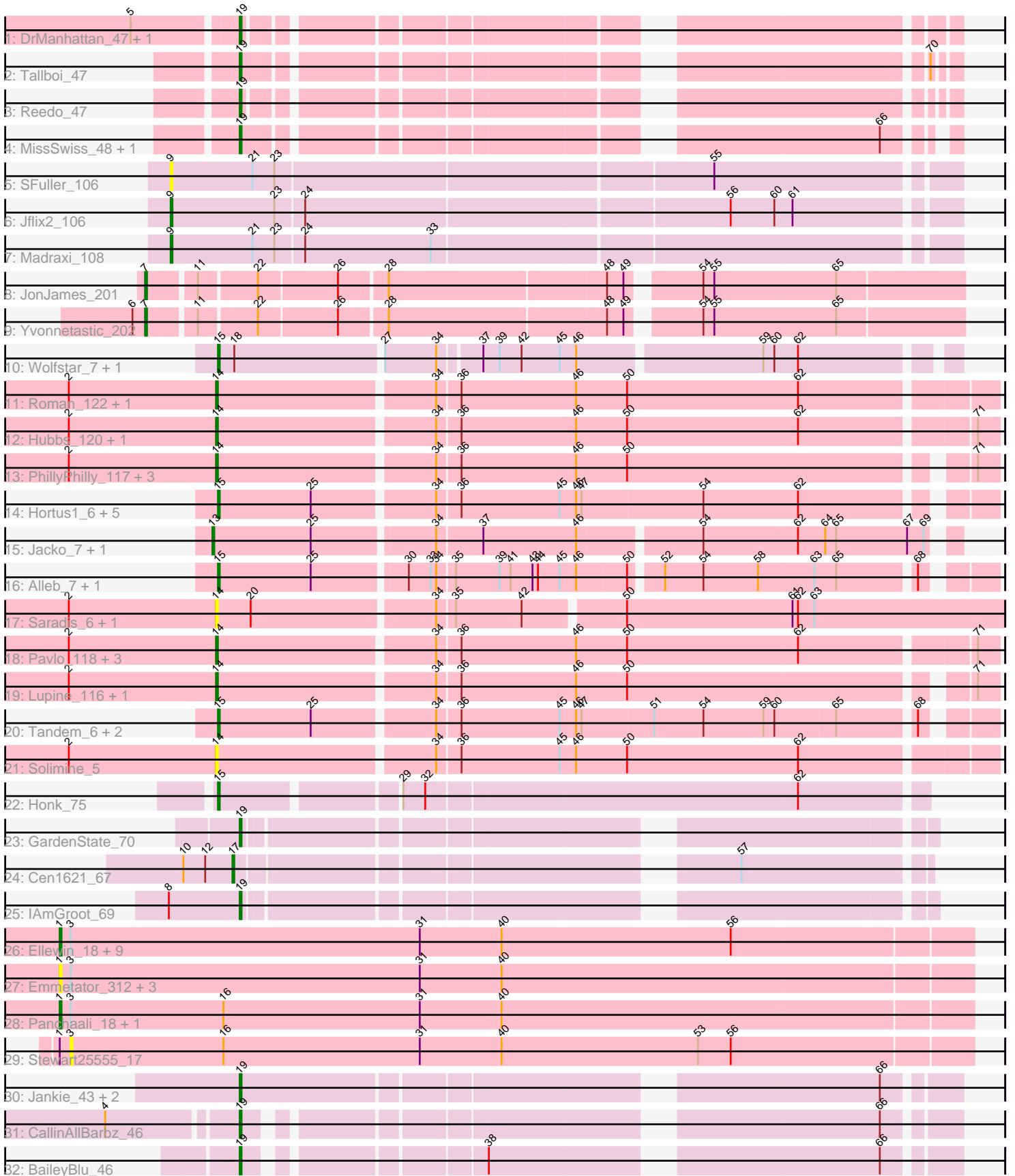


Pham 311558



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 311558 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 311558 has 69 members, 16 are drafts.

Phages represented in each track:

- Track 1 : DrManhattan\_47, Adolin\_48
- Track 2 : Tallboi\_47
- Track 3 : Reedo\_47
- Track 4 : MissSwiss\_48, PandaPo\_48
- Track 5 : SFuller\_106
- Track 6 : Jflix2\_106
- Track 7 : Madraxi\_108
- Track 8 : JonJames\_201
- Track 9 : Yvonnestic\_202
- Track 10 : Wolfstar\_7, Wolfstar\_123
- Track 11 : Roman\_122, Roman\_6
- Track 12 : Hubbs\_120, Hubbs\_6
- Track 13 : PhillyPhilly\_117, DejaVu\_6, PhillyPhilly\_7, DejaVu\_122
- Track 14 : Hortus1\_6, Hortus1\_117, Pioneer3\_117, Pioneer3\_6, OlinDD\_117, OlinDD\_6
- Track 15 : Jacko\_7, Jacko\_116
- Track 16 : Alleb\_7, Alleb\_115
- Track 17 : Saradis\_6, Saradis\_124
- Track 18 : Pavlo\_118, Uterion\_6, Uterion\_125, Pavlo\_6
- Track 19 : Lupine\_116, Lupine\_6
- Track 20 : Tandem\_6, Platte\_6, Tandem\_117
- Track 21 : Solimine\_5
- Track 22 : Honk\_75
- Track 23 : GardenState\_70
- Track 24 : Cen1621\_67
- Track 25 : IAmGroot\_69
- Track 26 : Ellewin\_18, KSunshine22\_311, KSunshine22\_19, Artu\_19, DunneganBoMo\_313, WaddleDee\_308, WaddleDee\_17, Artu\_306, DunneganBoMo\_18, Ellewin\_311
- Track 27 : Emmetator\_312, BooTeria\_320, BooTeria\_21, Emmetator\_18
- Track 28 : Panchaali\_18, Panchaali\_305
- Track 29 : Stewart25555\_17
- Track 30 : Jankie\_43, GrimEater\_42, Soondubu\_41

- Track 31 : CallinAllBarbz\_46
- Track 32 : BaileyBlu\_46

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

The start number called the most often in the published annotations is 15, it was called in 14 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alleb\_115, Alleb\_7, Honk\_75, Hortus1\_117, Hortus1\_6, OlinDD\_117, OlinDD\_6, Pioneer3\_117, Pioneer3\_6, Platte\_6, Tandem\_117, Tandem\_6, Wolfstar\_123, Wolfstar\_7,

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

- 

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

- Adolin\_48, Artu\_19, Artu\_306, BaileyBlu\_46, BooTeria\_21, BooTeria\_320, CallinAllBarbz\_46, Cen1621\_67, DejaVu\_122, DejaVu\_6, DrManhattan\_47, DunneganBoMo\_18, DunneganBoMo\_313, Ellewin\_18, Ellewin\_311, Emmetator\_18, Emmetator\_312, GardenState\_70, GrimEater\_42, Hubbs\_120, Hubbs\_6, IAmGroot\_69, Jacko\_116, Jacko\_7, Jankie\_43, Jflix2\_106, JonJames\_201, KSunshine22\_19, KSunshine22\_311, Lupine\_116, Lupine\_6, Madraxi\_108, MissSwiss\_48, Panchaali\_18, Panchaali\_305, PandaPo\_48, Pavlo\_118, Pavlo\_6, PhillyPhilly\_117, PhillyPhilly\_7, Reedo\_47, Roman\_122, Roman\_6, SFuller\_106, Saradis\_124, Saradis\_6, Solimine\_5, Soondubu\_41, Stewart25555\_17, Tallboi\_47, Uterion\_125, Uterion\_6, WaddleDee\_17, WaddleDee\_308, Yvonnetastic\_202,

**Summary by start number:**

Start 1:

- Found in 17 of 69 ( 24.6% ) of genes in pham
- Manual Annotations of this start: 8 of 53
- Called 94.1% of time when present
- Phage (with cluster) where this start called: Artu\_19 (FC), Artu\_306 (FC), BooTeria\_21 (FC), BooTeria\_320 (FC), DunneganBoMo\_18 (FC), DunneganBoMo\_313 (FC), Ellewin\_18 (FC), Ellewin\_311 (FC), Emmetator\_18 (FC), Emmetator\_312 (FC), KSunshine22\_19 (FC), KSunshine22\_311 (FC), Panchaali\_18 (FC), Panchaali\_305 (FC), WaddleDee\_17 (FC), WaddleDee\_308 (FC),

Start 3:

- Found in 17 of 69 ( 24.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Stewart25555\_17 (FC),

Start 7:

- Found in 2 of 69 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 2 of 53
- Called 100.0% of time when present

- Phage (with cluster) where this start called: JonJames\_201 (DD), Yvonnetastic\_202 (DD),

Start 9:

- Found in 3 of 69 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 2 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JfliX2\_106 (CF), Madraxi\_108 (CF), SFuller\_106 (CF),

Start 13:

- Found in 2 of 69 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 2 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jacko\_116 (ED1), Jacko\_7 (ED1),

Start 14:

- Found in 17 of 69 ( 24.6% ) of genes in pham
- Manual Annotations of this start: 12 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DejaVu\_122 (ED1), DejaVu\_6 (ED1), Hubbs\_120 (ED1), Hubbs\_6 (ED1), Lupine\_116 (ED1), Lupine\_6 (ED1), Pavlo\_118 (ED1), Pavlo\_6 (ED1), PhillyPhilly\_117 (ED1), PhillyPhilly\_7 (ED1), Roman\_122 (ED1), Roman\_6 (ED1), Saradis\_124 (ED1), Saradis\_6 (ED1), Solimine\_5 (ED1), Uterion\_125 (ED1), Uterion\_6 (ED1),

Start 15:

- Found in 14 of 69 ( 20.3% ) of genes in pham
- Manual Annotations of this start: 14 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alleb\_115 (ED1), Alleb\_7 (ED1), Honk\_75 (EH), Hortus1\_117 (ED1), Hortus1\_6 (ED1), OlinDD\_117 (ED1), OlinDD\_6 (ED1), Pioneer3\_117 (ED1), Pioneer3\_6 (ED1), Platte\_6 (ED1), Tandem\_117 (ED1), Tandem\_6 (ED1), Wolfstar\_123 (ED), Wolfstar\_7 (ED),

Start 17:

- Found in 1 of 69 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cen1621\_67 (EH),

Start 19:

- Found in 13 of 69 ( 18.8% ) of genes in pham
- Manual Annotations of this start: 12 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adolin\_48 (AZ1), BaileyBlu\_46 (FP), CallinAllBarbz\_46 (FP), DrManhattan\_47 (AZ1), GardenState\_70 (EH), GrimEater\_42 (FP), IAmGroot\_69 (EH), Jankie\_43 (FP), MissSwiss\_48 (AZ1), PandaPo\_48 (AZ1), Reedo\_47 (AZ1), Soondubu\_41 (AZ6), Tallboi\_47 (AZ1),

**Summary by clusters:**

There are 9 clusters represented in this pham: FP, EH, ED1, ED, DD, CF, FC, AZ1, AZ6,

Info for manual annotations of cluster AZ1:

- Start number 19 was manually annotated 5 times for cluster AZ1.

Info for manual annotations of cluster AZ6:

- Start number 19 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster CF:

- Start number 9 was manually annotated 2 times for cluster CF.

Info for manual annotations of cluster DD:

- Start number 7 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster ED:

- Start number 15 was manually annotated 2 times for cluster ED.

Info for manual annotations of cluster ED1:

- Start number 13 was manually annotated 2 times for cluster ED1.
- Start number 14 was manually annotated 12 times for cluster ED1.
- Start number 15 was manually annotated 11 times for cluster ED1.

Info for manual annotations of cluster EH:

- Start number 15 was manually annotated 1 time for cluster EH.
- Start number 17 was manually annotated 1 time for cluster EH.
- Start number 19 was manually annotated 2 times for cluster EH.

Info for manual annotations of cluster FC:

- Start number 1 was manually annotated 8 times for cluster FC.

Info for manual annotations of cluster FP:

- Start number 19 was manually annotated 4 times for cluster FP.

### ***Gene Information:***

Gene: Adolin\_48 Start: 33121, Stop: 33456, Start Num: 19

Candidate Starts for Adolin\_48:

(5, 33067), (Start: 19 @33121 has 12 MA's),

Gene: Alleb\_7 Start: 2777, Stop: 2382, Start Num: 15

Candidate Starts for Alleb\_7:

(Start: 15 @2777 has 14 MA's), (25, 2726), (30, 2678), (33, 2666), (34, 2663), (35, 2654), (39, 2630), (41, 2624), (43, 2612), (44, 2609), (45, 2597), (46, 2588), (50, 2561), (52, 2546), (54, 2525), (58, 2495), (63, 2465), (65, 2453), (68, 2414),

Gene: Alleb\_115 Start: 62256, Stop: 61861, Start Num: 15

Candidate Starts for Alleb\_115:

(Start: 15 @62256 has 14 MA's), (25, 62205), (30, 62157), (33, 62145), (34, 62142), (35, 62133), (39, 62109), (41, 62103), (43, 62091), (44, 62088), (45, 62076), (46, 62067), (50, 62040), (52, 62025), (54, 62004), (58, 61974), (63, 61944), (65, 61932), (68, 61893),

Gene: Artu\_19 Start: 7846, Stop: 8343, Start Num: 1  
Candidate Starts for Artu\_19:  
(Start: 1 @7846 has 8 MA's), (3, 7852), (31, 8044), (40, 8089), (56, 8215),

Gene: Artu\_306 Start: 187000, Stop: 187497, Start Num: 1  
Candidate Starts for Artu\_306:  
(Start: 1 @187000 has 8 MA's), (3, 187006), (31, 187198), (40, 187243), (56, 187369),

Gene: BaileyBlu\_46 Start: 33124, Stop: 33462, Start Num: 19  
Candidate Starts for BaileyBlu\_46:  
(Start: 19 @33124 has 12 MA's), (38, 33235), (66, 33427),

Gene: BooTeria\_320 Start: 187340, Stop: 187837, Start Num: 1  
Candidate Starts for BooTeria\_320:  
(Start: 1 @187340 has 8 MA's), (3, 187346), (31, 187538), (40, 187583),

Gene: BooTeria\_21 Start: 8431, Stop: 8928, Start Num: 1  
Candidate Starts for BooTeria\_21:  
(Start: 1 @8431 has 8 MA's), (3, 8437), (31, 8629), (40, 8674),

Gene: CallinAllBarbz\_46 Start: 33305, Stop: 33643, Start Num: 19  
Candidate Starts for CallinAllBarbz\_46:  
(4, 33239), (Start: 19 @33305 has 12 MA's), (66, 33608),

Gene: Cen1621\_67 Start: 45156, Stop: 45494, Start Num: 17  
Candidate Starts for Cen1621\_67:  
(10, 45129), (12, 45141), (Start: 17 @45156 has 1 MA's), (57, 45399),

Gene: DejaVu\_6 Start: 2530, Stop: 2129, Start Num: 14  
Candidate Starts for DejaVu\_6:  
(2, 2611), (Start: 14 @2530 has 12 MA's), (34, 2416), (36, 2404), (46, 2341), (50, 2314), (71, 2140),

Gene: DejaVu\_122 Start: 62910, Stop: 62509, Start Num: 14  
Candidate Starts for DejaVu\_122:  
(2, 62991), (Start: 14 @62910 has 12 MA's), (34, 62796), (36, 62784), (46, 62721), (50, 62694), (71, 62520),

Gene: DrManhattan\_47 Start: 32688, Stop: 33023, Start Num: 19  
Candidate Starts for DrManhattan\_47:  
(5, 32634), (Start: 19 @32688 has 12 MA's),

Gene: DunneganBoMo\_313 Start: 187774, Stop: 188271, Start Num: 1  
Candidate Starts for DunneganBoMo\_313:  
(Start: 1 @187774 has 8 MA's), (3, 187780), (31, 187972), (40, 188017), (56, 188143),

Gene: DunneganBoMo\_18 Start: 8362, Stop: 8859, Start Num: 1  
Candidate Starts for DunneganBoMo\_18:  
(Start: 1 @8362 has 8 MA's), (3, 8368), (31, 8560), (40, 8605), (56, 8731),

Gene: Ellewin\_18 Start: 8450, Stop: 8947, Start Num: 1  
Candidate Starts for Ellewin\_18:  
(Start: 1 @8450 has 8 MA's), (3, 8456), (31, 8648), (40, 8693), (56, 8819),

Gene: Ellewin\_311 Start: 187564, Stop: 188061, Start Num: 1  
Candidate Starts for Ellewin\_311:  
(Start: 1 @187564 has 8 MA's), (3, 187570), (31, 187762), (40, 187807), (56, 187933),

Gene: Emmetator\_312 Start: 186566, Stop: 187063, Start Num: 1  
Candidate Starts for Emmetator\_312:  
(Start: 1 @186566 has 8 MA's), (3, 186572), (31, 186764), (40, 186809),

Gene: Emmetator\_18 Start: 8266, Stop: 8763, Start Num: 1  
Candidate Starts for Emmetator\_18:  
(Start: 1 @8266 has 8 MA's), (3, 8272), (31, 8464), (40, 8509),

Gene: GardenState\_70 Start: 42790, Stop: 43125, Start Num: 19  
Candidate Starts for GardenState\_70:  
(Start: 19 @42790 has 12 MA's),

Gene: GrimEater\_42 Start: 31771, Stop: 32124, Start Num: 19  
Candidate Starts for GrimEater\_42:  
(Start: 19 @31771 has 12 MA's), (66, 32089),

Gene: Honk\_75 Start: 46974, Stop: 47339, Start Num: 15  
Candidate Starts for Honk\_75:  
(Start: 15 @46974 has 14 MA's), (29, 47064), (32, 47076), (62, 47274),

Gene: Hortus1\_6 Start: 2730, Stop: 2329, Start Num: 15  
Candidate Starts for Hortus1\_6:  
(Start: 15 @2730 has 14 MA's), (25, 2679), (34, 2616), (36, 2604), (45, 2550), (46, 2541), (47, 2538),  
(54, 2472), (62, 2421),

Gene: Hortus1\_117 Start: 62690, Stop: 62289, Start Num: 15  
Candidate Starts for Hortus1\_117:  
(Start: 15 @62690 has 14 MA's), (25, 62639), (34, 62576), (36, 62564), (45, 62510), (46, 62501), (47,  
62498), (54, 62432), (62, 62381),

Gene: Hubbs\_120 Start: 63433, Stop: 63023, Start Num: 14  
Candidate Starts for Hubbs\_120:  
(2, 63514), (Start: 14 @63433 has 12 MA's), (34, 63319), (36, 63307), (46, 63244), (50, 63217), (62,  
63124), (71, 63034),

Gene: Hubbs\_6 Start: 3034, Stop: 2624, Start Num: 14  
Candidate Starts for Hubbs\_6:  
(2, 3115), (Start: 14 @3034 has 12 MA's), (34, 2920), (36, 2908), (46, 2845), (50, 2818), (62, 2725),  
(71, 2635),

Gene: IAmGroot\_69 Start: 43001, Stop: 43336, Start Num: 19  
Candidate Starts for IAmGroot\_69:  
(8, 42962), (Start: 19 @43001 has 12 MA's),

Gene: Jacko\_7 Start: 2600, Stop: 2214, Start Num: 13  
Candidate Starts for Jacko\_7:  
(Start: 13 @2600 has 2 MA's), (25, 2546), (34, 2483), (37, 2459), (46, 2408), (54, 2345), (62, 2294),  
(64, 2279), (65, 2273), (67, 2234), (69, 2225),

Gene: Jacko\_116 Start: 60993, Stop: 60607, Start Num: 13

Candidate Starts for Jacko\_116:

(Start: 13 @60993 has 2 MA's), (25, 60939), (34, 60876), (37, 60852), (46, 60801), (54, 60738), (62, 60687), (64, 60672), (65, 60666), (67, 60627), (69, 60618),

Gene: Jankie\_43 Start: 31949, Stop: 32302, Start Num: 19

Candidate Starts for Jankie\_43:

(Start: 19 @31949 has 12 MA's), (66, 32267),

Gene: Jflix2\_106 Start: 61115, Stop: 60702, Start Num: 9

Candidate Starts for Jflix2\_106:

(Start: 9 @61115 has 2 MA's), (23, 61058), (24, 61043), (56, 60818), (60, 60794), (61, 60785),

Gene: JonJames\_201 Start: 99038, Stop: 98619, Start Num: 7

Candidate Starts for JonJames\_201:

(Start: 7 @99038 has 2 MA's), (11, 99014), (22, 98984), (26, 98942), (28, 98918), (48, 98801), (49, 98792), (54, 98759), (55, 98753), (65, 98687),

Gene: KSunshine22\_311 Start: 185876, Stop: 186373, Start Num: 1

Candidate Starts for KSunshine22\_311:

(Start: 1 @185876 has 8 MA's), (3, 185882), (31, 186074), (40, 186119), (56, 186245),

Gene: KSunshine22\_19 Start: 8975, Stop: 9472, Start Num: 1

Candidate Starts for KSunshine22\_19:

(Start: 1 @8975 has 8 MA's), (3, 8981), (31, 9173), (40, 9218), (56, 9344),

Gene: Lupine\_116 Start: 62104, Stop: 61703, Start Num: 14

Candidate Starts for Lupine\_116:

(2, 62185), (Start: 14 @62104 has 12 MA's), (34, 61990), (36, 61978), (46, 61915), (50, 61888), (71, 61714),

Gene: Lupine\_6 Start: 2831, Stop: 2430, Start Num: 14

Candidate Starts for Lupine\_6:

(2, 2912), (Start: 14 @2831 has 12 MA's), (34, 2717), (36, 2705), (46, 2642), (50, 2615), (71, 2441),

Gene: Madraxi\_108 Start: 63145, Stop: 62732, Start Num: 9

Candidate Starts for Madraxi\_108:

(Start: 9 @63145 has 2 MA's), (21, 63100), (23, 63088), (24, 63073), (33, 63004),

Gene: MissSwiss\_48 Start: 33199, Stop: 33531, Start Num: 19

Candidate Starts for MissSwiss\_48:

(Start: 19 @33199 has 12 MA's), (66, 33505),

Gene: OlinDD\_117 Start: 62695, Stop: 62294, Start Num: 15

Candidate Starts for OlinDD\_117:

(Start: 15 @62695 has 14 MA's), (25, 62644), (34, 62581), (36, 62569), (45, 62515), (46, 62506), (47, 62503), (54, 62437), (62, 62386),

Gene: OlinDD\_6 Start: 2730, Stop: 2329, Start Num: 15

Candidate Starts for OlinDD\_6:

(Start: 15 @2730 has 14 MA's), (25, 2679), (34, 2616), (36, 2604), (45, 2550), (46, 2541), (47, 2538), (54, 2472), (62, 2421),

Gene: Panchaali\_18 Start: 7794, Stop: 8291, Start Num: 1  
Candidate Starts for Panchaali\_18:  
(Start: 1 @7794 has 8 MA's), (3, 7800), (16, 7884), (31, 7992), (40, 8037),

Gene: Panchaali\_305 Start: 186852, Stop: 187349, Start Num: 1  
Candidate Starts for Panchaali\_305:  
(Start: 1 @186852 has 8 MA's), (3, 186858), (16, 186942), (31, 187050), (40, 187095),

Gene: PandaPo\_48 Start: 33207, Stop: 33539, Start Num: 19  
Candidate Starts for PandaPo\_48:  
(Start: 19 @33207 has 12 MA's), (66, 33513),

Gene: Pavlo\_118 Start: 63181, Stop: 62771, Start Num: 14  
Candidate Starts for Pavlo\_118:  
(2, 63262), (Start: 14 @63181 has 12 MA's), (34, 63067), (36, 63055), (46, 62992), (50, 62965), (62, 62872), (71, 62782),

Gene: Pavlo\_6 Start: 2925, Stop: 2515, Start Num: 14  
Candidate Starts for Pavlo\_6:  
(2, 3006), (Start: 14 @2925 has 12 MA's), (34, 2811), (36, 2799), (46, 2736), (50, 2709), (62, 2616), (71, 2526),

Gene: PhillyPhilly\_117 Start: 62440, Stop: 62039, Start Num: 14  
Candidate Starts for PhillyPhilly\_117:  
(2, 62521), (Start: 14 @62440 has 12 MA's), (34, 62326), (36, 62314), (46, 62251), (50, 62224), (71, 62050),

Gene: PhillyPhilly\_7 Start: 2951, Stop: 2550, Start Num: 14  
Candidate Starts for PhillyPhilly\_7:  
(2, 3032), (Start: 14 @2951 has 12 MA's), (34, 2837), (36, 2825), (46, 2762), (50, 2735), (71, 2561),

Gene: Pioneer3\_117 Start: 62526, Stop: 62125, Start Num: 15  
Candidate Starts for Pioneer3\_117:  
(Start: 15 @62526 has 14 MA's), (25, 62475), (34, 62412), (36, 62400), (45, 62346), (46, 62337), (47, 62334), (54, 62268), (62, 62217),

Gene: Pioneer3\_6 Start: 2763, Stop: 2362, Start Num: 15  
Candidate Starts for Pioneer3\_6:  
(Start: 15 @2763 has 14 MA's), (25, 2712), (34, 2649), (36, 2637), (45, 2583), (46, 2574), (47, 2571), (54, 2505), (62, 2454),

Gene: Platte\_6 Start: 2752, Stop: 2351, Start Num: 15  
Candidate Starts for Platte\_6:  
(Start: 15 @2752 has 14 MA's), (25, 2701), (34, 2638), (36, 2626), (45, 2572), (46, 2563), (47, 2560), (51, 2521), (54, 2494), (59, 2461), (60, 2455), (65, 2422), (68, 2383),

Gene: Reedo\_47 Start: 32807, Stop: 33139, Start Num: 19  
Candidate Starts for Reedo\_47:  
(Start: 19 @32807 has 12 MA's),

Gene: Roman\_122 Start: 63830, Stop: 63420, Start Num: 14  
Candidate Starts for Roman\_122:

(2, 63911), (Start: 14 @63830 has 12 MA's), (34, 63716), (36, 63704), (46, 63641), (50, 63614), (62, 63521),

Gene: Roman\_6 Start: 2743, Stop: 2333, Start Num: 14

Candidate Starts for Roman\_6:

(2, 2824), (Start: 14 @2743 has 12 MA's), (34, 2629), (36, 2617), (46, 2554), (50, 2527), (62, 2434),

Gene: SFuller\_106 Start: 61855, Stop: 61442, Start Num: 9

Candidate Starts for SFuller\_106:

(Start: 9 @61855 has 2 MA's), (21, 61810), (23, 61798), (55, 61567),

Gene: Saradis\_6 Start: 2798, Stop: 2382, Start Num: 14

Candidate Starts for Saradis\_6:

(2, 2879), (Start: 14 @2798 has 12 MA's), (20, 2780), (34, 2684), (35, 2675), (42, 2639), (50, 2588), (61, 2498), (62, 2495), (63, 2486),

Gene: Saradis\_124 Start: 63175, Stop: 62759, Start Num: 14

Candidate Starts for Saradis\_124:

(2, 63256), (Start: 14 @63175 has 12 MA's), (20, 63157), (34, 63061), (35, 63052), (42, 63016), (50, 62965), (61, 62875), (62, 62872), (63, 62863),

Gene: Solimine\_5 Start: 2539, Stop: 2129, Start Num: 14

Candidate Starts for Solimine\_5:

(2, 2620), (Start: 14 @2539 has 12 MA's), (34, 2425), (36, 2413), (45, 2359), (46, 2350), (50, 2323), (62, 2230),

Gene: Soondubu\_41 Start: 34415, Stop: 34756, Start Num: 19

Candidate Starts for Soondubu\_41:

(Start: 19 @34415 has 12 MA's), (66, 34718),

Gene: Stewart25555\_17 Start: 8261, Stop: 8752, Start Num: 3

Candidate Starts for Stewart25555\_17:

(Start: 1 @8255 has 8 MA's), (3, 8261), (16, 8345), (31, 8453), (40, 8498), (53, 8606), (56, 8624),

Gene: Tallboi\_47 Start: 35393, Stop: 35728, Start Num: 19

Candidate Starts for Tallboi\_47:

(Start: 19 @35393 has 12 MA's), (70, 35717),

Gene: Tandem\_6 Start: 2857, Stop: 2456, Start Num: 15

Candidate Starts for Tandem\_6:

(Start: 15 @2857 has 14 MA's), (25, 2806), (34, 2743), (36, 2731), (45, 2677), (46, 2668), (47, 2665), (51, 2626), (54, 2599), (59, 2566), (60, 2560), (65, 2527), (68, 2488),

Gene: Tandem\_117 Start: 62700, Stop: 62299, Start Num: 15

Candidate Starts for Tandem\_117:

(Start: 15 @62700 has 14 MA's), (25, 62649), (34, 62586), (36, 62574), (45, 62520), (46, 62511), (47, 62508), (51, 62469), (54, 62442), (59, 62409), (60, 62403), (65, 62370), (68, 62331),

Gene: Uterion\_6 Start: 3063, Stop: 2653, Start Num: 14

Candidate Starts for Uterion\_6:

(2, 3144), (Start: 14 @3063 has 12 MA's), (34, 2949), (36, 2937), (46, 2874), (50, 2847), (62, 2754), (71, 2664),

Gene: Uterion\_125 Start: 63154, Stop: 62744, Start Num: 14

Candidate Starts for Uterion\_125:

(2, 63235), (Start: 14 @63154 has 12 MA's), (34, 63040), (36, 63028), (46, 62965), (50, 62938), (62, 62845), (71, 62755),

Gene: WaddleDee\_308 Start: 186302, Stop: 186799, Start Num: 1

Candidate Starts for WaddleDee\_308:

(Start: 1 @186302 has 8 MA's), (3, 186308), (31, 186500), (40, 186545), (56, 186671),

Gene: WaddleDee\_17 Start: 8107, Stop: 8604, Start Num: 1

Candidate Starts for WaddleDee\_17:

(Start: 1 @8107 has 8 MA's), (3, 8113), (31, 8305), (40, 8350), (56, 8476),

Gene: Wolfstar\_7 Start: 3322, Stop: 2945, Start Num: 15

Candidate Starts for Wolfstar\_7:

(Start: 15 @3322 has 14 MA's), (18, 3313), (27, 3235), (34, 3208), (37, 3187), (39, 3178), (42, 3166), (45, 3145), (46, 3136), (59, 3040), (60, 3034), (62, 3022),

Gene: Wolfstar\_123 Start: 64463, Stop: 64086, Start Num: 15

Candidate Starts for Wolfstar\_123:

(Start: 15 @64463 has 14 MA's), (18, 64454), (27, 64376), (34, 64349), (37, 64328), (39, 64319), (42, 64307), (45, 64286), (46, 64277), (59, 64181), (60, 64175), (62, 64163),

Gene: Yvonnetastic\_202 Start: 96089, Stop: 95670, Start Num: 7

Candidate Starts for Yvonnetastic\_202:

(6, 96095), (Start: 7 @96089 has 2 MA's), (11, 96065), (22, 96035), (26, 95993), (28, 95969), (48, 95852), (49, 95843), (54, 95810), (55, 95804), (65, 95738),