Pham 345654


1: Rozby_55 + 8
2: Temper16_53
3: TattModd_54 + 10
4: Suppi_55 + 2
5: RcigaStruga_56 + 2
6: Lennox_54 + 1
7: PinkFriday_54
8: Lakshmi_56 + 1
9: PitaDog_54
10: Litotes_54 + 2
11: AppleCider_55 + 2
12: ChewChew_54 + 8
13: HeadNerd_53 + 3
14: Chridison_50
15: BigMack_54
16: Seigei_53 + 4
17: OMalley_53 + 3
18: Preamble_55
19: Joann_57
20: Greenhouse_57
21: Albanese_56 + 1
22: RAP15_57 + 1
23: Vulture_52 + 1
24: Supakev_53 + 1
25: Kittykat_57 + 2
26: LilStuart_53
27: Christian_54 + 1

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 345654 Report

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

Pham number 345654 has 80 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Rozby_55, Beethoven_55, Riverdale_56, Savage2526_56, Fluke_56, Dino_56, Vallejo_56, MrGloopy_56, Zorro_56
• Track 2 : Temper16_53
• Track 3 : TattModd_54, Wawa_56, Carpal_55, BrotherBLo_55, Scuttle_55, Cholula_55, Jumboset_57, Korra_57, Glenn_57, Potatoes_55, Immaculata_55
• Track 4 : Suppi_55, Wayne_57, Canowicakte_55
• Track 5 : RcigaStruga_56, Huntingdon_56, Misaeng_55
• Track 6 : Lennox_54, Pterodactyl_54
• Track 7 : PinkFriday_54
• Track 8 : Lakshmi_56, GreenHearts_57
• Track 9 : PitaDog_54
• Track 10 : Litotes_54, CallieOMalley_55, Graynor_58
• Track 11 : AppleCider_55, PartyCup_56, MrBoss_58
• Track 12 : ChewChew_54, Lasagna_52, CristinaYang_54, WonderBoy_52, Bodacious_54, OurGirlNessie_52, DrRobert_52, Lucy_53, Nancia_54
• Track 13 : HeadNerd_53, Bennie_54, Moki_53, Huckleberry_53
• Track 14 : Chridison_50
• Track 15 : BigMack_54
• Track 16 : Sergei_53, Maria1952_52, KingBob_53, Daiboju_53, Herb_53
• Track 17 : OMalley_53, Riovina_53, Eunoia_55, Aledel_53
• Track 18 : Preamble_55
• Track 19 : Joann_57
• Track 20 : Greenhouse_57
• Track 21 : Albanese_56, Nubia_56
• Track 22 : RAP15_57, MeganNoll_56
• Track 23 : Vulture_52, HunterDalle_52
• Track 24 : Supakev_53, AustinPowers_53
• Track 25 : Kittykat_57, Gisselle_53, DreamTeam_53
• Track 26 : LilStuart_53
• Track 27 : Christian_54, Makoto_53

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

The start number called the most often in the published annotations is 5, it was called in 71 of the 78 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albanese_56, Aledel_53, AppleCider_55, AustinPowers_53, Beethoven_55, Bennie_54, BigMack_54, Bodacious_54, BrotherBLo_55, CallieOMalley_55, Carpal_55, ChewChew_54, Cholula_55, Chridison_50, Christian_54, CristinaYang_54, Daiboju_53, Dino_56, DrRobert_52, DreamTeam_53, Eunoia_55, Fluke_56, Gisselle_53, Glenn_57, Graynor_58, GreenHearts_57, Greenhouse_57, HeadNerd_53, Herb_53, Huckleberry_53, Huntingdon_56, Immaculata_55, Joann_57, Jumboset_57, KingBob_53, Kittykat_57, Korra_57, Lakshmi_56, Lasagna_52, Lennox_54, Litotes_54, Lucy_53, Makoto_53, Maria1952_52, MeganNoll_56, Misaeng_55, Moki_53, MrBoss_58, MrGloopy_56, Nancia_54, Nubia_56, OMalley_53, OurGirlNessie_52, PartyCup_56, PinkFriday_54, PitaDog_54, Potatoes_55, Preamble_55, Pterodactyl_54, RAP15_57, RcigaStruga_56, Riovina_53, Riverdale_56, Rozby_55, Savage2526_56, Scuttle_55, Sergei_53, Supakev_53, TattModd_54, Vallejo_56, Wawa_56, WonderBoy_52, Zorro_56,

Genes that have the "Most Annotated" start but do not call it:
• Canowicakte_55, HunterDalle_52, Suppi_55, Temper16_53, Vulture_52, Wayne_57,

Genes that do not have the "Most Annotated" start:
• LilStuart_53,

Summary by start number:

Start 1:
• Found in 18 of 80 (22.5%) of genes in pham
• Manual Annotations of this start: 3 of 78
• Called 16.7% of time when present
• Phage (with cluster) where this start called: HunterDalle_52 (AK), Temper16_53 (AK), Vulture_52 (AK),

Start 3:
• Found in 6 of 80 (7.5%) of genes in pham
• Manual Annotations of this start: 3 of 78
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Canowicakte_55 (AK), Suppi_55 (AK), Wayne_57 (AK),

Start 4:
• Found in 1 of 80 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 78
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LilStuart_53 (AK),

Start 5:
• Found in 79 of 80 (98.8%) of genes in pham
• Manual Annotations of this start: 71 of 78
• Called 92.4% of time when present

• Phage (with cluster) where this start called: Albanese_56 (AK), Aledel_53 (AK), AppleCider_55 (AK), AustinPowers_53 (AK), Beethoven_55 (AK), Bennie_54 (AK), BigMack_54 (AK), Bodacious_54 (AK), BrotherBLo_55 (AK), CallieOMalley_55 (AK), Carpal_55 (AK), ChewChew_54 (AK), Cholula_55 (AK), Chridison_50 (AK), Christian_54 (AK), CristinaYang_54 (AK), Daiboju_53 (AK), Dino_56 (AK), DrRobert_52 (AK), DreamTeam_53 (AK), Eunoia_55 (AK), Fluke_56 (AK), Gisselle_53 (AK), Glenn_57 (AK), Graynor_58 (AK), GreenHearts_57 (AK), Greenhouse_57 (AK), HeadNerd_53 (AK), Herb_53 (AK), Huckleberry_53 (AK), Huntingdon_56 (AK), Immaculata_55 (AK), Joann_57 (AK), Jumboset_57 (AK), KingBob_53 (AK), Kittykat_57 (AK), Korra_57 (AK), Lakshmi_56 (AK), Lasagna_52 (AK), Lennox_54 (AK), Litotes_54 (AK), Lucy_53 (AK), Makoto_53 (AK), Maria1952_52 (AK), MeganNoll_56 (AK), Misaeng_55 (AK), Moki_53 (AK), MrBoss_58 (AK), MrGloopy_56 (AK), Nancia_54 (AK), Nubia_56 (AK), OMalley_53 (AK), OurGirlNessie_52 (AK), PartyCup_56 (AK), PinkFriday_54 (AK), PitaDog_54 (AK), Potatoes_55 (AK), Preamble_55 (AK), Pterodactyl_54 (AK), RAP15_57 (AK), RcigaStruga_56 (AK), Riovina_53 (AK), Riverdale_56 (AK), Rozby_55 (AK), Savage2526_56 (AK), Scuttle_55 (AK), Sergei_53 (AK), Supakev_53 (AK), TattModd_54 (AK), Vallejo_56 (AK), Wawa_56 (AK), WonderBoy_52 (AK), Zorro_56 (AK),

Summary by clusters:

There is one cluster represented in this pham: AK

Info for manual annotations of cluster AK:
•Start number 1 was manually annotated 3 times for cluster AK.
•Start number 3 was manually annotated 3 times for cluster AK.
•Start number 4 was manually annotated 1 time for cluster AK.
•Start number 5 was manually annotated 71 times for cluster AK.

Gene Information:

Gene: Albanese_56 Start: 41517, Stop: 40972, Start Num: 5
Candidate Starts for Albanese_56:
(Start: 1 @41595 has 3 MA's), (Start: 5 @41517 has 71 MA's), (18, 41226), (24, 40992),

Gene: Aledel_53 Start: 40905, Stop: 40363, Start Num: 5
Candidate Starts for Aledel_53:
(Start: 1 @40983 has 3 MA's), (Start: 5 @40905 has 71 MA's), (10, 40761), (16, 40641), (17, 40635),

Gene: AppleCider_55 Start: 40947, Stop: 40399, Start Num: 5
Candidate Starts for AppleCider_55:
(Start: 5 @40947 has 71 MA's), (6, 40902), (13, 40749), (19, 40650), (24, 40419),

Gene: AustinPowers_53 Start: 40927, Stop: 40385, Start Num: 5
Candidate Starts for AustinPowers_53:
(Start: 1 @41005 has 3 MA's), (Start: 5 @40927 has 71 MA's), (10, 40783), (17, 40657),

Gene: Beethoven_55 Start: 40994, Stop: 40434, Start Num: 5
Candidate Starts for Beethoven_55:
(Start: 5 @40994 has 71 MA's), (8, 40865), (9, 40853), (15, 40724), (22, 40529), (24, 40454),

Gene: Bennie_54 Start: 39785, Stop: 39225, Start Num: 5
Candidate Starts for Bennie_54:
(Start: 5 @39785 has 71 MA's), (7, 39686), (8, 39656), (9, 39644), (12, 39587), (16, 39512), (22, 39320), (24, 39245),

Gene: BigMack_54 Start: 40245, Stop: 39691, Start Num: 5
Candidate Starts for BigMack_54:
(Start: 5 @40245 has 71 MA's), (9, 40104), (12, 40047), (24, 39711),

Gene: Bodacious_54 Start: 40215, Stop: 39664, Start Num: 5
Candidate Starts for Bodacious_54:
(Start: 5 @40215 has 71 MA's), (9, 40074), (12, 40017), (22, 39759), (24, 39684),

Gene: BrotherBLo_55 Start: 41034, Stop: 40474, Start Num: 5
Candidate Starts for BrotherBLo_55:
(Start: 5 @41034 has 71 MA's), (8, 40905), (9, 40893), (15, 40764), (24, 40494),

Gene: CallieOMalley_55 Start: 40929, Stop: 40381, Start Num: 5
Candidate Starts for CallieOMalley_55:
(Start: 3 @40977 has 3 MA's), (Start: 5 @40929 has 71 MA's), (6, 40884), (13, 40731), (19, 40632), (24, 40401),

Gene: Canowicakte_55 Start: 41029, Stop: 40433, Start Num: 3
Candidate Starts for Canowicakte_55:
(Start: 3 @41029 has 3 MA's), (Start: 5 @40981 has 71 MA's), (6, 40936), (13, 40783), (19, 40684), (24, 40453),

Gene: Carpal_55 Start: 41010, Stop: 40450, Start Num: 5
Candidate Starts for Carpal_55:
(Start: 5 @41010 has 71 MA's), (8, 40881), (9, 40869), (15, 40740), (24, 40470),

Gene: ChewChew_54 Start: 40345, Stop: 39794, Start Num: 5
Candidate Starts for ChewChew_54:
(Start: 5 @40345 has 71 MA's), (9, 40204), (12, 40147), (22, 39889), (24, 39814),

Gene: Cholula_55 Start: 41044, Stop: 40484, Start Num: 5
Candidate Starts for Cholula_55:
(Start: 5 @41044 has 71 MA's), (8, 40915), (9, 40903), (15, 40774), (24, 40504),

Gene: Chridison_50 Start: 40183, Stop: 39638, Start Num: 5
Candidate Starts for Chridison_50:
(Start: 1 @40261 has 3 MA's), (Start: 5 @40183 has 71 MA's), (6, 40141),

Gene: Christian_54 Start: 40056, Stop: 39502, Start Num: 5
Candidate Starts for Christian_54:
(Start: 5 @40056 has 71 MA's), (21, 39669), (24, 39522),

Gene: CristinaYang_54 Start: 40342, Stop: 39791, Start Num: 5
Candidate Starts for CristinaYang_54:
(Start: 5 @40342 has 71 MA's), (9, 40201), (12, 40144), (22, 39886), (24, 39811),

Gene: Daiboju_53 Start: 40967, Stop: 40425, Start Num: 5

Candidate Starts for Daiboju_53:
(Start: 1 @41045 has 3 MA's), (Start: 5 @40967 has 71 MA's), (11, 40787), (17, 40697), (18, 40679), (20, 40658), (22, 40520), (23, 40517),

Gene: Dino_56 Start: 41153, Stop: 40593, Start Num: 5
Candidate Starts for Dino_56:
(Start: 5 @41153 has 71 MA's), (8, 41024), (9, 41012), (15, 40883), (22, 40688), (24, 40613),

Gene: DrRobert_52 Start: 39577, Stop: 39026, Start Num: 5
Candidate Starts for DrRobert_52:
(Start: 5 @39577 has 71 MA's), (9, 39436), (12, 39379), (22, 39121), (24, 39046),

Gene: DreamTeam_53 Start: 39944, Stop: 39393, Start Num: 5
Candidate Starts for DreamTeam_53:
(Start: 5 @39944 has 71 MA's), (8, 39815), (9, 39803), (12, 39746), (22, 39488), (23, 39485), (24, 39413),

Gene: Eunoia_55 Start: 41582, Stop: 41040, Start Num: 5
Candidate Starts for Eunoia_55:
(Start: 1 @41660 has 3 MA's), (Start: 5 @41582 has 71 MA's), (10, 41438), (16, 41318), (17, 41312),

Gene: Fluke_56 Start: 41267, Stop: 40707, Start Num: 5
Candidate Starts for Fluke_56:
(Start: 5 @41267 has 71 MA's), (8, 41138), (9, 41126), (15, 40997), (22, 40802), (24, 40727),

Gene: Gisselle_53 Start: 39944, Stop: 39393, Start Num: 5
Candidate Starts for Gisselle_53:
(Start: 5 @39944 has 71 MA's), (8, 39815), (9, 39803), (12, 39746), (22, 39488), (23, 39485), (24, 39413),

Gene: Glenn_57 Start: 41728, Stop: 41168, Start Num: 5
Candidate Starts for Glenn_57:
(Start: 5 @41728 has 71 MA's), (8, 41599), (9, 41587), (15, 41458), (24, 41188),

Gene: Graynor_58 Start: 40566, Stop: 40018, Start Num: 5
Candidate Starts for Graynor_58:
(Start: 3 @40614 has 3 MA's), (Start: 5 @40566 has 71 MA's), (6, 40521), (13, 40368), (19, 40269), (24, 40038),

Gene: GreenHearts_57 Start: 41834, Stop: 41280, Start Num: 5
Candidate Starts for GreenHearts_57:
(Start: 5 @41834 has 71 MA's), (18, 41543), (24, 41300),

Gene: Greenhouse_57 Start: 41583, Stop: 41038, Start Num: 5
Candidate Starts for Greenhouse_57:
(Start: 5 @41583 has 71 MA's), (18, 41292), (19, 41289), (24, 41058),

Gene: HeadNerd_53 Start: 39679, Stop: 39119, Start Num: 5
Candidate Starts for HeadNerd_53:
(Start: 5 @39679 has 71 MA's), (7, 39580), (8, 39550), (9, 39538), (12, 39481), (16, 39406), (22, 39214), (24, 39139),

Gene: Herb_53 Start: 40966, Stop: 40424, Start Num: 5

Candidate Starts for Herb_53:
(Start: 1 @41044 has 3 MA's), (Start: 5 @40966 has 71 MA's), (11, 40786), (17, 40696), (18, 40678), (20, 40657), (22, 40519), (23, 40516),

Gene: Huckleberry_53 Start: 39683, Stop: 39123, Start Num: 5
Candidate Starts for Huckleberry_53:
(Start: 5 @39683 has 71 MA's), (7, 39584), (8, 39554), (9, 39542), (12, 39485), (16, 39410), (22, 39218), (24, 39143),

Gene: HunterDalle_52 Start: 40582, Stop: 39959, Start Num: 1
Candidate Starts for HunterDalle_52:
(Start: 1 @40582 has 3 MA's), (Start: 5 @40504 has 71 MA's), (6, 40462),

Gene: Huntingdon_56 Start: 41559, Stop: 41008, Start Num: 5
Candidate Starts for Huntingdon_56:
(Start: 5 @41559 has 71 MA's), (8, 41433), (9, 41421), (11, 41379),

Gene: Immaculata_55 Start: 41044, Stop: 40484, Start Num: 5
Candidate Starts for Immaculata_55:
(Start: 5 @41044 has 71 MA's), (8, 40915), (9, 40903), (15, 40774), (24, 40504),

Gene: Joann_57 Start: 41585, Stop: 41040, Start Num: 5
Candidate Starts for Joann_57:
(Start: 5 @41585 has 71 MA's), (10, 41438), (18, 41294), (24, 41060),

Gene: Jumboset_57 Start: 41574, Stop: 41014, Start Num: 5
Candidate Starts for Jumboset_57:
(Start: 5 @41574 has 71 MA's), (8, 41445), (9, 41433), (15, 41304), (24, 41034),

Gene: KingBob_53 Start: 40967, Stop: 40425, Start Num: 5
Candidate Starts for KingBob_53:
(Start: 1 @41045 has 3 MA's), (Start: 5 @40967 has 71 MA's), (11, 40787), (17, 40697), (18, 40679), (20, 40658), (22, 40520), (23, 40517),

Gene: Kittykat_57 Start: 40597, Stop: 40046, Start Num: 5
Candidate Starts for Kittykat_57:
(Start: 5 @40597 has 71 MA's), (8, 40468), (9, 40456), (12, 40399), (22, 40141), (23, 40138), (24, 40066),

Gene: Korra_57 Start: 41002, Stop: 40442, Start Num: 5
Candidate Starts for Korra_57:
(Start: 5 @41002 has 71 MA's), (8, 40873), (9, 40861), (15, 40732), (24, 40462),

Gene: Lakshmi_56 Start: 41603, Stop: 41058, Start Num: 5
Candidate Starts for Lakshmi_56:
(Start: 5 @41603 has 71 MA's), (18, 41312), (24, 41078),

Gene: Lasagna_52 Start: 39578, Stop: 39027, Start Num: 5
Candidate Starts for Lasagna_52:
(Start: 5 @39578 has 71 MA's), (9, 39437), (12, 39380), (22, 39122), (24, 39047),

Gene: Lennox_54 Start: 40063, Stop: 39509, Start Num: 5
Candidate Starts for Lennox_54:

(Start: 5 @40063 has 71 MA's), (21, 39676), (24, 39529),

Gene: LilStuart_53 Start: 39927, Stop: 39376, Start Num: 4
Candidate Starts for LilStuart_53:
(2, 40002), (Start: 4 @39927 has 1 MA's), (9, 39786), (12, 39729), (22, 39471), (24, 39396),

Gene: Litotes_54 Start: 40528, Stop: 39980, Start Num: 5
Candidate Starts for Litotes_54:
(Start: 3 @40576 has 3 MA's), (Start: 5 @40528 has 71 MA's), (6, 40483), (13, 40330), (19, 40231), (24, 40000),

Gene: Lucy_53 Start: 39921, Stop: 39370, Start Num: 5
Candidate Starts for Lucy_53:
(Start: 5 @39921 has 71 MA's), (9, 39780), (12, 39723), (22, 39465), (24, 39390),

Gene: Makoto_53 Start: 39819, Stop: 39265, Start Num: 5
Candidate Starts for Makoto_53:
(Start: 5 @39819 has 71 MA's), (21, 39432), (24, 39285),

Gene: Maria1952_52 Start: 40966, Stop: 40424, Start Num: 5
Candidate Starts for Maria1952_52:
(Start: 1 @41044 has 3 MA's), (Start: 5 @40966 has 71 MA's), (11, 40786), (17, 40696), (18, 40678), (20, 40657), (22, 40519), (23, 40516),

Gene: MeganNoll_56 Start: 41513, Stop: 40953, Start Num: 5
Candidate Starts for MeganNoll_56:
(Start: 5 @41513 has 71 MA's), (8, 41384), (9, 41372), (12, 41315), (15, 41243), (24, 40973),

Gene: Misaeng_55 Start: 41485, Stop: 40934, Start Num: 5
Candidate Starts for Misaeng_55:
(Start: 5 @41485 has 71 MA's), (8, 41359), (9, 41347), (11, 41305),

Gene: Moki_53 Start: 39872, Stop: 39312, Start Num: 5
Candidate Starts for Moki_53:
(Start: 5 @39872 has 71 MA's), (7, 39773), (8, 39743), (9, 39731), (12, 39674), (16, 39599), (22, 39407), (24, 39332),

Gene: MrBoss_58 Start: 40529, Stop: 39981, Start Num: 5
Candidate Starts for MrBoss_58:
(Start: 5 @40529 has 71 MA's), (6, 40484), (13, 40331), (19, 40232), (24, 40001),

Gene: MrGloopy_56 Start: 41165, Stop: 40605, Start Num: 5
Candidate Starts for MrGloopy_56:
(Start: 5 @41165 has 71 MA's), (8, 41036), (9, 41024), (15, 40895), (22, 40700), (24, 40625),

Gene: Nancia_54 Start: 40214, Stop: 39663, Start Num: 5
Candidate Starts for Nancia_54:
(Start: 5 @40214 has 71 MA's), (9, 40073), (12, 40016), (22, 39758), (24, 39683),

Gene: Nubia_56 Start: 41448, Stop: 40903, Start Num: 5
Candidate Starts for Nubia_56:
(Start: 1 @41526 has 3 MA's), (Start: 5 @41448 has 71 MA's), (18, 41157), (24, 40923),

Gene: OMalley_53 Start: 40905, Stop: 40363, Start Num: 5
Candidate Starts for OMalley_53:
(Start: 1 @40983 has 3 MA's), (Start: 5 @40905 has 71 MA's), (10, 40761), (16, 40641), (17, 40635),

Gene: OurGirlNessie_52 Start: 39543, Stop: 38992, Start Num: 5
Candidate Starts for OurGirlNessie_52:
(Start: 5 @39543 has 71 MA's), (9, 39402), (12, 39345), (22, 39087), (24, 39012),

Gene: PartyCup_56 Start: 41176, Stop: 40628, Start Num: 5
Candidate Starts for PartyCup_56:
(Start: 5 @41176 has 71 MA's), (6, 41131), (13, 40978), (19, 40879), (24, 40648),

Gene: PinkFriday_54 Start: 40552, Stop: 40004, Start Num: 5
Candidate Starts for PinkFriday_54:
(Start: 1 @40630 has 3 MA's), (Start: 5 @40552 has 71 MA's), (10, 40408), (13, 40354), (17, 40276), (22, 40099),

Gene: PitaDog_54 Start: 39939, Stop: 39388, Start Num: 5
Candidate Starts for PitaDog_54:
(Start: 5 @39939 has 71 MA's), (9, 39798), (12, 39741), (16, 39666), (22, 39483), (24, 39408),

Gene: Potatoes_55 Start: 41044, Stop: 40484, Start Num: 5
Candidate Starts for Potatoes_55:
(Start: 5 @41044 has 71 MA's), (8, 40915), (9, 40903), (15, 40774), (24, 40504),

Gene: Preamble_55 Start: 40125, Stop: 39574, Start Num: 5
Candidate Starts for Preamble_55:
(Start: 5 @40125 has 71 MA's), (8, 39996), (9, 39984), (11, 39942), (12, 39927), (14, 39885), (22, 39669), (23, 39666), (24, 39594),

Gene: Pterodactyl_54 Start: 40180, Stop: 39626, Start Num: 5
Candidate Starts for Pterodactyl_54:
(Start: 5 @40180 has 71 MA's), (21, 39793), (24, 39646),

Gene: RAP15_57 Start: 41514, Stop: 40954, Start Num: 5
Candidate Starts for RAP15_57:
(Start: 5 @41514 has 71 MA's), (8, 41385), (9, 41373), (12, 41316), (15, 41244), (24, 40974),

Gene: RcigaStruga_56 Start: 41559, Stop: 41008, Start Num: 5
Candidate Starts for RcigaStruga_56:
(Start: 5 @41559 has 71 MA's), (8, 41433), (9, 41421), (11, 41379),

Gene: Riovina_53 Start: 40905, Stop: 40363, Start Num: 5
Candidate Starts for Riovina_53:
(Start: 1 @40983 has 3 MA's), (Start: 5 @40905 has 71 MA's), (10, 40761), (16, 40641), (17, 40635),

Gene: Riverdale_56 Start: 41190, Stop: 40630, Start Num: 5
Candidate Starts for Riverdale_56:
(Start: 5 @41190 has 71 MA's), (8, 41061), (9, 41049), (15, 40920), (22, 40725), (24, 40650),

Gene: Rozby_55 Start: 40994, Stop: 40434, Start Num: 5
Candidate Starts for Rozby_55:
(Start: 5 @40994 has 71 MA's), (8, 40865), (9, 40853), (15, 40724), (22, 40529), (24, 40454),

Gene: Savage2526_56 Start: 41217, Stop: 40657, Start Num: 5
Candidate Starts for Savage2526_56:
(Start: 5 @41217 has 71 MA's), (8, 41088), (9, 41076), (15, 40947), (22, 40752), (24, 40677),

Gene: Scuttle_55 Start: 41193, Stop: 40633, Start Num: 5
Candidate Starts for Scuttle_55:
(Start: 5 @41193 has 71 MA's), (8, 41064), (9, 41052), (15, 40923), (24, 40653),

Gene: Sergei_53 Start: 40967, Stop: 40425, Start Num: 5
Candidate Starts for Sergei_53:
(Start: 1 @41045 has 3 MA's), (Start: 5 @40967 has 71 MA's), (11, 40787), (17, 40697), (18, 40679), (20, 40658), (22, 40520), (23, 40517),

Gene: Supakev_53 Start: 40931, Stop: 40389, Start Num: 5
Candidate Starts for Supakev_53:
(Start: 1 @41009 has 3 MA's), (Start: 5 @40931 has 71 MA's), (10, 40787), (17, 40661),

Gene: Suppi_55 Start: 41029, Stop: 40433, Start Num: 3
Candidate Starts for Suppi_55:
(Start: 3 @41029 has 3 MA's), (Start: 5 @40981 has 71 MA's), (6, 40936), (13, 40783), (19, 40684), (24, 40453),

Gene: TattModd_54 Start: 40929, Stop: 40369, Start Num: 5
Candidate Starts for TattModd_54:
(Start: 5 @40929 has 71 MA's), (8, 40800), (9, 40788), (15, 40659), (24, 40389),

Gene: Temper16_53 Start: 41045, Stop: 40425, Start Num: 1
Candidate Starts for Temper16_53:
(Start: 1 @41045 has 3 MA's), (Start: 5 @40967 has 71 MA's), (11, 40787), (17, 40697), (18, 40679), (20, 40658), (22, 40520), (23, 40517),

Gene: Vallejo_56 Start: 41192, Stop: 40632, Start Num: 5
Candidate Starts for Vallejo_56:
(Start: 5 @41192 has 71 MA's), (8, 41063), (9, 41051), (15, 40922), (22, 40727), (24, 40652),

Gene: Vulture_52 Start: 40582, Stop: 39959, Start Num: 1
Candidate Starts for Vulture_52:
(Start: 1 @40582 has 3 MA's), (Start: 5 @40504 has 71 MA's), (6, 40462),

Gene: Wawa_56 Start: 41435, Stop: 40875, Start Num: 5
Candidate Starts for Wawa_56:
(Start: 5 @41435 has 71 MA's), (8, 41306), (9, 41294), (15, 41165), (24, 40895),

Gene: Wayne_57 Start: 41486, Stop: 40890, Start Num: 3
Candidate Starts for Wayne_57:
(Start: 3 @41486 has 3 MA's), (Start: 5 @41438 has 71 MA's), (6, 41393), (13, 41240), (19, 41141), (24, 40910),

Gene: WonderBoy_52 Start: 39785, Stop: 39234, Start Num: 5
Candidate Starts for WonderBoy_52:
(Start: 5 @39785 has 71 MA's), (9, 39644), (12, 39587), (22, 39329), (24, 39254),

Gene: Zorro_56 Start: 41153, Stop: 40593, Start Num: 5
Candidate Starts for Zorro_56:
(Start: 5 @41153 has 71 MA's), (8, 41024), (9, 41012), (15, 40883), (22, 40688), (24, 40613),