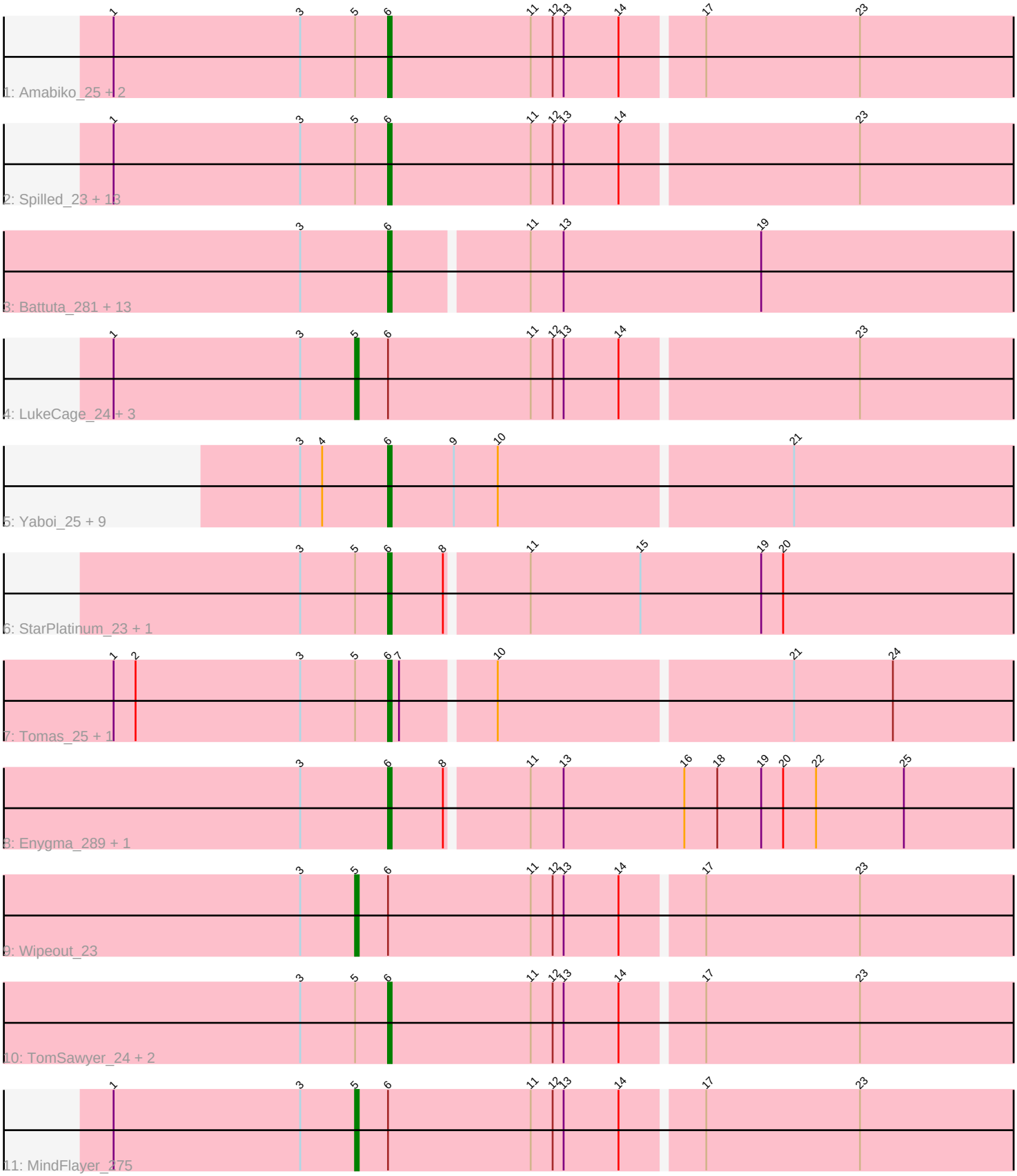
Pham 172921


1: Amabiko_25 + 2
2: Spilled_23 + 13
3: Battuta_281 + 13
4: LukeCage_24 + 3
5: Yaboi_25 + 9
6: StarPlatinum_23 + 1
7: Tomas_25 + 1
8: Enygma_289 + 1
9: Wipeout_23
10: TomSawyer_24 + 2
11: MindFlayer_275

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 172921 Report

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

Pham number 172921 has 56 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Amabiko_25, Amabiko_289, MindFlayer_23
• Track 2 : Spilled_23, KentuckyRacer_24, Spelly_290, Jollison_25, CeilingFan_300, JimJam_24, KentuckyRacer_292, Jollison_282, JimJam_292, Spilled_291, PumpkinSpice_24, PumpkinSpice_288, Spelly_24, CeilingFan_26
• Track 3 : Battuta_281, Birchlyn_281, Karimac_24, Quaran19_285, IchabodCrane_23, Starbow_281, Bordeaux_281, Karimac_282, Bordeaux_24, Battuta_24, Starbow_24, Quaran19_24, Birchlyn_21, IchabodCrane_276
• Track 4 : LukeCage_24, SaltySpitoon_24, LukeCage_287, SaltySpitoon_284
• Track 5 : Yaboi_25, Genie2_25, Sollertia_281, Stanimal_25, Genie2_280, Yaboi_285, Stanimal_280, Sollertia_25, BoomerJR_25, BoomerJR_280
• Track 6 : StarPlatinum_23, StarPlatinum_293
• Track 7 : Tomas_25, Tomas_281
• Track 8 : Enygma_289, Enygma_21
• Track 9 : Wipeout_23
• Track 10 : TomSawyer_24, Wipeout_277, TomSawyer_289
• Track 11 : MindFlayer_275

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

The start number called the most often in the published annotations is 6, it was called in 48 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Amabiko_25, Amabiko_289, Battuta_24, Battuta_281, Birchlyn_21, Birchlyn_281, BoomerJR_25, BoomerJR_280, Bordeaux_24, Bordeaux_281, CeilingFan_26, CeilingFan_300, Enygma_21, Enygma_289, Genie2_25, Genie2_280, IchabodCrane_23, IchabodCrane_276, JimJam_24, JimJam_292, Jollison_25, Jollison_282, Karimac_24, Karimac_282, KentuckyRacer_24, KentuckyRacer_292, MindFlayer_23, PumpkinSpice_24, PumpkinSpice_288, Quaran19_24, Quaran19_285, Sollertia_25, Sollertia_281, Spelly_24, Spelly_290, Spilled_23, Spilled_291, Stanimal_25, Stanimal_280, StarPlatinum_23, StarPlatinum_293, Starbow_24, Starbow_281, TomSawyer_24, TomSawyer_289, Tomas_25, Tomas_281, Wipeout_277, Yaboi_25, Yaboi_285,

Genes that have the "Most Annotated" start but do not call it:
• LukeCage_24, LukeCage_287, MindFlayer_275, SaltySpitoon_24, SaltySpitoon_284, Wipeout_23,

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

Summary by start number:

Start 5:
• Found in 30 of 56 (53.6%) of genes in pham
• Manual Annotations of this start: 6 of 54
• Called 20.0% of time when present
• Phage (with cluster) where this start called: LukeCage_24 (BE2), LukeCage_287 (BE2), MindFlayer_275 (BE2), SaltySpitoon_24 (BE2), SaltySpitoon_284 (BE2), Wipeout_23 (BE2),

Start 6:
• Found in 56 of 56 (100.0%) of genes in pham
• Manual Annotations of this start: 48 of 54
• Called 89.3% of time when present
• Phage (with cluster) where this start called: Amabiko_25 (BE2), Amabiko_289 (BE2), Battuta_24 (BE2), Battuta_281 (BE2), Birchlyn_21 (BE2), Birchlyn_281 (BE2), BoomerJR_25 (BE2), BoomerJR_280 (BE2), Bordeaux_24 (BE2), Bordeaux_281 (BE2), CeilingFan_26 (BE2), CeilingFan_300 (BE2), Enygma_21 (BE2), Enygma_289 (BE2), Genie2_25 (BE2), Genie2_280 (BE2), IchabodCrane_23 (BE2), IchabodCrane_276 (BE2), JimJam_24 (BE2), JimJam_292 (BE2), Jollison_25 (BE2), Jollison_282 (BE2), Karimac_24 (BE2), Karimac_282 (BE2), KentuckyRacer_24 (BE2), KentuckyRacer_292 (BE2), MindFlayer_23 (BE2), PumpkinSpice_24 (BE2), PumpkinSpice_288 (BE2), Quaran19_24 (BE2), Quaran19_285 (BE2), Sollertia_25 (BE2), Sollertia_281 (BE2), Spelly_24 (BE2), Spelly_290 (BE2), Spilled_23 (BE2), Spilled_291 (BE2), Stanimal_25 (BE2), Stanimal_280 (BE2), StarPlatinum_23 (BE2), StarPlatinum_293 (BE2), Starbow_24 (BE2), Starbow_281 (BE2), TomSawyer_24 (BE2), TomSawyer_289 (BE2), Tomas_25 (BE2), Tomas_281 (BE2), Wipeout_277 (BE2), Yaboi_25 (BE2), Yaboi_285 (BE2),

Summary by clusters:

There is one cluster represented in this pham: BE2

Info for manual annotations of cluster BE2:
•Start number 5 was manually annotated 6 times for cluster BE2.
•Start number 6 was manually annotated 48 times for cluster BE2.

Gene Information:

Gene: Amabiko_25 Start: 11116, Stop: 10940, Start Num: 6
Candidate Starts for Amabiko_25:
(1, 11191), (3, 11140), (Start: 5 @11125 has 6 MA's), (Start: 6 @11116 has 48 MA's), (11, 11077), (12, 11071), (13, 11068), (14, 11053), (17, 11032), (23, 10990),

Gene: Amabiko_289 Start: 129942, Stop: 129766, Start Num: 6
Candidate Starts for Amabiko_289:
(1, 130017), (3, 129966), (Start: 5 @129951 has 6 MA's), (Start: 6 @129942 has 48 MA's), (11, 129903), (12, 129897), (13, 129894), (14, 129879), (17, 129858), (23, 129816),

Gene: Battuta_281 Start: 129262, Stop: 129086, Start Num: 6
Candidate Starts for Battuta_281:
(3, 129286), (Start: 6 @129262 has 48 MA's), (11, 129226), (13, 129217), (19, 129163),

Gene: Battuta_24 Start: 11107, Stop: 10931, Start Num: 6
Candidate Starts for Battuta_24:
(3, 11131), (Start: 6 @11107 has 48 MA's), (11, 11071), (13, 11062), (19, 11008),

Gene: Birchlyn_281 Start: 125051, Stop: 124875, Start Num: 6
Candidate Starts for Birchlyn_281:
(3, 125075), (Start: 6 @125051 has 48 MA's), (11, 125015), (13, 125006), (19, 124952),

Gene: Birchlyn_21 Start: 8960, Stop: 8784, Start Num: 6
Candidate Starts for Birchlyn_21:
(3, 8984), (Start: 6 @8960 has 48 MA's), (11, 8924), (13, 8915), (19, 8861),

Gene: BoomerJR_25 Start: 11017, Stop: 10841, Start Num: 6
Candidate Starts for BoomerJR_25:
(3, 11041), (4, 11035), (Start: 6 @11017 has 48 MA's), (9, 10999), (10, 10987), (21, 10909),

Gene: BoomerJR_280 Start: 129805, Stop: 129629, Start Num: 6
Candidate Starts for BoomerJR_280:
(3, 129829), (4, 129823), (Start: 6 @129805 has 48 MA's), (9, 129787), (10, 129775), (21, 129697),

Gene: Bordeaux_281 Start: 129845, Stop: 129669, Start Num: 6
Candidate Starts for Bordeaux_281:
(3, 129869), (Start: 6 @129845 has 48 MA's), (11, 129809), (13, 129800), (19, 129746),

Gene: Bordeaux_24 Start: 11107, Stop: 10931, Start Num: 6
Candidate Starts for Bordeaux_24:
(3, 11131), (Start: 6 @11107 has 48 MA's), (11, 11071), (13, 11062), (19, 11008),

Gene: CeilingFan_300 Start: 131519, Stop: 131343, Start Num: 6
Candidate Starts for CeilingFan_300:
(1, 131594), (3, 131543), (Start: 5 @131528 has 6 MA's), (Start: 6 @131519 has 48 MA's), (11, 131480), (12, 131474), (13, 131471), (14, 131456), (23, 131393),

Gene: CeilingFan_26 Start: 10912, Stop: 10736, Start Num: 6
Candidate Starts for CeilingFan_26:
(1, 10987), (3, 10936), (Start: 5 @10921 has 6 MA's), (Start: 6 @10912 has 48 MA's), (11, 10873), (12, 10867), (13, 10864), (14, 10849), (23, 10786),

Gene: Enygma_289 Start: 132546, Stop: 132367, Start Num: 6
Candidate Starts for Enygma_289:
(3, 132570), (Start: 6 @132546 has 48 MA's), (8, 132531), (11, 132510), (13, 132501), (16, 132468), (18, 132459), (19, 132447), (20, 132441), (22, 132432), (25, 132408),

Gene: Enygma_21 Start: 10122, Stop: 9943, Start Num: 6

Candidate Starts for Enygma_21:
(3, 10146), (Start: 6 @10122 has 48 MA's), (8, 10107), (11, 10086), (13, 10077), (16, 10044), (18, 10035), (19, 10023), (20, 10017), (22, 10008), (25, 9984),

Gene: Genie2_25 Start: 11017, Stop: 10841, Start Num: 6
Candidate Starts for Genie2_25:
(3, 11041), (4, 11035), (Start: 6 @11017 has 48 MA's), (9, 10999), (10, 10987), (21, 10909),

Gene: Genie2_280 Start: 129918, Stop: 129742, Start Num: 6
Candidate Starts for Genie2_280:
(3, 129942), (4, 129936), (Start: 6 @129918 has 48 MA's), (9, 129900), (10, 129888), (21, 129810),

Gene: IchabodCrane_23 Start: 10715, Stop: 10539, Start Num: 6
Candidate Starts for IchabodCrane_23:
(3, 10739), (Start: 6 @10715 has 48 MA's), (11, 10679), (13, 10670), (19, 10616),

Gene: IchabodCrane_276 Start: 129258, Stop: 129082, Start Num: 6
Candidate Starts for IchabodCrane_276:
(3, 129282), (Start: 6 @129258 has 48 MA's), (11, 129222), (13, 129213), (19, 129159),

Gene: JimJam_24 Start: 11115, Stop: 10939, Start Num: 6
Candidate Starts for JimJam_24:
(1, 11190), (3, 11139), (Start: 5 @11124 has 6 MA's), (Start: 6 @11115 has 48 MA's), (11, 11076), (12, 11070), (13, 11067), (14, 11052), (23, 10989),

Gene: JimJam_292 Start: 132651, Stop: 132475, Start Num: 6
Candidate Starts for JimJam_292:
(1, 132726), (3, 132675), (Start: 5 @132660 has 6 MA's), (Start: 6 @132651 has 48 MA's), (11, 132612), (12, 132606), (13, 132603), (14, 132588), (23, 132525),

Gene: Jollison_25 Start: 11116, Stop: 10940, Start Num: 6
Candidate Starts for Jollison_25:
(1, 11191), (3, 11140), (Start: 5 @11125 has 6 MA's), (Start: 6 @11116 has 48 MA's), (11, 11077), (12, 11071), (13, 11068), (14, 11053), (23, 10990),

Gene: Jollison_282 Start: 129791, Stop: 129615, Start Num: 6
Candidate Starts for Jollison_282:
(1, 129866), (3, 129815), (Start: 5 @129800 has 6 MA's), (Start: 6 @129791 has 48 MA's), (11, 129752), (12, 129746), (13, 129743), (14, 129728), (23, 129665),

Gene: Karimac_24 Start: 11118, Stop: 10942, Start Num: 6
Candidate Starts for Karimac_24:
(3, 11142), (Start: 6 @11118 has 48 MA's), (11, 11082), (13, 11073), (19, 11019),

Gene: Karimac_282 Start: 130437, Stop: 130261, Start Num: 6
Candidate Starts for Karimac_282:
(3, 130461), (Start: 6 @130437 has 48 MA's), (11, 130401), (13, 130392), (19, 130338),

Gene: KentuckyRacer_24 Start: 10913, Stop: 10737, Start Num: 6
Candidate Starts for KentuckyRacer_24:
(1, 10988), (3, 10937), (Start: 5 @10922 has 6 MA's), (Start: 6 @10913 has 48 MA's), (11, 10874), (12, 10868), (13, 10865), (14, 10850), (23, 10787),

Gene: KentuckyRacer_292 Start: 132364, Stop: 132188, Start Num: 6
Candidate Starts for KentuckyRacer_292:
(1, 132439), (3, 132388), (Start: 5 @132373 has 6 MA's), (Start: 6 @132364 has 48 MA's), (11, 132325), (12, 132319), (13, 132316), (14, 132301), (23, 132238),

Gene: LukeCage_24 Start: 10874, Stop: 10689, Start Num: 5
Candidate Starts for LukeCage_24:
(1, 10940), (3, 10889), (Start: 5 @10874 has 6 MA's), (Start: 6 @10865 has 48 MA's), (11, 10826), (12, 10820), (13, 10817), (14, 10802), (23, 10739),

Gene: LukeCage_287 Start: 131778, Stop: 131593, Start Num: 5
Candidate Starts for LukeCage_287:
(1, 131844), (3, 131793), (Start: 5 @131778 has 6 MA's), (Start: 6 @131769 has 48 MA's), (11, 131730), (12, 131724), (13, 131721), (14, 131706), (23, 131643),

Gene: MindFlayer_23 Start: 10726, Stop: 10550, Start Num: 6
Candidate Starts for MindFlayer_23:
(1, 10801), (3, 10750), (Start: 5 @10735 has 6 MA's), (Start: 6 @10726 has 48 MA's), (11, 10687), (12, 10681), (13, 10678), (14, 10663), (17, 10642), (23, 10600),

Gene: MindFlayer_275 Start: 128795, Stop: 128610, Start Num: 5
Candidate Starts for MindFlayer_275:
(1, 128861), (3, 128810), (Start: 5 @128795 has 6 MA's), (Start: 6 @128786 has 48 MA's), (11, 128747), (12, 128741), (13, 128738), (14, 128723), (17, 128702), (23, 128660),

Gene: PumpkinSpice_24 Start: 11116, Stop: 10940, Start Num: 6
Candidate Starts for PumpkinSpice_24:
(1, 11191), (3, 11140), (Start: 5 @11125 has 6 MA's), (Start: 6 @11116 has 48 MA's), (11, 11077), (12, 11071), (13, 11068), (14, 11053), (23, 10990),

Gene: PumpkinSpice_288 Start: 131008, Stop: 130832, Start Num: 6
Candidate Starts for PumpkinSpice_288:
(1, 131083), (3, 131032), (Start: 5 @131017 has 6 MA's), (Start: 6 @131008 has 48 MA's), (11, 130969), (12, 130963), (13, 130960), (14, 130945), (23, 130882),

Gene: Quaran19_285 Start: 130289, Stop: 130113, Start Num: 6
Candidate Starts for Quaran19_285:
(3, 130313), (Start: 6 @130289 has 48 MA's), (11, 130253), (13, 130244), (19, 130190),

Gene: Quaran19_24 Start: 11107, Stop: 10931, Start Num: 6
Candidate Starts for Quaran19_24:
(3, 11131), (Start: 6 @11107 has 48 MA's), (11, 11071), (13, 11062), (19, 11008),

Gene: SaltySpitoon_24 Start: 11125, Stop: 10940, Start Num: 5
Candidate Starts for SaltySpitoon_24:
(1, 11191), (3, 11140), (Start: 5 @11125 has 6 MA's), (Start: 6 @11116 has 48 MA's), (11, 11077), (12, 11071), (13, 11068), (14, 11053), (23, 10990),

Gene: SaltySpitoon_284 Start: 129389, Stop: 129204, Start Num: 5
Candidate Starts for SaltySpitoon_284:
(1, 129455), (3, 129404), (Start: 5 @129389 has 6 MA's), (Start: 6 @129380 has 48 MA's), (11, 129341), (12, 129335), (13, 129332), (14, 129317), (23, 129254),

Gene: Sollertia_281 Start: 129907, Stop: 129731, Start Num: 6
Candidate Starts for Sollertia_281:
(3, 129931), (4, 129925), (Start: 6 @129907 has 48 MA's), (9, 129889), (10, 129877), (21, 129799),

Gene: Sollertia_25 Start: 11017, Stop: 10841, Start Num: 6
Candidate Starts for Sollertia_25:
(3, 11041), (4, 11035), (Start: 6 @11017 has 48 MA's), (9, 10999), (10, 10987), (21, 10909),

Gene: Spelly_290 Start: 129920, Stop: 129744, Start Num: 6
Candidate Starts for Spelly_290:
(1, 129995), (3, 129944), (Start: 5 @129929 has 6 MA's), (Start: 6 @129920 has 48 MA's), (11, 129881), (12, 129875), (13, 129872), (14, 129857), (23, 129794),

Gene: Spelly_24 Start: 11116, Stop: 10940, Start Num: 6
Candidate Starts for Spelly_24:
(1, 11191), (3, 11140), (Start: 5 @11125 has 6 MA's), (Start: 6 @11116 has 48 MA's), (11, 11077), (12, 11071), (13, 11068), (14, 11053), (23, 10990),

Gene: Spilled_23 Start: 10726, Stop: 10550, Start Num: 6
Candidate Starts for Spilled_23:
(1, 10801), (3, 10750), (Start: 5 @10735 has 6 MA's), (Start: 6 @10726 has 48 MA's), (11, 10687), (12, 10681), (13, 10678), (14, 10663), (23, 10600),

Gene: Spilled_291 Start: 131195, Stop: 131019, Start Num: 6
Candidate Starts for Spilled_291:
(1, 131270), (3, 131219), (Start: 5 @131204 has 6 MA's), (Start: 6 @131195 has 48 MA's), (11, 131156), (12, 131150), (13, 131147), (14, 131132), (23, 131069),

Gene: Stanimal_25 Start: 11017, Stop: 10841, Start Num: 6
Candidate Starts for Stanimal_25:
(3, 11041), (4, 11035), (Start: 6 @11017 has 48 MA's), (9, 10999), (10, 10987), (21, 10909),

Gene: Stanimal_280 Start: 130291, Stop: 130115, Start Num: 6
Candidate Starts for Stanimal_280:
(3, 130315), (4, 130309), (Start: 6 @130291 has 48 MA's), (9, 130273), (10, 130261), (21, 130183),

Gene: StarPlatinum_23 Start: 10770, Stop: 10594, Start Num: 6
Candidate Starts for StarPlatinum_23:
(3, 10794), (Start: 5 @10779 has 6 MA's), (Start: 6 @10770 has 48 MA's), (8, 10755), (11, 10734), (15, 10704), (19, 10671), (20, 10665),

Gene: StarPlatinum_293 Start: 132457, Stop: 132281, Start Num: 6
Candidate Starts for StarPlatinum_293:
(3, 132481), (Start: 5 @132466 has 6 MA's), (Start: 6 @132457 has 48 MA's), (8, 132442), (11, 132421), (15, 132391), (19, 132358), (20, 132352),

Gene: Starbow_281 Start: 129955, Stop: 129779, Start Num: 6
Candidate Starts for Starbow_281:
(3, 129979), (Start: 6 @129955 has 48 MA's), (11, 129919), (13, 129910), (19, 129856),

Gene: Starbow_24 Start: 11107, Stop: 10931, Start Num: 6
Candidate Starts for Starbow_24:
(3, 11131), (Start: 6 @11107 has 48 MA's), (11, 11071), (13, 11062), (19, 11008),

Gene: TomSawyer_24 Start: 10709, Stop: 10533, Start Num: 6
Candidate Starts for TomSawyer_24:
(3, 10733), (Start: 5 @10718 has 6 MA's), (Start: 6 @10709 has 48 MA's), (11, 10670), (12, 10664), (13, 10661), (14, 10646), (17, 10625), (23, 10583),

Gene: TomSawyer_289 Start: 132488, Stop: 132312, Start Num: 6
Candidate Starts for TomSawyer_289:
(3, 132512), (Start: 5 @132497 has 6 MA's), (Start: 6 @132488 has 48 MA's), (11, 132449), (12, 132443), (13, 132440), (14, 132425), (17, 132404), (23, 132362),

Gene: Tomas_25 Start: 11320, Stop: 11141, Start Num: 6
Candidate Starts for Tomas_25:
(1, 11395), (2, 11389), (3, 11344), (Start: 5 @11329 has 6 MA's), (Start: 6 @11320 has 48 MA's), (7, 11317), (10, 11293), (21, 11215), (24, 11188),

Gene: Tomas_281 Start: 133027, Stop: 132848, Start Num: 6
Candidate Starts for Tomas_281:
(1, 133102), (2, 133096), (3, 133051), (Start: 5 @133036 has 6 MA's), (Start: 6 @133027 has 48 MA's), (7, 133024), (10, 133000), (21, 132922), (24, 132895),

Gene: Wipeout_23 Start: 10740, Stop: 10555, Start Num: 5
Candidate Starts for Wipeout_23:
(3, 10755), (Start: 5 @10740 has 6 MA's), (Start: 6 @10731 has 48 MA's), (11, 10692), (12, 10686), (13, 10683), (14, 10668), (17, 10647), (23, 10605),

Gene: Wipeout_277 Start: 131462, Stop: 131286, Start Num: 6
Candidate Starts for Wipeout_277:
(3, 131486), (Start: 5 @131471 has 6 MA's), (Start: 6 @131462 has 48 MA's), (11, 131423), (12, 131417), (13, 131414), (14, 131399), (17, 131378), (23, 131336),

Gene: Yaboi_25 Start: 11017, Stop: 10841, Start Num: 6
Candidate Starts for Yaboi_25:
(3, 11041), (4, 11035), (Start: 6 @11017 has 48 MA's), (9, 10999), (10, 10987), (21, 10909),

Gene: Yaboi_285 Start: 129835, Stop: 129659, Start Num: 6
Candidate Starts for Yaboi_285:
(3, 129859), (4, 129853), (Start: 6 @129835 has 48 MA's), (9, 129817), (10, 129805), (21, 129727),