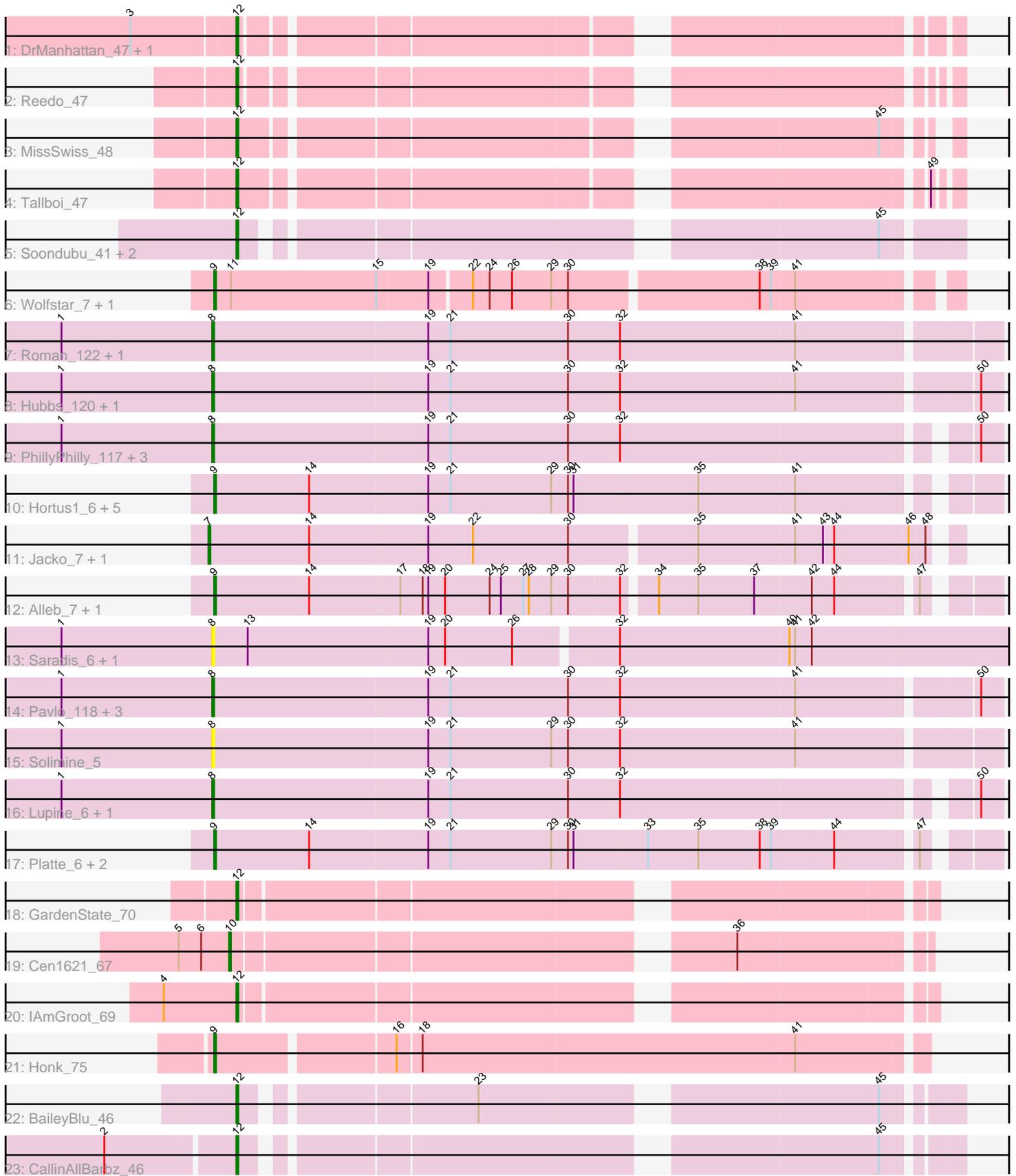


Pham 289507



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 289507 Report

This analysis was run 03/28/26 on database version 641.

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 289507 has 46 members, 7 are drafts.

Phages represented in each track:

- Track 1 : DrManhattan_47, Adolin_48
- Track 2 : Reedo_47
- Track 3 : MissSwiss_48
- Track 4 : Tallboi_47
- Track 5 : Soondubu_41, Jankie_45, GrimEater_43
- Track 6 : Wolfstar_7, Wolfstar_123
- Track 7 : Roman_122, Roman_6
- Track 8 : Hubbs_120, Hubbs_6
- Track 9 : PhillyPhilly_117, DejaVu_6, PhillyPhilly_7, DejaVu_122
- Track 10 : Hortus1_6, OlinDD_117, Hortus1_117, Pioneer3_6, Pioneer3_117, OlinDD_6
- Track 11 : Jacko_7, Jacko_116
- Track 12 : Alleb_7, Alleb_115
- Track 13 : Saradis_6, Saradis_124
- Track 14 : Pavlo_118, Uterion_6, Pavlo_6, Uterion_125
- Track 15 : Solimine_5
- Track 16 : Lupine_6, Lupine_116
- Track 17 : Platte_6, Tandem_6, Tandem_117
- Track 18 : GardenState_70
- Track 19 : Cen1621_67
- Track 20 : IAmGroot_69
- Track 21 : Honk_75
- Track 22 : BaileyBlu_46
- Track 23 : CallinAllBarbz_46

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

The start number called the most often in the published annotations is 9, it was called in 14 of the 39 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, BaileyBlu_46, CallinAllBarbz_46, Cen1621_67, DejaVu_122, DejaVu_6, DrManhattan_47, GardenState_70, GrimEater_43, Hubbs_120, Hubbs_6, IAmGroot_69, Jacko_116, Jacko_7, Jankie_45, Lupine_116, Lupine_6, MissSwiss_48, Pavlo_118, Pavlo_6, PhillyPhilly_117, PhillyPhilly_7, Reedo_47, Roman_122, Roman_6, Saradis_124, Saradis_6, Solimine_5, Soondubu_41, Tallboi_47, Uterion_125, Uterion_6,

Summary by start number:

Start 7:

- Found in 2 of 46 (4.3%) of genes in pham
- Manual Annotations of this start: 2 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jacko_116 (ED1), Jacko_7 (ED1),

Start 8:

- Found in 17 of 46 (37.0%) of genes in pham
- Manual Annotations of this start: 12 of 39
- 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 9:

- Found in 14 of 46 (30.4%) of genes in pham
- Manual Annotations of this start: 14 of 39
- 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 10:

- Found in 1 of 46 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cen1621_67 (EH),

Start 12:

- Found in 12 of 46 (26.1%) of genes in pham
- Manual Annotations of this start: 10 of 39
- 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_43 (FP), IAmGroot_69 (EH), Jankie_45 (FP), MissSwiss_48 (AZ1), Reedo_47 (AZ1), Soondubu_41 (AZ6), Tallboi_47 (AZ1),

Summary by clusters:

There are 6 clusters represented in this pham: FP, EH, ED, ED1, AZ1, AZ6,

Info for manual annotations of cluster AZ1:

- Start number 12 was manually annotated 5 times for cluster AZ1.

Info for manual annotations of cluster AZ6:

- Start number 12 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster ED:

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

Info for manual annotations of cluster ED1:

- Start number 7 was manually annotated 2 times for cluster ED1.
- Start number 8 was manually annotated 12 times for cluster ED1.
- Start number 9 was manually annotated 11 times for cluster ED1.

Info for manual annotations of cluster EH:

- Start number 9 was manually annotated 1 time for cluster EH.
- Start number 10 was manually annotated 1 time for cluster EH.
- Start number 12 was manually annotated 2 times for cluster EH.

Info for manual annotations of cluster FP:

- Start number 12 was manually annotated 2 times for cluster FP.

Gene Information:

Gene: Adolin_48 Start: 33121, Stop: 33456, Start Num: 12

Candidate Starts for Adolin_48:

(3, 33067), (Start: 12 @33121 has 10 MA's),

Gene: Alleb_7 Start: 2777, Stop: 2382, Start Num: 9

Candidate Starts for Alleb_7:

(Start: 9 @2777 has 14 MA's), (14, 2726), (17, 2678), (18, 2666), (19, 2663), (20, 2654), (24, 2630), (25, 2624), (27, 2612), (28, 2609), (29, 2597), (30, 2588), (32, 2561), (34, 2546), (35, 2525), (37, 2495), (42, 2465), (44, 2453), (47, 2414),

Gene: Alleb_115 Start: 62256, Stop: 61861, Start Num: 9

Candidate Starts for Alleb_115:

(Start: 9 @62256 has 14 MA's), (14, 62205), (17, 62157), (18, 62145), (19, 62142), (20, 62133), (24, 62109), (25, 62103), (27, 62091), (28, 62088), (29, 62076), (30, 62067), (32, 62040), (34, 62025), (35, 62004), (37, 61974), (42, 61944), (44, 61932), (47, 61893),

Gene: BaileyBlu_46 Start: 33124, Stop: 33462, Start Num: 12

Candidate Starts for BaileyBlu_46:

(Start: 12 @33124 has 10 MA's), (23, 33235), (45, 33427),

Gene: CallinAllBarbz_46 Start: 33305, Stop: 33643, Start Num: 12

Candidate Starts for CallinAllBarbz_46:

(2, 33239), (Start: 12 @33305 has 10 MA's), (45, 33608),

Gene: Cen1621_67 Start: 45156, Stop: 45494, Start Num: 10

Candidate Starts for Cen1621_67:

(5, 45129), (6, 45141), (Start: 10 @45156 has 1 MA's), (36, 45399),

Gene: DejaVu_6 Start: 2530, Stop: 2129, Start Num: 8

Candidate Starts for DejaVu_6:

(1, 2611), (Start: 8 @2530 has 12 MA's), (19, 2416), (21, 2404), (30, 2341), (32, 2314), (50, 2140),

Gene: DejaVu_122 Start: 62910, Stop: 62509, Start Num: 8

Candidate Starts for DejaVu_122:

(1, 62991), (Start: 8 @62910 has 12 MA's), (19, 62796), (21, 62784), (30, 62721), (32, 62694), (50, 62520),

Gene: DrManhattan_47 Start: 32688, Stop: 33023, Start Num: 12

Candidate Starts for DrManhattan_47:

(3, 32634), (Start: 12 @32688 has 10 MA's),

Gene: GardenState_70 Start: 42790, Stop: 43125, Start Num: 12

Candidate Starts for GardenState_70:

(Start: 12 @42790 has 10 MA's),

Gene: GrimEater_43 Start: 31771, Stop: 32124, Start Num: 12

Candidate Starts for GrimEater_43:

(Start: 12 @31771 has 10 MA's), (45, 32089),

Gene: Honk_75 Start: 46974, Stop: 47339, Start Num: 9

Candidate Starts for Honk_75:

(Start: 9 @46974 has 14 MA's), (16, 47064), (18, 47076), (41, 47274),

Gene: Hortus1_6 Start: 2730, Stop: 2329, Start Num: 9

Candidate Starts for Hortus1_6:

(Start: 9 @2730 has 14 MA's), (14, 2679), (19, 2616), (21, 2604), (29, 2550), (30, 2541), (31, 2538), (35, 2472), (41, 2421),

Gene: Hortus1_117 Start: 62690, Stop: 62289, Start Num: 9

Candidate Starts for Hortus1_117:

(Start: 9 @62690 has 14 MA's), (14, 62639), (19, 62576), (21, 62564), (29, 62510), (30, 62501), (31, 62498), (35, 62432), (41, 62381),

Gene: Hubbs_120 Start: 63433, Stop: 63023, Start Num: 8

Candidate Starts for Hubbs_120:

(1, 63514), (Start: 8 @63433 has 12 MA's), (19, 63319), (21, 63307), (30, 63244), (32, 63217), (41, 63124), (50, 63034),

Gene: Hubbs_6 Start: 3034, Stop: 2624, Start Num: 8

Candidate Starts for Hubbs_6:

(1, 3115), (Start: 8 @3034 has 12 MA's), (19, 2920), (21, 2908), (30, 2845), (32, 2818), (41, 2725), (50, 2635),

Gene: IAmGroot_69 Start: 43001, Stop: 43336, Start Num: 12

Candidate Starts for IAmGroot_69:

(4, 42962), (Start: 12 @43001 has 10 MA's),

Gene: Jacko_7 Start: 2600, Stop: 2214, Start Num: 7

Candidate Starts for Jacko_7:

(Start: 7 @2600 has 2 MA's), (14, 2546), (19, 2483), (22, 2459), (30, 2408), (35, 2345), (41, 2294), (43, 2279), (44, 2273), (46, 2234), (48, 2225),

Gene: Jacko_116 Start: 60993, Stop: 60607, Start Num: 7

Candidate Starts for Jacko_116:

(Start: 7 @60993 has 2 MA's), (14, 60939), (19, 60876), (22, 60852), (30, 60801), (35, 60738), (41, 60687), (43, 60672), (44, 60666), (46, 60627), (48, 60618),

Gene: Jankie_45 Start: 31949, Stop: 32302, Start Num: 12

Candidate Starts for Jankie_45:

(Start: 12 @31949 has 10 MA's), (45, 32267),

Gene: Lupine_6 Start: 2831, Stop: 2430, Start Num: 8

Candidate Starts for Lupine_6:

(1, 2912), (Start: 8 @2831 has 12 MA's), (19, 2717), (21, 2705), (30, 2642), (32, 2615), (50, 2441),

Gene: Lupine_116 Start: 62104, Stop: 61703, Start Num: 8

Candidate Starts for Lupine_116:

(1, 62185), (Start: 8 @62104 has 12 MA's), (19, 61990), (21, 61978), (30, 61915), (32, 61888), (50, 61714),

Gene: MissSwiss_48 Start: 33199, Stop: 33531, Start Num: 12

Candidate Starts for MissSwiss_48:

(Start: 12 @33199 has 10 MA's), (45, 33505),

Gene: OlinDD_117 Start: 62695, Stop: 62294, Start Num: 9

Candidate Starts for OlinDD_117:

(Start: 9 @62695 has 14 MA's), (14, 62644), (19, 62581), (21, 62569), (29, 62515), (30, 62506), (31, 62503), (35, 62437), (41, 62386),

Gene: OlinDD_6 Start: 2730, Stop: 2329, Start Num: 9

Candidate Starts for OlinDD_6:

(Start: 9 @2730 has 14 MA's), (14, 2679), (19, 2616), (21, 2604), (29, 2550), (30, 2541), (31, 2538), (35, 2472), (41, 2421),

Gene: Pavlo_118 Start: 63181, Stop: 62771, Start Num: 8

Candidate Starts for Pavlo_118:

(1, 63262), (Start: 8 @63181 has 12 MA's), (19, 63067), (21, 63055), (30, 62992), (32, 62965), (41, 62872), (50, 62782),

Gene: Pavlo_6 Start: 2925, Stop: 2515, Start Num: 8

Candidate Starts for Pavlo_6:

(1, 3006), (Start: 8 @2925 has 12 MA's), (19, 2811), (21, 2799), (30, 2736), (32, 2709), (41, 2616), (50, 2526),

Gene: PhillyPhilly_117 Start: 62440, Stop: 62039, Start Num: 8
Candidate Starts for PhillyPhilly_117:
(1, 62521), (Start: 8 @62440 has 12 MA's), (19, 62326), (21, 62314), (30, 62251), (32, 62224), (50, 62050),

Gene: PhillyPhilly_7 Start: 2951, Stop: 2550, Start Num: 8
Candidate Starts for PhillyPhilly_7:
(1, 3032), (Start: 8 @2951 has 12 MA's), (19, 2837), (21, 2825), (30, 2762), (32, 2735), (50, 2561),

Gene: Pioneer3_6 Start: 2763, Stop: 2362, Start Num: 9
Candidate Starts for Pioneer3_6:
(Start: 9 @2763 has 14 MA's), (14, 2712), (19, 2649), (21, 2637), (29, 2583), (30, 2574), (31, 2571), (35, 2505), (41, 2454),

Gene: Pioneer3_117 Start: 62526, Stop: 62125, Start Num: 9
Candidate Starts for Pioneer3_117:
(Start: 9 @62526 has 14 MA's), (14, 62475), (19, 62412), (21, 62400), (29, 62346), (30, 62337), (31, 62334), (35, 62268), (41, 62217),

Gene: Platte_6 Start: 2752, Stop: 2351, Start Num: 9
Candidate Starts for Platte_6:
(Start: 9 @2752 has 14 MA's), (14, 2701), (19, 2638), (21, 2626), (29, 2572), (30, 2563), (31, 2560), (33, 2521), (35, 2494), (38, 2461), (39, 2455), (44, 2422), (47, 2383),

Gene: Reedo_47 Start: 32807, Stop: 33139, Start Num: 12
Candidate Starts for Reedo_47:
(Start: 12 @32807 has 10 MA's),

Gene: Roman_122 Start: 63830, Stop: 63420, Start Num: 8
Candidate Starts for Roman_122:
(1, 63911), (Start: 8 @63830 has 12 MA's), (19, 63716), (21, 63704), (30, 63641), (32, 63614), (41, 63521),

Gene: Roman_6 Start: 2743, Stop: 2333, Start Num: 8
Candidate Starts for Roman_6:
(1, 2824), (Start: 8 @2743 has 12 MA's), (19, 2629), (21, 2617), (30, 2554), (32, 2527), (41, 2434),

Gene: Saradis_6 Start: 2798, Stop: 2382, Start Num: 8
Candidate Starts for Saradis_6:
(1, 2879), (Start: 8 @2798 has 12 MA's), (13, 2780), (19, 2684), (20, 2675), (26, 2639), (32, 2588), (40, 2498), (41, 2495), (42, 2486),

Gene: Saradis_124 Start: 63175, Stop: 62759, Start Num: 8
Candidate Starts for Saradis_124:
(1, 63256), (Start: 8 @63175 has 12 MA's), (13, 63157), (19, 63061), (20, 63052), (26, 63016), (32, 62965), (40, 62875), (41, 62872), (42, 62863),

Gene: Solimine_5 Start: 2539, Stop: 2129, Start Num: 8
Candidate Starts for Solimine_5:
(1, 2620), (Start: 8 @2539 has 12 MA's), (19, 2425), (21, 2413), (29, 2359), (30, 2350), (32, 2323), (41, 2230),

Gene: Soondubu_41 Start: 34415, Stop: 34756, Start Num: 12
Candidate Starts for Soondubu_41:
(Start: 12 @34415 has 10 MA's), (45, 34718),

Gene: Tallboi_47 Start: 35393, Stop: 35728, Start Num: 12
Candidate Starts for Tallboi_47:
(Start: 12 @35393 has 10 MA's), (49, 35717),

Gene: Tandem_6 Start: 2857, Stop: 2456, Start Num: 9
Candidate Starts for Tandem_6:
(Start: 9 @2857 has 14 MA's), (14, 2806), (19, 2743), (21, 2731), (29, 2677), (30, 2668), (31, 2665),
(33, 2626), (35, 2599), (38, 2566), (39, 2560), (44, 2527), (47, 2488),

Gene: Tandem_117 Start: 62700, Stop: 62299, Start Num: 9
Candidate Starts for Tandem_117:
(Start: 9 @62700 has 14 MA's), (14, 62649), (19, 62586), (21, 62574), (29, 62520), (30, 62511), (31,
62508), (33, 62469), (35, 62442), (38, 62409), (39, 62403), (44, 62370), (47, 62331),

Gene: Uterion_6 Start: 3063, Stop: 2653, Start Num: 8
Candidate Starts for Uterion_6:
(1, 3144), (Start: 8 @3063 has 12 MA's), (19, 2949), (21, 2937), (30, 2874), (32, 2847), (41, 2754), (50,
2664),

Gene: Uterion_125 Start: 63154, Stop: 62744, Start Num: 8
Candidate Starts for Uterion_125:
(1, 63235), (Start: 8 @63154 has 12 MA's), (19, 63040), (21, 63028), (30, 62965), (32, 62938), (41,
62845), (50, 62755),

Gene: Wolfstar_7 Start: 3322, Stop: 2945, Start Num: 9
Candidate Starts for Wolfstar_7:
(Start: 9 @3322 has 14 MA's), (11, 3313), (15, 3235), (19, 3208), (22, 3187), (24, 3178), (26, 3166),
(29, 3145), (30, 3136), (38, 3040), (39, 3034), (41, 3022),

Gene: Wolfstar_123 Start: 64463, Stop: 64086, Start Num: 9
Candidate Starts for Wolfstar_123:
(Start: 9 @64463 has 14 MA's), (11, 64454), (15, 64376), (19, 64349), (22, 64328), (24, 64319), (26,
64307), (29, 64286), (30, 64277), (38, 64181), (39, 64175), (41, 64163),