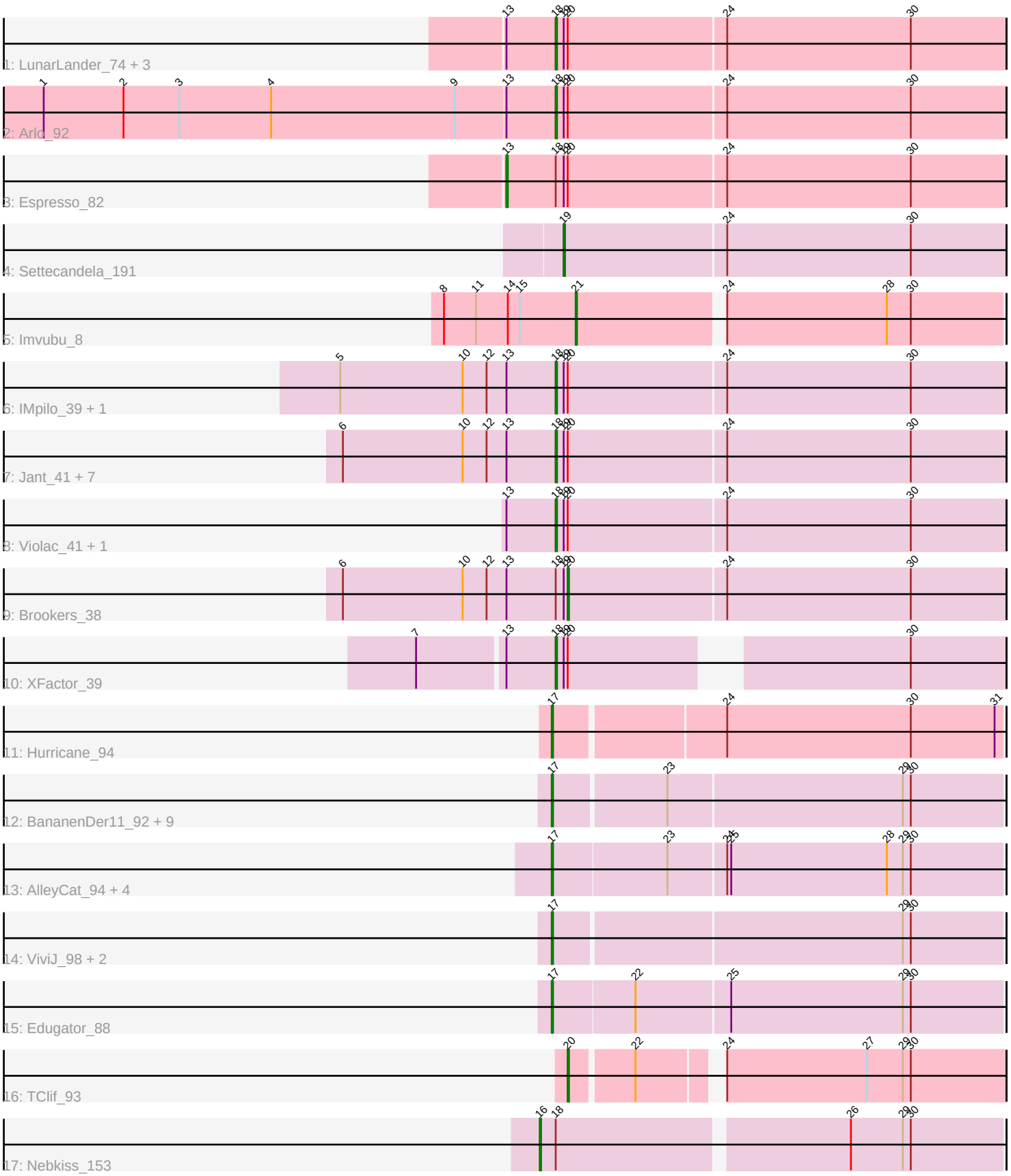
Pham 332968


1: LunarLander_74 + 3
2: Arlo_92
3: Espresso_82
4: Settecandela_191
5: Imvubu_8
6: IMpilo_39 + 1
7: Jant_41 + 7
8: Violac_41 + 1
9: Brookers_38
10: XFactor_39
11: Hurricane_94
12: BananenDer11_92 + 9
13: AlleyCat_94 + 4
14: ViviJ_98 + 2
15: Edugator_88
16: TClif_93
17: Nebkiss_153

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 332968 Report

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

Pham number 332968 has 44 members, 4 are drafts.

Phages represented in each track:
• Track 1 : LunarLander_74, Violet_82, ILeeKay_87, Magnito_88
• Track 2 : Arlo_92
• Track 3 : Espresso_82
• Track 4 : Settecandela_191
• Track 5 : Imvubu_8
• Track 6 : IMpilo_39, Galactic_42
• Track 7 : Jant_41, Phanphagia_36, Donkeykong_40, Coco12_39, MinionDave_42, NewHope4_44, Byougenkin_39, Soul22_45
• Track 8 : Violac_41, Doom_81
• Track 9 : Brookers_38
• Track 10 : XFactor_39
• Track 11 : Hurricane_94
• Track 12 : BananenDer11_92, Collard_90, OkiRoe_91, Feyre_93, Leston_90, Gengar_90, DoubleChamp_90, Kratio_94, Waterfoul_90, LilDirt_92
• Track 13 : AlleyCat_94, Larva_93, Dadosky_94, Neighly_94, Psycho_92
• Track 14 : ViviJ_98, InvictusManeo_89, Agent47_91
• Track 15 : Edugator_88
• Track 16 : TClif_93
• Track 17 : Nebkiss_153

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

The start number called the most often in the published annotations is 17, it was called in 18 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Agent47_91, AlleyCat_94, BananenDer11_92, Collard_90, Dadosky_94, DoubleChamp_90, Edugator_88, Feyre_93, Gengar_90, Hurricane_94, InvictusManeo_89, Kratio_94, Larva_93, Leston_90, LilDirt_92, Neighly_94, OkiRoe_91, Psycho_92, ViviJ_98, Waterfoul_90,

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

Genes that do not have the "Most Annotated" start:
• Arlo_92, Brookers_38, Byougenkin_39, Coco12_39, Donkeykong_40, Doom_81, Espresso_82, Galactic_42, ILeeKay_87, IMpilo_39, Imvubu_8, Jant_41, LunarLander_74, Magnito_88, MinionDave_42, Nebkiss_153, NewHope4_44, Phanphagia_36, Settecandela_191, Soul22_45, TClif_93, Violac_41, Violet_82, XFactor_39,

Summary by start number:

Start 13:
• Found in 20 of 44 (45.5%) of genes in pham
• Manual Annotations of this start: 1 of 40
• Called 5.0% of time when present
• Phage (with cluster) where this start called: Espresso_82 (A1),

Start 16:
• Found in 1 of 44 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 40
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Nebkiss_153 (X),

Start 17:
• Found in 20 of 44 (45.5%) of genes in pham
• Manual Annotations of this start: 18 of 40
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Agent47_91 (K5), AlleyCat_94 (K5), BananenDer11_92 (K5), Collard_90 (K5), Dadosky_94 (K5), DoubleChamp_90 (K5), Edugator_88 (K5), Feyre_93 (K5), Gengar_90 (K5), Hurricane_94 (K3), InvictusManeo_89 (K5), Kratio_94 (K5), Larva_93 (K5), Leston_90 (K5), LilDirt_92 (K5), Neighly_94 (K3), OkiRoe_91 (K5), Psycho_92 (K5), ViviJ_98 (K5), Waterfoul_90 (K5),

Start 18:
• Found in 21 of 44 (47.7%) of genes in pham
• Manual Annotations of this start: 16 of 40
• Called 85.7% of time when present
• Phage (with cluster) where this start called: Arlo_92 (A1), Byougenkin_39 (F1), Coco12_39 (F1), Donkeykong_40 (F1), Doom_81 (A1), Galactic_42 (F1), ILeeKay_87 (A1), IMpilo_39 (F1), Jant_41 (F1), LunarLander_74 (A1), Magnito_88 (A1), MinionDave_42 (F1), NewHope4_44 (F1), Phanphagia_36 (F1), Soul22_45 (F2), Violac_41 (F1), Violet_82 (A1), XFactor_39 (F1),

Start 19:
• Found in 21 of 44 (47.7%) of genes in pham
• Manual Annotations of this start: 1 of 40
• Called 4.8% of time when present
• Phage (with cluster) where this start called: Settecandela_191 (AA),

Start 20:
• Found in 21 of 44 (47.7%) of genes in pham
• Manual Annotations of this start: 2 of 40
• Called 9.5% of time when present
• Phage (with cluster) where this start called: Brookers_38 (F1), TClif_93 (K6),

Start 21:
• Found in 1 of 44 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 40
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Imvubu_8 (B10),

Summary by clusters:

There are 9 clusters represented in this pham: AA, F1, F2, B10, A1, K6, K5, X, K3,

Info for manual annotations of cluster A1:
•Start number 13 was manually annotated 1 time for cluster A1.
•Start number 18 was manually annotated 6 times for cluster A1.

Info for manual annotations of cluster AA:
•Start number 19 was manually annotated 1 time for cluster AA.

Info for manual annotations of cluster B10:
•Start number 21 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster F1:
•Start number 18 was manually annotated 9 times for cluster F1.
•Start number 20 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:
•Start number 18 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster K3:
•Start number 17 was manually annotated 1 time for cluster K3.

Info for manual annotations of cluster K5:
•Start number 17 was manually annotated 17 times for cluster K5.

Info for manual annotations of cluster K6:
•Start number 20 was manually annotated 1 time for cluster K6.

Info for manual annotations of cluster X:
•Start number 16 was manually annotated 1 time for cluster X.

Gene Information:

Gene: Agent47_91 Start: 58078, Stop: 58407, Start Num: 17
Candidate Starts for Agent47_91:
(Start: 17 @58078 has 18 MA's), (29, 58333), (30, 58339),

Gene: AlleyCat_94 Start: 59367, Stop: 59699, Start Num: 17
Candidate Starts for AlleyCat_94:
(Start: 17 @59367 has 18 MA's), (23, 59451), (24, 59493), (25, 59496), (28, 59613), (29, 59625), (30, 59631),

Gene: Arlo_92 Start: 51494, Stop: 51159, Start Num: 18
Candidate Starts for Arlo_92:
(1, 51875), (2, 51815), (3, 51773), (4, 51704), (9, 51566), (Start: 13 @51530 has 1 MA's), (Start: 18 @51494 has 16 MA's), (Start: 19 @51488 has 1 MA's), (Start: 20 @51485 has 2 MA's), (24, 51368), (30, 51230),

Gene: BananenDer11_92 Start: 58330, Stop: 58659, Start Num: 17
Candidate Starts for BananenDer11_92:
(Start: 17 @58330 has 18 MA's), (23, 58411), (29, 58585), (30, 58591),

Gene: Brookers_38 Start: 30476, Stop: 30150, Start Num: 20
Candidate Starts for Brookers_38:
(6, 30641), (10, 30554), (12, 30536), (Start: 13 @30521 has 1 MA's), (Start: 18 @30485 has 16 MA's), (Start: 19 @30479 has 1 MA's), (Start: 20 @30476 has 2 MA's), (24, 30359), (30, 30221),

Gene: Byougenkin_39 Start: 31630, Stop: 31295, Start Num: 18
Candidate Starts for Byougenkin_39:
(6, 31786), (10, 31699), (12, 31681), (Start: 13 @31666 has 1 MA's), (Start: 18 @31630 has 16 MA's), (Start: 19 @31624 has 1 MA's), (Start: 20 @31621 has 2 MA's), (24, 31504), (30, 31366),

Gene: Coco12_39 Start: 31609, Stop: 31274, Start Num: 18
Candidate Starts for Coco12_39:
(6, 31765), (10, 31678), (12, 31660), (Start: 13 @31645 has 1 MA's), (Start: 18 @31609 has 16 MA's), (Start: 19 @31603 has 1 MA's), (Start: 20 @31600 has 2 MA's), (24, 31483), (30, 31345),

Gene: Collard_90 Start: 58330, Stop: 58659, Start Num: 17
Candidate Starts for Collard_90:
(Start: 17 @58330 has 18 MA's), (23, 58411), (29, 58585), (30, 58591),

Gene: Dadosky_94 Start: 59368, Stop: 59700, Start Num: 17
Candidate Starts for Dadosky_94:
(Start: 17 @59368 has 18 MA's), (23, 59452), (24, 59494), (25, 59497), (28, 59614), (29, 59626), (30, 59632),

Gene: Donkeykong_40 Start: 31737, Stop: 31402, Start Num: 18
Candidate Starts for Donkeykong_40:
(6, 31893), (10, 31806), (12, 31788), (Start: 13 @31773 has 1 MA's), (Start: 18 @31737 has 16 MA's), (Start: 19 @31731 has 1 MA's), (Start: 20 @31728 has 2 MA's), (24, 31611), (30, 31473),

Gene: Doom_81 Start: 49545, Stop: 49210, Start Num: 18
Candidate Starts for Doom_81:
(Start: 13 @49581 has 1 MA's), (Start: 18 @49545 has 16 MA's), (Start: 19 @49539 has 1 MA's), (Start: 20 @49536 has 2 MA's), (24, 49419), (30, 49281),

Gene: DoubleChamp_90 Start: 58330, Stop: 58659, Start Num: 17
Candidate Starts for DoubleChamp_90:
(Start: 17 @58330 has 18 MA's), (23, 58411), (29, 58585), (30, 58591),

Gene: Edugator_88 Start: 60566, Stop: 60898, Start Num: 17
Candidate Starts for Edugator_88:
(Start: 17 @60566 has 18 MA's), (22, 60626), (25, 60695), (29, 60824), (30, 60830),

Gene: Espresso_82 Start: 49468, Stop: 49097, Start Num: 13

Candidate Starts for Espresso_82:
(Start: 13 @49468 has 1 MA's), (Start: 18 @49432 has 16 MA's), (Start: 19 @49426 has 1 MA's), (Start: 20 @49423 has 2 MA's), (24, 49306), (30, 49168),

Gene: Feyre_93 Start: 60553, Stop: 60882, Start Num: 17
Candidate Starts for Feyre_93:
(Start: 17 @60553 has 18 MA's), (23, 60634), (29, 60808), (30, 60814),

Gene: Galactic_42 Start: 32399, Stop: 32064, Start Num: 18
Candidate Starts for Galactic_42:
(5, 32558), (10, 32468), (12, 32450), (Start: 13 @32435 has 1 MA's), (Start: 18 @32399 has 16 MA's), (Start: 19 @32393 has 1 MA's), (Start: 20 @32390 has 2 MA's), (24, 32273), (30, 32135),

Gene: Gengar_90 Start: 58624, Stop: 58953, Start Num: 17
Candidate Starts for Gengar_90:
(Start: 17 @58624 has 18 MA's), (23, 58705), (29, 58879), (30, 58885),

Gene: Hurricane_94 Start: 58705, Stop: 59034, Start Num: 17
Candidate Starts for Hurricane_94:
(Start: 17 @58705 has 18 MA's), (24, 58828), (30, 58966), (31, 59029),

Gene: ILeeKay_87 Start: 49541, Stop: 49206, Start Num: 18
Candidate Starts for ILeeKay_87:
(Start: 13 @49577 has 1 MA's), (Start: 18 @49541 has 16 MA's), (Start: 19 @49535 has 1 MA's), (Start: 20 @49532 has 2 MA's), (24, 49415), (30, 49277),

Gene: IMpilo_39 Start: 31340, Stop: 31005, Start Num: 18
Candidate Starts for IMpilo_39:
(5, 31499), (10, 31409), (12, 31391), (Start: 13 @31376 has 1 MA's), (Start: 18 @31340 has 16 MA's), (Start: 19 @31334 has 1 MA's), (Start: 20 @31331 has 2 MA's), (24, 31214), (30, 31076),

Gene: Imvubu_8 Start: 8549, Stop: 8241, Start Num: 21
Candidate Starts for Imvubu_8:
(8, 8648), (11, 8624), (14, 8600), (15, 8591), (Start: 21 @8549 has 1 MA's), (24, 8447), (28, 8327), (30, 8309),

Gene: InvictusManeo_89 Start: 58082, Stop: 58411, Start Num: 17
Candidate Starts for InvictusManeo_89:
(Start: 17 @58082 has 18 MA's), (29, 58337), (30, 58343),

Gene: Jant_41 Start: 31735, Stop: 31400, Start Num: 18
Candidate Starts for Jant_41:
(6, 31891), (10, 31804), (12, 31786), (Start: 13 @31771 has 1 MA's), (Start: 18 @31735 has 16 MA's), (Start: 19 @31729 has 1 MA's), (Start: 20 @31726 has 2 MA's), (24, 31609), (30, 31471),

Gene: Kratio_94 Start: 59262, Stop: 59591, Start Num: 17
Candidate Starts for Kratio_94:
(Start: 17 @59262 has 18 MA's), (23, 59343), (29, 59517), (30, 59523),

Gene: Larva_93 Start: 60240, Stop: 60572, Start Num: 17
Candidate Starts for Larva_93:
(Start: 17 @60240 has 18 MA's), (23, 60324), (24, 60366), (25, 60369), (28, 60486), (29, 60498), (30, 60504),

Gene: Leston_90 Start: 58573, Stop: 58902, Start Num: 17
Candidate Starts for Leston_90:
(Start: 17 @58573 has 18 MA's), (23, 58654), (29, 58828), (30, 58834),

Gene: LilDirt_92 Start: 58131, Stop: 58460, Start Num: 17
Candidate Starts for LilDirt_92:
(Start: 17 @58131 has 18 MA's), (23, 58212), (29, 58386), (30, 58392),

Gene: LunarLander_74 Start: 46820, Stop: 46485, Start Num: 18
Candidate Starts for LunarLander_74:
(Start: 13 @46856 has 1 MA's), (Start: 18 @46820 has 16 MA's), (Start: 19 @46814 has 1 MA's), (Start: 20 @46811 has 2 MA's), (24, 46694), (30, 46556),

Gene: Magnito_88 Start: 50110, Stop: 49775, Start Num: 18
Candidate Starts for Magnito_88:
(Start: 13 @50146 has 1 MA's), (Start: 18 @50110 has 16 MA's), (Start: 19 @50104 has 1 MA's), (Start: 20 @50101 has 2 MA's), (24, 49984), (30, 49846),

Gene: MinionDave_42 Start: 32726, Stop: 32391, Start Num: 18
Candidate Starts for MinionDave_42:
(6, 32882), (10, 32795), (12, 32777), (Start: 13 @32762 has 1 MA's), (Start: 18 @32726 has 16 MA's), (Start: 19 @32720 has 1 MA's), (Start: 20 @32717 has 2 MA's), (24, 32600), (30, 32462),

Gene: Nebkiss_153 Start: 76314, Stop: 75979, Start Num: 16
Candidate Starts for Nebkiss_153:
(Start: 16 @76314 has 1 MA's), (Start: 18 @76302 has 16 MA's), (26, 76092), (29, 76053), (30, 76047),

Gene: Neighly_94 Start: 60239, Stop: 60571, Start Num: 17
Candidate Starts for Neighly_94:
(Start: 17 @60239 has 18 MA's), (23, 60323), (24, 60365), (25, 60368), (28, 60485), (29, 60497), (30, 60503),

Gene: NewHope4_44 Start: 32369, Stop: 32034, Start Num: 18
Candidate Starts for NewHope4_44:
(6, 32525), (10, 32438), (12, 32420), (Start: 13 @32405 has 1 MA's), (Start: 18 @32369 has 16 MA's), (Start: 19 @32363 has 1 MA's), (Start: 20 @32360 has 2 MA's), (24, 32243), (30, 32105),

Gene: OkiRoe_91 Start: 59586, Stop: 59915, Start Num: 17
Candidate Starts for OkiRoe_91:
(Start: 17 @59586 has 18 MA's), (23, 59667), (29, 59841), (30, 59847),

Gene: Phanphagia_36 Start: 30684, Stop: 30349, Start Num: 18
Candidate Starts for Phanphagia_36:
(6, 30840), (10, 30753), (12, 30735), (Start: 13 @30720 has 1 MA's), (Start: 18 @30684 has 16 MA's), (Start: 19 @30678 has 1 MA's), (Start: 20 @30675 has 2 MA's), (24, 30558), (30, 30420),

Gene: Psycho_92 Start: 59365, Stop: 59697, Start Num: 17
Candidate Starts for Psycho_92:
(Start: 17 @59365 has 18 MA's), (23, 59449), (24, 59491), (25, 59494), (28, 59611), (29, 59623), (30, 59629),

Gene: Settecandela_191 Start: 122658, Stop: 122987, Start Num: 19

Candidate Starts for Settecandela_191:
(Start: 19 @122658 has 1 MA's), (24, 122778), (30, 122916),

Gene: Soul22_45 Start: 31934, Stop: 31599, Start Num: 18
Candidate Starts for Soul22_45:
(6, 32090), (10, 32003), (12, 31985), (Start: 13 @31970 has 1 MA's), (Start: 18 @31934 has 16 MA's), (Start: 19 @31928 has 1 MA's), (Start: 20 @31925 has 2 MA's), (24, 31808), (30, 31670),

Gene: TClif_93 Start: 58143, Stop: 58448, Start Num: 20
Candidate Starts for TClif_93:
(Start: 20 @58143 has 2 MA's), (22, 58188), (24, 58239), (27, 58344), (29, 58371), (30, 58377),

Gene: Violac_41 Start: 32283, Stop: 31948, Start Num: 18
Candidate Starts for Violac_41:
(Start: 13 @32319 has 1 MA's), (Start: 18 @32283 has 16 MA's), (Start: 19 @32277 has 1 MA's), (Start: 20 @32274 has 2 MA's), (24, 32157), (30, 32019),

Gene: Violet_82 Start: 50228, Stop: 49893, Start Num: 18
Candidate Starts for Violet_82:
(Start: 13 @50264 has 1 MA's), (Start: 18 @50228 has 16 MA's), (Start: 19 @50222 has 1 MA's), (Start: 20 @50219 has 2 MA's), (24, 50102), (30, 49964),

Gene: ViviJ_98 Start: 60419, Stop: 60748, Start Num: 17
Candidate Starts for ViviJ_98:
(Start: 17 @60419 has 18 MA's), (29, 60674), (30, 60680),

Gene: Waterfoul_90 Start: 58243, Stop: 58572, Start Num: 17
Candidate Starts for Waterfoul_90:
(Start: 17 @58243 has 18 MA's), (23, 58324), (29, 58498), (30, 58504),

Gene: XFactor_39 Start: 31705, Stop: 31403, Start Num: 18
Candidate Starts for XFactor_39:
(7, 31804), (Start: 13 @31741 has 1 MA's), (Start: 18 @31705 has 16 MA's), (Start: 19 @31699 has 1 MA's), (Start: 20 @31696 has 2 MA's), (30, 31474),