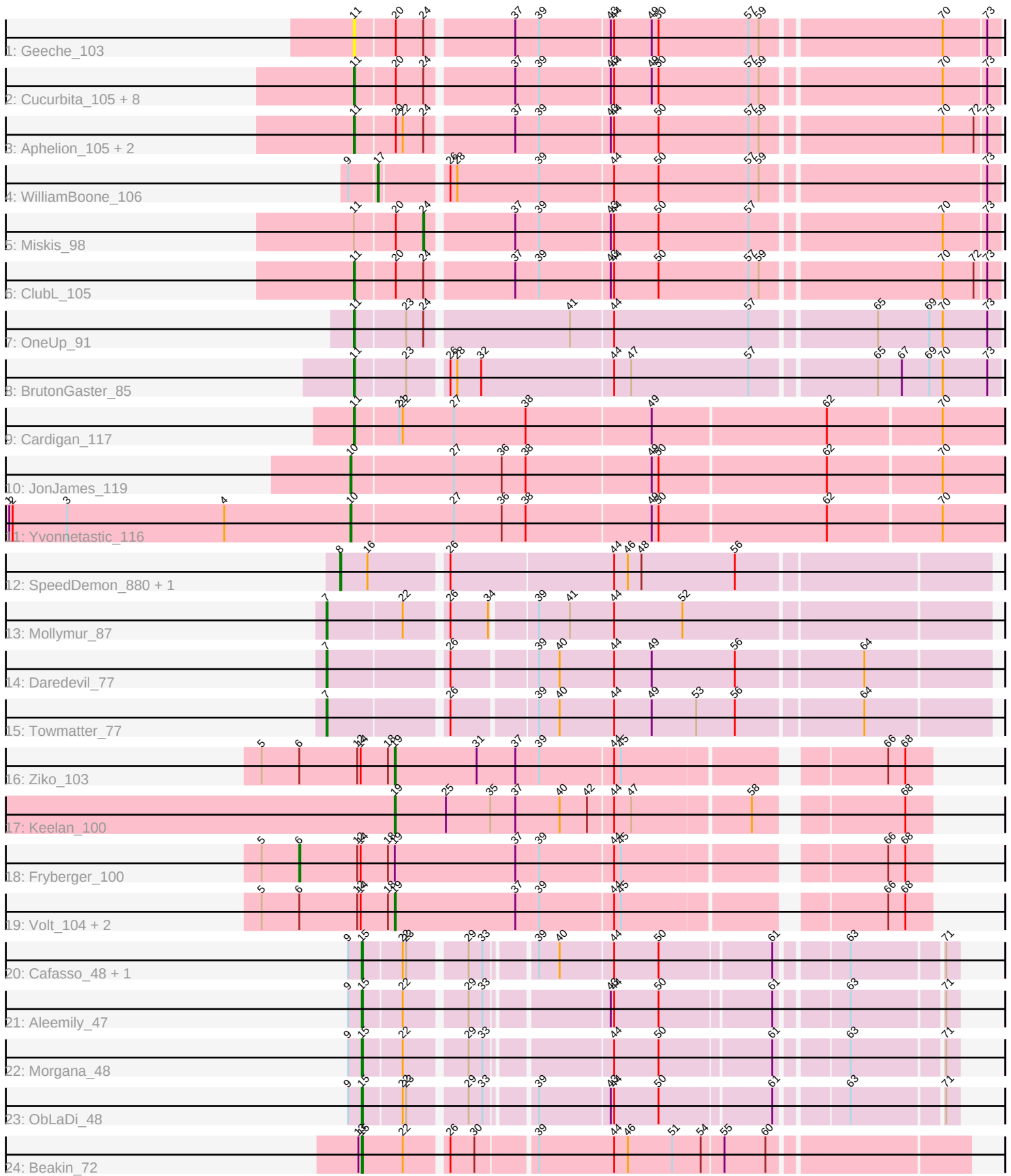


Pham 323438



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 323438 Report

This analysis was run 09/05/26 on database version 662.

Pham number 323438 has 38 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Geeche_103
- Track 2 : Cucurbita_105, Toniann_106, Dusty_102, Bachita_106, PhinkBoden_103, Culver_106, Engineer_105, Smoothie_105, Lozinak_104
- Track 3 : Aphelion_105, Abscondus_103, Norvs_106
- Track 4 : WilliamBoone_106
- Track 5 : Miskis_98
- Track 6 : ClubL_105
- Track 7 : OneUp_91
- Track 8 : BrutonGaster_85
- Track 9 : Cardigan_117
- Track 10 : JonJames_119
- Track 11 : Yvonnetastic_116
- Track 12 : SpeedDemon_880, Bantam_87
- Track 13 : Mollymur_87
- Track 14 : Daredevil_77
- Track 15 : Towmatter_77
- Track 16 : Ziko_103
- Track 17 : Keelan_100
- Track 18 : Fryberger_100
- Track 19 : Volt_104, Guey18_105, Ronaldo_102
- Track 20 : Cafasso_48, ModicumRichard_48
- Track 21 : Aleemily_47
- Track 22 : Morgana_48
- Track 23 : ObLaDi_48
- Track 24 : Beakin_72

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

The start number called the most often in the published annotations is 11, it was called in 16 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus_103, Aphelion_105, Bachita_106, BrutonGaster_85, Cardigan_117, ClubL_105, Cucurbita_105, Culver_106, Dusty_102, Engineer_105, Geeche_103,

Lozinak_104, Norvs_106, OneUp_91, PhinkBoden_103, Smoothie_105, Toniann_106,

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

- Miskis_98,

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

- Aleemily_47, Bantam_87, Beakin_72, Cafasso_48, Daredevil_77, Fryberger_100, Guey18_105, JonJames_119, Keelan_100, ModicumRichard_48, Mollymur_87, Morgana_48, ObLaDi_48, Ronaldo_102, SpeedDemon_880, Towmatter_77, Volt_104, WilliamBoone_106, Yvonnetastic_116, Ziko_103,

Summary by start number:

Start 6:

- Found in 5 of 38 (13.2%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Fryberger_100 (DP),

Start 7:

- Found in 3 of 38 (7.9%) of genes in pham
- Manual Annotations of this start: 3 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daredevil_77 (DL), Mollymur_87 (DL), Towmatter_77 (DL),

Start 8:

- Found in 2 of 38 (5.3%) of genes in pham
- Manual Annotations of this start: 2 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam_87 (DL), SpeedDemon_880 (DL),

Start 10:

- Found in 2 of 38 (5.3%) of genes in pham
- Manual Annotations of this start: 2 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JonJames_119 (DD), Yvonnetastic_116 (DD),

Start 11:

- Found in 18 of 38 (47.4%) of genes in pham
- Manual Annotations of this start: 16 of 37
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Abscondus_103 (CQ1), Aphelion_105 (CQ1), Bachita_106 (CQ1), BrutonGaster_85 (CQ2), Cardigan_117 (DD), ClubL_105 (CQ1), Cucurbita_105 (CQ1), Culver_106 (CQ1), Dusty_102 (CQ1), Engineer_105 (CQ1), Geeche_103 (CQ1), Lozinak_104 (CQ1), Norvs_106 (CQ1), OneUp_91 (CQ2), PhinkBoden_103 (CQ1), Smoothie_105 (CQ1), Toniann_106 (CQ1),

Start 15:

- Found in 6 of 38 (15.8%) of genes in pham

- Manual Annotations of this start: 6 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aleemily_47 (DZ), Beakin_72 (F1), Cafasso_48 (DZ), ModicumRichard_48 (DZ), Morgana_48 (DZ), ObLaDi_48 (DZ),

Start 17:

- Found in 1 of 38 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: WilliamBoone_106 (CQ1),

Start 19:

- Found in 6 of 38 (15.8%) of genes in pham
- Manual Annotations of this start: 5 of 37
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Guey18_105 (DP), Keelan_100 (DP), Ronaldo_102 (DP), Volt_104 (DP), Ziko_103 (DP),

Start 24:

- Found in 16 of 38 (42.1%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Miskis_98 (CQ1),

Summary by clusters:

There are 7 clusters represented in this pham: F1, DL, DD, DZ, CQ2, CQ1, DP,

Info for manual annotations of cluster CQ1:

- Start number 11 was manually annotated 13 times for cluster CQ1.
- Start number 17 was manually annotated 1 time for cluster CQ1.
- Start number 24 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 11 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 10 was manually annotated 2 times for cluster DD.
- Start number 11 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster DL:

- Start number 7 was manually annotated 3 times for cluster DL.
- Start number 8 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster DP:

- Start number 6 was manually annotated 1 time for cluster DP.
- Start number 19 was manually annotated 5 times for cluster DP.

Info for manual annotations of cluster DZ:

- Start number 15 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster F1:

- Start number 15 was manually annotated 1 time for cluster F1.

Gene Information:

Gene: Abscondus_103 Start: 62014, Stop: 62550, Start Num: 11

Candidate Starts for Abscondus_103:

(Start: 11 @62014 has 16 MA's), (20, 62047), (22, 62053), (Start: 24 @62071 has 1 MA's), (37, 62143), (39, 62164), (43, 62224), (44, 62227), (50, 62266), (57, 62344), (59, 62353), (70, 62503), (72, 62530), (73, 62539),

Gene: Aleemily_47 Start: 36490, Stop: 36951, Start Num: 15

Candidate Starts for Aleemily_47:

(9, 36478), (Start: 15 @36490 has 6 MA's), (22, 36523), (29, 36571), (33, 36583), (43, 36679), (44, 36682), (50, 36721), (61, 36811), (63, 36865), (71, 36940),

Gene: Aphelion_105 Start: 63567, Stop: 64103, Start Num: 11

Candidate Starts for Aphelion_105:

(Start: 11 @63567 has 16 MA's), (20, 63600), (22, 63606), (Start: 24 @63624 has 1 MA's), (37, 63696), (39, 63717), (43, 63777), (44, 63780), (50, 63819), (57, 63897), (59, 63906), (70, 64056), (72, 64083), (73, 64092),

Gene: Bachita_106 Start: 63225, Stop: 63761, Start Num: 11

Candidate Starts for Bachita_106:

(Start: 11 @63225 has 16 MA's), (20, 63258), (Start: 24 @63282 has 1 MA's), (37, 63354), (39, 63375), (43, 63435), (44, 63438), (49, 63471), (50, 63477), (57, 63555), (59, 63564), (70, 63714), (73, 63750),

Gene: Bantam_87 Start: 59627, Stop: 59082, Start Num: 8

Candidate Starts for Bantam_87:

(Start: 8 @59627 has 2 MA's), (16, 59603), (26, 59540), (44, 59399), (46, 59387), (48, 59375), (56, 59294),

Gene: Beakin_72 Start: 43119, Stop: 43616, Start Num: 15

Candidate Starts for Beakin_72:

(13, 43116), (Start: 15 @43119 has 6 MA's), (22, 43155), (26, 43188), (30, 43209), (39, 43257), (44, 43323), (46, 43335), (51, 43374), (54, 43398), (55, 43416), (60, 43452),

Gene: BrutonGaster_85 Start: 57332, Stop: 57871, Start Num: 11

Candidate Starts for BrutonGaster_85:

(Start: 11 @57332 has 16 MA's), (23, 57374), (26, 57404), (28, 57410), (32, 57431), (44, 57545), (47, 57560), (57, 57662), (65, 57764), (67, 57785), (69, 57809), (70, 57821), (73, 57860),

Gene: Cafasso_48 Start: 37064, Stop: 37525, Start Num: 15

Candidate Starts for Cafasso_48:

(9, 37052), (Start: 15 @37064 has 6 MA's), (22, 37097), (23, 37100), (29, 37145), (33, 37157), (39, 37193), (40, 37211), (44, 37256), (50, 37295), (61, 37385), (63, 37439), (71, 37514),

Gene: Cardigan_117 Start: 68409, Stop: 68963, Start Num: 11

Candidate Starts for Cardigan_117:

(Start: 11 @68409 has 16 MA's), (21, 68445), (22, 68448), (27, 68493), (38, 68556), (49, 68664), (62, 68814), (70, 68910),

Gene: ClubL_105 Start: 62155, Stop: 62691, Start Num: 11

Candidate Starts for ClubL_105:

(Start: 11 @62155 has 16 MA's), (20, 62188), (Start: 24 @62212 has 1 MA's), (37, 62284), (39, 62305), (43, 62365), (44, 62368), (50, 62407), (57, 62485), (59, 62494), (70, 62644), (72, 62671), (73, 62680),

Gene: Cucurbita_105 Start: 63732, Stop: 64268, Start Num: 11

Candidate Starts for Cucurbita_105:

(Start: 11 @63732 has 16 MA's), (20, 63765), (Start: 24 @63789 has 1 MA's), (37, 63861), (39, 63882), (43, 63942), (44, 63945), (49, 63978), (50, 63984), (57, 64062), (59, 64071), (70, 64221), (73, 64257),

Gene: Culver_106 Start: 62054, Stop: 62590, Start Num: 11

Candidate Starts for Culver_106:

(Start: 11 @62054 has 16 MA's), (20, 62087), (Start: 24 @62111 has 1 MA's), (37, 62183), (39, 62204), (43, 62264), (44, 62267), (49, 62300), (50, 62306), (57, 62384), (59, 62393), (70, 62543), (73, 62579),

Gene: Daredevil_77 Start: 55211, Stop: 54663, Start Num: 7

Candidate Starts for Daredevil_77:

(Start: 7 @55211 has 3 MA's), (26, 55115), (39, 55046), (40, 55028), (44, 54980), (49, 54947), (56, 54875), (64, 54770),

Gene: Dusty_102 Start: 62073, Stop: 62609, Start Num: 11

Candidate Starts for Dusty_102:

(Start: 11 @62073 has 16 MA's), (20, 62106), (Start: 24 @62130 has 1 MA's), (37, 62202), (39, 62223), (43, 62283), (44, 62286), (49, 62319), (50, 62325), (57, 62403), (59, 62412), (70, 62562), (73, 62598),

Gene: Engineer_105 Start: 63198, Stop: 63734, Start Num: 11

Candidate Starts for Engineer_105:

(Start: 11 @63198 has 16 MA's), (20, 63231), (Start: 24 @63255 has 1 MA's), (37, 63327), (39, 63348), (43, 63408), (44, 63411), (49, 63444), (50, 63450), (57, 63528), (59, 63537), (70, 63687), (73, 63723),

Gene: Fryberger_100 Start: 49279, Stop: 49800, Start Num: 6

Candidate Starts for Fryberger_100:

(5, 49246), (Start: 6 @49279 has 1 MA's), (12, 49330), (14, 49333), (18, 49357), (Start: 19 @49363 has 5 MA's), (37, 49468), (39, 49489), (44, 49552), (45, 49558), (66, 49762), (68, 49777),

Gene: Geeche_103 Start: 62296, Stop: 62832, Start Num: 11

Candidate Starts for Geeche_103:

(Start: 11 @62296 has 16 MA's), (20, 62329), (Start: 24 @62353 has 1 MA's), (37, 62425), (39, 62446), (43, 62506), (44, 62509), (49, 62542), (50, 62548), (57, 62626), (59, 62635), (70, 62785), (73, 62821),

Gene: Guey18_105 Start: 50683, Stop: 51120, Start Num: 19

Candidate Starts for Guey18_105:

(5, 50566), (Start: 6 @50599 has 1 MA's), (12, 50650), (14, 50653), (18, 50677), (Start: 19 @50683 has 5 MA's), (37, 50788), (39, 50809), (44, 50872), (45, 50878), (66, 51082), (68, 51097),

Gene: JonJames_119 Start: 69097, Stop: 69654, Start Num: 10

Candidate Starts for JonJames_119:

(Start: 10 @69097 has 2 MA's), (27, 69184), (36, 69226), (38, 69247), (49, 69355), (50, 69361), (62, 69505), (70, 69601),

Gene: Keelan_100 Start: 50153, Stop: 50590, Start Num: 19

Candidate Starts for Keelan_100:

(Start: 19 @50153 has 5 MA's), (25, 50198), (35, 50237), (37, 50258), (40, 50297), (42, 50321), (44, 50342), (47, 50357), (58, 50456), (68, 50567),

Gene: Lozinak_104 Start: 63036, Stop: 63572, Start Num: 11

Candidate Starts for Lozinak_104:

(Start: 11 @63036 has 16 MA's), (20, 63069), (Start: 24 @63093 has 1 MA's), (37, 63165), (39, 63186), (43, 63246), (44, 63249), (49, 63282), (50, 63288), (57, 63366), (59, 63375), (70, 63525), (73, 63561),

Gene: Miskis_98 Start: 61793, Stop: 62272, Start Num: 24

Candidate Starts for Miskis_98:

(Start: 11 @61736 has 16 MA's), (20, 61769), (Start: 24 @61793 has 1 MA's), (37, 61865), (39, 61886), (43, 61946), (44, 61949), (50, 61988), (57, 62066), (70, 62225), (73, 62261),

Gene: ModicumRichard_48 Start: 37063, Stop: 37524, Start Num: 15

Candidate Starts for ModicumRichard_48:

(9, 37051), (Start: 15 @37063 has 6 MA's), (22, 37096), (23, 37099), (29, 37144), (33, 37156), (39, 37192), (40, 37210), (44, 37255), (50, 37294), (61, 37384), (63, 37438), (71, 37513),

Gene: Mollymur_87 Start: 60351, Stop: 59803, Start Num: 7

Candidate Starts for Mollymur_87:

(Start: 7 @60351 has 3 MA's), (22, 60288), (26, 60255), (34, 60222), (39, 60186), (41, 60159), (44, 60120), (52, 60060),

Gene: Morgana_48 Start: 37017, Stop: 37478, Start Num: 15

Candidate Starts for Morgana_48:

(9, 37005), (Start: 15 @37017 has 6 MA's), (22, 37050), (29, 37098), (33, 37110), (44, 37209), (50, 37248), (61, 37338), (63, 37392), (71, 37467),

Gene: Norvs_106 Start: 63063, Stop: 63599, Start Num: 11

Candidate Starts for Norvs_106:

(Start: 11 @63063 has 16 MA's), (20, 63096), (22, 63102), (Start: 24 @63120 has 1 MA's), (37, 63192), (39, 63213), (43, 63273), (44, 63276), (50, 63315), (57, 63393), (59, 63402), (70, 63552), (72, 63579), (73, 63588),

Gene: ObLaDi_48 Start: 37054, Stop: 37515, Start Num: 15

Candidate Starts for ObLaDi_48:

(9, 37042), (Start: 15 @37054 has 6 MA's), (22, 37087), (23, 37090), (29, 37135), (33, 37147), (39, 37183), (43, 37243), (44, 37246), (50, 37285), (61, 37375), (63, 37429), (71, 37504),

Gene: OneUp_91 Start: 59239, Stop: 59778, Start Num: 11

Candidate Starts for OneUp_91:

(Start: 11 @59239 has 16 MA's), (23, 59281), (Start: 24 @59296 has 1 MA's), (41, 59416), (44, 59452), (57, 59569), (65, 59671), (69, 59716), (70, 59728), (73, 59767),

Gene: PhinkBoden_103 Start: 62826, Stop: 63362, Start Num: 11

Candidate Starts for PhinkBoden_103:

(Start: 11 @62826 has 16 MA's), (20, 62859), (Start: 24 @62883 has 1 MA's), (37, 62955), (39, 62976), (43, 63036), (44, 63039), (49, 63072), (50, 63078), (57, 63156), (59, 63165), (70, 63315), (73, 63351),

Gene: Ronaldo_102 Start: 50265, Stop: 50702, Start Num: 19

Candidate Starts for Ronaldo_102:

(5, 50148), (Start: 6 @50181 has 1 MA's), (12, 50232), (14, 50235), (18, 50259), (Start: 19 @50265 has 5 MA's), (37, 50370), (39, 50391), (44, 50454), (45, 50460), (66, 50664), (68, 50679),

Gene: Smoothie_105 Start: 63036, Stop: 63572, Start Num: 11

Candidate Starts for Smoothie_105:

(Start: 11 @63036 has 16 MA's), (20, 63069), (Start: 24 @63093 has 1 MA's), (37, 63165), (39, 63186), (43, 63246), (44, 63249), (49, 63282), (50, 63288), (57, 63366), (59, 63375), (70, 63525), (73, 63561),

Gene: SpeedDemon_880 Start: 61548, Stop: 61003, Start Num: 8

Candidate Starts for SpeedDemon_880:

(Start: 8 @61548 has 2 MA's), (16, 61524), (26, 61461), (44, 61320), (46, 61308), (48, 61296), (56, 61215),

Gene: Toniann_106 Start: 63006, Stop: 63542, Start Num: 11

Candidate Starts for Toniann_106:

(Start: 11 @63006 has 16 MA's), (20, 63039), (Start: 24 @63063 has 1 MA's), (37, 63135), (39, 63156), (43, 63216), (44, 63219), (49, 63252), (50, 63258), (57, 63336), (59, 63345), (70, 63495), (73, 63531),

Gene: Towmatter_77 Start: 55290, Stop: 54742, Start Num: 7

Candidate Starts for Towmatter_77:

(Start: 7 @55290 has 3 MA's), (26, 55194), (39, 55125), (40, 55107), (44, 55059), (49, 55026), (53, 54987), (56, 54954), (64, 54849),

Gene: Volt_104 Start: 50429, Stop: 50866, Start Num: 19

Candidate Starts for Volt_104:

(5, 50312), (Start: 6 @50345 has 1 MA's), (12, 50396), (14, 50399), (18, 50423), (Start: 19 @50429 has 5 MA's), (37, 50534), (39, 50555), (44, 50618), (45, 50624), (66, 50828), (68, 50843),

Gene: WilliamBoone_106 Start: 61643, Stop: 62158, Start Num: 17

Candidate Starts for WilliamBoone_106:

(9, 61622), (Start: 17 @61643 has 1 MA's), (26, 61694), (28, 61700), (39, 61772), (44, 61835), (50, 61874), (57, 61952), (59, 61961), (73, 62147),

Gene: Yvonnetastic_116 Start: 65875, Stop: 66432, Start Num: 10

Candidate Starts for Yvonnetastic_116:

(1, 65575), (2, 65578), (3, 65626), (4, 65764), (Start: 10 @65875 has 2 MA's), (27, 65962), (36, 66004), (38, 66025), (49, 66133), (50, 66139), (62, 66283), (70, 66379),

Gene: Ziko_103 Start: 50271, Stop: 50708, Start Num: 19

Candidate Starts for Ziko_103:

(5, 50154), (Start: 6 @50187 has 1 MA's), (12, 50238), (14, 50241), (18, 50265), (Start: 19 @50271 has 5 MA's), (31, 50343), (37, 50376), (39, 50397), (44, 50460), (45, 50466), (66, 50670), (68, 50685),