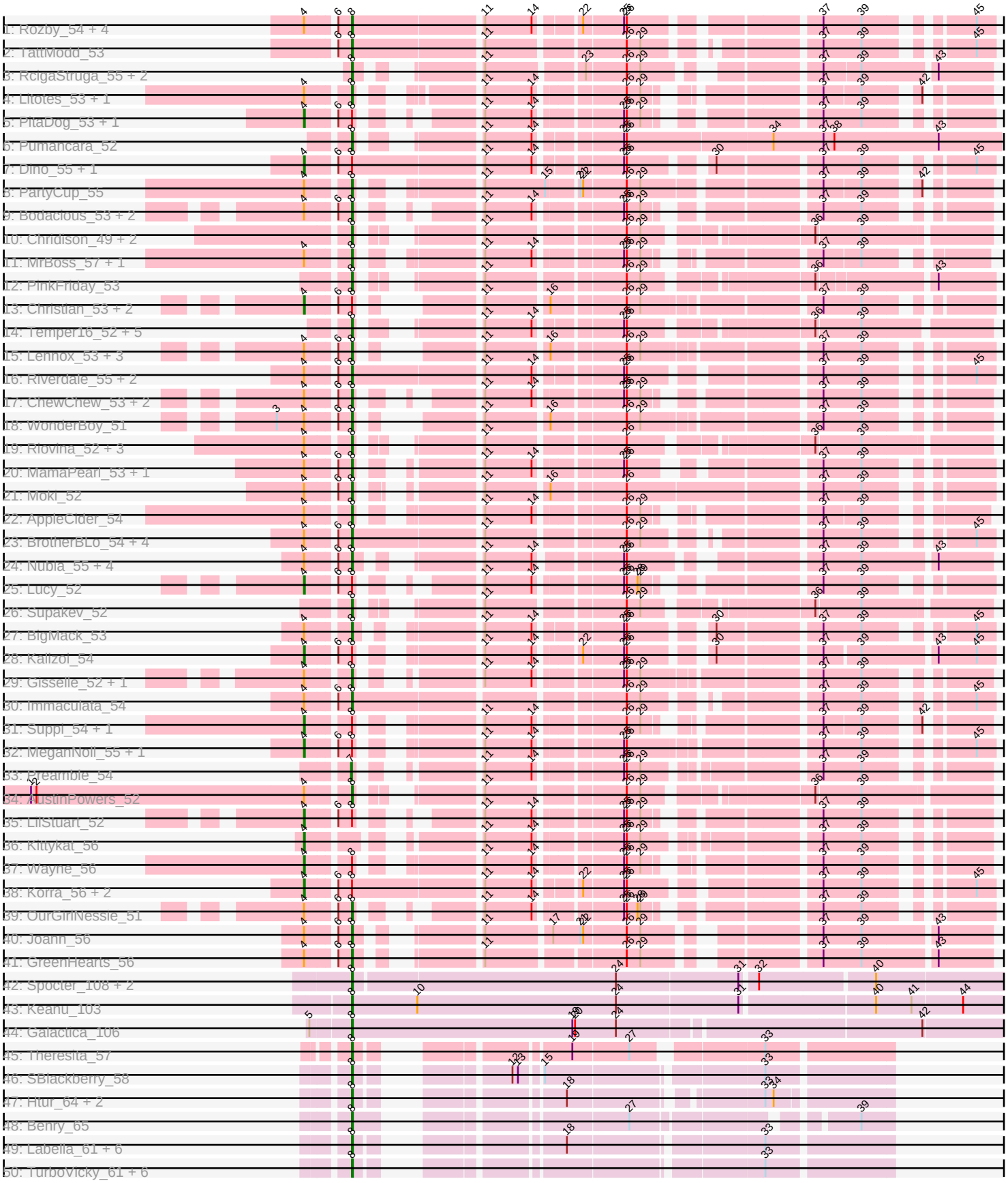
Pham 347418


1: Rozby_54 + 4
2: TattModd_53
3: RcigaStruga_55 + 2
4: Litotes_53 + 1
5: PitaDog_53 + 1
6: Pumancara_52
7: Dino_55 + 1
8: PartyCup_55
9: Bodacious_53 + 2
10: Chridison_49 + 2
11: MrBoss_57 + 1
12: PinkFriday_53
13: Christian_53 + 2
14: Temper16_52 + 5
15: Lennox_53 + 3
16: Riverdale_55 + 2
17: ChewChew_53 + 2
18: WonderBoy_51
19: Riovina_52 + 3
20: MamaPearl_53 + 1
21: Moki_52
22: AppleCider_54
23: BrotherBLo_54 + 4
24: Nubia_55 + 4
25: Lucy_52
26: Supakev_52
27: BigMack_53
28: Kailzoi_54
29: Gisselle_52 + 1
30: Immaculata_54
31: Suppi_54 + 1
32: MeganNoll_55 + 1
33: Preamble_54
34: AustinPowers_52
35: LilStuart_52
36: Kittykat_56
37: Wayne_56
38: Korra_56 + 2
39: OurGirlNessie_51
40: Joann_56
41: GreenHearts_56
42: Spocter_108 + 2
43: Keanu_103
44: Galactica_106
45: Theresita_57
46: SBlackberry_58
47: Fitur_64 + 2
48: Benry_65
49: Labella_61 + 6
50: TurboVicky_61 + 6

Pham 347418


61: PermaG_62
62: FireCastle_61
63: Sucha_62
64: Parvaparticeps_23
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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 347418 Report

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

Pham number 347418 has 115 members, 4 are drafts.

Phages represented in each track:
- Track 1 : Rozby_54, MrGloopy_55, Scuttle_54, Jumboset_56, Glenn_56
- Track 2 : TattModd_53
- Track 3 : RcigaStruga_55, Huntingdon_55, Misaeng_54
- Track 4 : Litotes_53, Graynor_57
- Track 5 : PitaDog_53, DrRobert_51
- Track 6 : Pumancara_52
- Track 7 : Dino_55, Zorro_55
- Track 8 : PartyCup_55
- Track 9 : Bodacious_53, CristinaYang_53, Lasagna_51
- Track 10 : Chridison_49, Vulture_51, HunterDalle_51
- Track 11 : MrBoss_57, CallieOMalley_54
- Track 12 : PinkFriday_53
- Track 13 : Christian_53, Urla_53, Bennie_53
- Track 14 : Temper16_52, Maria1952_51, Daiboju_52, Sergei_52, KingBob_52, Herb_52
- Track 15 : Lennox_53, Makoto_52, Huckleberry_52, HeadNerd_52
- Track 16 : Riverdale_55, Beethoven_54, Savage2526_55
- Track 17 : ChewChew_53, Pterodactyl_53, Nancia_53
- Track 18 : WonderBoy_51
- Track 19 : Riovina_52, OMalley_52, Eunoia_54, Aledel_52
- Track 20 : MamaPearl_53, EstebanJulior_53
- Track 21 : Moki_52
- Track 22 : AppleCider_54
- Track 23 : BrotherBLo_54, Wawa_55, Carpal_54, Potatoes_54, Cholula_54
- Track 24 : Nubia_55, Oxynfrius_55, Albanese_55, Greenhouse_56, Lakshmi_55
- Track 25 : Lucy_52
- Track 26 : Supakev_52
- Track 27 : BigMack_53
- Track 28 : Kalizoi_54
- Track 29 : Gisselle_52, DreamTeam_52
- Track 30 : Immaculata_54
- Track 31 : Suppi_54, Canowicakte_54
- Track 32 : MeganNoll_55, RAP15_56
- Track 33 : Preamble_54
- Track 34 : AustinPowers_52
- Track 35 : LilStuart_52
- Track 36 : Kittykat_56

• Track 37 : Wayne_56
• Track 38 : Korra_56, Fluke_55, Vallejo_55
• Track 39 : OurGirlNessie_51
• Track 40 : Joann_56
• Track 41 : GreenHearts_56
• Track 42 : Spocter_108, Kokushibo_110, Hiyaa_111
• Track 43 : Keanu_103
• Track 44 : Galactica_106
• Track 45 : Theresita_57
• Track 46 : SBlackberry_58
• Track 47 : Htur_64, Rasovi_64, Linayshia_64
• Track 48 : Benry_65
• Track 49 : Labella_61, Goodman_62, AyoTeo_59, Typher_60, Cicada_63, Olympi_63, Johann_62
• Track 50 : TurboVicky_61, Zanella_59, Milani_60, Rootkit7_59, Alove_60, Jera_61, IndiRoo_67
• Track 51 : PermaG_62
• Track 52 : FireCastle_61
• Track 53 : Sucha_62
• Track 54 : Parvaparticeps_23

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

The start number called the most often in the published annotations is 8, it was called in 91 of the 111 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albanese_55, Aledel_52, Alove_60, AppleCider_54, AustinPowers_52, AyoTeo_59, Beethoven_54, Benry_65, BigMack_53, Bodacious_53, BrotherBLo_54, CallieOMalley_54, Carpal_54, ChewChew_53, Cholula_54, Chridison_49, Cicada_63, CristinaYang_53, Daiboju_52, DreamTeam_52, EstebanJulior_53, Eunoia_54, FireCastle_61, Galactica_106, Gisselle_52, Glenn_56, Goodman_62, Graynor_57, GreenHearts_56, Greenhouse_56, HeadNerd_52, Herb_52, Hiyaa_111, Htur_64, Huckleberry_52, HunterDalle_51, Huntingdon_55, Immaculata_54, IndiRoo_67, Jera_61, Joann_56, Johann_62, Jumboset_56, Keanu_103, KingBob_52, Kokushibo_110, Labella_61, Lakshmi_55, Lasagna_51, Lennox_53, Linayshia_64, Litotes_53, Makoto_52, MamaPearl_53, Maria1952_51, Milani_60, Misaeng_54, Moki_52, MrBoss_57, MrGloopy_55, Nancia_53, Nubia_55, OMalley_52, Olympi_63, OurGirlNessie_51, Oxynfrius_55, PartyCup_55, PermaG_62, PinkFriday_53, Potatoes_54, Pterodactyl_53, Pumancara_52, Rasovi_64, RcigaStruga_55, Riovina_52, Riverdale_55, Rootkit7_59, Rozby_54, SBlackberry_58, Savage2526_55, Scuttle_54, Sergei_52, Spocter_108, Sucha_62, Supakev_52, TattModd_53, Temper16_52, Theresita_57, TurboVicky_61, Typher_60, Vulture_51, Wawa_55, WonderBoy_51, Zanella_59,

Genes that have the "Most Annotated" start but do not call it:
• Bennie_53, Canowicakte_54, Christian_53, Dino_55, DrRobert_51, Fluke_55, Kalizoi_54, Korra_56, LilStuart_52, Lucy_52, MeganNoll_55, PitaDog_53, RAP15_56, Suppi_54, Urla_53, Vallejo_55, Wayne_56, Zorro_55,

Genes that do not have the "Most Annotated" start:
• Kittykat_56, Parvaparticeps_23, Preamble_54,

Summary by start number:

Start 4:
• Found in 69 of 115 (60.0%) of genes in pham
• Manual Annotations of this start: 19 of 111
• Called 27.5% of time when present
• Phage (with cluster) where this start called: Bennie_53 (AK), Canowicakte_54 (AK), Christian_53 (AK), Dino_55 (AK), DrRobert_51 (AK), Fluke_55 (AK), Kalizoi_54 (AK), Kittykat_56 (AK), Korra_56 (AK), LilStuart_52 (AK), Lucy_52 (AK), MeganNoll_55 (AK), PitaDog_53 (AK), RAP15_56 (AK), Suppi_54 (AK), Urla_53 (AK), Vallejo_55 (AK), Wayne_56 (AK), Zorro_55 (AK),

Start 7:
• Found in 1 of 115 (0.9%) of genes in pham
• Manual Annotations of this start: 1 of 111
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Preamble_54 (AK),

Start 8:
• Found in 112 of 115 (97.4%) of genes in pham
• Manual Annotations of this start: 91 of 111
• Called 83.9% of time when present
• Phage (with cluster) where this start called: Albanese_55 (AK), Aledel_52 (AK), Alove_60 (EJ), AppleCider_54 (AK), AustinPowers_52 (AK), AyoTeo_59 (EJ), Beethoven_54 (AK), Benry_65 (EJ), BigMack_53 (AK), Bodacious_53 (AK), BrotherBLo_54 (AK), CallieOMalley_54 (AK), Carpal_54 (AK), ChewChew_53 (AK), Cholula_54 (AK), Chridison_49 (AK), Cicada_63 (EJ), CristinaYang_53 (AK), Daiboju_52 (AK), DreamTeam_52 (AK), EstebanJulior_53 (AK), Eunoia_54 (AK), FireCastle_61 (EJ), Galactica_106 (BQ), Gisselle_52 (AK), Glenn_56 (AK), Goodman_62 (EJ), Graynor_57 (AK), GreenHearts_56 (AK), Greenhouse_56 (AK), HeadNerd_52 (AK), Herb_52 (AK), Hiyaa_111 (BQ), Htur_64 (EJ), Huckleberry_52 (AK), HunterDalle_51 (AK), Huntingdon_55 (AK), Immaculata_54 (AK), IndiRoo_67 (EJ), Jera_61 (EJ), Joann_56 (AK), Johann_62 (EJ), Jumboset_56 (AK), Keanu_103 (BQ), KingBob_52 (AK), Kokushibo_110 (BQ), Labella_61 (EJ), Lakshmi_55 (AK), Lasagna_51 (AK), Lennox_53 (AK), Linayshia_64 (EJ), Litotes_53 (AK), Makoto_52 (AK), MamaPearl_53 (AK), Maria1952_51 (AK), Milani_60 (EJ), Misaeng_54 (AK), Moki_52 (AK), MrBoss_57 (AK), MrGloopy_55 (AK), Nancia_53 (AK), Nubia_55 (AK), OMalley_52 (AK), Olympi_63 (EJ), OurGirlNessie_51 (AK), Oxynfrius_55 (AK), PartyCup_55 (AK), PermaG_62 (EJ), PinkFriday_53 (AK), Potatoes_54 (AK), Pterodactyl_53 (AK), Pumancara_52 (AK), Rasovi_64 (EJ), RcigaStruga_55 (AK), Riovina_52 (AK), Riverdale_55 (AK), Rootkit7_59 (EJ), Rozby_54 (AK), SBlackberry_58 (EJ), Savage2526_55 (AK), Scuttle_54 (AK), Sergei_52 (AK), Spocter_108 (BQ), Sucha_62 (EJ), Supakev_52 (AK), TattModd_53 (AK), Temper16_52 (AK), Theresita_57 (EA7), TurboVicky_61 (EJ), Typher_60 (EJ), Vulture_51 (AK), Wawa_55 (AK), WonderBoy_51 (AK), Zanella_59 (EJ),

Start 9:
• Found in 1 of 115 (0.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Parvaparticeps_23 (UNK),

Summary by clusters:

There are 5 clusters represented in this pham: AK, UNK, BQ, EA7, EJ,

Info for manual annotations of cluster AK:
•Start number 4 was manually annotated 19 times for cluster AK.
•Start number 7 was manually annotated 1 time for cluster AK.
•Start number 8 was manually annotated 64 times for cluster AK.

Info for manual annotations of cluster BQ:
•Start number 8 was manually annotated 5 times for cluster BQ.

Info for manual annotations of cluster EA7:
•Start number 8 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EJ:
•Start number 8 was manually annotated 21 times for cluster EJ.

Gene Information:

Gene: Albanese_55 Start: 40808, Stop: 40245, Start Num: 8
Candidate Starts for Albanese_55:
(Start: 4 @40850 has 19 MA's), (6, 40823), (Start: 8 @40808 has 91 MA's), (11, 40718), (14, 40667), (25, 40586), (26, 40583), (37, 40421), (39, 40379), (43, 40304),

Gene: Aledel_52 Start: 40200, Stop: 39622, Start Num: 8
Candidate Starts for Aledel_52:
(Start: 4 @40242 has 19 MA's), (Start: 8 @40200 has 91 MA's), (11, 40113), (26, 39975), (36, 39801), (39, 39753),

Gene: Alove_60 Start: 41959, Stop: 41474, Start Num: 8
Candidate Starts for Alove_60:
(Start: 8 @41959 has 91 MA's), (33, 41605),

Gene: AppleCider_54 Start: 40199, Stop: 39663, Start Num: 8
Candidate Starts for AppleCider_54:
(Start: 4 @40241 has 19 MA's), (Start: 8 @40199 has 91 MA's), (11, 40106), (14, 40055), (26, 39971), (29, 39956), (37, 39809), (39, 39770),

Gene: AustinPowers_52 Start: 40223, Stop: 39645, Start Num: 8
Candidate Starts for AustinPowers_52:
(1, 40565), (2, 40559), (Start: 4 @40265 has 19 MA's), (Start: 8 @40223 has 91 MA's), (11, 40136), (26, 39998), (29, 39983), (36, 39824), (39, 39776),

Gene: AyoTeo_59 Start: 41700, Stop: 41215, Start Num: 8
Candidate Starts for AyoTeo_59:
(Start: 8 @41700 has 91 MA's), (18, 41541), (33, 41346),

Gene: Beethoven_54 Start: 40233, Stop: 39637, Start Num: 8
Candidate Starts for Beethoven_54:
(Start: 4 @40275 has 19 MA's), (6, 40248), (Start: 8 @40233 has 91 MA's), (11, 40098), (14, 40047), (25, 39966), (26, 39963), (37, 39789), (39, 39747), (45, 39657),

Gene: Bennie_53 Start: 39104, Stop: 38487, Start Num: 4
Candidate Starts for Bennie_53:
(Start: 4 @39104 has 19 MA's), (6, 39077), (Start: 8 @39062 has 91 MA's), (11, 38975), (16, 38912), (26, 38837), (29, 38822), (37, 38639), (39, 38597),

Gene: Benry_65 Start: 42218, Stop: 41745, Start Num: 8
Candidate Starts for Benry_65:
(Start: 8 @42218 has 91 MA's), (27, 41987), (39, 41780),

Gene: BigMack_53 Start: 39528, Stop: 38974, Start Num: 8
Candidate Starts for BigMack_53:
(Start: 4 @39570 has 19 MA's), (Start: 8 @39528 has 91 MA's), (11, 39435), (14, 39384), (25, 39303), (26, 39300), (30, 39228), (37, 39126), (39, 39084), (45, 38994),

Gene: Bodacious_53 Start: 39500, Stop: 38976, Start Num: 8
Candidate Starts for Bodacious_53:
(Start: 4 @39542 has 19 MA's), (6, 39515), (Start: 8 @39500 has 91 MA's), (11, 39425), (14, 39374), (25, 39293), (26, 39290), (29, 39275), (37, 39125), (39, 39083),

Gene: BrotherBLo_54 Start: 40273, Stop: 39686, Start Num: 8
Candidate Starts for BrotherBLo_54:
(Start: 4 @40315 has 19 MA's), (6, 40288), (Start: 8 @40273 has 91 MA's), (11, 40138), (26, 40000), (29, 39985), (37, 39838), (39, 39796), (45, 39706),

Gene: CallieOMalley_54 Start: 40181, Stop: 39642, Start Num: 8
Candidate Starts for CallieOMalley_54:
(Start: 4 @40223 has 19 MA's), (Start: 8 @40181 has 91 MA's), (11, 40088), (14, 40037), (25, 39956), (26, 39953), (29, 39938), (37, 39791), (39, 39749),

Gene: Canowicakte_54 Start: 40275, Stop: 39697, Start Num: 4
Candidate Starts for Canowicakte_54:
(Start: 4 @40275 has 19 MA's), (Start: 8 @40233 has 91 MA's), (11, 40140), (14, 40089), (26, 40005), (29, 39990), (37, 39843), (39, 39804), (42, 39756),

Gene: Carpal_54 Start: 40249, Stop: 39662, Start Num: 8
Candidate Starts for Carpal_54:
(Start: 4 @40291 has 19 MA's), (6, 40264), (Start: 8 @40249 has 91 MA's), (11, 40114), (26, 39976), (29, 39961), (37, 39814), (39, 39772), (45, 39682),

Gene: ChewChew_53 Start: 39631, Stop: 39107, Start Num: 8
Candidate Starts for ChewChew_53:
(Start: 4 @39673 has 19 MA's), (6, 39646), (Start: 8 @39631 has 91 MA's), (11, 39556), (14, 39505), (25, 39424), (26, 39421), (29, 39406), (37, 39256), (39, 39214),

Gene: Cholula_54 Start: 40283, Stop: 39696, Start Num: 8
Candidate Starts for Cholula_54:
(Start: 4 @40325 has 19 MA's), (6, 40298), (Start: 8 @40283 has 91 MA's), (11, 40148), (26, 40010), (29, 39995), (37, 39848), (39, 39806), (45, 39716),

Gene: Chridison_49 Start: 39475, Stop: 38897, Start Num: 8
Candidate Starts for Chridison_49:
(Start: 8 @39475 has 91 MA's), (11, 39388), (26, 39250), (29, 39235), (36, 39076), (39, 39028),

Gene: Christian_53 Start: 39381, Stop: 38788, Start Num: 4
Candidate Starts for Christian_53:
(Start: 4 @39381 has 19 MA's), (6, 39354), (Start: 8 @39339 has 91 MA's), (11, 39264), (16, 39201), (26, 39126), (29, 39111), (37, 38940), (39, 38898),

Gene: Cicada_63 Start: 42183, Stop: 41698, Start Num: 8
Candidate Starts for Cicada_63:
(Start: 8 @42183 has 91 MA's), (18, 42024), (33, 41829),

Gene: CristinaYang_53 Start: 39627, Stop: 39103, Start Num: 8
Candidate Starts for CristinaYang_53:
(Start: 4 @39669 has 19 MA's), (6, 39642), (Start: 8 @39627 has 91 MA's), (11, 39552), (14, 39501), (25, 39420), (26, 39417), (29, 39402), (37, 39252), (39, 39210),

Gene: Daiboju_52 Start: 40261, Stop: 39683, Start Num: 8
Candidate Starts for Daiboju_52:
(Start: 8 @40261 has 91 MA's), (11, 40171), (14, 40120), (25, 40039), (26, 40036), (36, 39862), (39, 39814),

Gene: Dino_55 Start: 40434, Stop: 39796, Start Num: 4
Candidate Starts for Dino_55:
(Start: 4 @40434 has 19 MA's), (6, 40407), (Start: 8 @40392 has 91 MA's), (11, 40257), (14, 40206), (25, 40125), (26, 40122), (30, 40050), (37, 39948), (39, 39906), (45, 39816),

Gene: DrRobert_51 Start: 38905, Stop: 38339, Start Num: 4
Candidate Starts for DrRobert_51:
(Start: 4 @38905 has 19 MA's), (6, 38878), (Start: 8 @38863 has 91 MA's), (11, 38788), (14, 38737), (25, 38656), (26, 38653), (29, 38638), (37, 38491), (39, 38449),

Gene: DreamTeam_52 Start: 39229, Stop: 38672, Start Num: 8
Candidate Starts for DreamTeam_52:
(Start: 4 @39271 has 19 MA's), (Start: 8 @39229 has 91 MA's), (11, 39142), (14, 39091), (25, 39010), (26, 39007), (29, 38992), (37, 38821), (39, 38779),

Gene: EstebanJulior_53 Start: 40175, Stop: 39636, Start Num: 8
Candidate Starts for EstebanJulior_53:
(Start: 4 @40217 has 19 MA's), (6, 40190), (Start: 8 @40175 has 91 MA's), (11, 40085), (14, 40034), (25, 39953), (26, 39950), (37, 39788), (39, 39746),

Gene: Eunoia_54 Start: 40877, Stop: 40299, Start Num: 8
Candidate Starts for Eunoia_54:
(Start: 4 @40919 has 19 MA's), (Start: 8 @40877 has 91 MA's), (11, 40790), (26, 40652), (36, 40478), (39, 40430),

Gene: FireCastle_61 Start: 42791, Stop: 42294, Start Num: 8
Candidate Starts for FireCastle_61:
(Start: 8 @42791 has 91 MA's), (19, 42620), (33, 42425), (35, 42410),

Gene: Fluke_55 Start: 40548, Stop: 39910, Start Num: 4
Candidate Starts for Fluke_55:
(Start: 4 @40548 has 19 MA's), (6, 40521), (Start: 8 @40506 has 91 MA's), (11, 40371), (14, 40320), (22, 40281), (25, 40239), (26, 40236), (37, 40062), (39, 40020), (45, 39930),

Gene: Galactica_106 Start: 73883, Stop: 74602, Start Num: 8
Candidate Starts for Galactica_106:
(5, 73841), (Start: 8 @73883 has 91 MA's), (19, 74126), (20, 74129), (24, 74174), (42, 74492),

Gene: Gisselle_52 Start: 39229, Stop: 38672, Start Num: 8
Candidate Starts for Gisselle_52:
(Start: 4 @39271 has 19 MA's), (Start: 8 @39229 has 91 MA's), (11, 39142), (14, 39091), (25, 39010), (26, 39007), (29, 38992), (37, 38821), (39, 38779),

Gene: Glenn_56 Start: 40967, Stop: 40371, Start Num: 8
Candidate Starts for Glenn_56:
(Start: 4 @41009 has 19 MA's), (6, 40982), (Start: 8 @40967 has 91 MA's), (11, 40832), (14, 40781), (22, 40742), (25, 40700), (26, 40697), (37, 40523), (39, 40481), (45, 40391),

Gene: Goodman_62 Start: 42196, Stop: 41711, Start Num: 8
Candidate Starts for Goodman_62:
(Start: 8 @42196 has 91 MA's), (18, 42037), (33, 41842),

Gene: Graynor_57 Start: 39818, Stop: 39282, Start Num: 8
Candidate Starts for Graynor_57:
(Start: 4 @39860 has 19 MA's), (Start: 8 @39818 has 91 MA's), (11, 39725), (14, 39674), (26, 39590), (29, 39575), (37, 39428), (39, 39389), (42, 39341),

Gene: GreenHearts_56 Start: 41116, Stop: 40550, Start Num: 8
Candidate Starts for GreenHearts_56:
(Start: 4 @41158 has 19 MA's), (6, 41131), (Start: 8 @41116 has 91 MA's), (11, 41026), (26, 40888), (29, 40873), (37, 40726), (39, 40684), (43, 40609),

Gene: Greenhouse_56 Start: 40874, Stop: 40242, Start Num: 8
Candidate Starts for Greenhouse_56:
(Start: 4 @40916 has 19 MA's), (6, 40889), (Start: 8 @40874 has 91 MA's), (11, 40739), (14, 40688), (25, 40607), (26, 40604), (37, 40418), (39, 40376), (43, 40301),

Gene: HeadNerd_52 Start: 38956, Stop: 38381, Start Num: 8
Candidate Starts for HeadNerd_52:
(Start: 4 @38998 has 19 MA's), (6, 38971), (Start: 8 @38956 has 91 MA's), (11, 38869), (16, 38806), (26, 38731), (29, 38716), (37, 38533), (39, 38491),

Gene: Herb_52 Start: 40260, Stop: 39682, Start Num: 8
Candidate Starts for Herb_52:
(Start: 8 @40260 has 91 MA's), (11, 40170), (14, 40119), (25, 40038), (26, 40035), (36, 39861), (39, 39813),

Gene: Hiyaa_111 Start: 75302, Stop: 76012, Start Num: 8
Candidate Starts for Hiyaa_111:
(Start: 8 @75302 has 91 MA's), (24, 75584), (31, 75716), (32, 75731), (40, 75851),

Gene: Htur_64 Start: 42748, Stop: 42278, Start Num: 8

Candidate Starts for Htur_64:
(Start: 8 @42748 has 91 MA's), (18, 42589), (33, 42406), (34, 42397),

Gene: Huckleberry_52 Start: 38960, Stop: 38385, Start Num: 8
Candidate Starts for Huckleberry_52:
(Start: 4 @39002 has 19 MA's), (6, 38975), (Start: 8 @38960 has 91 MA's), (11, 38873), (16, 38810), (26, 38735), (29, 38720), (37, 38537), (39, 38495),

Gene: HunterDalle_51 Start: 39796, Stop: 39218, Start Num: 8
Candidate Starts for HunterDalle_51:
(Start: 8 @39796 has 91 MA's), (11, 39709), (26, 39571), (29, 39556), (36, 39397), (39, 39349),

Gene: Huntingdon_55 Start: 40838, Stop: 40275, Start Num: 8
Candidate Starts for Huntingdon_55:
(Start: 8 @40838 has 91 MA's), (11, 40748), (23, 40652), (26, 40610), (29, 40595), (37, 40448), (39, 40409), (43, 40334),

Gene: Immaculata_54 Start: 40283, Stop: 39696, Start Num: 8
Candidate Starts for Immaculata_54:
(Start: 4 @40325 has 19 MA's), (6, 40298), (Start: 8 @40283 has 91 MA's), (26, 40010), (29, 39995), (37, 39848), (39, 39806), (45, 39716),

Gene: IndiRoo_67 Start: 42736, Stop: 42239, Start Num: 8
Candidate Starts for IndiRoo_67:
(Start: 8 @42736 has 91 MA's), (33, 42370),

Gene: Jera_61 Start: 41005, Stop: 40520, Start Num: 8
Candidate Starts for Jera_61:
(Start: 8 @41005 has 91 MA's), (33, 40651),

Gene: Joann_56 Start: 40875, Stop: 40303, Start Num: 8
Candidate Starts for Joann_56:
(Start: 4 @40917 has 19 MA's), (6, 40890), (Start: 8 @40875 has 91 MA's), (11, 40785), (17, 40719), (21, 40689), (22, 40686), (26, 40641), (29, 40626), (37, 40479), (39, 40437), (43, 40362),

Gene: Johann_62 Start: 42196, Stop: 41711, Start Num: 8
Candidate Starts for Johann_62:
(Start: 8 @42196 has 91 MA's), (18, 42037), (33, 41842),

Gene: Jumboset_56 Start: 40813, Stop: 40217, Start Num: 8
Candidate Starts for Jumboset_56:
(Start: 4 @40855 has 19 MA's), (6, 40828), (Start: 8 @40813 has 91 MA's), (11, 40678), (14, 40627), (22, 40588), (25, 40546), (26, 40543), (37, 40369), (39, 40327), (45, 40237),

Gene: Kalizoi_54 Start: 40251, Stop: 39634, Start Num: 4
Candidate Starts for Kalizoi_54:
(Start: 4 @40251 has 19 MA's), (6, 40224), (Start: 8 @40209 has 91 MA's), (11, 40116), (14, 40065), (22, 40026), (25, 39984), (26, 39981), (30, 39909), (37, 39807), (39, 39771), (43, 39696), (45, 39654),

Gene: Keanu_103 Start: 74187, Stop: 74909, Start Num: 8
Candidate Starts for Keanu_103:
(Start: 8 @74187 has 91 MA's), (10, 74259), (24, 74478), (31, 74610), (40, 74748), (41, 74787), (44, 74841),

Gene: KingBob_52 Start: 40261, Stop: 39683, Start Num: 8
Candidate Starts for KingBob_52:
(Start: 8 @40261 has 91 MA's), (11, 40171), (14, 40120), (25, 40039), (26, 40036), (36, 39862), (39, 39814),

Gene: Kittykat_56 Start: 39877, Stop: 39284, Start Num: 4
Candidate Starts for Kittykat_56:
(Start: 4 @39877 has 19 MA's), (11, 39742), (14, 39691), (25, 39610), (26, 39607), (29, 39592), (37, 39433), (39, 39391),

Gene: Kokushibo_110 Start: 75340, Stop: 76050, Start Num: 8
Candidate Starts for Kokushibo_110:
(Start: 8 @75340 has 91 MA's), (24, 75622), (31, 75754), (32, 75769), (40, 75889),

Gene: Korra_56 Start: 40283, Stop: 39645, Start Num: 4
Candidate Starts for Korra_56:
(Start: 4 @40283 has 19 MA's), (6, 40256), (Start: 8 @40241 has 91 MA's), (11, 40106), (14, 40055), (22, 40016), (25, 39974), (26, 39971), (37, 39797), (39, 39755), (45, 39665),

Gene: Labella_61 Start: 41696, Stop: 41211, Start Num: 8
Candidate Starts for Labella_61:
(Start: 8 @41696 has 91 MA's), (18, 41537), (33, 41342),

Gene: Lakshmi_55 Start: 40894, Stop: 40307, Start Num: 8
Candidate Starts for Lakshmi_55:
(Start: 4 @40936 has 19 MA's), (6, 40909), (Start: 8 @40894 has 91 MA's), (11, 40804), (14, 40753), (25, 40672), (26, 40669), (37, 40483), (39, 40441), (43, 40366),

Gene: Lasagna_51 Start: 38863, Stop: 38339, Start Num: 8
Candidate Starts for Lasagna_51:
(Start: 4 @38905 has 19 MA's), (6, 38878), (Start: 8 @38863 has 91 MA's), (11, 38788), (14, 38737), (25, 38656), (26, 38653), (29, 38638), (37, 38488), (39, 38446),

Gene: Lennox_53 Start: 39346, Stop: 38795, Start Num: 8
Candidate Starts for Lennox_53:
(Start: 4 @39388 has 19 MA's), (6, 39361), (Start: 8 @39346 has 91 MA's), (11, 39271), (16, 39208), (26, 39133), (29, 39118), (37, 38947), (39, 38905),

Gene: LilStuart_52 Start: 39254, Stop: 38688, Start Num: 4
Candidate Starts for LilStuart_52:
(Start: 4 @39254 has 19 MA's), (6, 39227), (Start: 8 @39212 has 91 MA's), (11, 39137), (14, 39086), (25, 39005), (26, 39002), (29, 38987), (37, 38837), (39, 38795),

Gene: Linayshia_64 Start: 42664, Stop: 42194, Start Num: 8
Candidate Starts for Linayshia_64:
(Start: 8 @42664 has 91 MA's), (18, 42505), (33, 42322), (34, 42313),

Gene: Litotes_53 Start: 39780, Stop: 39250, Start Num: 8
Candidate Starts for Litotes_53:
(Start: 4 @39822 has 19 MA's), (Start: 8 @39780 has 91 MA's), (11, 39693), (14, 39642), (26, 39558), (29, 39543), (37, 39396), (39, 39357), (42, 39309),

Gene: Lucy_52 Start: 39249, Stop: 38680, Start Num: 4
Candidate Starts for Lucy_52:
(Start: 4 @39249 has 19 MA's), (6, 39222), (Start: 8 @39207 has 91 MA's), (11, 39132), (14, 39081), (25, 39000), (26, 38997), (28, 38985), (29, 38982), (37, 38832), (39, 38790),

Gene: Makoto_52 Start: 39102, Stop: 38554, Start Num: 8
Candidate Starts for Makoto_52:
(Start: 4 @39144 has 19 MA's), (6, 39117), (Start: 8 @39102 has 91 MA's), (11, 39027), (16, 38964), (26, 38889), (29, 38874), (37, 38703), (39, 38661),

Gene: MamaPearl_53 Start: 40175, Stop: 39636, Start Num: 8
Candidate Starts for MamaPearl_53:
(Start: 4 @40217 has 19 MA's), (6, 40190), (Start: 8 @40175 has 91 MA's), (11, 40085), (14, 40034), (25, 39953), (26, 39950), (37, 39788), (39, 39746),

Gene: Maria1952_51 Start: 40260, Stop: 39682, Start Num: 8
Candidate Starts for Maria1952_51:
(Start: 8 @40260 has 91 MA's), (11, 40170), (14, 40119), (25, 40038), (26, 40035), (36, 39861), (39, 39813),

Gene: MeganNoll_55 Start: 40794, Stop: 40186, Start Num: 4
Candidate Starts for MeganNoll_55:
(Start: 4 @40794 has 19 MA's), (6, 40767), (Start: 8 @40752 has 91 MA's), (11, 40659), (14, 40608), (25, 40527), (26, 40524), (37, 40338), (39, 40296), (45, 40206),

Gene: Milani_60 Start: 41892, Stop: 41401, Start Num: 8
Candidate Starts for Milani_60:
(Start: 8 @41892 has 91 MA's), (33, 41532),

Gene: Misaeng_54 Start: 40764, Stop: 40201, Start Num: 8
Candidate Starts for Misaeng_54:
(Start: 8 @40764 has 91 MA's), (11, 40674), (23, 40578), (26, 40536), (29, 40521), (37, 40374), (39, 40335), (43, 40260),

Gene: Moki_52 Start: 39149, Stop: 38574, Start Num: 8
Candidate Starts for Moki_52:
(Start: 4 @39191 has 19 MA's), (6, 39164), (Start: 8 @39149 has 91 MA's), (11, 39062), (16, 38999), (26, 38924), (37, 38726), (39, 38684),

Gene: MrBoss_57 Start: 39781, Stop: 39245, Start Num: 8
Candidate Starts for MrBoss_57:
(Start: 4 @39823 has 19 MA's), (Start: 8 @39781 has 91 MA's), (11, 39688), (14, 39637), (25, 39556), (26, 39553), (29, 39538), (37, 39391), (39, 39352),

Gene: MrGloopy_55 Start: 40404, Stop: 39808, Start Num: 8
Candidate Starts for MrGloopy_55:
(Start: 4 @40446 has 19 MA's), (6, 40419), (Start: 8 @40404 has 91 MA's), (11, 40269), (14, 40218), (22, 40179), (25, 40137), (26, 40134), (37, 39960), (39, 39918), (45, 39828),

Gene: Nancia_53 Start: 39500, Stop: 38976, Start Num: 8
Candidate Starts for Nancia_53:
(Start: 4 @39542 has 19 MA's), (6, 39515), (Start: 8 @39500 has 91 MA's), (11, 39425), (14, 39374), (25, 39293), (26, 39290), (29, 39275), (37, 39125), (39, 39083),

Gene: Nubia_55 Start: 40739, Stop: 40176, Start Num: 8
Candidate Starts for Nubia_55:
(Start: 4 @40781 has 19 MA's), (6, 40754), (Start: 8 @40739 has 91 MA's), (11, 40649), (14, 40598), (25, 40517), (26, 40514), (37, 40352), (39, 40310), (43, 40235),

Gene: OMalley_52 Start: 40200, Stop: 39622, Start Num: 8
Candidate Starts for OMalley_52:
(Start: 4 @40242 has 19 MA's), (Start: 8 @40200 has 91 MA's), (11, 40113), (26, 39975), (36, 39801), (39, 39753),

Gene: Olympi_63 Start: 42011, Stop: 41526, Start Num: 8
Candidate Starts for Olympi_63:
(Start: 8 @42011 has 91 MA's), (18, 41852), (33, 41657),

Gene: OurGirlNessie_51 Start: 38829, Stop: 38302, Start Num: 8
Candidate Starts for OurGirlNessie_51:
(Start: 4 @38871 has 19 MA's), (6, 38844), (Start: 8 @38829 has 91 MA's), (11, 38754), (14, 38703), (25, 38622), (26, 38619), (28, 38607), (29, 38604), (37, 38454), (39, 38412),

Gene: Oxynfrius_55 Start: 40747, Stop: 40184, Start Num: 8
Candidate Starts for Oxynfrius_55:
(Start: 4 @40789 has 19 MA's), (6, 40762), (Start: 8 @40747 has 91 MA's), (11, 40657), (14, 40606), (25, 40525), (26, 40522), (37, 40360), (39, 40318), (43, 40243),

Gene: PartyCup_55 Start: 40428, Stop: 39859, Start Num: 8
Candidate Starts for PartyCup_55:
(Start: 4 @40470 has 19 MA's), (Start: 8 @40428 has 91 MA's), (11, 40335), (15, 40269), (21, 40239), (22, 40236), (26, 40191), (29, 40176), (37, 40005), (39, 39966), (42, 39918),

Gene: Parvaparticeps_23 Start: 15966, Stop: 16436, Start Num: 9
Candidate Starts for Parvaparticeps_23:
(9, 15966), (15, 16092), (20, 16125),

Gene: PermaG_62 Start: 42116, Stop: 41646, Start Num: 8
Candidate Starts for PermaG_62:
(Start: 8 @42116 has 91 MA's), (15, 41981), (33, 41774), (34, 41765),

Gene: PinkFriday_53 Start: 39842, Stop: 39264, Start Num: 8
Candidate Starts for PinkFriday_53:
(Start: 8 @39842 has 91 MA's), (11, 39755), (26, 39617), (29, 39602), (36, 39443), (43, 39326),

Gene: PitaDog_53 Start: 39267, Stop: 38701, Start Num: 4
Candidate Starts for PitaDog_53:
(Start: 4 @39267 has 19 MA's), (6, 39240), (Start: 8 @39225 has 91 MA's), (11, 39150), (14, 39099), (25, 39018), (26, 39015), (29, 39000), (37, 38853), (39, 38811),

Gene: Potatoes_54 Start: 40283, Stop: 39696, Start Num: 8
Candidate Starts for Potatoes_54:
(Start: 4 @40325 has 19 MA's), (6, 40298), (Start: 8 @40283 has 91 MA's), (11, 40148), (26, 40010), (29, 39995), (37, 39848), (39, 39806), (45, 39716),

Gene: Preamble_54 Start: 39411, Stop: 38866, Start Num: 7

Candidate Starts for Preamble_54:
(Start: 7 @39411 has 1 MA's), (11, 39324), (14, 39273), (25, 39192), (26, 39189), (29, 39174), (37, 39015), (39, 38973),

Gene: Pterodactyl_53 Start: 39463, Stop: 38942, Start Num: 8
Candidate Starts for Pterodactyl_53:
(Start: 4 @39505 has 19 MA's), (6, 39478), (Start: 8 @39463 has 91 MA's), (11, 39388), (14, 39337), (25, 39256), (26, 39253), (29, 39238), (37, 39091), (39, 39049),

Gene: Pumancara_52 Start: 39351, Stop: 38722, Start Num: 8
Candidate Starts for Pumancara_52:
(Start: 8 @39351 has 91 MA's), (11, 39261), (14, 39210), (25, 39129), (26, 39126), (34, 38970), (37, 38916), (38, 38904), (43, 38790),

Gene: RAP15_56 Start: 40795, Stop: 40187, Start Num: 4
Candidate Starts for RAP15_56:
(Start: 4 @40795 has 19 MA's), (6, 40768), (Start: 8 @40753 has 91 MA's), (11, 40660), (14, 40609), (25, 40528), (26, 40525), (37, 40339), (39, 40297), (45, 40207),

Gene: Rasovi_64 Start: 42749, Stop: 42279, Start Num: 8
Candidate Starts for Rasovi_64:
(Start: 8 @42749 has 91 MA's), (18, 42590), (33, 42407), (34, 42398),

Gene: RcigaStruga_55 Start: 40838, Stop: 40275, Start Num: 8
Candidate Starts for RcigaStruga_55:
(Start: 8 @40838 has 91 MA's), (11, 40748), (23, 40652), (26, 40610), (29, 40595), (37, 40448), (39, 40409), (43, 40334),

Gene: Riovina_52 Start: 40200, Stop: 39622, Start Num: 8
Candidate Starts for Riovina_52:
(Start: 4 @40242 has 19 MA's), (Start: 8 @40200 has 91 MA's), (11, 40113), (26, 39975), (36, 39801), (39, 39753),

Gene: Riverdale_55 Start: 40429, Stop: 39833, Start Num: 8
Candidate Starts for Riverdale_55:
(Start: 4 @40471 has 19 MA's), (6, 40444), (Start: 8 @40429 has 91 MA's), (11, 40294), (14, 40243), (25, 40162), (26, 40159), (37, 39985), (39, 39943), (45, 39853),

Gene: Rootkit7_59 Start: 41959, Stop: 41474, Start Num: 8
Candidate Starts for Rootkit7_59:
(Start: 8 @41959 has 91 MA's), (33, 41605),

Gene: Rozby_54 Start: 40233, Stop: 39637, Start Num: 8
Candidate Starts for Rozby_54:
(Start: 4 @40275 has 19 MA's), (6, 40248), (Start: 8 @40233 has 91 MA's), (11, 40098), (14, 40047), (22, 40008), (25, 39966), (26, 39963), (37, 39789), (39, 39747), (45, 39657),

Gene: SBlackberry_58 Start: 41880, Stop: 41395, Start Num: 8
Candidate Starts for SBlackberry_58:
(Start: 8 @41880 has 91 MA's), (12, 41769), (13, 41763), (15, 41745), (33, 41526),

Gene: Savage2526_55 Start: 40456, Stop: 39860, Start Num: 8
Candidate Starts for Savage2526_55:

(Start: 4 @40498 has 19 MA's), (6, 40471), (Start: 8 @40456 has 91 MA's), (11, 40321), (14, 40270), (25, 40189), (26, 40186), (37, 40012), (39, 39970), (45, 39880),

Gene: Scuttle_54 Start: 40432, Stop: 39836, Start Num: 8
Candidate Starts for Scuttle_54:
(Start: 4 @40474 has 19 MA's), (6, 40447), (Start: 8 @40432 has 91 MA's), (11, 40297), (14, 40246), (22, 40207), (25, 40165), (26, 40162), (37, 39988), (39, 39946), (45, 39856),

Gene: Sergei_52 Start: 40261, Stop: 39683, Start Num: 8
Candidate Starts for Sergei_52:
(Start: 8 @40261 has 91 MA's), (11, 40171), (14, 40120), (25, 40039), (26, 40036), (36, 39862), (39, 39814),

Gene: Spocter_108 Start: 74822, Stop: 75532, Start Num: 8
Candidate Starts for Spocter_108:
(Start: 8 @74822 has 91 MA's), (24, 75104), (31, 75236), (32, 75251), (40, 75371),

Gene: Sucha_62 Start: 41657, Stop: 41184, Start Num: 8
Candidate Starts for Sucha_62:
(Start: 8 @41657 has 91 MA's), (19, 41486), (27, 41426), (39, 41219),

Gene: Supakev_52 Start: 40227, Stop: 39649, Start Num: 8
Candidate Starts for Supakev_52:
(Start: 8 @40227 has 91 MA's), (11, 40140), (26, 40002), (29, 39987), (36, 39828), (39, 39780),

Gene: Suppi_54 Start: 40275, Stop: 39697, Start Num: 4
Candidate Starts for Suppi_54:
(Start: 4 @40275 has 19 MA's), (Start: 8 @40233 has 91 MA's), (11, 40140), (14, 40089), (26, 40005), (29, 39990), (37, 39843), (39, 39804), (42, 39756),

Gene: TattModd_53 Start: 40168, Stop: 39581, Start Num: 8
Candidate Starts for TattModd_53:
(6, 40183), (Start: 8 @40168 has 91 MA's), (11, 40033), (26, 39895), (29, 39880), (37, 39733), (39, 39691), (45, 39601),

Gene: Temper16_52 Start: 40261, Stop: 39683, Start Num: 8
Candidate Starts for Temper16_52:
(Start: 8 @40261 has 91 MA's), (11, 40171), (14, 40120), (25, 40039), (26, 40036), (36, 39862), (39, 39814),

Gene: Theresita_57 Start: 40106, Stop: 39627, Start Num: 8
Candidate Starts for Theresita_57:
(Start: 8 @40106 has 91 MA's), (19, 39941), (27, 39881), (33, 39758),

Gene: TurboVicky_61 Start: 42136, Stop: 41651, Start Num: 8
Candidate Starts for TurboVicky_61:
(Start: 8 @42136 has 91 MA's), (33, 41782),

Gene: Typher_60 Start: 41696, Stop: 41211, Start Num: 8
Candidate Starts for Typher_60:
(Start: 8 @41696 has 91 MA's), (18, 41537), (33, 41342),

Gene: Urla_53 Start: 40230, Stop: 39610, Start Num: 4

Candidate Starts for Urla_53:
(Start: 4 @40230 has 19 MA's), (6, 40203), (Start: 8 @40188 has 91 MA's), (11, 40098), (16, 40035), (26, 39960), (29, 39945), (37, 39762), (39, 39720),

Gene: Vallejo_55 Start: 40473, Stop: 39835, Start Num: 4
Candidate Starts for Vallejo_55:
(Start: 4 @40473 has 19 MA's), (6, 40446), (Start: 8 @40431 has 91 MA's), (11, 40296), (14, 40245), (22, 40206), (25, 40164), (26, 40161), (37, 39987), (39, 39945), (45, 39855),

Gene: Vulture_51 Start: 39796, Stop: 39218, Start Num: 8
Candidate Starts for Vulture_51:
(Start: 8 @39796 has 91 MA's), (11, 39709), (26, 39571), (29, 39556), (36, 39397), (39, 39349),

Gene: Wawa_55 Start: 40674, Stop: 40087, Start Num: 8
Candidate Starts for Wawa_55:
(Start: 4 @40716 has 19 MA's), (6, 40689), (Start: 8 @40674 has 91 MA's), (11, 40539), (26, 40401), (29, 40386), (37, 40239), (39, 40197), (45, 40107),

Gene: Wayne_56 Start: 40732, Stop: 40151, Start Num: 4
Candidate Starts for Wayne_56:
(Start: 4 @40732 has 19 MA's), (Start: 8 @40690 has 91 MA's), (11, 40597), (14, 40546), (25, 40465), (26, 40462), (29, 40447), (37, 40300), (39, 40258),

Gene: WonderBoy_51 Start: 39071, Stop: 38523, Start Num: 8
Candidate Starts for WonderBoy_51:
(3, 39143), (Start: 4 @39113 has 19 MA's), (6, 39086), (Start: 8 @39071 has 91 MA's), (11, 38996), (16, 38933), (26, 38858), (29, 38843), (37, 38672), (39, 38630),

Gene: Zanella_59 Start: 41940, Stop: 41455, Start Num: 8
Candidate Starts for Zanella_59:
(Start: 8 @41940 has 91 MA's), (33, 41586),

Gene: Zorro_55 Start: 40434, Stop: 39796, Start Num: 4
Candidate Starts for Zorro_55:
(Start: 4 @40434 has 19 MA's), (6, 40407), (Start: 8 @40392 has 91 MA's), (11, 40257), (14, 40206), (25, 40125), (26, 40122), (30, 40050), (37, 39948), (39, 39906), (45, 39816),