Pham 196537


1: Kate33_53 + 3
2: Elva_55
3: Celaena_51 + 1
4: Brahms_50 + 4
5: Albedo_54
6: BabyYoda_53 + 5
7: ChiliPepper_50 + 4
8: Swervy_54 + 4
9: Nicky22_54
10: Franklin22_52
11: CroZenni_53
12: Eula_53
13: Armstrong_50 + 2
14: Quenya_54
15: DickRichards_51
16: Cashington_51
17: BubbaBear_52 + 2
18: Kenzers_53 + 1
19: Bachaco_51 + 1
20: Lynlen_54
21: Slay_53
22: Icarian_56
23: BelmontSKP_53 + 2
24: Gack_51
25: Arroyo_53
26: BAjuniper_51
27: Phisb_53
28: Lahqtemish_52
29: QMacho_55
30: Avocadoman_51
31: LimaBean_53
32: AvGardian_54
33: Albright_50
34: Eden_52
35: Burritobowl_53

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 196537 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196537 has 64 members, 3 are drafts.

Phages represented in each track:
- Track 1 : Kate33_53, Didgeridoo_56, BabyDaisy_53, IndyLu_53
- Track 2 : Elva_55
- Track 3 : Celaena_51, FlameThrower_50
- Track 4 : Brahms_50, Coltrane_50, Clayda5_52, Bernstein_50, Rollins_50
- Track 5 : Albedo_54
- Track 6 : BabyYoda_53, WalkingDead_55, DirtyBubble_52, SanaSana_55, Stoor_53, Stromboli_53
- Track 7 : ChiliPepper_50, Kieran_50, Sharkboy_51, Dismas_51, Rona_50
- Track 8 : Swervy_54, Jovita_52, TukTuk_54, Finalfrontier_54, SarBear_53
- Track 9 : Nicky22_54
- Track 10 : Franklin22_52
- Track 11 : CroZenni_53
- Track 12 : Eula_53
- Track 13 : Armstrong_50, Vitas_50, Skylord_50
- Track 14 : Quenya_54
- Track 15 : DickRichards_51
- Track 16 : Cashington_51
- Track 17 : BubbaBear_52, Doobus_51, Abigail_52
- Track 18 : Kenzers_53, Johnathan_52
- Track 19 : Bachaco_51, Katzastrophic_52
- Track 20 : Lynlen_54
- Track 21 : Slay_53
- Track 22 : Icarian_56
- Track 23 : BelmontSKP_53, SansAfet_54, AnnaLie_53
- Track 24 : Gack_51
- Track 25 : Arroyo_53
- Track 26 : BAjuniper_51
- Track 27 : Phisb_53
- Track 28 : Lahqtemish_52
- Track 29 : QMacho_55
- Track 30 : Avocadoman_51
- Track 31 : LimaBean_53
- Track 32 : AvGardian_54
- Track 33 : Albright_50
- Track 34 : Eden_52
- Track 35 : Burritobowl_53

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

The start number called the most often in the published annotations is 10, it was called in 43 of the 61 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abigail_52, Albedo_54, Albright_50, AnnaLie_53, AvGardian_54, Avocadoman_51, BAjuniper_51, BabyDaisy_53, BabyYoda_53, Bachaco_51, BelmontSKP_53, BubbaBear_52, Cashington_51, Celaena_51, ChiliPepper_50, Didgeridoo_56, DirtyBubble_52, Dismas_51, Doobus_51, Elva_55, Eula_53, Finalfrontier_54, FlameThrower_50, Icarian_56, IndyLu_53, Johnathan_52, Jovita_52, Kate33_53, Katzastrophic_52, Kenzers_53, Kieran_50, Lahqtemish_52, Nicky22_54, Phisb_53, QMacho_55, Quenya_54, Rona_50, SanaSana_55, SansAfet_54, SarBear_53, Sharkboy_51, Stoor_53, Stromboli_53, Swervy_54, TukTuk_54, WalkingDead_55,

Genes that have the "Most Annotated" start but do not call it:
• Arroyo_53, Burritobowl_53, CroZenni_53, DickRichards_51, LimaBean_53, Lynlen_54, Slay_53,

Genes that do not have the "Most Annotated" start:
• Armstrong_50, Bernstein_50, Brahms_50, Clayda5_52, Coltrane_50, Eden_52, Franklin22_52, Gack_51, Rollins_50, Skylord_50, Vitas_50,

Summary by start number:

Start 6:
• Found in 32 of 64 (50.0%) of genes in pham
• Manual Annotations of this start: 7 of 61
• Called 21.9% of time when present
• Phage (with cluster) where this start called: Arroyo_53 (EB), Burritobowl_53 (EB), CroZenni_53 (EB), DickRichards_51 (EB), LimaBean_53 (EB), Lynlen_54 (EB), Slay_53 (EB),

Start 8:
• Found in 8 of 64 (12.5%) of genes in pham
• Manual Annotations of this start: 5 of 61
• Called 62.5% of time when present
• Phage (with cluster) where this start called: Bernstein_50 (EB), Brahms_50 (EB), Clayda5_52 (EB), Coltrane_50 (EB), Rollins_50 (EB),

Start 10:
• Found in 53 of 64 (82.8%) of genes in pham
• Manual Annotations of this start: 43 of 61
• Called 86.8% of time when present
• Phage (with cluster) where this start called: Abigail_52 (EB), Albedo_54 (EB), Albright_50 (EB), AnnaLie_53 (EB), AvGardian_54 (EB), Avocadoman_51 (EB), BAjuniper_51 (EB), BabyDaisy_53 (EB), BabyYoda_53 (EB), Bachaco_51 (EB), BelmontSKP_53 (EB), BubbaBear_52 (EB), Cashington_51 (EB), Celaena_51 (EB), ChiliPepper_50 (EB), Didgeridoo_56 (EB), DirtyBubble_52 (EB), Dismas_51 (EB), Doobus_51 (EB), Elva_55 (EB), Eula_53 (EB), Finalfrontier_54 (EB),

FlameThrower_50 (EB), Icarian_56 (EB), IndyLu_53 (EB), Johnathan_52 (EB), Jovita_52 (EB), Kate33_53 (EB), Katzastrophic_52 (EB), Kenzers_53 (EB), Kieran_50 (EB), Lahqtemish_52 (EB), Nicky22_54 (EB), Phisb_53 (EB), QMacho_55 (EB), Quenya_54 (EB), Rona_50 (EB), SanaSana_55 (EB), SansAfet_54 (EB), SarBear_53 (EB), Sharkboy_51 (EB), Stoor_53 (EB), Stromboli_53 (EB), Swervy_54 (EB), TukTuk_54 (EB), WalkingDead_55 (EB),

Start 11:
• Found in 1 of 64 (1.6%) of genes in pham
• Manual Annotations of this start: 1 of 61
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gack_51 (EB),

Start 14:
• Found in 3 of 64 (4.7%) of genes in pham
• Manual Annotations of this start: 2 of 61
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Eden_52 (EB), Franklin22_52 (EB),

Start 15:
• Found in 8 of 64 (12.5%) of genes in pham
• Manual Annotations of this start: 3 of 61
• Called 37.5% of time when present
• Phage (with cluster) where this start called: Armstrong_50 (EB), Skylord_50 (EB), Vitas_50 (EB),

Summary by clusters:

There is one cluster represented in this pham: EB

Info for manual annotations of cluster EB:
•Start number 6 was manually annotated 7 times for cluster EB.
•Start number 8 was manually annotated 5 times for cluster EB.
•Start number 10 was manually annotated 43 times for cluster EB.
•Start number 11 was manually annotated 1 time for cluster EB.
•Start number 14 was manually annotated 2 times for cluster EB.
•Start number 15 was manually annotated 3 times for cluster EB.

Gene Information:

Gene: Abigail_52 Start: 34814, Stop: 35131, Start Num: 10
Candidate Starts for Abigail_52:
(1, 34322), (2, 34337), (3, 34340), (4, 34442), (5, 34556), (Start: 6 @34715 has 7 MA's), (Start: 10 @34814 has 43 MA's), (12, 34844), (19, 34940), (25, 35024),

Gene: Albedo_54 Start: 35539, Stop: 35856, Start Num: 10
Candidate Starts for Albedo_54:
(2, 35062), (3, 35065), (4, 35167), (5, 35281), (Start: 6 @35440 has 7 MA's), (Start: 10 @35539 has 43 MA's), (12, 35569), (19, 35665), (21, 35719),

Gene: Albright_50 Start: 34245, Stop: 34562, Start Num: 10

Candidate Starts for Albright_50:
(5, 33987), (Start: 6 @34146 has 7 MA's), (Start: 10 @34245 has 43 MA's), (12, 34275), (19, 34371), (25, 34455),

Gene: AnnaLie_53 Start: 35474, Stop: 35791, Start Num: 10
Candidate Starts for AnnaLie_53:
(1, 34982), (2, 34997), (3, 35000), (4, 35102), (5, 35216), (Start: 6 @35375 has 7 MA's), (Start: 10 @35474 has 43 MA's), (12, 35504),

Gene: Armstrong_50 Start: 33369, Stop: 33632, Start Num: 15
Candidate Starts for Armstrong_50:
(Start: 8 @33273 has 5 MA's), (Start: 15 @33369 has 3 MA's), (23, 33522), (25, 33537),

Gene: Arroyo_53 Start: 35483, Stop: 35899, Start Num: 6
Candidate Starts for Arroyo_53:
(4, 35210), (5, 35324), (Start: 6 @35483 has 7 MA's), (Start: 10 @35582 has 43 MA's), (12, 35612),

Gene: AvGardian_54 Start: 35767, Stop: 36078, Start Num: 10
Candidate Starts for AvGardian_54:
(Start: 10 @35767 has 43 MA's), (19, 35893), (25, 35977), (27, 36013), (31, 36067),

Gene: Avocadoman_51 Start: 34446, Stop: 34763, Start Num: 10
Candidate Starts for Avocadoman_51:
(3, 33972), (4, 34074), (5, 34188), (Start: 6 @34347 has 7 MA's), (Start: 10 @34446 has 43 MA's), (12, 34476), (19, 34572), (25, 34656),

Gene: BAjuniper_51 Start: 36109, Stop: 36411, Start Num: 10
Candidate Starts for BAjuniper_51:
(Start: 10 @36109 has 43 MA's), (16, 36157), (20, 36247), (25, 36313),

Gene: BabyDaisy_53 Start: 35603, Stop: 35920, Start Num: 10
Candidate Starts for BabyDaisy_53:
(Start: 10 @35603 has 43 MA's), (19, 35729), (20, 35747), (25, 35813), (26, 35822),

Gene: BabyYoda_53 Start: 36188, Stop: 36499, Start Num: 10
Candidate Starts for BabyYoda_53:
(Start: 10 @36188 has 43 MA's), (19, 36314), (25, 36398), (31, 36488),

Gene: Bachaco_51 Start: 36917, Stop: 37228, Start Num: 10
Candidate Starts for Bachaco_51:
(Start: 6 @36821 has 7 MA's), (9, 36881), (Start: 10 @36917 has 43 MA's), (20, 37064), (28, 37181), (31, 37217),

Gene: BelmontSKP_53 Start: 35474, Stop: 35791, Start Num: 10
Candidate Starts for BelmontSKP_53:
(1, 34982), (2, 34997), (3, 35000), (4, 35102), (5, 35216), (Start: 6 @35375 has 7 MA's), (Start: 10 @35474 has 43 MA's), (12, 35504),

Gene: Bernstein_50 Start: 33271, Stop: 33630, Start Num: 8
Candidate Starts for Bernstein_50:
(Start: 8 @33271 has 5 MA's), (Start: 15 @33367 has 3 MA's), (23, 33520), (25, 33535),

Gene: Brahms_50 Start: 33191, Stop: 33550, Start Num: 8

Candidate Starts for Brahms_50:
(Start: 8 @33191 has 5 MA's), (Start: 15 @33287 has 3 MA's), (23, 33440), (25, 33455),

Gene: BubbaBear_52 Start: 35223, Stop: 35540, Start Num: 10
Candidate Starts for BubbaBear_52:
(1, 34731), (2, 34746), (3, 34749), (4, 34851), (5, 34965), (Start: 6 @35124 has 7 MA's), (Start: 10 @35223 has 43 MA's), (12, 35253), (19, 35349), (25, 35433),

Gene: Burritobowl_53 Start: 35054, Stop: 35470, Start Num: 6
Candidate Starts for Burritobowl_53:
(1, 34661), (2, 34676), (3, 34679), (4, 34781), (5, 34895), (Start: 6 @35054 has 7 MA's), (Start: 10 @35153 has 43 MA's), (12, 35183), (19, 35279), (25, 35363),

Gene: Cashington_51 Start: 34566, Stop: 34883, Start Num: 10
Candidate Starts for Cashington_51:
(4, 34194), (5, 34308), (Start: 6 @34467 has 7 MA's), (Start: 10 @34566 has 43 MA's), (12, 34596), (19, 34692),

Gene: Celaena_51 Start: 36679, Stop: 36990, Start Num: 10
Candidate Starts for Celaena_51:
(Start: 6 @36583 has 7 MA's), (9, 36643), (Start: 10 @36679 has 43 MA's), (20, 36826), (25, 36892), (28, 36943), (31, 36979),

Gene: ChiliPepper_50 Start: 35984, Stop: 36280, Start Num: 10
Candidate Starts for ChiliPepper_50:
(Start: 10 @35984 has 43 MA's), (13, 36017), (17, 36047), (18, 36065), (19, 36098), (25, 36185), (31, 36269),

Gene: Clayda5_52 Start: 33256, Stop: 33615, Start Num: 8
Candidate Starts for Clayda5_52:
(Start: 8 @33256 has 5 MA's), (Start: 15 @33352 has 3 MA's), (23, 33505), (25, 33520),

Gene: Coltrane_50 Start: 33191, Stop: 33550, Start Num: 8
Candidate Starts for Coltrane_50:
(Start: 8 @33191 has 5 MA's), (Start: 15 @33287 has 3 MA's), (23, 33440), (25, 33455),

Gene: CroZenni_53 Start: 34991, Stop: 35407, Start Num: 6
Candidate Starts for CroZenni_53:
(1, 34598), (2, 34613), (3, 34616), (4, 34718), (5, 34832), (Start: 6 @34991 has 7 MA's), (Start: 10 @35090 has 43 MA's), (12, 35120),

Gene: DickRichards_51 Start: 35166, Stop: 35582, Start Num: 6
Candidate Starts for DickRichards_51:
(5, 35007), (Start: 6 @35166 has 7 MA's), (Start: 10 @35265 has 43 MA's), (12, 35295), (19, 35391), (25, 35475),

Gene: Didgeridoo_56 Start: 35947, Stop: 36264, Start Num: 10
Candidate Starts for Didgeridoo_56:
(Start: 10 @35947 has 43 MA's), (19, 36073), (20, 36091), (25, 36157), (26, 36166),

Gene: DirtyBubble_52 Start: 35856, Stop: 36167, Start Num: 10
Candidate Starts for DirtyBubble_52:
(Start: 10 @35856 has 43 MA's), (19, 35982), (25, 36066), (31, 36156),

Gene: Dismas_51 Start: 35905, Stop: 36201, Start Num: 10
Candidate Starts for Dismas_51:
(Start: 10 @35905 has 43 MA's), (13, 35938), (17, 35968), (18, 35986), (19, 36019), (25, 36106), (31, 36190),

Gene: Doobus_51 Start: 34754, Stop: 35071, Start Num: 10
Candidate Starts for Doobus_51:
(1, 34262), (2, 34277), (3, 34280), (4, 34382), (5, 34496), (Start: 6 @34655 has 7 MA's), (Start: 10 @34754 has 43 MA's), (12, 34784), (19, 34880), (25, 34964),

Gene: Eden_52 Start: 34643, Stop: 34912, Start Num: 14
Candidate Starts for Eden_52:
(Start: 14 @34643 has 2 MA's), (29, 34880),

Gene: Elva_55 Start: 36253, Stop: 36564, Start Num: 10
Candidate Starts for Elva_55:
(Start: 10 @36253 has 43 MA's), (19, 36379), (25, 36463), (28, 36517), (31, 36553),

Gene: Eula_53 Start: 34937, Stop: 35254, Start Num: 10
Candidate Starts for Eula_53:
(4, 34565), (5, 34679), (Start: 6 @34838 has 7 MA's), (Start: 10 @34937 has 43 MA's), (19, 35063),

Gene: Finalfrontier_54 Start: 36047, Stop: 36364, Start Num: 10
Candidate Starts for Finalfrontier_54:
(3, 35573), (4, 35675), (5, 35789), (Start: 6 @35948 has 7 MA's), (Start: 10 @36047 has 43 MA's), (19, 36173),

Gene: FlameThrower_50 Start: 35716, Stop: 36027, Start Num: 10
Candidate Starts for FlameThrower_50:
(Start: 6 @35620 has 7 MA's), (9, 35680), (Start: 10 @35716 has 43 MA's), (20, 35863), (25, 35929), (28, 35980), (31, 36016),

Gene: Franklin22_52 Start: 33928, Stop: 34197, Start Num: 14
Candidate Starts for Franklin22_52:
(Start: 14 @33928 has 2 MA's),

Gene: Gack_51 Start: 34247, Stop: 34525, Start Num: 11
Candidate Starts for Gack_51:
(Start: 11 @34247 has 1 MA's), (Start: 14 @34262 has 2 MA's), (20, 34364), (29, 34493), (31, 34514),

Gene: Icarian_56 Start: 36852, Stop: 37163, Start Num: 10
Candidate Starts for Icarian_56:
(Start: 10 @36852 has 43 MA's), (19, 36978), (22, 37044), (31, 37152),

Gene: IndyLu_53 Start: 35523, Stop: 35840, Start Num: 10
Candidate Starts for IndyLu_53:
(Start: 10 @35523 has 43 MA's), (19, 35649), (20, 35667), (25, 35733), (26, 35742),

Gene: Johnathan_52 Start: 34592, Stop: 34909, Start Num: 10
Candidate Starts for Johnathan_52:
(1, 34100), (2, 34115), (3, 34118), (4, 34220), (5, 34334), (Start: 6 @34493 has 7 MA's), (Start: 10 @34592 has 43 MA's), (12, 34622), (19, 34718),

Gene: Jovita_52 Start: 34811, Stop: 35128, Start Num: 10
Candidate Starts for Jovita_52:
(3, 34337), (4, 34439), (5, 34553), (Start: 6 @34712 has 7 MA's), (Start: 10 @34811 has 43 MA's), (19, 34937),

Gene: Kate33_53 Start: 35240, Stop: 35557, Start Num: 10
Candidate Starts for Kate33_53:
(Start: 10 @35240 has 43 MA's), (19, 35366), (20, 35384), (25, 35450), (26, 35459),

Gene: Katzastrophic_52 Start: 36226, Stop: 36537, Start Num: 10
Candidate Starts for Katzastrophic_52:
(Start: 6 @36130 has 7 MA's), (9, 36190), (Start: 10 @36226 has 43 MA's), (20, 36373), (28, 36490), (31, 36526),

Gene: Kenzers_53 Start: 35071, Stop: 35388, Start Num: 10
Candidate Starts for Kenzers_53:
(1, 34579), (2, 34594), (3, 34597), (4, 34699), (5, 34813), (Start: 6 @34972 has 7 MA's), (Start: 10 @35071 has 43 MA's), (12, 35101), (19, 35197),

Gene: Kieran_50 Start: 35946, Stop: 36242, Start Num: 10
Candidate Starts for Kieran_50:
(Start: 10 @35946 has 43 MA's), (13, 35979), (17, 36009), (18, 36027), (19, 36060), (25, 36147), (31, 36231),

Gene: Lahqtemish_52 Start: 35520, Stop: 35831, Start Num: 10
Candidate Starts for Lahqtemish_52:
(Start: 10 @35520 has 43 MA's), (25, 35730), (30, 35808), (31, 35820),

Gene: LimaBean_53 Start: 34593, Stop: 35009, Start Num: 6
Candidate Starts for LimaBean_53:
(1, 34200), (2, 34215), (3, 34218), (4, 34320), (5, 34434), (Start: 6 @34593 has 7 MA's), (Start: 10 @34692 has 43 MA's), (12, 34722), (19, 34818), (25, 34902),

Gene: Lynlen_54 Start: 35152, Stop: 35568, Start Num: 6
Candidate Starts for Lynlen_54:
(1, 34759), (2, 34774), (3, 34777), (4, 34879), (5, 34993), (Start: 6 @35152 has 7 MA's), (Start: 10 @35251 has 43 MA's), (12, 35281), (19, 35377),

Gene: Nicky22_54 Start: 35706, Stop: 36017, Start Num: 10
Candidate Starts for Nicky22_54:
(5, 35448), (Start: 6 @35607 has 7 MA's), (Start: 10 @35706 has 43 MA's), (24, 35907), (25, 35916), (31, 36006),

Gene: Phisb_53 Start: 35175, Stop: 35492, Start Num: 10
Candidate Starts for Phisb_53:
(Start: 6 @35076 has 7 MA's), (Start: 10 @35175 has 43 MA's), (19, 35301),

Gene: QMacho_55 Start: 35591, Stop: 35908, Start Num: 10
Candidate Starts for QMacho_55:
(3, 35117), (4, 35219), (5, 35333), (Start: 6 @35492 has 7 MA's), (Start: 10 @35591 has 43 MA's), (19, 35717), (25, 35801),

Gene: Quenya_54 Start: 36360, Stop: 36671, Start Num: 10
Candidate Starts for Quenya_54:
(7, 36273), (Start: 10 @36360 has 43 MA's), (20, 36507), (25, 36573), (31, 36660),

Gene: Rollins_50 Start: 33271, Stop: 33630, Start Num: 8
Candidate Starts for Rollins_50:
(Start: 8 @33271 has 5 MA's), (Start: 15 @33367 has 3 MA's), (23, 33520), (25, 33535),

Gene: Rona_50 Start: 35896, Stop: 36192, Start Num: 10
Candidate Starts for Rona_50:
(Start: 10 @35896 has 43 MA's), (13, 35929), (17, 35959), (18, 35977), (19, 36010), (25, 36097), (31, 36181),

Gene: SanaSana_55 Start: 36568, Stop: 36879, Start Num: 10
Candidate Starts for SanaSana_55:
(Start: 10 @36568 has 43 MA's), (19, 36694), (25, 36778), (31, 36868),

Gene: SansAfet_54 Start: 35000, Stop: 35317, Start Num: 10
Candidate Starts for SansAfet_54:
(1, 34508), (2, 34523), (3, 34526), (4, 34628), (5, 34742), (Start: 6 @34901 has 7 MA's), (Start: 10 @35000 has 43 MA's), (12, 35030),

Gene: SarBear_53 Start: 34895, Stop: 35212, Start Num: 10
Candidate Starts for SarBear_53:
(3, 34421), (4, 34523), (5, 34637), (Start: 6 @34796 has 7 MA's), (Start: 10 @34895 has 43 MA's), (19, 35021),

Gene: Sharkboy_51 Start: 35995, Stop: 36291, Start Num: 10
Candidate Starts for Sharkboy_51:
(Start: 10 @35995 has 43 MA's), (13, 36028), (17, 36058), (18, 36076), (19, 36109), (25, 36196), (31, 36280),

Gene: Skylord_50 Start: 33326, Stop: 33589, Start Num: 15
Candidate Starts for Skylord_50:
(Start: 8 @33230 has 5 MA's), (Start: 15 @33326 has 3 MA's), (23, 33479), (25, 33494),

Gene: Slay_53 Start: 35388, Stop: 35804, Start Num: 6
Candidate Starts for Slay_53:
(3, 35013), (4, 35115), (5, 35229), (Start: 6 @35388 has 7 MA's), (Start: 10 @35487 has 43 MA's), (19, 35613),

Gene: Stoor_53 Start: 36355, Stop: 36666, Start Num: 10
Candidate Starts for Stoor_53:
(Start: 10 @36355 has 43 MA's), (19, 36481), (25, 36565), (31, 36655),

Gene: Stromboli_53 Start: 36226, Stop: 36537, Start Num: 10
Candidate Starts for Stromboli_53:
(Start: 10 @36226 has 43 MA's), (19, 36352), (25, 36436), (31, 36526),

Gene: Swervy_54 Start: 35167, Stop: 35484, Start Num: 10
Candidate Starts for Swervy_54:
(3, 34693), (4, 34795), (5, 34909), (Start: 6 @35068 has 7 MA's), (Start: 10 @35167 has 43 MA's), (19, 35293),

Gene: TukTuk_54 Start: 35232, Stop: 35549, Start Num: 10
Candidate Starts for TukTuk_54:
(3, 34758), (4, 34860), (5, 34974), (Start: 6 @35133 has 7 MA's), (Start: 10 @35232 has 43 MA's), (19, 35358),

Gene: Vitas_50 Start: 33358, Stop: 33621, Start Num: 15
Candidate Starts for Vitas_50:
(Start: 8 @33262 has 5 MA's), (Start: 15 @33358 has 3 MA's), (23, 33511), (25, 33526),

Gene: WalkingDead_55 Start: 36975, Stop: 37286, Start Num: 10
Candidate Starts for WalkingDead_55:
(Start: 10 @36975 has 43 MA's), (19, 37101), (25, 37185), (31, 37275),