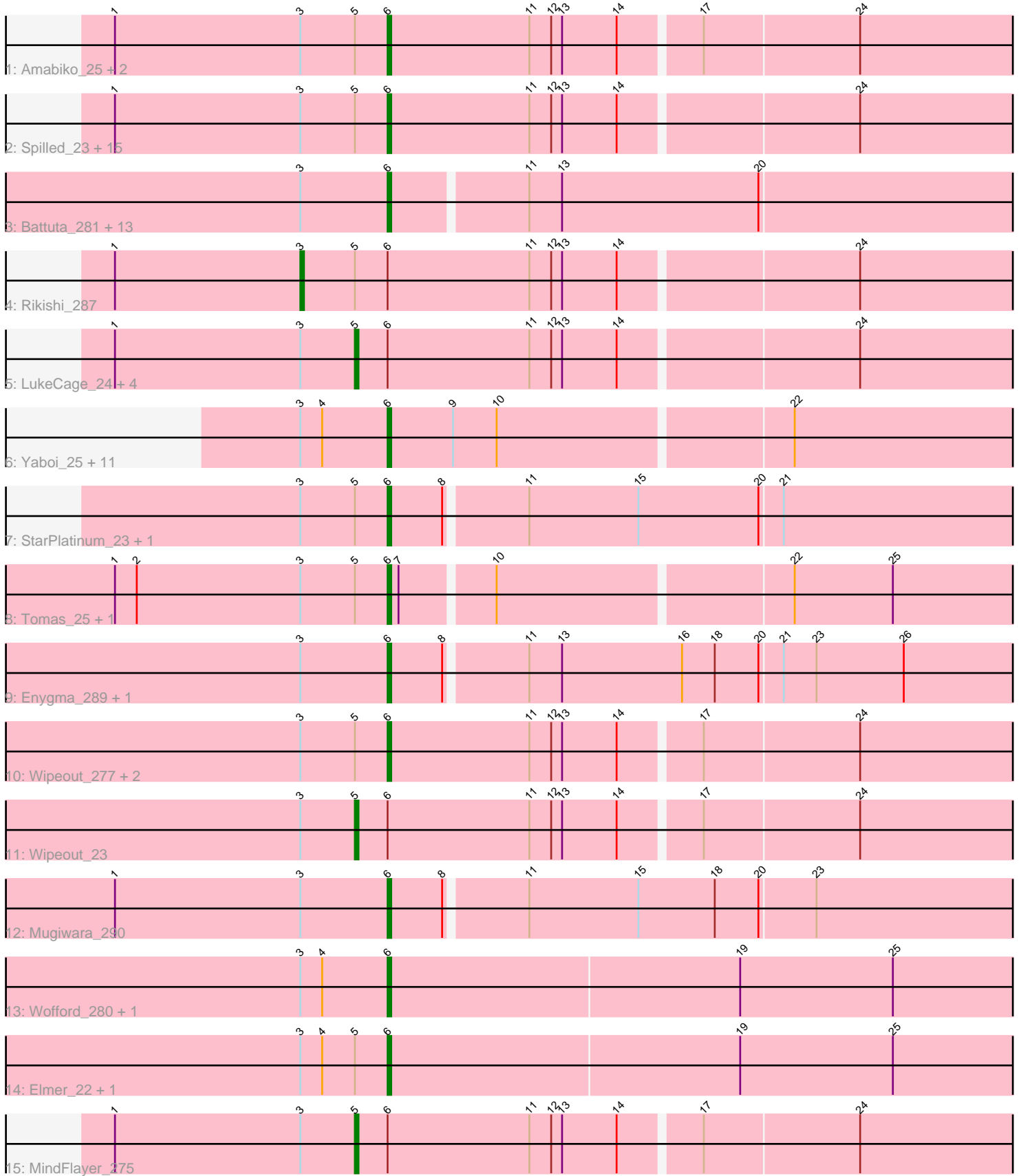


Pham 308577



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 308577 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308577 has 67 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Amabiko_25, Amabiko_289, MindFlayer_23
- Track 2 : Spilled_23, KentuckyRacer_24, CeilingFan_290, Brizzy_281, Jollison_25, JimJam_24, Brizzy_23, KentuckyRacer_292, Spelly_290, JimJam_292, Jollison_282, Spilled_291, PumpkinSpice_24, PumpkinSpice_288, Spelly_24, CeilingFan_24
- Track 3 : Battuta_281, Birchlyn_281, Karimac_24, Quaran19_285, IchabodCrane_23, Starbow_281, Bordeaux_281, Karimac_282, Battuta_24, Starbow_24, Quaran19_24, Birchlyn_21, Bordeaux_24, IchabodCrane_276
- Track 4 : Rikishi_287
- Track 5 : LukeCage_24, SaltySpittoon_24, LukeCage_287, SaltySpittoon_284, Rikishi_26
- Track 6 : Yaboi_25, Genie2_25, Sollertia_281, Stanimal_25, AngryGiraffe_25, Genie2_280, Yaboi_285, Stanimal_280, Sollertia_25, AngryGiraffe_281, BoomerJR_25, BoomerJR_280
- Track 7 : StarPlatinum_23, StarPlatinum_293
- Track 8 : Tomas_25, Tomas_281
- Track 9 : Enygma_289, Enygma_21
- Track 10 : Wipeout_277, TomSawyer_24, TomSawyer_289
- Track 11 : Wipeout_23
- Track 12 : Mugiwara_290
- Track 13 : Wofford_280, Wofford_22
- Track 14 : Elmer_22, Elmer_289
- Track 15 : 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 59 of the 67 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko_25, Amabiko_289, AngryGiraffe_25, AngryGiraffe_281, Battuta_24, Battuta_281, Birchlyn_21, Birchlyn_281, BoomerJR_25, BoomerJR_280, Bordeaux_24, Bordeaux_281, Brizzy_23, Brizzy_281, CeilingFan_24, CeilingFan_290, Elmer_22, Elmer_289, 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, Mugiwara_290, 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, Wofford_22, Wofford_280, Yaboi_25, Yaboi_285,

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

- LukeCage_24, LukeCage_287, MindFlayer_275, Rikishi_26, Rikishi_287, SaltySpittoon_24, SaltySpittoon_284, Wipeout_23,

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

-

Summary by start number:

Start 3:

- Found in 67 of 67 (100.0%) of genes in pham
- Manual Annotations of this start: 1 of 67
- Called 1.5% of time when present
- Phage (with cluster) where this start called: Rikishi_287 (BE2),

Start 5:

- Found in 36 of 67 (53.7%) of genes in pham
- Manual Annotations of this start: 7 of 67
- Called 19.4% of time when present
- Phage (with cluster) where this start called: LukeCage_24 (BE2), LukeCage_287 (BE2), MindFlayer_275 (BE2), Rikishi_26 (BE2), SaltySpittoon_24 (BE2), SaltySpittoon_284 (BE2), Wipeout_23 (BE2),

Start 6:

- Found in 67 of 67 (100.0%) of genes in pham
- Manual Annotations of this start: 59 of 67
- Called 88.1% of time when present
- Phage (with cluster) where this start called: Amabiko_25 (BE2), Amabiko_289 (BE2), AngryGiraffe_25 (BE2), AngryGiraffe_281 (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), Brizzy_23 (BE2), Brizzy_281 (BE2), CeilingFan_24 (BE2), CeilingFan_290 (BE2), Elmer_22 (BE2), Elmer_289 (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), Mugiwara_290 (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), Wofford_22 (BE2), Wofford_280 (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 3 was manually annotated 1 time for cluster BE2.
- Start number 5 was manually annotated 7 times for cluster BE2.
- Start number 6 was manually annotated 59 times for cluster BE2.

Gene Information:

Gene: Amabiko_25 Start: 11116, Stop: 10940, Start Num: 6

Candidate Starts for Amabiko_25:

(1, 11191), (Start: 3 @11140 has 1 MA's), (Start: 5 @11125 has 7 MA's), (Start: 6 @11116 has 59 MA's), (11, 11077), (12, 11071), (13, 11068), (14, 11053), (17, 11032), (24, 10990),

Gene: Amabiko_289 Start: 129942, Stop: 129766, Start Num: 6

Candidate Starts for Amabiko_289:

(1, 130017), (Start: 3 @129966 has 1 MA's), (Start: 5 @129951 has 7 MA's), (Start: 6 @129942 has 59 MA's), (11, 129903), (12, 129897), (13, 129894), (14, 129879), (17, 129858), (24, 129816),

Gene: AngryGiraffe_25 Start: 11017, Stop: 10841, Start Num: 6

Candidate Starts for AngryGiraffe_25:

(Start: 3 @11041 has 1 MA's), (4, 11035), (Start: 6 @11017 has 59 MA's), (9, 10999), (10, 10987), (22, 10909),

Gene: AngryGiraffe_281 Start: 129360, Stop: 129184, Start Num: 6

Candidate Starts for AngryGiraffe_281:

(Start: 3 @129384 has 1 MA's), (4, 129378), (Start: 6 @129360 has 59 MA's), (9, 129342), (10, 129330), (22, 129252),

Gene: Battuta_281 Start: 129262, Stop: 129086, Start Num: 6

Candidate Starts for Battuta_281:

(Start: 3 @129286 has 1 MA's), (Start: 6 @129262 has 59 MA's), (11, 129226), (13, 129217), (20, 129163),

Gene: Battuta_24 Start: 11107, Stop: 10931, Start Num: 6

Candidate Starts for Battuta_24:

(Start: 3 @11131 has 1 MA's), (Start: 6 @11107 has 59 MA's), (11, 11071), (13, 11062), (20, 11008),

Gene: Birchlyn_281 Start: 125051, Stop: 124875, Start Num: 6

Candidate Starts for Birchlyn_281:

(Start: 3 @125075 has 1 MA's), (Start: 6 @125051 has 59 MA's), (11, 125015), (13, 125006), (20, 124952),

Gene: Birchlyn_21 Start: 8960, Stop: 8784, Start Num: 6

Candidate Starts for Birchlyn_21:

(Start: 3 @8984 has 1 MA's), (Start: 6 @8960 has 59 MA's), (11, 8924), (13, 8915), (20, 8861),

Gene: BoomerJR_25 Start: 11017, Stop: 10841, Start Num: 6

Candidate Starts for BoomerJR_25:

(Start: 3 @11041 has 1 MA's), (4, 11035), (Start: 6 @11017 has 59 MA's), (9, 10999), (10, 10987), (22, 10909),

Gene: BoomerJR_280 Start: 129805, Stop: 129629, Start Num: 6

Candidate Starts for BoomerJR_280:

(Start: 3 @129829 has 1 MA's), (4, 129823), (Start: 6 @129805 has 59 MA's), (9, 129787), (10, 129775), (22, 129697),

Gene: Bordeaux_281 Start: 129845, Stop: 129669, Start Num: 6

Candidate Starts for Bordeaux_281:

(Start: 3 @129869 has 1 MA's), (Start: 6 @129845 has 59 MA's), (11, 129809), (13, 129800), (20, 129746),

Gene: Bordeaux_24 Start: 11107, Stop: 10931, Start Num: 6

Candidate Starts for Bordeaux_24:

(Start: 3 @11131 has 1 MA's), (Start: 6 @11107 has 59 MA's), (11, 11071), (13, 11062), (20, 11008),

Gene: Brizzy_281 Start: 129973, Stop: 129797, Start Num: 6

Candidate Starts for Brizzy_281:

(1, 130048), (Start: 3 @129997 has 1 MA's), (Start: 5 @129982 has 7 MA's), (Start: 6 @129973 has 59 MA's), (11, 129934), (12, 129928), (13, 129925), (14, 129910), (24, 129847),

Gene: Brizzy_23 Start: 10705, Stop: 10529, Start Num: 6

Candidate Starts for Brizzy_23:

(1, 10780), (Start: 3 @10729 has 1 MA's), (Start: 5 @10714 has 7 MA's), (Start: 6 @10705 has 59 MA's), (11, 10666), (12, 10660), (13, 10657), (14, 10642), (24, 10579),

Gene: CeilingFan_290 Start: 131519, Stop: 131343, Start Num: 6

Candidate Starts for CeilingFan_290:

(1, 131594), (Start: 3 @131543 has 1 MA's), (Start: 5 @131528 has 7 MA's), (Start: 6 @131519 has 59 MA's), (11, 131480), (12, 131474), (13, 131471), (14, 131456), (24, 131393),

Gene: CeilingFan_24 Start: 10912, Stop: 10736, Start Num: 6

Candidate Starts for CeilingFan_24:

(1, 10987), (Start: 3 @10936 has 1 MA's), (Start: 5 @10921 has 7 MA's), (Start: 6 @10912 has 59 MA's), (11, 10873), (12, 10867), (13, 10864), (14, 10849), (24, 10786),

Gene: Elmer_22 Start: 9789, Stop: 9610, Start Num: 6

Candidate Starts for Elmer_22:

(Start: 3 @9813 has 1 MA's), (4, 9807), (Start: 5 @9798 has 7 MA's), (Start: 6 @9789 has 59 MA's), (19, 9693), (25, 9651),

Gene: Elmer_289 Start: 132157, Stop: 131978, Start Num: 6

Candidate Starts for Elmer_289:

(Start: 3 @132181 has 1 MA's), (4, 132175), (Start: 5 @132166 has 7 MA's), (Start: 6 @132157 has 59 MA's), (19, 132061), (25, 132019),

Gene: Enygma_289 Start: 132546, Stop: 132367, Start Num: 6

Candidate Starts for Enygma_289:

(Start: 3 @132570 has 1 MA's), (Start: 6 @132546 has 59 MA's), (8, 132531), (11, 132510), (13, 132501), (16, 132468), (18, 132459), (20, 132447), (21, 132441), (23, 132432), (26, 132408),

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

Candidate Starts for Enygma_21:

(Start: 3 @10146 has 1 MA's), (Start: 6 @10122 has 59 MA's), (8, 10107), (11, 10086), (13, 10077), (16, 10044), (18, 10035), (20, 10023), (21, 10017), (23, 10008), (26, 9984),

Gene: Genie2_25 Start: 11017, Stop: 10841, Start Num: 6

Candidate Starts for Genie2_25:

(Start: 3 @11041 has 1 MA's), (4, 11035), (Start: 6 @11017 has 59 MA's), (9, 10999), (10, 10987), (22, 10909),

Gene: Genie2_280 Start: 129918, Stop: 129742, Start Num: 6

Candidate Starts for Genie2_280:

(Start: 3 @129942 has 1 MA's), (4, 129936), (Start: 6 @129918 has 59 MA's), (9, 129900), (10, 129888), (22, 129810),

Gene: IchabodCrane_23 Start: 10715, Stop: 10539, Start Num: 6

Candidate Starts for IchabodCrane_23:

(Start: 3 @10739 has 1 MA's), (Start: 6 @10715 has 59 MA's), (11, 10679), (13, 10670), (20, 10616),

Gene: IchabodCrane_276 Start: 129258, Stop: 129082, Start Num: 6

Candidate Starts for IchabodCrane_276:

(Start: 3 @129282 has 1 MA's), (Start: 6 @129258 has 59 MA's), (11, 129222), (13, 129213), (20, 129159),

Gene: JimJam_24 Start: 11115, Stop: 10939, Start Num: 6

Candidate Starts for JimJam_24:

(1, 11190), (Start: 3 @11139 has 1 MA's), (Start: 5 @11124 has 7 MA's), (Start: 6 @11115 has 59 MA's), (11, 11076), (12, 11070), (13, 11067), (14, 11052), (24, 10989),

Gene: JimJam_292 Start: 132651, Stop: 132475, Start Num: 6

Candidate Starts for JimJam_292:

(1, 132726), (Start: 3 @132675 has 1 MA's), (Start: 5 @132660 has 7 MA's), (Start: 6 @132651 has 59 MA's), (11, 132612), (12, 132606), (13, 132603), (14, 132588), (24, 132525),

Gene: Jollison_25 Start: 11116, Stop: 10940, Start Num: 6

Candidate Starts for Jollison_25:

(1, 11191), (Start: 3 @11140 has 1 MA's), (Start: 5 @11125 has 7 MA's), (Start: 6 @11116 has 59 MA's), (11, 11077), (12, 11071), (13, 11068), (14, 11053), (24, 10990),

Gene: Jollison_282 Start: 129791, Stop: 129615, Start Num: 6

Candidate Starts for Jollison_282:

(1, 129866), (Start: 3 @129815 has 1 MA's), (Start: 5 @129800 has 7 MA's), (Start: 6 @129791 has 59 MA's), (11, 129752), (12, 129746), (13, 129743), (14, 129728), (24, 129665),

Gene: Karimac_24 Start: 11118, Stop: 10942, Start Num: 6

Candidate Starts for Karimac_24:

(Start: 3 @11142 has 1 MA's), (Start: 6 @11118 has 59 MA's), (11, 11082), (13, 11073), (20, 11019),

Gene: Karimac_282 Start: 130437, Stop: 130261, Start Num: 6

Candidate Starts for Karimac_282:

(Start: 3 @130461 has 1 MA's), (Start: 6 @130437 has 59 MA's), (11, 130401), (13, 130392), (20, 130338),

Gene: KentuckyRacer_24 Start: 10913, Stop: 10737, Start Num: 6

Candidate Starts for KentuckyRacer_24:

(1, 10988), (Start: 3 @10937 has 1 MA's), (Start: 5 @10922 has 7 MA's), (Start: 6 @10913 has 59 MA's), (11, 10874), (12, 10868), (13, 10865), (14, 10850), (24, 10787),

Gene: KentuckyRacer_292 Start: 132364, Stop: 132188, Start Num: 6

Candidate Starts for KentuckyRacer_292:

(1, 132439), (Start: 3 @132388 has 1 MA's), (Start: 5 @132373 has 7 MA's), (Start: 6 @132364 has 59 MA's), (11, 132325), (12, 132319), (13, 132316), (14, 132301), (24, 132238),

Gene: LukeCage_24 Start: 10874, Stop: 10689, Start Num: 5

Candidate Starts for LukeCage_24:

(1, 10940), (Start: 3 @10889 has 1 MA's), (Start: 5 @10874 has 7 MA's), (Start: 6 @10865 has 59 MA's), (11, 10826), (12, 10820), (13, 10817), (14, 10802), (24, 10739),

Gene: LukeCage_287 Start: 131778, Stop: 131593, Start Num: 5

Candidate Starts for LukeCage_287:

(1, 131844), (Start: 3 @131793 has 1 MA's), (Start: 5 @131778 has 7 MA's), (Start: 6 @131769 has 59 MA's), (11, 131730), (12, 131724), (13, 131721), (14, 131706), (24, 131643),

Gene: MindFlyer_23 Start: 10726, Stop: 10550, Start Num: 6

Candidate Starts for MindFlyer_23:

(1, 10801), (Start: 3 @10750 has 1 MA's), (Start: 5 @10735 has 7 MA's), (Start: 6 @10726 has 59 MA's), (11, 10687), (12, 10681), (13, 10678), (14, 10663), (17, 10642), (24, 10600),

Gene: MindFlyer_275 Start: 128795, Stop: 128610, Start Num: 5

Candidate Starts for MindFlyer_275:

(1, 128861), (Start: 3 @128810 has 1 MA's), (Start: 5 @128795 has 7 MA's), (Start: 6 @128786 has 59 MA's), (11, 128747), (12, 128741), (13, 128738), (14, 128723), (17, 128702), (24, 128660),

Gene: Mugiwara_290 Start: 131896, Stop: 131708, Start Num: 6

Candidate Starts for Mugiwara_290:

(1, 131971), (Start: 3 @131920 has 1 MA's), (Start: 6 @131896 has 59 MA's), (8, 131881), (11, 131860), (15, 131830), (18, 131809), (20, 131797), (23, 131782),

Gene: PumpkinSpice_24 Start: 11116, Stop: 10940, Start Num: 6

Candidate Starts for PumpkinSpice_24:

(1, 11191), (Start: 3 @11140 has 1 MA's), (Start: 5 @11125 has 7 MA's), (Start: 6 @11116 has 59 MA's), (11, 11077), (12, 11071), (13, 11068), (14, 11053), (24, 10990),

Gene: PumpkinSpice_288 Start: 131008, Stop: 130832, Start Num: 6

Candidate Starts for PumpkinSpice_288:

(1, 131083), (Start: 3 @131032 has 1 MA's), (Start: 5 @131017 has 7 MA's), (Start: 6 @131008 has 59 MA's), (11, 130969), (12, 130963), (13, 130960), (14, 130945), (24, 130882),

Gene: Quaran19_285 Start: 130289, Stop: 130113, Start Num: 6

Candidate Starts for Quaran19_285:

(Start: 3 @130313 has 1 MA's), (Start: 6 @130289 has 59 MA's), (11, 130253), (13, 130244), (20, 130190),

Gene: Quaran19_24 Start: 11107, Stop: 10931, Start Num: 6

Candidate Starts for Quaran19_24:

(Start: 3 @11131 has 1 MA's), (Start: 6 @11107 has 59 MA's), (11, 11071), (13, 11062), (20, 11008),

Gene: Rikishi_287 Start: 131119, Stop: 130919, Start Num: 3

Candidate Starts for Rikishi_287:

(1, 131170), (Start: 3 @131119 has 1 MA's), (Start: 5 @131104 has 7 MA's), (Start: 6 @131095 has 59 MA's), (11, 131056), (12, 131050), (13, 131047), (14, 131032), (24, 130969),

Gene: Rikishi_26 Start: 11031, Stop: 10846, Start Num: 5

Candidate Starts for Rikishi_26:

(1, 11097), (Start: 3 @11046 has 1 MA's), (Start: 5 @11031 has 7 MA's), (Start: 6 @11022 has 59 MA's), (11, 10983), (12, 10977), (13, 10974), (14, 10959), (24, 10896),

Gene: SaltySpittoon_24 Start: 11125, Stop: 10940, Start Num: 5

Candidate Starts for SaltySpittoon_24:

(1, 11191), (Start: 3 @11140 has 1 MA's), (Start: 5 @11125 has 7 MA's), (Start: 6 @11116 has 59 MA's), (11, 11077), (12, 11071), (13, 11068), (14, 11053), (24, 10990),

Gene: SaltySpittoon_284 Start: 129389, Stop: 129204, Start Num: 5

Candidate Starts for SaltySpittoon_284:

(1, 129455), (Start: 3 @129404 has 1 MA's), (Start: 5 @129389 has 7 MA's), (Start: 6 @129380 has 59 MA's), (11, 129341), (12, 129335), (13, 129332), (14, 129317), (24, 129254),

Gene: Sollertia_281 Start: 129907, Stop: 129731, Start Num: 6

Candidate Starts for Sollertia_281:

(Start: 3 @129931 has 1 MA's), (4, 129925), (Start: 6 @129907 has 59 MA's), (9, 129889), (10, 129877), (22, 129799),

Gene: Sollertia_25 Start: 11017, Stop: 10841, Start Num: 6

Candidate Starts for Sollertia_25:

(Start: 3 @11041 has 1 MA's), (4, 11035), (Start: 6 @11017 has 59 MA's), (9, 10999), (10, 10987), (22, 10909),

Gene: Spelly_290 Start: 129920, Stop: 129744, Start Num: 6

Candidate Starts for Spelly_290:

(1, 129995), (Start: 3 @129944 has 1 MA's), (Start: 5 @129929 has 7 MA's), (Start: 6 @129920 has 59 MA's), (11, 129881), (12, 129875), (13, 129872), (14, 129857), (24, 129794),

Gene: Spelly_24 Start: 11116, Stop: 10940, Start Num: 6

Candidate Starts for Spelly_24:

(1, 11191), (Start: 3 @11140 has 1 MA's), (Start: 5 @11125 has 7 MA's), (Start: 6 @11116 has 59 MA's), (11, 11077), (12, 11071), (13, 11068), (14, 11053), (24, 10990),

Gene: Spilled_23 Start: 10726, Stop: 10550, Start Num: 6

Candidate Starts for Spilled_23:

(1, 10801), (Start: 3 @10750 has 1 MA's), (Start: 5 @10735 has 7 MA's), (Start: 6 @10726 has 59 MA's), (11, 10687), (12, 10681), (13, 10678), (14, 10663), (24, 10600),

Gene: Spilled_291 Start: 131195, Stop: 131019, Start Num: 6

Candidate Starts for Spilled_291:

(1, 131270), (Start: 3 @131219 has 1 MA's), (Start: 5 @131204 has 7 MA's), (Start: 6 @131195 has 59 MA's), (11, 131156), (12, 131150), (13, 131147), (14, 131132), (24, 131069),

Gene: Stanimal_25 Start: 11017, Stop: 10841, Start Num: 6

Candidate Starts for Stanimal_25:

(Start: 3 @11041 has 1 MA's), (4, 11035), (Start: 6 @11017 has 59 MA's), (9, 10999), (10, 10987), (22, 10909),

Gene: Stanimal_280 Start: 130291, Stop: 130115, Start Num: 6

Candidate Starts for Stanimal_280:

(Start: 3 @130315 has 1 MA's), (4, 130309), (Start: 6 @130291 has 59 MA's), (9, 130273), (10, 130261), (22, 130183),

Gene: StarPlatinum_23 Start: 10770, Stop: 10594, Start Num: 6

Candidate Starts for StarPlatinum_23:

(Start: 3 @10794 has 1 MA's), (Start: 5 @10779 has 7 MA's), (Start: 6 @10770 has 59 MA's), (8, 10755), (11, 10734), (15, 10704), (20, 10671), (21, 10665),

Gene: StarPlatinum_293 Start: 132457, Stop: 132281, Start Num: 6

Candidate Starts for StarPlatinum_293:

(Start: 3 @132481 has 1 MA's), (Start: 5 @132466 has 7 MA's), (Start: 6 @132457 has 59 MA's), (8, 132442), (11, 132421), (15, 132391), (20, 132358), (21, 132352),

Gene: Starbow_281 Start: 129955, Stop: 129779, Start Num: 6

Candidate Starts for Starbow_281:

(Start: 3 @129979 has 1 MA's), (Start: 6 @129955 has 59 MA's), (11, 129919), (13, 129910), (20, 129856),

Gene: Starbow_24 Start: 11107, Stop: 10931, Start Num: 6

Candidate Starts for Starbow_24:

(Start: 3 @11131 has 1 MA's), (Start: 6 @11107 has 59 MA's), (11, 11071), (13, 11062), (20, 11008),

Gene: TomSawyer_24 Start: 10709, Stop: 10533, Start Num: 6

Candidate Starts for TomSawyer_24:

(Start: 3 @10733 has 1 MA's), (Start: 5 @10718 has 7 MA's), (Start: 6 @10709 has 59 MA's), (11, 10670), (12, 10664), (13, 10661), (14, 10646), (17, 10625), (24, 10583),

Gene: TomSawyer_289 Start: 132488, Stop: 132312, Start Num: 6

Candidate Starts for TomSawyer_289:

(Start: 3 @132512 has 1 MA's), (Start: 5 @132497 has 7 MA's), (Start: 6 @132488 has 59 MA's), (11, 132449), (12, 132443), (13, 132440), (14, 132425), (17, 132404), (24, 132362),

Gene: Tomas_25 Start: 11320, Stop: 11141, Start Num: 6

Candidate Starts for Tomas_25:

(1, 11395), (2, 11389), (Start: 3 @11344 has 1 MA's), (Start: 5 @11329 has 7 MA's), (Start: 6 @11320 has 59 MA's), (7, 11317), (10, 11293), (22, 11215), (25, 11188),

Gene: Tomas_281 Start: 133027, Stop: 132848, Start Num: 6

Candidate Starts for Tomas_281:

(1, 133102), (2, 133096), (Start: 3 @133051 has 1 MA's), (Start: 5 @133036 has 7 MA's), (Start: 6 @133027 has 59 MA's), (7, 133024), (10, 133000), (22, 132922), (25, 132895),

Gene: Wipeout_277 Start: 131462, Stop: 131286, Start Num: 6

Candidate Starts for Wipeout_277:

(Start: 3 @131486 has 1 MA's), (Start: 5 @131471 has 7 MA's), (Start: 6 @131462 has 59 MA's), (11, 131423), (12, 131417), (13, 131414), (14, 131399), (17, 131378), (24, 131336),

Gene: Wipeout_23 Start: 10740, Stop: 10555, Start Num: 5

Candidate Starts for Wipeout_23:

(Start: 3 @10755 has 1 MA's), (Start: 5 @10740 has 7 MA's), (Start: 6 @10731 has 59 MA's), (11, 10692), (12, 10686), (13, 10683), (14, 10668), (17, 10647), (24, 10605),

Gene: Wofford_280 Start: 131586, Stop: 131407, Start Num: 6

Candidate Starts for Wofford_280:

(Start: 3 @131610 has 1 MA's), (4, 131604), (Start: 6 @131586 has 59 MA's), (19, 131490), (25, 131448),

Gene: Wofford_22 Start: 9793, Stop: 9614, Start Num: 6

Candidate Starts for Wofford_22:

(Start: 3 @9817 has 1 MA's), (4, 9811), (Start: 6 @9793 has 59 MA's), (19, 9697), (25, 9655),

Gene: Yaboi_25 Start: 11017, Stop: 10841, Start Num: 6

Candidate Starts for Yaboi_25:

(Start: 3 @11041 has 1 MA's), (4, 11035), (Start: 6 @11017 has 59 MA's), (9, 10999), (10, 10987), (22, 10909),

Gene: Yaboi_285 Start: 129835, Stop: 129659, Start Num: 6

Candidate Starts for Yaboi_285:

(Start: 3 @129859 has 1 MA's), (4, 129853), (Start: 6 @129835 has 59 MA's), (9, 129817), (10, 129805), (22, 129727),