51, 33391), (58, 33427), (66, 33511), (78, 33616), (93, 33757), (94, 33766), (95, 33784),

Gene: PinkiePie_61 Start: 44150, Stop: 44947, Start Num: 3
Candidate Starts for PinkiePie_61:
(Start: 3 @44150 has 83 MA's), (20, 44303), (21, 44306), (28, 44366), (40, 44468), (44, 44516), (48, 44546), (53, 44567), (57, 44594), (59, 44600), (72, 44714), (80, 44801), (94, 44912), (95, 44930),

Gene: PumpkinSpice_64 Start: 44090, Stop: 44887, Start Num: 3
Candidate Starts for PumpkinSpice_64:
(Start: 3 @44090 has 83 MA's), (12, 44174), (16, 44207), (30, 44324), (31, 44330), (60, 44573), (75, 44669), (88, 44798), (94, 44852), (95, 44870),

Gene: Quaran19_65 Start: 44081, Stop: 44878, Start Num: 3
Candidate Starts for Quaran19_65:
(Start: 3 @44081 has 83 MA's), (12, 44165), (16, 44198), (30, 44315), (31, 44321), (60, 44564), (75, 44660), (88, 44789), (94, 44843), (95, 44861),

Gene: Rikishi_65 Start: 43996, Stop: 44793, Start Num: 3
Candidate Starts for Rikishi_65:
(Start: 3 @43996 has 83 MA's), (12, 44080), (16, 44113), (30, 44230), (31, 44236), (60, 44479), (75, 44575), (88, 44704), (94, 44758), (95, 44776),

Gene: Riptide_60 Start: 42859, Stop: 43656, Start Num: 3
Candidate Starts for Riptide_60:

(Start: 3 @42859 has 83 MA's), (17, 42979), (20, 43012), (21, 43015), (28, 43075), (30, 43093), (37, 43147), (42, 43201), (57, 43303), (59, 43309), (72, 43423), (92, 43600), (94, 43621), (95, 43639),

Gene: SaltySpitoon_65 Start: 44090, Stop: 44887, Start Num: 3
Candidate Starts for SaltySpitoon_65:
(Start: 3 @44090 has 83 MA's), (12, 44174), (16, 44207), (30, 44324), (31, 44330), (60, 44573), (75, 44669), (88, 44798), (94, 44852), (95, 44870),

Gene: Samisti12_63 Start: 45950, Stop: 46747, Start Num: 3
Candidate Starts for Samisti12_63:
(Start: 3 @45950 has 83 MA's), (11, 46028), (20, 46103), (21, 46106), (44, 46316), (53, 46367), (55, 46373), (57, 46394), (59, 46400), (72, 46514), (94, 46712), (95, 46730),

Gene: Scheme_64 Start: 45360, Stop: 46157, Start Num: 3
Candidate Starts for Scheme_64:
(Start: 3 @45360 has 83 MA's), (11, 45438), (20, 45513), (21, 45516), (30, 45594), (43, 45717), (44, 45726), (51, 45771), (53, 45777), (55, 45783), (57, 45804), (72, 45924), (94, 46122), (95, 46140),

Gene: SeresaTree_42 Start: 33656, Stop: 34552, Start Num: 1
Candidate Starts for SeresaTree_42:
(Start: 1 @33656 has 27 MA's), (5, 33743), (17, 33833), (20, 33866), (27, 33899), (51, 34139), (63, 34235), (65, 34253), (78, 34364), (91, 34490), (94, 34514), (95, 34532),

Gene: Sham_40 Start: 34781, Stop: 35677, Start Num: 1
Candidate Starts for Sham_40:
(Start: 1 @34781 has 27 MA's), (5, 34868), (8, 34898), (17, 34958), (20, 34991), (31, 35078), (49, 35258), (51, 35264), (65, 35378), (78, 35489), (83, 35543), (91, 35615), (94, 35639), (95, 35657),

Gene: Shuckle_61 Start: 44966, Stop: 45763, Start Num: 3
Candidate Starts for Shuckle_61:
(Start: 3 @44966 has 83 MA's), (11, 45044), (20, 45119), (21, 45122), (44, 45332), (45, 45338), (53, 45383), (55, 45389), (57, 45410), (59, 45416), (72, 45530), (94, 45728), (95, 45746),

Gene: Sollertia_65 Start: 44055, Stop: 44852, Start Num: 3
Candidate Starts for Sollertia_65:
(Start: 3 @44055 has 83 MA's), (12, 44139), (15, 44160), (23, 44223), (31, 44295), (45, 44427), (64, 44565), (74, 44628), (81, 44709), (88, 44763), (94, 44817), (95, 44835),

Gene: SparkleGoddess_43 Start: 34899, Stop: 35795, Start Num: 1
Candidate Starts for SparkleGoddess_43:
(Start: 1 @34899 has 27 MA's), (5, 34986), (16, 35073), (25, 35136), (30, 35190), (31, 35196), (32, 35220), (45, 35334), (49, 35376), (51, 35382), (58, 35418), (78, 35607), (80, 35646), (82, 35652), (93, 35748), (94, 35757), (95, 35775),

Gene: Spelly_65 Start: 44045, Stop: 44842, Start Num: 3
Candidate Starts for Spelly_65:
(Start: 3 @44045 has 83 MA's), (12, 44129), (16, 44162), (30, 44279), (31, 44285), (60, 44528), (75, 44624), (88, 44753), (94, 44807), (95, 44825),

Gene: Spilled_66 Start: 44162, Stop: 44959, Start Num: 3
Candidate Starts for Spilled_66:
(Start: 3 @44162 has 83 MA's), (12, 44246), (16, 44279), (30, 44396), (31, 44402), (60, 44645), (75, 44741), (88, 44870), (94, 44924), (95, 44942),

Gene: Squillium_62 Start: 44151, Stop: 44948, Start Num: 3
Candidate Starts for Squillium_62:
(Start: 3 @44151 has 83 MA's), (20, 44304), (21, 44307), (28, 44367), (40, 44469), (44, 44517), (48, 44547), (53, 44568), (57, 44595), (59, 44601), (72, 44715), (80, 44802), (94, 44913), (95, 44931),

Gene: Stanimal_65 Start: 43944, Stop: 44741, Start Num: 3
Candidate Starts for Stanimal_65:
(Start: 3 @43944 has 83 MA's), (12, 44028), (15, 44049), (23, 44112), (31, 44184), (45, 44316), (64, 44454), (74, 44517), (81, 44598), (88, 44652), (94, 44706), (95, 44724),

Gene: StarPlatinum_65 Start: 44593, Stop: 45390, Start Num: 3
Candidate Starts for StarPlatinum_65:
(Start: 3 @44593 has 83 MA's), (12, 44677), (30, 44827), (31, 44833), (44, 44959), (88, 45301), (94, 45355), (95, 45373),

Gene: Starbow_63 Start: 44066, Stop: 44863, Start Num: 3
Candidate Starts for Starbow_63:
(Start: 3 @44066 has 83 MA's), (12, 44150), (16, 44183), (30, 44300), (31, 44306), (60, 44549), (75, 44645), (88, 44774), (94, 44828), (95, 44846),

Gene: Stigma_43 Start: 34912, Stop: 35808, Start Num: 1
Candidate Starts for Stigma_43:
(Start: 1 @34912 has 27 MA's), (5, 34999), (16, 35086), (25, 35149), (30, 35203), (31, 35209), (32, 35233), (45, 35347), (49, 35389), (51, 35395), (58, 35431), (78, 35620), (80, 35659), (82, 35665), (93, 35761), (94, 35770), (95, 35788),

Gene: Sushi23_63 Start: 44871, Stop: 45668, Start Num: 3
Candidate Starts for Sushi23_63:
(Start: 3 @44871 has 83 MA's), (11, 44949), (20, 45024), (21, 45027), (30, 45105), (37, 45159), (43, 45228), (44, 45237), (51, 45282), (53, 45288), (55, 45294), (57, 45315), (72, 45435), (94, 45633), (95, 45651),

Gene: Targaryen_64 Start: 45666, Stop: 46463, Start Num: 3
Candidate Starts for Targaryen_64:
(Start: 3 @45666 has 83 MA's), (20, 45819), (21, 45822), (40, 45984), (44, 46032), (53, 46083), (57, 46110), (72, 46230), (92, 46407), (94, 46428), (95, 46446),

Gene: Teutsch_63 Start: 45134, Stop: 45931, Start Num: 3
Candidate Starts for Teutsch_63:
(Start: 3 @45134 has 83 MA's), (11, 45212), (20, 45287), (21, 45290), (30, 45368), (43, 45491), (44, 45500), (51, 45545), (53, 45551), (55, 45557), (57, 45578), (72, 45698), (94, 45896), (95, 45914),

Gene: TomSawyer_63 Start: 43684, Stop: 44481, Start Num: 3
Candidate Starts for TomSawyer_63:
(Start: 3 @43684 has 83 MA's), (12, 43768), (16, 43801), (30, 43918), (31, 43924), (60, 44167), (75, 44263), (88, 44392), (94, 44446), (95, 44464),

Gene: Tomas_67 Start: 46390, Stop: 47187, Start Num: 3
Candidate Starts for Tomas_67:
(Start: 3 @46390 has 83 MA's), (7, 46441), (12, 46474), (28, 46606), (39, 46696), (53, 46807), (75, 46969), (79, 47017), (94, 47152), (95, 47170),

Gene: Tribute_61 Start: 44340, Stop: 45137, Start Num: 3
Candidate Starts for Tribute_61:
(Start: 3 @44340 has 83 MA's), (11, 44418), (20, 44493), (21, 44496), (30, 44574), (37, 44628), (43, 44697), (44, 44706), (51, 44751), (53, 44757), (55, 44763), (57, 44784), (72, 44904), (94, 45102), (95, 45120),

Gene: Trina_85 Start: 55545, Stop: 56348, Start Num: 3
Candidate Starts for Trina_85:
(Start: 3 @55545 has 83 MA's), (9, 55614), (10, 55620), (14, 55644), (27, 55731), (46, 55935), (52, 55965), (54, 55974), (62, 56046), (73, 56121), (90, 56277), (94, 56313), (95, 56331),

Gene: TunaTartare_42 Start: 35073, Stop: 35969, Start Num: 1
Candidate Starts for TunaTartare_42:
(Start: 1 @35073 has 27 MA's), (5, 35160), (17, 35250), (20, 35283), (38, 35436), (44, 35502), (51, 35556), (78, 35781), (79, 35793), (91, 35907), (94, 35931), (95, 35949),

Gene: Wakanda_39 Start: 34543, Stop: 35439, Start Num: 1
Candidate Starts for Wakanda_39:
(Start: 1 @34543 has 27 MA's), (6, 34639), (19, 34747), (71, 35188), (76, 35212), (94, 35401), (95, 35419),

Gene: Warpy_67 Start: 45130, Stop: 45927, Start Num: 3
Candidate Starts for Warpy_67:
(Start: 3 @45130 has 83 MA's), (11, 45208), (20, 45283), (21, 45286), (28, 45346), (44, 45496), (45, 45502), (53, 45547), (57, 45574), (68, 45664), (72, 45694), (92, 45871), (94, 45892), (95, 45910),

Gene: Watermoore_63 Start: 45347, Stop: 46144, Start Num: 3
Candidate Starts for Watermoore_63:
(Start: 3 @45347 has 83 MA's), (11, 45425), (20, 45500), (21, 45503), (30, 45581), (37, 45635), (43, 45704), (44, 45713), (51, 45758), (53, 45764), (57, 45791), (72, 45911), (94, 46109), (95, 46127),

Gene: Westy_43 Start: 34900, Stop: 35796, Start Num: 1
Candidate Starts for Westy_43:
(Start: 1 @34900 has 27 MA's), (5, 34987), (16, 35074), (25, 35137), (30, 35191), (31, 35197), (32, 35221), (45, 35335), (51, 35383), (58, 35419), (78, 35608), (80, 35647), (82, 35653), (93, 35749), (94, 35758), (95, 35776),

Gene: WhereRU_60 Start: 43585, Stop: 44382, Start Num: 3
Candidate Starts for WhereRU_60:
(Start: 3 @43585 has 83 MA's), (20, 43738), (21, 43741), (28, 43801), (44, 43951), (48, 43981), (53, 44002), (57, 44029), (59, 44035), (72, 44149), (80, 44236), (94, 44347), (95, 44365),

Gene: Wipeout_63 Start: 44435, Stop: 45232, Start Num: 3
Candidate Starts for Wipeout_63:
(Start: 3 @44435 has 83 MA's), (12, 44519), (16, 44552), (30, 44669), (31, 44675), (60, 44918), (75, 45014), (88, 45143), (94, 45197), (95, 45215),

Gene: Wofford_64 Start: 45117, Stop: 45914, Start Num: 3
Candidate Starts for Wofford_64:
(Start: 3 @45117 has 83 MA's), (12, 45201), (31, 45357), (44, 45483), (57, 45561), (61, 45606), (75, 45696), (94, 45879), (95, 45897),

Gene: Yaboi_65 Start: 44032, Stop: 44829, Start Num: 3

Candidate Starts for Yaboi_65:
(Start: 3 @44032 has 83 MA's), (12, 44116), (15, 44137), (23, 44200), (31, 44272), (45, 44404), (64, 44542), (74, 44605), (81, 44686), (88, 44740), (94, 44794), (95, 44812),