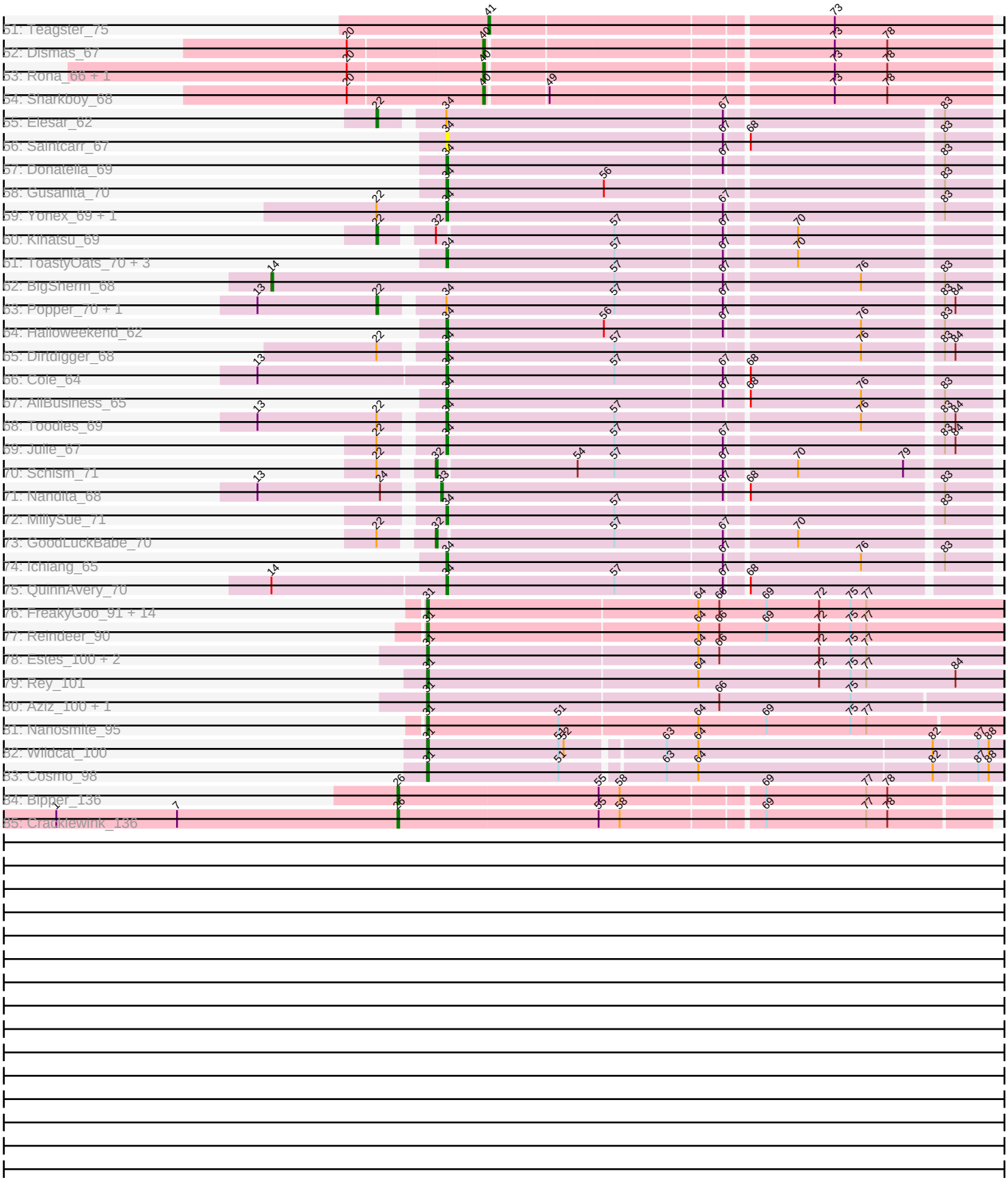
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1: Lakshmi_61 + 1
2: Huntingdon_61
3: Bodacious_61 + 4
4: Chridison_57 + 1
5: Greenhouse_61 + 1
6: Savage2526_61 + 13
7: Vulture_60 + 1
8: PitaDog_61 + 1
9: Misaeng_61
10: Bennie_63
11: Pumancara_61 + 1
12: Pterodactyl_61 + 5
13: BigMack_61
14: PartyCup_62 + 5
15: Scuttle_61 + 7
16: Eunoia_62 + 4
17: KingBob_60 + 5
18: Kittykat_65 + 1
19: Huckleberry_62 + 2
20: MamaPearl_60 + 2
21: Gisselle_61 + 1
22: Lucy_60 + 1
23: Joann_63 + 1
24: Litoles_62 + 1
25: Nubia_61
26: AppleCider_61
27: Jumboset_62
28: RcigaStruga_62
29: Abidatro_66
30: Basilisk_66
31: TaylorSpht_65
32: Vulpecula_64
33: Zixiang_65 + 3
34: Orcanus_65
35: Niblet_63 + 1
36: Chickaboom_66 + 2
37: Galaxy_65
38: Toad24_68 + 1
39: Ruchi_64
40: Jamun_63
41: LittleTokyo_73 + 1
42: Antrice_75
43: Zhuangyuan_77
44: CurlyFries_112
45: Quenya_69
46: SunnyD_75 + 1
47: Kamdara_65
48: Gack_71
49: Eden_72
50: CliffHanger_78

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51: Teagster_75
52: Dismas_67
53: Rona_66 + 1
54: Sharkboy_68
55: Elesar_62
56: Saintcarr_67
57: Donatella_69
58: Gusanita_70
59: Yonex_69 + 1
60: Kinatsu_69
61: ToastyOats_70 + 3
62: BigSherm_68
63: Popper_70 + 1
64: Halloweekend_62
65: Dirtdigger_68
66: Cole_64
67: AllBusiness_65
68: Toodles_69
69: Julie_67
70: Schism_71
71: Nandita_68
72: MillySue_71
73: GoodLuckBabe_70
74: Ichiang_65
75: QuinnAvery_70
76: FreakyGoo_91 + 14
77: Reindeer_90
78: Estes_100 + 2
79: Rey_101
80: Aziz_100 + 1
81: Nanosmite_95
82: Wildcat_100
83: Cosmo_98
84: Bipper_136
85: Cracklewink_136

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 347303 Report

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

Pham number 347303 has 175 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Lakshmi_61, GreenHearts_62
• Track 2 : Huntingdon_61
• Track 3 : Bodacious_61, CristinaYang_61, Nancia_61, LilStuart_60, Lasagna_59
• Track 4 : Chridison_57, Supakev_60
• Track 5 : Greenhouse_61, Albanese_61
• Track 6 : Savage2526_61, Potatoes_62, BrotherBLo_62, Cholula_62, Zorro_62, Immaculata_62, TattModd_61, Wawa_62, Rozby_60, Kalizoi_62, Korra_62, Riverdale_61, Beethoven_63, Carpal_61
• Track 7 : Vulture_60, HunterDalle_60
• Track 8 : PitaDog_61, Christian_61
• Track 9 : Misaeng_61
• Track 10 : Bennie_63
• Track 11 : Pumancara_61, PinkFriday_61
• Track 12 : Pterodactyl_61, Makoto_60, Lennox_61, WonderBoy_59, ChewChew_61, OurGirlNessie_59
• Track 13 : BigMack_61
• Track 14 : PartyCup_62, Canowicakte_62, Wayne_64, Suppi_62, Graynor_65, MrBoss_63
• Track 15 : Scuttle_61, Vallejo_62, Fluke_62, MrGloopy_62, RAP15_63, Glenn_64, Dino_62, MeganNoll_63
• Track 16 : Eunoia_62, OMalley_60, Aledel_60, AustinPowers_60, Riovina_60
• Track 17 : KingBob_60, Maria1952_59, Sergei_60, Daiboju_60, Herb_60, Temper16_60
• Track 18 : Kittykat_65, Preamble_64
• Track 19 : Huckleberry_62, Moki_62, HeadNerd_62
• Track 20 : MamaPearl_60, EstebanJulior_60, Urla_62
• Track 21 : Gisselle_61, DreamTeam_61
• Track 22 : Lucy_60, DrRobert_59
• Track 23 : Joann_63, Oxynfrius_62
• Track 24 : Litotes_62, CallieOMalley_62
• Track 25 : Nubia_61
• Track 26 : AppleCider_61
• Track 27 : Jumboset_62
• Track 28 : RcigaStruga_62
• Track 29 : Abidatro_66
• Track 30 : Basilisk_66
• Track 31 : TaylorSipht_65

• Track 32 : Vulpecula_64
• Track 33 : Zixiang_65, Shen_61, Eesa_65, Amanises_68
• Track 34 : Orcanus_65
• Track 35 : Niblet_63, Chicken_65
• Track 36 : Chickaboom_66, Brynnie_64, WileyE_66
• Track 37 : Galaxy_65
• Track 38 : Toad24_68, KendraB23_76
• Track 39 : Ruchi_64
• Track 40 : Jamun_63
• Track 41 : LittleTokyo_73, Cygnet_73
• Track 42 : Antrice_75
• Track 43 : Zhuangyuan_77
• Track 44 : CurlyFries_112
• Track 45 : Quenya_69
• Track 46 : SunnyD_75, Shayna_75
• Track 47 : Kamdara_65
• Track 48 : Gack_71
• Track 49 : Eden_72
• Track 50 : CliffHanger_78
• Track 51 : Teagster_75
• Track 52 : Dismas_67
• Track 53 : Rona_66, Kieran_65
• Track 54 : Sharkboy_68
• Track 55 : Elesar_62
• Track 56 : Saintcarr_67
• Track 57 : Donatella_69
• Track 58 : Gusanita_70
• Track 59 : Yonex_69, Ryan_70
• Track 60 : Kihatsu_69
• Track 61 : ToastyOats_70, Zaheer_69, Lenoxika_66, Guinevere_71
• Track 62 : BigSherm_68
• Track 63 : Popper_70, IsHungry_64
• Track 64 : Halloweekend_62
• Track 65 : Dirtdigger_68
• Track 66 : Cole_64
• Track 67 : AllBusiness_65
• Track 68 : Toodles_69
• Track 69 : Julie_67
• Track 70 : Schism_71
• Track 71 : Nandita_68
• Track 72 : MillySue_71
• Track 73 : GoodLuckBabe_70
• Track 74 : Ichiang_65
• Track 75 : QuinnAvery_70
• Track 76 : FreakyGoo_91, SlimJimmy_89, IPhane7_88, Bricole_88, Auspice_90, TyDawg_89, Diminimus_91, Izel_91, Dulcita_91, TpudiCK_91, PegLeg_88, Glaske16_91, Skinny_93, LilhomieP_89, Bongo_89
• Track 77 : Reindeer_90
• Track 78 : Estes_100, GardenSalsa_100, MrMagoo_101
• Track 79 : Rey_101
• Track 80 : Aziz_100, GenevaB15_102
• Track 81 : Nanosmite_95
• Track 82 : Wildcat_100

• Track 83 : Cosmo_98
• Track 84 : Bipper_136
• Track 85 : Cracklewink_136

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

The start number called the most often in the published annotations is 45, it was called in 63 of the 168 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albanese_61, Aledel_60, AustinPowers_60, Beethoven_63, BigMack_61, Bodacious_61, BrotherBLo_62, CallieOMalley_62, Carpal_61, ChewChew_61, Cholula_62, Chridison_57, CristinaYang_61, Daiboju_60, DreamTeam_61, EstebanJulior_60, Eunoia_62, Gisselle_61, GreenHearts_62, Greenhouse_61, HeadNerd_62, Herb_60, Huckleberry_62, Immaculata_62, Joann_63, Jumboset_62, Kalizoi_62, KingBob_60, Kittykat_65, Korra_62, Lakshmi_61, Lasagna_59, Lennox_61, LilStuart_60, Litotes_62, Makoto_60, MamaPearl_60, Maria1952_59, Misaeng_61, Moki_62, Nancia_61, Nubia_61, OMalley_60, OurGirlNessie_59, Oxynfrius_62, PinkFriday_61, Potatoes_62, Preamble_64, Pterodactyl_61, Pumancara_61, RcigaStruga_62, Riovina_60, Riverdale_61, Rozby_60, Savage2526_61, Sergei_60, Supakev_60, TattModd_61, Temper16_60, Urla_62, Wawa_62, WonderBoy_59, Zorro_62,

Genes that have the "Most Annotated" start but do not call it:
• AppleCider_61, Bennie_63, Canowicakte_62, Christian_61, Dino_62, DrRobert_59, Fluke_62, Glenn_64, Graynor_65, HunterDalle_60, Huntingdon_61, Lucy_60, MeganNoll_63, MrBoss_63, MrGloopy_62, PartyCup_62, PitaDog_61, RAP15_63, Scuttle_61, Suppi_62, Vallejo_62, Vulture_60, Wayne_64,

Genes that do not have the "Most Annotated" start:
• Abidatro_66, AllBusiness_65, Amanises_68, Antrice_75, Auspice_90, Aziz_100, Basilisk_66, BigSherm_68, Bipper_136, Bongo_89, Bricole_88, Brynnie_64, Chickaboom_66, Chicken_65, CliffHanger_78, Cole_64, Cosmo_98, Cracklewink_136, CurlyFries_112, Cygnet_73, Diminimus_91, Dirtdigger_68, Dismas_67, Donatella_69, Dulcita_91, Eden_72, Eesa_65, Elesar_62, Estes_100, FreakyGoo_91, Gack_71, Galaxy_65, GardenSalsa_100, GenevaB15_102, Glaske16_91, GoodLuckBabe_70, Guinevere_71, Gusanita_70, Halloweekend_62, IPhane7_88, Ichiang_65, IsHungry_64, Izel_91, Jamun_63, Julie_67, Kamdara_65, KendraB23_76, Kieran_65, Kihatsu_69, Lenoxika_66, LilhomieP_89, LittleTokyo_73, MillySue_71, MrMagoo_101, Nandita_68, Nanosmite_95, Niblet_63, Orcanus_65, PegLeg_88, Popper_70, Quenya_69, QuinnAvery_70, Reindeer_90, Rey_101, Rona_66, Ruchi_64, Ryan_70, Saintcarr_67, Schism_71, Sharkboy_68, Shayna_75, Shen_61, Skinny_93, SlimJimmy_89, SunnyD_75, TaylorSipht_65, Teagster_75, Toad24_68, ToastyOats_70, Toodles_69, TpudiCK_91, TyDawg_89, Vulpecula_64, Wildcat_100, WileyE_66, Yonex_69, Zaheer_69, Zhuangyuan_77, Zixiang_65,

Summary by start number:

Start 14:
• Found in 2 of 175 (1.1%) of genes in pham

• Manual Annotations of this start: 1 of 168
• Called 50.0% of time when present
• Phage (with cluster) where this start called: BigSherm_68 (FF),

Start 22:
• Found in 11 of 175 (6.3%) of genes in pham
• Manual Annotations of this start: 4 of 168
• Called 36.4% of time when present
• Phage (with cluster) where this start called: Elesar_62 (FF), IsHungry_64 (FF), Kihatsu_69 (FF), Popper_70 (FF),

Start 25:
• Found in 9 of 175 (5.1%) of genes in pham
• Manual Annotations of this start: 2 of 168
• Called 22.2% of time when present
• Phage (with cluster) where this start called: HunterDalle_60 (AK), Vulture_60 (AK),

Start 26:
• Found in 2 of 175 (1.1%) of genes in pham
• Manual Annotations of this start: 2 of 168
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bipper_136 (Y), Cracklewink_136 (Y),

Start 31:
• Found in 25 of 175 (14.3%) of genes in pham
• Manual Annotations of this start: 24 of 168
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Auspice_90 (M1), Aziz_100 (M2), Bongo_89 (M1), Bricole_88 (M1), Cosmo_98 (V), Diminimus_91 (M1), Dulcita_91 (M1), Estes_100 (M2), FreakyGoo_91 (M1), GardenSalsa_100 (M2), GenevaB15_102 (M2), Glaske16_91 (M1), IPhane7_88 (M1), Izel_91 (M1), LilhomieP_89 (M1), MrMagoo_101 (M2), Nanosmite_95 (M3), PegLeg_88 (M1), Reindeer_90 (M1), Rey_101 (M2), Skinny_93 (M1), SlimJimmy_89 (M1), TpudiCK_91 (M1), TyDawg_89 (M1), Wildcat_100 (V),

Start 32:
• Found in 3 of 175 (1.7%) of genes in pham
• Manual Annotations of this start: 2 of 168
• Called 66.7% of time when present
• Phage (with cluster) where this start called: GoodLuckBabe_70 (FF), Schism_71 (FF),

Start 33:
• Found in 1 of 175 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 168
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Nandita_68 (FF),

Start 34:
• Found in 29 of 175 (16.6%) of genes in pham
• Manual Annotations of this start: 15 of 168
• Called 62.1% of time when present

• Phage (with cluster) where this start called: AllBusiness_65 (FF), Cole_64 (FF), Dirtdigger_68 (FF), Donatella_69 (FF), Guinevere_71 (FF), Gusanita_70 (FF), Halloweekend_62 (FF), Ichiang_65 (FF), Julie_67 (FF), Lenoxika_66 (FF), MillySue_71 (FF), QuinnAvery_70 (FF), Ryan_70 (FF), Saintcarr_67 (FF), ToastyOats_70 (FF), Toodles_69 (FF), Yonex_69 (FF), Zaheer_69 (FF),

Start 35:
• Found in 7 of 175 (4.0%) of genes in pham
• Manual Annotations of this start: 1 of 168
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Basilisk_66 (AS1),

Start 36:
• Found in 2 of 175 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 168
• Called 50.0% of time when present
• Phage (with cluster) where this start called: CurlyFries_112 (CF),

Start 37:
• Found in 3 of 175 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 168
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Huntingdon_61 (AK),

Start 38:
• Found in 24 of 175 (13.7%) of genes in pham
• Manual Annotations of this start: 21 of 168
• Called 91.7% of time when present
• Phage (with cluster) where this start called: Abidatro_66 (AS1), Amanises_68 (AS1), Antrice_75 (AS2), Brynnie_64 (AS1), Chickaboom_66 (AS1), Chicken_65 (AS1), Cygnet_73 (AS2), Eesa_65 (AS1), Galaxy_65 (AS1), Jamun_63 (AS1), KendraB23_76 (AS1), LittleTokyo_73 (AS2), Niblet_63 (AS1), Orcanus_65 (AS1), Ruchi_64 (AS1), Shen_61 (AS1), TaylorSipht_65 (AS1), Toad24_68 (AS1), Vulpecula_64 (AS1), WileyE_66 (AS1), Zhuangyuan_77 (AS2), Zixiang_65 (AS1),

Start 39:
• Found in 47 of 175 (26.9%) of genes in pham
• Manual Annotations of this start: 13 of 168
• Called 27.7% of time when present
• Phage (with cluster) where this start called: Bennie_63 (AK), Christian_61 (AK), Dino_62 (AK), DrRobert_59 (AK), Fluke_62 (AK), Glenn_64 (AK), Lucy_60 (AK), MeganNoll_63 (AK), MrGloopy_62 (AK), PitaDog_61 (AK), RAP15_63 (AK), Scuttle_61 (AK), Vallejo_62 (AK),

Start 40:
• Found in 13 of 175 (7.4%) of genes in pham
• Manual Annotations of this start: 8 of 168
• Called 76.9% of time when present
• Phage (with cluster) where this start called: Canowicakte_62 (AK), Dismas_67 (EB), Graynor_65 (AK), Kieran_65 (EB), MrBoss_63 (AK), PartyCup_62 (AK), Rona_66 (EB), Sharkboy_68 (EB), Suppi_62 (AK), Wayne_64 (AK),

Start 41:

• Found in 7 of 175 (4.0%) of genes in pham
• Manual Annotations of this start: 7 of 168
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CliffHanger_78 (EB), Eden_72 (EB), Gack_71 (EB), Quenya_69 (EB), Shayna_75 (EB), SunnyD_75 (EB), Teagster_75 (EB),

Start 44:
• Found in 1 of 175 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 168
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AppleCider_61 (AK),

Start 45:
• Found in 86 of 175 (49.1%) of genes in pham
• Manual Annotations of this start: 63 of 168
• Called 73.3% of time when present
• Phage (with cluster) where this start called: Albanese_61 (AK), Aledel_60 (AK), AustinPowers_60 (AK), Beethoven_63 (AK), BigMack_61 (AK), Bodacious_61 (AK), BrotherBLo_62 (AK), CallieOMalley_62 (AK), Carpal_61 (AK), ChewChew_61 (AK), Cholula_62 (AK), Chridison_57 (AK), CristinaYang_61 (AK), Daiboju_60 (AK), DreamTeam_61 (AK), EstebanJulior_60 (AK), Eunoia_62 (AK), Gisselle_61 (AK), GreenHearts_62 (AK), Greenhouse_61 (AK), HeadNerd_62 (AK), Herb_60 (AK), Huckleberry_62 (AK), Immaculata_62 (AK), Joann_63 (AK), Jumboset_62 (AK), Kalizoi_62 (AK), KingBob_60 (AK), Kittykat_65 (AK), Korra_62 (AK), Lakshmi_61 (AK), Lasagna_59 (AK), Lennox_61 (AK), LilStuart_60 (AK), Litotes_62 (AK), Makoto_60 (AK), MamaPearl_60 (AK), Maria1952_59 (AK), Misaeng_61 (AK), Moki_62 (AK), Nancia_61 (AK), Nubia_61 (AK), OMalley_60 (AK), OurGirlNessie_59 (AK), Oxynfrius_62 (AK), PinkFriday_61 (AK), Potatoes_62 (AK), Preamble_64 (AK), Pterodactyl_61 (AK), Pumancara_61 (AK), RcigaStruga_62 (AK), Riovina_60 (AK), Riverdale_61 (AK), Rozby_60 (AK), Savage2526_61 (AK), Sergei_60 (AK), Supakev_60 (AK), TattModd_61 (AK), Temper16_60 (AK), Urla_62 (AK), Wawa_62 (AK), WonderBoy_59 (AK), Zorro_62 (AK),

Start 49:
• Found in 4 of 175 (2.3%) of genes in pham
• Manual Annotations of this start: 1 of 168
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Kamdara_65 (EB),

Summary by clusters:

There are 11 clusters represented in this pham: AS2, AS1, M3, AK, V, CF, EB, M1, FF, M2, Y,

Info for manual annotations of cluster AK:
•Start number 25 was manually annotated 2 times for cluster AK.
•Start number 37 was manually annotated 1 time for cluster AK.
•Start number 39 was manually annotated 13 times for cluster AK.
•Start number 40 was manually annotated 4 times for cluster AK.
•Start number 44 was manually annotated 1 time for cluster AK.
•Start number 45 was manually annotated 63 times for cluster AK.

Info for manual annotations of cluster AS1:
•Start number 35 was manually annotated 1 time for cluster AS1.
•Start number 38 was manually annotated 17 times for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 38 was manually annotated 4 times for cluster AS2.

Info for manual annotations of cluster CF:
•Start number 36 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster EB:
•Start number 40 was manually annotated 4 times for cluster EB.
•Start number 41 was manually annotated 7 times for cluster EB.
•Start number 49 was manually annotated 1 time for cluster EB.

Info for manual annotations of cluster FF:
•Start number 14 was manually annotated 1 time for cluster FF.
•Start number 22 was manually annotated 4 times for cluster FF.
•Start number 32 was manually annotated 2 times for cluster FF.
•Start number 33 was manually annotated 1 time for cluster FF.
•Start number 34 was manually annotated 15 times for cluster FF.

Info for manual annotations of cluster M1:
•Start number 31 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:
•Start number 31 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:
•Start number 31 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:
•Start number 31 was manually annotated 2 times for cluster V.

Info for manual annotations of cluster Y:
•Start number 26 was manually annotated 2 times for cluster Y.

Gene Information:

Gene: Abidatro_66 Start: 38766, Stop: 39044, Start Num: 38
Candidate Starts for Abidatro_66:
(11, 38640), (Start: 38 @38766 has 21 MA's),

Gene: Albanese_61 Start: 43774, Stop: 44034, Start Num: 45
Candidate Starts for Albanese_61:
(Start: 45 @43774 has 63 MA's), (46, 43780), (57, 43831), (58, 43834), (78, 43978),

Gene: Aledel_60 Start: 43400, Stop: 43660, Start Num: 45
Candidate Starts for Aledel_60:
(Start: 25 @43331 has 2 MA's), (30, 43352), (Start: 45 @43400 has 63 MA's), (50, 43421), (59, 43472),

Gene: AllBusiness_65 Start: 43063, Stop: 43359, Start Num: 34
Candidate Starts for AllBusiness_65:
(Start: 34 @43063 has 15 MA's), (67, 43219), (68, 43228), (76, 43291), (83, 43333),

Gene: Amanises_68 Start: 39398, Stop: 39676, Start Num: 38
Candidate Starts for Amanises_68:
(Start: 38 @39398 has 21 MA's), (86, 39668),

Gene: Antrice_75 Start: 38862, Stop: 39140, Start Num: 38
Candidate Starts for Antrice_75:
(Start: 36 @38853 has 1 MA's), (Start: 38 @38862 has 21 MA's),

Gene: AppleCider_61 Start: 43353, Stop: 43619, Start Num: 44
Candidate Starts for AppleCider_61:
(Start: 44 @43353 has 1 MA's), (Start: 45 @43359 has 63 MA's),

Gene: Auspice_90 Start: 53928, Stop: 54254, Start Num: 31
Candidate Starts for Auspice_90:
(Start: 31 @53928 has 24 MA's), (64, 54081), (66, 54093), (69, 54120), (72, 54150), (75, 54168), (77, 54177),

Gene: AustinPowers_60 Start: 43422, Stop: 43682, Start Num: 45
Candidate Starts for AustinPowers_60:
(Start: 25 @43353 has 2 MA's), (30, 43374), (Start: 45 @43422 has 63 MA's), (50, 43443), (59, 43494),

Gene: Aziz_100 Start: 55956, Stop: 56279, Start Num: 31
Candidate Starts for Aziz_100:
(Start: 31 @55956 has 24 MA's), (66, 56121), (75, 56196),

Gene: Basilisk_66 Start: 38281, Stop: 38571, Start Num: 35
Candidate Starts for Basilisk_66:
(12, 38188), (18, 38218), (Start: 35 @38281 has 1 MA's), (Start: 38 @38293 has 21 MA's),

Gene: Beethoven_63 Start: 43598, Stop: 43858, Start Num: 45
Candidate Starts for Beethoven_63:
(Start: 39 @43580 has 13 MA's), (Start: 45 @43598 has 63 MA's), (48, 43616), (59, 43670),

Gene: Bennie_63 Start: 42720, Stop: 42998, Start Num: 39
Candidate Starts for Bennie_63:
(Start: 39 @42720 has 13 MA's), (Start: 45 @42738 has 63 MA's), (48, 42756), (59, 42810), (80, 42963),

Gene: BigMack_61 Start: 43021, Stop: 43281, Start Num: 45
Candidate Starts for BigMack_61:
(Start: 39 @43003 has 13 MA's), (Start: 45 @43021 has 63 MA's), (48, 43039), (74, 43198), (80, 43246),

Gene: BigSherm_68 Start: 41205, Stop: 41600, Start Num: 14
Candidate Starts for BigSherm_68:
(Start: 14 @41205 has 1 MA's), (57, 41400), (67, 41460), (76, 41532), (83, 41574),

Gene: Bipper_136 Start: 77103, Stop: 77429, Start Num: 26
Candidate Starts for Bipper_136:

(Start: 26 @77103 has 2 MA's), (55, 77217), (58, 77229), (69, 77304), (77, 77361), (78, 77373),

Gene: Bodacious_61 Start: 42903, Stop: 43163, Start Num: 45
Candidate Starts for Bodacious_61:
(Start: 39 @42885 has 13 MA's), (Start: 45 @42903 has 63 MA's), (48, 42921), (74, 43080), (83, 43137), (84, 43143),

Gene: Bongo_89 Start: 53932, Stop: 54258, Start Num: 31
Candidate Starts for Bongo_89:
(Start: 31 @53932 has 24 MA's), (64, 54085), (66, 54097), (69, 54124), (72, 54154), (75, 54172), (77, 54181),

Gene: Bricole_88 Start: 53696, Stop: 54022, Start Num: 31
Candidate Starts for Bricole_88:
(Start: 31 @53696 has 24 MA's), (64, 53849), (66, 53861), (69, 53888), (72, 53918), (75, 53936), (77, 53945),

Gene: BrotherBLo_62 Start: 43314, Stop: 43574, Start Num: 45
Candidate Starts for BrotherBLo_62:
(Start: 39 @43296 has 13 MA's), (Start: 45 @43314 has 63 MA's), (48, 43332), (59, 43386),

Gene: Brynnie_64 Start: 38238, Stop: 38516, Start Num: 38
Candidate Starts for Brynnie_64:
(Start: 35 @38226 has 1 MA's), (Start: 38 @38238 has 21 MA's),

Gene: CallieOMalley_62 Start: 43522, Stop: 43782, Start Num: 45
Candidate Starts for CallieOMalley_62:
(Start: 34 @43489 has 15 MA's), (Start: 40 @43510 has 8 MA's), (43, 43516), (Start: 45 @43522 has 63 MA's),

Gene: Canowicakte_62 Start: 43562, Stop: 43834, Start Num: 40
Candidate Starts for Canowicakte_62:
(Start: 34 @43541 has 15 MA's), (Start: 40 @43562 has 8 MA's), (43, 43568), (Start: 45 @43574 has 63 MA's),

Gene: Carpal_61 Start: 43369, Stop: 43629, Start Num: 45
Candidate Starts for Carpal_61:
(Start: 39 @43351 has 13 MA's), (Start: 45 @43369 has 63 MA's), (48, 43387), (59, 43441),

Gene: ChewChew_61 Start: 43103, Stop: 43363, Start Num: 45
Candidate Starts for ChewChew_61:
(Start: 39 @43085 has 13 MA's), (Start: 45 @43103 has 63 MA's), (48, 43121), (60, 43178), (74, 43280), (83, 43337), (84, 43343),

Gene: Chickaboom_66 Start: 38402, Stop: 38680, Start Num: 38
Candidate Starts for Chickaboom_66:
(Start: 35 @38390 has 1 MA's), (Start: 38 @38402 has 21 MA's),

Gene: Chicken_65 Start: 39158, Stop: 39436, Start Num: 38
Candidate Starts for Chicken_65:
(15, 39047), (27, 39116), (28, 39122), (Start: 38 @39158 has 21 MA's),

Gene: Cholula_62 Start: 43324, Stop: 43584, Start Num: 45

Candidate Starts for Cholula_62:
(Start: 39 @43306 has 13 MA's), (Start: 45 @43324 has 63 MA's), (48, 43342), (59, 43396),

Gene: Chridison_57 Start: 42676, Stop: 42936, Start Num: 45
Candidate Starts for Chridison_57:
(Start: 25 @42607 has 2 MA's), (30, 42628), (Start: 45 @42676 has 63 MA's), (48, 42694), (50, 42697), (59, 42748),

Gene: Christian_61 Start: 42727, Stop: 43005, Start Num: 39
Candidate Starts for Christian_61:
(Start: 39 @42727 has 13 MA's), (Start: 45 @42745 has 63 MA's), (48, 42763), (60, 42820), (74, 42922), (83, 42979), (84, 42985),

Gene: CliffHanger_78 Start: 40817, Stop: 41092, Start Num: 41
Candidate Starts for CliffHanger_78:
(Start: 41 @40817 has 7 MA's), (Start: 49 @40850 has 1 MA's), (73, 41003), (74, 41006),

Gene: Cole_64 Start: 41483, Stop: 41779, Start Num: 34
Candidate Starts for Cole_64:
(13, 41378), (Start: 34 @41483 has 15 MA's), (57, 41579), (67, 41639), (68, 41648),

Gene: Cosmo_98 Start: 57711, Stop: 58028, Start Num: 31
Candidate Starts for Cosmo_98:
(Start: 31 @57711 has 24 MA's), (51, 57786), (63, 57840), (64, 57858), (82, 57990), (87, 58014), (88, 58020),

Gene: Cracklewink_136 Start: 76262, Stop: 76588, Start Num: 26
Candidate Starts for Cracklewink_136:
(1, 76067), (7, 76136), (Start: 26 @76262 has 2 MA's), (55, 76376), (58, 76388), (69, 76463), (77, 76520), (78, 76532),

Gene: CristinaYang_61 Start: 43030, Stop: 43290, Start Num: 45
Candidate Starts for CristinaYang_61:
(Start: 39 @43012 has 13 MA's), (Start: 45 @43030 has 63 MA's), (48, 43048), (74, 43207), (83, 43264), (84, 43270),

Gene: CurlyFries_112 Start: 57829, Stop: 58110, Start Num: 36
Candidate Starts for CurlyFries_112:
(Start: 36 @57829 has 1 MA's), (Start: 38 @57838 has 21 MA's), (47, 57874), (53, 57892), (65, 57961), (68, 57982), (81, 58081),

Gene: Cygnet_73 Start: 39144, Stop: 39422, Start Num: 38
Candidate Starts for Cygnet_73:
(Start: 38 @39144 has 21 MA's), (73, 39336),

Gene: Daiboju_60 Start: 43614, Stop: 43871, Start Num: 45
Candidate Starts for Daiboju_60:
(42, 43605), (Start: 45 @43614 has 63 MA's), (48, 43632), (61, 43689), (71, 43767),

Gene: Diminimus_91 Start: 53927, Stop: 54253, Start Num: 31
Candidate Starts for Diminimus_91:
(Start: 31 @53927 has 24 MA's), (64, 54080), (66, 54092), (69, 54119), (72, 54149), (75, 54167), (77, 54176),

Gene: Dino_62 Start: 43208, Stop: 43486, Start Num: 39
Candidate Starts for Dino_62:
(Start: 39 @43208 has 13 MA's), (Start: 45 @43226 has 63 MA's), (48, 43244), (59, 43298),

Gene: Dirtdigger_68 Start: 41774, Stop: 42070, Start Num: 34
Candidate Starts for Dirtdigger_68:
(Start: 22 @41744 has 4 MA's), (Start: 34 @41774 has 15 MA's), (57, 41870), (76, 42002), (83, 42044), (84, 42050),

Gene: Dismas_67 Start: 41256, Stop: 41531, Start Num: 40
Candidate Starts for Dismas_67:
(20, 41181), (Start: 40 @41256 has 8 MA's), (73, 41442), (78, 41472),

Gene: Donatella_69 Start: 42522, Stop: 42818, Start Num: 34
Candidate Starts for Donatella_69:
(Start: 34 @42522 has 15 MA's), (67, 42678), (83, 42792),

Gene: DrRobert_59 Start: 42246, Stop: 42524, Start Num: 39
Candidate Starts for DrRobert_59:
(Start: 39 @42246 has 13 MA's), (Start: 45 @42264 has 63 MA's), (48, 42282), (74, 42441), (83, 42498), (84, 42504),

Gene: DreamTeam_61 Start: 42752, Stop: 43012, Start Num: 45
Candidate Starts for DreamTeam_61:
(Start: 39 @42734 has 13 MA's), (Start: 45 @42752 has 63 MA's), (48, 42770), (60, 42827), (71, 42908),

Gene: Dulcita_91 Start: 53928, Stop: 54254, Start Num: 31
Candidate Starts for Dulcita_91:
(Start: 31 @53928 has 24 MA's), (64, 54081), (66, 54093), (69, 54120), (72, 54150), (75, 54168), (77, 54177),

Gene: Eden_72 Start: 40483, Stop: 40758, Start Num: 41
Candidate Starts for Eden_72:
(2, 40246), (3, 40276), (4, 40279), (5, 40294), (9, 40324), (10, 40327), (17, 40381), (23, 40423), (Start: 41 @40483 has 7 MA's), (73, 40669), (74, 40672), (85, 40741),

Gene: Eesa_65 Start: 39439, Stop: 39717, Start Num: 38
Candidate Starts for Eesa_65:
(Start: 38 @39439 has 21 MA's), (86, 39709),

Gene: Elesar_62 Start: 42571, Stop: 42897, Start Num: 22
Candidate Starts for Elesar_62:
(Start: 22 @42571 has 4 MA's), (Start: 34 @42601 has 15 MA's), (67, 42757), (83, 42871),

Gene: EstebanJulior_60 Start: 43409, Stop: 43669, Start Num: 45
Candidate Starts for EstebanJulior_60:
(Start: 45 @43409 has 63 MA's), (48, 43427), (60, 43484),

Gene: Estes_100 Start: 55935, Stop: 56261, Start Num: 31
Candidate Starts for Estes_100:
(Start: 31 @55935 has 24 MA's), (64, 56088), (66, 56100), (72, 56157), (75, 56175), (77, 56184),

Gene: Eunoia_62 Start: 44077, Stop: 44337, Start Num: 45
Candidate Starts for Eunoia_62:
(Start: 25 @44008 has 2 MA's), (30, 44029), (Start: 45 @44077 has 63 MA's), (50, 44098), (59, 44149),

Gene: Fluke_62 Start: 43458, Stop: 43736, Start Num: 39
Candidate Starts for Fluke_62:
(Start: 39 @43458 has 13 MA's), (Start: 45 @43476 has 63 MA's), (48, 43494), (59, 43548),

Gene: FreakyGoo_91 Start: 54407, Stop: 54733, Start Num: 31
Candidate Starts for FreakyGoo_91:
(Start: 31 @54407 has 24 MA's), (64, 54560), (66, 54572), (69, 54599), (72, 54629), (75, 54647), (77, 54656),

Gene: Gack_71 Start: 40197, Stop: 40472, Start Num: 41
Candidate Starts for Gack_71:
(Start: 41 @40197 has 7 MA's), (73, 40383), (78, 40413),

Gene: Galaxy_65 Start: 37453, Stop: 37731, Start Num: 38
Candidate Starts for Galaxy_65:
(8, 37303), (11, 37327), (16, 37360), (Start: 38 @37453 has 21 MA's), (76, 37660),

Gene: GardenSalsa_100 Start: 56014, Stop: 56340, Start Num: 31
Candidate Starts for GardenSalsa_100:
(Start: 31 @56014 has 24 MA's), (64, 56167), (66, 56179), (72, 56236), (75, 56254), (77, 56263),

Gene: GenevaB15_102 Start: 55956, Stop: 56279, Start Num: 31
Candidate Starts for GenevaB15_102:
(Start: 31 @55956 has 24 MA's), (66, 56121), (75, 56196),

Gene: Gisselle_61 Start: 42752, Stop: 43012, Start Num: 45
Candidate Starts for Gisselle_61:
(Start: 39 @42734 has 13 MA's), (Start: 45 @42752 has 63 MA's), (48, 42770), (60, 42827), (71, 42908),

Gene: Glaske16_91 Start: 54100, Stop: 54426, Start Num: 31
Candidate Starts for Glaske16_91:
(Start: 31 @54100 has 24 MA's), (64, 54253), (66, 54265), (69, 54292), (72, 54322), (75, 54340), (77, 54349),

Gene: Glenn_64 Start: 44035, Stop: 44313, Start Num: 39
Candidate Starts for Glenn_64:
(Start: 39 @44035 has 13 MA's), (Start: 45 @44053 has 63 MA's), (48, 44071), (59, 44125),

Gene: GoodLuckBabe_70 Start: 41904, Stop: 42203, Start Num: 32
Candidate Starts for GoodLuckBabe_70:
(Start: 22 @41880 has 4 MA's), (Start: 32 @41904 has 2 MA's), (57, 42003), (67, 42063), (70, 42099),

Gene: Graynor_65 Start: 43171, Stop: 43443, Start Num: 40
Candidate Starts for Graynor_65:
(Start: 34 @43150 has 15 MA's), (Start: 40 @43171 has 8 MA's), (43, 43177), (Start: 45 @43183 has 63 MA's),

Gene: GreenHearts_62 Start: 43911, Stop: 44171, Start Num: 45
Candidate Starts for GreenHearts_62:
(Start: 45 @43911 has 63 MA's), (46, 43917), (57, 43968), (58, 43971), (59, 43983), (78, 44115),

Gene: Greenhouse_61 Start: 43637, Stop: 43897, Start Num: 45
Candidate Starts for Greenhouse_61:
(Start: 45 @43637 has 63 MA's), (46, 43643), (57, 43694), (58, 43697), (78, 43841),

Gene: Guinevere_71 Start: 41765, Stop: 42061, Start Num: 34
Candidate Starts for Guinevere_71:
(Start: 34 @41765 has 15 MA's), (57, 41861), (67, 41921), (70, 41957),

Gene: Gusanita_70 Start: 42391, Stop: 42687, Start Num: 34
Candidate Starts for Gusanita_70:
(Start: 34 @42391 has 15 MA's), (56, 42481), (83, 42661),

Gene: Halloweekend_62 Start: 41095, Stop: 41391, Start Num: 34
Candidate Starts for Halloweekend_62:
(Start: 34 @41095 has 15 MA's), (56, 41185), (67, 41251), (76, 41323), (83, 41365),

Gene: HeadNerd_62 Start: 42632, Stop: 42892, Start Num: 45
Candidate Starts for HeadNerd_62:
(Start: 39 @42614 has 13 MA's), (Start: 45 @42632 has 63 MA's), (48, 42650), (60, 42707), (74, 42809), (80, 42857),

Gene: Herb_60 Start: 43613, Stop: 43870, Start Num: 45
Candidate Starts for Herb_60:
(42, 43604), (Start: 45 @43613 has 63 MA's), (48, 43631), (61, 43688), (71, 43766),

Gene: Huckleberry_62 Start: 42636, Stop: 42896, Start Num: 45
Candidate Starts for Huckleberry_62:
(Start: 39 @42618 has 13 MA's), (Start: 45 @42636 has 63 MA's), (48, 42654), (60, 42711), (74, 42813), (80, 42861),

Gene: HunterDalle_60 Start: 42928, Stop: 43257, Start Num: 25
Candidate Starts for HunterDalle_60:
(Start: 25 @42928 has 2 MA's), (30, 42949), (Start: 45 @42997 has 63 MA's), (48, 43015), (50, 43018), (59, 43069),

Gene: Huntingdon_61 Start: 43533, Stop: 43811, Start Num: 37
Candidate Starts for Huntingdon_61:
(Start: 37 @43533 has 1 MA's), (Start: 45 @43551 has 63 MA's), (57, 43608), (58, 43611), (59, 43623), (78, 43755),

Gene: IPhane7_88 Start: 53932, Stop: 54258, Start Num: 31
Candidate Starts for IPhane7_88:
(Start: 31 @53932 has 24 MA's), (64, 54085), (66, 54097), (69, 54124), (72, 54154), (75, 54172), (77, 54181),

Gene: Ichiang_65 Start: 41204, Stop: 41500, Start Num: 34
Candidate Starts for Ichiang_65:
(Start: 34 @41204 has 15 MA's), (67, 41360), (76, 41432), (83, 41474),

Gene: Immaculata_62 Start: 43324, Stop: 43584, Start Num: 45
Candidate Starts for Immaculata_62:
(Start: 39 @43306 has 13 MA's), (Start: 45 @43324 has 63 MA's), (48, 43342), (59, 43396),

Gene: IsHungry_64 Start: 40246, Stop: 40572, Start Num: 22
Candidate Starts for IsHungry_64:
(13, 40180), (Start: 22 @40246 has 4 MA's), (Start: 34 @40276 has 15 MA's), (57, 40372), (67, 40432), (83, 40546), (84, 40552),

Gene: Izel_91 Start: 53927, Stop: 54253, Start Num: 31
Candidate Starts for Izel_91:
(Start: 31 @53927 has 24 MA's), (64, 54080), (66, 54092), (69, 54119), (72, 54149), (75, 54167), (77, 54176),

Gene: Jamun_63 Start: 38467, Stop: 38745, Start Num: 38
Candidate Starts for Jamun_63:
(6, 38326), (21, 38413), (29, 38449), (Start: 35 @38455 has 1 MA's), (Start: 38 @38467 has 21 MA's),

Gene: Joann_63 Start: 43843, Stop: 44103, Start Num: 45
Candidate Starts for Joann_63:
(Start: 45 @43843 has 63 MA's), (57, 43900), (58, 43903), (78, 44047),

Gene: Julie_67 Start: 41903, Stop: 42199, Start Num: 34
Candidate Starts for Julie_67:
(Start: 22 @41873 has 4 MA's), (Start: 34 @41903 has 15 MA's), (57, 41999), (67, 42059), (83, 42173), (84, 42179),

Gene: Jumboset_62 Start: 43444, Stop: 43704, Start Num: 45
Candidate Starts for Jumboset_62:
(Start: 39 @43426 has 13 MA's), (Start: 45 @43444 has 63 MA's), (48, 43462), (58, 43504), (59, 43516),

Gene: Kalizoi_62 Start: 43182, Stop: 43442, Start Num: 45
Candidate Starts for Kalizoi_62:
(Start: 39 @43164 has 13 MA's), (Start: 45 @43182 has 63 MA's), (48, 43200), (59, 43254),

Gene: Kamdara_65 Start: 41110, Stop: 41352, Start Num: 49
Candidate Starts for Kamdara_65:
(20, 41002), (Start: 40 @41077 has 8 MA's), (Start: 49 @41110 has 1 MA's), (73, 41263), (78, 41293),

Gene: KendraB23_76 Start: 39417, Stop: 39695, Start Num: 38
Candidate Starts for KendraB23_76:
(19, 39363), (Start: 38 @39417 has 21 MA's), (86, 39687),

Gene: Kieran_65 Start: 41080, Stop: 41355, Start Num: 40
Candidate Starts for Kieran_65:
(20, 41005), (Start: 40 @41080 has 8 MA's), (73, 41266), (78, 41296),

Gene: Kihatsu_69 Start: 42860, Stop: 43183, Start Num: 22
Candidate Starts for Kihatsu_69:
(Start: 22 @42860 has 4 MA's), (Start: 32 @42884 has 2 MA's), (57, 42983), (67, 43043), (70, 43079),

Gene: KingBob_60 Start: 43614, Stop: 43871, Start Num: 45

Candidate Starts for KingBob_60:
(42, 43605), (Start: 45 @43614 has 63 MA's), (48, 43632), (61, 43689), (71, 43767),

Gene: Kittykat_65 Start: 43266, Stop: 43526, Start Num: 45
Candidate Starts for Kittykat_65:
(Start: 39 @43248 has 13 MA's), (Start: 45 @43266 has 63 MA's), (48, 43284), (60, 43341), (71, 43422), (74, 43443),

Gene: Korra_62 Start: 43371, Stop: 43631, Start Num: 45
Candidate Starts for Korra_62:
(Start: 39 @43353 has 13 MA's), (Start: 45 @43371 has 63 MA's), (48, 43389), (59, 43443),

Gene: Lakshmi_61 Start: 43678, Stop: 43938, Start Num: 45
Candidate Starts for Lakshmi_61:
(Start: 45 @43678 has 63 MA's), (46, 43684), (57, 43735), (58, 43738), (59, 43750), (78, 43882),

Gene: Lasagna_59 Start: 42266, Stop: 42526, Start Num: 45
Candidate Starts for Lasagna_59:
(Start: 39 @42248 has 13 MA's), (Start: 45 @42266 has 63 MA's), (48, 42284), (74, 42443), (83, 42500), (84, 42506),

Gene: Lennox_61 Start: 42751, Stop: 43011, Start Num: 45
Candidate Starts for Lennox_61:
(Start: 39 @42733 has 13 MA's), (Start: 45 @42751 has 63 MA's), (48, 42769), (60, 42826), (74, 42928), (83, 42985), (84, 42991),

Gene: Lenoxika_66 Start: 41766, Stop: 42062, Start Num: 34
Candidate Starts for Lenoxika_66:
(Start: 34 @41766 has 15 MA's), (57, 41862), (67, 41922), (70, 41958),

Gene: LilStuart_60 Start: 42614, Stop: 42874, Start Num: 45
Candidate Starts for LilStuart_60:
(Start: 39 @42596 has 13 MA's), (Start: 45 @42614 has 63 MA's), (48, 42632), (74, 42791), (83, 42848), (84, 42854),

Gene: LilhomieP_89 Start: 54411, Stop: 54737, Start Num: 31
Candidate Starts for LilhomieP_89:
(Start: 31 @54411 has 24 MA's), (64, 54564), (66, 54576), (69, 54603), (72, 54633), (75, 54651), (77, 54660),

Gene: Litotes_62 Start: 43156, Stop: 43416, Start Num: 45
Candidate Starts for Litotes_62:
(Start: 34 @43123 has 15 MA's), (Start: 40 @43144 has 8 MA's), (43, 43150), (Start: 45 @43156 has 63 MA's),

Gene: LittleTokyo_73 Start: 38604, Stop: 38882, Start Num: 38
Candidate Starts for LittleTokyo_73:
(Start: 38 @38604 has 21 MA's), (73, 38796),

Gene: Lucy_60 Start: 42591, Stop: 42869, Start Num: 39
Candidate Starts for Lucy_60:
(Start: 39 @42591 has 13 MA's), (Start: 45 @42609 has 63 MA's), (48, 42627), (74, 42786), (83, 42843), (84, 42849),

Gene: Makoto_60 Start: 42571, Stop: 42831, Start Num: 45
Candidate Starts for Makoto_60:
(Start: 39 @42553 has 13 MA's), (Start: 45 @42571 has 63 MA's), (48, 42589), (60, 42646), (74, 42748), (83, 42805), (84, 42811),

Gene: MamaPearl_60 Start: 43409, Stop: 43669, Start Num: 45
Candidate Starts for MamaPearl_60:
(Start: 45 @43409 has 63 MA's), (48, 43427), (60, 43484),

Gene: Maria1952_59 Start: 43613, Stop: 43870, Start Num: 45
Candidate Starts for Maria1952_59:
(42, 43604), (Start: 45 @43613 has 63 MA's), (48, 43631), (61, 43688), (71, 43766),

Gene: MeganNoll_63 Start: 43904, Stop: 44182, Start Num: 39
Candidate Starts for MeganNoll_63:
(Start: 39 @43904 has 13 MA's), (Start: 45 @43922 has 63 MA's), (48, 43940), (59, 43994),

Gene: MillySue_71 Start: 41794, Stop: 42090, Start Num: 34
Candidate Starts for MillySue_71:
(Start: 34 @41794 has 15 MA's), (57, 41890), (83, 42064),

Gene: Misaeng_61 Start: 43477, Stop: 43737, Start Num: 45
Candidate Starts for Misaeng_61:
(Start: 45 @43477 has 63 MA's), (57, 43534), (58, 43537), (59, 43549), (78, 43681),

Gene: Moki_62 Start: 42825, Stop: 43085, Start Num: 45
Candidate Starts for Moki_62:
(Start: 39 @42807 has 13 MA's), (Start: 45 @42825 has 63 MA's), (48, 42843), (60, 42900), (74, 43002), (80, 43050),

Gene: MrBoss_63 Start: 42722, Stop: 42994, Start Num: 40
Candidate Starts for MrBoss_63:
(Start: 34 @42701 has 15 MA's), (Start: 40 @42722 has 8 MA's), (43, 42728), (Start: 45 @42734 has 63 MA's),

Gene: MrGloopy_62 Start: 43347, Stop: 43625, Start Num: 39
Candidate Starts for MrGloopy_62:
(Start: 39 @43347 has 13 MA's), (Start: 45 @43365 has 63 MA's), (48, 43383), (59, 43437),

Gene: MrMagoo_101 Start: 56014, Stop: 56340, Start Num: 31
Candidate Starts for MrMagoo_101:
(Start: 31 @56014 has 24 MA's), (64, 56167), (66, 56179), (72, 56236), (75, 56254), (77, 56263),

Gene: Nancia_61 Start: 42902, Stop: 43162, Start Num: 45
Candidate Starts for Nancia_61:
(Start: 39 @42884 has 13 MA's), (Start: 45 @42902 has 63 MA's), (48, 42920), (74, 43079), (83, 43136), (84, 43142),

Gene: Nandita_68 Start: 42024, Stop: 42323, Start Num: 33
Candidate Starts for Nandita_68:
(13, 41931), (24, 42000), (Start: 33 @42024 has 1 MA's), (67, 42183), (68, 42192), (83, 42297),

Gene: Nanosmite_95 Start: 55538, Stop: 55861, Start Num: 31
Candidate Starts for Nanosmite_95:
(Start: 31 @55538 has 24 MA's), (51, 55613), (64, 55691), (69, 55730), (75, 55778), (77, 55787),

Gene: Niblet_63 Start: 38827, Stop: 39105, Start Num: 38
Candidate Starts for Niblet_63:
(15, 38716), (27, 38785), (28, 38791), (Start: 38 @38827 has 21 MA's),

Gene: Nubia_61 Start: 43705, Stop: 43965, Start Num: 45
Candidate Starts for Nubia_61:
(Start: 37 @43687 has 1 MA's), (Start: 45 @43705 has 63 MA's), (57, 43762), (58, 43765), (78, 43909),

Gene: OMalley_60 Start: 43400, Stop: 43660, Start Num: 45
Candidate Starts for OMalley_60:
(Start: 25 @43331 has 2 MA's), (30, 43352), (Start: 45 @43400 has 63 MA's), (50, 43421), (59, 43472),

Gene: Orcanus_65 Start: 39051, Stop: 39329, Start Num: 38
Candidate Starts for Orcanus_65:
(Start: 38 @39051 has 21 MA's),

Gene: OurGirlNessie_59 Start: 42225, Stop: 42485, Start Num: 45
Candidate Starts for OurGirlNessie_59:
(Start: 39 @42207 has 13 MA's), (Start: 45 @42225 has 63 MA's), (48, 42243), (60, 42300), (74, 42402), (83, 42459), (84, 42465),

Gene: Oxynfrius_62 Start: 43823, Stop: 44083, Start Num: 45
Candidate Starts for Oxynfrius_62:
(Start: 45 @43823 has 63 MA's), (57, 43880), (58, 43883), (78, 44027),

Gene: PartyCup_62 Start: 43576, Stop: 43848, Start Num: 40
Candidate Starts for PartyCup_62:
(Start: 34 @43555 has 15 MA's), (Start: 40 @43576 has 8 MA's), (43, 43582), (Start: 45 @43588 has 63 MA's),

Gene: PegLeg_88 Start: 53672, Stop: 53998, Start Num: 31
Candidate Starts for PegLeg_88:
(Start: 31 @53672 has 24 MA's), (64, 53825), (66, 53837), (69, 53864), (72, 53894), (75, 53912), (77, 53921),

Gene: PinkFriday_61 Start: 42959, Stop: 43216, Start Num: 45
Candidate Starts for PinkFriday_61:
(42, 42950), (Start: 45 @42959 has 63 MA's), (61, 43034), (62, 43037), (71, 43112), (84, 43196),

Gene: PitaDog_61 Start: 42609, Stop: 42887, Start Num: 39
Candidate Starts for PitaDog_61:
(Start: 39 @42609 has 13 MA's), (Start: 45 @42627 has 63 MA's), (48, 42645), (60, 42702), (74, 42804), (83, 42861), (84, 42867),

Gene: Popper_70 Start: 41441, Stop: 41767, Start Num: 22
Candidate Starts for Popper_70:
(13, 41375), (Start: 22 @41441 has 4 MA's), (Start: 34 @41471 has 15 MA's), (57, 41567), (67, 41627), (83, 41741), (84, 41747),

Gene: Potatoes_62 Start: 43324, Stop: 43584, Start Num: 45
Candidate Starts for Potatoes_62:
(Start: 39 @43306 has 13 MA's), (Start: 45 @43324 has 63 MA's), (48, 43342), (59, 43396),

Gene: Preamble_64 Start: 43037, Stop: 43297, Start Num: 45
Candidate Starts for Preamble_64:
(Start: 39 @43019 has 13 MA's), (Start: 45 @43037 has 63 MA's), (48, 43055), (60, 43112), (71, 43193), (74, 43214),

Gene: Pterodactyl_61 Start: 42938, Stop: 43198, Start Num: 45
Candidate Starts for Pterodactyl_61:
(Start: 39 @42920 has 13 MA's), (Start: 45 @42938 has 63 MA's), (48, 42956), (60, 43013), (74, 43115), (83, 43172), (84, 43178),

Gene: Pumancara_61 Start: 42494, Stop: 42751, Start Num: 45
Candidate Starts for Pumancara_61:
(42, 42485), (Start: 45 @42494 has 63 MA's), (61, 42569), (62, 42572), (71, 42647), (84, 42731),

Gene: Quenya_69 Start: 41516, Stop: 41791, Start Num: 41
Candidate Starts for Quenya_69:
(Start: 41 @41516 has 7 MA's), (Start: 49 @41549 has 1 MA's), (73, 41702), (85, 41774),

Gene: QuinnAvery_70 Start: 42826, Stop: 43122, Start Num: 34
Candidate Starts for QuinnAvery_70:
(Start: 14 @42730 has 1 MA's), (Start: 34 @42826 has 15 MA's), (57, 42922), (67, 42982), (68, 42991),

Gene: RAP15_63 Start: 43905, Stop: 44183, Start Num: 39
Candidate Starts for RAP15_63:
(Start: 39 @43905 has 13 MA's), (Start: 45 @43923 has 63 MA's), (48, 43941), (59, 43995),

Gene: RcigaStruga_62 Start: 43551, Stop: 43811, Start Num: 45
Candidate Starts for RcigaStruga_62:
(Start: 37 @43533 has 1 MA's), (Start: 45 @43551 has 63 MA's), (57, 43608), (58, 43611), (59, 43623), (78, 43755),

Gene: Reindeer_90 Start: 55191, Stop: 55517, Start Num: 31
Candidate Starts for Reindeer_90:
(Start: 31 @55191 has 24 MA's), (64, 55344), (66, 55356), (69, 55383), (72, 55413), (75, 55431), (77, 55440),

Gene: Rey_101 Start: 55933, Stop: 56259, Start Num: 31
Candidate Starts for Rey_101:
(Start: 31 @55933 has 24 MA's), (64, 56086), (72, 56155), (75, 56173), (77, 56182), (84, 56233),

Gene: Riovina_60 Start: 43400, Stop: 43660, Start Num: 45
Candidate Starts for Riovina_60:
(Start: 25 @43331 has 2 MA's), (30, 43352), (Start: 45 @43400 has 63 MA's), (50, 43421), (59, 43472),

Gene: Riverdale_61 Start: 43055, Stop: 43315, Start Num: 45
Candidate Starts for Riverdale_61:
(Start: 39 @43037 has 13 MA's), (Start: 45 @43055 has 63 MA's), (48, 43073), (59, 43127),

Gene: Rona_66 Start: 41247, Stop: 41522, Start Num: 40

Candidate Starts for Rona_66:
(20, 41172), (Start: 40 @41247 has 8 MA's), (73, 41433), (78, 41463),

Gene: Rozby_60 Start: 42859, Stop: 43119, Start Num: 45
Candidate Starts for Rozby_60:
(Start: 39 @42841 has 13 MA's), (Start: 45 @42859 has 63 MA's), (48, 42877), (59, 42931),

Gene: Ruchi_64 Start: 38215, Stop: 38493, Start Num: 38
Candidate Starts for Ruchi_64:
(12, 38110), (18, 38140), (Start: 35 @38203 has 1 MA's), (Start: 38 @38215 has 21 MA's),

Gene: Ryan_70 Start: 42477, Stop: 42773, Start Num: 34
Candidate Starts for Ryan_70:
(Start: 22 @42438 has 4 MA's), (Start: 34 @42477 has 15 MA's), (67, 42633), (83, 42747),

Gene: Saintcarr_67 Start: 42490, Stop: 42786, Start Num: 34
Candidate Starts for Saintcarr_67:
(Start: 34 @42490 has 15 MA's), (67, 42646), (68, 42655), (83, 42760),

Gene: Savage2526_61 Start: 43082, Stop: 43342, Start Num: 45
Candidate Starts for Savage2526_61:
(Start: 39 @43064 has 13 MA's), (Start: 45 @43082 has 63 MA's), (48, 43100), (59, 43154),

Gene: Schism_71 Start: 42712, Stop: 43011, Start Num: 32
Candidate Starts for Schism_71:
(Start: 22 @42688 has 4 MA's), (Start: 32 @42712 has 2 MA's), (54, 42790), (57, 42811), (67, 42871), (70, 42907), (79, 42967),

Gene: Scuttle_61 Start: 43375, Stop: 43653, Start Num: 39
Candidate Starts for Scuttle_61:
(Start: 39 @43375 has 13 MA's), (Start: 45 @43393 has 63 MA's), (48, 43411), (59, 43465),

Gene: Sergei_60 Start: 43614, Stop: 43871, Start Num: 45
Candidate Starts for Sergei_60:
(42, 43605), (Start: 45 @43614 has 63 MA's), (48, 43632), (61, 43689), (71, 43767),

Gene: Sharkboy_68 Start: 41611, Stop: 41886, Start Num: 40
Candidate Starts for Sharkboy_68:
(20, 41536), (Start: 40 @41611 has 8 MA's), (Start: 49 @41644 has 1 MA's), (73, 41797), (78, 41827),

Gene: Shayna_75 Start: 41004, Stop: 41279, Start Num: 41
Candidate Starts for Shayna_75:
(Start: 41 @41004 has 7 MA's), (73, 41190),

Gene: Shen_61 Start: 37312, Stop: 37590, Start Num: 38
Candidate Starts for Shen_61:
(Start: 38 @37312 has 21 MA's), (86, 37582),

Gene: Skinny_93 Start: 54840, Stop: 55166, Start Num: 31
Candidate Starts for Skinny_93:
(Start: 31 @54840 has 24 MA's), (64, 54993), (66, 55005), (69, 55032), (72, 55062), (75, 55080), (77, 55089),

Gene: SlimJimmy_89 Start: 54828, Stop: 55154, Start Num: 31
Candidate Starts for SlimJimmy_89:
(Start: 31 @54828 has 24 MA's), (64, 54981), (66, 54993), (69, 55020), (72, 55050), (75, 55068), (77, 55077),

Gene: SunnyD_75 Start: 41007, Stop: 41282, Start Num: 41
Candidate Starts for SunnyD_75:
(Start: 41 @41007 has 7 MA's), (73, 41193),

Gene: Supakev_60 Start: 43425, Stop: 43685, Start Num: 45
Candidate Starts for Supakev_60:
(Start: 25 @43356 has 2 MA's), (30, 43377), (Start: 45 @43425 has 63 MA's), (48, 43443), (50, 43446), (59, 43497),

Gene: Suppi_62 Start: 43562, Stop: 43834, Start Num: 40
Candidate Starts for Suppi_62:
(Start: 34 @43541 has 15 MA's), (Start: 40 @43562 has 8 MA's), (43, 43568), (Start: 45 @43574 has 63 MA's),

Gene: TattModd_61 Start: 43209, Stop: 43469, Start Num: 45
Candidate Starts for TattModd_61:
(Start: 39 @43191 has 13 MA's), (Start: 45 @43209 has 63 MA's), (48, 43227), (59, 43281),

Gene: TaylorSipht_65 Start: 38681, Stop: 38959, Start Num: 38
Candidate Starts for TaylorSipht_65:
(Start: 38 @38681 has 21 MA's),

Gene: Teagster_75 Start: 41426, Stop: 41701, Start Num: 41
Candidate Starts for Teagster_75:
(Start: 41 @41426 has 7 MA's), (73, 41612),

Gene: Temper16_60 Start: 43614, Stop: 43871, Start Num: 45
Candidate Starts for Temper16_60:
(42, 43605), (Start: 45 @43614 has 63 MA's), (48, 43632), (61, 43689), (71, 43767),

Gene: Toad24_68 Start: 39472, Stop: 39750, Start Num: 38
Candidate Starts for Toad24_68:
(19, 39418), (Start: 38 @39472 has 21 MA's), (86, 39742),

Gene: ToastyOats_70 Start: 42136, Stop: 42432, Start Num: 34
Candidate Starts for ToastyOats_70:
(Start: 34 @42136 has 15 MA's), (57, 42232), (67, 42292), (70, 42328),

Gene: Toodles_69 Start: 42560, Stop: 42856, Start Num: 34
Candidate Starts for Toodles_69:
(13, 42464), (Start: 22 @42530 has 4 MA's), (Start: 34 @42560 has 15 MA's), (57, 42656), (76, 42788), (83, 42830), (84, 42836),

Gene: TpudiCK_91 Start: 53932, Stop: 54258, Start Num: 31
Candidate Starts for TpudiCK_91:
(Start: 31 @53932 has 24 MA's), (64, 54085), (66, 54097), (69, 54124), (72, 54154), (75, 54172), (77, 54181),

Gene: TyDawg_89 Start: 53935, Stop: 54261, Start Num: 31
Candidate Starts for TyDawg_89:
(Start: 31 @53935 has 24 MA's), (64, 54088), (66, 54100), (69, 54127), (72, 54157), (75, 54175), (77, 54184),

Gene: Urla_62 Start: 43603, Stop: 43863, Start Num: 45
Candidate Starts for Urla_62:
(Start: 45 @43603 has 63 MA's), (48, 43621), (60, 43678),

Gene: Vallejo_62 Start: 43253, Stop: 43531, Start Num: 39
Candidate Starts for Vallejo_62:
(Start: 39 @43253 has 13 MA's), (Start: 45 @43271 has 63 MA's), (48, 43289), (59, 43343),

Gene: Vulpecula_64 Start: 37410, Stop: 37688, Start Num: 38
Candidate Starts for Vulpecula_64:
(Start: 35 @37398 has 1 MA's), (Start: 38 @37410 has 21 MA's),

Gene: Vulture_60 Start: 42928, Stop: 43257, Start Num: 25
Candidate Starts for Vulture_60:
(Start: 25 @42928 has 2 MA's), (30, 42949), (Start: 45 @42997 has 63 MA's), (48, 43015), (50, 43018), (59, 43069),

Gene: Wawa_62 Start: 43514, Stop: 43774, Start Num: 45
Candidate Starts for Wawa_62:
(Start: 39 @43496 has 13 MA's), (Start: 45 @43514 has 63 MA's), (48, 43532), (59, 43586),

Gene: Wayne_64 Start: 44019, Stop: 44291, Start Num: 40
Candidate Starts for Wayne_64:
(Start: 34 @43998 has 15 MA's), (Start: 40 @44019 has 8 MA's), (43, 44025), (Start: 45 @44031 has 63 MA's),

Gene: Wildcat_100 Start: 58129, Stop: 58446, Start Num: 31
Candidate Starts for Wildcat_100:
(Start: 31 @58129 has 24 MA's), (51, 58204), (52, 58207), (63, 58258), (64, 58276), (82, 58408), (87, 58432), (88, 58438),

Gene: WileyE_66 Start: 38402, Stop: 38680, Start Num: 38
Candidate Starts for WileyE_66:
(Start: 35 @38390 has 1 MA's), (Start: 38 @38402 has 21 MA's),

Gene: WonderBoy_59 Start: 42399, Stop: 42659, Start Num: 45
Candidate Starts for WonderBoy_59:
(Start: 39 @42381 has 13 MA's), (Start: 45 @42399 has 63 MA's), (48, 42417), (60, 42474), (74, 42576), (83, 42633), (84, 42639),

Gene: Yonex_69 Start: 42477, Stop: 42773, Start Num: 34
Candidate Starts for Yonex_69:
(Start: 22 @42438 has 4 MA's), (Start: 34 @42477 has 15 MA's), (67, 42633), (83, 42747),

Gene: Zaheer_69 Start: 42523, Stop: 42819, Start Num: 34
Candidate Starts for Zaheer_69:
(Start: 34 @42523 has 15 MA's), (57, 42619), (67, 42679), (70, 42715),

Gene: Zhuangyuan_77 Start: 39902, Stop: 40180, Start Num: 38
Candidate Starts for Zhuangyuan_77:
(Start: 38 @39902 has 21 MA's),

Gene: Zixiang_65 Start: 38816, Stop: 39094, Start Num: 38
Candidate Starts for Zixiang_65:
(Start: 38 @38816 has 21 MA's), (86, 39086),

Gene: Zorro_62 Start: 43226, Stop: 43486, Start Num: 45
Candidate Starts for Zorro_62:
(Start: 39 @43208 has 13 MA's), (Start: 45 @43226 has 63 MA's), (48, 43244), (59, 43298),