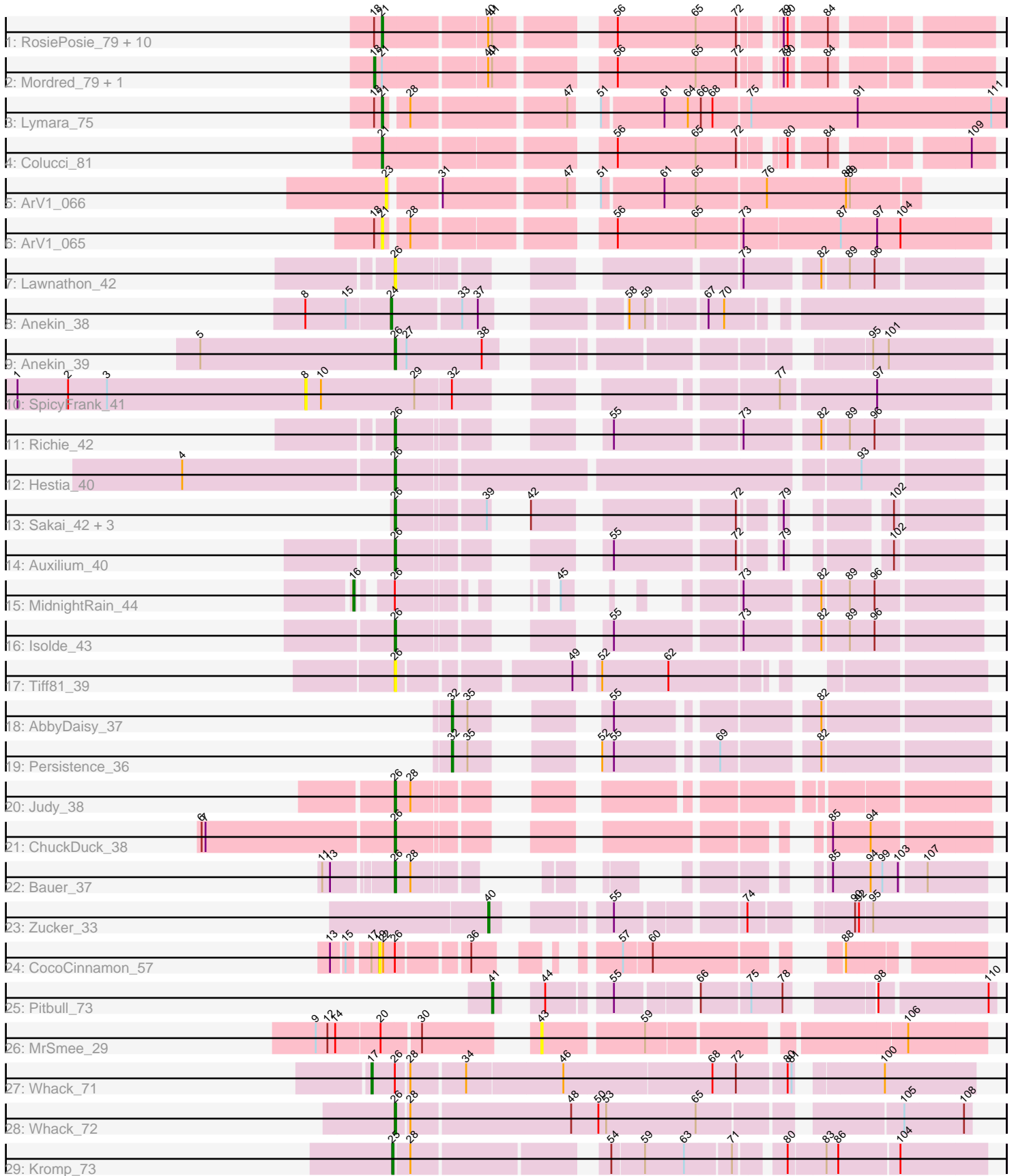


# Pham 196647



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 196647 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196647 has 43 members, 9 are drafts.

Phages represented in each track:

- Track 1 : RosiePosie\_79, Linus\_79, EdgarPoe\_78, Scavito\_80, Chipper1996\_800, HumptyDumpty\_79, Kabreeze\_79, PrincessTrina\_80, Tophat\_80, Chocolat\_79, Chubster\_80
- Track 2 : Mordred\_79, JaNo\_78
- Track 3 : Lymara\_75
- Track 4 : Colucci\_81
- Track 5 : ArV1\_066
- Track 6 : ArV1\_065
- Track 7 : Lawnathon\_42
- Track 8 : Anekin\_38
- Track 9 : Anekin\_39
- Track 10 : SpicyFrank\_41
- Track 11 : Richie\_42
- Track 12 : Hestia\_40
- Track 13 : Sakai\_42, Gorpy\_43, YoungHarleezy\_42, Aikyam\_39
- Track 14 : Auxilium\_40
- Track 15 : MidnightRain\_44
- Track 16 : Isolde\_43
- Track 17 : Tiff81\_39
- Track 18 : AbbyDaisy\_37
- Track 19 : Persistence\_36
- Track 20 : Judy\_38
- Track 21 : ChuckDuck\_38
- Track 22 : Bauer\_37
- Track 23 : Zucker\_33
- Track 24 : CocoCinnamon\_57
- Track 25 : Pitbull\_73
- Track 26 : MrSmee\_29
- Track 27 : Whack\_71
- Track 28 : Whack\_72
- Track 29 : Kromp\_73

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

The start number called the most often in the published annotations is 21, it was called in 13 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArV1\_065, Chipper1996\_800, Chocolat\_79, Chubster\_80, Colucci\_81, EdgarPoe\_78, HumptyDumpty\_79, Kabreeze\_79, Linus\_79, Lymara\_75, PrincessTrina\_80, RosiePosie\_79, Scavito\_80, Tophat\_80,

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

- JaNo\_78, Mordred\_79,

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

- AbbyDaisy\_37, Aikyam\_39, Anekin\_38, Anekin\_39, ArV1\_066, Auxilium\_40, Bauer\_37, ChuckDuck\_38, CocoCinnamon\_57, Gorpy\_43, Hestia\_40, Isolde\_43, Judy\_38, Kromp\_73, Lawnathon\_42, MidnightRain\_44, MrSmee\_29, Persistence\_36, Pitbull\_73, Richie\_42, Sakai\_42, SpicyFrank\_41, Tiff81\_39, Whack\_71, Whack\_72, YoungHarleezy\_42, Zucker\_33,

### Summary by start number:

Start 8:

- Found in 2 of 43 ( 4.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: SpicyFrank\_41 (AY),

Start 16:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MidnightRain\_44 (AY),

Start 17:

- Found in 2 of 43 ( 4.7% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Whack\_71 (singleton),

Start 18:

- Found in 15 of 43 ( 34.9% ) of genes in pham
- Manual Annotations of this start: 2 of 34
- Called 13.3% of time when present
- Phage (with cluster) where this start called: JaNo\_78 (AR), Mordred\_79 (AR),

Start 19:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CocoCinnamon\_57 (FO),

Start 21:

- Found in 16 of 43 ( 37.2% ) of genes in pham
- Manual Annotations of this start: 13 of 34

- Called 87.5% of time when present
- Phage (with cluster) where this start called: ArV1\_065 (AR), Chipper1996\_800 (AR), Chocolat\_79 (AR), Chubster\_80 (AR), Colucci\_81 (AR), EdgarPoe\_78 (AR), HumptyDumpty\_79 (AR), Kabreeze\_79 (AR), Linus\_79 (AR), Lymara\_75 (AR), PrincessTrina\_80 (AR), RosiePosie\_79 (AR), Scavito\_80 (AR), Tophat\_80 (AR),

#### Start 23:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArV1\_066 (AR),

#### Start 24:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anekin\_38 (AY),

#### Start 25:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kromp\_73 (singleton),

#### Start 26:

- Found in 18 of 43 ( 41.9% ) of genes in pham
- Manual Annotations of this start: 11 of 34
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Aikyam\_39 (AY), Anekin\_39 (AY), Auxilium\_40 (AY), Bauer\_37 (FN), ChuckDuck\_38 (FA), Gorpy\_43 (AY), Hestia\_40 (AY), Isolde\_43 (AY), Judy\_38 (FA), Lawnathon\_42 (AY), Richie\_42 (AY), Sakai\_42 (AY), Tiff81\_39 (AY), Whack\_72 (singleton), YoungHarleezy\_42 (AY),

#### Start 32:

- Found in 3 of 43 ( 7.0% ) of genes in pham
- Manual Annotations of this start: 2 of 34
- Called 66.7% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_37 (AY), Persistence\_36 (AY),

#### Start 40:

- Found in 14 of 43 ( 32.6% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Zucker\_33 (FN),

#### Start 41:

- Found in 14 of 43 ( 32.6% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Pitbull\_73 (FQ),

#### Start 43:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MrSmee\_29 (UNK),

### **Summary by clusters:**

There are 8 clusters represented in this pham: FQ, singleton, FA, AR, AY, UNK, FN, FO,

Info for manual annotations of cluster AR:

- Start number 18 was manually annotated 2 times for cluster AR.
- Start number 21 was manually annotated 13 times for cluster AR.

Info for manual annotations of cluster AY:

- Start number 16 was manually annotated 1 time for cluster AY.
- Start number 24 was manually annotated 1 time for cluster AY.
- Start number 26 was manually annotated 7 times for cluster AY.
- Start number 32 was manually annotated 2 times for cluster AY.

Info for manual annotations of cluster FA:

- Start number 26 was manually annotated 2 times for cluster FA.

Info for manual annotations of cluster FN:

- Start number 26 was manually annotated 1 time for cluster FN.
- Start number 40 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster FQ:

- Start number 41 was manually annotated 1 time for cluster FQ.

### **Gene Information:**

Gene: AbbyDaisy\_37 Start: 27733, Stop: 27410, Start Num: 32

Candidate Starts for AbbyDaisy\_37:

(Start: 32 @27733 has 2 MA's), (35, 27721), (55, 27661), (82, 27529),

Gene: Aikyam\_39 Start: 26132, Stop: 25803, Start Num: 26

Candidate Starts for Aikyam\_39:

(Start: 26 @26132 has 11 MA's), (39, 26069), (42, 26066), (72, 25937), (79, 25916), (102, 25865),

Gene: Anekin\_38 Start: 27545, Stop: 27171, Start Num: 24

Candidate Starts for Anekin\_38:

(8, 27608), (15, 27578), (Start: 24 @27545 has 1 MA's), (33, 27494), (37, 27482), (58, 27407), (59, 27395), (67, 27356), (70, 27344),

Gene: Anekin\_39 Start: 27918, Stop: 27538, Start Num: 26

Candidate Starts for Anekin\_39:

(5, 28068), (Start: 26 @27918 has 11 MA's), (27, 27909), (38, 27852), (95, 27627), (101, 27615),

Gene: ArV1\_066 Start: 50683, Stop: 51042, Start Num: 23

Candidate Starts for ArV1\_066:

(23, 50683), (31, 50716), (47, 50803), (51, 50809), (61, 50854), (65, 50878), (76, 50929), (88, 50989), (89, 50992),

Gene: ArV1\_065 Start: 50268, Stop: 50690, Start Num: 21

Candidate Starts for ArV1\_065:

(Start: 18 @50262 has 2 MA's), (Start: 21 @50268 has 13 MA's), (28, 50283), (56, 50412), (65, 50472), (73, 50505), (87, 50577), (97, 50604), (104, 50622),

Gene: Auxilium\_40 Start: 25834, Stop: 25505, Start Num: 26

Candidate Starts for Auxilium\_40:

(Start: 26 @25834 has 11 MA's), (55, 25726), (72, 25639), (79, 25618), (102, 25567),

Gene: Bauer\_37 Start: 26477, Stop: 26764, Start Num: 26

Candidate Starts for Bauer\_37:

(11, 26429), (13, 26435), (Start: 26 @26477 has 11 MA's), (28, 26489), (85, 26654), (94, 26681), (99, 26690), (103, 26702), (107, 26720),

Gene: Chipper1996\_800 Start: 51561, Stop: 51953, Start Num: 21

Candidate Starts for Chipper1996\_800:

(Start: 18 @51555 has 2 MA's), (Start: 21 @51561 has 13 MA's), (Start: 40 @51636 has 1 MA's), (Start: 41 @51639 has 1 MA's), (56, 51711), (65, 51771), (72, 51801), (79, 51822), (80, 51825), (84, 51849),

Gene: Chocolat\_79 Start: 51268, Stop: 51660, Start Num: 21

Candidate Starts for Chocolat\_79:

(Start: 18 @51262 has 2 MA's), (Start: 21 @51268 has 13 MA's), (Start: 40 @51343 has 1 MA's), (Start: 41 @51346 has 1 MA's), (56, 51418), (65, 51478), (72, 51508), (79, 51529), (80, 51532), (84, 51556),

Gene: Chubster\_80 Start: 51962, Stop: 52354, Start Num: 21

Candidate Starts for Chubster\_80:

(Start: 18 @51956 has 2 MA's), (Start: 21 @51962 has 13 MA's), (Start: 40 @52037 has 1 MA's), (Start: 41 @52040 has 1 MA's), (56, 52112), (65, 52172), (72, 52202), (79, 52223), (80, 52226), (84, 52250),

Gene: ChuckDuck\_38 Start: 26145, Stop: 26492, Start Num: 26

Candidate Starts for ChuckDuck\_38:

(6, 26001), (7, 26004), (Start: 26 @26145 has 11 MA's), (85, 26379), (94, 26406),

Gene: CocoCinnamon\_57 Start: 35240, Stop: 35584, Start Num: 19

Candidate Starts for CocoCinnamon\_57:

(13, 35210), (15, 35219), (Start: 17 @35234 has 1 MA's), (19, 35240), (22, 35243), (Start: 26 @35252 has 11 MA's), (36, 35300), (57, 35366), (60, 35387), (88, 35492),

Gene: Colucci\_81 Start: 51910, Stop: 52302, Start Num: 21

Candidate Starts for Colucci\_81:

(Start: 21 @51910 has 13 MA's), (56, 52060), (65, 52120), (72, 52150), (80, 52174), (84, 52198), (109, 52285),

Gene: EdgarPoe\_78 Start: 51425, Stop: 51817, Start Num: 21

Candidate Starts for EdgarPoe\_78:

(Start: 18 @51419 has 2 MA's), (Start: 21 @51425 has 13 MA's), (Start: 40 @51500 has 1 MA's), (Start: 41 @51503 has 1 MA's), (56, 51575), (65, 51635), (72, 51665), (79, 51686), (80, 51689), (84, 51713),

Gene: Gorpy\_43 Start: 29526, Stop: 29197, Start Num: 26

Candidate Starts for Gorpy\_43:

(Start: 26 @29526 has 11 MA's), (39, 29463), (42, 29460), (72, 29331), (79, 29310), (102, 29259),

Gene: Hestia\_40 Start: 27726, Stop: 27310, Start Num: 26

Candidate Starts for Hestia\_40:

(4, 27885), (Start: 26 @27726 has 11 MA's), (93, 27396),

Gene: HumptyDumpty\_79 Start: 51228, Stop: 51620, Start Num: 21

Candidate Starts for HumptyDumpty\_79:

(Start: 18 @51222 has 2 MA's), (Start: 21 @51228 has 13 MA's), (Start: 40 @51303 has 1 MA's), (Start: 41 @51306 has 1 MA's), (56, 51378), (65, 51438), (72, 51468), (79, 51489), (80, 51492), (84, 51516),

Gene: Isolde\_43 Start: 28418, Stop: 28056, Start Num: 26

Candidate Starts for Isolde\_43:

(Start: 26 @28418 has 11 MA's), (55, 28310), (73, 28220), (82, 28169), (89, 28151), (96, 28133),

Gene: JaNo\_78 Start: 51193, Stop: 51591, Start Num: 18

Candidate Starts for JaNo\_78:

(Start: 18 @51193 has 2 MA's), (Start: 21 @51199 has 13 MA's), (Start: 40 @51274 has 1 MA's), (Start: 41 @51277 has 1 MA's), (56, 51349), (65, 51409), (72, 51439), (79, 51460), (80, 51463), (84, 51487),

Gene: Judy\_38 Start: 26628, Stop: 26987, Start Num: 26

Candidate Starts for Judy\_38:

(Start: 26 @26628 has 11 MA's), (28, 26640),

Gene: Kabreeze\_79 Start: 51285, Stop: 51677, Start Num: 21

Candidate Starts for Kabreeze\_79:

(Start: 18 @51279 has 2 MA's), (Start: 21 @51285 has 13 MA's), (Start: 40 @51360 has 1 MA's), (Start: 41 @51363 has 1 MA's), (56, 51435), (65, 51495), (72, 51525), (79, 51546), (80, 51549), (84, 51573),

Gene: Kromp\_73 Start: 47753, Stop: 47349, Start Num: 25

Candidate Starts for Kromp\_73:

(Start: 25 @47753 has 1 MA's), (28, 47741), (54, 47612), (59, 47588), (63, 47558), (71, 47525), (80, 47495), (83, 47468), (86, 47459), (104, 47414),

Gene: Lawnathon\_42 Start: 28163, Stop: 27801, Start Num: 26

Candidate Starts for Lawnathon\_42:

(Start: 26 @28163 has 11 MA's), (73, 27965), (82, 27914), (89, 27896), (96, 27878),

Gene: Linus\_79 Start: 51733, Stop: 52125, Start Num: 21

Candidate Starts for Linus\_79:

(Start: 18 @51727 has 2 MA's), (Start: 21 @51733 has 13 MA's), (Start: 40 @51808 has 1 MA's), (Start: 41 @51811 has 1 MA's), (56, 51883), (65, 51943), (72, 51973), (79, 51994), (80, 51997), (84, 52021),

Gene: Lymara\_75 Start: 50005, Stop: 50436, Start Num: 21

Candidate Starts for Lymara\_75:

(Start: 18 @49999 has 2 MA's), (Start: 21 @50005 has 13 MA's), (28, 50020), (47, 50128), (51, 50134), (61, 50179), (64, 50197), (66, 50206), (68, 50215), (75, 50242), (91, 50323), (111, 50425),

Gene: MidnightRain\_44 Start: 29060, Stop: 28755, Start Num: 16

Candidate Starts for MidnightRain\_44:

(Start: 16 @29060 has 1 MA's), (Start: 26 @29042 has 11 MA's), (45, 28976), (73, 28919), (82, 28868), (89, 28850), (96, 28832),

Gene: Mordred\_79 Start: 51318, Stop: 51716, Start Num: 18

Candidate Starts for Mordred\_79:

(Start: 18 @51318 has 2 MA's), (Start: 21 @51324 has 13 MA's), (Start: 40 @51399 has 1 MA's), (Start: 41 @51402 has 1 MA's), (56, 51474), (65, 51534), (72, 51564), (79, 51585), (80, 51588), (84, 51612),

Gene: MrSmee\_29 Start: 23244, Stop: 22936, Start Num: 43

Candidate Starts for MrSmee\_29:

(9, 23382), (12, 23373), (14, 23367), (20, 23334), (30, 23307), (43, 23244), (59, 23172), (106, 22995),

Gene: Persistence\_36 Start: 26553, Stop: 26230, Start Num: 32

Candidate Starts for Persistence\_36:

(Start: 32 @26553 has 2 MA's), (35, 26541), (52, 26490), (55, 26481), (69, 26415), (82, 26349),

Gene: Pitbull\_73 Start: 38580, Stop: 38888, Start Num: 41

Candidate Starts for Pitbull\_73:

(Start: 41 @38580 has 1 MA's), (44, 38598), (55, 38640), (66, 38694), (75, 38730), (78, 38754), (98, 38805), (110, 38883),

Gene: PrincessTrina\_80 Start: 51629, Stop: 52021, Start Num: 21

Candidate Starts for PrincessTrina\_80:

(Start: 18 @51623 has 2 MA's), (Start: 21 @51629 has 13 MA's), (Start: 40 @51704 has 1 MA's), (Start: 41 @51707 has 1 MA's), (56, 51779), (65, 51839), (72, 51869), (79, 51890), (80, 51893), (84, 51917),

Gene: Richie\_42 Start: 28324, Stop: 27962, Start Num: 26

Candidate Starts for Richie\_42:

(Start: 26 @28324 has 11 MA's), (55, 28216), (73, 28126), (82, 28075), (89, 28057), (96, 28039),

Gene: RosiePosie\_79 Start: 51413, Stop: 51805, Start Num: 21

Candidate Starts for RosiePosie\_79:

(Start: 18 @51407 has 2 MA's), (Start: 21 @51413 has 13 MA's), (Start: 40 @51488 has 1 MA's), (Start: 41 @51491 has 1 MA's), (56, 51563), (65, 51623), (72, 51653), (79, 51674), (80, 51677), (84, 51701),

Gene: Sakai\_42 Start: 28237, Stop: 27908, Start Num: 26

Candidate Starts for Sakai\_42:

(Start: 26 @28237 has 11 MA's), (39, 28174), (42, 28171), (72, 28042), (79, 28021), (102, 27970),

Gene: Scavito\_80 Start: 51373, Stop: 51765, Start Num: 21

Candidate Starts for Scavito\_80:

(Start: 18 @51367 has 2 MA's), (Start: 21 @51373 has 13 MA's), (Start: 40 @51448 has 1 MA's), (Start: 41 @51451 has 1 MA's), (56, 51523), (65, 51583), (72, 51613), (79, 51634), (80, 51637), (84,



51661),

Gene: SpicyFrank\_41 Start: 28170, Stop: 27721, Start Num: 8

Candidate Starts for SpicyFrank\_41:

(1, 28392), (2, 28353), (3, 28323), (8, 28170), (10, 28158), (29, 28086), (Start: 32 @28059 has 2 MA's), (77, 27876), (97, 27807),

Gene: Tiff81\_39 Start: 25801, Stop: 25427, Start Num: 26

Candidate Starts for Tiff81\_39:

(Start: 26 @25801 has 11 MA's), (49, 25684), (52, 25669), (62, 25618),

Gene: Tophat\_80 Start: 51562, Stop: 51954, Start Num: 21

Candidate Starts for Tophat\_80:

(Start: 18 @51556 has 2 MA's), (Start: 21 @51562 has 13 MA's), (Start: 40 @51637 has 1 MA's), (Start: 41 @51640 has 1 MA's), (56, 51712), (65, 51772), (72, 51802), (79, 51823), (80, 51826), (84, 51850),

Gene: Whack\_71 Start: 46738, Stop: 47166, Start Num: 17

Candidate Starts for Whack\_71:

(Start: 17 @46738 has 1 MA's), (Start: 26 @46756 has 11 MA's), (28, 46765), (34, 46804), (46, 46876), (68, 46987), (72, 47005), (80, 47041), (81, 47044), (100, 47098),

Gene: Whack\_72 Start: 47171, Stop: 47581, Start Num: 26

Candidate Starts for Whack\_72:

(Start: 26 @47171 has 11 MA's), (28, 47180), (48, 47300), (50, 47321), (53, 47327), (65, 47396), (105, 47531), (108, 47576),

Gene: YoungHarleezy\_42 Start: 28307, Stop: 27978, Start Num: 26

Candidate Starts for YoungHarleezy\_42:

(Start: 26 @28307 has 11 MA's), (39, 28244), (42, 28241), (72, 28112), (79, 28091), (102, 28040),

Gene: Zucker\_33 Start: 26898, Stop: 26590, Start Num: 40

Candidate Starts for Zucker\_33:

(Start: 40 @26898 has 1 MA's), (55, 26835), (74, 26748), (90, 26688), (92, 26685), (95, 26676),