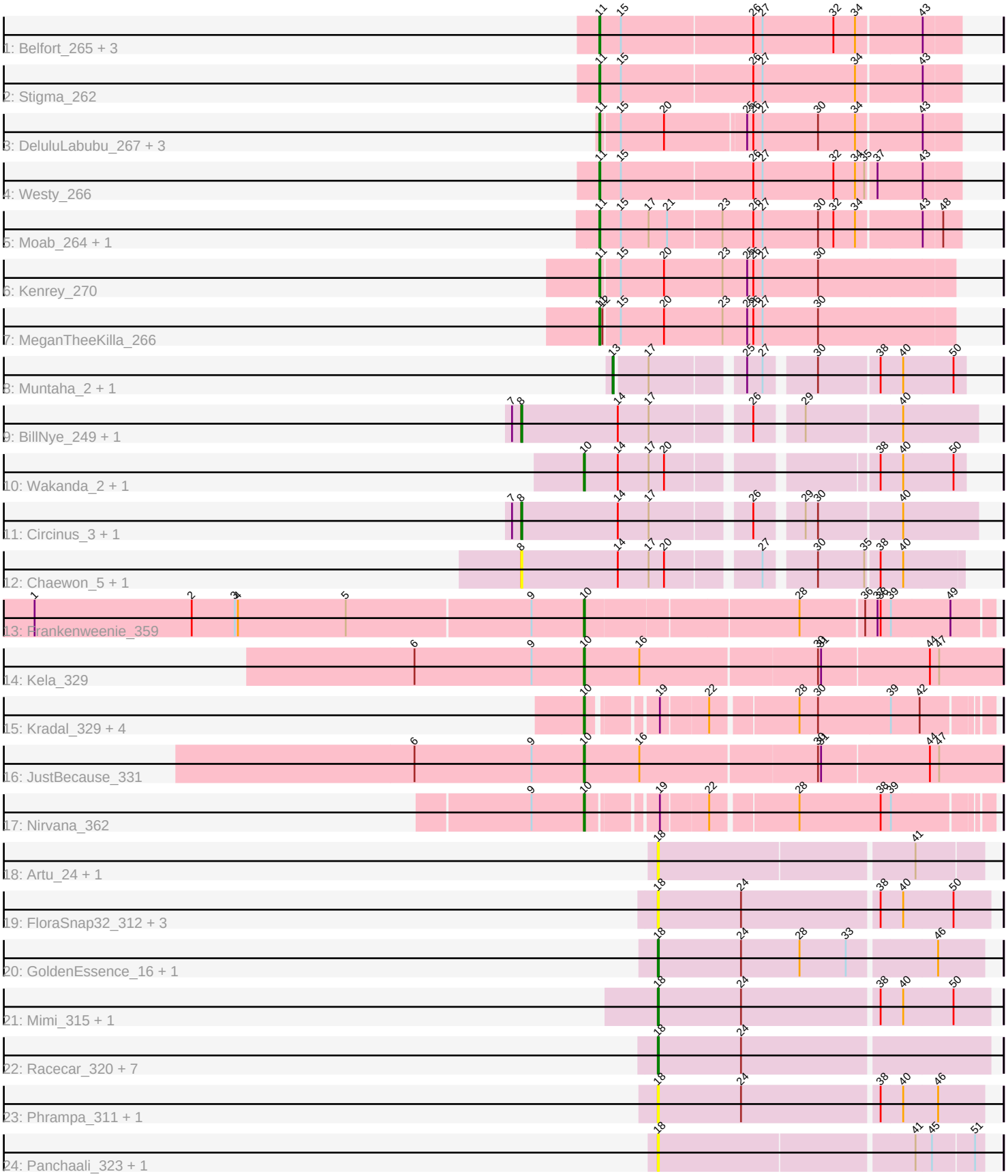
Pham 283867


1: Belfort_265 + 3
2: Stigma_262
3: DeluluLabubu_267 + 3
4: Westy_266
5: Moab_264 + 1
6: Kenrey_270
7: MeganTheeKilla_266
8: Muntaha_2 + 1
9: BillNye_249 + 1
10: Wakanda_2 + 1
11: Circinus_3 + 1
12: Chaewon_5 + 1
13: Frankenweenie_359
14: Kela_329
15: Kradal_329 + 4
16: JustBecause_331
17: Nirvana_362
18: Artu_24 + 1
19: FloraSnap32_312 + 3
20: GoldenEssence_16 + 1
21: Mimi_315 + 1
22: Racecar_320 + 7
23: Phrampa_311 + 1
24: Panchaali_323 + 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 283867 Report

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

Pham number 283867 has 55 members, 19 are drafts.

Phages represented in each track:
• Track 1 : Belfort_265, Comrade_260, Karp_265, SparkleGoddess_264
• Track 2 : Stigma_262
• Track 3 : DeluluLabubu_267, Gilson_264, Maupel_270, Francob_267
• Track 4 : Westy_266
• Track 5 : Moab_264, Patelgo_267
• Track 6 : Kenrey_270
• Track 7 : MeganTheeKilla_266
• Track 8 : Muntaha_2, Muntaha_265
• Track 9 : BillNye_249, BillNye_3
• Track 10 : Wakanda_2, Wakanda_261
• Track 11 : Circinus_3, Circinus_248
• Track 12 : Chaewon_5, Chaewon_254
• Track 13 : Frankenweenie_359
• Track 14 : Kela_329
• Track 15 : Kradal_329, Quantum_327, EhyElimayoE_332, Satis_329, Sarkar_343
• Track 16 : JustBecause_331
• Track 17 : Nirvana_362
• Track 18 : Artu_24, Artu_311
• Track 19 : FloraSnap32_312, Patbob_28, Patbob_318, FloraSnap32_27
• Track 20 : GoldenEssence_16, GoldenEssence_297
• Track 21 : Mimi_315, Mimi_30
• Track 22 : Racecar_320, Bloom_319, Talia1610_30, Talia1610_316, FrostedClock_32, Bloom_32, Racecar_31, FrostedClock_317
• Track 23 : Phrampa_311, Phrampa_26
• Track 24 : Panchaali_323, Panchaali_24

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

The start number called the most often in the published annotations is 11, it was called in 12 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Belfort_265, Comrade_260, DeluluLabubu_267, Francob_267, Gilson_264, Karp_265, Kenrey_270, Maupel_270, MeganTheeKilla_266, Moab_264,

Patelgo_267, SparkleGoddess_264, Stigma_262, Westy_266,

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

Genes that do not have the "Most Annotated" start:
• Artu_24, Artu_311, BillNye_249, BillNye_3, Bloom_319, Bloom_32, Chaewon_254, Chaewon_5, Circinus_248, Circinus_3, EhyElimayoE_332, FloraSnap32_27, FloraSnap32_312, Frankenweenie_359, FrostedClock_317, FrostedClock_32, GoldenEssence_16, GoldenEssence_297, JustBecause_331, Kela_329, Kradal_329, Mimi_30, Mimi_315, Muntaha_2, Muntaha_265, Nirvana_362, Panchaali_24, Panchaali_323, Patbob_28, Patbob_318, Phrampa_26, Phrampa_311, Quantum_327, Racecar_31, Racecar_320, Sarkar_343, Satis_329, Talia1610_30, Talia1610_316, Wakanda_2, Wakanda_261,

Summary by start number:

Start 8:
• Found in 6 of 55 (10.9%) of genes in pham
• Manual Annotations of this start: 4 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BillNye_249 (BK2), BillNye_3 (BK2), Chaewon_254 (BK2), Chaewon_5 (BK2), Circinus_248 (BK2), Circinus_3 (BK2),

Start 10:
• Found in 11 of 55 (20.0%) of genes in pham
• Manual Annotations of this start: 10 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EhyElimayoE_332 (BM), Frankenweenie_359 (BM), JustBecause_331 (BM), Kela_329 (BM), Kradal_329 (BM), Nirvana_362 (BM), Quantum_327 (BM), Sarkar_343 (BM), Satis_329 (BM), Wakanda_2 (BK2), Wakanda_261 (BK2),

Start 11:
• Found in 14 of 55 (25.5%) of genes in pham
• Manual Annotations of this start: 12 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Belfort_265 (BK1), Comrade_260 (BK1), DeluluLababu_267 (BK1), Francob_267 (BK1), Gilson_264 (BK1), Karp_265 (BK1), Kenrey_270 (BK1), Maupel_270 (BK1), MeganTheeKilla_266 (BK1), Moab_264 (BK1), Patelgo_267 (BK1), SparkleGoddess_264 (BK1), Stigma_262 (BK1), Westy_266 (BK1),

Start 13:
• Found in 2 of 55 (3.6%) of genes in pham
• Manual Annotations of this start: 2 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Muntaha_2 (BK2), Muntaha_265 (BK2),

Start 18:
• Found in 22 of 55 (40.0%) of genes in pham
• Manual Annotations of this start: 8 of 36
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Artu_24 (FC), Artu_311 (FC), Bloom_319 (FC), Bloom_32 (FC), FloraSnap32_27 (FC), FloraSnap32_312 (FC), FrostedClock_317 (FC), FrostedClock_32 (FC), GoldenEssence_16 (FC), GoldenEssence_297 (FC), Mimi_30 (FC), Mimi_315 (FC), Panchaali_24 (FC), Panchaali_323 (FC), Patbob_28 (FC), Patbob_318 (FC), Phrampa_26 (FC), Phrampa_311 (FC), Racecar_31 (FC), Racecar_320 (FC), Talia1610_30 (FC), Talia1610_316 (FC),

Summary by clusters:

There are 4 clusters represented in this pham: BM, FC, BK1, BK2,

Info for manual annotations of cluster BK1:
•Start number 11 was manually annotated 12 times for cluster BK1.

Info for manual annotations of cluster BK2:
•Start number 8 was manually annotated 4 times for cluster BK2.
•Start number 10 was manually annotated 2 times for cluster BK2.
•Start number 13 was manually annotated 2 times for cluster BK2.

Info for manual annotations of cluster BM:
•Start number 10 was manually annotated 8 times for cluster BM.

Info for manual annotations of cluster FC:
•Start number 18 was manually annotated 8 times for cluster FC.

Gene Information:

Gene: Artu_24 Start: 9828, Stop: 10130, Start Num: 18
Candidate Starts for Artu_24:
(Start: 18 @9828 has 8 MA's), (41, 10068),

Gene: Artu_311 Start: 188982, Stop: 189284, Start Num: 18
Candidate Starts for Artu_311:
(Start: 18 @188982 has 8 MA's), (41, 189222),

Gene: Belfort_265 Start: 126637, Stop: 126978, Start Num: 11
Candidate Starts for Belfort_265:
(Start: 11 @126637 has 12 MA's), (15, 126658), (26, 126784), (27, 126793), (32, 126862), (34, 126883), (43, 126943),

Gene: BillNye_249 Start: 125861, Stop: 126271, Start Num: 8
Candidate Starts for BillNye_249:
(7, 125852), (Start: 8 @125861 has 4 MA's), (14, 125954), (17, 125984), (26, 126071), (29, 126110), (40, 126200),

Gene: BillNye_3 Start: 1039, Stop: 1449, Start Num: 8
Candidate Starts for BillNye_3:
(7, 1030), (Start: 8 @1039 has 4 MA's), (14, 1132), (17, 1162), (26, 1249), (29, 1288), (40, 1378),

Gene: Bloom_319 Start: 187552, Stop: 187866, Start Num: 18

Candidate Starts for Bloom_319:
(Start: 18 @187552 has 8 MA's), (24, 187633),

Gene: Bloom_32 Start: 14077, Stop: 14391, Start Num: 18
Candidate Starts for Bloom_32:
(Start: 18 @14077 has 8 MA's), (24, 14158),

Gene: Chaewon_5 Start: 1041, Stop: 1436, Start Num: 8
Candidate Starts for Chaewon_5:
(Start: 8 @1041 has 4 MA's), (14, 1134), (17, 1164), (20, 1179), (27, 1260), (30, 1302), (35, 1347), (38, 1359), (40, 1380),

Gene: Chaewon_254 Start: 126768, Stop: 127163, Start Num: 8
Candidate Starts for Chaewon_254:
(Start: 8 @126768 has 4 MA's), (14, 126861), (17, 126891), (20, 126906), (27, 126987), (30, 127029), (35, 127074), (38, 127086), (40, 127107),

Gene: Circinus_3 Start: 1078, Stop: 1488, Start Num: 8
Candidate Starts for Circinus_3:
(7, 1069), (Start: 8 @1078 has 4 MA's), (14, 1171), (17, 1201), (26, 1288), (29, 1327), (30, 1339), (40, 1417),

Gene: Circinus_248 Start: 125405, Stop: 125815, Start Num: 8
Candidate Starts for Circinus_248:
(7, 125396), (Start: 8 @125405 has 4 MA's), (14, 125498), (17, 125528), (26, 125615), (29, 125654), (30, 125666), (40, 125744),

Gene: Comrade_260 Start: 126776, Stop: 127117, Start Num: 11
Candidate Starts for Comrade_260:
(Start: 11 @126776 has 12 MA's), (15, 126797), (26, 126923), (27, 126932), (32, 127001), (34, 127022), (43, 127082),

Gene: DeluluLabubu_267 Start: 126437, Stop: 126772, Start Num: 11
Candidate Starts for DeluluLabubu_267:
(Start: 11 @126437 has 12 MA's), (15, 126455), (20, 126497), (25, 126572), (26, 126578), (27, 126587), (30, 126641), (34, 126677), (43, 126737),

Gene: EhyElimayoE_332 Start: 178762, Stop: 178415, Start Num: 10
Candidate Starts for EhyElimayoE_332:
(Start: 10 @178762 has 10 MA's), (19, 178708), (22, 178666), (28, 178588), (30, 178570), (39, 178501), (42, 178474),

Gene: FloraSnap32_312 Start: 186646, Stop: 186960, Start Num: 18
Candidate Starts for FloraSnap32_312:
(Start: 18 @186646 has 8 MA's), (24, 186727), (38, 186856), (40, 186877), (50, 186925),

Gene: FloraSnap32_27 Start: 12508, Stop: 12822, Start Num: 18
Candidate Starts for FloraSnap32_27:
(Start: 18 @12508 has 8 MA's), (24, 12589), (38, 12718), (40, 12739), (50, 12787),

Gene: Francob_267 Start: 126631, Stop: 126966, Start Num: 11
Candidate Starts for Francob_267:

(Start: 11 @126631 has 12 MA's), (15, 126649), (20, 126691), (25, 126766), (26, 126772), (27, 126781), (30, 126835), (34, 126871), (43, 126931),

Gene: Frankenweenie_359 Start: 192379, Stop: 192002, Start Num: 10
Candidate Starts for Frankenweenie_359:
(1, 192910), (2, 192757), (3, 192715), (4, 192712), (5, 192607), (9, 192430), (Start: 10 @192379 has 10 MA's), (28, 192181), (36, 192121), (37, 192109), (38, 192106), (39, 192097), (49, 192040),

Gene: FrostedClock_32 Start: 13635, Stop: 13949, Start Num: 18
Candidate Starts for FrostedClock_32:
(Start: 18 @13635 has 8 MA's), (24, 13716),

Gene: FrostedClock_317 Start: 187435, Stop: 187749, Start Num: 18
Candidate Starts for FrostedClock_317:
(Start: 18 @187435 has 8 MA's), (24, 187516),

Gene: Gilson_264 Start: 126168, Stop: 126503, Start Num: 11
Candidate Starts for Gilson_264:
(Start: 11 @126168 has 12 MA's), (15, 126186), (20, 126228), (25, 126303), (26, 126309), (27, 126318), (30, 126372), (34, 126408), (43, 126468),

Gene: GoldenEssence_16 Start: 7886, Stop: 8194, Start Num: 18
Candidate Starts for GoldenEssence_16:
(Start: 18 @7886 has 8 MA's), (24, 7967), (28, 8024), (33, 8069), (46, 8150),

Gene: GoldenEssence_297 Start: 178439, Stop: 178747, Start Num: 18
Candidate Starts for GoldenEssence_297:
(Start: 18 @178439 has 8 MA's), (24, 178520), (28, 178577), (33, 178622), (46, 178703),

Gene: JustBecause_331 Start: 175882, Stop: 175484, Start Num: 10
Candidate Starts for JustBecause_331:
(6, 176047), (9, 175933), (Start: 10 @175882 has 10 MA's), (16, 175828), (30, 175660), (31, 175657), (44, 175555), (47, 175546),

Gene: Karp_265 Start: 128234, Stop: 128575, Start Num: 11
Candidate Starts for Karp_265:
(Start: 11 @128234 has 12 MA's), (15, 128255), (26, 128381), (27, 128390), (32, 128459), (34, 128480), (43, 128540),

Gene: Kela_329 Start: 176783, Stop: 176385, Start Num: 10
Candidate Starts for Kela_329:
(6, 176948), (9, 176834), (Start: 10 @176783 has 10 MA's), (16, 176729), (30, 176561), (31, 176558), (44, 176456), (47, 176447),

Gene: Kenrey_270 Start: 127380, Stop: 127718, Start Num: 11
Candidate Starts for Kenrey_270:
(Start: 11 @127380 has 12 MA's), (15, 127398), (20, 127440), (23, 127497), (25, 127521), (26, 127527), (27, 127536), (30, 127590),

Gene: Kradal_329 Start: 178759, Stop: 178412, Start Num: 10
Candidate Starts for Kradal_329:
(Start: 10 @178759 has 10 MA's), (19, 178705), (22, 178663), (28, 178585), (30, 178567), (39, 178498), (42, 178471),

Gene: Maupel_270 Start: 125361, Stop: 125696, Start Num: 11
Candidate Starts for Maupel_270:
(Start: 11 @125361 has 12 MA's), (15, 125379), (20, 125421), (25, 125496), (26, 125502), (27, 125511), (30, 125565), (34, 125601), (43, 125661),

Gene: MeganTheeKilla_266 Start: 125979, Stop: 126317, Start Num: 11
Candidate Starts for MeganTheeKilla_266:
(Start: 11 @125979 has 12 MA's), (12, 125982), (15, 125997), (20, 126039), (23, 126096), (25, 126120), (26, 126126), (27, 126135), (30, 126189),

Gene: Mimi_315 Start: 186189, Stop: 186503, Start Num: 18
Candidate Starts for Mimi_315:
(Start: 18 @186189 has 8 MA's), (24, 186270), (38, 186399), (40, 186420), (50, 186468),

Gene: Mimi_30 Start: 13529, Stop: 13843, Start Num: 18
Candidate Starts for Mimi_30:
(Start: 18 @13529 has 8 MA's), (24, 13610), (38, 13739), (40, 13760), (50, 13808),

Gene: Moab_264 Start: 127015, Stop: 127356, Start Num: 11
Candidate Starts for Moab_264:
(Start: 11 @127015 has 12 MA's), (15, 127036), (17, 127063), (21, 127081), (23, 127132), (26, 127162), (27, 127171), (30, 127225), (32, 127240), (34, 127261), (43, 127321), (48, 127339),

Gene: Muntaha_2 Start: 749, Stop: 1054, Start Num: 13
Candidate Starts for Muntaha_2:
(Start: 13 @749 has 2 MA's), (17, 779), (25, 860), (27, 875), (30, 917), (38, 974), (40, 995), (50, 1043),

Gene: Muntaha_265 Start: 126426, Stop: 126731, Start Num: 13
Candidate Starts for Muntaha_265:
(Start: 13 @126426 has 2 MA's), (17, 126456), (25, 126537), (27, 126552), (30, 126594), (38, 126651), (40, 126672), (50, 126720),

Gene: Nirvana_362 Start: 195822, Stop: 195472, Start Num: 10
Candidate Starts for Nirvana_362:
(9, 195873), (Start: 10 @195822 has 10 MA's), (19, 195765), (22, 195723), (28, 195645), (38, 195567), (39, 195558),

Gene: Panchaali_323 Start: 188816, Stop: 189118, Start Num: 18
Candidate Starts for Panchaali_323:
(Start: 18 @188816 has 8 MA's), (41, 189056), (45, 189071), (51, 189110),

Gene: Panchaali_24 Start: 9758, Stop: 10060, Start Num: 18
Candidate Starts for Panchaali_24:
(Start: 18 @9758 has 8 MA's), (41, 9998), (45, 10013), (51, 10052),

Gene: Patbob_28 Start: 13693, Stop: 14007, Start Num: 18
Candidate Starts for Patbob_28:
(Start: 18 @13693 has 8 MA's), (24, 13774), (38, 13903), (40, 13924), (50, 13972),

Gene: Patbob_318 Start: 189152, Stop: 189466, Start Num: 18
Candidate Starts for Patbob_318:
(Start: 18 @189152 has 8 MA's), (24, 189233), (38, 189362), (40, 189383), (50, 189431),

Gene: Patelgo_267 Start: 127948, Stop: 128289, Start Num: 11
Candidate Starts for Patelgo_267:
(Start: 11 @127948 has 12 MA's), (15, 127969), (17, 127996), (21, 128014), (23, 128065), (26, 128095), (27, 128104), (30, 128158), (32, 128173), (34, 128194), (43, 128254), (48, 128272),

Gene: Phrampa_311 Start: 187978, Stop: 188286, Start Num: 18
Candidate Starts for Phrampa_311:
(Start: 18 @187978 has 8 MA's), (24, 188059), (38, 188188), (40, 188209), (46, 188242),

Gene: Phrampa_26 Start: 11607, Stop: 11915, Start Num: 18
Candidate Starts for Phrampa_26:
(Start: 18 @11607 has 8 MA's), (24, 11688), (38, 11817), (40, 11838), (46, 11871),

Gene: Quantum_327 Start: 178753, Stop: 178406, Start Num: 10
Candidate Starts for Quantum_327:
(Start: 10 @178753 has 10 MA's), (19, 178699), (22, 178657), (28, 178579), (30, 178561), (39, 178492), (42, 178465),

Gene: Racecar_320 Start: 187830, Stop: 188144, Start Num: 18
Candidate Starts for Racecar_320:
(Start: 18 @187830 has 8 MA's), (24, 187911),

Gene: Racecar_31 Start: 14121, Stop: 14435, Start Num: 18
Candidate Starts for Racecar_31:
(Start: 18 @14121 has 8 MA's), (24, 14202),

Gene: Sarkar_343 Start: 178803, Stop: 178456, Start Num: 10
Candidate Starts for Sarkar_343:
(Start: 10 @178803 has 10 MA's), (19, 178749), (22, 178707), (28, 178629), (30, 178611), (39, 178542), (42, 178515),

Gene: Satis_329 Start: 179094, Stop: 178747, Start Num: 10
Candidate Starts for Satis_329:
(Start: 10 @179094 has 10 MA's), (19, 179040), (22, 178998), (28, 178920), (30, 178902), (39, 178833), (42, 178806),

Gene: SparkleGoddess_264 Start: 127503, Stop: 127844, Start Num: 11
Candidate Starts for SparkleGoddess_264:
(Start: 11 @127503 has 12 MA's), (15, 127524), (26, 127650), (27, 127659), (32, 127728), (34, 127749), (43, 127809),

Gene: Stigma_262 Start: 127216, Stop: 127557, Start Num: 11
Candidate Starts for Stigma_262:
(Start: 11 @127216 has 12 MA's), (15, 127237), (26, 127363), (27, 127372), (34, 127462), (43, 127522),

Gene: Talia1610_30 Start: 13543, Stop: 13857, Start Num: 18
Candidate Starts for Talia1610_30:
(Start: 18 @13543 has 8 MA's), (24, 13624),

Gene: Talia1610_316 Start: 188015, Stop: 188329, Start Num: 18
Candidate Starts for Talia1610_316:

(Start: 18 @188015 has 8 MA's), (24, 188096),

Gene: Wakanda_2 Start: 866, Stop: 1201, Start Num: 10
Candidate Starts for Wakanda_2:
(Start: 10 @866 has 10 MA's), (14, 899), (17, 929), (20, 944), (38, 1121), (40, 1142), (50, 1190),

Gene: Wakanda_261 Start: 125707, Stop: 126042, Start Num: 10
Candidate Starts for Wakanda_261:
(Start: 10 @125707 has 10 MA's), (14, 125740), (17, 125770), (20, 125785), (38, 125962), (40, 125983), (50, 126031),

Gene: Westy_266 Start: 128040, Stop: 128381, Start Num: 11
Candidate Starts for Westy_266:
(Start: 11 @128040 has 12 MA's), (15, 128061), (26, 128187), (27, 128196), (32, 128265), (34, 128286), (35, 128295), (37, 128304), (43, 128346),