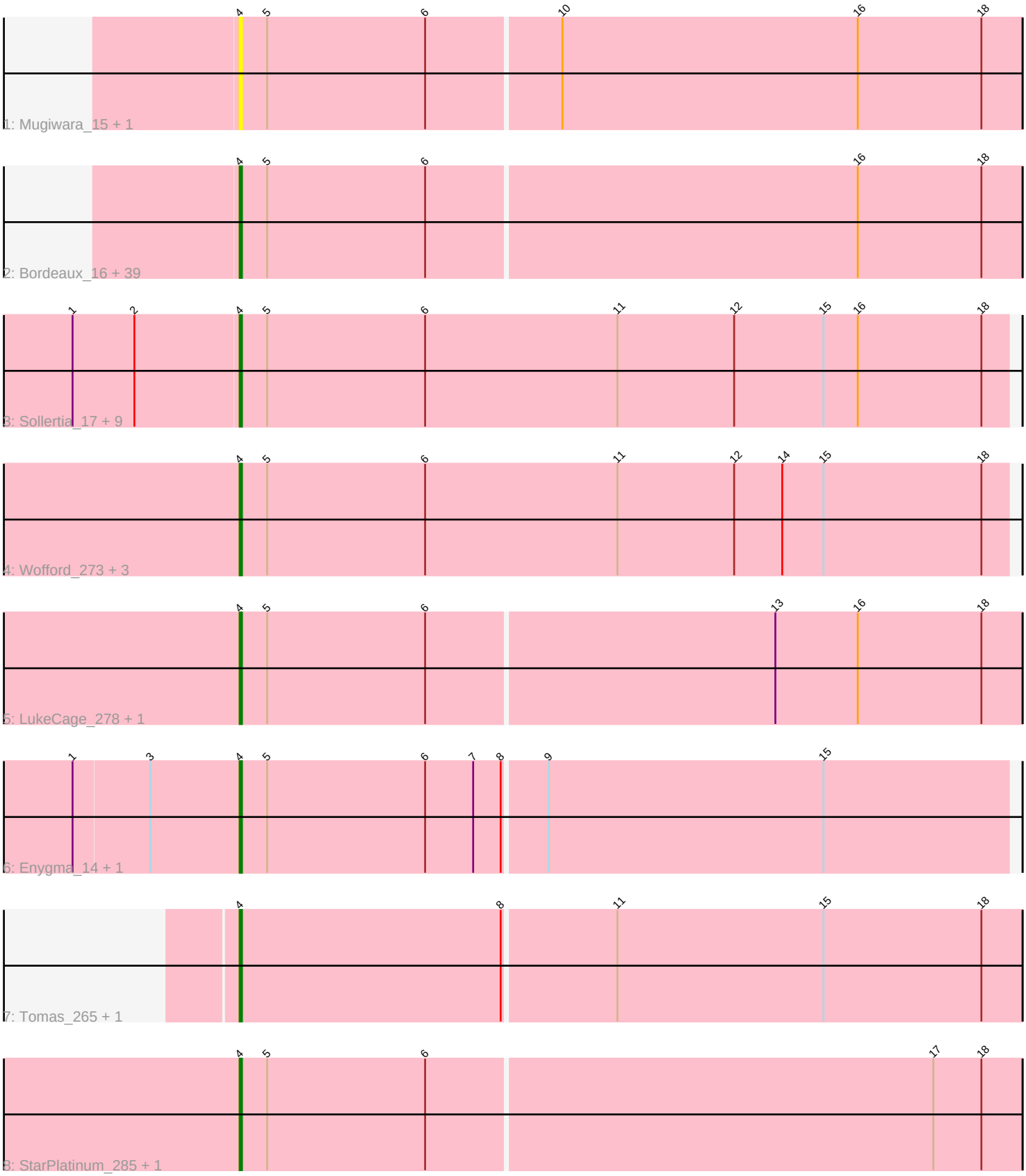
Pham 85652


4 5 6 10 16 18
1: Mugiwara_15 + 1
4 5 6 16 18
2: Bordeaux_16 + 39
1 2 4 5 6 11 12 15 16 18
3: Sollertia_17 + 9
4 5 6 11 12 14 15 18
4: Wofford_273 + 3
4 5 6 13 16 18
5: LukeCage_278 + 1
1 3 4 5 6 7 8 9 15
6: Enygma_14 + 1
4 8 11 15 18
7: Tomas_265 + 1
4 5 6 17 18
8: StarPlatinum_285 + 1

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 85652 Report

This analysis was run 04/28/24 on database version 559.

Pham number 85652 has 64 members, 12 are drafts.

Phages represented in each track:
• Track 1 : Mugiwara_15, Mugiwara_287
• Track 2 : Bordeaux_16, Jollison_18, MindFlayer_267, PumpkinSpice_16, Spelly_16, Amabiko_281, MindFlayer_15, IchabodCrane_15, Starbow_16, Gibbi_288, Wipeout_15, Battuta_273, Birchlyn_13, Battuta_16, CeilingFan_15, Karimac_274, KentuckyRacer_291, Quaran19_16, Gibbi_17, PumpkinSpice_280, Jollison_282, IchabodCrane_268, Quaran19_277, KentuckyRacer_17, Birchlyn_273, TomSawyer_281, Starbow_273, Spelly_282, JimJam_284, Karimac_16, Amabiko_17, SaltySpitoon_276, TomSawyer_16, Spilled_15, Wipeout_269, Spilled_283, JimJam_16, Bordeaux_273, SaltySpitoon_16, CeilingFan_289
• Track 3 : Sollertia_17, Stanimal_17, Stanimal_272, BoomerJR_17, Yaboi_278, BoomerJR_272, Genie2_17, Yaboi_17, Sollertia_273, Genie2_272
• Track 4 : Wofford_273, Wofford_15, Elmer_18, Elmer_294
• Track 5 : LukeCage_278, LukeCage_15
• Track 6 : Enygma_14, Enygma_282
• Track 7 : Tomas_265, Tomas_9
• Track 8 : StarPlatinum_285, StarPlatinum_15

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

The start number called the most often in the published annotations is 4, it was called in 52 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Amabiko_17, Amabiko_281, Battuta_16, Battuta_273, Birchlyn_13, Birchlyn_273, BoomerJR_17, BoomerJR_272, Bordeaux_16, Bordeaux_273, CeilingFan_15, CeilingFan_289, Elmer_18, Elmer_294, Enygma_14, Enygma_282, Genie2_17, Genie2_272, Gibbi_17, Gibbi_288, IchabodCrane_15, IchabodCrane_268, JimJam_16, JimJam_284, Jollison_18, Jollison_282, Karimac_16, Karimac_274, KentuckyRacer_17, KentuckyRacer_291, LukeCage_15, LukeCage_278, MindFlayer_15, MindFlayer_267, Mugiwara_15, Mugiwara_287, PumpkinSpice_16, PumpkinSpice_280, Quaran19_16, Quaran19_277, SaltySpitoon_16, SaltySpitoon_276, Sollertia_17, Sollertia_273, Spelly_16, Spelly_282, Spilled_15, Spilled_283, Stanimal_17, Stanimal_272, StarPlatinum_15, StarPlatinum_285, Starbow_16, Starbow_273, TomSawyer_16, TomSawyer_281, Tomas_265,

Tomas_9, Wipeout_15, Wipeout_269, Wofford_15, Wofford_273, Yaboi_17, Yaboi_278,

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

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

Summary by start number:

Start 4:
• Found in 64 of 64 (100.0%) of genes in pham
• Manual Annotations of this start: 52 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amabiko_17 (BE2), Amabiko_281 (BE2), Battuta_16 (BE2), Battuta_273 (BE2), Birchlyn_13 (BE2), Birchlyn_273 (BE2), BoomerJR_17 (BE2), BoomerJR_272 (BE2), Bordeaux_16 (BE2), Bordeaux_273 (BE2), CeilingFan_15 (BE2), CeilingFan_289 (BE2), Elmer_18 (BE2), Elmer_294 (BE2), Enygma_14 (BE2), Enygma_282 (BE2), Genie2_17 (BE2), Genie2_272 (BE2), Gibbi_17 (BE2), Gibbi_288 (BE2), IchabodCrane_15 (BE2), IchabodCrane_268 (BE2), JimJam_16 (BE2), JimJam_284 (BE2), Jollison_18 (BE2), Jollison_282 (BE2), Karimac_16 (BE2), Karimac_274 (BE2), KentuckyRacer_17 (BE2), KentuckyRacer_291 (BE2), LukeCage_15 (BE2), LukeCage_278 (BE2), MindFlayer_15 (BE2), MindFlayer_267 (BE2), Mugiwara_15 (BE2), Mugiwara_287 (BE2), PumpkinSpice_16 (BE2), PumpkinSpice_280 (BE2), Quaran19_16 (BE2), Quaran19_277 (BE2), SaltySpitoon_16 (BE2), SaltySpitoon_276 (BE2), Sollertia_17 (BE2), Sollertia_273 (BE2), Spelly_16 (BE2), Spelly_282 (BE2), Spilled_15 (BE2), Spilled_283 (BE2), Stanimal_17 (BE2), Stanimal_272 (BE2), StarPlatinum_15 (BE2), StarPlatinum_285 (BE2), Starbow_16 (BE2), Starbow_273 (BE2), TomSawyer_16 (BE2), TomSawyer_281 (BE2), Tomas_265 (BE2), Tomas_9 (BE2), Wipeout_15 (BE2), Wipeout_269 (BE2), Wofford_15 (BE2), Wofford_273 (BE2), Yaboi_17 (BE2), Yaboi_278 (BE2),

Summary by clusters:

There is one cluster represented in this pham: BE2

Info for manual annotations of cluster BE2:
•Start number 4 was manually annotated 52 times for cluster BE2.

Gene Information:

Gene: Amabiko_281 Start: 126969, Stop: 126631, Start Num: 4
Candidate Starts for Amabiko_281:
(Start: 4 @126969 has 52 MA's), (5, 126957), (6, 126888), (16, 126702), (18, 126648),

Gene: Amabiko_17 Start: 8143, Stop: 7805, Start Num: 4
Candidate Starts for Amabiko_17:
(Start: 4 @8143 has 52 MA's), (5, 8131), (6, 8062), (16, 7876), (18, 7822),

Gene: Battuta_273 Start: 126298, Stop: 125960, Start Num: 4
Candidate Starts for Battuta_273:
(Start: 4 @126298 has 52 MA's), (5, 126286), (6, 126217), (16, 126031), (18, 125977),

Gene: Battuta_16 Start: 8143, Stop: 7805, Start Num: 4
Candidate Starts for Battuta_16:
(Start: 4 @8143 has 52 MA's), (5, 8131), (6, 8062), (16, 7876), (18, 7822),

Gene: Birchlyn_13 Start: 5996, Stop: 5658, Start Num: 4
Candidate Starts for Birchlyn_13:
(Start: 4 @5996 has 52 MA's), (5, 5984), (6, 5915), (16, 5729), (18, 5675),

Gene: Birchlyn_273 Start: 122087, Stop: 121749, Start Num: 4
Candidate Starts for Birchlyn_273:
(Start: 4 @122087 has 52 MA's), (5, 122075), (6, 122006), (16, 121820), (18, 121766),

Gene: BoomerJR_17 Start: 8112, Stop: 7777, Start Num: 4
Candidate Starts for BoomerJR_17:
(1, 8184), (2, 8157), (Start: 4 @8112 has 52 MA's), (5, 8100), (6, 8031), (11, 7947), (12, 7896), (15, 7857), (16, 7842), (18, 7788),

Gene: BoomerJR_272 Start: 126900, Stop: 126565, Start Num: 4
Candidate Starts for BoomerJR_272:
(1, 126972), (2, 126945), (Start: 4 @126900 has 52 MA's), (5, 126888), (6, 126819), (11, 126735), (12, 126684), (15, 126645), (16, 126630), (18, 126576),

Gene: Bordeaux_16 Start: 8143, Stop: 7805, Start Num: 4
Candidate Starts for Bordeaux_16:
(Start: 4 @8143 has 52 MA's), (5, 8131), (6, 8062), (16, 7876), (18, 7822),

Gene: Bordeaux_273 Start: 126881, Stop: 126543, Start Num: 4
Candidate Starts for Bordeaux_273:
(Start: 4 @126881 has 52 MA's), (5, 126869), (6, 126800), (16, 126614), (18, 126560),

Gene: CeilingFan_15 Start: 7754, Stop: 7416, Start Num: 4
Candidate Starts for CeilingFan_15:
(Start: 4 @7754 has 52 MA's), (5, 7742), (6, 7673), (16, 7487), (18, 7433),

Gene: CeilingFan_289 Start: 128361, Stop: 128023, Start Num: 4
Candidate Starts for CeilingFan_289:
(Start: 4 @128361 has 52 MA's), (5, 128349), (6, 128280), (16, 128094), (18, 128040),

Gene: Elmer_18 Start: 7244, Stop: 6909, Start Num: 4
Candidate Starts for Elmer_18:
(Start: 4 @7244 has 52 MA's), (5, 7232), (6, 7163), (11, 7079), (12, 7028), (14, 7007), (15, 6989), (18, 6920),

Gene: Elmer_294 Start: 129612, Stop: 129277, Start Num: 4
Candidate Starts for Elmer_294:
(Start: 4 @129612 has 52 MA's), (5, 129600), (6, 129531), (11, 129447), (12, 129396), (14, 129375), (15, 129357), (18, 129288),

Gene: Enygma_14 Start: 7394, Stop: 7062, Start Num: 4

Candidate Starts for Enygma_14:
(1, 7466), (3, 7433), (Start: 4 @7394 has 52 MA's), (5, 7382), (6, 7313), (7, 7292), (8, 7280), (9, 7262), (15, 7142),

Gene: Enygma_282 Start: 129818, Stop: 129486, Start Num: 4
Candidate Starts for Enygma_282:
(1, 129890), (3, 129857), (Start: 4 @129818 has 52 MA's), (5, 129806), (6, 129737), (7, 129716), (8, 129704), (9, 129686), (15, 129566),

Gene: Genie2_17 Start: 8112, Stop: 7777, Start Num: 4
Candidate Starts for Genie2_17:
(1, 8184), (2, 8157), (Start: 4 @8112 has 52 MA's), (5, 8100), (6, 8031), (11, 7947), (12, 7896), (15, 7857), (16, 7842), (18, 7788),

Gene: Genie2_272 Start: 127013, Stop: 126678, Start Num: 4
Candidate Starts for Genie2_272:
(1, 127085), (2, 127058), (Start: 4 @127013 has 52 MA's), (5, 127001), (6, 126932), (11, 126848), (12, 126797), (15, 126758), (16, 126743), (18, 126689),

Gene: Gibbi_288 Start: 127854, Stop: 127516, Start Num: 4
Candidate Starts for Gibbi_288:
(Start: 4 @127854 has 52 MA's), (5, 127842), (6, 127773), (16, 127587), (18, 127533),

Gene: Gibbi_17 Start: 7754, Stop: 7416, Start Num: 4
Candidate Starts for Gibbi_17:
(Start: 4 @7754 has 52 MA's), (5, 7742), (6, 7673), (16, 7487), (18, 7433),

Gene: IchabodCrane_15 Start: 7751, Stop: 7413, Start Num: 4
Candidate Starts for IchabodCrane_15:
(Start: 4 @7751 has 52 MA's), (5, 7739), (6, 7670), (16, 7484), (18, 7430),

Gene: IchabodCrane_268 Start: 126294, Stop: 125956, Start Num: 4
Candidate Starts for IchabodCrane_268:
(Start: 4 @126294 has 52 MA's), (5, 126282), (6, 126213), (16, 126027), (18, 125973),

Gene: JimJam_284 Start: 129678, Stop: 129340, Start Num: 4
Candidate Starts for JimJam_284:
(Start: 4 @129678 has 52 MA's), (5, 129666), (6, 129597), (16, 129411), (18, 129357),

Gene: JimJam_16 Start: 8142, Stop: 7804, Start Num: 4
Candidate Starts for JimJam_16:
(Start: 4 @8142 has 52 MA's), (5, 8130), (6, 8061), (16, 7875), (18, 7821),

Gene: Jollison_18 Start: 8143, Stop: 7805, Start Num: 4
Candidate Starts for Jollison_18:
(Start: 4 @8143 has 52 MA's), (5, 8131), (6, 8062), (16, 7876), (18, 7822),

Gene: Jollison_282 Start: 126818, Stop: 126480, Start Num: 4
Candidate Starts for Jollison_282:
(Start: 4 @126818 has 52 MA's), (5, 126806), (6, 126737), (16, 126551), (18, 126497),

Gene: Karimac_274 Start: 127464, Stop: 127126, Start Num: 4
Candidate Starts for Karimac_274:

(Start: 4 @127464 has 52 MA's), (5, 127452), (6, 127383), (16, 127197), (18, 127143),

Gene: Karimac_16 Start: 8145, Stop: 7807, Start Num: 4
Candidate Starts for Karimac_16:
(Start: 4 @8145 has 52 MA's), (5, 8133), (6, 8064), (16, 7878), (18, 7824),

Gene: KentuckyRacer_291 Start: 129206, Stop: 128868, Start Num: 4
Candidate Starts for KentuckyRacer_291:
(Start: 4 @129206 has 52 MA's), (5, 129194), (6, 129125), (16, 128939), (18, 128885),

Gene: KentuckyRacer_17 Start: 7755, Stop: 7417, Start Num: 4
Candidate Starts for KentuckyRacer_17:
(Start: 4 @7755 has 52 MA's), (5, 7743), (6, 7674), (16, 7488), (18, 7434),

Gene: LukeCage_278 Start: 128580, Stop: 128242, Start Num: 4
Candidate Starts for LukeCage_278:
(Start: 4 @128580 has 52 MA's), (5, 128568), (6, 128499), (13, 128349), (16, 128313), (18, 128259),

Gene: LukeCage_15 Start: 7676, Stop: 7338, Start Num: 4
Candidate Starts for LukeCage_15:
(Start: 4 @7676 has 52 MA's), (5, 7664), (6, 7595), (13, 7445), (16, 7409), (18, 7355),

Gene: MindFlayer_267 Start: 125813, Stop: 125475, Start Num: 4
Candidate Starts for MindFlayer_267:
(Start: 4 @125813 has 52 MA's), (5, 125801), (6, 125732), (16, 125546), (18, 125492),

Gene: MindFlayer_15 Start: 7753, Stop: 7415, Start Num: 4
Candidate Starts for MindFlayer_15:
(Start: 4 @7753 has 52 MA's), (5, 7741), (6, 7672), (16, 7486), (18, 7432),

Gene: Mugiwara_15 Start: 7405, Stop: 7067, Start Num: 4
Candidate Starts for Mugiwara_15:
(Start: 4 @7405 has 52 MA's), (5, 7393), (6, 7324), (10, 7267), (16, 7138), (18, 7084),

Gene: Mugiwara_287 Start: 128790, Stop: 128452, Start Num: 4
Candidate Starts for Mugiwara_287:
(Start: 4 @128790 has 52 MA's), (5, 128778), (6, 128709), (10, 128652), (16, 128523), (18, 128469),

Gene: PumpkinSpice_16 Start: 8143, Stop: 7805, Start Num: 4
Candidate Starts for PumpkinSpice_16:
(Start: 4 @8143 has 52 MA's), (5, 8131), (6, 8062), (16, 7876), (18, 7822),

Gene: PumpkinSpice_280 Start: 128035, Stop: 127697, Start Num: 4
Candidate Starts for PumpkinSpice_280:
(Start: 4 @128035 has 52 MA's), (5, 128023), (6, 127954), (16, 127768), (18, 127714),

Gene: Quaran19_16 Start: 8143, Stop: 7805, Start Num: 4
Candidate Starts for Quaran19_16:
(Start: 4 @8143 has 52 MA's), (5, 8131), (6, 8062), (16, 7876), (18, 7822),

Gene: Quaran19_277 Start: 127325, Stop: 126987, Start Num: 4
Candidate Starts for Quaran19_277:
(Start: 4 @127325 has 52 MA's), (5, 127313), (6, 127244), (16, 127058), (18, 127004),

Gene: SaltySpitoon_276 Start: 126407, Stop: 126069, Start Num: 4
Candidate Starts for SaltySpitoon_276:
(Start: 4 @126407 has 52 MA's), (5, 126395), (6, 126326), (16, 126140), (18, 126086),

Gene: SaltySpitoon_16 Start: 8143, Stop: 7805, Start Num: 4
Candidate Starts for SaltySpitoon_16:
(Start: 4 @8143 has 52 MA's), (5, 8131), (6, 8062), (16, 7876), (18, 7822),

Gene: Sollertia_17 Start: 8112, Stop: 7777, Start Num: 4
Candidate Starts for Sollertia_17:
(1, 8184), (2, 8157), (Start: 4 @8112 has 52 MA's), (5, 8100), (6, 8031), (11, 7947), (12, 7896), (15, 7857), (16, 7842), (18, 7788),

Gene: Sollertia_273 Start: 127002, Stop: 126667, Start Num: 4
Candidate Starts for Sollertia_273:
(1, 127074), (2, 127047), (Start: 4 @127002 has 52 MA's), (5, 126990), (6, 126921), (11, 126837), (12, 126786), (15, 126747), (16, 126732), (18, 126678),

Gene: Spelly_16 Start: 8143, Stop: 7805, Start Num: 4
Candidate Starts for Spelly_16:
(Start: 4 @8143 has 52 MA's), (5, 8131), (6, 8062), (16, 7876), (18, 7822),

Gene: Spelly_282 Start: 126947, Stop: 126609, Start Num: 4
Candidate Starts for Spelly_282:
(Start: 4 @126947 has 52 MA's), (5, 126935), (6, 126866), (16, 126680), (18, 126626),

Gene: Spilled_15 Start: 7753, Stop: 7415, Start Num: 4
Candidate Starts for Spilled_15:
(Start: 4 @7753 has 52 MA's), (5, 7741), (6, 7672), (16, 7486), (18, 7432),

Gene: Spilled_283 Start: 128222, Stop: 127884, Start Num: 4
Candidate Starts for Spilled_283:
(Start: 4 @128222 has 52 MA's), (5, 128210), (6, 128141), (16, 127955), (18, 127901),

Gene: Stanimal_17 Start: 8112, Stop: 7777, Start Num: 4
Candidate Starts for Stanimal_17:
(1, 8184), (2, 8157), (Start: 4 @8112 has 52 MA's), (5, 8100), (6, 8031), (11, 7947), (12, 7896), (15, 7857), (16, 7842), (18, 7788),

Gene: Stanimal_272 Start: 127386, Stop: 127051, Start Num: 4
Candidate Starts for Stanimal_272:
(1, 127458), (2, 127431), (Start: 4 @127386 has 52 MA's), (5, 127374), (6, 127305), (11, 127221), (12, 127170), (15, 127131), (16, 127116), (18, 127062),

Gene: StarPlatinum_285 Start: 129523, Stop: 129185, Start Num: 4
Candidate Starts for StarPlatinum_285:
(Start: 4 @129523 has 52 MA's), (5, 129511), (6, 129442), (17, 129223), (18, 129202),

Gene: StarPlatinum_15 Start: 7836, Stop: 7498, Start Num: 4
Candidate Starts for StarPlatinum_15:
(Start: 4 @7836 has 52 MA's), (5, 7824), (6, 7755), (17, 7536), (18, 7515),

Gene: Starbow_16 Start: 8143, Stop: 7805, Start Num: 4
Candidate Starts for Starbow_16:
(Start: 4 @8143 has 52 MA's), (5, 8131), (6, 8062), (16, 7876), (18, 7822),

Gene: Starbow_273 Start: 126991, Stop: 126653, Start Num: 4
Candidate Starts for Starbow_273:
(Start: 4 @126991 has 52 MA's), (5, 126979), (6, 126910), (16, 126724), (18, 126670),

Gene: TomSawyer_281 Start: 129515, Stop: 129177, Start Num: 4
Candidate Starts for TomSawyer_281:
(Start: 4 @129515 has 52 MA's), (5, 129503), (6, 129434), (16, 129248), (18, 129194),

Gene: TomSawyer_16 Start: 7736, Stop: 7398, Start Num: 4
Candidate Starts for TomSawyer_16:
(Start: 4 @7736 has 52 MA's), (5, 7724), (6, 7655), (16, 7469), (18, 7415),

Gene: Tomas_265 Start: 126967, Stop: 126629, Start Num: 4
Candidate Starts for Tomas_265:
(Start: 4 @126967 has 52 MA's), (8, 126853), (11, 126805), (15, 126715), (18, 126646),

Gene: Tomas_9 Start: 5260, Stop: 4922, Start Num: 4
Candidate Starts for Tomas_9:
(Start: 4 @5260 has 52 MA's), (8, 5146), (11, 5098), (15, 5008), (18, 4939),

Gene: Wipeout_15 Start: 7758, Stop: 7420, Start Num: 4
Candidate Starts for Wipeout_15:
(Start: 4 @7758 has 52 MA's), (5, 7746), (6, 7677), (16, 7491), (18, 7437),

Gene: Wipeout_269 Start: 128489, Stop: 128151, Start Num: 4
Candidate Starts for Wipeout_269:
(Start: 4 @128489 has 52 MA's), (5, 128477), (6, 128408), (16, 128222), (18, 128168),

Gene: Wofford_273 Start: 129042, Stop: 128707, Start Num: 4
Candidate Starts for Wofford_273:
(Start: 4 @129042 has 52 MA's), (5, 129030), (6, 128961), (11, 128877), (12, 128826), (14, 128805), (15, 128787), (18, 128718),

Gene: Wofford_15 Start: 7249, Stop: 6914, Start Num: 4
Candidate Starts for Wofford_15:
(Start: 4 @7249 has 52 MA's), (5, 7237), (6, 7168), (11, 7084), (12, 7033), (14, 7012), (15, 6994), (18, 6925),

Gene: Yaboi_278 Start: 126930, Stop: 126595, Start Num: 4
Candidate Starts for Yaboi_278:
(1, 127002), (2, 126975), (Start: 4 @126930 has 52 MA's), (5, 126918), (6, 126849), (11, 126765), (12, 126714), (15, 126675), (16, 126660), (18, 126606),

Gene: Yaboi_17 Start: 8112, Stop: 7777, Start Num: 4
Candidate Starts for Yaboi_17:
(1, 8184), (2, 8157), (Start: 4 @8112 has 52 MA's), (5, 8100), (6, 8031), (11, 7947), (12, 7896), (15, 7857), (16, 7842), (18, 7788),