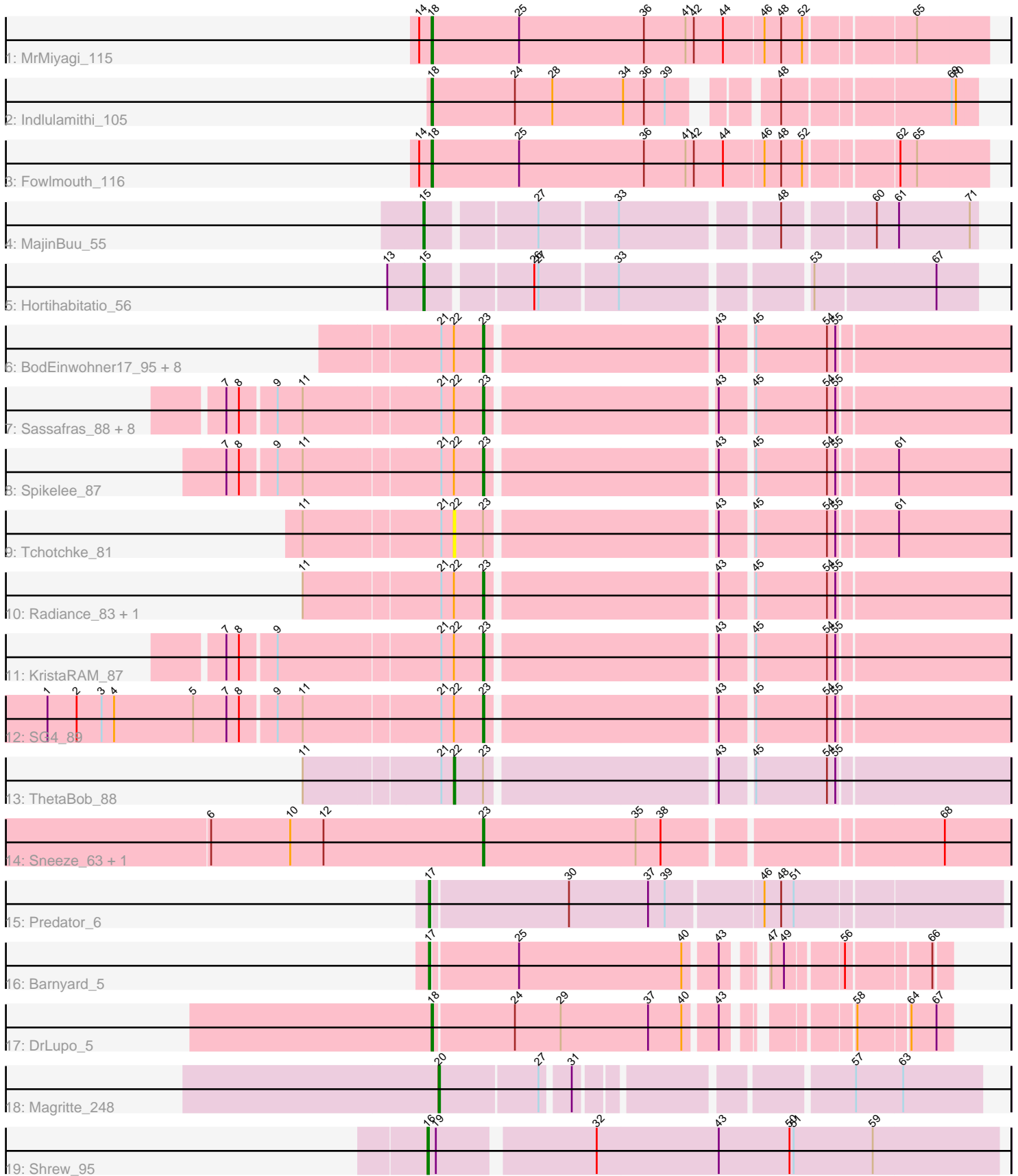


Pham 294908



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 294908 Report

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

Pham number 294908 has 37 members, 2 are drafts.

Phages represented in each track:

- Track 1 : MrMiyagi\_115
- Track 2 : Indlulamithi\_105
- Track 3 : Fowlmouth\_116
- Track 4 : MajinBuu\_55
- Track 5 : Hortihabitatio\_56
- Track 6 : BodEinwohner17\_95, IrishSherpFalk\_86, WillSterrel\_85, Clank\_84, Gandolph\_86, SuperGrey\_87, Bipolar\_88, Doug\_84, Blexus\_83
- Track 7 : Sassafras\_88, JoeyJr\_90, Squirty\_87, RedBird\_87, Dorothy\_87, Inventum\_84, Aubs\_87, Leperchaun\_88, Stap\_83
- Track 8 : Spikelee\_87
- Track 9 : Tchotchke\_81
- Track 10 : Radiance\_83, MadMen\_92
- Track 11 : KristaRAM\_87
- Track 12 : SG4\_89
- Track 13 : ThetaBob\_88
- Track 14 : Sneeze\_63, Rabbs\_64
- Track 15 : Predator\_6
- Track 16 : Barnyard\_5
- Track 17 : DrLupo\_5
- Track 18 : Magritte\_248
- Track 19 : Shrew\_95

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

The start number called the most often in the published annotations is 23, it was called in 24 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aubs\_87, Bipolar\_88, Blexus\_83, BodEinwohner17\_95, Clank\_84, Dorothy\_87, Doug\_84, Gandolph\_86, Inventum\_84, IrishSherpFalk\_86, JoeyJr\_90, KristaRAM\_87, Leperchaun\_88, MadMen\_92, Rabbs\_64, Radiance\_83, RedBird\_87, SG4\_89, Sassafras\_88, Sneeze\_63, Spikelee\_87, Squirty\_87, Stap\_83, SuperGrey\_87, WillSterrel\_85,

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

- Tchotchke\_81, ThetaBob\_88,

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

- Barnyard\_5, DrLupo\_5, Fowlmouth\_116, Hortihabitatio\_56, Indlulamithi\_105, Magritte\_248, MajinBuu\_55, MrMiyagi\_115, Predator\_6, Shrew\_95,

### Summary by start number:

Start 15:

- Found in 2 of 37 ( 5.4% ) of genes in pham
- Manual Annotations of this start: 2 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hortihabitatio\_56 (DJ), MajinBuu\_55 (DJ),

Start 16:

- Found in 1 of 37 ( 2.7% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shrew\_95 (singleton),

Start 17:

- Found in 2 of 37 ( 5.4% ) of genes in pham
- Manual Annotations of this start: 2 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barnyard\_5 (H2), Predator\_6 (H1),

Start 18:

- Found in 4 of 37 ( 10.8% ) of genes in pham
- Manual Annotations of this start: 4 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DrLupo\_5 (H2), Fowlmouth\_116 (AC), Indlulamithi\_105 (AC), MrMiyagi\_115 (AC),

Start 20:

- Found in 1 of 37 ( 2.7% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Magritte\_248 (singleton),

Start 22:

- Found in 25 of 37 ( 67.6% ) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 8.0% of time when present
- Phage (with cluster) where this start called: Tchotchke\_81 (F1), ThetaBob\_88 (F4),

Start 23:

- Found in 27 of 37 ( 73.0% ) of genes in pham
- Manual Annotations of this start: 24 of 35
- Called 92.6% of time when present
- Phage (with cluster) where this start called: Aubs\_87 (F1), Bipolar\_88 (F1), Blexus\_83 (F1), BodEinwohner17\_95 (F1), Clank\_84 (F), Dorothy\_87 (F1), Doug\_84

(F1), Gandalph\_86 (F1), Inventum\_84 (F1), IrishSherpFalk\_86 (F1), JoeyJr\_90 (F1), KristaRAM\_87 (F1), Leperchaun\_88 (F1), MadMen\_92 (F1), Rabbs\_64 (G1), Radiance\_83 (F1), RedBird\_87 (F1), SG4\_89 (F1), Sassafras\_88 (F1), Sneeze\_63 (G1), Spikelee\_87 (F1), Squirty\_87 (F3), Stap\_83 (F1), SuperGrey\_87 (F1), WillSterrel\_85 (F1),

### **Summary by clusters:**

There are 10 clusters represented in this pham: F1, singleton, F3, F4, G1, F, H2, H1, AC, DJ,

Info for manual annotations of cluster AC:

- Start number 18 was manually annotated 3 times for cluster AC.

Info for manual annotations of cluster DJ:

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

Info for manual annotations of cluster F1:

- Start number 23 was manually annotated 21 times for cluster F1.

Info for manual annotations of cluster F3:

- Start number 23 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 22 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster G1:

- Start number 23 was manually annotated 2 times for cluster G1.

Info for manual annotations of cluster H1:

- Start number 17 was manually annotated 1 time for cluster H1.

Info for manual annotations of cluster H2:

- Start number 17 was manually annotated 1 time for cluster H2.
- Start number 18 was manually annotated 1 time for cluster H2.

### **Gene Information:**

Gene: Aubs\_87 Start: 51186, Stop: 51539, Start Num: 23

Candidate Starts for Aubs\_87:

(7, 51012), (8, 51021), (9, 51045), (11, 51063), (21, 51156), (Start: 22 @51165 has 1 MA's), (Start: 23 @51186 has 24 MA's), (43, 51342), (45, 51363), (54, 51414), (55, 51420),

Gene: Barnyard\_5 Start: 2336, Stop: 2662, Start Num: 17

Candidate Starts for Barnyard\_5:

(Start: 17 @2336 has 2 MA's), (25, 2396), (40, 2513), (43, 2534), (47, 2552), (49, 2561), (56, 2597), (66, 2651),

Gene: Bipolar\_88 Start: 51911, Stop: 52264, Start Num: 23

Candidate Starts for Bipolar\_88:

(21, 51881), (Start: 22 @51890 has 1 MA's), (Start: 23 @51911 has 24 MA's), (43, 52067), (45, 52088), (54, 52139), (55, 52145),

Gene: Blexus\_83 Start: 50520, Stop: 50873, Start Num: 23

Candidate Starts for Blexus\_83:

(21, 50490), (Start: 22 @50499 has 1 MA's), (Start: 23 @50520 has 24 MA's), (43, 50676), (45, 50697), (54, 50748), (55, 50754),

Gene: BodEinwohner17\_95 Start: 52978, Stop: 53331, Start Num: 23

Candidate Starts for BodEinwohner17\_95:

(21, 52948), (Start: 22 @52957 has 1 MA's), (Start: 23 @52978 has 24 MA's), (43, 53134), (45, 53155), (54, 53206), (55, 53212),

Gene: Clank\_84 Start: 47495, Stop: 47848, Start Num: 23

Candidate Starts for Clank\_84:

(21, 47465), (Start: 22 @47474 has 1 MA's), (Start: 23 @47495 has 24 MA's), (43, 47651), (45, 47672), (54, 47723), (55, 47729),

Gene: Dorothy\_87 Start: 52163, Stop: 52516, Start Num: 23

Candidate Starts for Dorothy\_87:

(7, 51989), (8, 51998), (9, 52022), (11, 52040), (21, 52133), (Start: 22 @52142 has 1 MA's), (Start: 23 @52163 has 24 MA's), (43, 52319), (45, 52340), (54, 52391), (55, 52397),

Gene: Doug\_84 Start: 51219, Stop: 51512, Start Num: 23

Candidate Starts for Doug\_84:

(21, 51189), (Start: 22 @51198 has 1 MA's), (Start: 23 @51219 has 24 MA's), (43, 51375), (45, 51396), (54, 51447), (55, 51453),

Gene: DrLupo\_5 Start: 2304, Stop: 2633, Start Num: 18

Candidate Starts for DrLupo\_5:

(Start: 18 @2304 has 4 MA's), (24, 2361), (29, 2394), (37, 2457), (40, 2481), (43, 2502), (58, 2571), (64, 2604), (67, 2622),

Gene: Fowlmouth\_116 Start: 66878, Stop: 67264, Start Num: 18

Candidate Starts for Fowlmouth\_116:

(14, 66869), (Start: 18 @66878 has 4 MA's), (25, 66941), (36, 67031), (41, 67061), (42, 67067), (44, 67088), (46, 67115), (48, 67127), (52, 67142), (62, 67202), (65, 67214),

Gene: Gandalph\_86 Start: 47755, Stop: 48108, Start Num: 23

Candidate Starts for Gandalph\_86:

(21, 47725), (Start: 22 @47734 has 1 MA's), (Start: 23 @47755 has 24 MA's), (43, 47911), (45, 47932), (54, 47983), (55, 47989),

Gene: Hortihabitatio\_56 Start: 38133, Stop: 38495, Start Num: 15

Candidate Starts for Hortihabitatio\_56:

(13, 38109), (Start: 15 @38133 has 2 MA's), (26, 38202), (27, 38205), (33, 38259), (53, 38382), (67, 38466),

Gene: Indlulamithi\_105 Start: 68264, Stop: 68617, Start Num: 18

Candidate Starts for Indlulamithi\_105:

(Start: 18 @68264 has 4 MA's), (24, 68324), (28, 68351), (34, 68402), (36, 68417), (39, 68432), (48, 68489), (69, 68600), (70, 68603),

Gene: Inventum\_84 Start: 50348, Stop: 50701, Start Num: 23

Candidate Starts for Inventum\_84:

(7, 50174), (8, 50183), (9, 50207), (11, 50225), (21, 50318), (Start: 22 @50327 has 1 MA's), (Start: 23 @50348 has 24 MA's), (43, 50504), (45, 50525), (54, 50576), (55, 50582),

Gene: IrishSherpFalk\_86 Start: 50711, Stop: 51064, Start Num: 23

Candidate Starts for IrishSherpFalk\_86:

(21, 50681), (Start: 22 @50690 has 1 MA's), (Start: 23 @50711 has 24 MA's), (43, 50867), (45, 50888), (54, 50939), (55, 50945),

Gene: JoeyJr\_90 Start: 52257, Stop: 52610, Start Num: 23

Candidate Starts for JoeyJr\_90:

(7, 52083), (8, 52092), (9, 52116), (11, 52134), (21, 52227), (Start: 22 @52236 has 1 MA's), (Start: 23 @52257 has 24 MA's), (43, 52413), (45, 52434), (54, 52485), (55, 52491),

Gene: KristaRAM\_87 Start: 49995, Stop: 50348, Start Num: 23

Candidate Starts for KristaRAM\_87:

(7, 49821), (8, 49830), (9, 49854), (21, 49965), (Start: 22 @49974 has 1 MA's), (Start: 23 @49995 has 24 MA's), (43, 50151), (45, 50172), (54, 50223), (55, 50229),

Gene: Leperchaun\_88 Start: 51491, Stop: 51844, Start Num: 23

Candidate Starts for Leperchaun\_88:

(7, 51317), (8, 51326), (9, 51350), (11, 51368), (21, 51461), (Start: 22 @51470 has 1 MA's), (Start: 23 @51491 has 24 MA's), (43, 51647), (45, 51668), (54, 51719), (55, 51725),

Gene: MadMen\_92 Start: 50974, Stop: 51327, Start Num: 23

Candidate Starts for MadMen\_92:

(11, 50851), (21, 50944), (Start: 22 @50953 has 1 MA's), (Start: 23 @50974 has 24 MA's), (43, 51130), (45, 51151), (54, 51202), (55, 51208),

Gene: Magritte\_248 Start: 129666, Stop: 129316, Start Num: 20

Candidate Starts for Magritte\_248:

(Start: 20 @129666 has 1 MA's), (27, 129597), (31, 129579), (57, 129405), (63, 129372),

Gene: MajinBuu\_55 Start: 38365, Stop: 38727, Start Num: 15

Candidate Starts for MajinBuu\_55:

(Start: 15 @38365 has 2 MA's), (27, 38437), (33, 38491), (48, 38596), (60, 38656), (61, 38671), (71, 38722),

Gene: MrMiyagi\_115 Start: 67159, Stop: 67545, Start Num: 18

Candidate Starts for MrMiyagi\_115:

(14, 67150), (Start: 18 @67159 has 4 MA's), (25, 67222), (36, 67312), (41, 67342), (42, 67348), (44, 67369), (46, 67396), (48, 67408), (52, 67423), (65, 67495),

Gene: Predator\_6 Start: 2730, Stop: 3125, Start Num: 17

Candidate Starts for Predator\_6:

(Start: 17 @2730 has 2 MA's), (30, 2826), (37, 2883), (39, 2895), (46, 2961), (48, 2973), (51, 2982),

Gene: Rabbs\_64 Start: 41559, Stop: 41918, Start Num: 23

Candidate Starts for Rabbs\_64:

(6, 41364), (10, 41421), (12, 41445), (Start: 23 @41559 has 24 MA's), (35, 41667), (38, 41685), (68, 41871),

Gene: Radiance\_83 Start: 50015, Stop: 50368, Start Num: 23

Candidate Starts for Radiance\_83:

(11, 49892), (21, 49985), (Start: 22 @49994 has 1 MA's), (Start: 23 @50015 has 24 MA's), (43, 50171), (45, 50192), (54, 50243), (55, 50249),

Gene: RedBird\_87 Start: 52033, Stop: 52386, Start Num: 23

Candidate Starts for RedBird\_87:

(7, 51859), (8, 51868), (9, 51892), (11, 51910), (21, 52003), (Start: 22 @52012 has 1 MA's), (Start: 23 @52033 has 24 MA's), (43, 52189), (45, 52210), (54, 52261), (55, 52267),

Gene: SG4\_89 Start: 51636, Stop: 51989, Start Num: 23

Candidate Starts for SG4\_89:

(1, 51333), (2, 51354), (3, 51372), (4, 51381), (5, 51438), (7, 51462), (8, 51471), (9, 51495), (11, 51513), (21, 51606), (Start: 22 @51615 has 1 MA's), (Start: 23 @51636 has 24 MA's), (43, 51792), (45, 51813), (54, 51864), (55, 51870),

Gene: Sassafras\_88 Start: 50347, Stop: 50700, Start Num: 23

Candidate Starts for Sassafras\_88:

(7, 50173), (8, 50182), (9, 50206), (11, 50224), (21, 50317), (Start: 22 @50326 has 1 MA's), (Start: 23 @50347 has 24 MA's), (43, 50503), (45, 50524), (54, 50575), (55, 50581),

Gene: Shrew\_95 Start: 56440, Stop: 56838, Start Num: 16

Candidate Starts for Shrew\_95:

(Start: 16 @56440 has 1 MA's), (19, 56446), (32, 56551), (43, 56638), (50, 56689), (51, 56692), (59, 56749),

Gene: Sneeze\_63 Start: 41558, Stop: 41917, Start Num: 23

Candidate Starts for Sneeze\_63:

(6, 41363), (10, 41420), (12, 41444), (Start: 23 @41558 has 24 MA's), (35, 41666), (38, 41684), (68, 41870),

Gene: Spikelee\_87 Start: 51332, Stop: 51685, Start Num: 23

Candidate Starts for Spikelee\_87:

(7, 51158), (8, 51167), (9, 51191), (11, 51209), (21, 51302), (Start: 22 @51311 has 1 MA's), (Start: 23 @51332 has 24 MA's), (43, 51488), (45, 51509), (54, 51560), (55, 51566), (61, 51605),

Gene: Squirty\_87 Start: 54281, Stop: 54634, Start Num: 23

Candidate Starts for Squirty\_87:

(7, 54107), (8, 54116), (9, 54140), (11, 54158), (21, 54251), (Start: 22 @54260 has 1 MA's), (Start: 23 @54281 has 24 MA's), (43, 54437), (45, 54458), (54, 54509), (55, 54515),

Gene: Stap\_83 Start: 47996, Stop: 48349, Start Num: 23

Candidate Starts for Stap\_83:

(7, 47822), (8, 47831), (9, 47855), (11, 47873), (21, 47966), (Start: 22 @47975 has 1 MA's), (Start: 23 @47996 has 24 MA's), (43, 48152), (45, 48173), (54, 48224), (55, 48230),

Gene: SuperGrey\_87 Start: 52503, Stop: 52856, Start Num: 23

Candidate Starts for SuperGrey\_87:

(21, 52473), (Start: 22 @52482 has 1 MA's), (Start: 23 @52503 has 24 MA's), (43, 52659), (45, 52680), (54, 52731), (55, 52737),

Gene: Tchotchke\_81 Start: 49110, Stop: 49484, Start Num: 22

Candidate Starts for Tchotchke\_81:

(11, 49008), (21, 49101), (Start: 22 @49110 has 1 MA's), (Start: 23 @49131 has 24 MA's), (43, 49287), (45, 49308), (54, 49359), (55, 49365), (61, 49404),

Gene: ThetaBob\_88 Start: 49589, Stop: 49963, Start Num: 22

Candidate Starts for ThetaBob\_88:

(11, 49487), (21, 49580), (Start: 22 @49589 has 1 MA's), (Start: 23 @49610 has 24 MA's), (43, 49766), (45, 49787), (54, 49838), (55, 49844),

Gene: WillSterrel\_85 Start: 50744, Stop: 51097, Start Num: 23

Candidate Starts for WillSterrel\_85:

(21, 50714), (Start: 22 @50723 has 1 MA's), (Start: 23 @50744 has 24 MA's), (43, 50900), (45, 50921), (54, 50972), (55, 50978),