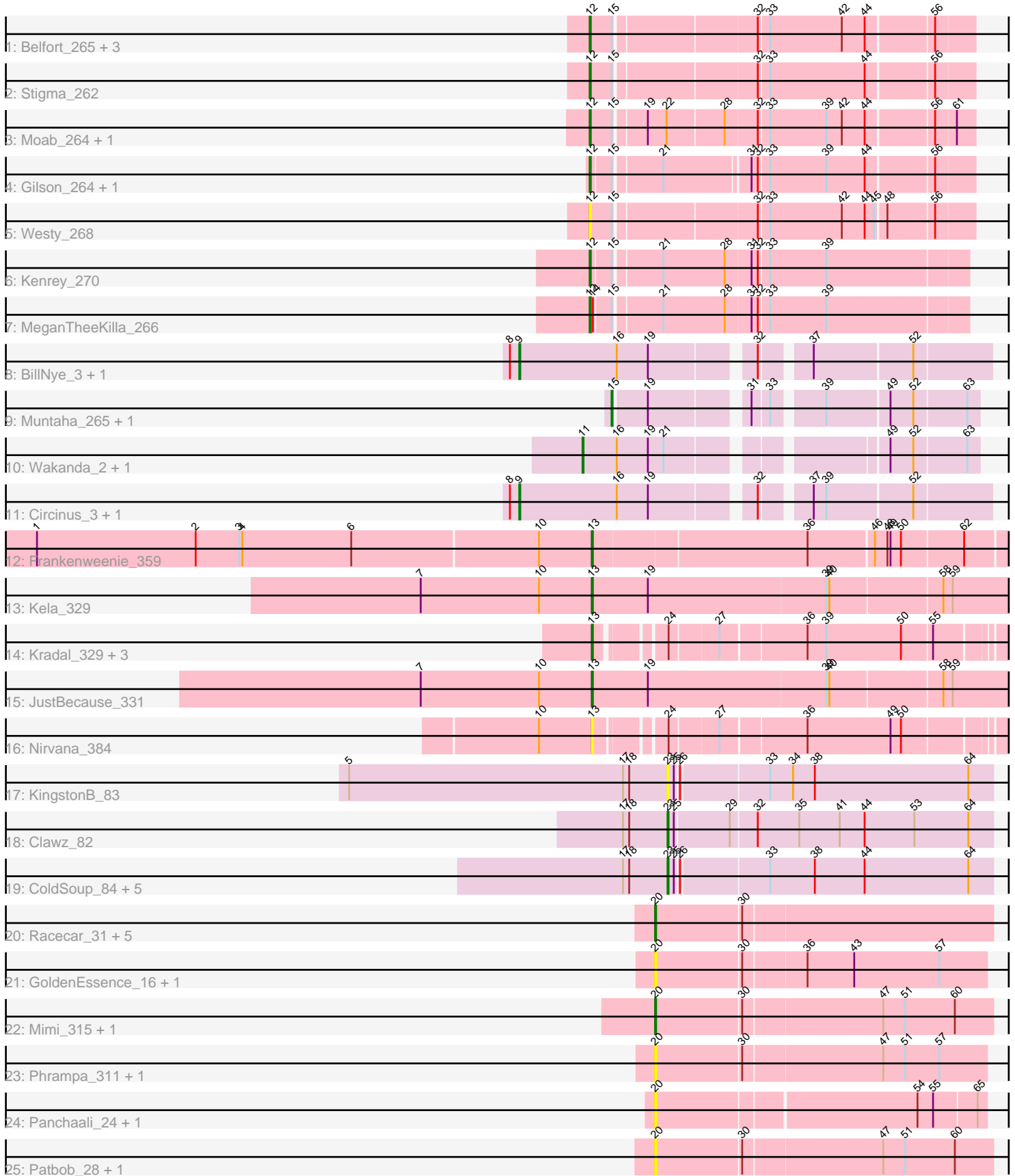


Pham 224652



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 224652 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224652 has 52 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Belfort_265, Comrade_260, Karp_265, SparkleGoddess_264
- Track 2 : Stigma_262
- Track 3 : Moab_264, Patelgo_267
- Track 4 : Gilson_264, Francob_267
- Track 5 : Westy_268
- Track 6 : Kenrey_270
- Track 7 : MeganTheeKilla_266
- Track 8 : BillNye_3, BillNye_249
- Track 9 : Muntaha_265, Muntaha_2
- Track 10 : Wakanda_2, Wakanda_261
- Track 11 : Circinus_3, Circinus_248
- Track 12 : Frankenweenie_359
- Track 13 : Kela_329
- Track 14 : Kradal_329, Quantum_327, EhyElimayoE_332, Satis_329
- Track 15 : JustBecause_331
- Track 16 : Nirvana_384
- Track 17 : KingstonB_83
- Track 18 : Clawz_82
- Track 19 : ColdSoup_84, Jollymon_81, Amo99_84, Soos_77, Sting_80, DonTron_81
- Track 20 : Racecar_31, Racecar_320, Bloom_319, Talia1610_316, Talia1610_30, Bloom_32
- Track 21 : GoldenEssence_16, GoldenEssence_298
- Track 22 : Mimi_315, Mimi_30
- Track 23 : Phrampa_311, Phrampa_26
- Track 24 : Panchaali_24, Panchaali_323
- Track 25 : Patbob_28, Patbob_318

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

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

Genes that call this "Most Annotated" start:

- Belfort_265, Comrade_260, Francob_267, Gilson_264, Karp_265, Kenrey_270, MeganTheeKilla_266, Moab_264, Patelgo_267, SparkleGoddess_264, Stigma_262, Westy_268,

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

-

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

- Amo99_84, BillNye_249, BillNye_3, Bloom_319, Bloom_32, Circinus_248, Circinus_3, Clawz_82, ColdSoup_84, DonTron_81, EhyElimayoE_332, Frankenweenie_359, GoldenEssence_16, GoldenEssence_298, Jollymon_81, JustBecause_331, Kela_329, KingstonB_83, Kradal_329, Mimi_30, Mimi_315, Muntaha_2, Muntaha_265, Nirvana_384, Panchaali_24, Panchaali_323, Patbob_28, Patbob_318, Phrampa_26, Phrampa_311, Quantum_327, Racecar_31, Racecar_320, Satis_329, Soos_77, Sting_80, Talia1610_30, Talia1610_316, Wakanda_2, Wakanda_261,

Summary by start number:

Start 9:

- Found in 4 of 52 (7.7%) 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), Circinus_248 (BK2), Circinus_3 (BK2),

Start 11:

- Found in 2 of 52 (3.8%) 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: Wakanda_2 (BK2), Wakanda_261 (BK2),

Start 12:

- Found in 12 of 52 (23.1%) of genes in pham
- Manual Annotations of this start: 11 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belfort_265 (BK1), Comrade_260 (BK1), Francob_267 (BK1), Gilson_264 (BK1), Karp_265 (BK1), Kenrey_270 (BK1), MeganTheeKilla_266 (BK1), Moab_264 (BK1), Patelgo_267 (BK1), SparkleGoddess_264 (BK1), Stigma_262 (BK1), Westy_268 (BK1),

Start 13:

- Found in 8 of 52 (15.4%) of genes in pham
- Manual Annotations of this start: 7 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_384 (BM), Quantum_327 (BM), Satis_329 (BM),

Start 15:

- Found in 14 of 52 (26.9%) of genes in pham
- Manual Annotations of this start: 2 of 36

- Called 14.3% of time when present
- Phage (with cluster) where this start called: Muntaha_2 (BK2), Muntaha_265 (BK2),

Start 20:

- Found in 16 of 52 (30.8%) of genes in pham
- Manual Annotations of this start: 6 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bloom_319 (FC), Bloom_32 (FC), GoldenEssence_16 (FC), GoldenEssence_298 (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),

Start 23:

- Found in 8 of 52 (15.4%) 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: Amo99_84 (CP), Clawz_82 (CP), ColdSoup_84 (CP), DonTron_81 (CP), Jollymon_81 (CP), KingstonB_83 (CP), Soos_77 (CP), Sting_80 (CP),

Summary by clusters:

There are 5 clusters represented in this pham: BM, CP, FC, BK1, BK2,

Info for manual annotations of cluster BK1:

- Start number 12 was manually annotated 11 times for cluster BK1.

Info for manual annotations of cluster BK2:

- Start number 9 was manually annotated 4 times for cluster BK2.
- Start number 11 was manually annotated 2 times for cluster BK2.
- Start number 15 was manually annotated 2 times for cluster BK2.

Info for manual annotations of cluster BM:

- Start number 13 was manually annotated 7 times for cluster BM.

Info for manual annotations of cluster CP:

- Start number 23 was manually annotated 4 times for cluster CP.

Info for manual annotations of cluster FC:

- Start number 20 was manually annotated 6 times for cluster FC.

Gene Information:

Gene: Amo99_84 Start: 52457, Stop: 52759, Start Num: 23

Candidate Starts for Amo99_84:

(17, 52415), (18, 52421), (Start: 23 @52457 has 4 MA's), (25, 52463), (26, 52466), (33, 52547), (38, 52589), (44, 52637), (64, 52736),

Gene: Belfort_265 Start: 126637, Stop: 126978, Start Num: 12

Candidate Starts for Belfort_265:

(Start: 12 @126637 has 11 MA's), (Start: 15 @126658 has 2 MA's), (32, 126784), (33, 126793), (42, 126862), (44, 126883), (56, 126943),

Gene: BillNye_3 Start: 1039, Stop: 1449, Start Num: 9

Candidate Starts for BillNye_3:

(8, 1030), (Start: 9 @1039 has 4 MA's), (16, 1132), (19, 1162), (32, 1249), (37, 1288), (52, 1378),

Gene: BillNye_249 Start: 125861, Stop: 126271, Start Num: 9

Candidate Starts for BillNye_249:

(8, 125852), (Start: 9 @125861 has 4 MA's), (16, 125954), (19, 125984), (32, 126071), (37, 126110), (52, 126200),

Gene: Bloom_319 Start: 187552, Stop: 187866, Start Num: 20

Candidate Starts for Bloom_319:

(Start: 20 @187552 has 6 MA's), (30, 187633),

Gene: Bloom_32 Start: 14077, Stop: 14391, Start Num: 20

Candidate Starts for Bloom_32:

(Start: 20 @14077 has 6 MA's), (30, 14158),

Gene: Circinus_3 Start: 1078, Stop: 1488, Start Num: 9

Candidate Starts for Circinus_3:

(8, 1069), (Start: 9 @1078 has 4 MA's), (16, 1171), (19, 1201), (32, 1288), (37, 1327), (39, 1339), (52, 1417),

Gene: Circinus_248 Start: 125405, Stop: 125815, Start Num: 9

Candidate Starts for Circinus_248:

(8, 125396), (Start: 9 @125405 has 4 MA's), (16, 125498), (19, 125528), (32, 125615), (37, 125654), (39, 125666), (52, 125744),

Gene: Clawz_82 Start: 52540, Stop: 52845, Start Num: 23

Candidate Starts for Clawz_82:

(17, 52498), (18, 52504), (Start: 23 @52540 has 4 MA's), (25, 52546), (29, 52597), (32, 52621), (35, 52660), (41, 52699), (44, 52723), (53, 52771), (64, 52822),

Gene: ColdSoup_84 Start: 52538, Stop: 52840, Start Num: 23

Candidate Starts for ColdSoup_84:

(17, 52496), (18, 52502), (Start: 23 @52538 has 4 MA's), (25, 52544), (26, 52547), (33, 52628), (38, 52670), (44, 52718), (64, 52817),

Gene: Comrade_260 Start: 126776, Stop: 127117, Start Num: 12

Candidate Starts for Comrade_260:

(Start: 12 @126776 has 11 MA's), (Start: 15 @126797 has 2 MA's), (32, 126923), (33, 126932), (42, 127001), (44, 127022), (56, 127082),

Gene: DonTron_81 Start: 52416, Stop: 52718, Start Num: 23

Candidate Starts for DonTron_81:

(17, 52374), (18, 52380), (Start: 23 @52416 has 4 MA's), (25, 52422), (26, 52425), (33, 52506), (38, 52548), (44, 52596), (64, 52695),

Gene: EhyElimayoE_332 Start: 178762, Stop: 178415, Start Num: 13

Candidate Starts for EhyElimayoE_332:

(Start: 13 @178762 has 7 MA's), (24, 178708), (27, 178666), (36, 178588), (39, 178570), (50, 178501), (55, 178474),

Gene: Francob_267 Start: 126631, Stop: 126966, Start Num: 12

Candidate Starts for Francob_267:

(Start: 12 @126631 has 11 MA's), (Start: 15 @126649 has 2 MA's), (21, 126691), (31, 126766), (32, 126772), (33, 126781), (39, 126835), (44, 126871), (56, 126931),

Gene: Frankenweenie_359 Start: 192379, Stop: 192002, Start Num: 13

Candidate Starts for Frankenweenie_359:

(1, 192910), (2, 192757), (3, 192715), (4, 192712), (6, 192607), (10, 192430), (Start: 13 @192379 has 7 MA's), (36, 192181), (46, 192121), (48, 192109), (49, 192106), (50, 192097), (62, 192040),

Gene: Gilson_264 Start: 126168, Stop: 126503, Start Num: 12

Candidate Starts for Gilson_264:

(Start: 12 @126168 has 11 MA's), (Start: 15 @126186 has 2 MA's), (21, 126228), (31, 126303), (32, 126309), (33, 126318), (39, 126372), (44, 126408), (56, 126468),

Gene: GoldenEssence_16 Start: 7886, Stop: 8194, Start Num: 20

Candidate Starts for GoldenEssence_16:

(Start: 20 @7886 has 6 MA's), (30, 7967), (36, 8024), (43, 8069), (57, 8150),

Gene: GoldenEssence_298 Start: 178439, Stop: 178747, Start Num: 20

Candidate Starts for GoldenEssence_298:

(Start: 20 @178439 has 6 MA's), (30, 178520), (36, 178577), (43, 178622), (57, 178703),

Gene: Jollymon_81 Start: 52538, Stop: 52840, Start Num: 23

Candidate Starts for Jollymon_81:

(17, 52496), (18, 52502), (Start: 23 @52538 has 4 MA's), (25, 52544), (26, 52547), (33, 52628), (38, 52670), (44, 52718), (64, 52817),

Gene: JustBecause_331 Start: 175882, Stop: 175484, Start Num: 13

Candidate Starts for JustBecause_331:

(7, 176047), (10, 175933), (Start: 13 @175882 has 7 MA's), (19, 175828), (39, 175660), (40, 175657), (58, 175555), (59, 175546),

Gene: Karp_265 Start: 128234, Stop: 128575, Start Num: 12

Candidate Starts for Karp_265:

(Start: 12 @128234 has 11 MA's), (Start: 15 @128255 has 2 MA's), (32, 128381), (33, 128390), (42, 128459), (44, 128480), (56, 128540),

Gene: Kela_329 Start: 176783, Stop: 176385, Start Num: 13

Candidate Starts for Kela_329:

(7, 176948), (10, 176834), (Start: 13 @176783 has 7 MA's), (19, 176729), (39, 176561), (40, 176558), (58, 176456), (59, 176447),

Gene: Kenrey_270 Start: 127380, Stop: 127718, Start Num: 12

Candidate Starts for Kenrey_270:

(Start: 12 @127380 has 11 MA's), (Start: 15 @127398 has 2 MA's), (21, 127440), (28, 127497), (31, 127521), (32, 127527), (33, 127536), (39, 127590),

Gene: KingstonB_83 Start: 51949, Stop: 52251, Start Num: 23

Candidate Starts for KingstonB_83:

(5, 51643), (17, 51907), (18, 51913), (Start: 23 @51949 has 4 MA's), (25, 51955), (26, 51958), (33, 52039), (34, 52060), (38, 52081), (64, 52228),

Gene: Kradal_329 Start: 178759, Stop: 178412, Start Num: 13

Candidate Starts for Kradal_329:

(Start: 13 @178759 has 7 MA's), (24, 178705), (27, 178663), (36, 178585), (39, 178567), (50, 178498), (55, 178471),

Gene: MeganTheeKilla_266 Start: 125979, Stop: 126317, Start Num: 12

Candidate Starts for MeganTheeKilla_266:

(Start: 12 @125979 has 11 MA's), (14, 125982), (Start: 15 @125997 has 2 MA's), (21, 126039), (28, 126096), (31, 126120), (32, 126126), (33, 126135), (39, 126189),

Gene: Mimi_315 Start: 186189, Stop: 186503, Start Num: 20

Candidate Starts for Mimi_315:

(Start: 20 @186189 has 6 MA's), (30, 186270), (47, 186399), (51, 186420), (60, 186468),

Gene: Mimi_30 Start: 13529, Stop: 13843, Start Num: 20

Candidate Starts for Mimi_30:

(Start: 20 @13529 has 6 MA's), (30, 13610), (47, 13739), (51, 13760), (60, 13808),

Gene: Moab_264 Start: 127015, Stop: 127356, Start Num: 12

Candidate Starts for Moab_264:

(Start: 12 @127015 has 11 MA's), (Start: 15 @127036 has 2 MA's), (19, 127063), (22, 127081), (28, 127132), (32, 127162), (33, 127171), (39, 127225), (42, 127240), (44, 127261), (56, 127321), (61, 127339),

Gene: Muntaha_265 Start: 126426, Stop: 126731, Start Num: 15

Candidate Starts for Muntaha_265:

(Start: 15 @126426 has 2 MA's), (19, 126456), (31, 126537), (33, 126552), (39, 126594), (49, 126651), (52, 126672), (63, 126720),

Gene: Muntaha_2 Start: 749, Stop: 1054, Start Num: 15

Candidate Starts for Muntaha_2:

(Start: 15 @749 has 2 MA's), (19, 779), (31, 860), (33, 875), (39, 917), (49, 974), (52, 995), (63, 1043),

Gene: Nirvana_384 Start: 195822, Stop: 195472, Start Num: 13

Candidate Starts for Nirvana_384:

(10, 195873), (Start: 13 @195822 has 7 MA's), (24, 195765), (27, 195723), (36, 195645), (49, 195567), (50, 195558),

Gene: Panchaali_24 Start: 9758, Stop: 10060, Start Num: 20

Candidate Starts for Panchaali_24:

(Start: 20 @9758 has 6 MA's), (54, 9998), (55, 10013), (65, 10052),

Gene: Panchaali_323 Start: 188816, Stop: 189118, Start Num: 20

Candidate Starts for Panchaali_323:

(Start: 20 @188816 has 6 MA's), (54, 189056), (55, 189071), (65, 189110),

Gene: Patbob_28 Start: 13693, Stop: 14007, Start Num: 20

Candidate Starts for Patbob_28:

(Start: 20 @13693 has 6 MA's), (30, 13774), (47, 13903), (51, 13924), (60, 13972),

Gene: Patbob_318 Start: 189152, Stop: 189466, Start Num: 20
Candidate Starts for Patbob_318:
(Start: 20 @189152 has 6 MA's), (30, 189233), (47, 189362), (51, 189383), (60, 189431),

Gene: Patelgo_267 Start: 127948, Stop: 128289, Start Num: 12
Candidate Starts for Patelgo_267:
(Start: 12 @127948 has 11 MA's), (Start: 15 @127969 has 2 MA's), (19, 127996), (22, 128014), (28, 128065), (32, 128095), (33, 128104), (39, 128158), (42, 128173), (44, 128194), (56, 128254), (61, 128272),

Gene: Phrampa_311 Start: 187978, Stop: 188286, Start Num: 20
Candidate Starts for Phrampa_311:
(Start: 20 @187978 has 6 MA's), (30, 188059), (47, 188188), (51, 188209), (57, 188242),

Gene: Phrampa_26 Start: 11607, Stop: 11915, Start Num: 20
Candidate Starts for Phrampa_26:
(Start: 20 @11607 has 6 MA's), (30, 11688), (47, 11817), (51, 11838), (57, 11871),

Gene: Quantum_327 Start: 178753, Stop: 178406, Start Num: 13
Candidate Starts for Quantum_327:
(Start: 13 @178753 has 7 MA's), (24, 178699), (27, 178657), (36, 178579), (39, 178561), (50, 178492), (55, 178465),

Gene: Racecar_31 Start: 14121, Stop: 14435, Start Num: 20
Candidate Starts for Racecar_31:
(Start: 20 @14121 has 6 MA's), (30, 14202),

Gene: Racecar_320 Start: 187830, Stop: 188144, Start Num: 20
Candidate Starts for Racecar_320:
(Start: 20 @187830 has 6 MA's), (30, 187911),

Gene: Satis_329 Start: 179094, Stop: 178747, Start Num: 13
Candidate Starts for Satis_329:
(Start: 13 @179094 has 7 MA's), (24, 179040), (27, 178998), (36, 178920), (39, 178902), (50, 178833), (55, 178806),

Gene: Soos_77 Start: 51742, Stop: 52044, Start Num: 23
Candidate Starts for Soos_77:
(17, 51700), (18, 51706), (Start: 23 @51742 has 4 MA's), (25, 51748), (26, 51751), (33, 51832), (38, 51874), (44, 51922), (64, 52021),

Gene: SparkleGoddess_264 Start: 127503, Stop: 127844, Start Num: 12
Candidate Starts for SparkleGoddess_264:
(Start: 12 @127503 has 11 MA's), (Start: 15 @127524 has 2 MA's), (32, 127650), (33, 127659), (42, 127728), (44, 127749), (56, 127809),

Gene: Stigma_262 Start: 127216, Stop: 127557, Start Num: 12
Candidate Starts for Stigma_262:
(Start: 12 @127216 has 11 MA's), (Start: 15 @127237 has 2 MA's), (32, 127363), (33, 127372), (44, 127462), (56, 127522),

Gene: Sting_80 Start: 52181, Stop: 52483, Start Num: 23
Candidate Starts for Sting_80:

(17, 52139), (18, 52145), (Start: 23 @52181 has 4 MA's), (25, 52187), (26, 52190), (33, 52271), (38, 52313), (44, 52361), (64, 52460),

Gene: Talia1610_316 Start: 188015, Stop: 188329, Start Num: 20
Candidate Starts for Talia1610_316:
(Start: 20 @188015 has 6 MA's), (30, 188096),

Gene: Talia1610_30 Start: 13543, Stop: 13857, Start Num: 20
Candidate Starts for Talia1610_30:
(Start: 20 @13543 has 6 MA's), (30, 13624),

Gene: Wakanda_2 Start: 866, Stop: 1201, Start Num: 11
Candidate Starts for Wakanda_2:
(Start: 11 @866 has 2 MA's), (16, 899), (19, 929), (21, 944), (49, 1121), (52, 1142), (63, 1190),

Gene: Wakanda_261 Start: 125707, Stop: 126042, Start Num: 11
Candidate Starts for Wakanda_261:
(Start: 11 @125707 has 2 MA's), (16, 125740), (19, 125770), (21, 125785), (49, 125962), (52, 125983), (63, 126031),

Gene: Westy_268 Start: 128040, Stop: 128381, Start Num: 12
Candidate Starts for Westy_268:
(Start: 12 @128040 has 11 MA's), (Start: 15 @128061 has 2 MA's), (32, 128187), (33, 128196), (42, 128265), (44, 128286), (45, 128295), (48, 128304), (56, 128346),