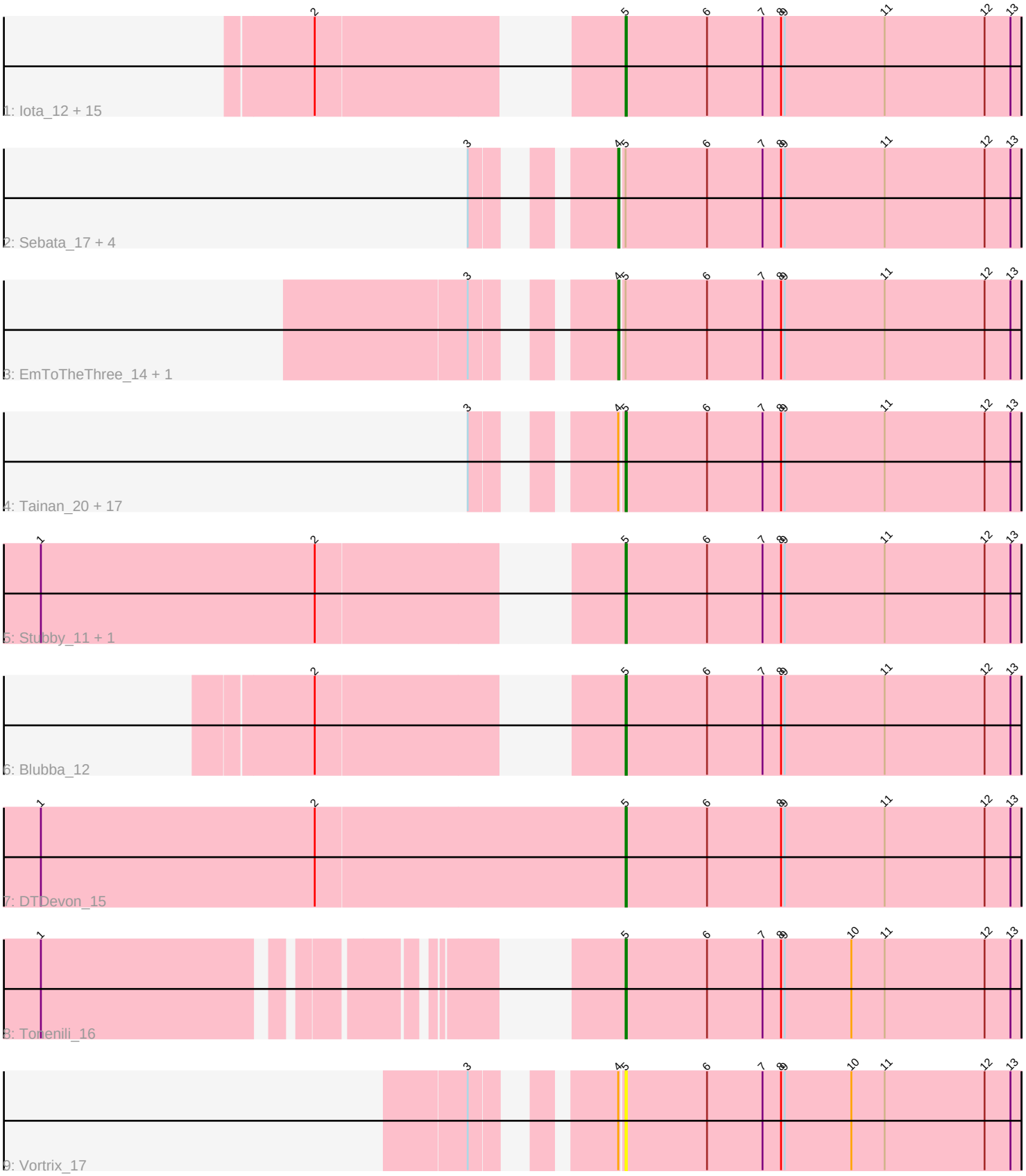
Pham 347751


1: Iota_12 + 15
2: Sebata_17 + 4
3: EmToTheThree_14 + 1
4: Tainan_20 + 17
5: Stubby_11 + 1
6: Blubba_12
7: DTDevon_15
8: Tomenili_16
9: Vortrix_17

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 347751 Report

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

Pham number 347751 has 47 members, 11 are drafts.

Phages represented in each track:
• Track 1 : Iota_12, MoMoMixon_16, Delylah_13, Colt_12, Caravan_13, Naval22_17, Pio_17, Lethe_16, Bxz1_16, Mangeria_17, Tyke_16, Shelob_14, Spud_17, Nidhogg_16, Cane17_12, ErnieJ_13
• Track 2 : Sebata_17, LolaVinca_17, Grasshills_19, InterFolia_20, LinStu_17
• Track 3 : EmToTheThree_14, NuevoMundo_18
• Track 4 : Tainan_20, Maguvora_21, BigCity_19, Puhon_20, Pupusa_20, JayJay_17, Dandelion_19, Nappy_16, FrayBell_20, Specks_18, JigglyPuff_15, PharkleMinkus_20, GoldenSnow_20, EggyFarm_19, Bigswole_19, LookingGlass_17, QBert_13, LordLeafolot_20
• Track 5 : Stubby_11, Sauce_16
• Track 6 : Blubba_12
• Track 7 : DTDevon_15
• Track 8 : Tonenili_16
• Track 9 : Vortrix_17

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

The start number called the most often in the published annotations is 5, it was called in 30 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BigCity_19, Bigswole_19, Blubba_12, Bxz1_16, Cane17_12, Caravan_13, Colt_12, DTDevon_15, Dandelion_19, Delylah_13, EggyFarm_19, ErnieJ_13, FrayBell_20, GoldenSnow_20, Iota_12, JayJay_17, JigglyPuff_15, Lethe_16, LookingGlass_17, LordLeafolot_20, Maguvora_21, Mangeria_17, MoMoMixon_16, Nappy_16, Naval22_17, Nidhogg_16, PharkleMinkus_20, Pio_17, Puhon_20, Pupusa_20, QBert_13, Sauce_16, Shelob_14, Specks_18, Spud_17, Stubby_11, Tainan_20, Tonenili_16, Tyke_16, Vortrix_17,

Genes that have the "Most Annotated" start but do not call it:
• EmToTheThree_14, Grasshills_19, InterFolia_20, LinStu_17, LolaVinca_17, NuevoMundo_18, Sebata_17,

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

•

Summary by start number:

Start 4:
• Found in 26 of 47 (55.3%) of genes in pham
• Manual Annotations of this start: 6 of 36
• Called 26.9% of time when present
• Phage (with cluster) where this start called: EmToTheThree_14 (C1), Grasshills_19 (C1), InterFolia_20 (C1), LinStu_17 (C1), LolaVinca_17 (C1), NuevoMundo_18 (C1), Sebata_17 (C1),

Start 5:
• Found in 47 of 47 (100.0%) of genes in pham
• Manual Annotations of this start: 30 of 36
• Called 85.1% of time when present
• Phage (with cluster) where this start called: BigCity_19 (C1), Bigswole_19 (C1), Blubba_12 (C1), Bxz1_16 (C1), Cane17_12 (C1), Caravan_13 (C1), Colt_12 (C1), DTDevon_15 (C1), Dandelion_19 (C1), Delylah_13 (C1), EggyFarm_19 (C1), ErnieJ_13 (C1), FrayBell_20 (C1), GoldenSnow_20 (C1), Iota_12 (C1), JayJay_17 (C1), JigglyPuff_15 (C1), Lethe_16 (C1), LookingGlass_17 (C1), LordLeafolot_20 (C1), Maguvora_21 (C1), Mangeria_17 (C1), MoMoMixon_16 (C1), Nappy_16 (C1), Naval22_17 (C1), Nidhogg_16 (C1), PharkleMinkus_20 (C1), Pio_17 (C1), Puhon_20 (C1), Pupusa_20 (C1), QBert_13 (C1), Sauce_16 (C1), Shelob_14 (C1), Specks_18 (C1), Spud_17 (C1), Stubby_11 (C1), Tainan_20 (C1), Tonenili_16 (C1), Tyke_16 (C1), Vortrix_17 (C1),

Summary by clusters:

There is one cluster represented in this pham: C1

Info for manual annotations of cluster C1:
•Start number 4 was manually annotated 6 times for cluster C1.
•Start number 5 was manually annotated 30 times for cluster C1.

Gene Information:

Gene: BigCity_19 Start: 6828, Stop: 7148, Start Num: 5
Candidate Starts for BigCity_19:
(3, 6744), (Start: 4 @6825 has 6 MA's), (Start: 5 @6828 has 30 MA's), (6, 6894), (7, 6939), (8, 6954), (9, 6957), (11, 7038), (12, 7119), (13, 7140),

Gene: Bigswole_19 Start: 6258, Stop: 6578, Start Num: 5
Candidate Starts for Bigswole_19:
(3, 6174), (Start: 4 @6255 has 6 MA's), (Start: 5 @6258 has 30 MA's), (6, 6324), (7, 6369), (8, 6384), (9, 6387), (11, 6468), (12, 6549), (13, 6570),

Gene: Blubba_12 Start: 4998, Stop: 5318, Start Num: 5
Candidate Starts for Blubba_12:
(2, 4809), (Start: 5 @4998 has 30 MA's), (6, 5064), (7, 5109), (8, 5124), (9, 5127), (11, 5208), (12, 5289), (13, 5310),

Gene: Bxz1_16 Start: 5407, Stop: 5727, Start Num: 5
Candidate Starts for Bxz1_16:
(2, 5218), (Start: 5 @5407 has 30 MA's), (6, 5473), (7, 5518), (8, 5533), (9, 5536), (11, 5617), (12, 5698), (13, 5719),

Gene: Cane17_12 Start: 4998, Stop: 5318, Start Num: 5
Candidate Starts for Cane17_12:
(2, 4809), (Start: 5 @4998 has 30 MA's), (6, 5064), (7, 5109), (8, 5124), (9, 5127), (11, 5208), (12, 5289), (13, 5310),

Gene: Caravan_13 Start: 4155, Stop: 4475, Start Num: 5
Candidate Starts for Caravan_13:
(2, 3966), (Start: 5 @4155 has 30 MA's), (6, 4221), (7, 4266), (8, 4281), (9, 4284), (11, 4365), (12, 4446), (13, 4467),

Gene: Colt_12 Start: 5004, Stop: 5324, Start Num: 5
Candidate Starts for Colt_12:
(2, 4815), (Start: 5 @5004 has 30 MA's), (6, 5070), (7, 5115), (8, 5130), (9, 5133), (11, 5214), (12, 5295), (13, 5316),

Gene: DTDevon_15 Start: 5028, Stop: 5348, Start Num: 5
Candidate Starts for DTDevon_15:
(1, 4557), (2, 4779), (Start: 5 @5028 has 30 MA's), (6, 5094), (8, 5154), (9, 5157), (11, 5238), (12, 5319), (13, 5340),

Gene: Dandelion_19 Start: 6466, Stop: 6786, Start Num: 5
Candidate Starts for Dandelion_19:
(3, 6382), (Start: 4 @6463 has 6 MA's), (Start: 5 @6466 has 30 MA's), (6, 6532), (7, 6577), (8, 6592), (9, 6595), (11, 6676), (12, 6757), (13, 6778),

Gene: Delylah_13 Start: 4155, Stop: 4475, Start Num: 5
Candidate Starts for Delylah_13:
(2, 3966), (Start: 5 @4155 has 30 MA's), (6, 4221), (7, 4266), (8, 4281), (9, 4284), (11, 4365), (12, 4446), (13, 4467),

Gene: EggyFarm_19 Start: 6828, Stop: 7148, Start Num: 5
Candidate Starts for EggyFarm_19:
(3, 6744), (Start: 4 @6825 has 6 MA's), (Start: 5 @6828 has 30 MA's), (6, 6894), (7, 6939), (8, 6954), (9, 6957), (11, 7038), (12, 7119), (13, 7140),

Gene: EmToTheThree_14 Start: 5539, Stop: 5862, Start Num: 4
Candidate Starts for EmToTheThree_14:
(3, 5458), (Start: 4 @5539 has 6 MA's), (Start: 5 @5542 has 30 MA's), (6, 5608), (7, 5653), (8, 5668), (9, 5671), (11, 5752), (12, 5833), (13, 5854),

Gene: ErnieJ_13 Start: 4219, Stop: 4539, Start Num: 5
Candidate Starts for ErnieJ_13:
(2, 4030), (Start: 5 @4219 has 30 MA's), (6, 4285), (7, 4330), (8, 4345), (9, 4348), (11, 4429), (12, 4510), (13, 4531),

Gene: FrayBell_20 Start: 6515, Stop: 6835, Start Num: 5
Candidate Starts for FrayBell_20:

(3, 6431), (Start: 4 @6512 has 6 MA's), (Start: 5 @6515 has 30 MA's), (6, 6581), (7, 6626), (8, 6641), (9, 6644), (11, 6725), (12, 6806), (13, 6827),

Gene: GoldenSnow_20 Start: 6514, Stop: 6834, Start Num: 5
Candidate Starts for GoldenSnow_20:
(3, 6430), (Start: 4 @6511 has 6 MA's), (Start: 5 @6514 has 30 MA's), (6, 6580), (7, 6625), (8, 6640), (9, 6643), (11, 6724), (12, 6805), (13, 6826),

Gene: Grasshills_19 Start: 6825, Stop: 7148, Start Num: 4
Candidate Starts for Grasshills_19:
(3, 6744), (Start: 4 @6825 has 6 MA's), (Start: 5 @6828 has 30 MA's), (6, 6894), (7, 6939), (8, 6954), (9, 6957), (11, 7038), (12, 7119), (13, 7140),

Gene: InterFolia_20 Start: 6509, Stop: 6832, Start Num: 4
Candidate Starts for InterFolia_20:
(3, 6428), (Start: 4 @6509 has 6 MA's), (Start: 5 @6512 has 30 MA's), (6, 6578), (7, 6623), (8, 6638), (9, 6641), (11, 6722), (12, 6803), (13, 6824),

Gene: Iota_12 Start: 4943, Stop: 5263, Start Num: 5
Candidate Starts for Iota_12:
(2, 4754), (Start: 5 @4943 has 30 MA's), (6, 5009), (7, 5054), (8, 5069), (9, 5072), (11, 5153), (12, 5234), (13, 5255),

Gene: JayJay_17 Start: 5183, Stop: 5503, Start Num: 5
Candidate Starts for JayJay_17:
(3, 5099), (Start: 4 @5180 has 6 MA's), (Start: 5 @5183 has 30 MA's), (6, 5249), (7, 5294), (8, 5309), (9, 5312), (11, 5393), (12, 5474), (13, 5495),

Gene: JigglyPuff_15 Start: 5028, Stop: 5348, Start Num: 5
Candidate Starts for JigglyPuff_15:
(3, 4944), (Start: 4 @5025 has 6 MA's), (Start: 5 @5028 has 30 MA's), (6, 5094), (7, 5139), (8, 5154), (9, 5157), (11, 5238), (12, 5319), (13, 5340),

Gene: Lethe_16 Start: 5303, Stop: 5623, Start Num: 5
Candidate Starts for Lethe_16:
(2, 5114), (Start: 5 @5303 has 30 MA's), (6, 5369), (7, 5414), (8, 5429), (9, 5432), (11, 5513), (12, 5594), (13, 5615),

Gene: LinStu_17 Start: 5951, Stop: 6274, Start Num: 4
Candidate Starts for LinStu_17:
(3, 5870), (Start: 4 @5951 has 6 MA's), (Start: 5 @5954 has 30 MA's), (6, 6020), (7, 6065), (8, 6080), (9, 6083), (11, 6164), (12, 6245), (13, 6266),

Gene: LolaVinca_17 Start: 5615, Stop: 5938, Start Num: 4
Candidate Starts for LolaVinca_17:
(3, 5534), (Start: 4 @5615 has 6 MA's), (Start: 5 @5618 has 30 MA's), (6, 5684), (7, 5729), (8, 5744), (9, 5747), (11, 5828), (12, 5909), (13, 5930),

Gene: LookingGlass_17 Start: 5493, Stop: 5813, Start Num: 5
Candidate Starts for LookingGlass_17:
(3, 5409), (Start: 4 @5490 has 6 MA's), (Start: 5 @5493 has 30 MA's), (6, 5559), (7, 5604), (8, 5619), (9, 5622), (11, 5703), (12, 5784), (13, 5805),

Gene: LordLeafolot_20 Start: 6514, Stop: 6834, Start Num: 5
Candidate Starts for LordLeafolot_20:
(3, 6430), (Start: 4 @6511 has 6 MA's), (Start: 5 @6514 has 30 MA's), (6, 6580), (7, 6625), (8, 6640), (9, 6643), (11, 6724), (12, 6805), (13, 6826),

Gene: Maguvora_21 Start: 6516, Stop: 6836, Start Num: 5
Candidate Starts for Maguvora_21:
(3, 6432), (Start: 4 @6513 has 6 MA's), (Start: 5 @6516 has 30 MA's), (6, 6582), (7, 6627), (8, 6642), (9, 6645), (11, 6726), (12, 6807), (13, 6828),

Gene: Mangeria_17 Start: 5794, Stop: 6114, Start Num: 5
Candidate Starts for Mangeria_17:
(2, 5605), (Start: 5 @5794 has 30 MA's), (6, 5860), (7, 5905), (8, 5920), (9, 5923), (11, 6004), (12, 6085), (13, 6106),

Gene: MoMoMixon_16 Start: 5636, Stop: 5956, Start Num: 5
Candidate Starts for MoMoMixon_16:
(2, 5447), (Start: 5 @5636 has 30 MA's), (6, 5702), (7, 5747), (8, 5762), (9, 5765), (11, 5846), (12, 5927), (13, 5948),

Gene: Nappy_16 Start: 5341, Stop: 5661, Start Num: 5
Candidate Starts for Nappy_16:
(3, 5257), (Start: 4 @5338 has 6 MA's), (Start: 5 @5341 has 30 MA's), (6, 5407), (7, 5452), (8, 5467), (9, 5470), (11, 5551), (12, 5632), (13, 5653),

Gene: Naval22_17 Start: 5636, Stop: 5956, Start Num: 5
Candidate Starts for Naval22_17:
(2, 5447), (Start: 5 @5636 has 30 MA's), (6, 5702), (7, 5747), (8, 5762), (9, 5765), (11, 5846), (12, 5927), (13, 5948),

Gene: Nidhogg_16 Start: 5636, Stop: 5956, Start Num: 5
Candidate Starts for Nidhogg_16:
(2, 5447), (Start: 5 @5636 has 30 MA's), (6, 5702), (7, 5747), (8, 5762), (9, 5765), (11, 5846), (12, 5927), (13, 5948),

Gene: NuevoMundo_18 Start: 6296, Stop: 6619, Start Num: 4
Candidate Starts for NuevoMundo_18:
(3, 6215), (Start: 4 @6296 has 6 MA's), (Start: 5 @6299 has 30 MA's), (6, 6365), (7, 6410), (8, 6425), (9, 6428), (11, 6509), (12, 6590), (13, 6611),

Gene: PharkleMinkus_20 Start: 6515, Stop: 6835, Start Num: 5
Candidate Starts for PharkleMinkus_20:
(3, 6431), (Start: 4 @6512 has 6 MA's), (Start: 5 @6515 has 30 MA's), (6, 6581), (7, 6626), (8, 6641), (9, 6644), (11, 6725), (12, 6806), (13, 6827),

Gene: Pio_17 Start: 5796, Stop: 6116, Start Num: 5
Candidate Starts for Pio_17:
(2, 5607), (Start: 5 @5796 has 30 MA's), (6, 5862), (7, 5907), (8, 5922), (9, 5925), (11, 6006), (12, 6087), (13, 6108),

Gene: Puhon_20 Start: 6514, Stop: 6834, Start Num: 5
Candidate Starts for Puhon_20:

(3, 6430), (Start: 4 @6511 has 6 MA's), (Start: 5 @6514 has 30 MA's), (6, 6580), (7, 6625), (8, 6640), (9, 6643), (11, 6724), (12, 6805), (13, 6826),

Gene: Pupusa_20 Start: 6514, Stop: 6834, Start Num: 5
Candidate Starts for Pupusa_20:
(3, 6430), (Start: 4 @6511 has 6 MA's), (Start: 5 @6514 has 30 MA's), (6, 6580), (7, 6625), (8, 6640), (9, 6643), (11, 6724), (12, 6805), (13, 6826),

Gene: QBert_13 Start: 5382, Stop: 5702, Start Num: 5
Candidate Starts for QBert_13:
(3, 5298), (Start: 4 @5379 has 6 MA's), (Start: 5 @5382 has 30 MA's), (6, 5448), (7, 5493), (8, 5508), (9, 5511), (11, 5592), (12, 5673), (13, 5694),

Gene: Sauce_16 Start: 5342, Stop: 5662, Start Num: 5
Candidate Starts for Sauce_16:
(1, 4931), (2, 5153), (Start: 5 @5342 has 30 MA's), (6, 5408), (7, 5453), (8, 5468), (9, 5471), (11, 5552), (12, 5633), (13, 5654),

Gene: Sebata_17 Start: 5951, Stop: 6274, Start Num: 4
Candidate Starts for Sebata_17:
(3, 5870), (Start: 4 @5951 has 6 MA's), (Start: 5 @5954 has 30 MA's), (6, 6020), (7, 6065), (8, 6080), (9, 6083), (11, 6164), (12, 6245), (13, 6266),

Gene: Shelob_14 Start: 5302, Stop: 5622, Start Num: 5
Candidate Starts for Shelob_14:
(2, 5113), (Start: 5 @5302 has 30 MA's), (6, 5368), (7, 5413), (8, 5428), (9, 5431), (11, 5512), (12, 5593), (13, 5614),

Gene: Specks_18 Start: 5695, Stop: 6015, Start Num: 5
Candidate Starts for Specks_18:
(3, 5611), (Start: 4 @5692 has 6 MA's), (Start: 5 @5695 has 30 MA's), (6, 5761), (7, 5806), (8, 5821), (9, 5824), (11, 5905), (12, 5986), (13, 6007),

Gene: Spud_17 Start: 5796, Stop: 6116, Start Num: 5
Candidate Starts for Spud_17:
(2, 5607), (Start: 5 @5796 has 30 MA's), (6, 5862), (7, 5907), (8, 5922), (9, 5925), (11, 6006), (12, 6087), (13, 6108),

Gene: Stubby_11 Start: 4534, Stop: 4854, Start Num: 5
Candidate Starts for Stubby_11:
(1, 4123), (2, 4345), (Start: 5 @4534 has 30 MA's), (6, 4600), (7, 4645), (8, 4660), (9, 4663), (11, 4744), (12, 4825), (13, 4846),

Gene: Tainan_20 Start: 6514, Stop: 6834, Start Num: 5
Candidate Starts for Tainan_20:
(3, 6430), (Start: 4 @6511 has 6 MA's), (Start: 5 @6514 has 30 MA's), (6, 6580), (7, 6625), (8, 6640), (9, 6643), (11, 6724), (12, 6805), (13, 6826),

Gene: Tonenili_16 Start: 4962, Stop: 5282, Start Num: 5
Candidate Starts for Tonenili_16:
(1, 4599), (Start: 5 @4962 has 30 MA's), (6, 5028), (7, 5073), (8, 5088), (9, 5091), (10, 5145), (11, 5172), (12, 5253), (13, 5274),

Gene: Tyke_16 Start: 5272, Stop: 5592, Start Num: 5
Candidate Starts for Tyke_16:
(2, 5083), (Start: 5 @5272 has 30 MA's), (6, 5338), (7, 5383), (8, 5398), (9, 5401), (11, 5482), (12, 5563), (13, 5584),

Gene: Vortrix_17 Start: 5232, Stop: 5552, Start Num: 5
Candidate Starts for Vortrix_17:
(3, 5148), (Start: 4 @5229 has 6 MA's), (Start: 5 @5232 has 30 MA's), (6, 5298), (7, 5343), (8, 5358), (9, 5361), (10, 5415), (11, 5442), (12, 5523), (13, 5544),