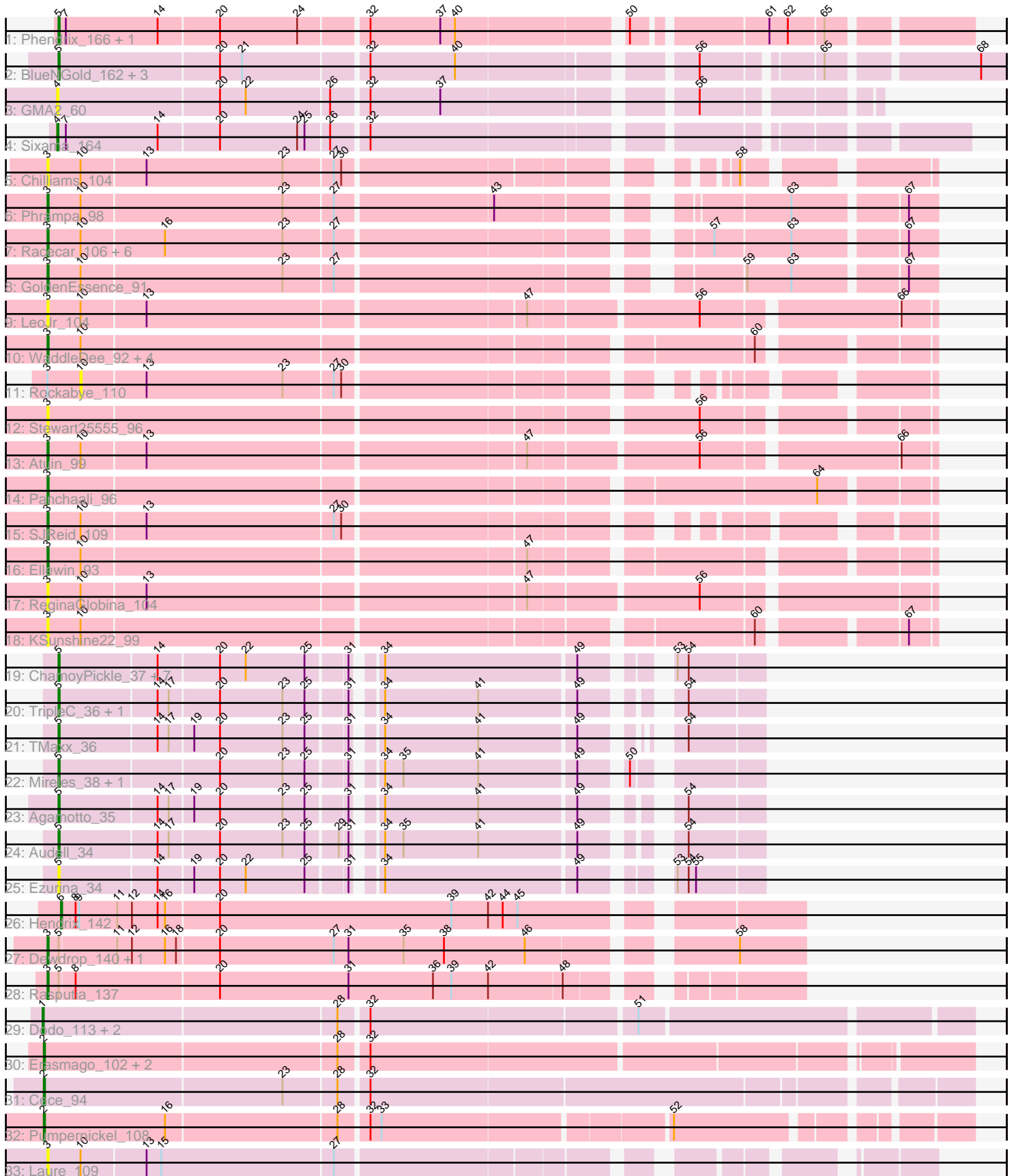


Pham 308638



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 308638 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308638 has 61 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Phendrix\_166, GodonK\_177
- Track 2 : BlueNGold\_162, Forza\_166, Boopy\_165, Mareelih\_163
- Track 3 : GMA2\_60
- Track 4 : Sixama\_164
- Track 5 : Chilliams\_104
- Track 6 : Phrampa\_98
- Track 7 : Racecar\_106, FloraSnap32\_105, Talia1610\_105, Mimi\_105, Bloom\_109, Patbob\_104, FrostedClock\_108
- Track 8 : GoldenEssence\_91
- Track 9 : LeoJr\_104
- Track 10 : WaddleDee\_92, BooTeria\_101, DunneganBoMo\_94, Emmetator\_97, Artu\_97
- Track 11 : Rockabye\_110
- Track 12 : Stewart25555\_96
- Track 13 : Atuin\_99
- Track 14 : Panchaali\_96
- Track 15 : SJReid\_109
- Track 16 : Ellewin\_93
- Track 17 : ReginaGlobina\_104
- Track 18 : KSunshine22\_99
- Track 19 : ChamoyPickle\_37, Gerri43\_35, Studio\_37, Roberts\_35, AnnabelleLee\_35, CardboardBox\_36, Neuville\_35, ChipsNGuac\_35
- Track 20 : TripleC\_36, LastNadiia\_37
- Track 21 : TMaxx\_36
- Track 22 : Mireles\_38, Makima\_35
- Track 23 : Agamoto\_35
- Track 24 : Audell\_34
- Track 25 : Ezurina\_34
- Track 26 : Hendrix\_142
- Track 27 : Dewdrop\_140, Leaf\_140
- Track 28 : Rasputia\_137
- Track 29 : Dodo\_113, PauloDiaboli\_111, A3Wally\_111
- Track 30 : Erasmago\_102, Big4\_100, Zooman\_95
- Track 31 : Cece\_94
- Track 32 : Pumpnickel\_108
- Track 33 : Laure\_109

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

The start number called the most often in the published annotations is 5, it was called in 17 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agamotto\_35, AnnabelLee\_35, Audell\_34, BlueNGold\_162, Boopy\_165, CardboardBox\_36, ChamoyPickle\_37, ChipsNGuac\_35, Ezurina\_34, Forza\_166, Gerri43\_35, GodonK\_177, LastNadiia\_37, Makima\_35, Mareelih\_163, Mireles\_38, Neuville\_35, Phendrix\_166, Roberts\_35, Studio\_37, TMaxx\_36, TripleC\_36,

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

- Dewdrop\_140, Leaf\_140, Rasputia\_137,

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

- A3Wally\_111, Artu\_97, Atuin\_99, Big4\_100, Bloom\_109, BooTeria\_101, Cece\_94, Chilliams\_104, Dodo\_113, DunneganBoMo\_94, Ellewin\_93, Emmetator\_97, Erasmago\_102, FloraSnap32\_105, FrostedClock\_108, GMA2\_60, GoldenEssence\_91, Hendrix\_142, KSunshine22\_99, Laure\_109, LeoJr\_104, Mimi\_105, Panchaali\_96, Patbob\_104, PauloDiaboli\_111, Phrampa\_98, Pumpnickel\_108, Racecar\_106, ReginaGlobina\_104, Rockabye\_110, SJReid\_109, Sixama\_164, Stewart25555\_96, Talia1610\_105, WaddleDee\_92, Zooman\_95,

### **Summary by start number:**

Start 1:

- Found in 3 of 61 ( 4.9% ) of genes in pham
- Manual Annotations of this start: 3 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally\_111 (GD1), Dodo\_113 (GD1), PauloDiaboli\_111 (GD1),

Start 2:

- Found in 5 of 61 ( 8.2% ) of genes in pham
- Manual Annotations of this start: 4 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Big4\_100 (GD2), Cece\_94 (GD3), Erasmago\_102 (GD2), Pumpnickel\_108 (GD4), Zooman\_95 (GD2),

Start 3:

- Found in 28 of 61 ( 45.9% ) of genes in pham
- Manual Annotations of this start: 15 of 41
- Called 96.4% of time when present
- Phage (with cluster) where this start called: Artu\_97 (FC), Atuin\_99 (FC), Bloom\_109 (FC), BooTeria\_101 (FC), Chilliams\_104 (FC), Dewdrop\_140 (GC), DunneganBoMo\_94 (FC), Ellewin\_93 (FC), Emmetator\_97 (FC), FloraSnap32\_105 (FC), FrostedClock\_108 (FC), GoldenEssence\_91 (FC), KSunshine22\_99 (FC), Laure\_109 (UNK), Leaf\_140 (GC), LeoJr\_104 (FC), Mimi\_105 (FC), Panchaali\_96 (FC), Patbob\_104 (FC), Phrampa\_98 (FC), Racecar\_106 (FC), Rasputia\_137 (GC), ReginaGlobina\_104 (FC), SJReid\_109 (FC), Stewart25555\_96 (FC), Talia1610\_105

(FC), WaddleDee\_92 (FC),

Start 4:

- Found in 2 of 61 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA2\_60 (DS), Sixama\_164 (DS),

Start 5:

- Found in 25 of 61 ( 41.0% ) of genes in pham
- Manual Annotations of this start: 17 of 41
- Called 88.0% of time when present
- Phage (with cluster) where this start called: Agamoto\_35 (FR), AnnabelLee\_35 (FR), Audell\_34 (FR), BlueNGold\_162 (DS), Boopy\_165 (DS), CardboardBox\_36 (FR), ChamoyPickle\_37 (FR), ChipsNGuac\_35 (FR), Ezurina\_34 (FR), Forza\_166 (DS), Gerri43\_35 (FR), GodonK\_177 (DK), LastNadiia\_37 (FR), Makima\_35 (FR), Mareelih\_163 (DS), Mireles\_38 (FR), Neuville\_35 (FR), Phendrix\_166 (DK), Roberts\_35 (FR), Studio\_37 (FR), TMaxx\_36 (FR), TripleC\_36 (FR),

Start 6:

- Found in 1 of 61 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hendrix\_142 (GC),

Start 10:

- Found in 23 of 61 ( 37.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Rockabye\_110 (FC),

### **Summary by clusters:**

There are 10 clusters represented in this pham: GD1, GD2, GD3, GD4, DK, FR, FC, GC, UNK, DS,

Info for manual annotations of cluster DK:

- Start number 5 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster DS:

- Start number 4 was manually annotated 1 time for cluster DS.
- Start number 5 was manually annotated 4 times for cluster DS.

Info for manual annotations of cluster FC:

- Start number 3 was manually annotated 12 times for cluster FC.

Info for manual annotations of cluster FR:

- Start number 5 was manually annotated 11 times for cluster FR.

Info for manual annotations of cluster GC:

- Start number 3 was manually annotated 3 times for cluster GC.
- Start number 6 was manually annotated 1 time for cluster GC.

Info for manual annotations of cluster GD1:

- Start number 1 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 2 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 2 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

- Start number 2 was manually annotated 1 time for cluster GD4.

### **Gene Information:**

Gene: A3Wally\_111 Start: 75589, Stop: 74876, Start Num: 1

Candidate Starts for A3Wally\_111:

(Start: 1 @75589 has 3 MA's), (28, 75355), (32, 75334), (51, 75127),

Gene: Agamoto\_35 Start: 25602, Stop: 25099, Start Num: 5

Candidate Starts for Agamoto\_35:

(Start: 5 @25602 has 17 MA's), (14, 25524), (17, 25515), (19, 25497), (20, 25476), (23, 25425), (25, 25407), (31, 25377), (34, 25362), (41, 25287), (49, 25212), (54, 25158),

Gene: AnnabelLee\_35 Start: 22785, Stop: 22279, Start Num: 5

Candidate Starts for AnnabelLee\_35:

(Start: 5 @22785 has 17 MA's), (14, 22707), (20, 22659), (22, 22638), (25, 22590), (31, 22560), (34, 22545), (49, 22395), (53, 22347), (54, 22338),

Gene: Artu\_97 Start: 81740, Stop: 82399, Start Num: 3

Candidate Starts for Artu\_97:

(Start: 3 @81740 has 15 MA's), (10, 81767), (60, 82277),

Gene: Atuin\_99 Start: 85221, Stop: 85898, Start Num: 3

Candidate Starts for Atuin\_99:

(Start: 3 @85221 has 15 MA's), (10, 85248), (13, 85299), (47, 85596), (56, 85725), (66, 85872),

Gene: Audell\_34 Start: 25184, Stop: 24681, Start Num: 5

Candidate Starts for Audell\_34:

(Start: 5 @25184 has 17 MA's), (14, 25106), (17, 25097), (20, 25058), (23, 25007), (25, 24989), (29, 24965), (31, 24959), (34, 24944), (35, 24929), (41, 24869), (49, 24794), (54, 24740),

Gene: Big4\_100 Start: 74707, Stop: 74009, Start Num: 2

Candidate Starts for Big4\_100:

(Start: 2 @74707 has 4 MA's), (28, 74473), (32, 74452),

Gene: Bloom\_109 Start: 85355, Stop: 86011, Start Num: 3

Candidate Starts for Bloom\_109:

(Start: 3 @85355 has 15 MA's), (10, 85382), (16, 85448), (23, 85544), (27, 85583), (57, 85844), (63, 85904), (67, 85988),

Gene: BlueNGold\_162 Start: 92754, Stop: 92056, Start Num: 5  
Candidate Starts for BlueNGold\_162:  
(Start: 5 @92754 has 17 MA's), (20, 92625), (21, 92607), (32, 92511), (40, 92442), (56, 92271), (65, 92187), (68, 92076),

Gene: BooTeria\_101 Start: 81853, Stop: 82512, Start Num: 3  
Candidate Starts for BooTeria\_101:  
(Start: 3 @81853 has 15 MA's), (10, 81880), (60, 82390),

Gene: Boopy\_165 Start: 92765, Stop: 92067, Start Num: 5  
Candidate Starts for Boopy\_165:  
(Start: 5 @92765 has 17 MA's), (20, 92636), (21, 92618), (32, 92522), (40, 92453), (56, 92282), (65, 92198), (68, 92087),

Gene: CardboardBox\_36 Start: 22788, Stop: 22282, Start Num: 5  
Candidate Starts for CardboardBox\_36:  
(Start: 5 @22788 has 17 MA's), (14, 22710), (20, 22662), (22, 22641), (25, 22593), (31, 22563), (34, 22548), (49, 22398), (53, 22350), (54, 22341),

Gene: Cece\_94 Start: 77750, Stop: 77037, Start Num: 2  
Candidate Starts for Cece\_94:  
(Start: 2 @77750 has 4 MA's), (23, 77558), (28, 77516), (32, 77495),

Gene: ChamoyPickle\_37 Start: 23328, Stop: 22822, Start Num: 5  
Candidate Starts for ChamoyPickle\_37:  
(Start: 5 @23328 has 17 MA's), (14, 23250), (20, 23202), (22, 23181), (25, 23133), (31, 23103), (34, 23088), (49, 22938), (53, 22890), (54, 22881),

Gene: Chilliams\_104 Start: 78152, Stop: 78772, Start Num: 3  
Candidate Starts for Chilliams\_104:  
(Start: 3 @78152 has 15 MA's), (10, 78179), (13, 78230), (23, 78341), (27, 78380), (30, 78386), (58, 78647),

Gene: ChipsNGuac\_35 Start: 22788, Stop: 22282, Start Num: 5  
Candidate Starts for ChipsNGuac\_35:  
(Start: 5 @22788 has 17 MA's), (14, 22710), (20, 22662), (22, 22641), (25, 22593), (31, 22563), (34, 22548), (49, 22398), (53, 22350), (54, 22341),

Gene: Dewdrop\_140 Start: 84117, Stop: 84695, Start Num: 3  
Candidate Starts for Dewdrop\_140:  
(Start: 3 @84117 has 15 MA's), (Start: 5 @84126 has 17 MA's), (11, 84171), (12, 84183), (16, 84210), (18, 84219), (20, 84252), (27, 84345), (31, 84357), (35, 84402), (38, 84435), (46, 84501), (58, 84642),

Gene: Dodo\_113 Start: 75911, Stop: 75198, Start Num: 1  
Candidate Starts for Dodo\_113:  
(Start: 1 @75911 has 3 MA's), (28, 75677), (32, 75656), (51, 75449),

Gene: DunneganBoMo\_94 Start: 81122, Stop: 81781, Start Num: 3  
Candidate Starts for DunneganBoMo\_94:  
(Start: 3 @81122 has 15 MA's), (10, 81149), (60, 81659),

Gene: Ellewin\_93 Start: 80533, Stop: 81192, Start Num: 3  
Candidate Starts for Ellewin\_93:

(Start: 3 @80533 has 15 MA's), (10, 80560), (47, 80908),

Gene: Emmetator\_97 Start: 81077, Stop: 81736, Start Num: 3

Candidate Starts for Emmetator\_97:

(Start: 3 @81077 has 15 MA's), (10, 81104), (60, 81614),

Gene: Erasmago\_102 Start: 72387, Stop: 71674, Start Num: 2

Candidate Starts for Erasmago\_102:

(Start: 2 @72387 has 4 MA's), (28, 72153), (32, 72132),

Gene: Ezurina\_34 Start: 23846, Stop: 23340, Start Num: 5

Candidate Starts for Ezurina\_34:

(Start: 5 @23846 has 17 MA's), (14, 23768), (19, 23741), (20, 23720), (22, 23699), (25, 23651), (31, 23621), (34, 23606), (49, 23456), (53, 23408), (54, 23399), (55, 23393),

Gene: FloraSnap32\_105 Start: 84252, Stop: 84908, Start Num: 3

Candidate Starts for FloraSnap32\_105:

(Start: 3 @84252 has 15 MA's), (10, 84279), (16, 84345), (23, 84441), (27, 84480), (57, 84741), (63, 84801), (67, 84885),

Gene: Forza\_166 Start: 92682, Stop: 91984, Start Num: 5

Candidate Starts for Forza\_166:

(Start: 5 @92682 has 17 MA's), (20, 92553), (21, 92535), (32, 92439), (40, 92370), (56, 92199), (65, 92115), (68, 92004),

Gene: FrostedClock\_108 Start: 85552, Stop: 86208, Start Num: 3

Candidate Starts for FrostedClock\_108:

(Start: 3 @85552 has 15 MA's), (10, 85579), (16, 85645), (23, 85741), (27, 85780), (57, 86041), (63, 86101), (67, 86185),

Gene: GMA2\_60 Start: 63482, Stop: 62877, Start Num: 4

Candidate Starts for GMA2\_60:

(Start: 4 @63482 has 1 MA's), (20, 63353), (22, 63332), (26, 63266), (32, 63239), (37, 63182), (56, 62999),

Gene: Gerri43\_35 Start: 22788, Stop: 22282, Start Num: 5

Candidate Starts for Gerri43\_35:

(Start: 5 @22788 has 17 MA's), (14, 22710), (20, 22662), (22, 22641), (25, 22593), (31, 22563), (34, 22548), (49, 22398), (53, 22350), (54, 22341),

Gene: GodonK\_177 Start: 88708, Stop: 88028, Start Num: 5

Candidate Starts for GodonK\_177:

(Start: 5 @88708 has 17 MA's), (7, 88702), (14, 88627), (20, 88579), (24, 88516), (32, 88465), (37, 88408), (40, 88396), (50, 88270), (61, 88174), (62, 88159), (65, 88132),

Gene: GoldenEssence\_91 Start: 79147, Stop: 79803, Start Num: 3

Candidate Starts for GoldenEssence\_91:

(Start: 3 @79147 has 15 MA's), (10, 79174), (23, 79336), (27, 79375), (59, 79660), (63, 79696), (67, 79780),

Gene: Hendrix\_142 Start: 88084, Stop: 88653, Start Num: 6

Candidate Starts for Hendrix\_142:

(Start: 6 @88084 has 1 MA's), (8, 88096), (9, 88099), (11, 88129), (12, 88141), (14, 88162), (16, 88168), (20, 88210), (39, 88399), (42, 88429), (44, 88441), (45, 88453),

Gene: KSunshine22\_99 Start: 82134, Stop: 82793, Start Num: 3

Candidate Starts for KSunshine22\_99:

(Start: 3 @82134 has 15 MA's), (10, 82161), (60, 82671), (67, 82773),

Gene: LastNadiia\_37 Start: 25143, Stop: 24640, Start Num: 5

Candidate Starts for LastNadiia\_37:

(Start: 5 @25143 has 17 MA's), (14, 25065), (17, 25056), (20, 25017), (23, 24966), (25, 24948), (31, 24918), (34, 24903), (41, 24828), (49, 24753), (54, 24699),

Gene: Laure\_109 Start: 78077, Stop: 78706, Start Num: 3

Candidate Starts for Laure\_109:

(Start: 3 @78077 has 15 MA's), (10, 78104), (13, 78155), (15, 78167), (27, 78305),

Gene: Leaf\_140 Start: 84048, Stop: 84626, Start Num: 3

Candidate Starts for Leaf\_140:

(Start: 3 @84048 has 15 MA's), (Start: 5 @84057 has 17 MA's), (11, 84102), (12, 84114), (16, 84141), (18, 84150), (20, 84183), (27, 84276), (31, 84288), (35, 84333), (38, 84366), (46, 84432), (58, 84573),

Gene: LeoJr\_104 Start: 85456, Stop: 86133, Start Num: 3

Candidate Starts for LeoJr\_104:

(Start: 3 @85456 has 15 MA's), (10, 85483), (13, 85534), (47, 85831), (56, 85960), (66, 86107),

Gene: Makima\_35 Start: 24262, Stop: 23753, Start Num: 5

Candidate Starts for Makima\_35:

(Start: 5 @24262 has 17 MA's), (20, 24136), (23, 24085), (25, 24067), (31, 24037), (34, 24022), (35, 24007), (41, 23947), (49, 23872), (50, 23842),

Gene: Mareelih\_163 Start: 92200, Stop: 91502, Start Num: 5

Candidate Starts for Mareelih\_163:

(Start: 5 @92200 has 17 MA's), (20, 92071), (21, 92053), (32, 91957), (40, 91888), (56, 91717), (65, 91633), (68, 91522),

Gene: Mimi\_105 Start: 84702, Stop: 85358, Start Num: 3

Candidate Starts for Mimi\_105:

(Start: 3 @84702 has 15 MA's), (10, 84729), (16, 84795), (23, 84891), (27, 84930), (57, 85191), (63, 85251), (67, 85335),

Gene: Mireles\_38 Start: 23820, Stop: 23314, Start Num: 5

Candidate Starts for Mireles\_38:

(Start: 5 @23820 has 17 MA's), (20, 23694), (23, 23643), (25, 23625), (31, 23595), (34, 23580), (35, 23565), (41, 23505), (49, 23430), (50, 23400),

Gene: Neuville\_35 Start: 22788, Stop: 22282, Start Num: 5

Candidate Starts for Neuville\_35:

(Start: 5 @22788 has 17 MA's), (14, 22710), (20, 22662), (22, 22641), (25, 22593), (31, 22563), (34, 22548), (49, 22398), (53, 22350), (54, 22341),

Gene: Panchaali\_96 Start: 82099, Stop: 82770, Start Num: 3

Candidate Starts for Panchaali\_96:

(Start: 3 @82099 has 15 MA's), (64, 82687),

Gene: Patbob\_104 Start: 85437, Stop: 86093, Start Num: 3

Candidate Starts for Patbob\_104:

(Start: 3 @85437 has 15 MA's), (10, 85464), (16, 85530), (23, 85626), (27, 85665), (57, 85926), (63, 85986), (67, 86070),

Gene: PauloDiaboli\_111 Start: 74946, Stop: 74233, Start Num: 1

Candidate Starts for PauloDiaboli\_111:

(Start: 1 @74946 has 3 MA's), (28, 74712), (32, 74691), (51, 74484),

Gene: Phendrix\_166 Start: 87805, Stop: 87125, Start Num: 5

Candidate Starts for Phendrix\_166:

(Start: 5 @87805 has 17 MA's), (7, 87799), (14, 87724), (20, 87676), (24, 87613), (32, 87562), (37, 87505), (40, 87493), (50, 87367), (61, 87271), (62, 87256), (65, 87229),

Gene: Phrampa\_98 Start: 86836, Stop: 87489, Start Num: 3

Candidate Starts for Phrampa\_98:

(Start: 3 @86836 has 15 MA's), (10, 86863), (23, 87025), (27, 87064), (43, 87187), (63, 87382), (67, 87466),

Gene: Pumpernickel\_108 Start: 76513, Stop: 75818, Start Num: 2

Candidate Starts for Pumpernickel\_108:

(Start: 2 @76513 has 4 MA's), (16, 76414), (28, 76279), (32, 76258), (33, 76249), (52, 76027),

Gene: Racecar\_106 Start: 85355, Stop: 86011, Start Num: 3

Candidate Starts for Racecar\_106:

(Start: 3 @85355 has 15 MA's), (10, 85382), (16, 85448), (23, 85544), (27, 85583), (57, 85844), (63, 85904), (67, 85988),

Gene: Rasputia\_137 Start: 85507, Stop: 86073, Start Num: 3

Candidate Starts for Rasputia\_137:

(Start: 3 @85507 has 15 MA's), (Start: 5 @85516 has 17 MA's), (8, 85528), (20, 85642), (31, 85747), (36, 85816), (39, 85831), (42, 85861), (48, 85918),

Gene: ReginaGlobina\_104 Start: 85021, Stop: 85698, Start Num: 3

Candidate Starts for ReginaGlobina\_104:

(Start: 3 @85021 has 15 MA's), (10, 85048), (13, 85099), (47, 85396), (56, 85525),

Gene: Roberts\_35 Start: 22788, Stop: 22282, Start Num: 5

Candidate Starts for Roberts\_35:

(Start: 5 @22788 has 17 MA's), (14, 22710), (20, 22662), (22, 22641), (25, 22593), (31, 22563), (34, 22548), (49, 22398), (53, 22350), (54, 22341),

Gene: Rockabye\_110 Start: 78617, Stop: 79210, Start Num: 10

Candidate Starts for Rockabye\_110:

(Start: 3 @78590 has 15 MA's), (10, 78617), (13, 78668), (23, 78779), (27, 78818), (30, 78824),

Gene: SJReid\_109 Start: 77627, Stop: 78247, Start Num: 3

Candidate Starts for SJReid\_109:

(Start: 3 @77627 has 15 MA's), (10, 77654), (13, 77705), (27, 77855), (30, 77861),

Gene: Sixama\_164 Start: 92202, Stop: 91534, Start Num: 4

Candidate Starts for Sixama\_164:

(Start: 4 @92202 has 1 MA's), (7, 92196), (14, 92121), (20, 92073), (24, 92010), (25, 92004), (26, 91986), (32, 91959),

Gene: Stewart25555\_96 Start: 81859, Stop: 82521, Start Num: 3

Candidate Starts for Stewart25555\_96:

(Start: 3 @81859 has 15 MA's), (56, 82357),

Gene: Studio\_37 Start: 24154, Stop: 23648, Start Num: 5

Candidate Starts for Studio\_37:

(Start: 5 @24154 has 17 MA's), (14, 24076), (20, 24028), (22, 24007), (25, 23959), (31, 23929), (34, 23914), (49, 23764), (53, 23716), (54, 23707),

Gene: TMaxx\_36 Start: 23432, Stop: 22935, Start Num: 5

Candidate Starts for TMaxx\_36:

(Start: 5 @23432 has 17 MA's), (14, 23354), (17, 23345), (19, 23327), (20, 23306), (23, 23255), (25, 23237), (31, 23207), (34, 23192), (41, 23117), (49, 23042), (54, 22994),

Gene: Talia1610\_105 Start: 84720, Stop: 85376, Start Num: 3

Candidate Starts for Talia1610\_105:

(Start: 3 @84720 has 15 MA's), (10, 84747), (16, 84813), (23, 84909), (27, 84948), (57, 85209), (63, 85269), (67, 85353),

Gene: TripleC\_36 Start: 25783, Stop: 25280, Start Num: 5

Candidate Starts for TripleC\_36:

(Start: 5 @25783 has 17 MA's), (14, 25705), (17, 25696), (20, 25657), (23, 25606), (25, 25588), (31, 25558), (34, 25543), (41, 25468), (49, 25393), (54, 25339),

Gene: WaddleDee\_92 Start: 80308, Stop: 80967, Start Num: 3

Candidate Starts for WaddleDee\_92:

(Start: 3 @80308 has 15 MA's), (10, 80335), (60, 80845),

Gene: Zooman\_95 Start: 72552, Stop: 71857, Start Num: 2

Candidate Starts for Zooman\_95:

(Start: 2 @72552 has 4 MA's), (28, 72318), (32, 72297),