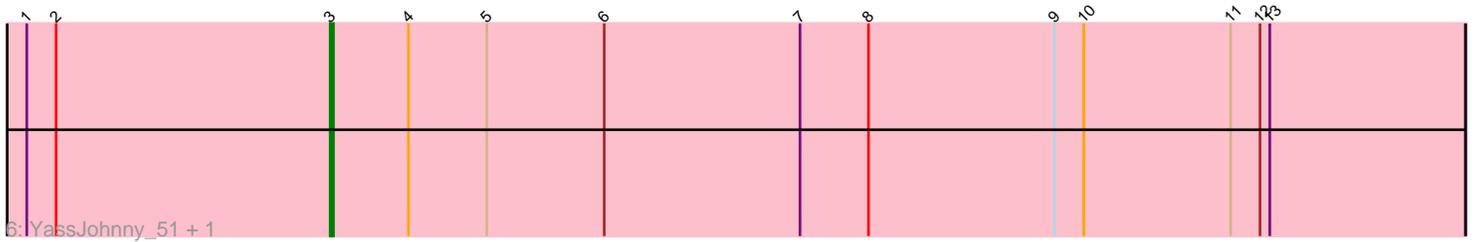
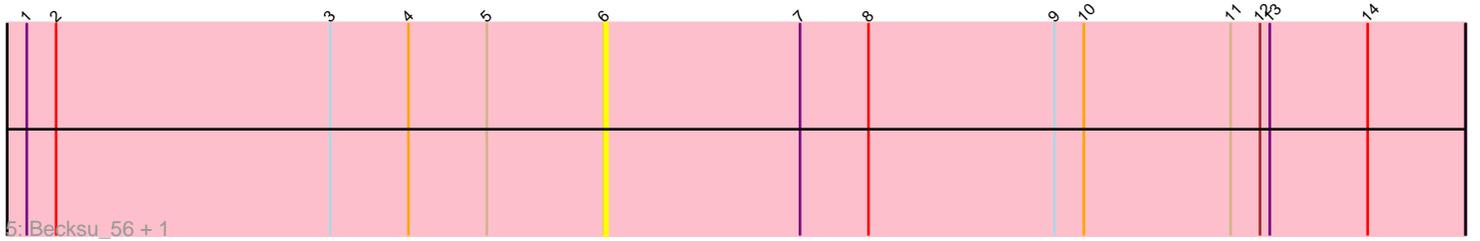
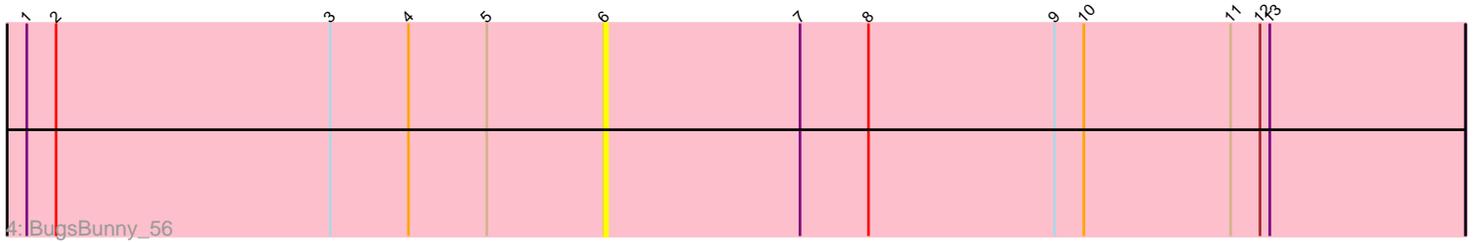
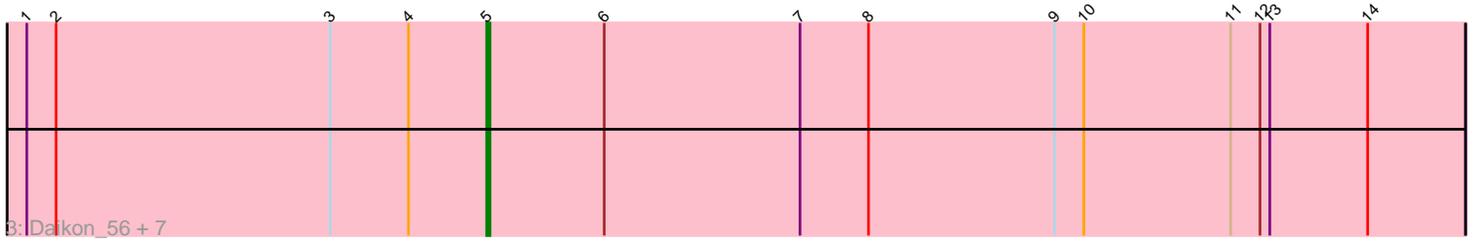
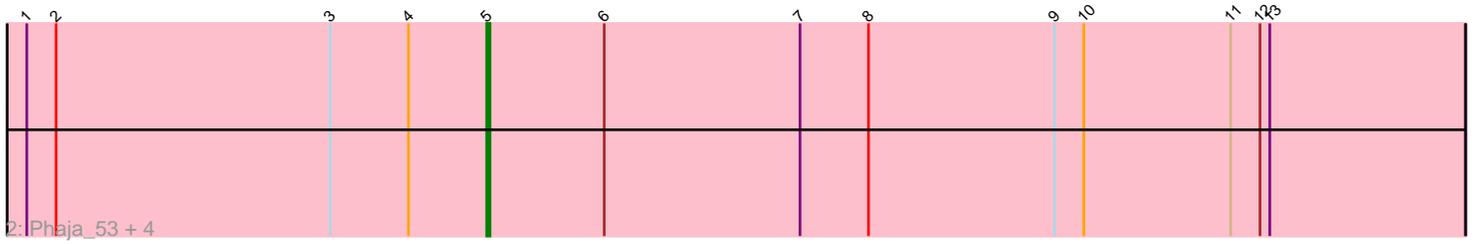
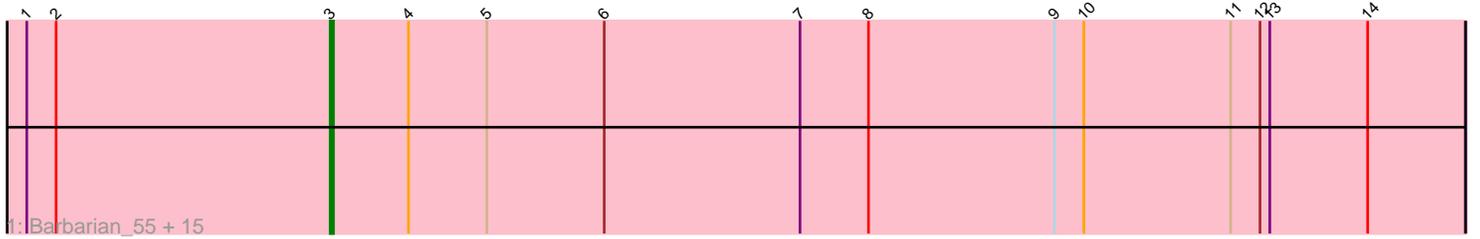


Pham 288079



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 288079 Report

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

Pham number 288079 has 34 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Barbarian\_55, Willez\_49, Sassay\_49, TBrady12\_58, Hopey\_55, FireRed\_58, Youngblood\_57, MISSy\_55, Terminus\_57, Sotrice96\_56, Murica\_57, Flypotenuse\_50, Inca\_52, Glexan\_53, Kimchi\_58, Asriel\_55
- Track 2 : Phaja\_53, IHOP\_53, FairyPath\_55, ShereKhan\_53, NoSleep\_57
- Track 3 : Daikon\_56, Maxxinista\_58, Ptowny\_54, Emmina\_55, Quallification\_56, Gage\_58, Brewer\_50, Petra64142\_60
- Track 4 : BugsBunny\_56
- Track 5 : Becksu\_56, FoghornLeghorn\_50
- Track 6 : YassJohnny\_51, Paperbeatsrock\_54

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

The start number called the most often in the published annotations is 3, it was called in 18 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Asriel\_55, Barbarian\_55, FireRed\_58, Flypotenuse\_50, Glexan\_53, Hopey\_55, Inca\_52, Kimchi\_58, MISSy\_55, Murica\_57, Paperbeatsrock\_54, Sassay\_49, Sotrice96\_56, TBrady12\_58, Terminus\_57, Willez\_49, YassJohnny\_51, Youngblood\_57,

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

- Becksu\_56, Brewer\_50, BugsBunny\_56, Daikon\_56, Emmina\_55, FairyPath\_55, FoghornLeghorn\_50, Gage\_58, IHOP\_53, Maxxinista\_58, NoSleep\_57, Petra64142\_60, Phaja\_53, Ptowny\_54, Quallification\_56, ShereKhan\_53,

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

- 

### **Summary by start number:**

Start 3:

- Found in 34 of 34 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 18 of 26

- Called 52.9% of time when present
- Phage (with cluster) where this start called: Asriel\_55 (E), Barbarian\_55 (E), FireRed\_58 (E), Flypotenuse\_50 (E), Glexan\_53 (E), Hopey\_55 (E), Inca\_52 (E), Kimchi\_58 (E), MISSy\_55 (E), Murica\_57 (E), Paperbeatsrock\_54 (E), Sassay\_49 (E), Sotrice96\_56 (E), TBrady12\_58 (E), Terminus\_57 (E), Willez\_49 (E), YassJohnny\_51 (E), Youngblood\_57 (E),

Start 5:

- Found in 34 of 34 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 8 of 26
- Called 38.2% of time when present
- Phage (with cluster) where this start called: Brewer\_50 (E), Daikon\_56 (E), Emmina\_55 (E), FairyPath\_55 (E), Gage\_58 (E), IHOP\_53 (E), Maxxinista\_58 (E), NoSleep\_57 (E), Petra64142\_60 (E), Phaja\_53 (E), Ptowny\_54 (E), Qualification\_56 (E), ShereKhan\_53 (E),

Start 6:

- Found in 34 of 34 ( 100.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 8.8% of time when present
- Phage (with cluster) where this start called: Becksu\_56 (E), BugsBunny\_56 (E), FoghornLeghorn\_50 (E),

### **Summary by clusters:**

There is one cluster represented in this pham: E

Info for manual annotations of cluster E:

- Start number 3 was manually annotated 18 times for cluster E.
- Start number 5 was manually annotated 8 times for cluster E.

### **Gene Information:**

Gene: Asriel\_55 Start: 39169, Stop: 38822, Start Num: 3

Candidate Starts for Asriel\_55:

(1, 39262), (2, 39253), (Start: 3 @39169 has 18 MA's), (4, 39145), (Start: 5 @39121 has 8 MA's), (6, 39085), (7, 39025), (8, 39004), (9, 38947), (10, 38938), (11, 38893), (12, 38884), (13, 38881), (14, 38851),

Gene: Barbarian\_55 Start: 39169, Stop: 38822, Start Num: 3

Candidate Starts for Barbarian\_55:

(1, 39262), (2, 39253), (Start: 3 @39169 has 18 MA's), (4, 39145), (Start: 5 @39121 has 8 MA's), (6, 39085), (7, 39025), (8, 39004), (9, 38947), (10, 38938), (11, 38893), (12, 38884), (13, 38881), (14, 38851),

Gene: Becksu\_56 Start: 40628, Stop: 40365, Start Num: 6

Candidate Starts for Becksu\_56:

(1, 40805), (2, 40796), (Start: 3 @40712 has 18 MA's), (4, 40688), (Start: 5 @40664 has 8 MA's), (6, 40628), (7, 40568), (8, 40547), (9, 40490), (10, 40481), (11, 40436), (12, 40427), (13, 40424), (14, 40394),

Gene: Brewer\_50 Start: 38929, Stop: 38630, Start Num: 5

Candidate Starts for Brewer\_50:

(1, 39070), (2, 39061), (Start: 3 @38977 has 18 MA's), (4, 38953), (Start: 5 @38929 has 8 MA's), (6, 38893), (7, 38833), (8, 38812), (9, 38755), (10, 38746), (11, 38701), (12, 38692), (13, 38689), (14, 38659),

Gene: BugsBunny\_56 Start: 40510, Stop: 40247, Start Num: 6

Candidate Starts for BugsBunny\_56:

(1, 40687), (2, 40678), (Start: 3 @40594 has 18 MA's), (4, 40570), (Start: 5 @40546 has 8 MA's), (6, 40510), (7, 40450), (8, 40429), (9, 40372), (10, 40363), (11, 40318), (12, 40309), (13, 40306),

Gene: Daikon\_56 Start: 40619, Stop: 40320, Start Num: 5

Candidate Starts for Daikon\_56:

(1, 40760), (2, 40751), (Start: 3 @40667 has 18 MA's), (4, 40643), (Start: 5 @40619 has 8 MA's), (6, 40583), (7, 40523), (8, 40502), (9, 40445), (10, 40436), (11, 40391), (12, 40382), (13, 40379), (14, 40349),

Gene: Emmina\_55 Start: 39694, Stop: 39395, Start Num: 5

Candidate Starts for Emmina\_55:

(1, 39835), (2, 39826), (Start: 3 @39742 has 18 MA's), (4, 39718), (Start: 5 @39694 has 8 MA's), (6, 39658), (7, 39598), (8, 39577), (9, 39520), (10, 39511), (11, 39466), (12, 39457), (13, 39454), (14, 39424),

Gene: FairyPath\_55 Start: 40610, Stop: 40311, Start Num: 5

Candidate Starts for FairyPath\_55:

(1, 40751), (2, 40742), (Start: 3 @40658 has 18 MA's), (4, 40634), (Start: 5 @40610 has 8 MA's), (6, 40574), (7, 40514), (8, 40493), (9, 40436), (10, 40427), (11, 40382), (12, 40373), (13, 40370),

Gene: FireRed\_58 Start: 41033, Stop: 40686, Start Num: 3

Candidate Starts for FireRed\_58:

(1, 41126), (2, 41117), (Start: 3 @41033 has 18 MA's), (4, 41009), (Start: 5 @40985 has 8 MA's), (6, 40949), (7, 40889), (8, 40868), (9, 40811), (10, 40802), (11, 40757), (12, 40748), (13, 40745), (14, 40715),

Gene: Flypotenuse\_50 Start: 39530, Stop: 39183, Start Num: 3

Candidate Starts for Flypotenuse\_50:

(1, 39623), (2, 39614), (Start: 3 @39530 has 18 MA's), (4, 39506), (Start: 5 @39482 has 8 MA's), (6, 39446), (7, 39386), (8, 39365), (9, 39308), (10, 39299), (11, 39254), (12, 39245), (13, 39242), (14, 39212),

Gene: FoghornLeghorn\_50 Start: 38456, Stop: 38193, Start Num: 6

Candidate Starts for FoghornLeghorn\_50:

(1, 38633), (2, 38624), (Start: 3 @38540 has 18 MA's), (4, 38516), (Start: 5 @38492 has 8 MA's), (6, 38456), (7, 38396), (8, 38375), (9, 38318), (10, 38309), (11, 38264), (12, 38255), (13, 38252), (14, 38222),

Gene: Gage\_58 Start: 40267, Stop: 39968, Start Num: 5

Candidate Starts for Gage\_58:

(1, 40408), (2, 40399), (Start: 3 @40315 has 18 MA's), (4, 40291), (Start: 5 @40267 has 8 MA's), (6, 40231), (7, 40171), (8, 40150), (9, 40093), (10, 40084), (11, 40039), (12, 40030), (13, 40027), (14, 39997),

Gene: Glexan\_53 Start: 40657, Stop: 40310, Start Num: 3

Candidate Starts for Glexan\_53:

(1, 40750), (2, 40741), (Start: 3 @40657 has 18 MA's), (4, 40633), (Start: 5 @40609 has 8 MA's), (6, 40573), (7, 40513), (8, 40492), (9, 40435), (10, 40426), (11, 40381), (12, 40372), (13, 40369), (14, 40339),

Gene: Hopey\_55 Start: 40159, Stop: 39812, Start Num: 3

Candidate Starts for Hopey\_55:

(1, 40252), (2, 40243), (Start: 3 @40159 has 18 MA's), (4, 40135), (Start: 5 @40111 has 8 MA's), (6, 40075), (7, 40015), (8, 39994), (9, 39937), (10, 39928), (11, 39883), (12, 39874), (13, 39871), (14, 39841),

Gene: IHOP\_53 Start: 40333, Stop: 40034, Start Num: 5

Candidate Starts for IHOP\_53:

(1, 40474), (2, 40465), (Start: 3 @40381 has 18 MA's), (4, 40357), (Start: 5 @40333 has 8 MA's), (6, 40297), (7, 40237), (8, 40216), (9, 40159), (10, 40150), (11, 40105), (12, 40096), (13, 40093),

Gene: Inca\_52 Start: 38906, Stop: 38559, Start Num: 3

Candidate Starts for Inca\_52:

(1, 38999), (2, 38990), (Start: 3 @38906 has 18 MA's), (4, 38882), (Start: 5 @38858 has 8 MA's), (6, 38822), (7, 38762), (8, 38741), (9, 38684), (10, 38675), (11, 38630), (12, 38621), (13, 38618), (14, 38588),

Gene: Kimchi\_58 Start: 40318, Stop: 39971, Start Num: 3

Candidate Starts for Kimchi\_58:

(1, 40411), (2, 40402), (Start: 3 @40318 has 18 MA's), (4, 40294), (Start: 5 @40270 has 8 MA's), (6, 40234), (7, 40174), (8, 40153), (9, 40096), (10, 40087), (11, 40042), (12, 40033), (13, 40030), (14, 40000),

Gene: MISSy\_55 Start: 40042, Stop: 39695, Start Num: 3

Candidate Starts for MISSy\_55:

(1, 40135), (2, 40126), (Start: 3 @40042 has 18 MA's), (4, 40018), (Start: 5 @39994 has 8 MA's), (6, 39958), (7, 39898), (8, 39877), (9, 39820), (10, 39811), (11, 39766), (12, 39757), (13, 39754), (14, 39724),

Gene: Maxxinista\_58 Start: 39866, Stop: 39567, Start Num: 5

Candidate Starts for Maxxinista\_58:

(1, 40007), (2, 39998), (Start: 3 @39914 has 18 MA's), (4, 39890), (Start: 5 @39866 has 8 MA's), (6, 39830), (7, 39770), (8, 39749), (9, 39692), (10, 39683), (11, 39638), (12, 39629), (13, 39626), (14, 39596),

Gene: Murica\_57 Start: 40989, Stop: 40642, Start Num: 3

Candidate Starts for Murica\_57:

(1, 41082), (2, 41073), (Start: 3 @40989 has 18 MA's), (4, 40965), (Start: 5 @40941 has 8 MA's), (6, 40905), (7, 40845), (8, 40824), (9, 40767), (10, 40758), (11, 40713), (12, 40704), (13, 40701), (14, 40671),

Gene: NoSleep\_57 Start: 40138, Stop: 39839, Start Num: 5

Candidate Starts for NoSleep\_57:

(1, 40279), (2, 40270), (Start: 3 @40186 has 18 MA's), (4, 40162), (Start: 5 @40138 has 8 MA's), (6, 40102), (7, 40042), (8, 40021), (9, 39964), (10, 39955), (11, 39910), (12, 39901), (13, 39898),

Gene: Paperbeatsrock\_54 Start: 40554, Stop: 40207, Start Num: 3

Candidate Starts for Paperbeatsrock\_54:

(1, 40647), (2, 40638), (Start: 3 @40554 has 18 MA's), (4, 40530), (Start: 5 @40506 has 8 MA's), (6, 40470), (7, 40410), (8, 40389), (9, 40332), (10, 40323), (11, 40278), (12, 40269), (13, 40266),

Gene: Petra64142\_60 Start: 41435, Stop: 41136, Start Num: 5

Candidate Starts for Petra64142\_60:

(1, 41576), (2, 41567), (Start: 3 @41483 has 18 MA's), (4, 41459), (Start: 5 @41435 has 8 MA's), (6, 41399), (7, 41339), (8, 41318), (9, 41261), (10, 41252), (11, 41207), (12, 41198), (13, 41195), (14, 41165),

Gene: Phaja\_53 Start: 40332, Stop: 40033, Start Num: 5

Candidate Starts for Phaja\_53:

(1, 40473), (2, 40464), (Start: 3 @40380 has 18 MA's), (4, 40356), (Start: 5 @40332 has 8 MA's), (6, 40296), (7, 40236), (8, 40215), (9, 40158), (10, 40149), (11, 40104), (12, 40095), (13, 40092),

Gene: Ptowny\_54 Start: 39168, Stop: 38869, Start Num: 5

Candidate Starts for Ptowny\_54:

(1, 39309), (2, 39300), (Start: 3 @39216 has 18 MA's), (4, 39192), (Start: 5 @39168 has 8 MA's), (6, 39132), (7, 39072), (8, 39051), (9, 38994), (10, 38985), (11, 38940), (12, 38931), (13, 38928), (14, 38898),

Gene: Quallification\_56 Start: 40621, Stop: 40322, Start Num: 5

Candidate Starts for Quallification\_56:

(1, 40762), (2, 40753), (Start: 3 @40669 has 18 MA's), (4, 40645), (Start: 5 @40621 has 8 MA's), (6, 40585), (7, 40525), (8, 40504), (9, 40447), (10, 40438), (11, 40393), (12, 40384), (13, 40381), (14, 40351),

Gene: Sassay\_49 Start: 38301, Stop: 37954, Start Num: 3

Candidate Starts for Sassay\_49:

(1, 38394), (2, 38385), (Start: 3 @38301 has 18 MA's), (4, 38277), (Start: 5 @38253 has 8 MA's), (6, 38217), (7, 38157), (8, 38136), (9, 38079), (10, 38070), (11, 38025), (12, 38016), (13, 38013), (14, 37983),

Gene: ShereKhan\_53 Start: 40545, Stop: 40246, Start Num: 5

Candidate Starts for ShereKhan\_53:

(1, 40686), (2, 40677), (Start: 3 @40593 has 18 MA's), (4, 40569), (Start: 5 @40545 has 8 MA's), (6, 40509), (7, 40449), (8, 40428), (9, 40371), (10, 40362), (11, 40317), (12, 40308), (13, 40305),

Gene: Sotrice96\_56 Start: 40279, Stop: 39932, Start Num: 3

Candidate Starts for Sotrice96\_56:

(1, 40372), (2, 40363), (Start: 3 @40279 has 18 MA's), (4, 40255), (Start: 5 @40231 has 8 MA's), (6, 40195), (7, 40135), (8, 40114), (9, 40057), (10, 40048), (11, 40003), (12, 39994), (13, 39991), (14, 39961),

Gene: TBrady12\_58 Start: 40315, Stop: 39968, Start Num: 3

Candidate Starts for TBrady12\_58:

(1, 40408), (2, 40399), (Start: 3 @40315 has 18 MA's), (4, 40291), (Start: 5 @40267 has 8 MA's), (6, 40231), (7, 40171), (8, 40150), (9, 40093), (10, 40084), (11, 40039), (12, 40030), (13, 40027), (14, 39997),

Gene: Terminus\_57 Start: 41054, Stop: 40707, Start Num: 3

Candidate Starts for Terminus\_57:

(1, 41147), (2, 41138), (Start: 3 @41054 has 18 MA's), (4, 41030), (Start: 5 @41006 has 8 MA's), (6, 40970), (7, 40910), (8, 40889), (9, 40832), (10, 40823), (11, 40778), (12, 40769), (13, 40766), (14,

40736),

Gene: Willez\_49 Start: 38301, Stop: 37954, Start Num: 3

Candidate Starts for Willez\_49:

(1, 38394), (2, 38385), (Start: 3 @38301 has 18 MA's), (4, 38277), (Start: 5 @38253 has 8 MA's), (6, 38217), (7, 38157), (8, 38136), (9, 38079), (10, 38070), (11, 38025), (12, 38016), (13, 38013), (14, 37983),

Gene: YassJohnny\_51 Start: 39476, Stop: 39129, Start Num: 3

Candidate Starts for YassJohnny\_51:

(1, 39569), (2, 39560), (Start: 3 @39476 has 18 MA's), (4, 39452), (Start: 5 @39428 has 8 MA's), (6, 39392), (7, 39332), (8, 39311), (9, 39254), (10, 39245), (11, 39200), (12, 39191), (13, 39188),

Gene: Youngblood\_57 Start: 40984, Stop: 40637, Start Num: 3

Candidate Starts for Youngblood\_57:

(1, 41077), (2, 41068), (Start: 3 @40984 has 18 MA's), (4, 40960), (Start: 5 @40936 has 8 MA's), (6, 40900), (7, 40840), (8, 40819), (9, 40762), (10, 40753), (11, 40708), (12, 40699), (13, 40696), (14, 40666),