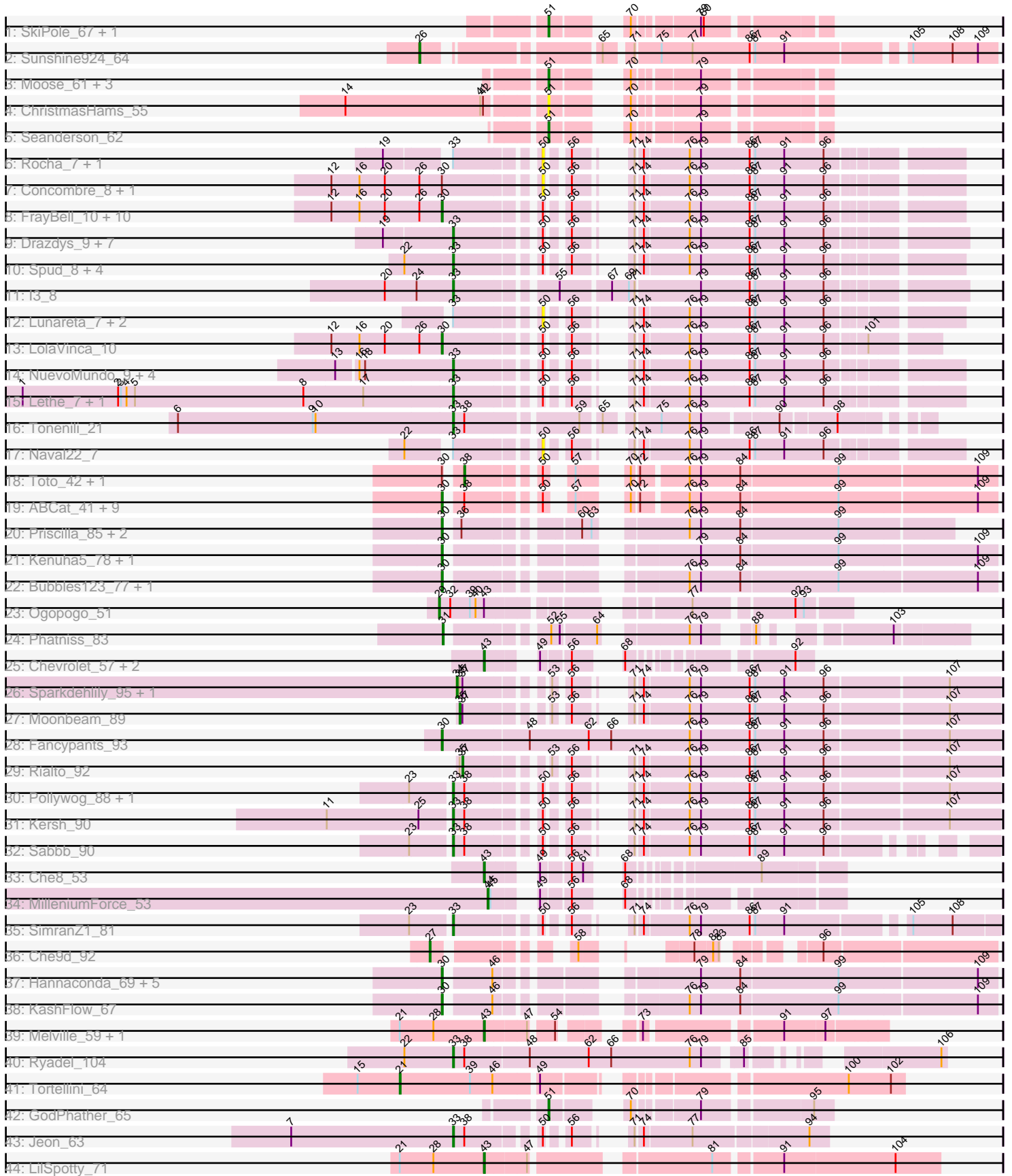


Pham 294590



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 294590 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294590 has 102 members, 17 are drafts.

Phages represented in each track:

- Track 1 : SkiPole\_67, Pepe\_58
- Track 2 : Sunshine924\_64
- Track 3 : Moose\_61, SwissCheese\_63, Forsytheast\_61, Bruns\_61
- Track 4 : ChristmasHams\_55
- Track 5 : Seanderson\_62
- Track 6 : Rocha\_7, LookingGlass\_7
- Track 7 : Concombre\_8, Demodog\_7
- Track 8 : FrayBell\_10, Tainan\_10, Sebata\_9, JayJay\_9, Specks\_10, InterFolia\_10, Pupusa\_10, JigglyPuff\_8, PharkleMinkus\_10, LordLeafolot\_10, LinStu\_9
- Track 9 : Drazdys\_9, Kamryn\_7, Jezreel\_7, Tyke\_9, Mikro\_7, Bxz1\_7, DTDevon\_9, NoodleTree\_7
- Track 10 : Spud\_8, Nidhogg\_7, Sauce\_7, Pio\_8, MoMoMixon\_7
- Track 11 : l3\_8
- Track 12 : Lunareta\_7, Maturis\_8, Montpel\_7
- Track 13 : LolaVinca\_10
- Track 14 : NuevoMundo\_9, StephanieG\_9, Pier\_10, Astraea\_9, Dandelion\_10
- Track 15 : Lethe\_7, Bigswole\_6
- Track 16 : Tonenili\_21
- Track 17 : Naval22\_7
- Track 18 : Toto\_42, Marshmallow\_42
- Track 19 : ABCat\_41, Inca\_40, BilboSwaggins\_42, IHOP\_41, Tuco\_44, CrystalP\_43, Myrale\_43, ShamWow\_43, StellaBean\_41, Phaja\_41
- Track 20 : Priscilla\_85, NormanBulbieJr\_83, Koella\_77
- Track 21 : Kenuha5\_78, Nekros\_71
- Track 22 : Bubbles123\_77, Shauna1\_82
- Track 23 : Ogopogo\_51
- Track 24 : Phatniss\_83
- Track 25 : Chevrolet\_57, Royals2015\_53, ArcusAngelus\_54
- Track 26 : Sparkdehlily\_95, TDanisky\_96
- Track 27 : Moonbeam\_89
- Track 28 : Fancypants\_93
- Track 29 : Rialto\_92
- Track 30 : Pollywog\_88, Rearden\_72
- Track 31 : Kersh\_90
- Track 32 : Sabbb\_90
- Track 33 : Che8\_53
- Track 34 : MilleniumForce\_53

- Track 35 : SimranZ1\_81
- Track 36 : Che9d\_92
- Track 37 : Hannaconda\_69, BronnyJames\_66, Aubs\_83, Shaboozey\_65, SuperGrey\_83, Donkeykong\_89
- Track 38 : KashFlow\_67
- Track 39 : Melville\_59, Duplicity\_53
- Track 40 : Ryadel\_104
- Track 41 : Tortellini\_64
- Track 42 : GodPhather\_65
- Track 43 : Jeon\_63
- Track 44 : LilSpotty\_71

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

The start number called the most often in the published annotations is 30, it was called in 30 of the 85 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABCat\_41, Aubs\_83, BilboSwaggins\_42, BronnyJames\_66, Bubbles123\_77, CrystalP\_43, Donkeykong\_89, Fancypants\_93, FrayBell\_10, Hannaconda\_69, IHOP\_41, Inca\_40, InterFolia\_10, JayJay\_9, JigglyPuff\_8, KashFlow\_67, Kenuha5\_78, Koella\_77, LinStu\_9, LolaVinca\_10, LordLeafolot\_10, Myrale\_43, Nekros\_71, NormanBulbieJr\_83, Phaja\_41, PharkleMinkus\_10, Priscilla\_85, Pupusa\_10, Sebata\_9, Shaboozey\_65, ShamWow\_43, Shauna1\_82, Specks\_10, StellaBean\_41, SuperGrey\_83, Tainan\_10, Tuco\_44,

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

- Concombre\_8, Demodog\_7, Marshmallow\_42, Toto\_42,

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

- ArcusAngelus\_54, Astraea\_9, Bigswole\_6, Bruns\_61, Bxz1\_7, Che8\_53, Che9d\_92, Chevrolet\_57, ChristmasHams\_55, DTDevon\_9, Dandelion\_10, Drazdys\_9, Duplicity\_53, Forsytheast\_61, GodPhather\_65, I3\_8, Jeon\_63, Jezreel\_7, Kamryn\_7, Kersh\_90, Lethe\_7, LilSpotty\_71, LookingGlass\_7, Lunareta\_7, Maturis\_8, Melville\_59, Mikro\_7, MilleniumForce\_53, MoMoMixon\_7, Montpel\_7, Moonbeam\_89, Moose\_61, Naval22\_7, Nidhogg\_7, NoodleTree\_7, NuevoMundo\_9, Ogopogo\_51, Pepe\_58, Phatniss\_83, Pier\_10, Pio\_8, Pollywog\_88, Rearden\_72, Rialto\_92, Rocha\_7, Royals2015\_53, Ryadel\_104, Sabbb\_90, Sauce\_7, Seanderson\_62, SimranZ1\_81, SkiPole\_67, Sparkdehlily\_95, Spud\_8, StephanieG\_9, Sunshine924\_64, SwissCheese\_63, TDanisky\_96, Tonenili\_21, Tortellini\_64, Tyke\_9,

**Summary by start number:**

Start 21:

- Found in 4 of 102 ( 3.9% ) of genes in pham
- Manual Annotations of this start: 1 of 85
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Tortellini\_64 (P2),

Start 26:

- Found in 15 of 102 ( 14.7% ) of genes in pham
- Manual Annotations of this start: 1 of 85
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Sunshine924\_64 (A1),

#### Start 27:

- Found in 1 of 102 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 1 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Che9d\_92 (F2),

#### Start 29:

- Found in 1 of 102 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 1 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ogopogo\_51 (F1),

#### Start 30:

- Found in 41 of 102 ( 40.2% ) of genes in pham
- Manual Annotations of this start: 30 of 85
- Called 90.2% of time when present
- Phage (with cluster) where this start called: ABCat\_41 (E), Aubs\_83 (F1), BilboSwaggins\_42 (E), BronnyJames\_66 (J), Bubbles123\_77 (F1), CrystalP\_43 (E), Donkeykong\_89 (F1), Fancypants\_93 (F1), FrayBell\_10 (C1), Hannaconda\_69 (J), IHOP\_41 (E), Inca\_40 (E), InterFolia\_10 (C1), JayJay\_9 (C1), JigglyPuff\_8 (C1), KashFlow\_67 (J), Kenuha5\_78 (F1), Koella\_77 (F1), LinStu\_9 (C1), LolaVinca\_10 (C1), LordLeafolot\_10 (C1), Myrale\_43 (E), Nekros\_71 (J), NormanBulbieJr\_83 (F1), Phaja\_41 (E), PharkleMinkus\_10 (C1), Priscilla\_85 (F1), Pupusa\_10 (C1), Sebata\_9 (C1), Shaboozey\_65 (J), ShamWow\_43 (E), Shauna1\_82 (F1), Specks\_10 (C1), StellaBean\_41 (E), SuperGrey\_83 (F1), Tainan\_10 (C1), Tuco\_44 (E),

#### Start 31:

- Found in 1 of 102 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 1 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phatniss\_83 (F1),

#### Start 33:

- Found in 35 of 102 ( 34.3% ) of genes in pham
- Manual Annotations of this start: 28 of 85
- Called 82.9% of time when present
- Phage (with cluster) where this start called: Astraea\_9 (C1), Bigswole\_6 (C1), Bxz1\_7 (C1), DTDevon\_9 (C1), Dandelion\_10 (C1), Drazdys\_9 (C1), I3\_8 (C1), Jeon\_63 (W), Jezreel\_7 (C1), Kamryn\_7 (C1), Kersh\_90 (F1), Lethe\_7 (C1), Mikro\_7 (C1), MoMoMixon\_7 (C1), Nidhogg\_7 (C1), NoodleTree\_7 (C1), NuevoMundo\_9 (C1), Pier\_10 (C1), Pio\_8 (C1), Pollywog\_88 (F1), Rearden\_72 (J), Ryadel\_104 (O), Sabbb\_90 (F1), Sauce\_7 (C1), SimranZ1\_81 (F1), Spud\_8 (C1), StephanieG\_9 (C1), Tonenii\_21 (C1), Tyke\_9 (C1),

#### Start 34:

- Found in 2 of 102 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 2 of 85
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Sparkdehlily\_95 (F1), TDanisky\_96 (F1),

Start 35:

- Found in 4 of 102 ( 3.9% ) of genes in pham
- Manual Annotations of this start: 1 of 85
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Moonbeam\_89 (F1),

Start 37:

- Found in 4 of 102 ( 3.9% ) of genes in pham
- Manual Annotations of this start: 1 of 85
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Rialto\_92 (F1),

Start 38:

- Found in 19 of 102 ( 18.6% ) of genes in pham
- Manual Annotations of this start: 2 of 85
- Called 10.5% of time when present
- Phage (with cluster) where this start called: Marshmallow\_42 (E), Toto\_42 (E),

Start 43:

- Found in 8 of 102 ( 7.8% ) of genes in pham
- Manual Annotations of this start: 7 of 85
- Called 87.5% of time when present
- Phage (with cluster) where this start called: ArcusAngelus\_54 (F1), Che8\_53 (F1), Chevrolet\_57 (F1), Duplicity\_53 (N), LilSpotty\_71 (singleton), Melville\_59 (N), Royals2015\_53 (F1),

Start 44:

- Found in 1 of 102 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 1 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MilleniumForce\_53 (F1),

Start 50:

- Found in 58 of 102 ( 56.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 13.8% of time when present
- Phage (with cluster) where this start called: Concombre\_8 (C1), Demodog\_7 (C1), LookingGlass\_7 (C1), Lunareta\_7 (C1), Maturis\_8 (C1), Montpel\_7 (C1), Naval22\_7 (C1), Rocha\_7 (C1),

Start 51:

- Found in 9 of 102 ( 8.8% ) of genes in pham
- Manual Annotations of this start: 8 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bruns\_61 (A1), ChristmasHams\_55 (A1), Forsytheast\_61 (A1), GodPhather\_65 (W), Moose\_61 (A1), Pepe\_58 (A1), Seanderson\_62 (A1), SkiPole\_67 (A1), SwissCheese\_63 (A1),

**Summary by clusters:**

There are 11 clusters represented in this pham: P2, F1, F2, E, J, singleton, O, N, A1, W, C1,

Info for manual annotations of cluster A1:

- Start number 26 was manually annotated 1 time for cluster A1.
- Start number 51 was manually annotated 7 times for cluster A1.

Info for manual annotations of cluster C1:

- Start number 30 was manually annotated 8 times for cluster C1.
- Start number 33 was manually annotated 22 times for cluster C1.

Info for manual annotations of cluster E:

- Start number 30 was manually annotated 10 times for cluster E.
- Start number 38 was manually annotated 2 times for cluster E.

Info for manual annotations of cluster F1:

- Start number 29 was manually annotated 1 time for cluster F1.
- Start number 30 was manually annotated 10 times for cluster F1.
- Start number 31 was manually annotated 1 time for cluster F1.
- Start number 33 was manually annotated 4 times for cluster F1.
- Start number 34 was manually annotated 2 times for cluster F1.
- Start number 35 was manually annotated 1 time for cluster F1.
- Start number 37 was manually annotated 1 time for cluster F1.
- Start number 43 was manually annotated 4 times for cluster F1.
- Start number 44 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 27 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster J:

- Start number 30 was manually annotated 2 times for cluster J.

Info for manual annotations of cluster N:

- Start number 43 was manually annotated 2 times for cluster N.

Info for manual annotations of cluster O:

- Start number 33 was manually annotated 1 time for cluster O.

Info for manual annotations of cluster P2:

- Start number 21 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster W:

- Start number 33 was manually annotated 1 time for cluster W.
- Start number 51 was manually annotated 1 time for cluster W.

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

Gene: ABCat\_41 Start: 35824, Stop: 35336, Start Num: 30

Candidate Starts for ABCat\_41:

(Start: 30 @35824 has 30 MA's), (Start: 38 @35812 has 2 MA's), (50, 35749), (57, 35734), (70, 35707), (72, 35701), (76, 35656), (79, 35644), (84, 35602), (99, 35500), (109, 35356),

Gene: ArcusAngelus\_54 Start: 38017, Stop: 38256, Start Num: 43  
Candidate Starts for ArcusAngelus\_54:  
(Start: 43 @38017 has 7 MA's), (49, 38050), (56, 38077), (68, 38101), (92, 38239),

Gene: Astraea\_9 Start: 2499, Stop: 2930, Start Num: 33  
Candidate Starts for Astraea\_9:  
(13, 2394), (16, 2415), (18, 2421), (Start: 33 @2499 has 28 MA's), (50, 2574), (56, 2589), (71, 2616),  
(74, 2622), (76, 2667), (79, 2679), (86, 2730), (87, 2733), (91, 2763), (96, 2805),

Gene: Aubs\_83 Start: 50008, Stop: 50520, Start Num: 30  
Candidate Starts for Aubs\_83:  
(Start: 30 @50008 has 30 MA's), (46, 50050), (79, 50212), (84, 50254), (99, 50356), (109, 50500),

Gene: Bigswole\_6 Start: 2050, Stop: 2481, Start Num: 33  
Candidate Starts for Bigswole\_6:  
(1, 1606), (2, 1708), (3, 1711), (4, 1717), (5, 1726), (8, 1906), (17, 1969), (Start: 33 @2050 has 28  
MA's), (50, 2125), (56, 2140), (71, 2167), (74, 2173), (76, 2218), (79, 2230), (86, 2281), (87, 2284), (91,  
2314), (96, 2356),

Gene: BilboSwaggins\_42 Start: 35832, Stop: 35344, Start Num: 30  
Candidate Starts for BilboSwaggins\_42:  
(Start: 30 @35832 has 30 MA's), (Start: 38 @35820 has 2 MA's), (50, 35757), (57, 35742), (70, 35715),  
(72, 35709), (76, 35664), (79, 35652), (84, 35610), (99, 35508), (109, 35364),

Gene: BronnyJames\_66 Start: 44654, Stop: 44142, Start Num: 30  
Candidate Starts for BronnyJames\_66:  
(Start: 30 @44654 has 30 MA's), (46, 44612), (79, 44450), (84, 44408), (99, 44306), (109, 44162),

Gene: Bruns\_61 Start: 39972, Stop: 39745, Start Num: 51  
Candidate Starts for Bruns\_61:  
(Start: 51 @39972 has 8 MA's), (70, 39924), (79, 39864),

Gene: Bubbles123\_77 Start: 48885, Stop: 49397, Start Num: 30  
Candidate Starts for Bubbles123\_77:  
(Start: 30 @48885 has 30 MA's), (76, 49077), (79, 49089), (84, 49131), (99, 49233), (109, 49377),

Gene: Bxz1\_7 Start: 2148, Stop: 2579, Start Num: 33  
Candidate Starts for Bxz1\_7:  
(19, 2091), (Start: 33 @2148 has 28 MA's), (50, 2223), (56, 2238), (71, 2265), (74, 2271), (76, 2316),  
(79, 2328), (86, 2379), (87, 2382), (91, 2412), (96, 2454),

Gene: Che8\_53 Start: 37842, Stop: 38123, Start Num: 43  
Candidate Starts for Che8\_53:  
(Start: 43 @37842 has 7 MA's), (49, 37875), (56, 37902), (61, 37914), (68, 37926), (89, 38040),

Gene: Che9d\_92 Start: 49021, Stop: 49440, Start Num: 27  
Candidate Starts for Che9d\_92:  
(Start: 27 @49021 has 1 MA's), (58, 49126), (78, 49174), (82, 49192), (83, 49198), (96, 49264),

Gene: Chevrolet\_57 Start: 38018, Stop: 38257, Start Num: 43  
Candidate Starts for Chevrolet\_57:  
(Start: 43 @38018 has 7 MA's), (49, 38051), (56, 38078), (68, 38102), (92, 38240),

Gene: ChristmasHams\_55 Start: 38539, Stop: 38312, Start Num: 51

Candidate Starts for ChristmasHams\_55:

(14, 38740), (41, 38596), (42, 38593), (Start: 51 @38539 has 8 MA's), (70, 38491), (79, 38431),

Gene: Concombres\_8 Start: 2242, Stop: 2598, Start Num: 50

Candidate Starts for Concombres\_8:

(12, 2038), (16, 2068), (20, 2095), (Start: 26 @2131 has 1 MA's), (Start: 30 @2155 has 30 MA's), (50, 2242), (56, 2257), (71, 2284), (74, 2290), (76, 2335), (79, 2347), (86, 2398), (87, 2401), (91, 2431), (96, 2473),

Gene: CrystalP\_43 Start: 35832, Stop: 35344, Start Num: 30

Candidate Starts for CrystalP\_43:

(Start: 30 @35832 has 30 MA's), (Start: 38 @35820 has 2 MA's), (50, 35757), (57, 35742), (70, 35715), (72, 35709), (76, 35664), (79, 35652), (84, 35610), (99, 35508), (109, 35364),

Gene: DTDevon\_9 Start: 2817, Stop: 3251, Start Num: 33

Candidate Starts for DTDevon\_9:

(19, 2760), (Start: 33 @2817 has 28 MA's), (50, 2892), (56, 2907), (71, 2934), (74, 2940), (76, 2985), (79, 2997), (86, 3048), (87, 3051), (91, 3081), (96, 3123),

Gene: Dandelion\_10 Start: 3168, Stop: 3599, Start Num: 33

Candidate Starts for Dandelion\_10:

(13, 3063), (16, 3084), (18, 3090), (Start: 33 @3168 has 28 MA's), (50, 3243), (56, 3258), (71, 3285), (74, 3291), (76, 3336), (79, 3348), (86, 3399), (87, 3402), (91, 3432), (96, 3474),

Gene: Demodog\_7 Start: 2242, Stop: 2598, Start Num: 50

Candidate Starts for Demodog\_7:

(12, 2038), (16, 2068), (20, 2095), (Start: 26 @2131 has 1 MA's), (Start: 30 @2155 has 30 MA's), (50, 2242), (56, 2257), (71, 2284), (74, 2290), (76, 2335), (79, 2347), (86, 2398), (87, 2401), (91, 2431), (96, 2473),

Gene: Donkeykong\_89 Start: 51613, Stop: 52125, Start Num: 30

Candidate Starts for Donkeykong\_89:

(Start: 30 @51613 has 30 MA's), (46, 51655), (79, 51817), (84, 51859), (99, 51961), (109, 52105),

Gene: Drazdys\_9 Start: 2817, Stop: 3251, Start Num: 33

Candidate Starts for Drazdys\_9:

(19, 2760), (Start: 33 @2817 has 28 MA's), (50, 2892), (56, 2907), (71, 2934), (74, 2940), (76, 2985), (79, 2997), (86, 3048), (87, 3051), (91, 3081), (96, 3123),

Gene: Duplicity\_53 Start: 35954, Stop: 36301, Start Num: 43

Candidate Starts for Duplicity\_53:

(Start: 21 @35864 has 1 MA's), (28, 35900), (Start: 43 @35954 has 7 MA's), (47, 35996), (54, 36017), (73, 36068), (91, 36197), (97, 36239),

Gene: Fancypants\_93 Start: 52418, Stop: 52996, Start Num: 30

Candidate Starts for Fancypants\_93:

(Start: 30 @52418 has 30 MA's), (48, 52508), (62, 52571), (66, 52595), (76, 52679), (79, 52691), (86, 52742), (87, 52745), (91, 52775), (96, 52817), (107, 52943),

Gene: Forsytheast\_61 Start: 40140, Stop: 39913, Start Num: 51

Candidate Starts for Forsytheast\_61:

(Start: 51 @40140 has 8 MA's), (70, 40092), (79, 40032),

Gene: FrayBell\_10 Start: 2978, Stop: 3421, Start Num: 30

Candidate Starts for FrayBell\_10:

(12, 2861), (16, 2891), (20, 2918), (Start: 26 @2954 has 1 MA's), (Start: 30 @2978 has 30 MA's), (50, 3065), (56, 3080), (71, 3107), (74, 3113), (76, 3158), (79, 3170), (86, 3221), (87, 3224), (91, 3254), (96, 3296),

Gene: GodPhather\_65 Start: 49176, Stop: 49409, Start Num: 51

Candidate Starts for GodPhather\_65:

(Start: 51 @49176 has 8 MA's), (70, 49224), (79, 49284), (95, 49389),

Gene: Hannaconda\_69 Start: 45759, Stop: 45247, Start Num: 30

Candidate Starts for Hannaconda\_69:

(Start: 30 @45759 has 30 MA's), (46, 45717), (79, 45555), (84, 45513), (99, 45411), (109, 45267),

Gene: I3\_8 Start: 2847, Stop: 3332, Start Num: 33

Candidate Starts for I3\_8:

(20, 2790), (24, 2823), (Start: 33 @2847 has 28 MA's), (55, 2940), (67, 2988), (69, 3006), (71, 3012), (79, 3078), (86, 3129), (87, 3132), (91, 3162), (96, 3204),

Gene: IHOP\_41 Start: 35396, Stop: 34908, Start Num: 30

Candidate Starts for IHOP\_41:

(Start: 30 @35396 has 30 MA's), (Start: 38 @35384 has 2 MA's), (50, 35321), (57, 35306), (70, 35279), (72, 35273), (76, 35228), (79, 35216), (84, 35174), (99, 35072), (109, 34928),

Gene: Inca\_40 Start: 33921, Stop: 33433, Start Num: 30

Candidate Starts for Inca\_40:

(Start: 30 @33921 has 30 MA's), (Start: 38 @33909 has 2 MA's), (50, 33846), (57, 33831), (70, 33804), (72, 33798), (76, 33753), (79, 33741), (84, 33699), (99, 33597), (109, 33453),

Gene: InterFolia\_10 Start: 2977, Stop: 3420, Start Num: 30

Candidate Starts for InterFolia\_10:

(12, 2860), (16, 2890), (20, 2917), (Start: 26 @2953 has 1 MA's), (Start: 30 @2977 has 30 MA's), (50, 3064), (56, 3079), (71, 3106), (74, 3112), (76, 3157), (79, 3169), (86, 3220), (87, 3223), (91, 3253), (96, 3295),

Gene: JayJay\_9 Start: 2506, Stop: 2949, Start Num: 30

Candidate Starts for JayJay\_9:

(12, 2389), (16, 2419), (20, 2446), (Start: 26 @2482 has 1 MA's), (Start: 30 @2506 has 30 MA's), (50, 2593), (56, 2608), (71, 2635), (74, 2641), (76, 2686), (79, 2698), (86, 2749), (87, 2752), (91, 2782), (96, 2824),

Gene: Jeon\_63 Start: 48868, Stop: 49173, Start Num: 33

Candidate Starts for Jeon\_63:

(7, 48709), (Start: 33 @48868 has 28 MA's), (Start: 38 @48880 has 2 MA's), (50, 48943), (56, 48958), (71, 48985), (74, 48991), (77, 49039), (94, 49153),

Gene: Jezreel\_7 Start: 2148, Stop: 2579, Start Num: 33

Candidate Starts for Jezreel\_7:

(19, 2091), (Start: 33 @2148 has 28 MA's), (50, 2223), (56, 2238), (71, 2265), (74, 2271), (76, 2316), (79, 2328), (86, 2379), (87, 2382), (91, 2412), (96, 2454),

Gene: JigglyPuff\_8 Start: 2522, Stop: 2965, Start Num: 30

Candidate Starts for JigglyPuff\_8:

(12, 2405), (16, 2435), (20, 2462), (Start: 26 @2498 has 1 MA's), (Start: 30 @2522 has 30 MA's), (50, 2609), (56, 2624), (71, 2651), (74, 2657), (76, 2702), (79, 2714), (86, 2765), (87, 2768), (91, 2798), (96, 2840),

Gene: Kamryn\_7 Start: 2148, Stop: 2579, Start Num: 33

Candidate Starts for Kamryn\_7:

(19, 2091), (Start: 33 @2148 has 28 MA's), (50, 2223), (56, 2238), (71, 2265), (74, 2271), (76, 2316), (79, 2328), (86, 2379), (87, 2382), (91, 2412), (96, 2454),

Gene: KashFlow\_67 Start: 45630, Stop: 45118, Start Num: 30

Candidate Starts for KashFlow\_67:

(Start: 30 @45630 has 30 MA's), (46, 45588), (76, 45438), (79, 45426), (84, 45384), (99, 45282), (109, 45138),

Gene: Kenuha5\_78 Start: 49646, Stop: 50158, Start Num: 30

Candidate Starts for Kenuha5\_78:

(Start: 30 @49646 has 30 MA's), (79, 49850), (84, 49892), (99, 49994), (109, 50138),

Gene: Kersh\_90 Start: 52725, Stop: 53210, Start Num: 33

Candidate Starts for Kersh\_90:

(11, 52599), (25, 52695), (Start: 33 @52725 has 28 MA's), (Start: 38 @52737 has 2 MA's), (50, 52800), (56, 52815), (71, 52842), (74, 52848), (76, 52893), (79, 52905), (86, 52956), (87, 52959), (91, 52989), (96, 53031), (107, 53157),

Gene: Koella\_77 Start: 46451, Stop: 46915, Start Num: 30

Candidate Starts for Koella\_77:

(Start: 30 @46451 has 30 MA's), (36, 46460), (60, 46562), (63, 46571), (76, 46643), (79, 46655), (84, 46697), (99, 46799),

Gene: Lethe\_7 Start: 2050, Stop: 2481, Start Num: 33

Candidate Starts for Lethe\_7:

(1, 1606), (2, 1708), (3, 1711), (4, 1717), (5, 1726), (8, 1906), (17, 1969), (Start: 33 @2050 has 28 MA's), (50, 2125), (56, 2140), (71, 2167), (74, 2173), (76, 2218), (79, 2230), (86, 2281), (87, 2284), (91, 2314), (96, 2356),

Gene: LilSpotty\_71 Start: 43082, Stop: 43513, Start Num: 43

Candidate Starts for LilSpotty\_71:

(Start: 21 @42992 has 1 MA's), (28, 43028), (Start: 43 @43082 has 7 MA's), (47, 43124), (81, 43286), (91, 43349), (104, 43466),

Gene: LinStu\_9 Start: 3505, Stop: 3948, Start Num: 30

Candidate Starts for LinStu\_9:

(12, 3388), (16, 3418), (20, 3445), (Start: 26 @3481 has 1 MA's), (Start: 30 @3505 has 30 MA's), (50, 3592), (56, 3607), (71, 3634), (74, 3640), (76, 3685), (79, 3697), (86, 3748), (87, 3751), (91, 3781), (96, 3823),

Gene: LolaVinca\_10 Start: 2977, Stop: 3399, Start Num: 30

Candidate Starts for LolaVinca\_10:

(12, 2860), (16, 2890), (20, 2917), (Start: 26 @2953 has 1 MA's), (Start: 30 @2977 has 30 MA's), (50, 3064), (56, 3079), (71, 3106), (74, 3112), (76, 3157), (79, 3169), (86, 3220), (87, 3223), (91, 3253), (96, 3295), (101, 3334),

Gene: LookingGlass\_7 Start: 2223, Stop: 2579, Start Num: 50

Candidate Starts for LookingGlass\_7:

(19, 2091), (Start: 33 @2148 has 28 MA's), (50, 2223), (56, 2238), (71, 2265), (74, 2271), (76, 2316), (79, 2328), (86, 2379), (87, 2382), (91, 2412), (96, 2454),

Gene: LordLeafolot\_10 Start: 2977, Stop: 3420, Start Num: 30

Candidate Starts for LordLeafolot\_10:

(12, 2860), (16, 2890), (20, 2917), (Start: 26 @2953 has 1 MA's), (Start: 30 @2977 has 30 MA's), (50, 3064), (56, 3079), (71, 3106), (74, 3112), (76, 3157), (79, 3169), (86, 3220), (87, 3223), (91, 3253), (96, 3295),

Gene: Lunareta\_7 Start: 2252, Stop: 2608, Start Num: 50

Candidate Starts for Lunareta\_7:

(Start: 33 @2177 has 28 MA's), (50, 2252), (56, 2267), (71, 2294), (74, 2300), (76, 2345), (79, 2357), (86, 2408), (87, 2411), (91, 2441), (96, 2483),

Gene: Marshmallow\_42 Start: 35818, Stop: 35342, Start Num: 38

Candidate Starts for Marshmallow\_42:

(Start: 30 @35830 has 30 MA's), (Start: 38 @35818 has 2 MA's), (50, 35755), (57, 35740), (70, 35713), (72, 35707), (76, 35662), (79, 35650), (84, 35608), (99, 35506), (109, 35362),

Gene: Maturis\_8 Start: 2252, Stop: 2608, Start Num: 50

Candidate Starts for Maturis\_8:

(Start: 33 @2177 has 28 MA's), (50, 2252), (56, 2267), (71, 2294), (74, 2300), (76, 2345), (79, 2357), (86, 2408), (87, 2411), (91, 2441), (96, 2483),

Gene: Melville\_59 Start: 36268, Stop: 36615, Start Num: 43

Candidate Starts for Melville\_59:

(Start: 21 @36178 has 1 MA's), (28, 36214), (Start: 43 @36268 has 7 MA's), (47, 36310), (54, 36331), (73, 36382), (91, 36511), (97, 36553),

Gene: Mikro\_7 Start: 3147, Stop: 3578, Start Num: 33

Candidate Starts for Mikro\_7:

(19, 3090), (Start: 33 @3147 has 28 MA's), (50, 3222), (56, 3237), (71, 3264), (74, 3270), (76, 3315), (79, 3327), (86, 3378), (87, 3381), (91, 3411), (96, 3453),

Gene: MilleniumForce\_53 Start: 38559, Stop: 38825, Start Num: 44

Candidate Starts for MilleniumForce\_53:

(Start: 44 @38559 has 1 MA's), (45, 38562), (49, 38589), (56, 38616), (68, 38640),

Gene: MoMoMixon\_7 Start: 2383, Stop: 2814, Start Num: 33

Candidate Starts for MoMoMixon\_7:

(22, 2347), (Start: 33 @2383 has 28 MA's), (50, 2458), (56, 2473), (71, 2500), (74, 2506), (76, 2551), (79, 2563), (86, 2614), (87, 2617), (91, 2647), (96, 2689),

Gene: Montpel\_7 Start: 2252, Stop: 2608, Start Num: 50

Candidate Starts for Montpel\_7:

(Start: 33 @2177 has 28 MA's), (50, 2252), (56, 2267), (71, 2294), (74, 2300), (76, 2345), (79, 2357), (86, 2408), (87, 2411), (91, 2441), (96, 2483),

Gene: Moonbeam\_89 Start: 51150, Stop: 51629, Start Num: 35

Candidate Starts for Moonbeam\_89:

(Start: 35 @51150 has 1 MA's), (Start: 37 @51153 has 1 MA's), (53, 51222), (56, 51234), (71, 51261), (74, 51267), (76, 51312), (79, 51324), (86, 51375), (87, 51378), (91, 51408), (96, 51450), (107, 51576),

Gene: Moose\_61 Start: 40140, Stop: 39913, Start Num: 51

Candidate Starts for Moose\_61:

(Start: 51 @40140 has 8 MA's), (70, 40092), (79, 40032),

Gene: Myrale\_43 Start: 35695, Stop: 35207, Start Num: 30

Candidate Starts for Myrale\_43:

(Start: 30 @35695 has 30 MA's), (Start: 38 @35683 has 2 MA's), (50, 35620), (57, 35605), (70, 35578), (72, 35572), (76, 35527), (79, 35515), (84, 35473), (99, 35371), (109, 35227),

Gene: Naval22\_7 Start: 2458, Stop: 2814, Start Num: 50

Candidate Starts for Naval22\_7:

(22, 2347), (Start: 33 @2383 has 28 MA's), (50, 2458), (56, 2473), (71, 2500), (74, 2506), (76, 2551), (79, 2563), (86, 2614), (87, 2617), (91, 2647), (96, 2689),

Gene: Nekros\_71 Start: 48970, Stop: 48458, Start Num: 30

Candidate Starts for Nekros\_71:

(Start: 30 @48970 has 30 MA's), (79, 48766), (84, 48724), (99, 48622), (109, 48478),

Gene: Nidhogg\_7 Start: 2383, Stop: 2814, Start Num: 33

Candidate Starts for Nidhogg\_7:

(22, 2347), (Start: 33 @2383 has 28 MA's), (50, 2458), (56, 2473), (71, 2500), (74, 2506), (76, 2551), (79, 2563), (86, 2614), (87, 2617), (91, 2647), (96, 2689),

Gene: NoodleTree\_7 Start: 2148, Stop: 2579, Start Num: 33

Candidate Starts for NoodleTree\_7:

(19, 2091), (Start: 33 @2148 has 28 MA's), (50, 2223), (56, 2238), (71, 2265), (74, 2271), (76, 2316), (79, 2328), (86, 2379), (87, 2382), (91, 2412), (96, 2454),

Gene: NormanBulbieJr\_83 Start: 50465, Stop: 50929, Start Num: 30

Candidate Starts for NormanBulbieJr\_83:

(Start: 30 @50465 has 30 MA's), (36, 50474), (60, 50576), (63, 50585), (76, 50657), (79, 50669), (84, 50711), (99, 50813),

Gene: NuevoMundo\_9 Start: 2841, Stop: 3272, Start Num: 33

Candidate Starts for NuevoMundo\_9:

(13, 2736), (16, 2757), (18, 2763), (Start: 33 @2841 has 28 MA's), (50, 2916), (56, 2931), (71, 2958), (74, 2964), (76, 3009), (79, 3021), (86, 3072), (87, 3075), (91, 3105), (96, 3147),

Gene: Ogotogo\_51 Start: 36143, Stop: 36514, Start Num: 29

Candidate Starts for Ogotogo\_51:

(Start: 29 @36143 has 1 MA's), (32, 36155), (39, 36176), (40, 36182), (Start: 43 @36191 has 7 MA's), (77, 36362), (92, 36458), (93, 36467),

Gene: Pepe\_58 Start: 39571, Stop: 39344, Start Num: 51

Candidate Starts for Pepe\_58:

(Start: 51 @39571 has 8 MA's), (70, 39523), (79, 39463), (80, 39460),

Gene: Phaja\_41 Start: 35395, Stop: 34907, Start Num: 30

Candidate Starts for Phaja\_41:

(Start: 30 @35395 has 30 MA's), (Start: 38 @35383 has 2 MA's), (50, 35320), (57, 35305), (70, 35278), (72, 35272), (76, 35227), (79, 35215), (84, 35173), (99, 35071), (109, 34927),

Gene: PharkleMinkus\_10 Start: 2978, Stop: 3421, Start Num: 30

Candidate Starts for PharkleMinkus\_10:

(12, 2861), (16, 2891), (20, 2918), (Start: 26 @2954 has 1 MA's), (Start: 30 @2978 has 30 MA's), (50, 3065), (56, 3080), (71, 3107), (74, 3113), (76, 3158), (79, 3170), (86, 3221), (87, 3224), (91, 3254), (96, 3296),

Gene: Phatniss\_83 Start: 49365, Stop: 49781, Start Num: 31

Candidate Starts for Phatniss\_83:

(Start: 31 @49365 has 1 MA's), (52, 49449), (55, 49458), (64, 49494), (76, 49563), (79, 49575), (88, 49608), (103, 49707),

Gene: Pier\_10 Start: 2844, Stop: 3275, Start Num: 33

Candidate Starts for Pier\_10:

(13, 2739), (16, 2760), (18, 2766), (Start: 33 @2844 has 28 MA's), (50, 2919), (56, 2934), (71, 2961), (74, 2967), (76, 3012), (79, 3024), (86, 3075), (87, 3078), (91, 3108), (96, 3150),

Gene: Pio\_8 Start: 2537, Stop: 2968, Start Num: 33

Candidate Starts for Pio\_8:

(22, 2501), (Start: 33 @2537 has 28 MA's), (50, 2612), (56, 2627), (71, 2654), (74, 2660), (76, 2705), (79, 2717), (86, 2768), (87, 2771), (91, 2801), (96, 2843),

Gene: Pollywog\_88 Start: 51599, Stop: 52084, Start Num: 33

Candidate Starts for Pollywog\_88:

(23, 51560), (Start: 33 @51599 has 28 MA's), (Start: 38 @51611 has 2 MA's), (50, 51674), (56, 51689), (71, 51716), (74, 51722), (76, 51767), (79, 51779), (86, 51830), (87, 51833), (91, 51863), (96, 51905), (107, 52031),

Gene: Priscilla\_85 Start: 50563, Stop: 51027, Start Num: 30

Candidate Starts for Priscilla\_85:

(Start: 30 @50563 has 30 MA's), (36, 50572), (60, 50674), (63, 50683), (76, 50755), (79, 50767), (84, 50809), (99, 50911),

Gene: Pupusa\_10 Start: 2977, Stop: 3420, Start Num: 30

Candidate Starts for Pupusa\_10:

(12, 2860), (16, 2890), (20, 2917), (Start: 26 @2953 has 1 MA's), (Start: 30 @2977 has 30 MA's), (50, 3064), (56, 3079), (71, 3106), (74, 3112), (76, 3157), (79, 3169), (86, 3220), (87, 3223), (91, 3253), (96, 3295),

Gene: Rearden\_72 Start: 47623, Stop: 47135, Start Num: 33

Candidate Starts for Rearden\_72:

(23, 47662), (Start: 33 @47623 has 28 MA's), (Start: 38 @47611 has 2 MA's), (50, 47548), (56, 47533), (71, 47506), (74, 47500), (76, 47455), (79, 47443), (86, 47392), (87, 47389), (91, 47359), (96, 47317), (107, 47191),

Gene: Rialto\_92 Start: 51249, Stop: 51725, Start Num: 37

Candidate Starts for Rialto\_92:

(Start: 35 @51246 has 1 MA's), (Start: 37 @51249 has 1 MA's), (53, 51318), (56, 51330), (71, 51357), (74, 51363), (76, 51408), (79, 51420), (86, 51471), (87, 51474), (91, 51504), (96, 51546), (107, 51672),

Gene: Rocha\_7 Start: 2220, Stop: 2576, Start Num: 50

Candidate Starts for Rocha\_7:

(19, 2088), (Start: 33 @2145 has 28 MA's), (50, 2220), (56, 2235), (71, 2262), (74, 2268), (76, 2313), (79, 2325), (86, 2376), (87, 2379), (91, 2409), (96, 2451),

Gene: Royals2015\_53 Start: 36891, Stop: 37130, Start Num: 43

Candidate Starts for Royals2015\_53:

(Start: 43 @36891 has 7 MA's), (49, 36924), (56, 36951), (68, 36975), (92, 37113),

Gene: Ryadel\_104 Start: 63381, Stop: 62932, Start Num: 33

Candidate Starts for Ryadel\_104:

(22, 63432), (Start: 33 @63381 has 28 MA's), (Start: 38 @63369 has 2 MA's), (48, 63303), (62, 63240), (66, 63216), (76, 63132), (79, 63120), (85, 63087), (106, 62937),

Gene: Sabbb\_90 Start: 48794, Stop: 49228, Start Num: 33

Candidate Starts for Sabbb\_90:

(23, 48755), (Start: 33 @48794 has 28 MA's), (Start: 38 @48806 has 2 MA's), (50, 48869), (56, 48884), (71, 48911), (74, 48917), (76, 48962), (79, 48974), (86, 49025), (87, 49028), (91, 49058), (96, 49100),

Gene: Sauce\_7 Start: 2387, Stop: 2818, Start Num: 33

Candidate Starts for Sauce\_7:

(22, 2351), (Start: 33 @2387 has 28 MA's), (50, 2462), (56, 2477), (71, 2504), (74, 2510), (76, 2555), (79, 2567), (86, 2618), (87, 2621), (91, 2651), (96, 2693),

Gene: Seanderson\_62 Start: 42352, Stop: 42125, Start Num: 51

Candidate Starts for Seanderson\_62:

(Start: 51 @42352 has 8 MA's), (70, 42304), (79, 42244),

Gene: Sebata\_9 Start: 3505, Stop: 3948, Start Num: 30

Candidate Starts for Sebata\_9:

(12, 3388), (16, 3418), (20, 3445), (Start: 26 @3481 has 1 MA's), (Start: 30 @3505 has 30 MA's), (50, 3592), (56, 3607), (71, 3634), (74, 3640), (76, 3685), (79, 3697), (86, 3748), (87, 3751), (91, 3781), (96, 3823),

Gene: Shaboozey\_65 Start: 44675, Stop: 44163, Start Num: 30

Candidate Starts for Shaboozey\_65:

(Start: 30 @44675 has 30 MA's), (46, 44633), (79, 44471), (84, 44429), (99, 44327), (109, 44183),

Gene: ShamWow\_43 Start: 35832, Stop: 35344, Start Num: 30

Candidate Starts for ShamWow\_43:

(Start: 30 @35832 has 30 MA's), (Start: 38 @35820 has 2 MA's), (50, 35757), (57, 35742), (70, 35715), (72, 35709), (76, 35664), (79, 35652), (84, 35610), (99, 35508), (109, 35364),

Gene: Shauna1\_82 Start: 49932, Stop: 50444, Start Num: 30

Candidate Starts for Shauna1\_82:

(Start: 30 @49932 has 30 MA's), (76, 50124), (79, 50136), (84, 50178), (99, 50280), (109, 50424),

Gene: SimranZ1\_81 Start: 48125, Stop: 48592, Start Num: 33

Candidate Starts for SimranZ1\_81:

(23, 48086), (Start: 33 @48125 has 28 MA's), (50, 48200), (56, 48215), (71, 48242), (74, 48248), (76, 48293), (79, 48305), (86, 48356), (87, 48359), (91, 48389), (105, 48503), (108, 48545),

Gene: SkiPole\_67 Start: 41615, Stop: 41388, Start Num: 51

Candidate Starts for SkiPole\_67:

(Start: 51 @41615 has 8 MA's), (70, 41567), (79, 41507), (80, 41504),

Gene: Sparkdehlily\_95 Start: 49514, Stop: 49996, Start Num: 34

Candidate Starts for Sparkdehlily\_95:

(Start: 34 @49514 has 2 MA's), (Start: 35 @49517 has 1 MA's), (Start: 37 @49520 has 1 MA's), (53, 49589), (56, 49601), (71, 49628), (74, 49634), (76, 49679), (79, 49691), (86, 49742), (87, 49745), (91, 49775), (96, 49817), (107, 49943),

Gene: Specks\_10 Start: 2977, Stop: 3420, Start Num: 30

Candidate Starts for Specks\_10:

(12, 2860), (16, 2890), (20, 2917), (Start: 26 @2953 has 1 MA's), (Start: 30 @2977 has 30 MA's), (50, 3064), (56, 3079), (71, 3106), (74, 3112), (76, 3157), (79, 3169), (86, 3220), (87, 3223), (91, 3253), (96, 3295),

Gene: Spud\_8 Start: 2537, Stop: 2968, Start Num: 33

Candidate Starts for Spud\_8:

(22, 2501), (Start: 33 @2537 has 28 MA's), (50, 2612), (56, 2627), (71, 2654), (74, 2660), (76, 2705), (79, 2717), (86, 2768), (87, 2771), (91, 2801), (96, 2843),

Gene: StellaBean\_41 Start: 35156, Stop: 34668, Start Num: 30

Candidate Starts for StellaBean\_41:

(Start: 30 @35156 has 30 MA's), (Start: 38 @35144 has 2 MA's), (50, 35081), (57, 35066), (70, 35039), (72, 35033), (76, 34988), (79, 34976), (84, 34934), (99, 34832), (109, 34688),

Gene: StephanieG\_9 Start: 2844, Stop: 3275, Start Num: 33

Candidate Starts for StephanieG\_9:

(13, 2739), (16, 2760), (18, 2766), (Start: 33 @2844 has 28 MA's), (50, 2919), (56, 2934), (71, 2961), (74, 2967), (76, 3012), (79, 3024), (86, 3075), (87, 3078), (91, 3108), (96, 3150),

Gene: Sunshine924\_64 Start: 40630, Stop: 40100, Start Num: 26

Candidate Starts for Sunshine924\_64:

(Start: 26 @40630 has 1 MA's), (65, 40477), (71, 40453), (75, 40429), (77, 40396), (86, 40336), (87, 40333), (91, 40303), (105, 40189), (108, 40147), (109, 40120),

Gene: SuperGrey\_83 Start: 51298, Stop: 51810, Start Num: 30

Candidate Starts for SuperGrey\_83:

(Start: 30 @51298 has 30 MA's), (46, 51340), (79, 51502), (84, 51544), (99, 51646), (109, 51790),

Gene: SwissCheese\_63 Start: 40640, Stop: 40413, Start Num: 51

Candidate Starts for SwissCheese\_63:

(Start: 51 @40640 has 8 MA's), (70, 40592), (79, 40532),

Gene: TDanisky\_96 Start: 49514, Stop: 49996, Start Num: 34

Candidate Starts for TDanisky\_96:

(Start: 34 @49514 has 2 MA's), (Start: 35 @49517 has 1 MA's), (Start: 37 @49520 has 1 MA's), (53, 49589), (56, 49601), (71, 49628), (74, 49634), (76, 49679), (79, 49691), (86, 49742), (87, 49745), (91, 49775), (96, 49817), (107, 49943),

Gene: Tainan\_10 Start: 2977, Stop: 3420, Start Num: 30

Candidate Starts for Tainan\_10:

(12, 2860), (16, 2890), (20, 2917), (Start: 26 @2953 has 1 MA's), (Start: 30 @2977 has 30 MA's), (50, 3064), (56, 3079), (71, 3106), (74, 3112), (76, 3157), (79, 3169), (86, 3220), (87, 3223), (91, 3253), (96, 3295),

Gene: Tonenili\_21 Start: 6415, Stop: 6846, Start Num: 33

Candidate Starts for Tonenili\_21:

(6, 6136), (9, 6280), (10, 6283), (Start: 33 @6415 has 28 MA's), (Start: 38 @6427 has 2 MA's), (59, 6535), (65, 6553), (71, 6577), (75, 6601), (76, 6631), (79, 6643), (90, 6715), (98, 6769),

Gene: Tortellini\_64 Start: 43747, Stop: 44214, Start Num: 21

Candidate Starts for Tortellini\_64:

(15, 43702), (Start: 21 @43747 has 1 MA's), (39, 43822), (46, 43846), (49, 43888), (100, 44155), (102, 44200),

Gene: Toto\_42 Start: 35820, Stop: 35344, Start Num: 38

Candidate Starts for Toto\_42:

(Start: 30 @35832 has 30 MA's), (Start: 38 @35820 has 2 MA's), (50, 35757), (57, 35742), (70, 35715), (72, 35709), (76, 35664), (79, 35652), (84, 35610), (99, 35508), (109, 35364),

Gene: Tuco\_44 Start: 36340, Stop: 35852, Start Num: 30

Candidate Starts for Tuco\_44:

(Start: 30 @36340 has 30 MA's), (Start: 38 @36328 has 2 MA's), (50, 36265), (57, 36250), (70, 36223), (72, 36217), (76, 36172), (79, 36160), (84, 36118), (99, 36016), (109, 35872),

Gene: Tyke\_9 Start: 2817, Stop: 3251, Start Num: 33

Candidate Starts for Tyke\_9:

(19, 2760), (Start: 33 @2817 has 28 MA's), (50, 2892), (56, 2907), (71, 2934), (74, 2940), (76, 2985), (79, 2997), (86, 3048), (87, 3051), (91, 3081), (96, 3123),