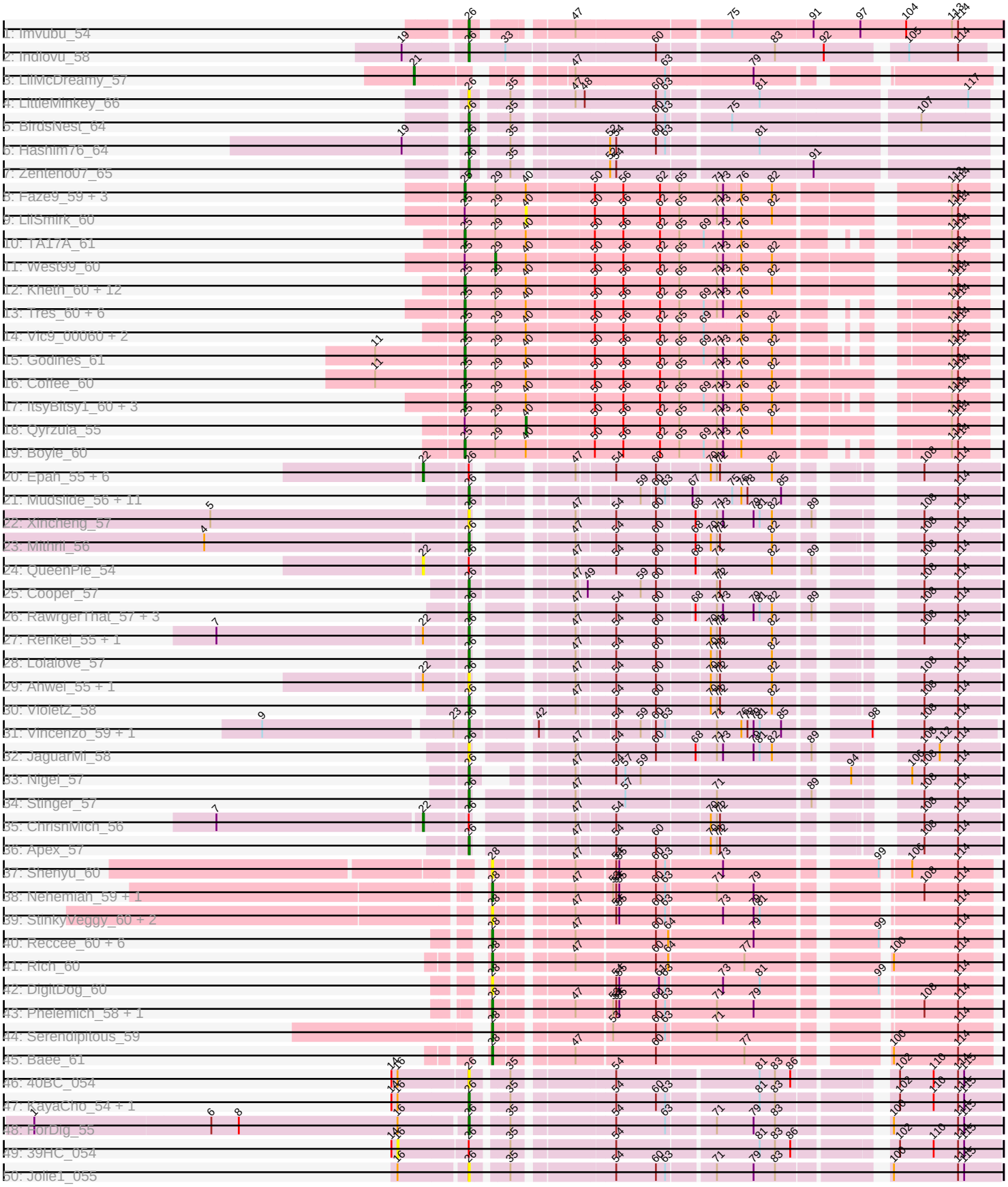
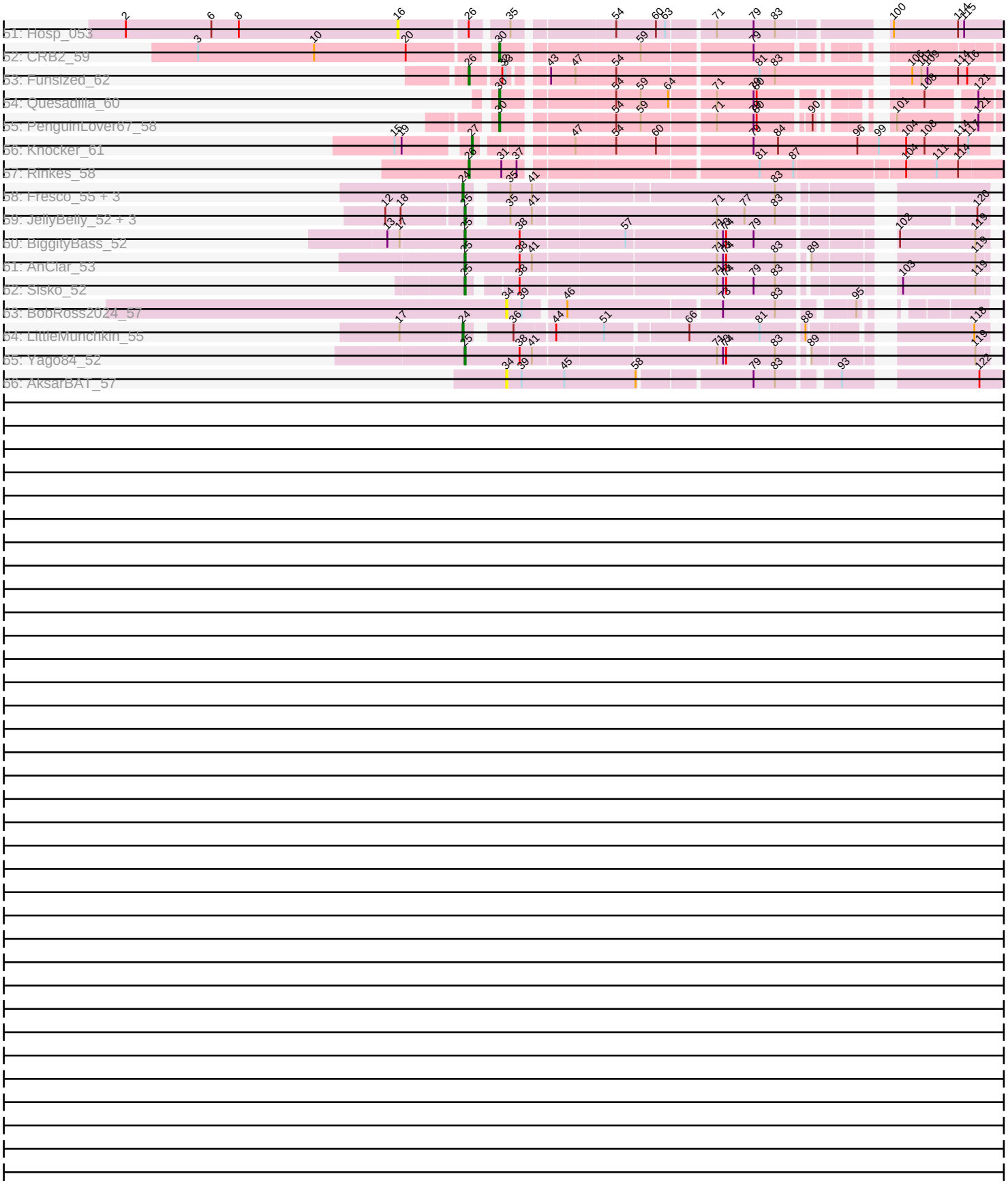
Pham 345496


1: Imvubu_54
2: Indlovu_58
3: LilMcDreamy_57
4: LittleMinkey_66
5: BirdsNest_64
6: Hashim76_64
7: Zenteno07_65
8: Faze9_59 + 3
9: LilSmirk_60
10: TA17A_61
11: West99_60
12: Kheth_60 + 12
13: Tres_60 + 6
14: Vic9_00060 + 2
15: Godines_61
16: Coffee_60
17: ItsyBitsy1_60 + 3
18: Qyrzula_55
19: Boyle_60
20: Epan_55 + 6
21: Mudslide_56 + 11
22: Xincheng_57
23: Mithri_56
24: QueenPie_54
25: Cooper_57
26: RawrgerThat_57 + 3
27: Renkei_55 + 1
28: Lolalove_57
29: Anwei_55 + 1
30: VioletZ_58
31: Vincenzo_59 + 1
32: JaguarMI_58
33: Nigel_57
34: Stinger_57
35: ChrisnMich_56
36: Apex_57
37: Shenyu_60
38: Nehemiah_59 + 1
39: StinkyVeggy_60 + 2
40: Reccee_60 + 6
41: Rich_60
42: DigitDog_60
43: Phelemich_58 + 1
44: Serendipitous_59
45: Baee_61
46: 40BC_054
47: KayaCho_54 + 1
48: HorDig_55
49: 39HC_054
50: Jolie1_055

Pham 345496


51: Hosp_053
52: CRB2_59
53: Funsized_62
54: Quesadilla_60
55: PenguinLover67_58
56: Knocker_61
57: Rinkes_58
58: Fresco_55 + 3
59: JellyBelly_52 + 3
60: BiggityBass_52
61: AnClar_53
62: Sisko_52
63: BobRoss2024_57
64: LittleMunchkin_55
65: Yago84_52
66: AksarBAT_57

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 345496 Report

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

Pham number 345496 has 132 members, 30 are drafts.

Phages represented in each track:
- Track 1 : Imvubu_54
- Track 2 : Indlovu_58
- Track 3 : LilMcDreamy_57
- Track 4 : LittleMinkey_66
- Track 5 : BirdsNest_64
- Track 6 : Hashim76_64
- Track 7 : Zenteno07_65
- Track 8 : Faze9_59, Allegro_60, Blocker23_60, Phantasmagoria_60
- Track 9 : LilSmirk_60
- Track 10 : TA17A_61
- Track 11 : West99_60
- Track 12 : Kheth_60, Ares_60, Glass_60, Calamitous_60, Lars_60, Bananafish_60, Kolhan_60, Lephleur_60, FrenchFry_60, Opia_60, LizLemon_60, Arbiter_59, Holeinone_60
- Track 13 : Tres_60, Brownie5_60, Rhinoforte_60, Sabella_59, Hedgerow_60, Rosebush_59, Tinciduntsolum_61
- Track 14 : Vic9_00060, MasterPo_60, Laurie_60
- Track 15 : Godines_61
- Track 16 : Coffee_60
- Track 17 : ItsyBitsy1_60, Eaglehorse_60, Kaleb_60, PrinceCharming_60
- Track 18 : Qyrzula_55
- Track 19 : Boyle_60
- Track 20 : Epah_55, Hally898_55, GinPorsche_56, Antihero_55, Lambano_55, Poster_55, JAMaL_56
- Track 21 : Mudslide_56, JoyceMaria_56, Frederick_57, Zemanar_57, Waleliano_56, Hangman_56, BrownCNA_58, BobbyK_57, Heath_55, Prince_56, Austelle_57, Hydro_56
- Track 22 : Xincheng_57
- Track 23 : Mithril_56
- Track 24 : QueenPie_54
- Track 25 : Cooper_57
- Track 26 : RawrgerThat_57, Fanaw_55, Fortunato_57, Magpie_55
- Track 27 : Renkei_55, LittleDigger_55
- Track 28 : Lolalove_57
- Track 29 : Ahwei_55, Nanao_55
- Track 30 : VioletZ_58
- Track 31 : Vincenzo_59, AlanGrant_60

• Track 32 : JaguarMi_58
• Track 33 : Nigel_57
• Track 34 : Stinger_57
• Track 35 : ChrisnMich_56
• Track 36 : Apex_57
• Track 37 : Shenyu_60
• Track 38 : Nehemiah_59, Mysterious_58
• Track 39 : StinkyVeggy_60, KarasumaRum_60, Nangang_60
• Track 40 : Reccee_60, EastView9101_59, SirJeffery_59, Suigeneris_61, Acadian_60, Donny_61, Rita130_59
• Track 41 : Rich_60
• Track 42 : DigitDog_60
• Track 43 : Phelemich_58, Reprobate_59
• Track 44 : Serendipitous_59
• Track 45 : Baee_61
• Track 46 : 40BC_054
• Track 47 : KayaCho_54, Minnow_57
• Track 48 : ForDig_55
• Track 49 : 39HC_054
• Track 50 : Jolie1_055
• Track 51 : Hosp_053
• Track 52 : CRB2_59
• Track 53 : Funsized_62
• Track 54 : Quesadilla_60
• Track 55 : PenguinLover67_58
• Track 56 : Knocker_61
• Track 57 : Rinkes_58
• Track 58 : Fresco_55, Axumite_55, Shatter_55, Ligma_55
• Track 59 : JellyBelly_52, CharlottesWeb_53, Coco2012_53, Mariokart_53
• Track 60 : BiggityBass_52
• Track 61 : AnClar_53
• Track 62 : Sisko_52
• Track 63 : BobRoss2024_57
• Track 64 : LittleMunchkin_55
• Track 65 : Yago84_52
• Track 66 : AksarBAT_57

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

The start number called the most often in the published annotations is 25, it was called in 41 of the 102 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Allegro_60, AnClar_53, Arbiter_59, Ares_60, Bananafish_60, BiggityBass_52, Blocker23_60, Boyle_60, Brownie5_60, Calamitous_60, CharlottesWeb_53, Coco2012_53, Coffee_60, Eaglehorse_60, Faze9_59, FrenchFry_60, Glass_60, Godines_61, Hedgerow_60, Holeinone_60, ItsyBitsy1_60, JellyBelly_52, Kaleb_60, Kheth_60, Kolhan_60, Lars_60, Laurie_60, Lephleur_60, LizLemon_60, Mariokart_53, MasterPo_60, Opia_60, Phantasmagoria_60, PrinceCharming_60, Rhinoforte_60, Rosebush_59, Sabella_59, Sisko_52, TA17A_61, Tinciduntsolum_61,

Tres_60, Vic9_00060, Yago84_52,

Genes that have the "Most Annotated" start but do not call it:
• LilSmirk_60, Qyrzula_55, West99_60,

Genes that do not have the "Most Annotated" start:
• 39HC_054, 40BC_054, Acadian_60, Ahwei_55, AksarBAT_57, AlanGrant_60, Antihero_55, Apex_57, Austelle_57, Axumite_55, Baee_61, BirdsNest_64, BobRoss2024_57, BobbyK_57, BrownCNA_58, CRB2_59, ChrisnMich_56, Cooper_57, DigitDog_60, Donny_61, EastView9101_59, Epah_55, Fanaw_55, ForDig_55, Fortunato_57, Frederick_57, Fresco_55, Funsized_62, GinPorsche_56, Hally898_55, Hangman_56, Hashim76_64, Heath_55, Hosp_053, Hydro_56, Imvubu_54, Indlovu_58, JAMaL_56, JaguarMi_58, Jolie1_055, JoyceMaria_56, KarasumaRum_60, KayaCho_54, Knocker_61, Lambano_55, Ligma_55, LilMcDreamy_57, LittleDigger_55, LittleMinkey_66, LittleMunchkin_55, Lolalove_57, Magpie_55, Minnow_57, Mithril_56, Mudslide_56, Mysterious_58, Nanao_55, Nangang_60, Nehemiah_59, Nigel_57, PenguinLover67_58, Phelemich_58, Poster_55, Prince_56, QueenPie_54, Quesadilla_60, RawrgerThat_57, Reccee_60, Renkei_55, Reprobate_59, Rich_60, Rinkes_58, Rita130_59, Serendipitous_59, Shatter_55, Shenyu_60, SirJeffery_59, Stinger_57, StinkyVeggy_60, Suigeneris_61, Vincenzo_59, VioletZ_58, Waleliano_56, Xincheng_57, Zemanar_57, Zenteno07_65,

Summary by start number:

Start 16:
• Found in 7 of 132 (5.3%) of genes in pham
• No Manual Annotations of this start.
• Called 28.6% of time when present
• Phage (with cluster) where this start called: 39HC_054 (B6), Hosp_053 (B6),

Start 21:
• Found in 1 of 132 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LilMcDreamy_57 (B12),

Start 22:
• Found in 13 of 132 (9.8%) of genes in pham
• Manual Annotations of this start: 3 of 102
• Called 69.2% of time when present
• Phage (with cluster) where this start called: Antihero_55 (B4), ChrisnMich_56 (B4), Epah_55 (B4), GinPorsche_56 (B4), Hally898_55 (B4), JAMaL_56 (B4), Lambano_55 (B4), Poster_55 (B4), QueenPie_54 (B4),

Start 24:
• Found in 5 of 132 (3.8%) of genes in pham
• Manual Annotations of this start: 5 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Axumite_55 (DR), Fresco_55 (DR), Ligma_55 (DR), LittleMunchkin_55 (DR), Shatter_55 (DR),

Start 25:
• Found in 46 of 132 (34.8%) of genes in pham

• Manual Annotations of this start: 41 of 102
• Called 93.5% of time when present
• Phage (with cluster) where this start called: Allegro_60 (B2), AnClar_53 (DR), Arbiter_59 (B2), Ares_60 (B2), Bananafish_60 (B2), BiggityBass_52 (DR), Blocker23_60 (B2), Boyle_60 (B2), Brownie5_60 (B2), Calamitous_60 (B2), CharlottesWeb_53 (DR), Coco2012_53 (DR), Coffee_60 (B2), Eaglehorse_60 (B2), Faze9_59 (B2), FrenchFry_60 (B2), Glass_60 (B2), Godines_61 (B2), Hedgerow_60 (B2), Holeinone_60 (B2), ItsyBitsy1_60 (B2), JellyBelly_52 (DR), Kaleb_60 (B2), Kheth_60 (B2), Kolhan_60 (B2), Lars_60 (B2), Laurie_60 (B2), Lephleur_60 (B2), LizLemon_60 (B2), Mariokart_53 (DR), MasterPo_60 (B2), Opia_60 (B2), Phantasmagoria_60 (B2), PrinceCharming_60 (B2), Rhinoforte_60 (B2), Rosebush_59 (B2), Sabella_59 (B2), Sisko_52 (DR), TA17A_61 (B2), Tinciduntsolum_61 (B2), Tres_60 (B2), Vic9_00060 (B2), Yago84_52 (DR),

Start 26:
• Found in 55 of 132 (41.7%) of genes in pham
• Manual Annotations of this start: 35 of 102
• Called 80.0% of time when present
• Phage (with cluster) where this start called: 40BC_054 (B6), Ahwei_55 (B4), AlanGrant_60 (B4), Apex_57 (B4), Austelle_57 (B4), BirdsNest_64 (B13), BobbyK_57 (B4), BrownCNA_58 (B4), Cooper_57 (B4), Fanaw_55 (B4), ForDig_55 (B6), Fortunato_57 (B4), Frederick_57 (B4), Funsized_62 (B9), Hangman_56 (B4), Hashim76_64 (B13), Heath_55 (B4), Hydro_56 (B4), Imvubu_54 (B10), Indlovu_58 (B11), JaguarMi_58 (B4), Jolie1_055 (B6), JoyceMaria_56 (B4), KayaCho_54 (B6), LittleDigger_55 (B4), LittleMinkey_66 (B13), Lolalove_57 (B4), Magpie_55 (B4), Minnow_57 (B6), Mithril_56 (B4), Mudslide_56 (B4), Nanao_55 (B4), Nigel_57 (B4), Prince_56 (B4), RawrgerThat_57 (B4), Renkei_55 (B4), Rinkes_58 (B9), Stinger_57 (B4), Vincenzo_59 (B4), VioletZ_58 (B4), Waleliano_56 (B4), Xincheng_57 (B4), Zemanar_57 (B4), Zenteno07_65 (B13),

Start 27:
• Found in 1 of 132 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Knocker_61 (B9),

Start 28:
• Found in 19 of 132 (14.4%) of genes in pham
• Manual Annotations of this start: 11 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acadian_60 (B5), Baee_61 (B5), DigitDog_60 (B5), Donny_61 (B5), EastView9101_59 (B5), KarasumaRum_60 (B5), Mysterious_58 (B5), Nangang_60 (B5), Nehemiah_59 (B5), Phelemich_58 (B5), Reccee_60 (B5), Reprobate_59 (B5), Rich_60 (B5), Rita130_59 (B5), Serendipitous_59 (B5), Shenyu_60 (B5), SirJeffery_59 (B5), StinkyVeggy_60 (B5), Suigeneris_61 (B5),

Start 29:
• Found in 38 of 132 (28.8%) of genes in pham
• Manual Annotations of this start: 1 of 102
• Called 2.6% of time when present
• Phage (with cluster) where this start called: West99_60 (B2),

Start 30:
• Found in 3 of 132 (2.3%) of genes in pham
• Manual Annotations of this start: 3 of 102
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CRB2_59 (B9), PenguinLover67_58 (B9), Quesadilla_60 (B9),

Start 34:
• Found in 2 of 132 (1.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AksarBAT_57 (DR), BobRoss2024_57 (DR),

Start 40:
• Found in 38 of 132 (28.8%) of genes in pham
• Manual Annotations of this start: 1 of 102
• Called 5.3% of time when present
• Phage (with cluster) where this start called: LilSmirk_60 (B2), Qyrzula_55 (B2),

Summary by clusters:

There are 10 clusters represented in this pham: B10, B4, B5, B6, B12, B13, B2, B11, DR, B9,

Info for manual annotations of cluster B10:
•Start number 26 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:
•Start number 26 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:
•Start number 21 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:
•Start number 26 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B2:
•Start number 25 was manually annotated 35 times for cluster B2.
•Start number 29 was manually annotated 1 time for cluster B2.
•Start number 40 was manually annotated 1 time for cluster B2.

Info for manual annotations of cluster B4:
•Start number 22 was manually annotated 3 times for cluster B4.
•Start number 26 was manually annotated 26 times for cluster B4.

Info for manual annotations of cluster B5:
•Start number 28 was manually annotated 11 times for cluster B5.

Info for manual annotations of cluster B6:
•Start number 26 was manually annotated 2 times for cluster B6.

Info for manual annotations of cluster B9:

•Start number 26 was manually annotated 2 times for cluster B9.
•Start number 27 was manually annotated 1 time for cluster B9.
•Start number 30 was manually annotated 3 times for cluster B9.

Info for manual annotations of cluster DR:
•Start number 24 was manually annotated 5 times for cluster DR.
•Start number 25 was manually annotated 6 times for cluster DR.

Gene Information:

Gene: 39HC_054 Start: 53638, Stop: 53117, Start Num: 16
Candidate Starts for 39HC_054:
(14, 53644), (16, 53638), (Start: 26 @53572 has 35 MA's), (35, 53542), (54, 53455), (81, 53323), (83, 53308), (86, 53293), (102, 53215), (110, 53182), (114, 53158), (115, 53152),

Gene: 40BC_054 Start: 53572, Stop: 53117, Start Num: 26
Candidate Starts for 40BC_054:
(14, 53644), (16, 53638), (Start: 26 @53572 has 35 MA's), (35, 53542), (54, 53455), (81, 53323), (83, 53308), (86, 53293), (102, 53215), (110, 53182), (114, 53158), (115, 53152),

Gene: Acadian_60 Start: 55536, Stop: 55105, Start Num: 28
Candidate Starts for Acadian_60:
(Start: 28 @55536 has 11 MA's), (47, 55470), (60, 55395), (64, 55383), (79, 55302), (99, 55200), (114, 55137),

Gene: Ahwei_55 Start: 54713, Stop: 54285, Start Num: 26
Candidate Starts for Ahwei_55:
(Start: 22 @54752 has 3 MA's), (Start: 26 @54713 has 35 MA's), (47, 54635), (54, 54602), (60, 54563), (70, 54515), (71, 54509), (72, 54506), (82, 54455), (108, 54356), (114, 54323),

Gene: AksarBAT_57 Start: 48900, Stop: 48469, Start Num: 34
Candidate Starts for AksarBAT_57:
(34, 48900), (39, 48885), (45, 48843), (58, 48774), (79, 48672), (83, 48651), (93, 48600), (122, 48489),

Gene: AlanGrant_60 Start: 56832, Stop: 56401, Start Num: 26
Candidate Starts for AlanGrant_60:
(9, 57021), (23, 56844), (Start: 26 @56832 has 35 MA's), (42, 56778), (54, 56718), (59, 56694), (60, 56682), (63, 56673), (71, 56628), (76, 56604), (78, 56598), (79, 56592), (81, 56586), (85, 56565), (98, 56496), (108, 56469), (114, 56436),

Gene: Allegro_60 Start: 53809, Stop: 53339, Start Num: 25
Candidate Starts for Allegro_60:
(Start: 25 @53809 has 41 MA's), (Start: 29 @53779 has 1 MA's), (Start: 40 @53749 has 1 MA's), (50, 53686), (56, 53659), (62, 53623), (65, 53605), (71, 53569), (73, 53563), (76, 53548), (82, 53518), (113, 53374), (114, 53368),

Gene: AnClar_53 Start: 49207, Stop: 48746, Start Num: 25
Candidate Starts for AnClar_53:
(Start: 25 @49207 has 41 MA's), (38, 49153), (41, 49141), (71, 48967), (73, 48961), (74, 48958), (83, 48910), (89, 48886), (119, 48757),

Gene: Antihero_55 Start: 54750, Stop: 54283, Start Num: 22
Candidate Starts for Antihero_55:
(Start: 22 @54750 has 3 MA's), (Start: 26 @54711 has 35 MA's), (47, 54633), (54, 54600), (60, 54561), (70, 54513), (71, 54507), (72, 54504), (82, 54453), (108, 54354), (114, 54321),

Gene: Apex_57 Start: 55933, Stop: 55505, Start Num: 26
Candidate Starts for Apex_57:
(Start: 26 @55933 has 35 MA's), (47, 55855), (54, 55822), (60, 55783), (70, 55735), (71, 55729), (72, 55726), (108, 55576), (114, 55543),

Gene: Arbiter_59 Start: 53921, Stop: 53451, Start Num: 25
Candidate Starts for Arbiter_59:
(Start: 25 @53921 has 41 MA's), (Start: 29 @53891 has 1 MA's), (Start: 40 @53861 has 1 MA's), (50, 53798), (56, 53771), (62, 53735), (65, 53717), (71, 53681), (73, 53675), (76, 53660), (82, 53630), (113, 53486), (114, 53480),

Gene: Ares_60 Start: 53890, Stop: 53420, Start Num: 25
Candidate Starts for Ares_60:
(Start: 25 @53890 has 41 MA's), (Start: 29 @53860 has 1 MA's), (Start: 40 @53830 has 1 MA's), (50, 53767), (56, 53740), (62, 53704), (65, 53686), (71, 53650), (73, 53644), (76, 53629), (82, 53599), (113, 53455), (114, 53449),

Gene: Austelle_57 Start: 56389, Stop: 55958, Start Num: 26
Candidate Starts for Austelle_57:
(Start: 26 @56389 has 35 MA's), (59, 56254), (60, 56242), (63, 56233), (67, 56209), (75, 56173), (76, 56164), (78, 56158), (85, 56125), (114, 55996),

Gene: Axumite_55 Start: 47477, Stop: 47031, Start Num: 24
Candidate Starts for Axumite_55:
(Start: 24 @47477 has 5 MA's), (35, 47447), (41, 47426), (83, 47204),

Gene: Baee_61 Start: 56597, Stop: 56163, Start Num: 28
Candidate Starts for Baee_61:
(Start: 28 @56597 has 11 MA's), (47, 56531), (60, 56456), (77, 56372), (100, 56258), (114, 56195),

Gene: Bananafish_60 Start: 53821, Stop: 53351, Start Num: 25
Candidate Starts for Bananafish_60:
(Start: 25 @53821 has 41 MA's), (Start: 29 @53791 has 1 MA's), (Start: 40 @53761 has 1 MA's), (50, 53698), (56, 53671), (62, 53635), (65, 53617), (71, 53581), (73, 53575), (76, 53560), (82, 53530), (113, 53386), (114, 53380),

Gene: BiggityBass_52 Start: 48551, Stop: 48084, Start Num: 25
Candidate Starts for BiggityBass_52:
(13, 48623), (17, 48611), (Start: 25 @48551 has 41 MA's), (38, 48497), (57, 48398), (71, 48311), (73, 48305), (74, 48302), (79, 48275), (102, 48167), (119, 48095),

Gene: BirdsNest_64 Start: 55434, Stop: 54970, Start Num: 26
Candidate Starts for BirdsNest_64:
(Start: 26 @55434 has 35 MA's), (35, 55404), (60, 55275), (63, 55266), (75, 55209), (107, 55035),

Gene: Blocker23_60 Start: 53931, Stop: 53461, Start Num: 25
Candidate Starts for Blocker23_60:

(Start: 25 @53931 has 41 MA's), (Start: 29 @53901 has 1 MA's), (Start: 40 @53871 has 1 MA's), (50, 53808), (56, 53781), (62, 53745), (65, 53727), (71, 53691), (73, 53685), (76, 53670), (82, 53640), (113, 53496), (114, 53490),

Gene: BobRoss2024_57 Start: 48242, Stop: 47850, Start Num: 34
Candidate Starts for BobRoss2024_57:
(34, 48242), (39, 48227), (46, 48191), (73, 48047), (83, 47996), (95, 47933),

Gene: BobbyK_57 Start: 55699, Stop: 55268, Start Num: 26
Candidate Starts for BobbyK_57:
(Start: 26 @55699 has 35 MA's), (59, 55564), (60, 55552), (63, 55543), (67, 55519), (75, 55483), (76, 55474), (78, 55468), (85, 55435), (114, 55306),

Gene: Boyle_60 Start: 53930, Stop: 53490, Start Num: 25
Candidate Starts for Boyle_60:
(Start: 25 @53930 has 41 MA's), (Start: 29 @53900 has 1 MA's), (Start: 40 @53870 has 1 MA's), (50, 53807), (56, 53780), (62, 53744), (65, 53726), (69, 53702), (71, 53690), (73, 53684), (76, 53669), (113, 53525), (114, 53519),

Gene: BrownCNA_58 Start: 56056, Stop: 55625, Start Num: 26
Candidate Starts for BrownCNA_58:
(Start: 26 @56056 has 35 MA's), (59, 55921), (60, 55909), (63, 55900), (67, 55876), (75, 55840), (76, 55831), (78, 55825), (85, 55792), (114, 55663),

Gene: Brownie5_60 Start: 53940, Stop: 53500, Start Num: 25
Candidate Starts for Brownie5_60:
(Start: 25 @53940 has 41 MA's), (Start: 29 @53910 has 1 MA's), (Start: 40 @53880 has 1 MA's), (50, 53817), (56, 53790), (62, 53754), (65, 53736), (69, 53712), (71, 53700), (73, 53694), (76, 53679), (113, 53535), (114, 53529),

Gene: CRB2_59 Start: 56619, Stop: 56215, Start Num: 30
Candidate Starts for CRB2_59:
(3, 56895), (10, 56781), (20, 56691), (Start: 30 @56619 has 3 MA's), (59, 56499), (79, 56397),

Gene: Calamitous_60 Start: 53820, Stop: 53350, Start Num: 25
Candidate Starts for Calamitous_60:
(Start: 25 @53820 has 41 MA's), (Start: 29 @53790 has 1 MA's), (Start: 40 @53760 has 1 MA's), (50, 53697), (56, 53670), (62, 53634), (65, 53616), (71, 53580), (73, 53574), (76, 53559), (82, 53529), (113, 53385), (114, 53379),

Gene: CharlottesWeb_53 Start: 46544, Stop: 46098, Start Num: 25
Candidate Starts for CharlottesWeb_53:
(12, 46616), (18, 46601), (Start: 25 @46544 has 41 MA's), (35, 46514), (41, 46493), (71, 46322), (77, 46295), (83, 46265), (120, 46109),

Gene: ChrisnMich_56 Start: 54764, Stop: 54297, Start Num: 22
Candidate Starts for ChrisnMich_56:
(7, 54962), (Start: 22 @54764 has 3 MA's), (Start: 26 @54725 has 35 MA's), (47, 54647), (54, 54614), (70, 54527), (71, 54521), (72, 54518), (108, 54368), (114, 54335),

Gene: Coco2012_53 Start: 46536, Stop: 46090, Start Num: 25
Candidate Starts for Coco2012_53:

(12, 46608), (18, 46593), (Start: 25 @46536 has 41 MA's), (35, 46506), (41, 46485), (71, 46314), (77, 46287), (83, 46257), (120, 46101),

Gene: Coffee_60 Start: 53932, Stop: 53462, Start Num: 25
Candidate Starts for Coffee_60:
(11, 54016), (Start: 25 @53932 has 41 MA's), (Start: 29 @53902 has 1 MA's), (Start: 40 @53872 has 1 MA's), (50, 53809), (56, 53782), (62, 53746), (65, 53728), (71, 53692), (73, 53686), (76, 53671), (82, 53641), (113, 53497), (114, 53491),

Gene: Cooper_57 Start: 54888, Stop: 54442, Start Num: 26
Candidate Starts for Cooper_57:
(Start: 26 @54888 has 35 MA's), (47, 54801), (49, 54792), (59, 54741), (60, 54726), (71, 54672), (72, 54669), (108, 54513), (114, 54480),

Gene: DigitDog_60 Start: 55479, Stop: 55048, Start Num: 28
Candidate Starts for DigitDog_60:
(Start: 28 @55479 has 11 MA's), (54, 55377), (55, 55374), (61, 55335), (63, 55329), (73, 55275), (81, 55239), (99, 55143), (114, 55080),

Gene: Donny_61 Start: 55582, Stop: 55151, Start Num: 28
Candidate Starts for Donny_61:
(Start: 28 @55582 has 11 MA's), (47, 55516), (60, 55441), (64, 55429), (79, 55348), (99, 55246), (114, 55183),

Gene: Eaglehorse_60 Start: 53852, Stop: 53400, Start Num: 25
Candidate Starts for Eaglehorse_60:
(Start: 25 @53852 has 41 MA's), (Start: 29 @53822 has 1 MA's), (Start: 40 @53792 has 1 MA's), (50, 53729), (56, 53702), (62, 53666), (65, 53648), (69, 53624), (71, 53612), (73, 53606), (76, 53591), (82, 53561), (113, 53435), (114, 53429),

Gene: EastView9101_59 Start: 55391, Stop: 54960, Start Num: 28
Candidate Starts for EastView9101_59:
(Start: 28 @55391 has 11 MA's), (47, 55325), (60, 55250), (64, 55238), (79, 55157), (99, 55055), (114, 54992),

Gene: Epah_55 Start: 54750, Stop: 54283, Start Num: 22
Candidate Starts for Epah_55:
(Start: 22 @54750 has 3 MA's), (Start: 26 @54711 has 35 MA's), (47, 54633), (54, 54600), (60, 54561), (70, 54513), (71, 54507), (72, 54504), (82, 54453), (108, 54354), (114, 54321),

Gene: Fanaw_55 Start: 55608, Stop: 55174, Start Num: 26
Candidate Starts for Fanaw_55:
(Start: 26 @55608 has 35 MA's), (47, 55530), (54, 55494), (60, 55455), (68, 55419), (71, 55401), (73, 55395), (79, 55365), (81, 55359), (82, 55347), (89, 55314), (108, 55245), (114, 55212),

Gene: Faze9_59 Start: 53955, Stop: 53485, Start Num: 25
Candidate Starts for Faze9_59:
(Start: 25 @53955 has 41 MA's), (Start: 29 @53925 has 1 MA's), (Start: 40 @53895 has 1 MA's), (50, 53832), (56, 53805), (62, 53769), (65, 53751), (71, 53715), (73, 53709), (76, 53694), (82, 53664), (113, 53520), (114, 53514),

Gene: ForDig_55 Start: 53897, Stop: 53439, Start Num: 26
Candidate Starts for ForDig_55:

(1, 54314), (6, 54143), (8, 54116), (16, 53960), (Start: 26 @53897 has 35 MA's), (35, 53867), (54, 53780), (63, 53732), (71, 53690), (79, 53654), (83, 53633), (100, 53543), (114, 53480), (115, 53474),

Gene: Fortunato_57 Start: 55748, Stop: 55314, Start Num: 26
Candidate Starts for Fortunato_57:
(Start: 26 @55748 has 35 MA's), (47, 55670), (54, 55634), (60, 55595), (68, 55559), (71, 55541), (73, 55535), (79, 55505), (81, 55499), (82, 55487), (89, 55454), (108, 55385), (114, 55352),

Gene: Frederick_57 Start: 55642, Stop: 55211, Start Num: 26
Candidate Starts for Frederick_57:
(Start: 26 @55642 has 35 MA's), (59, 55507), (60, 55495), (63, 55486), (67, 55462), (75, 55426), (76, 55417), (78, 55411), (85, 55378), (114, 55249),

Gene: FrenchFry_60 Start: 53931, Stop: 53461, Start Num: 25
Candidate Starts for FrenchFry_60:
(Start: 25 @53931 has 41 MA's), (Start: 29 @53901 has 1 MA's), (Start: 40 @53871 has 1 MA's), (50, 53808), (56, 53781), (62, 53745), (65, 53727), (71, 53691), (73, 53685), (76, 53670), (82, 53640), (113, 53496), (114, 53490),

Gene: Fresco_55 Start: 47477, Stop: 47031, Start Num: 24
Candidate Starts for Fresco_55:
(Start: 24 @47477 has 5 MA's), (35, 47447), (41, 47426), (83, 47204),

Gene: Funsized_62 Start: 57679, Stop: 57218, Start Num: 26
Candidate Starts for Funsized_62:
(Start: 26 @57679 has 35 MA's), (32, 57652), (33, 57649), (43, 57622), (47, 57598), (54, 57562), (81, 57430), (83, 57415), (106, 57298), (107, 57289), (109, 57283), (114, 57253), (116, 57244),

Gene: GinPorsche_56 Start: 54750, Stop: 54283, Start Num: 22
Candidate Starts for GinPorsche_56:
(Start: 22 @54750 has 3 MA's), (Start: 26 @54711 has 35 MA's), (47, 54633), (54, 54600), (60, 54561), (70, 54513), (71, 54507), (72, 54504), (82, 54453), (108, 54354), (114, 54321),

Gene: Glass_60 Start: 53933, Stop: 53463, Start Num: 25
Candidate Starts for Glass_60:
(Start: 25 @53933 has 41 MA's), (Start: 29 @53903 has 1 MA's), (Start: 40 @53873 has 1 MA's), (50, 53810), (56, 53783), (62, 53747), (65, 53729), (71, 53693), (73, 53687), (76, 53672), (82, 53642), (113, 53498), (114, 53492),

Gene: Godines_61 Start: 54198, Stop: 53746, Start Num: 25
Candidate Starts for Godines_61:
(11, 54282), (Start: 25 @54198 has 41 MA's), (Start: 29 @54168 has 1 MA's), (Start: 40 @54138 has 1 MA's), (50, 54075), (56, 54048), (62, 54012), (65, 53994), (69, 53970), (71, 53958), (73, 53952), (76, 53937), (82, 53907), (113, 53781), (114, 53775),

Gene: Hally898_55 Start: 54765, Stop: 54298, Start Num: 22
Candidate Starts for Hally898_55:
(Start: 22 @54765 has 3 MA's), (Start: 26 @54726 has 35 MA's), (47, 54648), (54, 54615), (60, 54576), (70, 54528), (71, 54522), (72, 54519), (82, 54468), (108, 54369), (114, 54336),

Gene: Hangman_56 Start: 55799, Stop: 55368, Start Num: 26
Candidate Starts for Hangman_56:

(Start: 26 @55799 has 35 MA's), (59, 55664), (60, 55652), (63, 55643), (67, 55619), (75, 55583), (76, 55574), (78, 55568), (85, 55535), (114, 55406),

Gene: Hashim76_64 Start: 55719, Stop: 55258, Start Num: 26
Candidate Starts for Hashim76_64:
(19, 55770), (Start: 26 @55719 has 35 MA's), (35, 55689), (52, 55608), (54, 55602), (60, 55563), (63, 55554), (81, 55470),

Gene: Heath_55 Start: 55425, Stop: 54994, Start Num: 26
Candidate Starts for Heath_55:
(Start: 26 @55425 has 35 MA's), (59, 55290), (60, 55278), (63, 55269), (67, 55245), (75, 55209), (76, 55200), (78, 55194), (85, 55161), (114, 55032),

Gene: Hedgerow_60 Start: 53915, Stop: 53475, Start Num: 25
Candidate Starts for Hedgerow_60:
(Start: 25 @53915 has 41 MA's), (Start: 29 @53885 has 1 MA's), (Start: 40 @53855 has 1 MA's), (50, 53792), (56, 53765), (62, 53729), (65, 53711), (69, 53687), (71, 53675), (73, 53669), (76, 53654), (113, 53510), (114, 53504),

Gene: Holeinone_60 Start: 53787, Stop: 53317, Start Num: 25
Candidate Starts for Holeinone_60:
(Start: 25 @53787 has 41 MA's), (Start: 29 @53757 has 1 MA's), (Start: 40 @53727 has 1 MA's), (50, 53664), (56, 53637), (62, 53601), (65, 53583), (71, 53547), (73, 53541), (76, 53526), (82, 53496), (113, 53352), (114, 53346),

Gene: Hosp_053 Start: 52031, Stop: 51510, Start Num: 16
Candidate Starts for Hosp_053:
(2, 52298), (6, 52214), (8, 52187), (16, 52031), (Start: 26 @51968 has 35 MA's), (35, 51938), (54, 51851), (60, 51812), (63, 51803), (71, 51761), (79, 51725), (83, 51704), (100, 51614), (114, 51551), (115, 51545),

Gene: Hydro_56 Start: 55776, Stop: 55345, Start Num: 26
Candidate Starts for Hydro_56:
(Start: 26 @55776 has 35 MA's), (59, 55641), (60, 55629), (63, 55620), (67, 55596), (75, 55560), (76, 55551), (78, 55545), (85, 55512), (114, 55383),

Gene: Imvubu_54 Start: 53064, Stop: 52585, Start Num: 26
Candidate Starts for Imvubu_54:
(Start: 26 @53064 has 35 MA's), (47, 52989), (75, 52848), (91, 52770), (97, 52725), (104, 52680), (113, 52635), (114, 52629),

Gene: Indlovu_58 Start: 55544, Stop: 55074, Start Num: 26
Candidate Starts for Indlovu_58:
(19, 55601), (Start: 26 @55544 has 35 MA's), (33, 55508), (60, 55370), (83, 55262), (92, 55214), (105, 55148), (114, 55100),

Gene: ItsyBitsy1_60 Start: 54065, Stop: 53613, Start Num: 25
Candidate Starts for ItsyBitsy1_60:
(Start: 25 @54065 has 41 MA's), (Start: 29 @54035 has 1 MA's), (Start: 40 @54005 has 1 MA's), (50, 53942), (56, 53915), (62, 53879), (65, 53861), (69, 53837), (71, 53825), (73, 53819), (76, 53804), (82, 53774), (113, 53648), (114, 53642),

Gene: JAMaL_56 Start: 55857, Stop: 55390, Start Num: 22

Candidate Starts for JAMaL_56:
(Start: 22 @55857 has 3 MA's), (Start: 26 @55818 has 35 MA's), (47, 55740), (54, 55707), (60, 55668), (70, 55620), (71, 55614), (72, 55611), (82, 55560), (108, 55461), (114, 55428),

Gene: JaguarMi_58 Start: 56843, Stop: 56409, Start Num: 26
Candidate Starts for JaguarMi_58:
(Start: 26 @56843 has 35 MA's), (47, 56765), (54, 56729), (60, 56690), (68, 56654), (71, 56636), (73, 56630), (79, 56600), (81, 56594), (82, 56582), (89, 56549), (108, 56480), (112, 56465), (114, 56447),

Gene: JellyBelly_52 Start: 46542, Stop: 46096, Start Num: 25
Candidate Starts for JellyBelly_52:
(12, 46614), (18, 46599), (Start: 25 @46542 has 41 MA's), (35, 46512), (41, 46491), (71, 46320), (77, 46293), (83, 46263), (120, 46107),

Gene: Jolie1_055 Start: 53868, Stop: 53410, Start Num: 26
Candidate Starts for Jolie1_055:
(16, 53931), (Start: 26 @53868 has 35 MA's), (35, 53838), (54, 53751), (60, 53712), (63, 53703), (71, 53661), (79, 53625), (83, 53604), (100, 53514), (114, 53451), (115, 53445),

Gene: JoyceMaria_56 Start: 55679, Stop: 55248, Start Num: 26
Candidate Starts for JoyceMaria_56:
(Start: 26 @55679 has 35 MA's), (59, 55544), (60, 55532), (63, 55523), (67, 55499), (75, 55463), (76, 55454), (78, 55448), (85, 55415), (114, 55286),

Gene: Kaleb_60 Start: 53939, Stop: 53499, Start Num: 25
Candidate Starts for Kaleb_60:
(Start: 25 @53939 has 41 MA's), (Start: 29 @53909 has 1 MA's), (Start: 40 @53879 has 1 MA's), (50, 53816), (56, 53789), (62, 53753), (65, 53735), (69, 53711), (71, 53699), (73, 53693), (76, 53678), (82, 53648), (113, 53534), (114, 53528),

Gene: KarasumaRum_60 Start: 55658, Stop: 55227, Start Num: 28
Candidate Starts for KarasumaRum_60:
(Start: 28 @55658 has 11 MA's), (47, 55592), (54, 55556), (55, 55553), (60, 55517), (63, 55508), (73, 55454), (79, 55424), (81, 55418), (114, 55259),

Gene: KayaCho_54 Start: 53811, Stop: 53356, Start Num: 26
Candidate Starts for KayaCho_54:
(14, 53886), (16, 53880), (Start: 26 @53811 has 35 MA's), (35, 53781), (54, 53694), (60, 53655), (63, 53646), (81, 53562), (83, 53547), (102, 53454), (110, 53421), (114, 53397), (115, 53391),

Gene: Kheth_60 Start: 53852, Stop: 53382, Start Num: 25
Candidate Starts for Kheth_60:
(Start: 25 @53852 has 41 MA's), (Start: 29 @53822 has 1 MA's), (Start: 40 @53792 has 1 MA's), (50, 53729), (56, 53702), (62, 53666), (65, 53648), (71, 53612), (73, 53606), (76, 53591), (82, 53561), (113, 53417), (114, 53411),

Gene: Knocker_61 Start: 57083, Stop: 56619, Start Num: 27
Candidate Starts for Knocker_61:
(15, 57143), (19, 57137), (Start: 27 @57083 has 1 MA's), (47, 57011), (54, 56975), (60, 56936), (79, 56849), (84, 56825), (96, 56747), (99, 56726), (104, 56699), (108, 56681), (114, 56648), (117, 56639),

Gene: Kolhan_60 Start: 53819, Stop: 53349, Start Num: 25
Candidate Starts for Kolhan_60:

(Start: 25 @53819 has 41 MA's), (Start: 29 @53789 has 1 MA's), (Start: 40 @53759 has 1 MA's), (50, 53696), (56, 53669), (62, 53633), (65, 53615), (71, 53579), (73, 53573), (76, 53558), (82, 53528), (113, 53384), (114, 53378),

Gene: Lambano_55 Start: 54765, Stop: 54298, Start Num: 22
Candidate Starts for Lambano_55:
(Start: 22 @54765 has 3 MA's), (Start: 26 @54726 has 35 MA's), (47, 54648), (54, 54615), (60, 54576), (70, 54528), (71, 54522), (72, 54519), (82, 54468), (108, 54369), (114, 54336),

Gene: Lars_60 Start: 53917, Stop: 53447, Start Num: 25
Candidate Starts for Lars_60:
(Start: 25 @53917 has 41 MA's), (Start: 29 @53887 has 1 MA's), (Start: 40 @53857 has 1 MA's), (50, 53794), (56, 53767), (62, 53731), (65, 53713), (71, 53677), (73, 53671), (76, 53656), (82, 53626), (113, 53482), (114, 53476),

Gene: Laurie_60 Start: 53614, Stop: 53174, Start Num: 25
Candidate Starts for Laurie_60:
(Start: 25 @53614 has 41 MA's), (Start: 29 @53584 has 1 MA's), (Start: 40 @53554 has 1 MA's), (50, 53491), (56, 53464), (62, 53428), (65, 53410), (69, 53386), (76, 53353), (82, 53323), (113, 53209), (114, 53203),

Gene: Lephleur_60 Start: 53826, Stop: 53356, Start Num: 25
Candidate Starts for Lephleur_60:
(Start: 25 @53826 has 41 MA's), (Start: 29 @53796 has 1 MA's), (Start: 40 @53766 has 1 MA's), (50, 53703), (56, 53676), (62, 53640), (65, 53622), (71, 53586), (73, 53580), (76, 53565), (82, 53535), (113, 53391), (114, 53385),

Gene: Ligma_55 Start: 47477, Stop: 47031, Start Num: 24
Candidate Starts for Ligma_55:
(Start: 24 @47477 has 5 MA's), (35, 47447), (41, 47426), (83, 47204),

Gene: LilMcDreamy_57 Start: 54942, Stop: 54460, Start Num: 21
Candidate Starts for LilMcDreamy_57:
(Start: 21 @54942 has 1 MA's), (47, 54825), (63, 54738), (79, 54657),

Gene: LilSmirk_60 Start: 53760, Stop: 53350, Start Num: 40
Candidate Starts for LilSmirk_60:
(Start: 25 @53820 has 41 MA's), (Start: 29 @53790 has 1 MA's), (Start: 40 @53760 has 1 MA's), (50, 53697), (56, 53670), (62, 53634), (65, 53616), (71, 53580), (73, 53574), (76, 53559), (82, 53529), (113, 53385), (114, 53379),

Gene: LittleDigger_55 Start: 54736, Stop: 54308, Start Num: 26
Candidate Starts for LittleDigger_55:
(7, 54973), (Start: 22 @54775 has 3 MA's), (Start: 26 @54736 has 35 MA's), (47, 54658), (54, 54625), (60, 54586), (70, 54538), (71, 54532), (72, 54529), (82, 54478), (108, 54379), (114, 54346),

Gene: LittleMinkey_66 Start: 55495, Stop: 55031, Start Num: 26
Candidate Starts for LittleMinkey_66:
(Start: 26 @55495 has 35 MA's), (35, 55465), (47, 55414), (48, 55405), (60, 55336), (63, 55327), (81, 55243), (117, 55051),

Gene: LittleMunchkin_55 Start: 49817, Stop: 49383, Start Num: 24
Candidate Starts for LittleMunchkin_55:

(17, 49877), (Start: 24 @49817 has 5 MA's), (36, 49784), (44, 49748), (51, 49706), (66, 49631), (81, 49562), (88, 49523), (118, 49397),

Gene: LizLemon_60 Start: 53942, Stop: 53472, Start Num: 25
Candidate Starts for LizLemon_60:
(Start: 25 @53942 has 41 MA's), (Start: 29 @53912 has 1 MA's), (Start: 40 @53882 has 1 MA's), (50, 53819), (56, 53792), (62, 53756), (65, 53738), (71, 53702), (73, 53696), (76, 53681), (82, 53651), (113, 53507), (114, 53501),

Gene: Lolalove_57 Start: 55756, Stop: 55328, Start Num: 26
Candidate Starts for Lolalove_57:
(Start: 26 @55756 has 35 MA's), (47, 55678), (54, 55645), (60, 55606), (70, 55558), (71, 55552), (72, 55549), (82, 55498), (114, 55366),

Gene: Magpie_55 Start: 55681, Stop: 55247, Start Num: 26
Candidate Starts for Magpie_55:
(Start: 26 @55681 has 35 MA's), (47, 55603), (54, 55567), (60, 55528), (68, 55492), (71, 55474), (73, 55468), (79, 55438), (81, 55432), (82, 55420), (89, 55387), (108, 55318), (114, 55285),

Gene: Mariokart_53 Start: 46830, Stop: 46384, Start Num: 25
Candidate Starts for Mariokart_53:
(12, 46902), (18, 46887), (Start: 25 @46830 has 41 MA's), (35, 46800), (41, 46779), (71, 46608), (77, 46581), (83, 46551), (120, 46395),

Gene: MasterPo_60 Start: 53808, Stop: 53368, Start Num: 25
Candidate Starts for MasterPo_60:
(Start: 25 @53808 has 41 MA's), (Start: 29 @53778 has 1 MA's), (Start: 40 @53748 has 1 MA's), (50, 53685), (56, 53658), (62, 53622), (65, 53604), (69, 53580), (76, 53547), (82, 53517), (113, 53403), (114, 53397),

Gene: Minnow_57 Start: 53944, Stop: 53489, Start Num: 26
Candidate Starts for Minnow_57:
(14, 54019), (16, 54013), (Start: 26 @53944 has 35 MA's), (35, 53914), (54, 53827), (60, 53788), (63, 53779), (81, 53695), (83, 53680), (102, 53587), (110, 53554), (114, 53530), (115, 53524),

Gene: Mithril_56 Start: 55751, Stop: 55323, Start Num: 26
Candidate Starts for Mithril_56:
(4, 56000), (Start: 26 @55751 has 35 MA's), (47, 55673), (54, 55640), (60, 55601), (68, 55565), (70, 55553), (71, 55547), (72, 55544), (82, 55493), (108, 55394), (114, 55361),

Gene: Mudslide_56 Start: 56021, Stop: 55590, Start Num: 26
Candidate Starts for Mudslide_56:
(Start: 26 @56021 has 35 MA's), (59, 55886), (60, 55874), (63, 55865), (67, 55841), (75, 55805), (76, 55796), (78, 55790), (85, 55757), (114, 55628),

Gene: Mysterious_58 Start: 55658, Stop: 55227, Start Num: 28
Candidate Starts for Mysterious_58:
(Start: 28 @55658 has 11 MA's), (47, 55592), (53, 55559), (54, 55556), (55, 55553), (60, 55517), (63, 55508), (71, 55460), (79, 55424), (108, 55292), (114, 55259),

Gene: Nanao_55 Start: 54716, Stop: 54288, Start Num: 26
Candidate Starts for Nanao_55:

(Start: 22 @54755 has 3 MA's), (Start: 26 @54716 has 35 MA's), (47, 54638), (54, 54605), (60, 54566), (70, 54518), (71, 54512), (72, 54509), (82, 54458), (108, 54359), (114, 54326),

Gene: Nangang_60 Start: 55837, Stop: 55406, Start Num: 28
Candidate Starts for Nangang_60:
(Start: 28 @55837 has 11 MA's), (47, 55771), (54, 55735), (55, 55732), (60, 55696), (63, 55687), (73, 55633), (79, 55603), (81, 55597), (114, 55438),

Gene: Nehemiah_59 Start: 55658, Stop: 55227, Start Num: 28
Candidate Starts for Nehemiah_59:
(Start: 28 @55658 has 11 MA's), (47, 55592), (53, 55559), (54, 55556), (55, 55553), (60, 55517), (63, 55508), (71, 55460), (79, 55424), (108, 55292), (114, 55259),

Gene: Nigel_57 Start: 55086, Stop: 54667, Start Num: 26
Candidate Starts for Nigel_57:
(Start: 26 @55086 has 35 MA's), (47, 55023), (54, 54987), (57, 54978), (59, 54963), (94, 54783), (106, 54750), (108, 54738), (114, 54705),

Gene: Opia_60 Start: 53832, Stop: 53362, Start Num: 25
Candidate Starts for Opia_60:
(Start: 25 @53832 has 41 MA's), (Start: 29 @53802 has 1 MA's), (Start: 40 @53772 has 1 MA's), (50, 53709), (56, 53682), (62, 53646), (65, 53628), (71, 53592), (73, 53586), (76, 53571), (82, 53541), (113, 53397), (114, 53391),

Gene: PenguinLover67_58 Start: 55676, Stop: 55281, Start Num: 30
Candidate Starts for PenguinLover67_58:
(Start: 30 @55676 has 3 MA's), (54, 55580), (59, 55556), (71, 55490), (79, 55454), (80, 55451), (90, 55406), (101, 55367), (121, 55298),

Gene: Phantasmagoria_60 Start: 53830, Stop: 53360, Start Num: 25
Candidate Starts for Phantasmagoria_60:
(Start: 25 @53830 has 41 MA's), (Start: 29 @53800 has 1 MA's), (Start: 40 @53770 has 1 MA's), (50, 53707), (56, 53680), (62, 53644), (65, 53626), (71, 53590), (73, 53584), (76, 53569), (82, 53539), (113, 53395), (114, 53389),

Gene: Phelemich_58 Start: 55654, Stop: 55223, Start Num: 28
Candidate Starts for Phelemich_58:
(Start: 28 @55654 has 11 MA's), (47, 55588), (53, 55555), (54, 55552), (55, 55549), (60, 55513), (63, 55504), (71, 55456), (79, 55420), (108, 55288), (114, 55255),

Gene: Poster_55 Start: 54756, Stop: 54289, Start Num: 22
Candidate Starts for Poster_55:
(Start: 22 @54756 has 3 MA's), (Start: 26 @54717 has 35 MA's), (47, 54639), (54, 54606), (60, 54567), (70, 54519), (71, 54513), (72, 54510), (82, 54459), (108, 54360), (114, 54327),

Gene: Prince_56 Start: 55934, Stop: 55503, Start Num: 26
Candidate Starts for Prince_56:
(Start: 26 @55934 has 35 MA's), (59, 55799), (60, 55787), (63, 55778), (67, 55754), (75, 55718), (76, 55709), (78, 55703), (85, 55670), (114, 55541),

Gene: PrinceCharming_60 Start: 53908, Stop: 53456, Start Num: 25
Candidate Starts for PrinceCharming_60:

(Start: 25 @53908 has 41 MA's), (Start: 29 @53878 has 1 MA's), (Start: 40 @53848 has 1 MA's), (50, 53785), (56, 53758), (62, 53722), (65, 53704), (69, 53680), (71, 53668), (73, 53662), (76, 53647), (82, 53617), (113, 53491), (114, 53485),

Gene: QueenPie_54 Start: 55489, Stop: 55007, Start Num: 22
Candidate Starts for QueenPie_54:
(Start: 22 @55489 has 3 MA's), (Start: 26 @55450 has 35 MA's), (47, 55363), (54, 55327), (60, 55288), (68, 55252), (71, 55234), (82, 55180), (89, 55147), (108, 55078), (114, 55045),

Gene: Quesadilla_60 Start: 55946, Stop: 55548, Start Num: 30
Candidate Starts for Quesadilla_60:
(Start: 30 @55946 has 3 MA's), (54, 55850), (59, 55826), (64, 55799), (71, 55760), (79, 55724), (80, 55721), (108, 55607), (121, 55565),

Gene: Qyrzula_55 Start: 53883, Stop: 53473, Start Num: 40
Candidate Starts for Qyrzula_55:
(Start: 25 @53943 has 41 MA's), (Start: 29 @53913 has 1 MA's), (Start: 40 @53883 has 1 MA's), (50, 53820), (56, 53793), (62, 53757), (65, 53739), (71, 53703), (73, 53697), (76, 53682), (82, 53652), (113, 53508), (114, 53502),

Gene: RawrgerThat_57 Start: 55774, Stop: 55343, Start Num: 26
Candidate Starts for RawrgerThat_57:
(Start: 26 @55774 has 35 MA's), (47, 55696), (54, 55660), (60, 55621), (68, 55588), (71, 55570), (73, 55564), (79, 55534), (81, 55528), (82, 55516), (89, 55483), (108, 55414), (114, 55381),

Gene: Reccee_60 Start: 55665, Stop: 55234, Start Num: 28
Candidate Starts for Reccee_60:
(Start: 28 @55665 has 11 MA's), (47, 55599), (60, 55524), (64, 55512), (79, 55431), (99, 55329), (114, 55266),

Gene: Renkei_55 Start: 54730, Stop: 54302, Start Num: 26
Candidate Starts for Renkei_55:
(7, 54967), (Start: 22 @54769 has 3 MA's), (Start: 26 @54730 has 35 MA's), (47, 54652), (54, 54619), (60, 54580), (70, 54532), (71, 54526), (72, 54523), (82, 54472), (108, 54373), (114, 54340),

Gene: Reprobate_59 Start: 55659, Stop: 55228, Start Num: 28
Candidate Starts for Reprobate_59:
(Start: 28 @55659 has 11 MA's), (47, 55593), (53, 55560), (54, 55557), (55, 55554), (60, 55518), (63, 55509), (71, 55461), (79, 55425), (108, 55293), (114, 55260),

Gene: Rhinoforte_60 Start: 53909, Stop: 53469, Start Num: 25
Candidate Starts for Rhinoforte_60:
(Start: 25 @53909 has 41 MA's), (Start: 29 @53879 has 1 MA's), (Start: 40 @53849 has 1 MA's), (50, 53786), (56, 53759), (62, 53723), (65, 53705), (69, 53681), (71, 53669), (73, 53663), (76, 53648), (113, 53504), (114, 53498),

Gene: Rich_60 Start: 56869, Stop: 56435, Start Num: 28
Candidate Starts for Rich_60:
(Start: 28 @56869 has 11 MA's), (47, 56803), (60, 56728), (64, 56716), (77, 56644), (100, 56530), (114, 56467),

Gene: Rinkes_58 Start: 55585, Stop: 55103, Start Num: 26
Candidate Starts for Rinkes_58:

(Start: 26 @55585 has 35 MA's), (31, 55555), (37, 55540), (81, 55330), (87, 55297), (104, 55195), (111, 55165), (114, 55144),

Gene: Rita130_59 Start: 55478, Stop: 55047, Start Num: 28
Candidate Starts for Rita130_59:
(Start: 28 @55478 has 11 MA's), (47, 55412), (60, 55337), (64, 55325), (79, 55244), (99, 55142), (114, 55079),

Gene: Rosebush_59 Start: 53936, Stop: 53496, Start Num: 25
Candidate Starts for Rosebush_59:
(Start: 25 @53936 has 41 MA's), (Start: 29 @53906 has 1 MA's), (Start: 40 @53876 has 1 MA's), (50, 53813), (56, 53786), (62, 53750), (65, 53732), (69, 53708), (71, 53696), (73, 53690), (76, 53675), (113, 53531), (114, 53525),

Gene: Sabella_59 Start: 53772, Stop: 53332, Start Num: 25
Candidate Starts for Sabella_59:
(Start: 25 @53772 has 41 MA's), (Start: 29 @53742 has 1 MA's), (Start: 40 @53712 has 1 MA's), (50, 53649), (56, 53622), (62, 53586), (65, 53568), (69, 53544), (71, 53532), (73, 53526), (76, 53511), (113, 53367), (114, 53361),

Gene: Serendipitous_59 Start: 55249, Stop: 54818, Start Num: 28
Candidate Starts for Serendipitous_59:
(Start: 28 @55249 has 11 MA's), (53, 55150), (60, 55108), (63, 55099), (71, 55051), (114, 54850),

Gene: Shatter_55 Start: 47477, Stop: 47031, Start Num: 24
Candidate Starts for Shatter_55:
(Start: 24 @47477 has 5 MA's), (35, 47447), (41, 47426), (83, 47204),

Gene: Shenyu_60 Start: 55861, Stop: 55430, Start Num: 28
Candidate Starts for Shenyu_60:
(Start: 28 @55861 has 11 MA's), (47, 55795), (54, 55759), (55, 55756), (60, 55720), (63, 55711), (73, 55657), (99, 55525), (106, 55507), (114, 55462),

Gene: SirJeffery_59 Start: 55613, Stop: 55182, Start Num: 28
Candidate Starts for SirJeffery_59:
(Start: 28 @55613 has 11 MA's), (47, 55547), (60, 55472), (64, 55460), (79, 55379), (99, 55277), (114, 55214),

Gene: Sisko_52 Start: 47195, Stop: 46749, Start Num: 25
Candidate Starts for Sisko_52:
(Start: 25 @47195 has 41 MA's), (38, 47156), (71, 46970), (73, 46964), (74, 46961), (79, 46934), (83, 46913), (103, 46829), (119, 46760),

Gene: Stinger_57 Start: 54647, Stop: 54213, Start Num: 26
Candidate Starts for Stinger_57:
(Start: 26 @54647 has 35 MA's), (47, 54569), (57, 54524), (71, 54440), (89, 54353), (108, 54284), (114, 54251),

Gene: StinkyVeggy_60 Start: 55658, Stop: 55227, Start Num: 28
Candidate Starts for StinkyVeggy_60:
(Start: 28 @55658 has 11 MA's), (47, 55592), (54, 55556), (55, 55553), (60, 55517), (63, 55508), (73, 55454), (79, 55424), (81, 55418), (114, 55259),

Gene: Suigeneris_61 Start: 55734, Stop: 55303, Start Num: 28
Candidate Starts for Suigeneris_61:
(Start: 28 @55734 has 11 MA's), (47, 55668), (60, 55593), (64, 55581), (79, 55500), (99, 55398), (114, 55335),

Gene: TA17A_61 Start: 53777, Stop: 53337, Start Num: 25
Candidate Starts for TA17A_61:
(Start: 25 @53777 has 41 MA's), (Start: 29 @53747 has 1 MA's), (Start: 40 @53717 has 1 MA's), (50, 53654), (56, 53627), (62, 53591), (65, 53573), (69, 53549), (73, 53531), (76, 53516), (113, 53372), (114, 53366),

Gene: Tinciduntsolum_61 Start: 53939, Stop: 53499, Start Num: 25
Candidate Starts for Tinciduntsolum_61:
(Start: 25 @53939 has 41 MA's), (Start: 29 @53909 has 1 MA's), (Start: 40 @53879 has 1 MA's), (50, 53816), (56, 53789), (62, 53753), (65, 53735), (69, 53711), (71, 53699), (73, 53693), (76, 53678), (113, 53534), (114, 53528),

Gene: Tres_60 Start: 53793, Stop: 53353, Start Num: 25
Candidate Starts for Tres_60:
(Start: 25 @53793 has 41 MA's), (Start: 29 @53763 has 1 MA's), (Start: 40 @53733 has 1 MA's), (50, 53670), (56, 53643), (62, 53607), (65, 53589), (69, 53565), (71, 53553), (73, 53547), (76, 53532), (113, 53388), (114, 53382),

Gene: Vic9_00060 Start: 54638, Stop: 54198, Start Num: 25
Candidate Starts for Vic9_00060:
(Start: 25 @54638 has 41 MA's), (Start: 29 @54608 has 1 MA's), (Start: 40 @54578 has 1 MA's), (50, 54515), (56, 54488), (62, 54452), (65, 54434), (69, 54410), (76, 54377), (82, 54347), (113, 54233), (114, 54227),

Gene: Vincenzo_59 Start: 56862, Stop: 56431, Start Num: 26
Candidate Starts for Vincenzo_59:
(9, 57051), (23, 56874), (Start: 26 @56862 has 35 MA's), (42, 56808), (54, 56748), (59, 56724), (60, 56712), (63, 56703), (71, 56658), (76, 56634), (78, 56628), (79, 56622), (81, 56616), (85, 56595), (98, 56526), (108, 56499), (114, 56466),

Gene: VioletZ_58 Start: 55847, Stop: 55419, Start Num: 26
Candidate Starts for VioletZ_58:
(Start: 26 @55847 has 35 MA's), (47, 55769), (54, 55736), (60, 55697), (70, 55649), (71, 55643), (72, 55640), (82, 55589), (108, 55490), (114, 55457),

Gene: Waleliano_56 Start: 55788, Stop: 55357, Start Num: 26
Candidate Starts for Waleliano_56:
(Start: 26 @55788 has 35 MA's), (59, 55653), (60, 55641), (63, 55632), (67, 55608), (75, 55572), (76, 55563), (78, 55557), (85, 55524), (114, 55395),

Gene: West99_60 Start: 53936, Stop: 53496, Start Num: 29
Candidate Starts for West99_60:
(Start: 25 @53966 has 41 MA's), (Start: 29 @53936 has 1 MA's), (Start: 40 @53906 has 1 MA's), (50, 53843), (56, 53816), (62, 53780), (65, 53762), (71, 53726), (73, 53720), (76, 53705), (82, 53675), (113, 53531), (114, 53525),

Gene: Xincheng_57 Start: 56816, Stop: 56382, Start Num: 26
Candidate Starts for Xincheng_57:

(5, 57065), (Start: 26 @56816 has 35 MA's), (47, 56738), (54, 56702), (60, 56663), (68, 56627), (71, 56609), (73, 56603), (79, 56573), (81, 56567), (82, 56555), (89, 56522), (108, 56453), (114, 56420),

Gene: Yago84_52 Start: 47285, Stop: 46824, Start Num: 25
Candidate Starts for Yago84_52:
(Start: 25 @47285 has 41 MA's), (38, 47231), (41, 47219), (71, 47045), (73, 47039), (74, 47036), (83, 46988), (89, 46964), (119, 46835),

Gene: Zemanar_57 Start: 55620, Stop: 55189, Start Num: 26
Candidate Starts for Zemanar_57:
(Start: 26 @55620 has 35 MA's), (59, 55485), (60, 55473), (63, 55464), (67, 55440), (75, 55404), (76, 55395), (78, 55389), (85, 55356), (114, 55227),

Gene: Zenteno07_65 Start: 55334, Stop: 54873, Start Num: 26
Candidate Starts for Zenteno07_65:
(Start: 26 @55334 has 35 MA's), (35, 55304), (52, 55223), (54, 55217), (91, 55034),