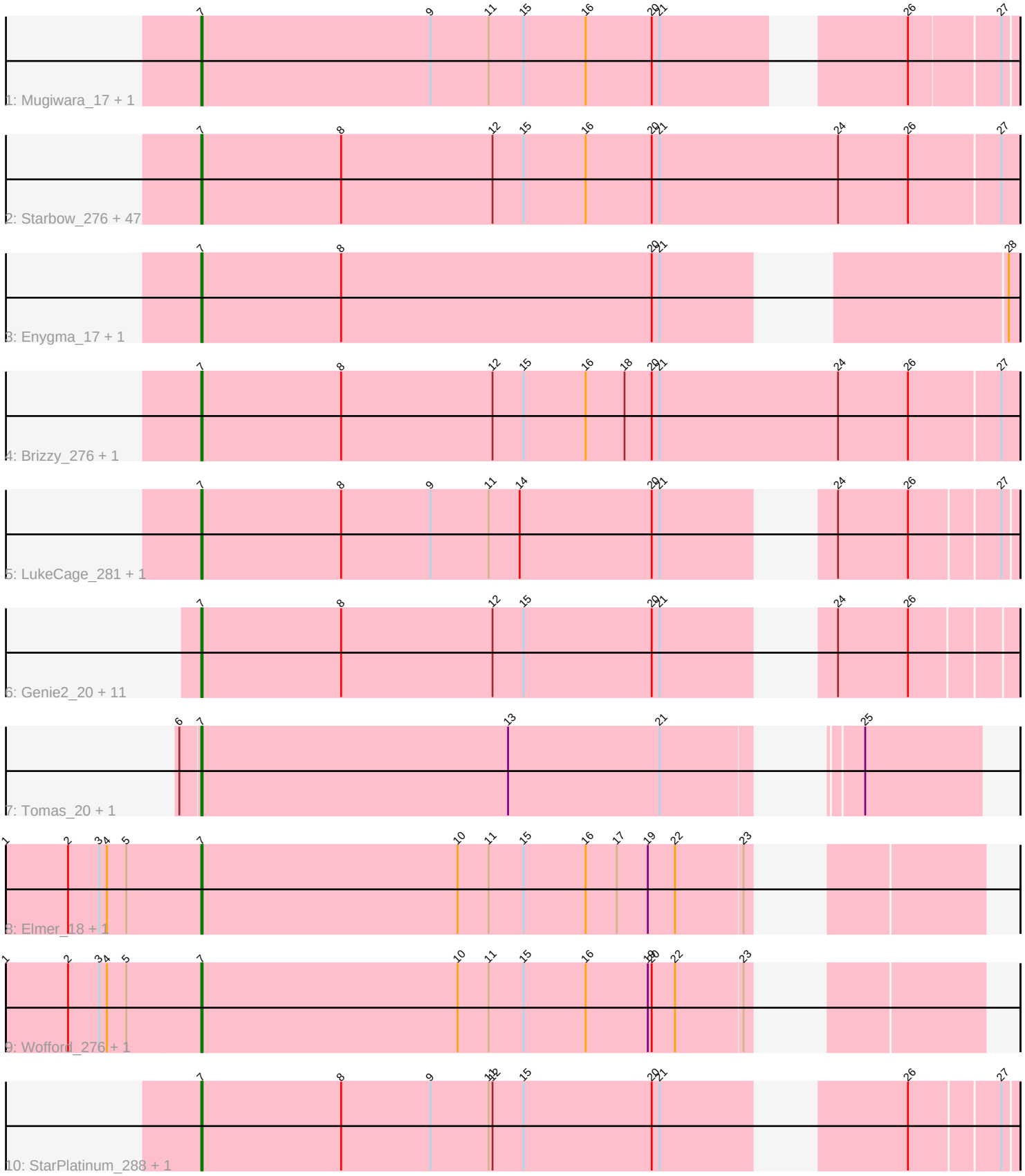
Pham 347552


1: Mugiwara_17 + 1
2: Starbow_276 + 47
3: Enygma_17 + 1
4: Brizzy_276 + 1
5: LukeCage_281 + 1
6: Genie2_20 + 11
7: Tomas_20 + 1
8: Elmer_18 + 1
9: Wofford_276 + 1
10: StarPlatinum_288 + 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 347552 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347552 has 76 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Mugiwara_17, Mugiwara_284
• Track 2 : Starbow_276, Battuta_276, MindFlayer_270, Daisy123_281, Wipeout_18, Bordeaux_19, Birchlyn_276, Spelly_285, Starbow_19, IchabodCrane_18, TomSawyer_284, PumpkinSpice_19, MindFlayer_18, Amabiko_284, Birchlyn_16, AcciDwight_22, Spelly_19, Battuta_19, TomSawyer_19, Amabiko_20, KentuckyRacer_286, Bordeaux_276, Karimac_277, PumpkinSpice_283, Tuesday_289, CeilingFan_18, SaltySpitoon_279, Rikishi_281, Quaran19_280, Spilled_18, KentuckyRacer_18, JimJam_287, CeilingFan_284, Gibbi_292, Quaran19_19, Spilled_286, Karimac_19, Jollison_277, Tuesday_21, Gibbi_21, Jollison_20, Rikishi_20, SaltySpitoon_19, AcciDwight_292, Daisy123_18, Wipeout_272, JimJam_19, IchabodCrane_271
• Track 3 : Enygma_17, Enygma_285
• Track 4 : Brizzy_276, Brizzy_18
• Track 5 : LukeCage_281, LukeCage_18
• Track 6 : Genie2_20, Sollertia_276, AngryGiraffe_20, Stanimal_20, Stanimal_275, BoomerJR_275, Yaboi_280, AngryGiraffe_276, Sollertia_20, Genie2_275, BoomerJR_20, Yaboi_19
• Track 7 : Tomas_20, Tomas_276
• Track 8 : Elmer_18, Elmer_285
• Track 9 : Wofford_276, Wofford_18
• Track 10 : StarPlatinum_288, StarPlatinum_18

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

The start number called the most often in the published annotations is 7, it was called in 70 of the 70 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AcciDwight_22, AcciDwight_292, Amabiko_20, Amabiko_284, AngryGiraffe_20, AngryGiraffe_276, Battuta_19, Battuta_276, Birchlyn_16, Birchlyn_276, BoomerJR_20, BoomerJR_275, Bordeaux_19, Bordeaux_276, Brizzy_18, Brizzy_276, CeilingFan_18, CeilingFan_284, Daisy123_18, Daisy123_281, Elmer_18, Elmer_285, Enygma_17, Enygma_285, Genie2_20, Genie2_275, Gibbi_21, Gibbi_292, IchabodCrane_18, IchabodCrane_271, JimJam_19, JimJam_287,

Jollison_20, Jollison_277, Karimac_19, Karimac_277, KentuckyRacer_18, KentuckyRacer_286, LukeCage_18, LukeCage_281, MindFlayer_18, MindFlayer_270, Mugiwara_17, Mugiwara_284, PumpkinSpice_19, PumpkinSpice_283, Quaran19_19, Quaran19_280, Rikishi_20, Rikishi_281, SaltySpitoon_19, SaltySpitoon_279, Sollertia_20, Sollertia_276, Spelly_19, Spelly_285, Spilled_18, Spilled_286, Stanimal_20, Stanimal_275, StarPlatinum_18, StarPlatinum_288, Starbow_19, Starbow_276, TomSawyer_19, TomSawyer_284, Tomas_20, Tomas_276, Tuesday_21, Tuesday_289, Wipeout_18, Wipeout_272, Wofford_18, Wofford_276, Yaboi_19, Yaboi_280,

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 7:
• Found in 76 of 76 (100.0%) of genes in pham
• Manual Annotations of this start: 70 of 70
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AcciDwight_22 (BE2), AcciDwight_292 (BE2), Amabiko_20 (BE2), Amabiko_284 (BE2), AngryGiraffe_20 (BE2), AngryGiraffe_276 (BE2), Battuta_19 (BE2), Battuta_276 (BE2), Birchlyn_16 (BE2), Birchlyn_276 (BE2), BoomerJR_20 (BE2), BoomerJR_275 (BE2), Bordeaux_19 (BE2), Bordeaux_276 (BE2), Brizzy_18 (BE2), Brizzy_276 (BE2), CeilingFan_18 (BE2), CeilingFan_284 (BE2), Daisy123_18 (BE2), Daisy123_281 (BE2), Elmer_18 (BE2), Elmer_285 (BE2), Enygma_17 (BE2), Enygma_285 (BE2), Genie2_20 (BE2), Genie2_275 (BE2), Gibbi_21 (BE2), Gibbi_292 (BE2), IchabodCrane_18 (BE2), IchabodCrane_271 (BE2), JimJam_19 (BE2), JimJam_287 (BE2), Jollison_20 (BE2), Jollison_277 (BE2), Karimac_19 (BE2), Karimac_277 (BE2), KentuckyRacer_18 (BE2), KentuckyRacer_286 (BE2), LukeCage_18 (BE2), LukeCage_281 (BE2), MindFlayer_18 (BE2), MindFlayer_270 (BE2), Mugiwara_17 (BE2), Mugiwara_284 (BE2), PumpkinSpice_19 (BE2), PumpkinSpice_283 (BE2), Quaran19_19 (BE2), Quaran19_280 (BE2), Rikishi_20 (BE2), Rikishi_281 (BE2), SaltySpitoon_19 (BE2), SaltySpitoon_279 (BE2), Sollertia_20 (BE2), Sollertia_276 (BE2), Spelly_19 (BE2), Spelly_285 (BE2), Spilled_18 (BE2), Spilled_286 (BE2), Stanimal_20 (BE2), Stanimal_275 (BE2), StarPlatinum_18 (BE2), StarPlatinum_288 (BE2), Starbow_19 (BE2), Starbow_276 (BE2), TomSawyer_19 (BE2), TomSawyer_284 (BE2), Tomas_20 (BE2), Tomas_276 (BE2), Tuesday_21 (BE2), Tuesday_289 (BE2), Wipeout_18 (BE2), Wipeout_272 (BE2), Wofford_18 (BE2), Wofford_276 (BE2), Yaboi_19 (BE2), Yaboi_280 (BE2),

Summary by clusters:

There is one cluster represented in this pham: BE2

Info for manual annotations of cluster BE2:
•Start number 7 was manually annotated 70 times for cluster BE2.

Gene Information:

Gene: AcciDwight_22 Start: 9586, Stop: 8957, Start Num: 7
Candidate Starts for AcciDwight_22:
(Start: 7 @9586 has 70 MA's), (8, 9478), (12, 9361), (15, 9337), (16, 9289), (20, 9238), (21, 9232), (24, 9094), (26, 9040), (27, 8971),

Gene: AcciDwight_292 Start: 129682, Stop: 129053, Start Num: 7
Candidate Starts for AcciDwight_292:
(Start: 7 @129682 has 70 MA's), (8, 129574), (12, 129457), (15, 129433), (16, 129385), (20, 129334), (21, 129328), (24, 129190), (26, 129136), (27, 129067),

Gene: Amabiko_284 Start: 128412, Stop: 127783, Start Num: 7
Candidate Starts for Amabiko_284:
(Start: 7 @128412 has 70 MA's), (8, 128304), (12, 128187), (15, 128163), (16, 128115), (20, 128064), (21, 128058), (24, 127920), (26, 127866), (27, 127797),

Gene: Amabiko_20 Start: 9586, Stop: 8957, Start Num: 7
Candidate Starts for Amabiko_20:
(Start: 7 @9586 has 70 MA's), (8, 9478), (12, 9361), (15, 9337), (16, 9289), (20, 9238), (21, 9232), (24, 9094), (26, 9040), (27, 8971),

Gene: AngryGiraffe_20 Start: 9496, Stop: 8924, Start Num: 7
Candidate Starts for AngryGiraffe_20:
(Start: 7 @9496 has 70 MA's), (8, 9388), (12, 9271), (15, 9247), (20, 9148), (21, 9142), (24, 9055), (26, 9001),

Gene: AngryGiraffe_276 Start: 127839, Stop: 127267, Start Num: 7
Candidate Starts for AngryGiraffe_276:
(Start: 7 @127839 has 70 MA's), (8, 127731), (12, 127614), (15, 127590), (20, 127491), (21, 127485), (24, 127398), (26, 127344),

Gene: Battuta_276 Start: 127741, Stop: 127112, Start Num: 7
Candidate Starts for Battuta_276:
(Start: 7 @127741 has 70 MA's), (8, 127633), (12, 127516), (15, 127492), (16, 127444), (20, 127393), (21, 127387), (24, 127249), (26, 127195), (27, 127126),

Gene: Battuta_19 Start: 9586, Stop: 8957, Start Num: 7
Candidate Starts for Battuta_19:
(Start: 7 @9586 has 70 MA's), (8, 9478), (12, 9361), (15, 9337), (16, 9289), (20, 9238), (21, 9232), (24, 9094), (26, 9040), (27, 8971),

Gene: Birchlyn_276 Start: 123530, Stop: 122901, Start Num: 7
Candidate Starts for Birchlyn_276:
(Start: 7 @123530 has 70 MA's), (8, 123422), (12, 123305), (15, 123281), (16, 123233), (20, 123182), (21, 123176), (24, 123038), (26, 122984), (27, 122915),

Gene: Birchlyn_16 Start: 7439, Stop: 6810, Start Num: 7
Candidate Starts for Birchlyn_16:
(Start: 7 @7439 has 70 MA's), (8, 7331), (12, 7214), (15, 7190), (16, 7142), (20, 7091), (21, 7085), (24, 6947), (26, 6893), (27, 6824),

Gene: BoomerJR_275 Start: 128284, Stop: 127712, Start Num: 7

Candidate Starts for BoomerJR_275:
(Start: 7 @128284 has 70 MA's), (8, 128176), (12, 128059), (15, 128035), (20, 127936), (21, 127930), (24, 127843), (26, 127789),

Gene: BoomerJR_20 Start: 9496, Stop: 8924, Start Num: 7
Candidate Starts for BoomerJR_20:
(Start: 7 @9496 has 70 MA's), (8, 9388), (12, 9271), (15, 9247), (20, 9148), (21, 9142), (24, 9055), (26, 9001),

Gene: Bordeaux_19 Start: 9586, Stop: 8957, Start Num: 7
Candidate Starts for Bordeaux_19:
(Start: 7 @9586 has 70 MA's), (8, 9478), (12, 9361), (15, 9337), (16, 9289), (20, 9238), (21, 9232), (24, 9094), (26, 9040), (27, 8971),

Gene: Bordeaux_276 Start: 128324, Stop: 127695, Start Num: 7
Candidate Starts for Bordeaux_276:
(Start: 7 @128324 has 70 MA's), (8, 128216), (12, 128099), (15, 128075), (16, 128027), (20, 127976), (21, 127970), (24, 127832), (26, 127778), (27, 127709),

Gene: Brizzy_276 Start: 128443, Stop: 127814, Start Num: 7
Candidate Starts for Brizzy_276:
(Start: 7 @128443 has 70 MA's), (8, 128335), (12, 128218), (15, 128194), (16, 128146), (18, 128116), (20, 128095), (21, 128089), (24, 127951), (26, 127897), (27, 127828),

Gene: Brizzy_18 Start: 9175, Stop: 8546, Start Num: 7
Candidate Starts for Brizzy_18:
(Start: 7 @9175 has 70 MA's), (8, 9067), (12, 8950), (15, 8926), (16, 8878), (18, 8848), (20, 8827), (21, 8821), (24, 8683), (26, 8629), (27, 8560),

Gene: CeilingFan_18 Start: 9197, Stop: 8568, Start Num: 7
Candidate Starts for CeilingFan_18:
(Start: 7 @9197 has 70 MA's), (8, 9089), (12, 8972), (15, 8948), (16, 8900), (20, 8849), (21, 8843), (24, 8705), (26, 8651), (27, 8582),

Gene: CeilingFan_284 Start: 129804, Stop: 129175, Start Num: 7
Candidate Starts for CeilingFan_284:
(Start: 7 @129804 has 70 MA's), (8, 129696), (12, 129579), (15, 129555), (16, 129507), (20, 129456), (21, 129450), (24, 129312), (26, 129258), (27, 129189),

Gene: Daisy123_281 Start: 129056, Stop: 128427, Start Num: 7
Candidate Starts for Daisy123_281:
(Start: 7 @129056 has 70 MA's), (8, 128948), (12, 128831), (15, 128807), (16, 128759), (20, 128708), (21, 128702), (24, 128564), (26, 128510), (27, 128441),

Gene: Daisy123_18 Start: 9196, Stop: 8567, Start Num: 7
Candidate Starts for Daisy123_18:
(Start: 7 @9196 has 70 MA's), (8, 9088), (12, 8971), (15, 8947), (16, 8899), (20, 8848), (21, 8842), (24, 8704), (26, 8650), (27, 8581),

Gene: Elmer_18 Start: 8556, Stop: 8014, Start Num: 7
Candidate Starts for Elmer_18:
(1, 8706), (2, 8658), (3, 8634), (4, 8628), (5, 8613), (Start: 7 @8556 has 70 MA's), (10, 8358), (11, 8334), (15, 8307), (16, 8259), (17, 8235), (19, 8211), (22, 8190), (23, 8139),

Gene: Elmer_285 Start: 130924, Stop: 130382, Start Num: 7
Candidate Starts for Elmer_285:
(1, 131074), (2, 131026), (3, 131002), (4, 130996), (5, 130981), (Start: 7 @130924 has 70 MA's), (10, 130726), (11, 130702), (15, 130675), (16, 130627), (17, 130603), (19, 130579), (22, 130558), (23, 130507),

Gene: Enygma_17 Start: 8779, Stop: 8213, Start Num: 7
Candidate Starts for Enygma_17:
(Start: 7 @8779 has 70 MA's), (8, 8671), (20, 8431), (21, 8425), (28, 8221),

Gene: Enygma_285 Start: 131203, Stop: 130637, Start Num: 7
Candidate Starts for Enygma_285:
(Start: 7 @131203 has 70 MA's), (8, 131095), (20, 130855), (21, 130849), (28, 130645),

Gene: Genie2_20 Start: 9496, Stop: 8924, Start Num: 7
Candidate Starts for Genie2_20:
(Start: 7 @9496 has 70 MA's), (8, 9388), (12, 9271), (15, 9247), (20, 9148), (21, 9142), (24, 9055), (26, 9001),

Gene: Genie2_275 Start: 128397, Stop: 127825, Start Num: 7
Candidate Starts for Genie2_275:
(Start: 7 @128397 has 70 MA's), (8, 128289), (12, 128172), (15, 128148), (20, 128049), (21, 128043), (24, 127956), (26, 127902),

Gene: Gibbi_292 Start: 129297, Stop: 128668, Start Num: 7
Candidate Starts for Gibbi_292:
(Start: 7 @129297 has 70 MA's), (8, 129189), (12, 129072), (15, 129048), (16, 129000), (20, 128949), (21, 128943), (24, 128805), (26, 128751), (27, 128682),

Gene: Gibbi_21 Start: 9197, Stop: 8568, Start Num: 7
Candidate Starts for Gibbi_21:
(Start: 7 @9197 has 70 MA's), (8, 9089), (12, 8972), (15, 8948), (16, 8900), (20, 8849), (21, 8843), (24, 8705), (26, 8651), (27, 8582),

Gene: IchabodCrane_18 Start: 9194, Stop: 8565, Start Num: 7
Candidate Starts for IchabodCrane_18:
(Start: 7 @9194 has 70 MA's), (8, 9086), (12, 8969), (15, 8945), (16, 8897), (20, 8846), (21, 8840), (24, 8702), (26, 8648), (27, 8579),

Gene: IchabodCrane_271 Start: 127737, Stop: 127108, Start Num: 7
Candidate Starts for IchabodCrane_271:
(Start: 7 @127737 has 70 MA's), (8, 127629), (12, 127512), (15, 127488), (16, 127440), (20, 127389), (21, 127383), (24, 127245), (26, 127191), (27, 127122),

Gene: JimJam_287 Start: 131121, Stop: 130492, Start Num: 7
Candidate Starts for JimJam_287:
(Start: 7 @131121 has 70 MA's), (8, 131013), (12, 130896), (15, 130872), (16, 130824), (20, 130773), (21, 130767), (24, 130629), (26, 130575), (27, 130506),

Gene: JimJam_19 Start: 9585, Stop: 8956, Start Num: 7
Candidate Starts for JimJam_19:

(Start: 7 @9585 has 70 MA's), (8, 9477), (12, 9360), (15, 9336), (16, 9288), (20, 9237), (21, 9231), (24, 9093), (26, 9039), (27, 8970),

Gene: Jollison_277 Start: 128261, Stop: 127632, Start Num: 7
Candidate Starts for Jollison_277:
(Start: 7 @128261 has 70 MA's), (8, 128153), (12, 128036), (15, 128012), (16, 127964), (20, 127913), (21, 127907), (24, 127769), (26, 127715), (27, 127646),

Gene: Jollison_20 Start: 9586, Stop: 8957, Start Num: 7
Candidate Starts for Jollison_20:
(Start: 7 @9586 has 70 MA's), (8, 9478), (12, 9361), (15, 9337), (16, 9289), (20, 9238), (21, 9232), (24, 9094), (26, 9040), (27, 8971),

Gene: Karimac_277 Start: 128907, Stop: 128278, Start Num: 7
Candidate Starts for Karimac_277:
(Start: 7 @128907 has 70 MA's), (8, 128799), (12, 128682), (15, 128658), (16, 128610), (20, 128559), (21, 128553), (24, 128415), (26, 128361), (27, 128292),

Gene: Karimac_19 Start: 9588, Stop: 8959, Start Num: 7
Candidate Starts for Karimac_19:
(Start: 7 @9588 has 70 MA's), (8, 9480), (12, 9363), (15, 9339), (16, 9291), (20, 9240), (21, 9234), (24, 9096), (26, 9042), (27, 8973),

Gene: KentuckyRacer_286 Start: 130649, Stop: 130020, Start Num: 7
Candidate Starts for KentuckyRacer_286:
(Start: 7 @130649 has 70 MA's), (8, 130541), (12, 130424), (15, 130400), (16, 130352), (20, 130301), (21, 130295), (24, 130157), (26, 130103), (27, 130034),

Gene: KentuckyRacer_18 Start: 9198, Stop: 8569, Start Num: 7
Candidate Starts for KentuckyRacer_18:
(Start: 7 @9198 has 70 MA's), (8, 9090), (12, 8973), (15, 8949), (16, 8901), (20, 8850), (21, 8844), (24, 8706), (26, 8652), (27, 8583),

Gene: LukeCage_281 Start: 130065, Stop: 129493, Start Num: 7
Candidate Starts for LukeCage_281:
(Start: 7 @130065 has 70 MA's), (8, 129957), (9, 129888), (11, 129843), (14, 129819), (20, 129717), (21, 129711), (24, 129624), (26, 129570), (27, 129504),

Gene: LukeCage_18 Start: 9161, Stop: 8589, Start Num: 7
Candidate Starts for LukeCage_18:
(Start: 7 @9161 has 70 MA's), (8, 9053), (9, 8984), (11, 8939), (14, 8915), (20, 8813), (21, 8807), (24, 8720), (26, 8666), (27, 8600),

Gene: MindFlayer_270 Start: 127256, Stop: 126627, Start Num: 7
Candidate Starts for MindFlayer_270:
(Start: 7 @127256 has 70 MA's), (8, 127148), (12, 127031), (15, 127007), (16, 126959), (20, 126908), (21, 126902), (24, 126764), (26, 126710), (27, 126641),

Gene: MindFlayer_18 Start: 9196, Stop: 8567, Start Num: 7
Candidate Starts for MindFlayer_18:
(Start: 7 @9196 has 70 MA's), (8, 9088), (12, 8971), (15, 8947), (16, 8899), (20, 8848), (21, 8842), (24, 8704), (26, 8650), (27, 8581),

Gene: Mugiwara_17 Start: 8795, Stop: 8211, Start Num: 7
Candidate Starts for Mugiwara_17:
(Start: 7 @8795 has 70 MA's), (9, 8618), (11, 8573), (15, 8546), (16, 8498), (20, 8447), (21, 8441), (26, 8288), (27, 8222),

Gene: Mugiwara_284 Start: 130180, Stop: 129596, Start Num: 7
Candidate Starts for Mugiwara_284:
(Start: 7 @130180 has 70 MA's), (9, 130003), (11, 129958), (15, 129931), (16, 129883), (20, 129832), (21, 129826), (26, 129673), (27, 129607),

Gene: PumpkinSpice_19 Start: 9586, Stop: 8957, Start Num: 7
Candidate Starts for PumpkinSpice_19:
(Start: 7 @9586 has 70 MA's), (8, 9478), (12, 9361), (15, 9337), (16, 9289), (20, 9238), (21, 9232), (24, 9094), (26, 9040), (27, 8971),

Gene: PumpkinSpice_283 Start: 129478, Stop: 128849, Start Num: 7
Candidate Starts for PumpkinSpice_283:
(Start: 7 @129478 has 70 MA's), (8, 129370), (12, 129253), (15, 129229), (16, 129181), (20, 129130), (21, 129124), (24, 128986), (26, 128932), (27, 128863),

Gene: Quaran19_280 Start: 128768, Stop: 128139, Start Num: 7
Candidate Starts for Quaran19_280:
(Start: 7 @128768 has 70 MA's), (8, 128660), (12, 128543), (15, 128519), (16, 128471), (20, 128420), (21, 128414), (24, 128276), (26, 128222), (27, 128153),

Gene: Quaran19_19 Start: 9586, Stop: 8957, Start Num: 7
Candidate Starts for Quaran19_19:
(Start: 7 @9586 has 70 MA's), (8, 9478), (12, 9361), (15, 9337), (16, 9289), (20, 9238), (21, 9232), (24, 9094), (26, 9040), (27, 8971),

Gene: Rikishi_281 Start: 129379, Stop: 128750, Start Num: 7
Candidate Starts for Rikishi_281:
(Start: 7 @129379 has 70 MA's), (8, 129271), (12, 129154), (15, 129130), (16, 129082), (20, 129031), (21, 129025), (24, 128887), (26, 128833), (27, 128764),

Gene: Rikishi_20 Start: 9306, Stop: 8677, Start Num: 7
Candidate Starts for Rikishi_20:
(Start: 7 @9306 has 70 MA's), (8, 9198), (12, 9081), (15, 9057), (16, 9009), (20, 8958), (21, 8952), (24, 8814), (26, 8760), (27, 8691),

Gene: SaltySpitoon_279 Start: 127850, Stop: 127221, Start Num: 7
Candidate Starts for SaltySpitoon_279:
(Start: 7 @127850 has 70 MA's), (8, 127742), (12, 127625), (15, 127601), (16, 127553), (20, 127502), (21, 127496), (24, 127358), (26, 127304), (27, 127235),

Gene: SaltySpitoon_19 Start: 9586, Stop: 8957, Start Num: 7
Candidate Starts for SaltySpitoon_19:
(Start: 7 @9586 has 70 MA's), (8, 9478), (12, 9361), (15, 9337), (16, 9289), (20, 9238), (21, 9232), (24, 9094), (26, 9040), (27, 8971),

Gene: Sollertia_276 Start: 128386, Stop: 127814, Start Num: 7
Candidate Starts for Sollertia_276:

(Start: 7 @128386 has 70 MA's), (8, 128278), (12, 128161), (15, 128137), (20, 128038), (21, 128032), (24, 127945), (26, 127891),

Gene: Sollertia_20 Start: 9496, Stop: 8924, Start Num: 7
Candidate Starts for Sollertia_20:
(Start: 7 @9496 has 70 MA's), (8, 9388), (12, 9271), (15, 9247), (20, 9148), (21, 9142), (24, 9055), (26, 9001),

Gene: Spelly_285 Start: 128390, Stop: 127761, Start Num: 7
Candidate Starts for Spelly_285:
(Start: 7 @128390 has 70 MA's), (8, 128282), (12, 128165), (15, 128141), (16, 128093), (20, 128042), (21, 128036), (24, 127898), (26, 127844), (27, 127775),

Gene: Spelly_19 Start: 9586, Stop: 8957, Start Num: 7
Candidate Starts for Spelly_19:
(Start: 7 @9586 has 70 MA's), (8, 9478), (12, 9361), (15, 9337), (16, 9289), (20, 9238), (21, 9232), (24, 9094), (26, 9040), (27, 8971),

Gene: Spilled_18 Start: 9196, Stop: 8567, Start Num: 7
Candidate Starts for Spilled_18:
(Start: 7 @9196 has 70 MA's), (8, 9088), (12, 8971), (15, 8947), (16, 8899), (20, 8848), (21, 8842), (24, 8704), (26, 8650), (27, 8581),

Gene: Spilled_286 Start: 129665, Stop: 129036, Start Num: 7
Candidate Starts for Spilled_286:
(Start: 7 @129665 has 70 MA's), (8, 129557), (12, 129440), (15, 129416), (16, 129368), (20, 129317), (21, 129311), (24, 129173), (26, 129119), (27, 129050),

Gene: Stanimal_20 Start: 9496, Stop: 8924, Start Num: 7
Candidate Starts for Stanimal_20:
(Start: 7 @9496 has 70 MA's), (8, 9388), (12, 9271), (15, 9247), (20, 9148), (21, 9142), (24, 9055), (26, 9001),

Gene: Stanimal_275 Start: 128770, Stop: 128198, Start Num: 7
Candidate Starts for Stanimal_275:
(Start: 7 @128770 has 70 MA's), (8, 128662), (12, 128545), (15, 128521), (20, 128422), (21, 128416), (24, 128329), (26, 128275),

Gene: StarPlatinum_288 Start: 130899, Stop: 130327, Start Num: 7
Candidate Starts for StarPlatinum_288:
(Start: 7 @130899 has 70 MA's), (8, 130791), (9, 130722), (11, 130677), (12, 130674), (15, 130650), (20, 130551), (21, 130545), (26, 130404), (27, 130338),

Gene: StarPlatinum_18 Start: 9212, Stop: 8640, Start Num: 7
Candidate Starts for StarPlatinum_18:
(Start: 7 @9212 has 70 MA's), (8, 9104), (9, 9035), (11, 8990), (12, 8987), (15, 8963), (20, 8864), (21, 8858), (26, 8717), (27, 8651),

Gene: Starbow_276 Start: 128434, Stop: 127805, Start Num: 7
Candidate Starts for Starbow_276:
(Start: 7 @128434 has 70 MA's), (8, 128326), (12, 128209), (15, 128185), (16, 128137), (20, 128086), (21, 128080), (24, 127942), (26, 127888), (27, 127819),

Gene: Starbow_19 Start: 9586, Stop: 8957, Start Num: 7
Candidate Starts for Starbow_19:
(Start: 7 @9586 has 70 MA's), (8, 9478), (12, 9361), (15, 9337), (16, 9289), (20, 9238), (21, 9232), (24, 9094), (26, 9040), (27, 8971),

Gene: TomSawyer_284 Start: 130958, Stop: 130329, Start Num: 7
Candidate Starts for TomSawyer_284:
(Start: 7 @130958 has 70 MA's), (8, 130850), (12, 130733), (15, 130709), (16, 130661), (20, 130610), (21, 130604), (24, 130466), (26, 130412), (27, 130343),

Gene: TomSawyer_19 Start: 9179, Stop: 8550, Start Num: 7
Candidate Starts for TomSawyer_19:
(Start: 7 @9179 has 70 MA's), (8, 9071), (12, 8954), (15, 8930), (16, 8882), (20, 8831), (21, 8825), (24, 8687), (26, 8633), (27, 8564),

Gene: Tomas_20 Start: 9825, Stop: 9289, Start Num: 7
Candidate Starts for Tomas_20:
(6, 9840), (Start: 7 @9825 has 70 MA's), (13, 9588), (21, 9471), (25, 9378),

Gene: Tomas_276 Start: 131532, Stop: 130996, Start Num: 7
Candidate Starts for Tomas_276:
(6, 131547), (Start: 7 @131532 has 70 MA's), (13, 131295), (21, 131178), (25, 131085),

Gene: Tuesday_289 Start: 128834, Stop: 128205, Start Num: 7
Candidate Starts for Tuesday_289:
(Start: 7 @128834 has 70 MA's), (8, 128726), (12, 128609), (15, 128585), (16, 128537), (20, 128486), (21, 128480), (24, 128342), (26, 128288), (27, 128219),

Gene: Tuesday_21 Start: 9586, Stop: 8957, Start Num: 7
Candidate Starts for Tuesday_21:
(Start: 7 @9586 has 70 MA's), (8, 9478), (12, 9361), (15, 9337), (16, 9289), (20, 9238), (21, 9232), (24, 9094), (26, 9040), (27, 8971),

Gene: Wipeout_18 Start: 9201, Stop: 8572, Start Num: 7
Candidate Starts for Wipeout_18:
(Start: 7 @9201 has 70 MA's), (8, 9093), (12, 8976), (15, 8952), (16, 8904), (20, 8853), (21, 8847), (24, 8709), (26, 8655), (27, 8586),

Gene: Wipeout_272 Start: 129932, Stop: 129303, Start Num: 7
Candidate Starts for Wipeout_272:
(Start: 7 @129932 has 70 MA's), (8, 129824), (12, 129707), (15, 129683), (16, 129635), (20, 129584), (21, 129578), (24, 129440), (26, 129386), (27, 129317),

Gene: Wofford_276 Start: 130354, Stop: 129812, Start Num: 7
Candidate Starts for Wofford_276:
(1, 130504), (2, 130456), (3, 130432), (4, 130426), (5, 130411), (Start: 7 @130354 has 70 MA's), (10, 130156), (11, 130132), (15, 130105), (16, 130057), (19, 130009), (20, 130006), (22, 129988), (23, 129937),

Gene: Wofford_18 Start: 8561, Stop: 8019, Start Num: 7
Candidate Starts for Wofford_18:
(1, 8711), (2, 8663), (3, 8639), (4, 8633), (5, 8618), (Start: 7 @8561 has 70 MA's), (10, 8363), (11, 8339), (15, 8312), (16, 8264), (19, 8216), (20, 8213), (22, 8195), (23, 8144),

Gene: Yaboi_280 Start: 128314, Stop: 127742, Start Num: 7
Candidate Starts for Yaboi_280:
(Start: 7 @128314 has 70 MA's), (8, 128206), (12, 128089), (15, 128065), (20, 127966), (21, 127960), (24, 127873), (26, 127819),

Gene: Yaboi_19 Start: 9496, Stop: 8924, Start Num: 7
Candidate Starts for Yaboi_19:
(Start: 7 @9496 has 70 MA's), (8, 9388), (12, 9271), (15, 9247), (20, 9148), (21, 9142), (24, 9055), (26, 9001),