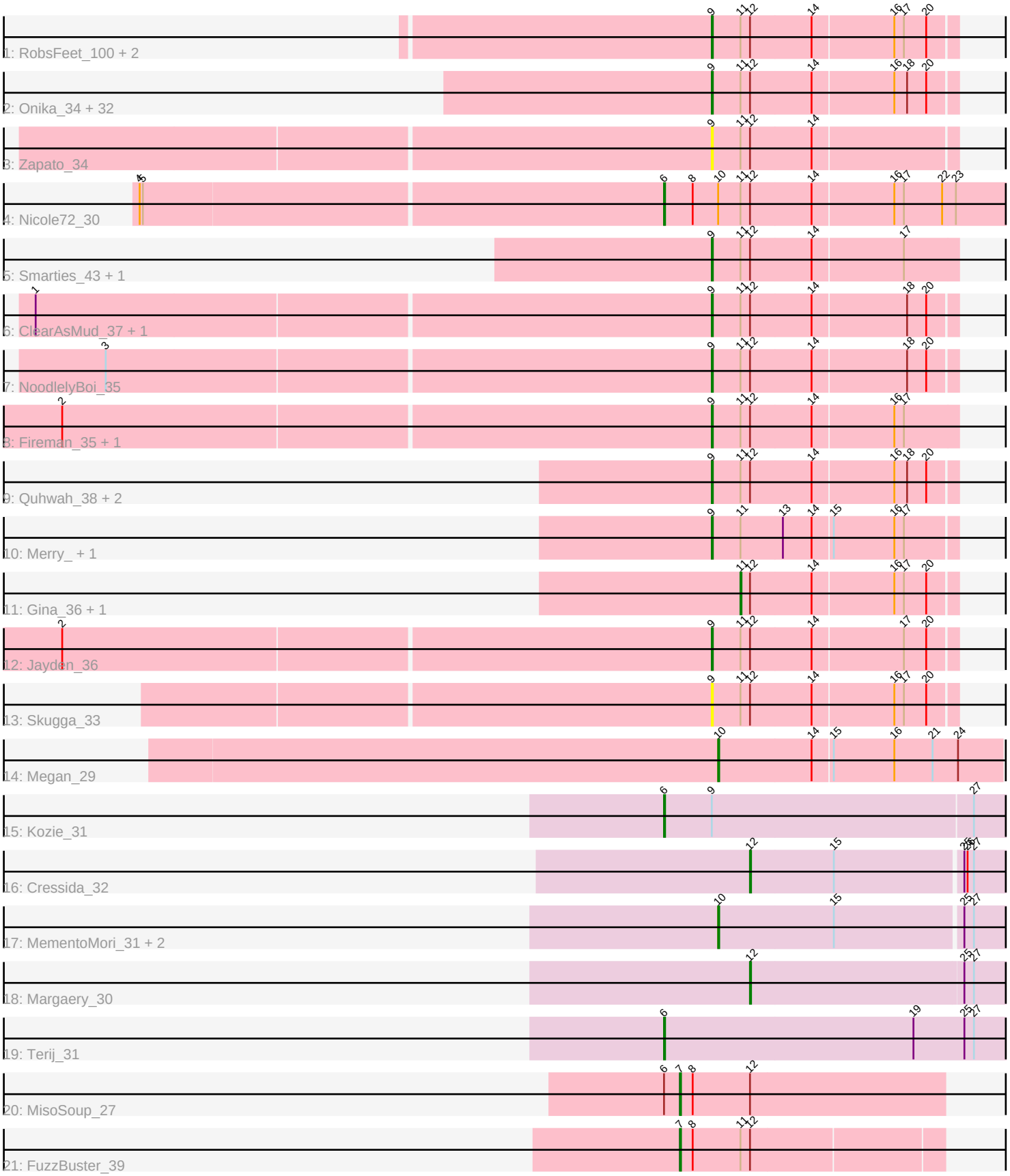
Pham 347614


1: RobsFeet_100 + 2
2: Onika_34 + 32
3: Zapato_34
4: Nicole72_30
5: Smarties_43 + 1
6: ClearAsMud_37 + 1
7: NoodlelyBoi_35
8: Fireman_35 + 1
9: Quhwah_38 + 2
10: Merry_ + 1
11: Gina_36 + 1
12: Jayden_36
13: Skugga_33
14: Megan_29
15: Kozie_31
16: Cressida_32
17: MementoMori_31 + 2
18: Margaery_30
19: Terij_31
20: MisoSoup_27
21: FuzzBuster_39

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 347614 Report

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

Pham number 347614 has 64 members, 6 are drafts.

Phages represented in each track:
• Track 1 : RobsFeet_100, Shrubaron_35, Metamorphoo_93
• Track 2 : Onika_34, Antares_35, Selwyn23_36, Pulchra_36, Piperis_35, Cranjis_36, Lucretia_35, Ramiel05_34, Glorp_36, Kowalski_34, Germa_36, Honeyfin_36, Busephilis_34, Jollipop_35, Ganandorf_34, Phrancesco_35, PiperSansNom_35, Shotgun_34, Paschalis_34, PhedwardCullen_34, CrazyRich_34, Hermeonysus_34, LittleFortune_36, BeagleBug_34, Jefe_35, Savannah_34, Scumberland_36, Yeti_35, Phorgeous_34, Rockwell_34, BrazzalePHS_34, PierreOrion_35, Crisis_36
• Track 3 : Zapato_34
• Track 4 : Nicole72_30
• Track 5 : Smarties_43, Ariadne_43
• Track 6 : ClearAsMud_37, SirFrank_34
• Track 7 : NoodlelyBoi_35
• Track 8 : Fireman_35, Tyrumbra_33
• Track 9 : Quhwah_38, EarickHC_35, KaiHaiDragon_35
• Track 10 : Merry_, Sunny_
• Track 11 : Gina_36, Teamocil_36
• Track 12 : Jayden_36
• Track 13 : Skugga_33
• Track 14 : Megan_29
• Track 15 : Kozie_31
• Track 16 : Cressida_32
• Track 17 : MementoMori_31, Matzah_31, Cinna_30
• Track 18 : Margaery_30
• Track 19 : Terij_31
• Track 20 : MisoSoup_27
• Track 21 : FuzzBuster_39

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

The start number called the most often in the published annotations is 9, it was called in 45 of the 58 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Antares_35, Ariadne_43, BeagleBug_34, BrazzalePHS_34, Busephilis_34, ClearAsMud_37, Cranjis_36, CrazyRich_34, Crisis_36, EarickHC_35, Fireman_35, Ganandorf_34, Germa_36, Glorp_36, Hermeonysus_34, Honeyfin_36, Jayden_36, Jefe_35, Jollipop_35, KaiHaiDragon_35, Kowalski_34, LittleFortune_36, Lucretia_35, Merry_, Metamorphoo_93, NoodlelyBoi_35, Onika_34, Paschalis_34, PhedwardCullen_34, Phorgeous_34, Phrancesco_35, PierreOrion_35, PiperSansNom_35, Piperis_35, Pulchra_36, Quhwah_38, Ramiel05_34, RobsFeet_100, Rockwell_34, Savannah_34, Scumberland_36, Selwyn23_36, Shotgun_34, Shrubaron_35, SirFrank_34, Skugga_33, Smarties_43, Sunny_, Tyrumbra_33, Yeti_35, Zapato_34,

Genes that have the "Most Annotated" start but do not call it:
• Kozie_31,

Genes that do not have the "Most Annotated" start:
• Cinna_30, Cressida_32, FuzzBuster_39, Gina_36, Margaery_30, Matzah_31, Megan_29, MementoMori_31, MisoSoup_27, Nicole72_30, Teamocil_36, Terij_31,

Summary by start number:

Start 6:
• Found in 4 of 64 (6.2%) of genes in pham
• Manual Annotations of this start: 3 of 58
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Kozie_31 (EI), Nicole72_30 (EC), Terij_31 (EI),

Start 7:
• Found in 2 of 64 (3.1%) of genes in pham
• Manual Annotations of this start: 2 of 58
• Called 100.0% of time when present
• Phage (with cluster) where this start called: FuzzBuster_39 (GM), MisoSoup_27 (GM),

Start 9:
• Found in 52 of 64 (81.2%) of genes in pham
• Manual Annotations of this start: 45 of 58
• Called 98.1% of time when present
• Phage (with cluster) where this start called: Antares_35 (EC), Ariadne_43 (EC), BeagleBug_34 (EC), BrazzalePHS_34 (EC), Busephilis_34 (EC), ClearAsMud_37 (EC), Cranjis_36 (EC), CrazyRich_34 (EC), Crisis_36 (EC), EarickHC_35 (EC), Fireman_35 (EC), Ganandorf_34 (EC), Germa_36 (EC), Glorp_36 (EC), Hermeonysus_34 (EC), Honeyfin_36 (EC), Jayden_36 (EC), Jefe_35 (EC), Jollipop_35 (EC), KaiHaiDragon_35 (EC), Kowalski_34 (EC), LittleFortune_36 (EC), Lucretia_35 (EC), Merry_ (EC), Metamorphoo_93 (EC), NoodlelyBoi_35 (EC), Onika_34 (EC), Paschalis_34 (EC), PhedwardCullen_34 (EC), Phorgeous_34 (EC), Phrancesco_35 (EC), PierreOrion_35 (EC), PiperSansNom_35 (EC), Piperis_35 (EC), Pulchra_36 (EC), Quhwah_38 (EC), Ramiel05_34 (EC), RobsFeet_100 (EC), Rockwell_34 (EC), Savannah_34 (EC), Scumberland_36 (EC), Selwyn23_36 (EC), Shotgun_34 (EC), Shrubaron_35 (EC), SirFrank_34 (EC), Skugga_33 (EC), Smarties_43 (EC), Sunny_ (EC), Tyrumbra_33 (EC), Yeti_35 (EC), Zapato_34 (EC),

Start 10:

• Found in 5 of 64 (7.8%) of genes in pham
• Manual Annotations of this start: 4 of 58
• Called 80.0% of time when present
• Phage (with cluster) where this start called: Cinna_30 (EI), Matzah_31 (EI), Megan_29 (EC), MementoMori_31 (EI),

Start 11:
• Found in 55 of 64 (85.9%) of genes in pham
• Manual Annotations of this start: 2 of 58
• Called 3.6% of time when present
• Phage (with cluster) where this start called: Gina_36 (EC), Teamocil_36 (EC),

Start 12:
• Found in 56 of 64 (87.5%) of genes in pham
• Manual Annotations of this start: 2 of 58
• Called 3.6% of time when present
• Phage (with cluster) where this start called: Cressida_32 (EI), Margaery_30 (EI),

Summary by clusters:

There are 3 clusters represented in this pham: GM, EI, EC,

Info for manual annotations of cluster EC:
•Start number 6 was manually annotated 1 time for cluster EC.
•Start number 9 was manually annotated 45 times for cluster EC.
•Start number 10 was manually annotated 1 time for cluster EC.
•Start number 11 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster EI:
•Start number 6 was manually annotated 2 times for cluster EI.
•Start number 10 was manually annotated 3 times for cluster EI.
•Start number 12 was manually annotated 2 times for cluster EI.

Info for manual annotations of cluster GM:
•Start number 7 was manually annotated 2 times for cluster GM.

Gene Information:

Gene: Antares_35 Start: 20527, Stop: 20751, Start Num: 9
Candidate Starts for Antares_35:
(Start: 9 @20527 has 45 MA's), (Start: 11 @20554 has 2 MA's), (Start: 12 @20563 has 2 MA's), (14, 20620), (16, 20695), (18, 20707), (20, 20725),

Gene: Ariadne_43 Start: 22227, Stop: 22454, Start Num: 9
Candidate Starts for Ariadne_43:
(Start: 9 @22227 has 45 MA's), (Start: 11 @22254 has 2 MA's), (Start: 12 @22263 has 2 MA's), (14, 22320), (17, 22404),

Gene: BeagleBug_34 Start: 20308, Stop: 20532, Start Num: 9
Candidate Starts for BeagleBug_34:

(Start: 9 @20308 has 45 MA's), (Start: 11 @20335 has 2 MA's), (Start: 12 @20344 has 2 MA's), (14, 20401), (16, 20476), (18, 20488), (20, 20506),

Gene: BrazzalePHS_34 Start: 20322, Stop: 20546, Start Num: 9
Candidate Starts for BrazzalePHS_34:
(Start: 9 @20322 has 45 MA's), (Start: 11 @20349 has 2 MA's), (Start: 12 @20358 has 2 MA's), (14, 20415), (16, 20490), (18, 20502), (20, 20520),

Gene: Busephilis_34 Start: 20257, Stop: 20481, Start Num: 9
Candidate Starts for Busephilis_34:
(Start: 9 @20257 has 45 MA's), (Start: 11 @20284 has 2 MA's), (Start: 12 @20293 has 2 MA's), (14, 20350), (16, 20425), (18, 20437), (20, 20455),

Gene: Cinna_30 Start: 19644, Stop: 19907, Start Num: 10
Candidate Starts for Cinna_30:
(Start: 10 @19644 has 4 MA's), (15, 19752), (25, 19869), (27, 19878),

Gene: ClearAsMud_37 Start: 21036, Stop: 21260, Start Num: 9
Candidate Starts for ClearAsMud_37:
(1, 20409), (Start: 9 @21036 has 45 MA's), (Start: 11 @21063 has 2 MA's), (Start: 12 @21072 has 2 MA's), (14, 21129), (18, 21216), (20, 21234),

Gene: Cranjis_36 Start: 20482, Stop: 20706, Start Num: 9
Candidate Starts for Cranjis_36:
(Start: 9 @20482 has 45 MA's), (Start: 11 @20509 has 2 MA's), (Start: 12 @20518 has 2 MA's), (14, 20575), (16, 20650), (18, 20662), (20, 20680),

Gene: CrazyRich_34 Start: 20291, Stop: 20515, Start Num: 9
Candidate Starts for CrazyRich_34:
(Start: 9 @20291 has 45 MA's), (Start: 11 @20318 has 2 MA's), (Start: 12 @20327 has 2 MA's), (14, 20384), (16, 20459), (18, 20471), (20, 20489),

Gene: Cressida_32 Start: 19733, Stop: 19966, Start Num: 12
Candidate Starts for Cressida_32:
(Start: 12 @19733 has 2 MA's), (15, 19811), (25, 19928), (26, 19931), (27, 19937),

Gene: Crisis_36 Start: 20276, Stop: 20500, Start Num: 9
Candidate Starts for Crisis_36:
(Start: 9 @20276 has 45 MA's), (Start: 11 @20303 has 2 MA's), (Start: 12 @20312 has 2 MA's), (14, 20369), (16, 20444), (18, 20456), (20, 20474),

Gene: EarickHC_35 Start: 20202, Stop: 20426, Start Num: 9
Candidate Starts for EarickHC_35:
(Start: 9 @20202 has 45 MA's), (Start: 11 @20229 has 2 MA's), (Start: 12 @20238 has 2 MA's), (14, 20295), (16, 20370), (18, 20382), (20, 20400),

Gene: Fireman_35 Start: 20093, Stop: 20320, Start Num: 9
Candidate Starts for Fireman_35:
(2, 19490), (Start: 9 @20093 has 45 MA's), (Start: 11 @20120 has 2 MA's), (Start: 12 @20129 has 2 MA's), (14, 20186), (16, 20261), (17, 20270),

Gene: FuzzBuster_39 Start: 20330, Stop: 20572, Start Num: 7
Candidate Starts for FuzzBuster_39:

(Start: 7 @20330 has 2 MA's), (8, 20342), (Start: 11 @20387 has 2 MA's), (Start: 12 @20396 has 2 MA's),

Gene: Ganandorf_34 Start: 20338, Stop: 20562, Start Num: 9
Candidate Starts for Ganandorf_34:
(Start: 9 @20338 has 45 MA's), (Start: 11 @20365 has 2 MA's), (Start: 12 @20374 has 2 MA's), (14, 20431), (16, 20506), (18, 20518), (20, 20536),

Gene: Germa_36 Start: 20167, Stop: 20391, Start Num: 9
Candidate Starts for Germa_36:
(Start: 9 @20167 has 45 MA's), (Start: 11 @20194 has 2 MA's), (Start: 12 @20203 has 2 MA's), (14, 20260), (16, 20335), (18, 20347), (20, 20365),

Gene: Gina_36 Start: 20146, Stop: 20343, Start Num: 11
Candidate Starts for Gina_36:
(Start: 11 @20146 has 2 MA's), (Start: 12 @20155 has 2 MA's), (14, 20212), (16, 20287), (17, 20296), (20, 20317),

Gene: Glorp_36 Start: 20339, Stop: 20563, Start Num: 9
Candidate Starts for Glorp_36:
(Start: 9 @20339 has 45 MA's), (Start: 11 @20366 has 2 MA's), (Start: 12 @20375 has 2 MA's), (14, 20432), (16, 20507), (18, 20519), (20, 20537),

Gene: Hermeonysus_34 Start: 20211, Stop: 20435, Start Num: 9
Candidate Starts for Hermeonysus_34:
(Start: 9 @20211 has 45 MA's), (Start: 11 @20238 has 2 MA's), (Start: 12 @20247 has 2 MA's), (14, 20304), (16, 20379), (18, 20391), (20, 20409),

Gene: Honeyfin_36 Start: 20526, Stop: 20750, Start Num: 9
Candidate Starts for Honeyfin_36:
(Start: 9 @20526 has 45 MA's), (Start: 11 @20553 has 2 MA's), (Start: 12 @20562 has 2 MA's), (14, 20619), (16, 20694), (18, 20706), (20, 20724),

Gene: Jayden_36 Start: 20269, Stop: 20493, Start Num: 9
Candidate Starts for Jayden_36:
(2, 19666), (Start: 9 @20269 has 45 MA's), (Start: 11 @20296 has 2 MA's), (Start: 12 @20305 has 2 MA's), (14, 20362), (17, 20446), (20, 20467),

Gene: Jefe_35 Start: 20263, Stop: 20487, Start Num: 9
Candidate Starts for Jefe_35:
(Start: 9 @20263 has 45 MA's), (Start: 11 @20290 has 2 MA's), (Start: 12 @20299 has 2 MA's), (14, 20356), (16, 20431), (18, 20443), (20, 20461),

Gene: Jollipop_35 Start: 20608, Stop: 20832, Start Num: 9
Candidate Starts for Jollipop_35:
(Start: 9 @20608 has 45 MA's), (Start: 11 @20635 has 2 MA's), (Start: 12 @20644 has 2 MA's), (14, 20701), (16, 20776), (18, 20788), (20, 20806),

Gene: KaiHaiDragon_35 Start: 20202, Stop: 20426, Start Num: 9
Candidate Starts for KaiHaiDragon_35:
(Start: 9 @20202 has 45 MA's), (Start: 11 @20229 has 2 MA's), (Start: 12 @20238 has 2 MA's), (14, 20295), (16, 20370), (18, 20382), (20, 20400),

Gene: Kowalski_34 Start: 20318, Stop: 20542, Start Num: 9
Candidate Starts for Kowalski_34:
(Start: 9 @20318 has 45 MA's), (Start: 11 @20345 has 2 MA's), (Start: 12 @20354 has 2 MA's), (14, 20411), (16, 20486), (18, 20498), (20, 20516),

Gene: Kozie_31 Start: 19882, Stop: 20199, Start Num: 6
Candidate Starts for Kozie_31:
(Start: 6 @19882 has 3 MA's), (Start: 9 @19927 has 45 MA's), (27, 20170),

Gene: LittleFortune_36 Start: 20568, Stop: 20792, Start Num: 9
Candidate Starts for LittleFortune_36:
(Start: 9 @20568 has 45 MA's), (Start: 11 @20595 has 2 MA's), (Start: 12 @20604 has 2 MA's), (14, 20661), (16, 20736), (18, 20748), (20, 20766),

Gene: Lucretia_35 Start: 20255, Stop: 20479, Start Num: 9
Candidate Starts for Lucretia_35:
(Start: 9 @20255 has 45 MA's), (Start: 11 @20282 has 2 MA's), (Start: 12 @20291 has 2 MA's), (14, 20348), (16, 20423), (18, 20435), (20, 20453),

Gene: Margaery_30 Start: 19615, Stop: 19851, Start Num: 12
Candidate Starts for Margaery_30:
(Start: 12 @19615 has 2 MA's), (25, 19813), (27, 19822),

Gene: Matzah_31 Start: 19620, Stop: 19883, Start Num: 10
Candidate Starts for Matzah_31:
(Start: 10 @19620 has 4 MA's), (15, 19728), (25, 19845), (27, 19854),

Gene: Megan_29 Start: 21646, Stop: 21909, Start Num: 10
Candidate Starts for Megan_29:
(Start: 10 @21646 has 4 MA's), (14, 21733), (15, 21751), (16, 21808), (21, 21844), (24, 21868),

Gene: MementoMori_31 Start: 19350, Stop: 19613, Start Num: 10
Candidate Starts for MementoMori_31:
(Start: 10 @19350 has 4 MA's), (15, 19458), (25, 19575), (27, 19584),

Gene: Merry_ Start: 22378, Stop: 22602, Start Num: 9
Candidate Starts for Merry_:
(Start: 9 @22378 has 45 MA's), (Start: 11 @22405 has 2 MA's), (13, 22444), (14, 22471), (15, 22489), (16, 22546), (17, 22555),

Gene: Metamorphoo_93 Start: 20121, Stop: 20345, Start Num: 9
Candidate Starts for Metamorphoo_93:
(Start: 9 @20121 has 45 MA's), (Start: 11 @20148 has 2 MA's), (Start: 12 @20157 has 2 MA's), (14, 20214), (16, 20289), (17, 20298), (20, 20319),

Gene: MisoSoup_27 Start: 16689, Stop: 16937, Start Num: 7
Candidate Starts for MisoSoup_27:
(Start: 6 @16674 has 3 MA's), (Start: 7 @16689 has 2 MA's), (8, 16701), (Start: 12 @16755 has 2 MA's),

Gene: Nicole72_30 Start: 21957, Stop: 22280, Start Num: 6
Candidate Starts for Nicole72_30:

(4, 21471), (5, 21474), (Start: 6 @21957 has 3 MA's), (8, 21984), (Start: 10 @22008 has 4 MA's), (Start: 11 @22029 has 2 MA's), (Start: 12 @22038 has 2 MA's), (14, 22095), (16, 22170), (17, 22179), (22, 22215), (23, 22227),

Gene: NoodlelyBoi_35 Start: 20646, Stop: 20870, Start Num: 9
Candidate Starts for NoodlelyBoi_35:
(3, 20085), (Start: 9 @20646 has 45 MA's), (Start: 11 @20673 has 2 MA's), (Start: 12 @20682 has 2 MA's), (14, 20739), (18, 20826), (20, 20844),

Gene: Onika_34 Start: 20293, Stop: 20517, Start Num: 9
Candidate Starts for Onika_34:
(Start: 9 @20293 has 45 MA's), (Start: 11 @20320 has 2 MA's), (Start: 12 @20329 has 2 MA's), (14, 20386), (16, 20461), (18, 20473), (20, 20491),

Gene: Paschalis_34 Start: 20306, Stop: 20530, Start Num: 9
Candidate Starts for Paschalis_34:
(Start: 9 @20306 has 45 MA's), (Start: 11 @20333 has 2 MA's), (Start: 12 @20342 has 2 MA's), (14, 20399), (16, 20474), (18, 20486), (20, 20504),

Gene: PhedwardCullen_34 Start: 20051, Stop: 20275, Start Num: 9
Candidate Starts for PhedwardCullen_34:
(Start: 9 @20051 has 45 MA's), (Start: 11 @20078 has 2 MA's), (Start: 12 @20087 has 2 MA's), (14, 20144), (16, 20219), (18, 20231), (20, 20249),

Gene: Phorgeous_34 Start: 20160, Stop: 20384, Start Num: 9
Candidate Starts for Phorgeous_34:
(Start: 9 @20160 has 45 MA's), (Start: 11 @20187 has 2 MA's), (Start: 12 @20196 has 2 MA's), (14, 20253), (16, 20328), (18, 20340), (20, 20358),

Gene: Phrancesco_35 Start: 20438, Stop: 20662, Start Num: 9
Candidate Starts for Phrancesco_35:
(Start: 9 @20438 has 45 MA's), (Start: 11 @20465 has 2 MA's), (Start: 12 @20474 has 2 MA's), (14, 20531), (16, 20606), (18, 20618), (20, 20636),

Gene: PierreOrion_35 Start: 20461, Stop: 20685, Start Num: 9
Candidate Starts for PierreOrion_35:
(Start: 9 @20461 has 45 MA's), (Start: 11 @20488 has 2 MA's), (Start: 12 @20497 has 2 MA's), (14, 20554), (16, 20629), (18, 20641), (20, 20659),

Gene: PiperSansNom_35 Start: 20613, Stop: 20837, Start Num: 9
Candidate Starts for PiperSansNom_35:
(Start: 9 @20613 has 45 MA's), (Start: 11 @20640 has 2 MA's), (Start: 12 @20649 has 2 MA's), (14, 20706), (16, 20781), (18, 20793), (20, 20811),

Gene: Piperis_35 Start: 20283, Stop: 20507, Start Num: 9
Candidate Starts for Piperis_35:
(Start: 9 @20283 has 45 MA's), (Start: 11 @20310 has 2 MA's), (Start: 12 @20319 has 2 MA's), (14, 20376), (16, 20451), (18, 20463), (20, 20481),

Gene: Pulchra_36 Start: 20683, Stop: 20907, Start Num: 9
Candidate Starts for Pulchra_36:
(Start: 9 @20683 has 45 MA's), (Start: 11 @20710 has 2 MA's), (Start: 12 @20719 has 2 MA's), (14, 20776), (16, 20851), (18, 20863), (20, 20881),

Gene: Quhwah_38 Start: 20909, Stop: 21133, Start Num: 9
Candidate Starts for Quhwah_38:
(Start: 9 @20909 has 45 MA's), (Start: 11 @20936 has 2 MA's), (Start: 12 @20945 has 2 MA's), (14, 21002), (16, 21077), (18, 21089), (20, 21107),

Gene: Ramiel05_34 Start: 20318, Stop: 20542, Start Num: 9
Candidate Starts for Ramiel05_34:
(Start: 9 @20318 has 45 MA's), (Start: 11 @20345 has 2 MA's), (Start: 12 @20354 has 2 MA's), (14, 20411), (16, 20486), (18, 20498), (20, 20516),

Gene: RobsFeet_100 Start: 20402, Stop: 20626, Start Num: 9
Candidate Starts for RobsFeet_100:
(Start: 9 @20402 has 45 MA's), (Start: 11 @20429 has 2 MA's), (Start: 12 @20438 has 2 MA's), (14, 20495), (16, 20570), (17, 20579), (20, 20600),

Gene: Rockwell_34 Start: 20318, Stop: 20542, Start Num: 9
Candidate Starts for Rockwell_34:
(Start: 9 @20318 has 45 MA's), (Start: 11 @20345 has 2 MA's), (Start: 12 @20354 has 2 MA's), (14, 20411), (16, 20486), (18, 20498), (20, 20516),

Gene: Savannah_34 Start: 20345, Stop: 20569, Start Num: 9
Candidate Starts for Savannah_34:
(Start: 9 @20345 has 45 MA's), (Start: 11 @20372 has 2 MA's), (Start: 12 @20381 has 2 MA's), (14, 20438), (16, 20513), (18, 20525), (20, 20543),

Gene: Scumberland_36 Start: 20534, Stop: 20758, Start Num: 9
Candidate Starts for Scumberland_36:
(Start: 9 @20534 has 45 MA's), (Start: 11 @20561 has 2 MA's), (Start: 12 @20570 has 2 MA's), (14, 20627), (16, 20702), (18, 20714), (20, 20732),

Gene: Selwyn23_36 Start: 20511, Stop: 20735, Start Num: 9
Candidate Starts for Selwyn23_36:
(Start: 9 @20511 has 45 MA's), (Start: 11 @20538 has 2 MA's), (Start: 12 @20547 has 2 MA's), (14, 20604), (16, 20679), (18, 20691), (20, 20709),

Gene: Shotgun_34 Start: 20144, Stop: 20368, Start Num: 9
Candidate Starts for Shotgun_34:
(Start: 9 @20144 has 45 MA's), (Start: 11 @20171 has 2 MA's), (Start: 12 @20180 has 2 MA's), (14, 20237), (16, 20312), (18, 20324), (20, 20342),

Gene: Shrubaron_35 Start: 20036, Stop: 20260, Start Num: 9
Candidate Starts for Shrubaron_35:
(Start: 9 @20036 has 45 MA's), (Start: 11 @20063 has 2 MA's), (Start: 12 @20072 has 2 MA's), (14, 20129), (16, 20204), (17, 20213), (20, 20234),

Gene: SirFrank_34 Start: 20246, Stop: 20470, Start Num: 9
Candidate Starts for SirFrank_34:
(1, 19619), (Start: 9 @20246 has 45 MA's), (Start: 11 @20273 has 2 MA's), (Start: 12 @20282 has 2 MA's), (14, 20339), (18, 20426), (20, 20444),

Gene: Skugga_33 Start: 20135, Stop: 20359, Start Num: 9
Candidate Starts for Skugga_33:

(Start: 9 @20135 has 45 MA's), (Start: 11 @20162 has 2 MA's), (Start: 12 @20171 has 2 MA's), (14, 20228), (16, 20303), (17, 20312), (20, 20333),

Gene: Smarties_43 Start: 22227, Stop: 22454, Start Num: 9
Candidate Starts for Smarties_43:
(Start: 9 @22227 has 45 MA's), (Start: 11 @22254 has 2 MA's), (Start: 12 @22263 has 2 MA's), (14, 22320), (17, 22404),

Gene: Sunny_ Start: 22380, Stop: 22604, Start Num: 9
Candidate Starts for Sunny_:
(Start: 9 @22380 has 45 MA's), (Start: 11 @22407 has 2 MA's), (13, 22446), (14, 22473), (15, 22491), (16, 22548), (17, 22557),

Gene: Teamocil_36 Start: 20245, Stop: 20442, Start Num: 11
Candidate Starts for Teamocil_36:
(Start: 11 @20245 has 2 MA's), (Start: 12 @20254 has 2 MA's), (14, 20311), (16, 20386), (17, 20395), (20, 20416),

Gene: Terij_31 Start: 19615, Stop: 19935, Start Num: 6
Candidate Starts for Terij_31:
(Start: 6 @19615 has 3 MA's), (19, 19849), (25, 19897), (27, 19906),

Gene: Tyrumbra_33 Start: 19436, Stop: 19663, Start Num: 9
Candidate Starts for Tyrumbra_33:
(2, 18833), (Start: 9 @19436 has 45 MA's), (Start: 11 @19463 has 2 MA's), (Start: 12 @19472 has 2 MA's), (14, 19529), (16, 19604), (17, 19613),

Gene: Yeti_35 Start: 20313, Stop: 20537, Start Num: 9
Candidate Starts for Yeti_35:
(Start: 9 @20313 has 45 MA's), (Start: 11 @20340 has 2 MA's), (Start: 12 @20349 has 2 MA's), (14, 20406), (16, 20481), (18, 20493), (20, 20511),

Gene: Zapato_34 Start: 20158, Stop: 20382, Start Num: 9
Candidate Starts for Zapato_34:
(Start: 9 @20158 has 45 MA's), (Start: 11 @20185 has 2 MA's), (Start: 12 @20194 has 2 MA's), (14, 20251),