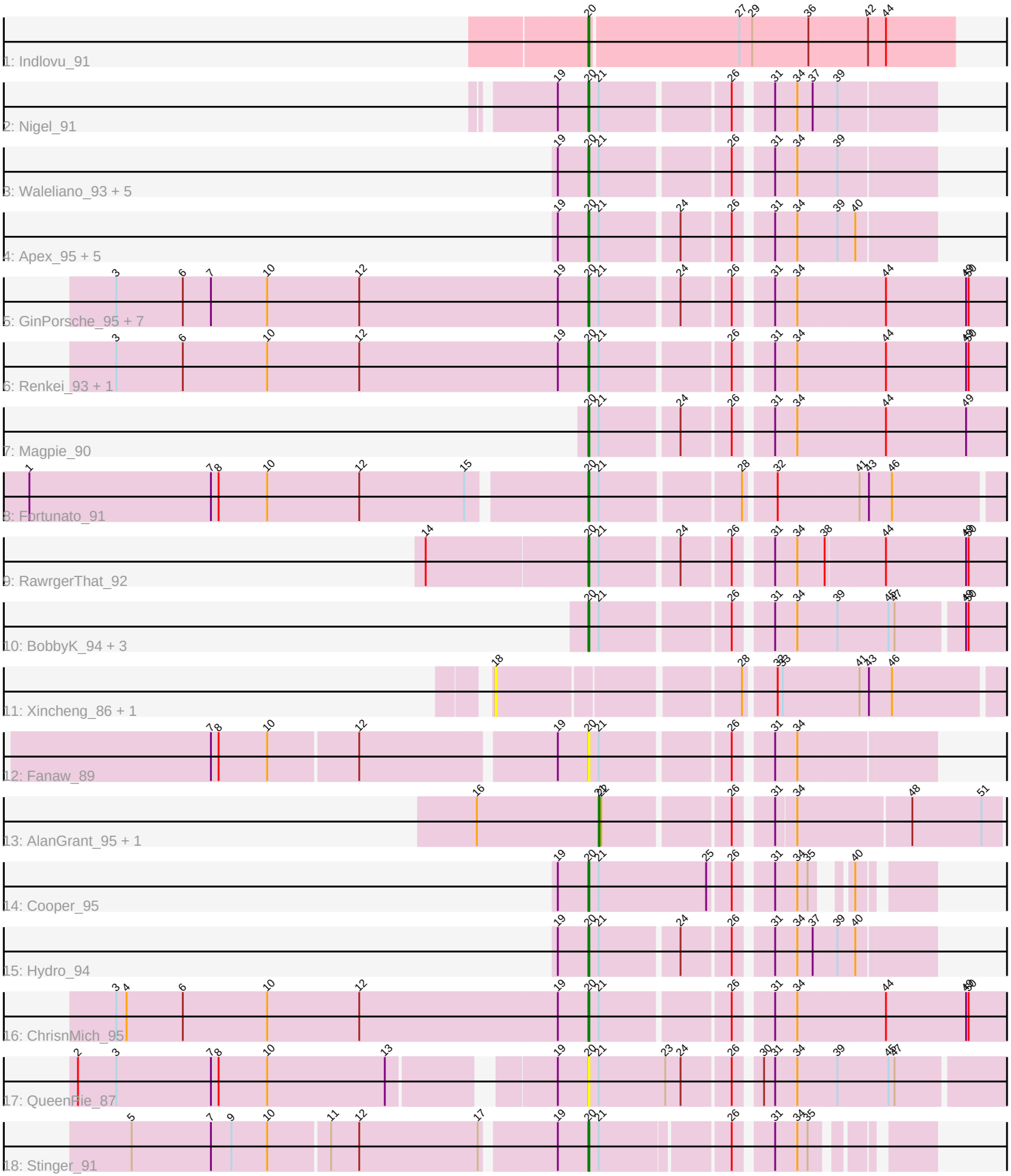
Pham 347788


1: Indlovu_91
2: Nigel_91
3: Waleliano_93 + 5
4: Apex_95 + 5
5: GinPorsche_95 + 7
6: Renkei_93 + 1
7: Magpie_90
8: Fortunato_91
9: RawrgerThat_92
10: BobbyK_94 + 3
11: Xincheng_86 + 1
12: Fanaw_89
13: AlanGrant_95 + 1
14: Cooper_95
15: Hydro_94
16: ChrisnMich_95
17: QueenRie_87
18: Stinger_91

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 347788 Report

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

Pham number 347788 has 41 members, 11 are drafts.

Phages represented in each track:
• Track 1 : Indlovu_91
• Track 2 : Nigel_91
• Track 3 : Waleliano_93, Mithril_92, Lolalove_96, JoyceMaria_94, BrownCNA_94, Hangman_94
• Track 4 : Apex_95, Prince_94, JAMaL_95, Austelle_94, VioletZ_96, Mudslide_95
• Track 5 : GinPorsche_95, Hally898_91, Antihero_93, Ahwei_91, Nanao_93, Poster_92, Epah_93, Lambano_91
• Track 6 : Renkei_93, LittleDigger_93
• Track 7 : Magpie_90
• Track 8 : Fortunato_91
• Track 9 : RawrgerThat_92
• Track 10 : BobbyK_94, Heath_88, Frederick_95, Zemanar_92
• Track 11 : Xincheng_86, JaguarMi_88
• Track 12 : Fanaw_89
• Track 13 : AlanGrant_95, Vincenzo_94
• Track 14 : Cooper_95
• Track 15 : Hydro_94
• Track 16 : ChrisnMich_95
• Track 17 : QueenPie_87
• Track 18 : Stinger_91

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

The start number called the most often in the published annotations is 20, it was called in 28 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ahwei_91, Antihero_93, Apex_95, Austelle_94, BobbyK_94, BrownCNA_94, ChrisnMich_95, Cooper_95, Epah_93, Fanaw_89, Fortunato_91, Frederick_95, GinPorsche_95, Hally898_91, Hangman_94, Heath_88, Hydro_94, Indlovu_91, JAMaL_95, JoyceMaria_94, Lambano_91, LittleDigger_93, Lolalove_96, Magpie_90, Mithril_92, Mudslide_95, Nanao_93, Nigel_91, Poster_92, Prince_94, QueenPie_87, RawrgerThat_92, Renkei_93, Stinger_91, VioletZ_96, Waleliano_93, Zemanar_92,

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

Genes that do not have the "Most Annotated" start:
• AlanGrant_95, JaguarMi_88, Vincenzo_94, Xincheng_86,

Summary by start number:

Start 18:
• Found in 2 of 41 (4.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: JaguarMi_88 (B4), Xincheng_86 (B4),

Start 20:
• Found in 37 of 41 (90.2%) of genes in pham
• Manual Annotations of this start: 28 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ahwei_91 (B4), Antihero_93 (B4), Apex_95 (B4), Austelle_94 (B4), BobbyK_94 (B4), BrownCNA_94 (B4), ChrisnMich_95 (B4), Cooper_95 (B4), Epah_93 (B4), Fanaw_89 (B4), Fortunato_91 (B4), Frederick_95 (B4), GinPorsche_95 (B4), Hally898_91 (B4), Hangman_94 (B4), Heath_88 (B4), Hydro_94 (B4), Indlovu_91 (B11), JAMaL_95 (B4), JoyceMaria_94 (B4), Lambano_91 (B4), LittleDigger_93 (B4), Lolalove_96 (B4), Magpie_90 (B4), Mithril_92 (B4), Mudslide_95 (B4), Nanao_93 (B4), Nigel_91 (B4), Poster_92 (B4), Prince_94 (B4), QueenPie_87 (B4), RawrgerThat_92 (B4), Renkei_93 (B4), Stinger_91 (B4), VioletZ_96 (B4), Waleliano_93 (B4), Zemanar_92 (B4),

Start 21:
• Found in 38 of 41 (92.7%) of genes in pham
• Manual Annotations of this start: 2 of 30
• Called 5.3% of time when present
• Phage (with cluster) where this start called: AlanGrant_95 (B4), Vincenzo_94 (B4),

Summary by clusters:

There are 2 clusters represented in this pham: B4, B11,

Info for manual annotations of cluster B11:
•Start number 20 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B4:
•Start number 20 was manually annotated 27 times for cluster B4.
•Start number 21 was manually annotated 2 times for cluster B4.

Gene Information:

Gene: Ahwei_91 Start: 68646, Stop: 68170, Start Num: 20
Candidate Starts for Ahwei_91:
(3, 69198), (6, 69120), (7, 69087), (10, 69021), (12, 68913), (19, 68682), (Start: 20 @68646 has 28 MA's), (Start: 21 @68634 has 2 MA's), (24, 68547), (26, 68493), (31, 68457), (34, 68433), (44, 68334),

(49, 68241), (50, 68238),

Gene: AlanGrant_95 Start: 70543, Stop: 70112, Start Num: 21
Candidate Starts for AlanGrant_95:
(16, 70684), (Start: 21 @70543 has 2 MA's), (22, 70540), (26, 70402), (31, 70366), (34, 70345), (48, 70216), (51, 70135),

Gene: Antihero_93 Start: 68571, Stop: 68095, Start Num: 20
Candidate Starts for Antihero_93:
(3, 69123), (6, 69045), (7, 69012), (10, 68946), (12, 68838), (19, 68607), (Start: 20 @68571 has 28 MA's), (Start: 21 @68559 has 2 MA's), (24, 68472), (26, 68418), (31, 68382), (34, 68358), (44, 68259), (49, 68166), (50, 68163),

Gene: Apex_95 Start: 69574, Stop: 69209, Start Num: 20
Candidate Starts for Apex_95:
(19, 69610), (Start: 20 @69574 has 28 MA's), (Start: 21 @69562 has 2 MA's), (24, 69475), (26, 69421), (31, 69385), (34, 69361), (39, 69316), (40, 69298),

Gene: Austelle_94 Start: 70106, Stop: 69741, Start Num: 20
Candidate Starts for Austelle_94:
(19, 70142), (Start: 20 @70106 has 28 MA's), (Start: 21 @70094 has 2 MA's), (24, 70007), (26, 69953), (31, 69917), (34, 69893), (39, 69848), (40, 69830),

Gene: BobbyK_94 Start: 69184, Stop: 68717, Start Num: 20
Candidate Starts for BobbyK_94:
(Start: 20 @69184 has 28 MA's), (Start: 21 @69172 has 2 MA's), (26, 69031), (31, 68995), (34, 68971), (39, 68926), (45, 68869), (47, 68863), (49, 68788), (50, 68785),

Gene: BrownCNA_94 Start: 69521, Stop: 69156, Start Num: 20
Candidate Starts for BrownCNA_94:
(19, 69557), (Start: 20 @69521 has 28 MA's), (Start: 21 @69509 has 2 MA's), (26, 69368), (31, 69332), (34, 69308), (39, 69263),

Gene: ChrisnMich_95 Start: 68262, Stop: 67786, Start Num: 20
Candidate Starts for ChrisnMich_95:
(3, 68814), (4, 68802), (6, 68736), (10, 68637), (12, 68529), (19, 68298), (Start: 20 @68262 has 28 MA's), (Start: 21 @68250 has 2 MA's), (26, 68109), (31, 68073), (34, 68049), (44, 67950), (49, 67857), (50, 67854),

Gene: Cooper_95 Start: 68661, Stop: 68329, Start Num: 20
Candidate Starts for Cooper_95:
(19, 68697), (Start: 20 @68661 has 28 MA's), (Start: 21 @68649 has 2 MA's), (25, 68523), (26, 68499), (31, 68463), (34, 68439), (35, 68427), (40, 68403),

Gene: Epah_93 Start: 68571, Stop: 68095, Start Num: 20
Candidate Starts for Epah_93:
(3, 69123), (6, 69045), (7, 69012), (10, 68946), (12, 68838), (19, 68607), (Start: 20 @68571 has 28 MA's), (Start: 21 @68559 has 2 MA's), (24, 68472), (26, 68418), (31, 68382), (34, 68358), (44, 68259), (49, 68166), (50, 68163),

Gene: Fanaw_89 Start: 69126, Stop: 68761, Start Num: 20
Candidate Starts for Fanaw_89:

(7, 69546), (8, 69537), (10, 69480), (12, 69378), (19, 69162), (Start: 20 @69126 has 28 MA's), (Start: 21 @69114 has 2 MA's), (26, 68973), (31, 68937), (34, 68913),

Gene: Fortunato_91 Start: 68994, Stop: 68518, Start Num: 20
Candidate Starts for Fortunato_91:
(1, 69633), (7, 69420), (8, 69411), (10, 69354), (12, 69246), (15, 69123), (Start: 20 @68994 has 28 MA's), (Start: 21 @68982 has 2 MA's), (28, 68829), (32, 68796), (41, 68703), (43, 68694), (46, 68667),

Gene: Frederick_95 Start: 69490, Stop: 69023, Start Num: 20
Candidate Starts for Frederick_95:
(Start: 20 @69490 has 28 MA's), (Start: 21 @69478 has 2 MA's), (26, 69337), (31, 69301), (34, 69277), (39, 69232), (45, 69175), (47, 69169), (49, 69094), (50, 69091),

Gene: GinPorsche_95 Start: 68568, Stop: 68092, Start Num: 20
Candidate Starts for GinPorsche_95:
(3, 69120), (6, 69042), (7, 69009), (10, 68943), (12, 68835), (19, 68604), (Start: 20 @68568 has 28 MA's), (Start: 21 @68556 has 2 MA's), (24, 68469), (26, 68415), (31, 68379), (34, 68355), (44, 68256), (49, 68163), (50, 68160),

Gene: Hally898_91 Start: 68408, Stop: 67932, Start Num: 20
Candidate Starts for Hally898_91:
(3, 68960), (6, 68882), (7, 68849), (10, 68783), (12, 68675), (19, 68444), (Start: 20 @68408 has 28 MA's), (Start: 21 @68396 has 2 MA's), (24, 68309), (26, 68255), (31, 68219), (34, 68195), (44, 68096), (49, 68003), (50, 68000),

Gene: Hangman_94 Start: 69683, Stop: 69318, Start Num: 20
Candidate Starts for Hangman_94:
(19, 69719), (Start: 20 @69683 has 28 MA's), (Start: 21 @69671 has 2 MA's), (26, 69530), (31, 69494), (34, 69470), (39, 69425),

Gene: Heath_88 Start: 67555, Stop: 67088, Start Num: 20
Candidate Starts for Heath_88:
(Start: 20 @67555 has 28 MA's), (Start: 21 @67543 has 2 MA's), (26, 67402), (31, 67366), (34, 67342), (39, 67297), (45, 67240), (47, 67234), (49, 67159), (50, 67156),

Gene: Hydro_94 Start: 69470, Stop: 69105, Start Num: 20
Candidate Starts for Hydro_94:
(19, 69506), (Start: 20 @69470 has 28 MA's), (Start: 21 @69458 has 2 MA's), (24, 69371), (26, 69317), (31, 69281), (34, 69257), (37, 69239), (39, 69212), (40, 69194),

Gene: Indlovu_91 Start: 69140, Stop: 68721, Start Num: 20
Candidate Starts for Indlovu_91:
(Start: 20 @69140 has 28 MA's), (27, 68969), (29, 68954), (36, 68888), (42, 68822), (44, 68801),

Gene: JAMaL_95 Start: 69170, Stop: 68805, Start Num: 20
Candidate Starts for JAMaL_95:
(19, 69206), (Start: 20 @69170 has 28 MA's), (Start: 21 @69158 has 2 MA's), (24, 69071), (26, 69017), (31, 68981), (34, 68957), (39, 68912), (40, 68894),

Gene: JaguarMi_88 Start: 69648, Stop: 69079, Start Num: 18
Candidate Starts for JaguarMi_88:
(18, 69648), (28, 69390), (32, 69357), (33, 69351), (41, 69264), (43, 69255), (46, 69228),

Gene: JoyceMaria_94 Start: 69515, Stop: 69150, Start Num: 20
Candidate Starts for JoyceMaria_94:
(19, 69551), (Start: 20 @69515 has 28 MA's), (Start: 21 @69503 has 2 MA's), (26, 69362), (31, 69326), (34, 69302), (39, 69257),

Gene: Lambano_91 Start: 68408, Stop: 67932, Start Num: 20
Candidate Starts for Lambano_91:
(3, 68960), (6, 68882), (7, 68849), (10, 68783), (12, 68675), (19, 68444), (Start: 20 @68408 has 28 MA's), (Start: 21 @68396 has 2 MA's), (24, 68309), (26, 68255), (31, 68219), (34, 68195), (44, 68096), (49, 68003), (50, 68000),

Gene: LittleDigger_93 Start: 68510, Stop: 68034, Start Num: 20
Candidate Starts for LittleDigger_93:
(3, 69062), (6, 68984), (10, 68885), (12, 68777), (19, 68546), (Start: 20 @68510 has 28 MA's), (Start: 21 @68498 has 2 MA's), (26, 68357), (31, 68321), (34, 68297), (44, 68198), (49, 68105), (50, 68102),

Gene: Lolalove_96 Start: 69418, Stop: 69053, Start Num: 20
Candidate Starts for Lolalove_96:
(19, 69454), (Start: 20 @69418 has 28 MA's), (Start: 21 @69406 has 2 MA's), (26, 69265), (31, 69229), (34, 69205), (39, 69160),

Gene: Magpie_90 Start: 69343, Stop: 68867, Start Num: 20
Candidate Starts for Magpie_90:
(Start: 20 @69343 has 28 MA's), (Start: 21 @69331 has 2 MA's), (24, 69244), (26, 69190), (31, 69154), (34, 69130), (44, 69031), (49, 68938),

Gene: Mithril_92 Start: 69244, Stop: 68879, Start Num: 20
Candidate Starts for Mithril_92:
(19, 69280), (Start: 20 @69244 has 28 MA's), (Start: 21 @69232 has 2 MA's), (26, 69091), (31, 69055), (34, 69031), (39, 68986),

Gene: Mudslide_95 Start: 69649, Stop: 69284, Start Num: 20
Candidate Starts for Mudslide_95:
(19, 69685), (Start: 20 @69649 has 28 MA's), (Start: 21 @69637 has 2 MA's), (24, 69550), (26, 69496), (31, 69460), (34, 69436), (39, 69391), (40, 69373),

Gene: Nanao_93 Start: 68421, Stop: 67945, Start Num: 20
Candidate Starts for Nanao_93:
(3, 68973), (6, 68895), (7, 68862), (10, 68796), (12, 68688), (19, 68457), (Start: 20 @68421 has 28 MA's), (Start: 21 @68409 has 2 MA's), (24, 68322), (26, 68268), (31, 68232), (34, 68208), (44, 68109), (49, 68016), (50, 68013),

Gene: Nigel_91 Start: 67940, Stop: 67575, Start Num: 20
Candidate Starts for Nigel_91:
(19, 67976), (Start: 20 @67940 has 28 MA's), (Start: 21 @67928 has 2 MA's), (26, 67787), (31, 67751), (34, 67727), (37, 67709), (39, 67682),

Gene: Poster_92 Start: 68422, Stop: 67946, Start Num: 20
Candidate Starts for Poster_92:
(3, 68974), (6, 68896), (7, 68863), (10, 68797), (12, 68689), (19, 68458), (Start: 20 @68422 has 28 MA's), (Start: 21 @68410 has 2 MA's), (24, 68323), (26, 68269), (31, 68233), (34, 68209), (44, 68110), (49, 68017), (50, 68014),

Gene: Prince_94 Start: 69516, Stop: 69151, Start Num: 20
Candidate Starts for Prince_94:
(19, 69552), (Start: 20 @69516 has 28 MA's), (Start: 21 @69504 has 2 MA's), (24, 69417), (26, 69363), (31, 69327), (34, 69303), (39, 69258), (40, 69240),

Gene: QueenPie_87 Start: 68292, Stop: 67816, Start Num: 20
Candidate Starts for QueenPie_87:
(2, 68853), (3, 68808), (7, 68697), (8, 68688), (10, 68631), (13, 68493), (19, 68328), (Start: 20 @68292 has 28 MA's), (Start: 21 @68280 has 2 MA's), (23, 68202), (24, 68184), (26, 68130), (30, 68106), (31, 68094), (34, 68070), (39, 68025), (45, 67968), (47, 67962),

Gene: RawrgerThat_92 Start: 69122, Stop: 68649, Start Num: 20
Candidate Starts for RawrgerThat_92:
(14, 69308), (Start: 20 @69122 has 28 MA's), (Start: 21 @69110 has 2 MA's), (24, 69023), (26, 68969), (31, 68933), (34, 68909), (38, 68879), (44, 68813), (49, 68720), (50, 68717),

Gene: Renkei_93 Start: 68504, Stop: 68028, Start Num: 20
Candidate Starts for Renkei_93:
(3, 69056), (6, 68978), (10, 68879), (12, 68771), (19, 68540), (Start: 20 @68504 has 28 MA's), (Start: 21 @68492 has 2 MA's), (26, 68351), (31, 68315), (34, 68291), (44, 68192), (49, 68099), (50, 68096),

Gene: Stinger_91 Start: 67668, Stop: 67336, Start Num: 20
Candidate Starts for Stinger_91:
(5, 68181), (7, 68088), (9, 68064), (10, 68022), (11, 67953), (12, 67920), (17, 67782), (19, 67704), (Start: 20 @67668 has 28 MA's), (Start: 21 @67656 has 2 MA's), (26, 67515), (31, 67479), (34, 67455), (35, 67443),

Gene: Vincenzo_94 Start: 70573, Stop: 70142, Start Num: 21
Candidate Starts for Vincenzo_94:
(16, 70714), (Start: 21 @70573 has 2 MA's), (22, 70570), (26, 70432), (31, 70396), (34, 70375), (48, 70246), (51, 70165),

Gene: VioletZ_96 Start: 69623, Stop: 69258, Start Num: 20
Candidate Starts for VioletZ_96:
(19, 69659), (Start: 20 @69623 has 28 MA's), (Start: 21 @69611 has 2 MA's), (24, 69524), (26, 69470), (31, 69434), (34, 69410), (39, 69365), (40, 69347),

Gene: Waleliano_93 Start: 69270, Stop: 68905, Start Num: 20
Candidate Starts for Waleliano_93:
(19, 69306), (Start: 20 @69270 has 28 MA's), (Start: 21 @69258 has 2 MA's), (26, 69117), (31, 69081), (34, 69057), (39, 69012),

Gene: Xincheng_86 Start: 69590, Stop: 69021, Start Num: 18
Candidate Starts for Xincheng_86:
(18, 69590), (28, 69332), (32, 69299), (33, 69293), (41, 69206), (43, 69197), (46, 69170),

Gene: Zemanar_92 Start: 69389, Stop: 68922, Start Num: 20
Candidate Starts for Zemanar_92:
(Start: 20 @69389 has 28 MA's), (Start: 21 @69377 has 2 MA's), (26, 69236), (31, 69200), (34, 69176), (39, 69131), (45, 69074), (47, 69068), (49, 68993), (50, 68990),