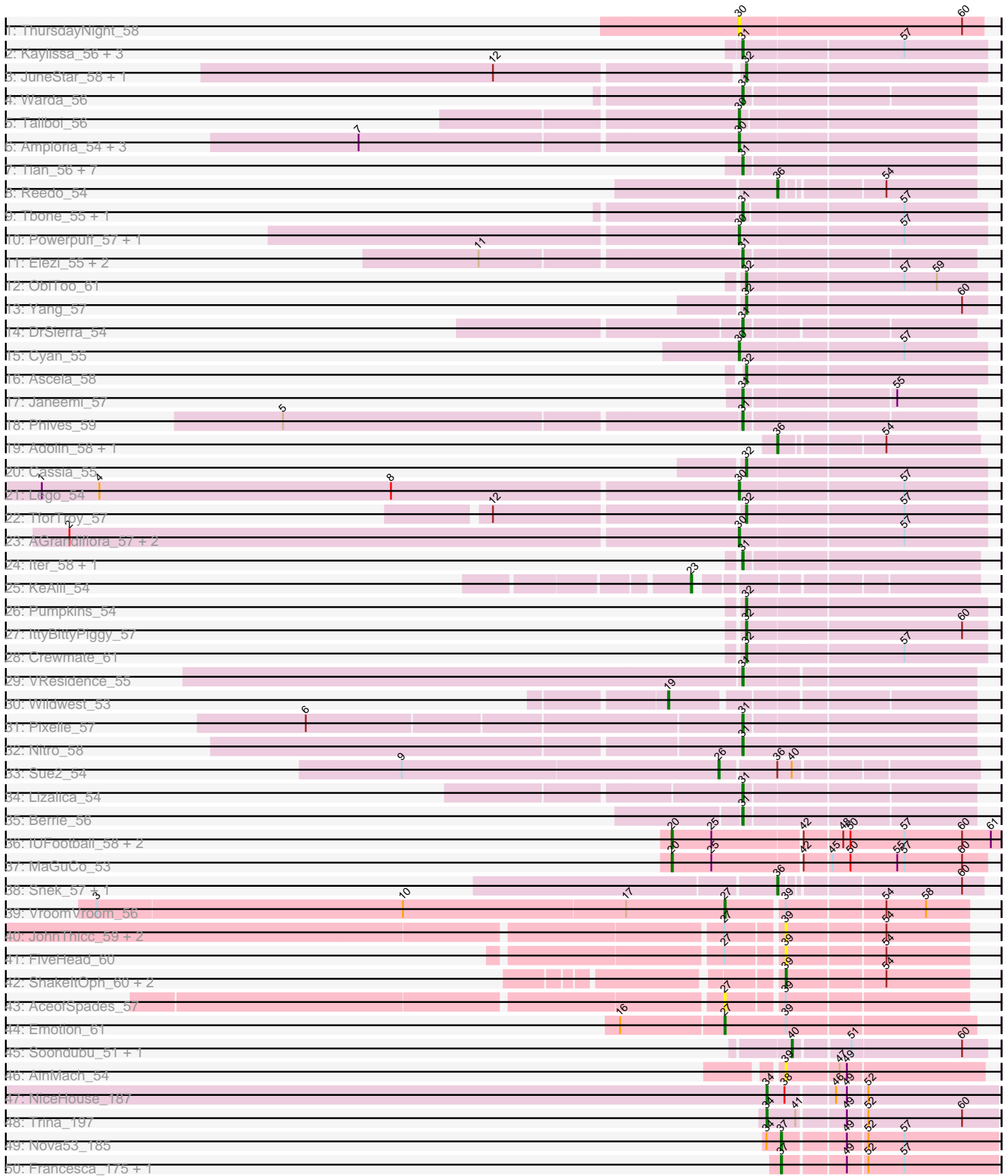
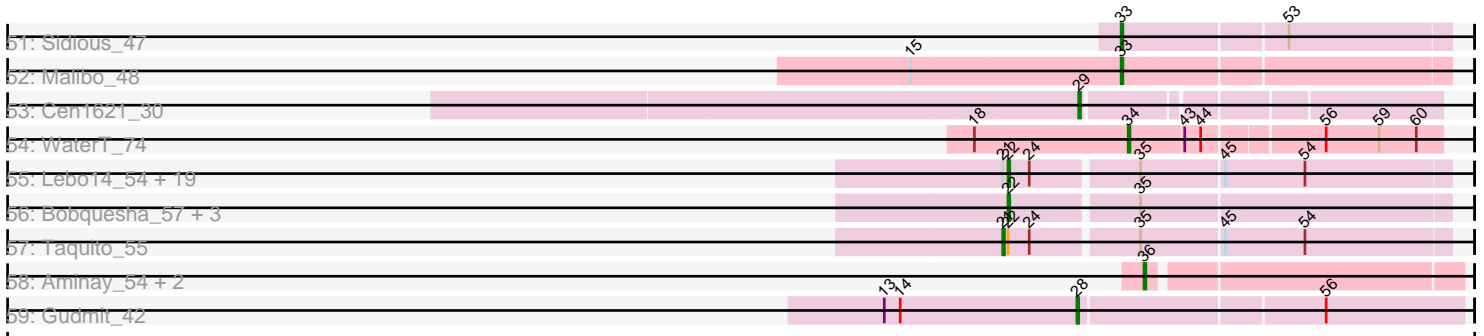


Pham 304855



Pham 304855



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 304855 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304855 has 114 members, 24 are drafts.

Phages represented in each track:

- Track 1 : ThursdayNight_58
- Track 2 : Kaylissa_56, Flutur_54, Tutumahutu_56, JohnDoe_55
- Track 3 : JuneStar_58, Schaffner_55
- Track 4 : Warda_56
- Track 5 : Tallboi_56
- Track 6 : Amploria_54, AEgle_52, Turab_53, Adumb2043_53
- Track 7 : Tian_56, Community_58, Niobe_56, Skelbel_57, Asa16_56, Amyev_57, Eraser_56, London_56
- Track 8 : Reedo_54
- Track 9 : Tbone_55, Mudpuppy_52
- Track 10 : Powerpuff_57, YesChef_55
- Track 11 : Elezi_55, Subaru_56, Jstan_57
- Track 12 : ObiToo_61
- Track 13 : Yang_57
- Track 14 : DrSierra_54
- Track 15 : Cyan_55
- Track 16 : Ascela_58
- Track 17 : Janeemi_57
- Track 18 : Phives_59
- Track 19 : Adolin_58, DrManhattan_58
- Track 20 : Cassia_55
- Track 21 : Lego_54
- Track 22 : TforTroy_57
- Track 23 : AGrandiflora_57, Joemato_55, Simpson_57
- Track 24 : Iter_58, Tuck_58
- Track 25 : KeAlii_54
- Track 26 : Pumpkins_54
- Track 27 : IttyBittyPiggy_57
- Track 28 : Crewmate_61
- Track 29 : VResidence_55
- Track 30 : Wildwest_53
- Track 31 : Pixelle_57
- Track 32 : Nitro_58
- Track 33 : Sue2_54
- Track 34 : Lizalica_54
- Track 35 : Berrie_56
- Track 36 : IUFootball_58, Liebe_58, Maureen_58

- Track 37 : MaGuCo_53
- Track 38 : Snek_57, Tweety19_58
- Track 39 : VroomVroom_56
- Track 40 : JohnThicc_59, LadyAstra_59, Origami_58
- Track 41 : FiveHead_60
- Track 42 : ShakeltOph_60, MiniMommy_60, JasmineDragon_60
- Track 43 : AceofSpades_57
- Track 44 : Emotion_61
- Track 45 : Soondubu_51, Exile_50
- Track 46 : AinMach_54
- Track 47 : NiceHouse_187
- Track 48 : Trina_197
- Track 49 : Nova53_185
- Track 50 : Francesca_175, Dorin_173
- Track 51 : Sidious_47
- Track 52 : Malibo_48
- Track 53 : Cen1621_30
- Track 54 : WaterT_74
- Track 55 : Lebo14_54, SamScheppers_53, Fionnbharth_55, Juliette_57, YasnayaPolyana_55, Cheetobro_55, DanSyl44_58, Slarp_55, JF1_55, Wintermute_55, Y10_54, OmniCritical_54, Eponine_57, Ruthiejr_56, Malthus_56, Y2_54, Mitti_55, Chancellor_55, Qhanda_57, Kraw_55
- Track 56 : Bobquesha_57, Patt_52, Reptar3000_53, MissDaisy_53
- Track 57 : Taquito_55
- Track 58 : Aminay_54, PandaPo_57, MissSwiss_57
- Track 59 : Gudmit_42

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

The start number called the most often in the published annotations is 31, it was called in 22 of the 90 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amyev_57, Asa16_56, Berrie_56, Community_58, DrSierra_54, Elezi_55, Eraser_56, Flutur_54, Iter_58, Janeemi_57, JohnDoe_55, Jstan_57, Kaylissa_56, Lizalica_54, London_56, Mudpuppy_52, Niobe_56, Nitro_58, Phives_59, Pixelle_57, Skelbel_57, Subaru_56, Tbone_55, Tian_56, Tuck_58, Tutumahutu_56, VResidence_55, Warda_56,

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

-

Genes that do not have the "Most Annotated" start:

- AEgle_52, AGrandiflora_57, AceofSpades_57, Adolin_58, Adumb2043_53, AinMach_54, Aminay_54, Amploria_54, Ascela_58, Bobquesha_57, Cassia_55, Cen1621_30, Chancellor_55, Cheetobro_55, Crewmate_61, Cyan_55, DanSyl44_58, Dorin_173, DrManhattan_58, Emotion_61, Eponine_57, Exile_50, Fionnbharth_55, FiveHead_60, Francesca_175, Gudmit_42, IUFootball_58, IttyBittyPiggy_57, JF1_55, JasmineDragon_60, Joemato_55, JohnThicc_59, Juliette_57, JuneStar_58, KeAlii_54, Kraw_55, LadyAstra_59, Lebo14_54, Lego_54, Liebe_58, MaGuCo_53,

Malibo_48, Malthus_56, Maureen_58, MiniMommy_60, MissDaisy_53, MissSwiss_57, Mitti_55, NiceHouse_187, Nova53_185, ObiToo_61, OmniCritical_54, Origami_58, PandaPo_57, Patt_52, Powerpuff_57, Pumpkins_54, Qhanda_57, Reedo_54, Reptar3000_53, Ruthiejr_56, SamScheppers_53, Schaffner_55, ShakeltOph_60, Sidious_47, Simpson_57, Slarp_55, Snek_57, Soondubu_51, Sue2_54, Tallboi_56, Taquito_55, TforTroy_57, ThursdayNight_58, Trina_197, Turab_53, Tweety19_58, VroomVroom_56, WaterT_74, Wildwest_53, Wintermute_55, Y10_54, Y2_54, Yang_57, YasnayaPolyana_55, YesChef_55,

Summary by start number:

Start 19:

- Found in 1 of 114 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 90
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wildwest_53 (AZ1),

Start 20:

- Found in 4 of 114 (3.5%) of genes in pham
- Manual Annotations of this start: 3 of 90
- Called 100.0% of time when present
- Phage (with cluster) where this start called: IUFootball_58 (AZ2), Liebe_58 (AZ2), MaGuCo_53 (AZ2), Maureen_58 (AZ2),

Start 21:

- Found in 21 of 114 (18.4%) of genes in pham
- Manual Annotations of this start: 1 of 90
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Taquito_55 (K4),

Start 22:

- Found in 25 of 114 (21.9%) of genes in pham
- Manual Annotations of this start: 21 of 90
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Bobquesha_57 (K4), Chancellor_55 (K4), Cheetobro_55 (K4), DanSyl44_58 (K4), Eponine_57 (K4), Fionnbharth_55 (K4), JF1_55 (K4), Juliette_57 (K4), Kraw_55 (K4), Lebo14_54 (K4), Malthus_56 (K4), MissDaisy_53 (K4), Mitti_55 (K4), OmniCritical_54 (K4), Patt_52 (K4), Qhanda_57 (K4), Reptar3000_53 (K4), Ruthiejr_56 (K4), SamScheppers_53 (K4), Slarp_55 (K4), Wintermute_55 (K4), Y10_54 (K4), Y2_54 (K4), YasnayaPolyana_55 (K4),

Start 23:

- Found in 1 of 114 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 90
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KeAlii_54 (AZ1),

Start 26:

- Found in 1 of 114 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 90
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sue2_54 (AZ1),

Start 27:

- Found in 7 of 114 (6.1%) of genes in pham
- Manual Annotations of this start: 2 of 90
- Called 42.9% of time when present
- Phage (with cluster) where this start called: AceofSpades_57 (AZ4), Emotion_61 (AZ4), VroomVroom_56 (AZ4),

Start 28:

- Found in 1 of 114 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 90
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gudmit_42 (singleton),

Start 29:

- Found in 1 of 114 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 90
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cen1621_30 (EH),

Start 30:

- Found in 13 of 114 (11.4%) of genes in pham
- Manual Annotations of this start: 7 of 90
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle_52 (AZ1), AGrandiflora_57 (AZ1), Adumb2043_53 (AZ1), Amploria_54 (AZ1), Cyan_55 (AZ1), Joemato_55 (AZ1), Lego_54 (AZ1), Powerpuff_57 (AZ1), Simpson_57 (AZ1), Tallboi_56 (AZ1), ThursdayNight_58 (AZ), Turab_53 (AZ1), YesChef_55 (AZ1),

Start 31:

- Found in 28 of 114 (24.6%) of genes in pham
- Manual Annotations of this start: 22 of 90
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amyev_57 (AZ1), Asa16_56 (AZ1), Berrie_56 (AZ1), Community_58 (AZ1), DrSierra_54 (AZ1), Elezi_55 (AZ1), Eraser_56 (AZ1), Flutur_54 (AZ), Iter_58 (AZ1), Janeemi_57 (AZ1), JohnDoe_55 (AZ1), Jstan_57 (AZ1), Kaylissa_56 (AZ1), Lizalica_54 (AZ1), London_56 (AZ1), Mudpuppy_52 (AZ1), Niobe_56 (AZ1), Nitro_58 (AZ1), Phives_59 (AZ1), Pixelle_57 (AZ1), Skelbel_57 (AZ1), Subaru_56 (AZ1), Tbone_55 (AZ1), Tian_56 (AZ1), Tuck_58 (AZ1), Tutumahutu_56 (AZ1), VResidence_55 (AZ1), Warda_56 (AZ1),

Start 32:

- Found in 10 of 114 (8.8%) of genes in pham
- Manual Annotations of this start: 10 of 90
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ascela_58 (AZ1), Cassia_55 (AZ1), Crewmate_61 (AZ1), IttyBittyPiggy_57 (AZ1), JuneStar_58 (AZ1), ObiToo_61 (AZ1), Pumpkins_54 (AZ1), Schaffner_55 (AZ1), TforTroy_57 (AZ1), Yang_57 (AZ1),

Start 33:

- Found in 2 of 114 (1.8%) of genes in pham
- Manual Annotations of this start: 2 of 90
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Malibo_48 (DW), Sidious_47 (CZ7),

Start 34:

- Found in 4 of 114 (3.5%) of genes in pham
- Manual Annotations of this start: 3 of 90
- Called 75.0% of time when present
- Phage (with cluster) where this start called: NiceHouse_187 (CE), Trina_197 (CE), WaterT_74 (GB),

Start 36:

- Found in 9 of 114 (7.9%) of genes in pham
- Manual Annotations of this start: 7 of 90
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Adolin_58 (AZ1), Aminay_54 (K7), DrManhattan_58 (AZ1), MissSwiss_57 (AZ1), PandaPo_57 (AZ1), Reedo_54 (AZ1), SneK_57 (AZ3), Tweety19_58 (AZ3),

Start 37:

- Found in 3 of 114 (2.6%) of genes in pham
- Manual Annotations of this start: 3 of 90
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dorin_173 (CG), Francesca_175 (CG), Nova53_185 (CG),

Start 39:

- Found in 11 of 114 (9.6%) of genes in pham
- Manual Annotations of this start: 3 of 90
- Called 72.7% of time when present
- Phage (with cluster) where this start called: AinMach_54 (AZ7), FiveHead_60 (AZ4), JasmineDragon_60 (AZ4), JohnThicc_59 (AZ4), LadyAstra_59 (AZ4), MiniMommy_60 (AZ4), Origami_58 (AZ4), ShakeltOph_60 (AZ4),

Start 40:

- Found in 3 of 114 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 90
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Exile_50 (AZ6), Soondubu_51 (AZ6),

Summary by clusters:

There are 16 clusters represented in this pham: singleton, AZ, EH, CG, CZ7, CE, DW, K7, GB, K4, AZ1, AZ2, AZ3, AZ4, AZ6, AZ7,

Info for manual annotations of cluster AZ1:

- Start number 19 was manually annotated 1 time for cluster AZ1.
- Start number 23 was manually annotated 1 time for cluster AZ1.
- Start number 26 was manually annotated 1 time for cluster AZ1.
- Start number 30 was manually annotated 7 times for cluster AZ1.
- Start number 31 was manually annotated 22 times for cluster AZ1.
- Start number 32 was manually annotated 10 times for cluster AZ1.
- Start number 36 was manually annotated 4 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 20 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 36 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 27 was manually annotated 2 times for cluster AZ4.
- Start number 39 was manually annotated 3 times for cluster AZ4.

Info for manual annotations of cluster AZ6:

- Start number 40 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster CE:

- Start number 34 was manually annotated 2 times for cluster CE.

Info for manual annotations of cluster CG:

- Start number 37 was manually annotated 3 times for cluster CG.

Info for manual annotations of cluster CZ7:

- Start number 33 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DW:

- Start number 33 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster EH:

- Start number 29 was manually annotated 1 time for cluster EH.

Info for manual annotations of cluster GB:

- Start number 34 was manually annotated 1 time for cluster GB.

Info for manual annotations of cluster K4:

- Start number 21 was manually annotated 1 time for cluster K4.
- Start number 22 was manually annotated 21 times for cluster K4.

Info for manual annotations of cluster K7:

- Start number 36 was manually annotated 1 time for cluster K7.

Gene Information:

Gene: AEgle_52 Start: 37591, Stop: 37782, Start Num: 30

Candidate Starts for AEgle_52:

(7, 37285), (Start: 30 @37591 has 7 MA's),

Gene: AGrandiflora_57 Start: 38760, Stop: 38960, Start Num: 30

Candidate Starts for AGrandiflora_57:

(2, 38211), (Start: 30 @38760 has 7 MA's), (57, 38892),

Gene: AceofSpades_57 Start: 39591, Stop: 39779, Start Num: 27

Candidate Starts for AceofSpades_57:

(Start: 27 @39591 has 2 MA's), (Start: 39 @39633 has 3 MA's),

Gene: Adolin_58 Start: 37478, Stop: 37633, Start Num: 36
Candidate Starts for Adolin_58:
(Start: 36 @37478 has 7 MA's), (54, 37556),

Gene: Adumb2043_53 Start: 37614, Stop: 37805, Start Num: 30
Candidate Starts for Adumb2043_53:
(7, 37308), (Start: 30 @37614 has 7 MA's),

Gene: AinMach_54 Start: 37308, Stop: 37466, Start Num: 39
Candidate Starts for AinMach_54:
(Start: 39 @37308 has 3 MA's), (47, 37350), (49, 37356),

Gene: Aminay_54 Start: 38354, Stop: 38521, Start Num: 36
Candidate Starts for Aminay_54:
(Start: 36 @38354 has 7 MA's),

Gene: Amploria_54 Start: 37795, Stop: 37986, Start Num: 30
Candidate Starts for Amploria_54:
(7, 37489), (Start: 30 @37795 has 7 MA's),

Gene: Amyev_57 Start: 40846, Stop: 41031, Start Num: 31
Candidate Starts for Amyev_57:
(Start: 31 @40846 has 22 MA's),

Gene: Asa16_56 Start: 39543, Stop: 39728, Start Num: 31
Candidate Starts for Asa16_56:
(Start: 31 @39543 has 22 MA's),

Gene: Ascela_58 Start: 39002, Stop: 39196, Start Num: 32
Candidate Starts for Ascela_58:
(Start: 32 @39002 has 10 MA's),

Gene: Berrie_56 Start: 38817, Stop: 38999, Start Num: 31
Candidate Starts for Berrie_56:
(Start: 31 @38817 has 22 MA's),

Gene: Bobquesha_57 Start: 37478, Stop: 37717, Start Num: 22
Candidate Starts for Bobquesha_57:
(Start: 22 @37478 has 21 MA's), (35, 37547),

Gene: Cassia_55 Start: 38504, Stop: 38698, Start Num: 32
Candidate Starts for Cassia_55:
(Start: 32 @38504 has 10 MA's),

Gene: Cen1621_30 Start: 22502, Stop: 22687, Start Num: 29
Candidate Starts for Cen1621_30:
(Start: 29 @22502 has 1 MA's),

Gene: Chancellor_55 Start: 37968, Stop: 38207, Start Num: 22
Candidate Starts for Chancellor_55:
(Start: 21 @37965 has 1 MA's), (Start: 22 @37968 has 21 MA's), (24, 37980), (35, 38037), (45, 38082),
(54, 38127),

Gene: Cheetobro_55 Start: 37965, Stop: 38204, Start Num: 22

Candidate Starts for Cheetobro_55:

(Start: 21 @37962 has 1 MA's), (Start: 22 @37965 has 21 MA's), (24, 37977), (35, 38034), (45, 38079), (54, 38124),

Gene: Community_58 Start: 40395, Stop: 40577, Start Num: 31

Candidate Starts for Community_58:

(Start: 31 @40395 has 22 MA's),

Gene: Crewmate_61 Start: 40124, Stop: 40318, Start Num: 32

Candidate Starts for Crewmate_61:

(Start: 32 @40124 has 10 MA's), (57, 40250),

Gene: Cyan_55 Start: 38301, Stop: 38501, Start Num: 30

Candidate Starts for Cyan_55:

(Start: 30 @38301 has 7 MA's), (57, 38433),

Gene: DanSyl44_58 Start: 39093, Stop: 39332, Start Num: 22

Candidate Starts for DanSyl44_58:

(Start: 21 @39090 has 1 MA's), (Start: 22 @39093 has 21 MA's), (24, 39105), (35, 39162), (45, 39207), (54, 39252),

Gene: Dorin_173 Start: 95195, Stop: 95365, Start Num: 37

Candidate Starts for Dorin_173:

(Start: 37 @95195 has 3 MA's), (49, 95243), (52, 95258), (57, 95288),

Gene: DrManhattan_58 Start: 37046, Stop: 37201, Start Num: 36

Candidate Starts for DrManhattan_58:

(Start: 36 @37046 has 7 MA's), (54, 37124),

Gene: DrSierra_54 Start: 37220, Stop: 37399, Start Num: 31

Candidate Starts for DrSierra_54:

(Start: 31 @37220 has 22 MA's),

Gene: Elezi_55 Start: 39303, Stop: 39485, Start Num: 31

Candidate Starts for Elezi_55:

(11, 39096), (Start: 31 @39303 has 22 MA's),

Gene: Emotion_61 Start: 40785, Stop: 40988, Start Num: 27

Candidate Starts for Emotion_61:

(16, 40701), (Start: 27 @40785 has 2 MA's), (Start: 39 @40836 has 3 MA's),

Gene: Eponine_57 Start: 38805, Stop: 39044, Start Num: 22

Candidate Starts for Eponine_57:

(Start: 21 @38802 has 1 MA's), (Start: 22 @38805 has 21 MA's), (24, 38817), (35, 38874), (45, 38919), (54, 38964),

Gene: Eraser_56 Start: 39550, Stop: 39735, Start Num: 31

Candidate Starts for Eraser_56:

(Start: 31 @39550 has 22 MA's),

Gene: Exile_50 Start: 40505, Stop: 40657, Start Num: 40

Candidate Starts for Exile_50:

(Start: 40 @40505 has 1 MA's), (51, 40547), (60, 40637),

Gene: Fionnbharth_55 Start: 38203, Stop: 38442, Start Num: 22

Candidate Starts for Fionnbharth_55:

(Start: 21 @38200 has 1 MA's), (Start: 22 @38203 has 21 MA's), (24, 38215), (35, 38272), (45, 38317), (54, 38362),

Gene: FiveHead_60 Start: 39271, Stop: 39417, Start Num: 39

Candidate Starts for FiveHead_60:

(Start: 27 @39229 has 2 MA's), (Start: 39 @39271 has 3 MA's), (54, 39349),

Gene: Flutur_54 Start: 38613, Stop: 38807, Start Num: 31

Candidate Starts for Flutur_54:

(Start: 31 @38613 has 22 MA's), (57, 38739),

Gene: Francesca_175 Start: 96114, Stop: 96284, Start Num: 37

Candidate Starts for Francesca_175:

(Start: 37 @96114 has 3 MA's), (49, 96162), (52, 96177), (57, 96207),

Gene: Gudmit_42 Start: 28762, Stop: 28971, Start Num: 28

Candidate Starts for Gudmit_42:

(13, 28654), (14, 28663), (Start: 28 @28762 has 1 MA's), (56, 28894),

Gene: IUFootball_58 Start: 41412, Stop: 41675, Start Num: 20

Candidate Starts for IUFootball_58:

(Start: 20 @41412 has 3 MA's), (25, 41445), (42, 41514), (48, 41544), (50, 41550), (57, 41595), (60, 41643), (61, 41667),

Gene: Iter_58 Start: 38994, Stop: 39182, Start Num: 31

Candidate Starts for Iter_58:

(Start: 31 @38994 has 22 MA's),

Gene: IttyBittyPiggy_57 Start: 38132, Stop: 38326, Start Num: 32

Candidate Starts for IttyBittyPiggy_57:

(Start: 32 @38132 has 10 MA's), (60, 38306),

Gene: JF1_55 Start: 38120, Stop: 38359, Start Num: 22

Candidate Starts for JF1_55:

(Start: 21 @38117 has 1 MA's), (Start: 22 @38120 has 21 MA's), (24, 38132), (35, 38189), (45, 38234), (54, 38279),

Gene: Janeemi_57 Start: 39872, Stop: 40054, Start Num: 31

Candidate Starts for Janeemi_57:

(Start: 31 @39872 has 22 MA's), (55, 39989),

Gene: JasmineDragon_60 Start: 40141, Stop: 40287, Start Num: 39

Candidate Starts for JasmineDragon_60:

(Start: 39 @40141 has 3 MA's), (54, 40219),

Gene: Joemato_55 Start: 38382, Stop: 38582, Start Num: 30

Candidate Starts for Joemato_55:

(2, 37833), (Start: 30 @38382 has 7 MA's), (57, 38514),

Gene: JohnDoe_55 Start: 38368, Stop: 38562, Start Num: 31

Candidate Starts for JohnDoe_55:

(Start: 31 @38368 has 22 MA's), (57, 38494),

Gene: JohnThicc_59 Start: 39271, Stop: 39417, Start Num: 39

Candidate Starts for JohnThicc_59:

(Start: 27 @39229 has 2 MA's), (Start: 39 @39271 has 3 MA's), (54, 39349),

Gene: Jstan_57 Start: 39307, Stop: 39489, Start Num: 31

Candidate Starts for Jstan_57:

(11, 39100), (Start: 31 @39307 has 22 MA's),

Gene: Juliette_57 Start: 38273, Stop: 38512, Start Num: 22

Candidate Starts for Juliette_57:

(Start: 21 @38270 has 1 MA's), (Start: 22 @38273 has 21 MA's), (24, 38285), (35, 38342), (45, 38387), (54, 38432),

Gene: JuneStar_58 Start: 41416, Stop: 41610, Start Num: 32

Candidate Starts for JuneStar_58:

(12, 41221), (Start: 32 @41416 has 10 MA's),

Gene: Kaylissa_56 Start: 38763, Stop: 38960, Start Num: 31

Candidate Starts for Kaylissa_56:

(Start: 31 @38763 has 22 MA's), (57, 38892),

Gene: KeAlii_54 Start: 38009, Stop: 38218, Start Num: 23

Candidate Starts for KeAlii_54:

(Start: 23 @38009 has 1 MA's),

Gene: Kraw_55 Start: 37961, Stop: 38200, Start Num: 22

Candidate Starts for Kraw_55:

(Start: 21 @37958 has 1 MA's), (Start: 22 @37961 has 21 MA's), (24, 37973), (35, 38030), (45, 38075), (54, 38120),

Gene: LadyAstra_59 Start: 39371, Stop: 39517, Start Num: 39

Candidate Starts for LadyAstra_59:

(Start: 27 @39329 has 2 MA's), (Start: 39 @39371 has 3 MA's), (54, 39449),

Gene: Lebo14_54 Start: 38228, Stop: 38467, Start Num: 22

Candidate Starts for Lebo14_54:

(Start: 21 @38225 has 1 MA's), (Start: 22 @38228 has 21 MA's), (24, 38240), (35, 38297), (45, 38342), (54, 38387),

Gene: Lego_54 Start: 38079, Stop: 38279, Start Num: 30

Candidate Starts for Lego_54:

(1, 37506), (4, 37554), (8, 37797), (Start: 30 @38079 has 7 MA's), (57, 38211),

Gene: Liebe_58 Start: 41412, Stop: 41675, Start Num: 20

Candidate Starts for Liebe_58:

(Start: 20 @41412 has 3 MA's), (25, 41445), (42, 41514), (48, 41544), (50, 41550), (57, 41595), (60, 41643), (61, 41667),

Gene: Lizalica_54 Start: 37826, Stop: 38008, Start Num: 31
Candidate Starts for Lizalica_54:
(Start: 31 @37826 has 22 MA's),

Gene: London_56 Start: 39541, Stop: 39726, Start Num: 31
Candidate Starts for London_56:
(Start: 31 @39541 has 22 MA's),

Gene: MaGuCo_53 Start: 39882, Stop: 40133, Start Num: 20
Candidate Starts for MaGuCo_53:
(Start: 20 @39882 has 3 MA's), (25, 39915), (42, 39984), (45, 40005), (50, 40020), (55, 40059), (57, 40065), (60, 40113),

Gene: Malibo_48 Start: 36272, Stop: 36448, Start Num: 33
Candidate Starts for Malibo_48:
(15, 36155), (Start: 33 @36272 has 2 MA's),

Gene: Malthus_56 Start: 37961, Stop: 38200, Start Num: 22
Candidate Starts for Malthus_56:
(Start: 21 @37958 has 1 MA's), (Start: 22 @37961 has 21 MA's), (24, 37973), (35, 38030), (45, 38075), (54, 38120),

Gene: Maureen_58 Start: 41411, Stop: 41674, Start Num: 20
Candidate Starts for Maureen_58:
(Start: 20 @41411 has 3 MA's), (25, 41444), (42, 41513), (48, 41543), (50, 41549), (57, 41594), (60, 41642), (61, 41666),

Gene: MiniMommy_60 Start: 40144, Stop: 40290, Start Num: 39
Candidate Starts for MiniMommy_60:
(Start: 39 @40144 has 3 MA's), (54, 40222),

Gene: MissDaisy_53 Start: 37493, Stop: 37732, Start Num: 22
Candidate Starts for MissDaisy_53:
(Start: 22 @37493 has 21 MA's), (35, 37562),

Gene: MissSwiss_57 Start: 37199, Stop: 37351, Start Num: 36
Candidate Starts for MissSwiss_57:
(Start: 36 @37199 has 7 MA's),

Gene: Mitti_55 Start: 38140, Stop: 38379, Start Num: 22
Candidate Starts for Mitti_55:
(Start: 21 @38137 has 1 MA's), (Start: 22 @38140 has 21 MA's), (24, 38152), (35, 38209), (45, 38254), (54, 38299),

Gene: Mudpuppy_52 Start: 38242, Stop: 38436, Start Num: 31
Candidate Starts for Mudpuppy_52:
(Start: 31 @38242 has 22 MA's), (57, 38368),

Gene: NiceHouse_187 Start: 105087, Stop: 105269, Start Num: 34
Candidate Starts for NiceHouse_187:
(Start: 34 @105087 has 3 MA's), (38, 105102), (46, 105138), (49, 105147), (52, 105162),

Gene: Niobe_56 Start: 39544, Stop: 39729, Start Num: 31

Candidate Starts for Niobe_56:
(Start: 31 @39544 has 22 MA's),

Gene: Nitro_58 Start: 40465, Stop: 40653, Start Num: 31
Candidate Starts for Nitro_58:
(Start: 31 @40465 has 22 MA's),

Gene: Nova53_185 Start: 97990, Stop: 98160, Start Num: 37
Candidate Starts for Nova53_185:
(Start: 34 @97978 has 3 MA's), (Start: 37 @97990 has 3 MA's), (49, 98038), (52, 98053), (57, 98083),

Gene: ObiToo_61 Start: 39721, Stop: 39915, Start Num: 32
Candidate Starts for ObiToo_61:
(Start: 32 @39721 has 10 MA's), (57, 39847), (59, 39874),

Gene: OmniCritical_54 Start: 37949, Stop: 38188, Start Num: 22
Candidate Starts for OmniCritical_54:
(Start: 21 @37946 has 1 MA's), (Start: 22 @37949 has 21 MA's), (24, 37961), (35, 38018), (45, 38063),
(54, 38108),

Gene: Origami_58 Start: 39163, Stop: 39309, Start Num: 39
Candidate Starts for Origami_58:
(Start: 27 @39121 has 2 MA's), (Start: 39 @39163 has 3 MA's), (54, 39241),

Gene: PandaPo_57 Start: 37207, Stop: 37359, Start Num: 36
Candidate Starts for PandaPo_57:
(Start: 36 @37207 has 7 MA's),

Gene: Patt_52 Start: 37217, Stop: 37456, Start Num: 22
Candidate Starts for Patt_52:
(Start: 22 @37217 has 21 MA's), (35, 37286),

Gene: Phives_59 Start: 40511, Stop: 40693, Start Num: 31
Candidate Starts for Phives_59:
(5, 40142), (Start: 31 @40511 has 22 MA's),

Gene: Pixelle_57 Start: 40947, Stop: 41132, Start Num: 31
Candidate Starts for Pixelle_57:
(6, 40599), (Start: 31 @40947 has 22 MA's),

Gene: Powerpuff_57 Start: 39483, Stop: 39683, Start Num: 30
Candidate Starts for Powerpuff_57:
(Start: 30 @39483 has 7 MA's), (57, 39615),

Gene: Pumpkins_54 Start: 39127, Stop: 39321, Start Num: 32
Candidate Starts for Pumpkins_54:
(Start: 32 @39127 has 10 MA's),

Gene: Qhanda_57 Start: 37977, Stop: 38216, Start Num: 22
Candidate Starts for Qhanda_57:
(Start: 21 @37974 has 1 MA's), (Start: 22 @37977 has 21 MA's), (24, 37989), (35, 38046), (45, 38091),
(54, 38136),

Gene: Reedo_54 Start: 36267, Stop: 36416, Start Num: 36

Candidate Starts for Reedo_54:

(Start: 36 @36267 has 7 MA's), (54, 36342),

Gene: Reptar3000_53 Start: 37205, Stop: 37444, Start Num: 22

Candidate Starts for Reptar3000_53:

(Start: 22 @37205 has 21 MA's), (35, 37274),

Gene: Ruthiejr_56 Start: 38011, Stop: 38250, Start Num: 22

Candidate Starts for Ruthiejr_56:

(Start: 21 @38008 has 1 MA's), (Start: 22 @38011 has 21 MA's), (24, 38023), (35, 38080), (45, 38125), (54, 38170),

Gene: SamScheppers_53 Start: 38440, Stop: 38679, Start Num: 22

Candidate Starts for SamScheppers_53:

(Start: 21 @38437 has 1 MA's), (Start: 22 @38440 has 21 MA's), (24, 38452), (35, 38509), (45, 38554), (54, 38599),

Gene: Schaffner_55 Start: 38968, Stop: 39162, Start Num: 32

Candidate Starts for Schaffner_55:

(12, 38773), (Start: 32 @38968 has 10 MA's),

Gene: ShakeltOph_60 Start: 40141, Stop: 40287, Start Num: 39

Candidate Starts for ShakeltOph_60:

(Start: 39 @40141 has 3 MA's), (54, 40219),

Gene: Sidious_47 Start: 36440, Stop: 36616, Start Num: 33

Candidate Starts for Sidious_47:

(Start: 33 @36440 has 2 MA's), (53, 36527),

Gene: Simpson_57 Start: 38386, Stop: 38586, Start Num: 30

Candidate Starts for Simpson_57:

(2, 37837), (Start: 30 @38386 has 7 MA's), (57, 38518),

Gene: Skelbel_57 Start: 39544, Stop: 39729, Start Num: 31

Candidate Starts for Skelbel_57:

(Start: 31 @39544 has 22 MA's),

Gene: Slarp_55 Start: 37968, Stop: 38207, Start Num: 22

Candidate Starts for Slarp_55:

(Start: 21 @37965 has 1 MA's), (Start: 22 @37968 has 21 MA's), (24, 37980), (35, 38037), (45, 38082), (54, 38127),

Gene: Snek_57 Start: 37403, Stop: 37558, Start Num: 36

Candidate Starts for Snek_57:

(Start: 36 @37403 has 7 MA's), (60, 37541),

Gene: Soondubu_51 Start: 41018, Stop: 41170, Start Num: 40

Candidate Starts for Soondubu_51:

(Start: 40 @41018 has 1 MA's), (51, 41060), (60, 41150),

Gene: Subaru_56 Start: 39303, Stop: 39485, Start Num: 31

Candidate Starts for Subaru_56:

(11, 39096), (Start: 31 @39303 has 22 MA's),

Gene: Sue2_54 Start: 38086, Stop: 38286, Start Num: 26

Candidate Starts for Sue2_54:

(9, 37828), (Start: 26 @38086 has 1 MA's), (Start: 36 @38131 has 7 MA's), (Start: 40 @38143 has 1 MA's),

Gene: Tallboi_56 Start: 39686, Stop: 39874, Start Num: 30

Candidate Starts for Tallboi_56:

(Start: 30 @39686 has 7 MA's),

Gene: Taquito_55 Start: 38293, Stop: 38535, Start Num: 21

Candidate Starts for Taquito_55:

(Start: 21 @38293 has 1 MA's), (Start: 22 @38296 has 21 MA's), (24, 38308), (35, 38365), (45, 38410), (54, 38455),

Gene: Tbone_55 Start: 38934, Stop: 39128, Start Num: 31

Candidate Starts for Tbone_55:

(Start: 31 @38934 has 22 MA's), (57, 39060),

Gene: TforTroy_57 Start: 39052, Stop: 39246, Start Num: 32

Candidate Starts for TforTroy_57:

(12, 38854), (Start: 32 @39052 has 10 MA's), (57, 39178),

Gene: ThursdayNight_58 Start: 39681, Stop: 39881, Start Num: 30

Candidate Starts for ThursdayNight_58:

(Start: 30 @39681 has 7 MA's), (60, 39864),

Gene: Tian_56 Start: 40845, Stop: 41030, Start Num: 31

Candidate Starts for Tian_56:

(Start: 31 @40845 has 22 MA's),

Gene: Trina_197 Start: 106567, Stop: 106749, Start Num: 34

Candidate Starts for Trina_197:

(Start: 34 @106567 has 3 MA's), (41, 106591), (49, 106627), (52, 106642), (60, 106720),

Gene: Tuck_58 Start: 40300, Stop: 40482, Start Num: 31

Candidate Starts for Tuck_58:

(Start: 31 @40300 has 22 MA's),

Gene: Turab_53 Start: 37635, Stop: 37826, Start Num: 30

Candidate Starts for Turab_53:

(7, 37329), (Start: 30 @37635 has 7 MA's),

Gene: Tutumahutu_56 Start: 38356, Stop: 38553, Start Num: 31

Candidate Starts for Tutumahutu_56:

(Start: 31 @38356 has 22 MA's), (57, 38485),

Gene: Tweety19_58 Start: 37403, Stop: 37558, Start Num: 36

Candidate Starts for Tweety19_58:

(Start: 36 @37403 has 7 MA's), (60, 37541),

Gene: VResidence_55 Start: 37492, Stop: 37677, Start Num: 31

Candidate Starts for VResidence_55:

(Start: 31 @37492 has 22 MA's),

Gene: VroomVroom_56 Start: 39271, Stop: 39462, Start Num: 27

Candidate Starts for VroomVroom_56:

(3, 38755), (10, 39007), (17, 39190), (Start: 27 @39271 has 2 MA's), (Start: 39 @39316 has 3 MA's), (54, 39394), (58, 39427),

Gene: Warda_56 Start: 38671, Stop: 38853, Start Num: 31

Candidate Starts for Warda_56:

(Start: 31 @38671 has 22 MA's),

Gene: WaterT_74 Start: 43421, Stop: 43254, Start Num: 34

Candidate Starts for WaterT_74:

(18, 43508), (Start: 34 @43421 has 3 MA's), (43, 43391), (44, 43382), (56, 43319), (59, 43289), (60, 43268),

Gene: Wildwest_53 Start: 38260, Stop: 38493, Start Num: 19

Candidate Starts for Wildwest_53:

(Start: 19 @38260 has 1 MA's),

Gene: Wintermute_55 Start: 38198, Stop: 38437, Start Num: 22

Candidate Starts for Wintermute_55:

(Start: 21 @38195 has 1 MA's), (Start: 22 @38198 has 21 MA's), (24, 38210), (35, 38267), (45, 38312), (54, 38357),

Gene: Y10_54 Start: 38120, Stop: 38359, Start Num: 22

Candidate Starts for Y10_54:

(Start: 21 @38117 has 1 MA's), (Start: 22 @38120 has 21 MA's), (24, 38132), (35, 38189), (45, 38234), (54, 38279),

Gene: Y2_54 Start: 38120, Stop: 38359, Start Num: 22

Candidate Starts for Y2_54:

(Start: 21 @38117 has 1 MA's), (Start: 22 @38120 has 21 MA's), (24, 38132), (35, 38189), (45, 38234), (54, 38279),

Gene: Yang_57 Start: 39052, Stop: 39246, Start Num: 32

Candidate Starts for Yang_57:

(Start: 32 @39052 has 10 MA's), (60, 39226),

Gene: YasnayaPolyana_55 Start: 38051, Stop: 38290, Start Num: 22

Candidate Starts for YasnayaPolyana_55:

(Start: 21 @38048 has 1 MA's), (Start: 22 @38051 has 21 MA's), (24, 38063), (35, 38120), (45, 38165), (54, 38210),

Gene: YesChef_55 Start: 38342, Stop: 38542, Start Num: 30

Candidate Starts for YesChef_55:

(Start: 30 @38342 has 7 MA's), (57, 38474),