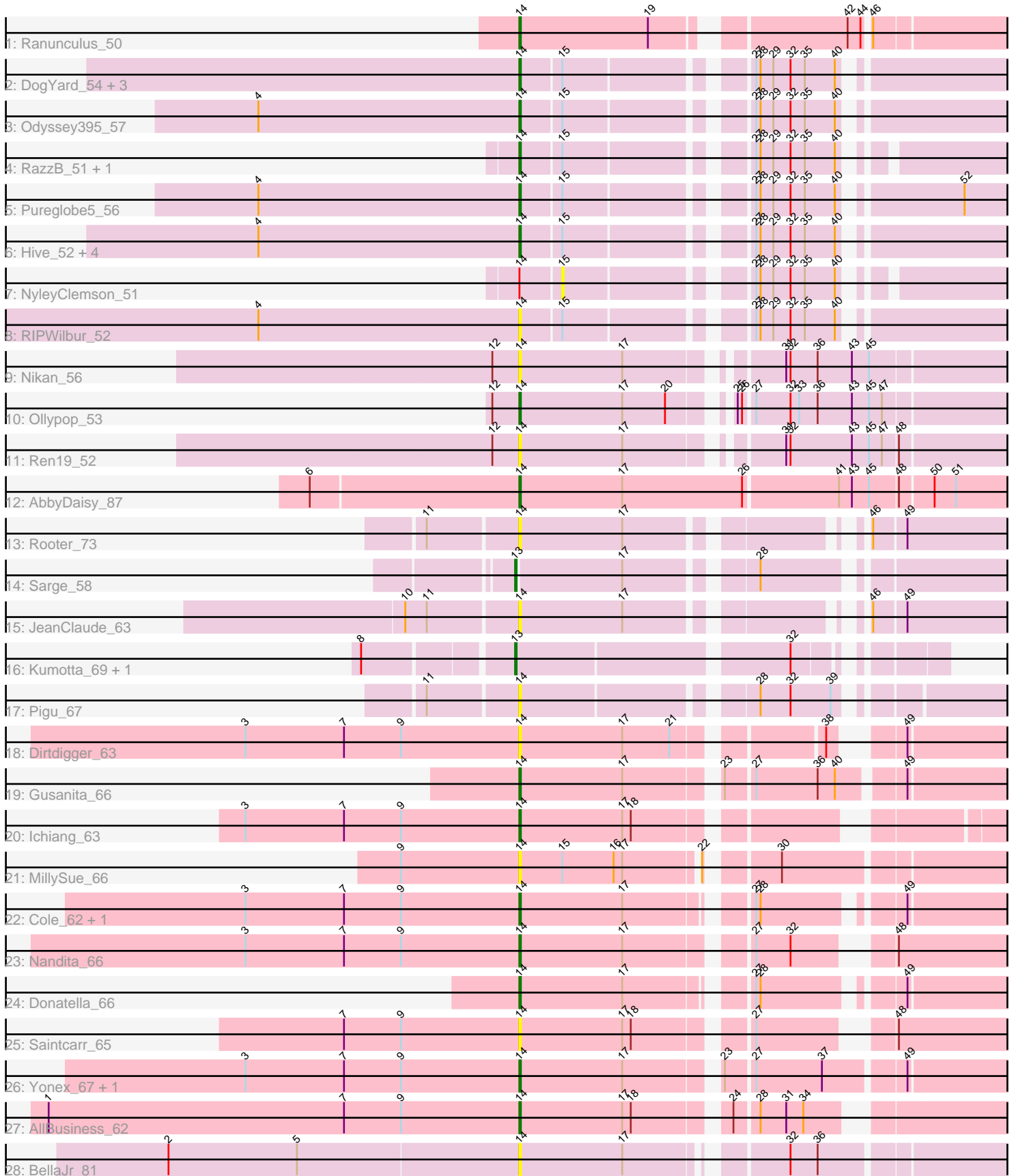


Pham 296730



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 296730 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296730 has 39 members, 17 are drafts.

Phages represented in each track:

- Track 1 : Ranunculus\_50
- Track 2 : DogYard\_54, Beagle\_55, Pointis\_53, Kubulix\_55
- Track 3 : Odyssey395\_57
- Track 4 : RazzB\_51, MellowYellow\_52
- Track 5 : Pureglobe5\_56
- Track 6 : Hive\_52, Popstraw\_51, Forrestell\_52, BetaFish\_54, PhuzzTulsa\_52
- Track 7 : NyleyClemson\_51
- Track 8 : RIPWilbur\_52
- Track 9 : Nikan\_56
- Track 10 : Ollypop\_53
- Track 11 : Ren19\_52
- Track 12 : AbbyDaisy\_87
- Track 13 : Rooter\_73
- Track 14 : Sarge\_58
- Track 15 : JeanClaude\_63
- Track 16 : Kumotta\_69, MargaretKali\_65
- Track 17 : Pigu\_67
- Track 18 : Dirdigger\_63
- Track 19 : Gusanita\_66
- Track 20 : Ichiang\_63
- Track 21 : MillySue\_66
- Track 22 : Cole\_62, BigSherm\_63
- Track 23 : Nandita\_66
- Track 24 : Donatella\_66
- Track 25 : Saintcarr\_65
- Track 26 : Yonex\_67, Ryan\_67
- Track 27 : AllBusiness\_62
- Track 28 : BellaJr\_81

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

The start number called the most often in the published annotations is 14, it was called in 19 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbyDaisy\_87, AllBusiness\_62, Beagle\_55, BellaJr\_81, BetaFish\_54, BigSherm\_63, Cole\_62, Dirdigger\_63, DogYard\_54, Donatella\_66, Forrestell\_52, Gusanita\_66, Hive\_52, Ichiang\_63, JeanClaude\_63, Kubulix\_55, MellowYellow\_52, MillySue\_66, Nandita\_66, Nikan\_56, Odyssey395\_57, Ollypop\_53, PhuzzTulsa\_52, Pigu\_67, Pointis\_53, Popstraw\_51, Pureglobe5\_56, RIPWilbur\_52, Ranunculus\_50, RazzB\_51, Ren19\_52, Rooter\_73, Ryan\_67, Saintcarr\_65, Yonex\_67,

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

- NyleyClemson\_51,

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

- Kumotta\_69, MargaretKali\_65, Sarge\_58,

### Summary by start number:

Start 13:

- Found in 3 of 39 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 3 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumotta\_69 (FB), MargaretKali\_65 (FB), Sarge\_58 (FB),

Start 14:

- Found in 36 of 39 ( 92.3% ) of genes in pham
- Manual Annotations of this start: 19 of 22
- Called 97.2% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_87 (AY), AllBusiness\_62 (FF), Beagle\_55 (AP2), BellaJr\_81 (FN), BetaFish\_54 (AP2), BigSherm\_63 (FF), Cole\_62 (FF), Dirdigger\_63 (FF), DogYard\_54 (AP2), Donatella\_66 (FF), Forrestell\_52 (AP2), Gusanita\_66 (FF), Hive\_52 (AP2), Ichiang\_63 (FF), JeanClaude\_63 (FB), Kubulix\_55 (AP2), MellowYellow\_52 (AP2), MillySue\_66 (FF), Nandita\_66 (FF), Nikan\_56 (AP2), Odyssey395\_57 (AP2), Ollypop\_53 (AP2), PhuzzTulsa\_52 (AP2), Pigu\_67 (FB), Pointis\_53 (AP2), Popstraw\_51 (AP2), Pureglobe5\_56 (AP2), RIPWilbur\_52 (AP2), Ranunculus\_50 (AP), RazzB\_51 (AP2), Ren19\_52 (AP2), Rooter\_73 (FB), Ryan\_67 (FF), Saintcarr\_65 (FF), Yonex\_67 (FF),

Start 15:

- Found in 16 of 39 ( 41.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 6.2% of time when present
- Phage (with cluster) where this start called: NyleyClemson\_51 (AP2),

### Summary by clusters:

There are 6 clusters represented in this pham: AP2, AP, FB, FF, AY, FN,

Info for manual annotations of cluster AP:

- Start number 14 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP2:

- Start number 14 was manually annotated 10 times for cluster AP2.

Info for manual annotations of cluster AY:

- Start number 14 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster FB:

- Start number 13 was manually annotated 3 times for cluster FB.

Info for manual annotations of cluster FF:

- Start number 14 was manually annotated 7 times for cluster FF.

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

Gene: AbbyDaisy\_87 Start: 50090, Stop: 50422, Start Num: 14

Candidate Starts for AbbyDaisy\_87:

(6, 49949), (Start: 14 @50090 has 19 MA's), (17, 50162), (26, 50246), (41, 50309), (43, 50318), (45, 50330), (48, 50348), (50, 50369), (51, 50384),

Gene: AllBusiness\_62 Start: 41766, Stop: 42065, Start Num: 14

Candidate Starts for AllBusiness\_62:

(1, 41439), (7, 41646), (9, 41685), (Start: 14 @41766 has 19 MA's), (17, 41838), (18, 41844), (24, 41901), (28, 41916), (31, 41934), (34, 41946),

Gene: Beagle\_55 Start: 39239, Stop: 38943, Start Num: 14

Candidate Starts for Beagle\_55:

(Start: 14 @39239 has 19 MA's), (15, 39212), (27, 39101), (28, 39098), (29, 39089), (32, 39077), (35, 39068), (40, 39047),

Gene: BellaJr\_81 Start: 47155, Stop: 47460, Start Num: 14

Candidate Starts for BellaJr\_81:

(2, 46912), (5, 47002), (Start: 14 @47155 has 19 MA's), (17, 47227), (32, 47320), (36, 47338),

Gene: BetaFish\_54 Start: 39723, Stop: 39427, Start Num: 14

Candidate Starts for BetaFish\_54:

(4, 39906), (Start: 14 @39723 has 19 MA's), (15, 39696), (27, 39585), (28, 39582), (29, 39573), (32, 39561), (35, 39552), (40, 39531),

Gene: BigSherm\_63 Start: 40511, Stop: 40807, Start Num: 14

Candidate Starts for BigSherm\_63:

(3, 40322), (7, 40391), (9, 40430), (Start: 14 @40511 has 19 MA's), (17, 40583), (27, 40655), (28, 40658), (49, 40739),

Gene: Cole\_62 Start: 40558, Stop: 40854, Start Num: 14

Candidate Starts for Cole\_62:

(3, 40369), (7, 40438), (9, 40477), (Start: 14 @40558 has 19 MA's), (17, 40630), (27, 40702), (28, 40705), (49, 40786),

Gene: DirtDigger\_63 Start: 40989, Stop: 41279, Start Num: 14

Candidate Starts for DirtDigger\_63:

(3, 40800), (7, 40869), (9, 40908), (Start: 14 @40989 has 19 MA's), (17, 41061), (21, 41094), (38, 41181), (49, 41211),

Gene: DogYard\_54 Start: 39156, Stop: 38860, Start Num: 14

Candidate Starts for DogYard\_54:

(Start: 14 @39156 has 19 MA's), (15, 39129), (27, 39018), (28, 39015), (29, 39006), (32, 38994), (35, 38985), (40, 38964),

Gene: Donatella\_66 Start: 41180, Stop: 41476, Start Num: 14

Candidate Starts for Donatella\_66:

(Start: 14 @41180 has 19 MA's), (17, 41252), (27, 41324), (28, 41327), (49, 41408),

Gene: Forrestell\_52 Start: 37800, Stop: 37504, Start Num: 14

Candidate Starts for Forrestell\_52:

(4, 37983), (Start: 14 @37800 has 19 MA's), (15, 37773), (27, 37662), (28, 37659), (29, 37650), (32, 37638), (35, 37629), (40, 37608),

Gene: Gusanita\_66 Start: 41368, Stop: 41676, Start Num: 14

Candidate Starts for Gusanita\_66:

(Start: 14 @41368 has 19 MA's), (17, 41440), (23, 41497), (27, 41515), (36, 41557), (40, 41569), (49, 41608),

Gene: Hive\_52 Start: 39337, Stop: 39041, Start Num: 14

Candidate Starts for Hive\_52:

(4, 39520), (Start: 14 @39337 has 19 MA's), (15, 39310), (27, 39199), (28, 39196), (29, 39187), (32, 39175), (35, 39166), (40, 39145),

Gene: Ichiang\_63 Start: 40540, Stop: 40830, Start Num: 14

Candidate Starts for Ichiang\_63:

(3, 40351), (7, 40420), (9, 40459), (Start: 14 @40540 has 19 MA's), (17, 40612), (18, 40618),

Gene: JeanClaude\_63 Start: 35141, Stop: 35431, Start Num: 14

Candidate Starts for JeanClaude\_63:

(10, 35066), (11, 35081), (Start: 14 @35141 has 19 MA's), (17, 35213), (46, 35339), (49, 35360),

Gene: Kubulix\_55 Start: 39104, Stop: 38808, Start Num: 14

Candidate Starts for Kubulix\_55:

(Start: 14 @39104 has 19 MA's), (15, 39077), (27, 38966), (28, 38963), (29, 38954), (32, 38942), (35, 38933), (40, 38912),

Gene: Kumotta\_69 Start: 37258, Stop: 37515, Start Num: 13

Candidate Starts for Kumotta\_69:

(8, 37162), (Start: 13 @37258 has 3 MA's), (32, 37435),

Gene: MargaretKali\_65 Start: 35876, Stop: 36133, Start Num: 13

Candidate Starts for MargaretKali\_65:

(8, 35780), (Start: 13 @35876 has 3 MA's), (32, 36053),

Gene: MellowYellow\_52 Start: 38261, Stop: 37974, Start Num: 14

Candidate Starts for MellowYellow\_52:

(Start: 14 @38261 has 19 MA's), (15, 38234), (27, 38123), (28, 38120), (29, 38111), (32, 38099), (35, 38090), (40, 38069),

Gene: MillySue\_66 Start: 40687, Stop: 40992, Start Num: 14

Candidate Starts for MillySue\_66:

(9, 40606), (Start: 14 @40687 has 19 MA's), (15, 40717), (16, 40753), (17, 40759), (22, 40807), (30, 40846),

Gene: Nandita\_66 Start: 41102, Stop: 41398, Start Num: 14

Candidate Starts for Nandita\_66:

(3, 40913), (7, 40982), (9, 41021), (Start: 14 @41102 has 19 MA's), (17, 41174), (27, 41249), (32, 41273), (48, 41321),

Gene: Nikan\_56 Start: 39907, Stop: 39596, Start Num: 14

Candidate Starts for Nikan\_56:

(12, 39925), (Start: 14 @39907 has 19 MA's), (17, 39835), (31, 39745), (32, 39742), (36, 39724), (43, 39700), (45, 39688),

Gene: NyleyClemson\_51 Start: 37849, Stop: 37589, Start Num: 15

Candidate Starts for NyleyClemson\_51:

(Start: 14 @37876 has 19 MA's), (15, 37849), (27, 37738), (28, 37735), (29, 37726), (32, 37714), (35, 37705), (40, 37684),

Gene: Odyssey395\_57 Start: 39463, Stop: 39167, Start Num: 14

Candidate Starts for Odyssey395\_57:

(4, 39646), (Start: 14 @39463 has 19 MA's), (15, 39436), (27, 39325), (28, 39322), (29, 39313), (32, 39301), (35, 39292), (40, 39271),

Gene: Ollypop\_53 Start: 40130, Stop: 39819, Start Num: 14

Candidate Starts for Ollypop\_53:

(12, 40148), (Start: 14 @40130 has 19 MA's), (17, 40058), (20, 40028), (25, 39998), (26, 39995), (27, 39989), (32, 39965), (33, 39959), (36, 39947), (43, 39923), (45, 39911), (47, 39902),

Gene: PhuzzTulsa\_52 Start: 39241, Stop: 38945, Start Num: 14

Candidate Starts for PhuzzTulsa\_52:

(4, 39424), (Start: 14 @39241 has 19 MA's), (15, 39214), (27, 39103), (28, 39100), (29, 39091), (32, 39079), (35, 39070), (40, 39049),

Gene: Pigu\_67 Start: 35049, Stop: 35342, Start Num: 14

Candidate Starts for Pigu\_67:

(11, 34989), (Start: 14 @35049 has 19 MA's), (28, 35193), (32, 35214), (39, 35241),

Gene: Pointis\_53 Start: 39279, Stop: 38983, Start Num: 14

Candidate Starts for Pointis\_53:

(Start: 14 @39279 has 19 MA's), (15, 39252), (27, 39141), (28, 39138), (29, 39129), (32, 39117), (35, 39108), (40, 39087),

Gene: Popstraw\_51 Start: 39065, Stop: 38769, Start Num: 14

Candidate Starts for Popstraw\_51:

(4, 39248), (Start: 14 @39065 has 19 MA's), (15, 39038), (27, 38927), (28, 38924), (29, 38915), (32, 38903), (35, 38894), (40, 38873),

Gene: Pureglobe5\_56 Start: 39710, Stop: 39414, Start Num: 14

Candidate Starts for Pureglobe5\_56:

(4, 39893), (Start: 14 @39710 has 19 MA's), (15, 39683), (27, 39572), (28, 39569), (29, 39560), (32, 39548), (35, 39539), (40, 39518), (52, 39446),

Gene: RIPWilbur\_52 Start: 38595, Stop: 38299, Start Num: 14

Candidate Starts for RIPWilbur\_52:

(4, 38778), (Start: 14 @38595 has 19 MA's), (15, 38568), (27, 38457), (28, 38454), (29, 38445), (32, 38433), (35, 38424), (40, 38403),

Gene: Ranunculus\_50 Start: 42260, Stop: 41955, Start Num: 14

Candidate Starts for Ranunculus\_50:

(Start: 14 @42260 has 19 MA's), (19, 42170), (42, 42056), (44, 42047), (46, 42044),

Gene: RazzB\_51 Start: 38007, Stop: 37720, Start Num: 14

Candidate Starts for RazzB\_51:

(Start: 14 @38007 has 19 MA's), (15, 37980), (27, 37869), (28, 37866), (29, 37857), (32, 37845), (35, 37836), (40, 37815),

Gene: Ren19\_52 Start: 39433, Stop: 39122, Start Num: 14

Candidate Starts for Ren19\_52:

(12, 39451), (Start: 14 @39433 has 19 MA's), (17, 39361), (31, 39271), (32, 39268), (43, 39226), (45, 39214), (47, 39205), (48, 39196),

Gene: Rooter\_73 Start: 37104, Stop: 37394, Start Num: 14

Candidate Starts for Rooter\_73:

(11, 37044), (Start: 14 @37104 has 19 MA's), (17, 37176), (46, 37302), (49, 37323),

Gene: Ryan\_67 Start: 41658, Stop: 41969, Start Num: 14

Candidate Starts for Ryan\_67:

(3, 41469), (7, 41538), (9, 41577), (Start: 14 @41658 has 19 MA's), (17, 41730), (23, 41787), (27, 41805), (37, 41850), (49, 41901),

Gene: Saintcarr\_65 Start: 41659, Stop: 41955, Start Num: 14

Candidate Starts for Saintcarr\_65:

(7, 41539), (9, 41578), (Start: 14 @41659 has 19 MA's), (17, 41731), (18, 41737), (27, 41806), (48, 41878),

Gene: Sarge\_58 Start: 32985, Stop: 33284, Start Num: 13

Candidate Starts for Sarge\_58:

(Start: 13 @32985 has 3 MA's), (17, 33057), (28, 33132),

Gene: Yonex\_67 Start: 41658, Stop: 41969, Start Num: 14

Candidate Starts for Yonex\_67:

(3, 41469), (7, 41538), (9, 41577), (Start: 14 @41658 has 19 MA's), (17, 41730), (23, 41787), (27, 41805), (37, 41850), (49, 41901),