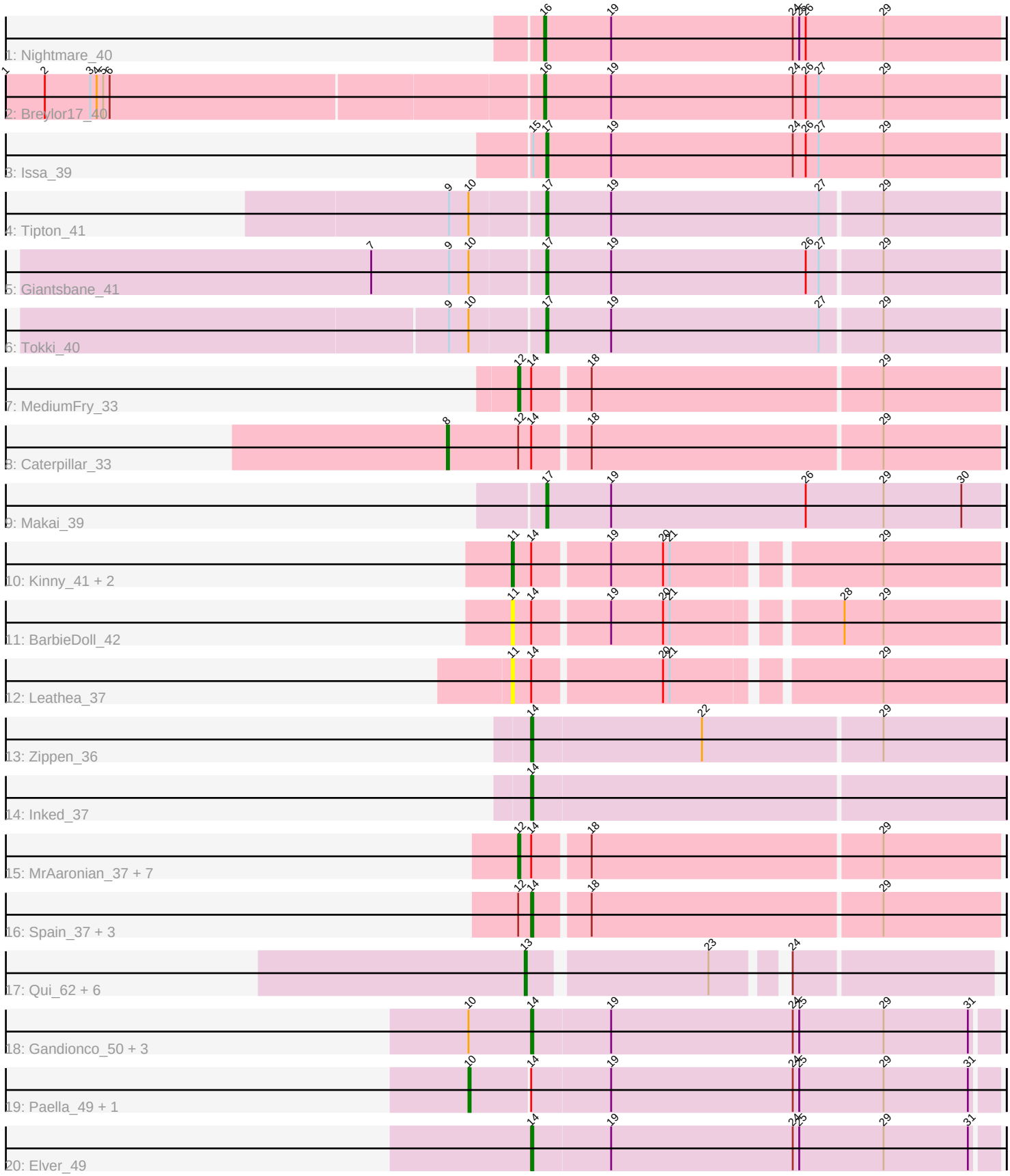
Pham 332974


1: Nightmare_40
2: Breylor17_40
3: Issa_39
4: Tipton_41
5: Giantsbane_41
6: Tokki_40
7: MediumFry_33
8: Caterpillar_33
9: Makai_39
10: Kinny_41 + 2
11: BarbieDoll_42
12: Leathea_37
13: Zippen_36
14: Inked_37
15: MrAaronian_37 + 7
16: Spain_37 + 3
17: Qui_62 + 6
18: Gandionco_50 + 3
19: Paella_49 + 1
20: Elver_49

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 332974 Report

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

Pham number 332974 has 42 members, 9 are drafts.

Phages represented in each track:
• Track 1 : Nightmare_40
• Track 2 : Breylor17_40
• Track 3 : Issa_39
• Track 4 : Tipton_41
• Track 5 : Giantsbane_41
• Track 6 : Tokki_40
• Track 7 : MediumFry_33
• Track 8 : Caterpillar_33
• Track 9 : Makai_39
• Track 10 : Kinny_41, Muglass_39, Biscute_38
• Track 11 : BarbieDoll_42
• Track 12 : Leathea_37
• Track 13 : Zippen_36
• Track 14 : Inked_37
• Track 15 : MrAaronian_37, Sloopyjoe_37, Djungelskog_37, ProfFrink_37, Salk_37, Stayer_37, Michelle_37, StarLord_37
• Track 16 : Spain_37, Egad_37, Linda_37, BronxBay_37
• Track 17 : Qui_62, Marianna39_62, Paella_62, Gandionco_62, Elver_61, JeNeSaisPas_60, Kureo_62
• Track 18 : Gandionco_50, Marianna39_50, JeNeSaisPas_48, Kureo_50
• Track 19 : Paella_49, Qui_49
• Track 20 : Elver_49

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 9 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Djungelskog_37, MediumFry_33, Michelle_37, MrAaronian_37, ProfFrink_37, Salk_37, Sloopyjoe_37, StarLord_37, Stayer_37,

Genes that have the "Most Annotated" start but do not call it:
• BronxBay_37, Caterpillar_33, Egad_37, Linda_37, Spain_37,

Genes that do not have the "Most Annotated" start:
• BarbieDoll_42, Biscute_38, Breylor17_40, Elver_49, Elver_61, Gandionco_50, Gandionco_62, Giantsbane_41, Inked_37, Issa_39, JeNeSaisPas_48, JeNeSaisPas_60, Kinny_41, Kureo_50, Kureo_62, Leathea_37, Makai_39, Marianna39_50, Marianna39_62, Muglass_39, Nightmare_40, Paella_49, Paella_62, Qui_49, Qui_62, Tipton_41, Tokki_40, Zippen_36,

Summary by start number:

Start 8:
• Found in 1 of 42 (2.4%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Caterpillar_33 (AU4),

Start 10:
• Found in 9 of 42 (21.4%) of genes in pham
• Manual Annotations of this start: 2 of 33
• Called 22.2% of time when present
• Phage (with cluster) where this start called: Paella_49 (FK), Qui_49 (FK),

Start 11:
• Found in 5 of 42 (11.9%) of genes in pham
• Manual Annotations of this start: 3 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BarbieDoll_42 (AU6), Biscute_38 (AU6), Kinny_41 (AU6), Leathea_37 (AU6), Muglass_39 (AU6),

Start 12:
• Found in 14 of 42 (33.3%) of genes in pham
• Manual Annotations of this start: 9 of 33
• Called 64.3% of time when present
• Phage (with cluster) where this start called: Djungelskog_37 (AW), MediumFry_33 (AU4), Michelle_37 (AW), MrAaronian_37 (AW), ProfFrink_37 (AW), Salk_37 (AW), Sloopyjoe_37 (AW), StarLord_37 (AW), Stayer_37 (AW),

Start 13:
• Found in 7 of 42 (16.7%) of genes in pham
• Manual Annotations of this start: 4 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elver_61 (FK), Gandionco_62 (FK), JeNeSaisPas_60 (FK), Kureo_62 (FK), Marianna39_62 (FK), Paella_62 (FK), Qui_62 (FK),

Start 14:
• Found in 28 of 42 (66.7%) of genes in pham
• Manual Annotations of this start: 7 of 33
• Called 39.3% of time when present
• Phage (with cluster) where this start called: BronxBay_37 (AW), Egad_37 (AW), Elver_49 (FK), Gandionco_50 (FK), Inked_37 (AU7), JeNeSaisPas_48 (FK), Kureo_50 (FK), Linda_37 (AW), Marianna39_50 (FK), Spain_37 (AW), Zippen_36 (AU7),

Start 16:
• Found in 2 of 42 (4.8%) of genes in pham
• Manual Annotations of this start: 2 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Breylor17_40 (AU1), Nightmare_40 (AU1),

Start 17:
• Found in 5 of 42 (11.9%) of genes in pham
• Manual Annotations of this start: 5 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Giantsbane_41 (AU2), Issa_39 (AU1), Makai_39 (AU5), Tipton_41 (AU2), Tokki_40 (AU2),

Summary by clusters:

There are 8 clusters represented in this pham: AU7, AU1, AU2, AU5, AU4, AW, AU6, FK,

Info for manual annotations of cluster AU1:
•Start number 16 was manually annotated 2 times for cluster AU1.
•Start number 17 was manually annotated 1 time for cluster AU1.

Info for manual annotations of cluster AU2:
•Start number 17 was manually annotated 3 times for cluster AU2.

Info for manual annotations of cluster AU4:
•Start number 8 was manually annotated 1 time for cluster AU4.
•Start number 12 was manually annotated 1 time for cluster AU4.

Info for manual annotations of cluster AU5:
•Start number 17 was manually annotated 1 time for cluster AU5.

Info for manual annotations of cluster AU6:
•Start number 11 was manually annotated 3 times for cluster AU6.

Info for manual annotations of cluster AU7:
•Start number 14 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster AW:
•Start number 12 was manually annotated 8 times for cluster AW.
•Start number 14 was manually annotated 3 times for cluster AW.

Info for manual annotations of cluster FK:
•Start number 10 was manually annotated 2 times for cluster FK.
•Start number 13 was manually annotated 4 times for cluster FK.
•Start number 14 was manually annotated 2 times for cluster FK.

Gene Information:

Gene: BarbieDoll_42 Start: 30649, Stop: 30858, Start Num: 11
Candidate Starts for BarbieDoll_42:
(Start: 11 @30649 has 3 MA's), (Start: 14 @30658 has 7 MA's), (19, 30691), (20, 30715), (21, 30718), (28, 30787), (29, 30805),

Gene: Biscute_38 Start: 30302, Stop: 30511, Start Num: 11
Candidate Starts for Biscute_38:
(Start: 11 @30302 has 3 MA's), (Start: 14 @30311 has 7 MA's), (19, 30344), (20, 30368), (21, 30371), (29, 30458),

Gene: Breylor17_40 Start: 31299, Stop: 31508, Start Num: 16
Candidate Starts for Breylor17_40:
(1, 31056), (2, 31074), (3, 31095), (4, 31098), (5, 31101), (6, 31104), (Start: 16 @31299 has 2 MA's), (19, 31329), (24, 31413), (26, 31419), (27, 31425), (29, 31455),

Gene: BronxBay_37 Start: 28106, Stop: 28315, Start Num: 14
Candidate Starts for BronxBay_37:
(Start: 12 @28100 has 9 MA's), (Start: 14 @28106 has 7 MA's), (18, 28130), (29, 28262),

Gene: Caterpillar_33 Start: 28561, Stop: 28809, Start Num: 8
Candidate Starts for Caterpillar_33:
(Start: 8 @28561 has 1 MA's), (Start: 12 @28594 has 9 MA's), (Start: 14 @28600 has 7 MA's), (18, 28624), (29, 28756),

Gene: Djungelskog_37 Start: 28100, Stop: 28315, Start Num: 12
Candidate Starts for Djungelskog_37:
(Start: 12 @28100 has 9 MA's), (Start: 14 @28106 has 7 MA's), (18, 28130), (29, 28262),

Gene: Egad_37 Start: 28107, Stop: 28316, Start Num: 14
Candidate Starts for Egad_37:
(Start: 12 @28101 has 9 MA's), (Start: 14 @28107 has 7 MA's), (18, 28131), (29, 28263),

Gene: Elver_49 Start: 38201, Stop: 38413, Start Num: 14
Candidate Starts for Elver_49:
(Start: 14 @38201 has 7 MA's), (19, 38237), (24, 38321), (25, 38324), (29, 38363), (31, 38402),

Gene: Elver_61 Start: 42022, Stop: 42216, Start Num: 13
Candidate Starts for Elver_61:
(Start: 13 @42022 has 4 MA's), (23, 42100), (24, 42127),

Gene: Gandionco_50 Start: 38725, Stop: 38937, Start Num: 14
Candidate Starts for Gandionco_50:
(Start: 10 @38698 has 2 MA's), (Start: 14 @38725 has 7 MA's), (19, 38761), (24, 38845), (25, 38848), (29, 38887), (31, 38926),

Gene: Gandionco_62 Start: 42613, Stop: 42807, Start Num: 13
Candidate Starts for Gandionco_62:
(Start: 13 @42613 has 4 MA's), (23, 42691), (24, 42718),

Gene: Giantsbane_41 Start: 29798, Stop: 30004, Start Num: 17
Candidate Starts for Giantsbane_41:
(7, 29720), (9, 29756), (Start: 10 @29765 has 2 MA's), (Start: 17 @29798 has 5 MA's), (19, 29828), (26, 29918), (27, 29924), (29, 29951),

Gene: Inked_37 Start: 30173, Stop: 30388, Start Num: 14
Candidate Starts for Inked_37:
(Start: 14 @30173 has 7 MA's),

Gene: Issa_39 Start: 30583, Stop: 30792, Start Num: 17
Candidate Starts for Issa_39:
(15, 30577), (Start: 17 @30583 has 5 MA's), (19, 30613), (24, 30697), (26, 30703), (27, 30709), (29, 30739),

Gene: JeNeSaisPas_60 Start: 42558, Stop: 42752, Start Num: 13
Candidate Starts for JeNeSaisPas_60:
(Start: 13 @42558 has 4 MA's), (23, 42636), (24, 42663),

Gene: JeNeSaisPas_48 Start: 38737, Stop: 38949, Start Num: 14
Candidate Starts for JeNeSaisPas_48:
(Start: 10 @38710 has 2 MA's), (Start: 14 @38737 has 7 MA's), (19, 38773), (24, 38857), (25, 38860), (29, 38899), (31, 38938),

Gene: Kinny_41 Start: 31143, Stop: 31352, Start Num: 11
Candidate Starts for Kinny_41:
(Start: 11 @31143 has 3 MA's), (Start: 14 @31152 has 7 MA's), (19, 31185), (20, 31209), (21, 31212), (29, 31299),

Gene: Kureo_62 Start: 41441, Stop: 41635, Start Num: 13
Candidate Starts for Kureo_62:
(Start: 13 @41441 has 4 MA's), (23, 41519), (24, 41546),

Gene: Kureo_50 Start: 37546, Stop: 37758, Start Num: 14
Candidate Starts for Kureo_50:
(Start: 10 @37519 has 2 MA's), (Start: 14 @37546 has 7 MA's), (19, 37582), (24, 37666), (25, 37669), (29, 37708), (31, 37747),

Gene: Leathea_37 Start: 28409, Stop: 28621, Start Num: 11
Candidate Starts for Leathea_37:
(Start: 11 @28409 has 3 MA's), (Start: 14 @28418 has 7 MA's), (20, 28475), (21, 28478), (29, 28565),

Gene: Linda_37 Start: 28102, Stop: 28311, Start Num: 14
Candidate Starts for Linda_37:
(Start: 12 @28096 has 9 MA's), (Start: 14 @28102 has 7 MA's), (18, 28126), (29, 28258),

Gene: Makai_39 Start: 30758, Stop: 30967, Start Num: 17
Candidate Starts for Makai_39:
(Start: 17 @30758 has 5 MA's), (19, 30788), (26, 30878), (29, 30914), (30, 30950),

Gene: Marianna39_62 Start: 42604, Stop: 42798, Start Num: 13
Candidate Starts for Marianna39_62:
(Start: 13 @42604 has 4 MA's), (23, 42682), (24, 42709),

Gene: Marianna39_50 Start: 38723, Stop: 38935, Start Num: 14
Candidate Starts for Marianna39_50:
(Start: 10 @38696 has 2 MA's), (Start: 14 @38723 has 7 MA's), (19, 38759), (24, 38843), (25, 38846), (29, 38885), (31, 38924),

Gene: MediumFry_33 Start: 28595, Stop: 28810, Start Num: 12
Candidate Starts for MediumFry_33:
(Start: 12 @28595 has 9 MA's), (Start: 14 @28601 has 7 MA's), (18, 28625), (29, 28757),

Gene: Michelle_37 Start: 28100, Stop: 28315, Start Num: 12
Candidate Starts for Michelle_37:
(Start: 12 @28100 has 9 MA's), (Start: 14 @28106 has 7 MA's), (18, 28130), (29, 28262),

Gene: MrAaronian_37 Start: 28100, Stop: 28315, Start Num: 12
Candidate Starts for MrAaronian_37:
(Start: 12 @28100 has 9 MA's), (Start: 14 @28106 has 7 MA's), (18, 28130), (29, 28262),

Gene: Muglass_39 Start: 30206, Stop: 30415, Start Num: 11
Candidate Starts for Muglass_39:
(Start: 11 @30206 has 3 MA's), (Start: 14 @30215 has 7 MA's), (19, 30248), (20, 30272), (21, 30275), (29, 30362),

Gene: Nightmare_40 Start: 31142, Stop: 31351, Start Num: 16
Candidate Starts for Nightmare_40:
(Start: 16 @31142 has 2 MA's), (19, 31172), (24, 31256), (25, 31259), (26, 31262), (29, 31298),

Gene: Paella_62 Start: 42313, Stop: 42507, Start Num: 13
Candidate Starts for Paella_62:
(Start: 13 @42313 has 4 MA's), (23, 42391), (24, 42418),

Gene: Paella_49 Start: 38177, Stop: 38416, Start Num: 10
Candidate Starts for Paella_49:
(Start: 10 @38177 has 2 MA's), (Start: 14 @38204 has 7 MA's), (19, 38240), (24, 38324), (25, 38327), (29, 38366), (31, 38405),

Gene: ProfFrink_37 Start: 28100, Stop: 28315, Start Num: 12
Candidate Starts for ProfFrink_37:
(Start: 12 @28100 has 9 MA's), (Start: 14 @28106 has 7 MA's), (18, 28130), (29, 28262),

Gene: Qui_62 Start: 42313, Stop: 42507, Start Num: 13
Candidate Starts for Qui_62:
(Start: 13 @42313 has 4 MA's), (23, 42391), (24, 42418),

Gene: Qui_49 Start: 38177, Stop: 38416, Start Num: 10
Candidate Starts for Qui_49:
(Start: 10 @38177 has 2 MA's), (Start: 14 @38204 has 7 MA's), (19, 38240), (24, 38324), (25, 38327), (29, 38366), (31, 38405),

Gene: Salk_37 Start: 28096, Stop: 28311, Start Num: 12
Candidate Starts for Salk_37:
(Start: 12 @28096 has 9 MA's), (Start: 14 @28102 has 7 MA's), (18, 28126), (29, 28258),

Gene: Sloopyjoe_37 Start: 28101, Stop: 28316, Start Num: 12
Candidate Starts for Sloopyjoe_37:
(Start: 12 @28101 has 9 MA's), (Start: 14 @28107 has 7 MA's), (18, 28131), (29, 28263),

Gene: Spain_37 Start: 28106, Stop: 28315, Start Num: 14

Candidate Starts for Spain_37:
(Start: 12 @28100 has 9 MA's), (Start: 14 @28106 has 7 MA's), (18, 28130), (29, 28262),

Gene: StarLord_37 Start: 28101, Stop: 28316, Start Num: 12
Candidate Starts for StarLord_37:
(Start: 12 @28101 has 9 MA's), (Start: 14 @28107 has 7 MA's), (18, 28131), (29, 28263),

Gene: Stayer_37 Start: 28096, Stop: 28311, Start Num: 12
Candidate Starts for Stayer_37:
(Start: 12 @28096 has 9 MA's), (Start: 14 @28102 has 7 MA's), (18, 28126), (29, 28258),

Gene: Tipton_41 Start: 30961, Stop: 31167, Start Num: 17
Candidate Starts for Tipton_41:
(9, 30919), (Start: 10 @30928 has 2 MA's), (Start: 17 @30961 has 5 MA's), (19, 30991), (27, 31087), (29, 31114),

Gene: Tokki_40 Start: 30614, Stop: 30820, Start Num: 17
Candidate Starts for Tokki_40:
(9, 30572), (Start: 10 @30581 has 2 MA's), (Start: 17 @30614 has 5 MA's), (19, 30644), (27, 30740), (29, 30767),

Gene: Zippen_36 Start: 30050, Stop: 30265, Start Num: 14
Candidate Starts for Zippen_36:
(Start: 14 @30050 has 7 MA's), (22, 30128), (29, 30209),