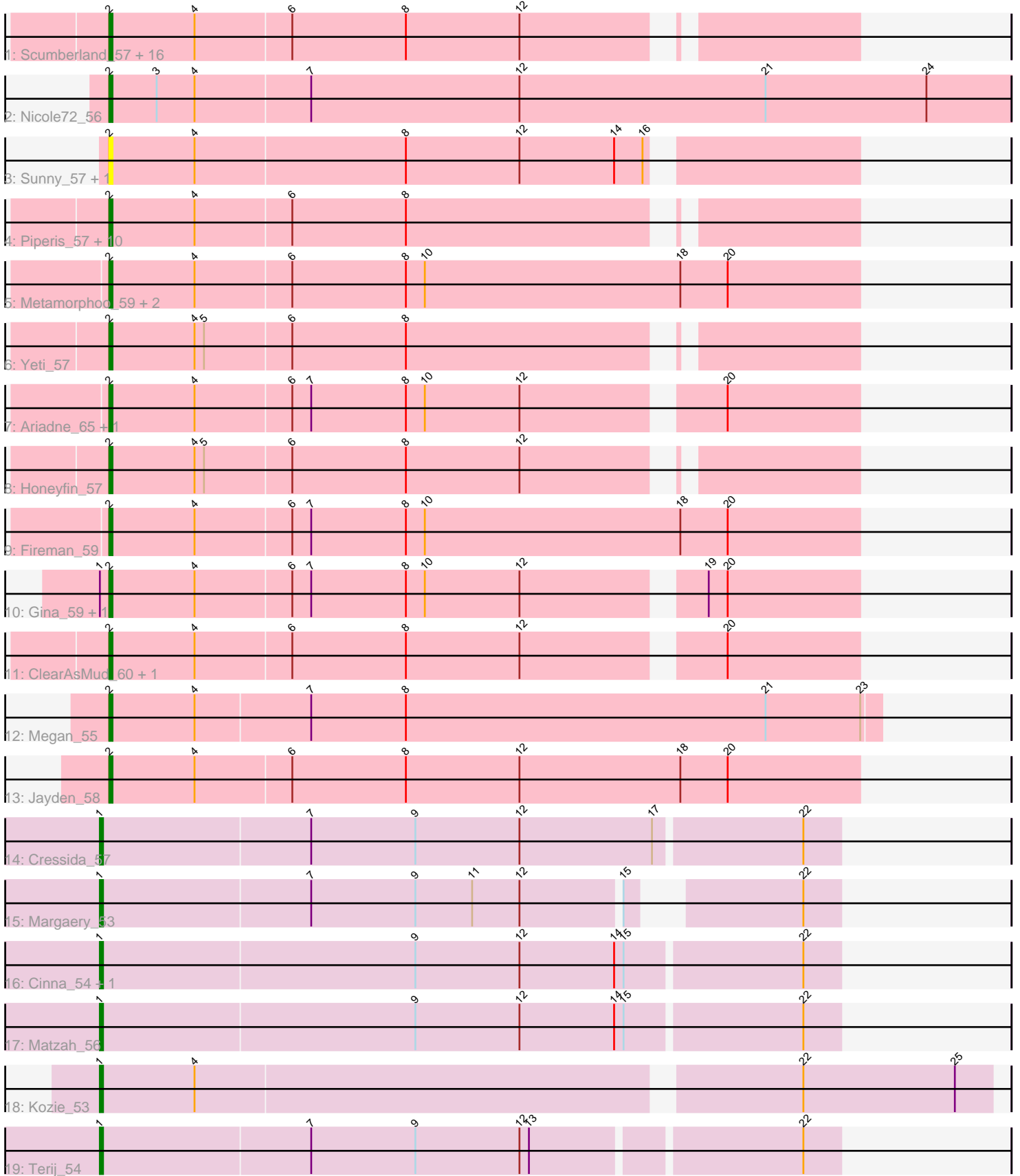


Pham 182333



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 182333 Report

This analysis was run 11/02/24 on database version 579.

Pham number 182333 has 52 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Scumberland\_57, Selwyn23\_57, Onika\_55, CrazyRich\_55, Crisis\_57, Ramiel05\_55, LittleFortune\_58, Antares\_56, Cranjis\_57, Kowalski\_55, BrazzalePHS\_55, KaiHaiDragon\_57, Hermeonysus\_55, Quhwah\_60, EarickHC\_57, Paschalis\_56, Savannah\_55
- Track 2 : Nicole72\_56
- Track 3 : Sunny\_57, Merry\_57
- Track 4 : Piperis\_57, Jollipop\_57, Phrancesco\_56, Pulchra\_58, PiperSansNom\_57, Busephilis\_55, Shotgun\_56, Jefe\_56, Phorgeous\_56, PierreOrion\_56, Ganandorf\_55
- Track 5 : Metamorphoo\_59, Tyrumbra\_56, RobsFeet\_60
- Track 6 : Yeti\_57
- Track 7 : Ariadne\_65, Smarties\_65
- Track 8 : Honeyfin\_57
- Track 9 : Fireman\_59
- Track 10 : Gina\_59, Teamocil\_59
- Track 11 : ClearAsMud\_60, NoodlelyBoi\_57
- Track 12 : Megan\_55
- Track 13 : Jayden\_58
- Track 14 : Cressida\_57
- Track 15 : Margaery\_53
- Track 16 : Cinna\_54, MementoMori\_55
- Track 17 : Matzah\_56
- Track 18 : Kozie\_53
- Track 19 : Terij\_54

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

The start number called the most often in the published annotations is 2, it was called in 42 of the 49 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares\_56, Ariadne\_65, BrazzalePHS\_55, Busephilis\_55, ClearAsMud\_60, Cranjis\_57, CrazyRich\_55, Crisis\_57, EarickHC\_57, Fireman\_59, Ganandorf\_55, Gina\_59, Hermeonysus\_55, Honeyfin\_57, Jayden\_58, Jefe\_56, Jollipop\_57, KaiHaiDragon\_57, Kowalski\_55, LittleFortune\_58, Megan\_55, Merry\_57,

Metamorphoo\_59, Nicole72\_56, NoodlelyBoi\_57, Onika\_55, Paschalis\_56, Phorgeous\_56, Phrancesco\_56, PierreOrion\_56, PiperSansNom\_57, Piperis\_57, Pulchra\_58, Quhwah\_60, Ramiel05\_55, RobsFeet\_60, Savannah\_55, Scumberland\_57, Selwyn23\_57, Shotgun\_56, Smarties\_65, Sunny\_57, Teamocil\_59, Tyumbra\_56, Yeti\_57,

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

- 

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

- Cinna\_54, Cressida\_57, Kozie\_53, Margaery\_53, Matzah\_56, MementoMori\_55, Terij\_54,

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

Start 1:

- Found in 9 of 52 ( 17.3% ) of genes in pham
- Manual Annotations of this start: 7 of 49
- Called 77.8% of time when present
- Phage (with cluster) where this start called: Cinna\_54 (EI), Cressida\_57 (EI), Kozie\_53 (EI), Margaery\_53 (EI), Matzah\_56 (EI), MementoMori\_55 (EI), Terij\_54 (EI),

Start 2:

- Found in 45 of 52 ( 86.5% ) of genes in pham
- Manual Annotations of this start: 42 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares\_56 (EC), Ariadne\_65 (EC), BrazzalePHS\_55 (EC), Busephilis\_55 (EC), ClearAsMud\_60 (EC), Cranjjs\_57 (EC), CrazyRich\_55 (EC), Crisis\_57 (EC), EarickHC\_57 (EC), Fireman\_59 (EC), Ganandorf\_55 (EC), Gina\_59 (EC), Hermeonysus\_55 (EC), Honeyfin\_57 (EC), Jayden\_58 (EC), Jefe\_56 (EC), Jollipop\_57 (EC), KaiHaiDragon\_57 (EC), Kowalski\_55 (EC), LittleFortune\_58 (EC), Megan\_55 (EC), Merry\_57 (EC), Metamorphoo\_59 (EC), Nicole72\_56 (EC), NoodlelyBoi\_57 (EC), Onika\_55 (EC), Paschalis\_56 (EC), Phorgeous\_56 (EC), Phrancesco\_56 (EC), PierreOrion\_56 (EC), PiperSansNom\_57 (EC), Piperis\_57 (EC), Pulchra\_58 (EC), Quhwah\_60 (EC), Ramiel05\_55 (EC), RobsFeet\_60 (EC), Savannah\_55 (EC), Scumberland\_57 (EC), Selwyn23\_57 (EC), Shotgun\_56 (EC), Smarties\_65 (EC), Sunny\_57 (EC), Teamocil\_59 (EC), Tyumbra\_56 (EC), Yeti\_57 (EC),

### **Summary by clusters:**

There are 2 clusters represented in this pham: EI, EC,

Info for manual annotations of cluster EC:

- Start number 2 was manually annotated 42 times for cluster EC.

Info for manual annotations of cluster EI:

- Start number 1 was manually annotated 7 times for cluster EI.

### **Gene Information:**

Gene: Antares\_56 Start: 36999, Stop: 37220, Start Num: 2

Candidate Starts for Antares\_56:

(Start: 2 @36999 has 42 MA's), (4, 37026), (6, 37056), (8, 37092), (12, 37128),

Gene: Ariadne\_65 Start: 38582, Stop: 38809, Start Num: 2

Candidate Starts for Ariadne\_65:

(Start: 2 @38582 has 42 MA's), (4, 38609), (6, 38639), (7, 38645), (8, 38675), (10, 38681), (12, 38711), (20, 38768),

Gene: BrazzalePHS\_55 Start: 36795, Stop: 37016, Start Num: 2

Candidate Starts for BrazzalePHS\_55:

(Start: 2 @36795 has 42 MA's), (4, 36822), (6, 36852), (8, 36888), (12, 36924),

Gene: Busephilis\_55 Start: 36705, Stop: 36926, Start Num: 2

Candidate Starts for Busephilis\_55:

(Start: 2 @36705 has 42 MA's), (4, 36732), (6, 36762), (8, 36798),

Gene: Cinna\_54 Start: 38149, Stop: 38379, Start Num: 1

Candidate Starts for Cinna\_54:

(Start: 1 @38149 has 7 MA's), (9, 38248), (12, 38281), (14, 38311), (15, 38314), (22, 38368),

Gene: ClearAsMud\_60 Start: 37257, Stop: 37484, Start Num: 2

Candidate Starts for ClearAsMud\_60:

(Start: 2 @37257 has 42 MA's), (4, 37284), (6, 37314), (8, 37350), (12, 37386), (20, 37443),

Gene: Cranjis\_57 Start: 36954, Stop: 37175, Start Num: 2

Candidate Starts for Cranjis\_57:

(Start: 2 @36954 has 42 MA's), (4, 36981), (6, 37011), (8, 37047), (12, 37083),

Gene: CrazyRich\_55 Start: 36763, Stop: 36984, Start Num: 2

Candidate Starts for CrazyRich\_55:

(Start: 2 @36763 has 42 MA's), (4, 36790), (6, 36820), (8, 36856), (12, 36892),

Gene: Cressida\_57 Start: 37800, Stop: 38030, Start Num: 1

Candidate Starts for Cressida\_57:

(Start: 1 @37800 has 7 MA's), (7, 37866), (9, 37899), (12, 37932), (17, 37974), (22, 38019),

Gene: Crisis\_57 Start: 36754, Stop: 36975, Start Num: 2

Candidate Starts for Crisis\_57:

(Start: 2 @36754 has 42 MA's), (4, 36781), (6, 36811), (8, 36847), (12, 36883),

Gene: EarickHC\_57 Start: 36677, Stop: 36898, Start Num: 2

Candidate Starts for EarickHC\_57:

(Start: 2 @36677 has 42 MA's), (4, 36704), (6, 36734), (8, 36770), (12, 36806),

Gene: Fireman\_59 Start: 38649, Stop: 38885, Start Num: 2

Candidate Starts for Fireman\_59:

(Start: 2 @38649 has 42 MA's), (4, 38676), (6, 38706), (7, 38712), (8, 38742), (10, 38748), (18, 38829), (20, 38844),

Gene: Ganandorf\_55 Start: 36787, Stop: 37008, Start Num: 2

Candidate Starts for Ganandorf\_55:

(Start: 2 @36787 has 42 MA's), (4, 36814), (6, 36844), (8, 36880),

Gene: Gina\_59 Start: 36758, Stop: 36985, Start Num: 2

Candidate Starts for Gina\_59:

(Start: 1 @36755 has 7 MA's), (Start: 2 @36758 has 42 MA's), (4, 36785), (6, 36815), (7, 36821), (8, 36851), (10, 36857), (12, 36887), (19, 36938), (20, 36944),

Gene: Hermeonysus\_55 Start: 36683, Stop: 36904, Start Num: 2

Candidate Starts for Hermeonysus\_55:

(Start: 2 @36683 has 42 MA's), (4, 36710), (6, 36740), (8, 36776), (12, 36812),

Gene: Honeyfin\_57 Start: 36975, Stop: 37196, Start Num: 2

Candidate Starts for Honeyfin\_57:

(Start: 2 @36975 has 42 MA's), (4, 37002), (5, 37005), (6, 37032), (8, 37068), (12, 37104),

Gene: Jayden\_58 Start: 37432, Stop: 37668, Start Num: 2

Candidate Starts for Jayden\_58:

(Start: 2 @37432 has 42 MA's), (4, 37459), (6, 37489), (8, 37525), (12, 37561), (18, 37612), (20, 37627),

Gene: Jefe\_56 Start: 36741, Stop: 36962, Start Num: 2

Candidate Starts for Jefe\_56:

(Start: 2 @36741 has 42 MA's), (4, 36768), (6, 36798), (8, 36834),

Gene: Jollipop\_57 Start: 37156, Stop: 37377, Start Num: 2

Candidate Starts for Jollipop\_57:

(Start: 2 @37156 has 42 MA's), (4, 37183), (6, 37213), (8, 37249),

Gene: KaiHaiDragon\_57 Start: 36677, Stop: 36898, Start Num: 2

Candidate Starts for KaiHaiDragon\_57:

(Start: 2 @36677 has 42 MA's), (4, 36704), (6, 36734), (8, 36770), (12, 36806),

Gene: Kowalski\_55 Start: 36790, Stop: 37011, Start Num: 2

Candidate Starts for Kowalski\_55:

(Start: 2 @36790 has 42 MA's), (4, 36817), (6, 36847), (8, 36883), (12, 36919),

Gene: Kozie\_53 Start: 37387, Stop: 37659, Start Num: 1

Candidate Starts for Kozie\_53:

(Start: 1 @37387 has 7 MA's), (4, 37417), (22, 37600), (25, 37648),

Gene: LittleFortune\_58 Start: 37046, Stop: 37267, Start Num: 2

Candidate Starts for LittleFortune\_58:

(Start: 2 @37046 has 42 MA's), (4, 37073), (6, 37103), (8, 37139), (12, 37175),

Gene: Margaery\_53 Start: 37382, Stop: 37597, Start Num: 1

Candidate Starts for Margaery\_53:

(Start: 1 @37382 has 7 MA's), (7, 37448), (9, 37481), (11, 37499), (12, 37514), (15, 37544), (22, 37586),

Gene: Matzah\_56 Start: 38227, Stop: 38457, Start Num: 1

Candidate Starts for Matzah\_56:

(Start: 1 @38227 has 7 MA's), (9, 38326), (12, 38359), (14, 38389), (15, 38392), (22, 38446),

Gene: Megan\_55 Start: 41408, Stop: 41650, Start Num: 2

Candidate Starts for Megan\_55:

(Start: 2 @41408 has 42 MA's), (4, 41435), (7, 41471), (8, 41501), (21, 41615), (23, 41645),

Gene: MementoMori\_55 Start: 37807, Stop: 38037, Start Num: 1

Candidate Starts for MementoMori\_55:

(Start: 1 @37807 has 7 MA's), (9, 37906), (12, 37939), (14, 37969), (15, 37972), (22, 38026),

Gene: Merry\_57 Start: 38577, Stop: 38804, Start Num: 2

Candidate Starts for Merry\_57:

(Start: 2 @38577 has 42 MA's), (4, 38604), (8, 38670), (12, 38706), (14, 38736), (16, 38745),

Gene: Metamorphoo\_59 Start: 37943, Stop: 38179, Start Num: 2

Candidate Starts for Metamorphoo\_59:

(Start: 2 @37943 has 42 MA's), (4, 37970), (6, 38000), (8, 38036), (10, 38042), (18, 38123), (20, 38138),

Gene: Nicole72\_56 Start: 41913, Stop: 42197, Start Num: 2

Candidate Starts for Nicole72\_56:

(Start: 2 @41913 has 42 MA's), (3, 41928), (4, 41940), (7, 41976), (12, 42042), (21, 42120), (24, 42171),

Gene: NoodlelyBoi\_57 Start: 37548, Stop: 37775, Start Num: 2

Candidate Starts for NoodlelyBoi\_57:

(Start: 2 @37548 has 42 MA's), (4, 37575), (6, 37605), (8, 37641), (12, 37677), (20, 37734),

Gene: Onika\_55 Start: 36765, Stop: 36986, Start Num: 2

Candidate Starts for Onika\_55:

(Start: 2 @36765 has 42 MA's), (4, 36792), (6, 36822), (8, 36858), (12, 36894),

Gene: Paschalis\_56 Start: 36772, Stop: 36993, Start Num: 2

Candidate Starts for Paschalis\_56:

(Start: 2 @36772 has 42 MA's), (4, 36799), (6, 36829), (8, 36865), (12, 36901),

Gene: Phorgeous\_56 Start: 36606, Stop: 36827, Start Num: 2

Candidate Starts for Phorgeous\_56:

(Start: 2 @36606 has 42 MA's), (4, 36633), (6, 36663), (8, 36699),

Gene: Phrancesco\_56 Start: 36895, Stop: 37116, Start Num: 2

Candidate Starts for Phrancesco\_56:

(Start: 2 @36895 has 42 MA's), (4, 36922), (6, 36952), (8, 36988),

Gene: PierreOrion\_56 Start: 37015, Stop: 37236, Start Num: 2

Candidate Starts for PierreOrion\_56:

(Start: 2 @37015 has 42 MA's), (4, 37042), (6, 37072), (8, 37108),

Gene: PiperSansNom\_57 Start: 37079, Stop: 37300, Start Num: 2

Candidate Starts for PiperSansNom\_57:

(Start: 2 @37079 has 42 MA's), (4, 37106), (6, 37136), (8, 37172),

Gene: Piperis\_57 Start: 36729, Stop: 36950, Start Num: 2

Candidate Starts for Piperis\_57:

(Start: 2 @36729 has 42 MA's), (4, 36756), (6, 36786), (8, 36822),

Gene: Pulchra\_58 Start: 37126, Stop: 37347, Start Num: 2  
Candidate Starts for Pulchra\_58:  
(Start: 2 @37126 has 42 MA's), (4, 37153), (6, 37183), (8, 37219),

Gene: Quhwah\_60 Start: 37387, Stop: 37608, Start Num: 2  
Candidate Starts for Quhwah\_60:  
(Start: 2 @37387 has 42 MA's), (4, 37414), (6, 37444), (8, 37480), (12, 37516),

Gene: Ramiel05\_55 Start: 36790, Stop: 37011, Start Num: 2  
Candidate Starts for Ramiel05\_55:  
(Start: 2 @36790 has 42 MA's), (4, 36817), (6, 36847), (8, 36883), (12, 36919),

Gene: RobsFeet\_60 Start: 38210, Stop: 38446, Start Num: 2  
Candidate Starts for RobsFeet\_60:  
(Start: 2 @38210 has 42 MA's), (4, 38237), (6, 38267), (8, 38303), (10, 38309), (18, 38390), (20, 38405),

Gene: Savannah\_55 Start: 36817, Stop: 37038, Start Num: 2  
Candidate Starts for Savannah\_55:  
(Start: 2 @36817 has 42 MA's), (4, 36844), (6, 36874), (8, 36910), (12, 36946),

Gene: Scumberland\_57 Start: 37012, Stop: 37233, Start Num: 2  
Candidate Starts for Scumberland\_57:  
(Start: 2 @37012 has 42 MA's), (4, 37039), (6, 37069), (8, 37105), (12, 37141),

Gene: Selwyn23\_57 Start: 36960, Stop: 37181, Start Num: 2  
Candidate Starts for Selwyn23\_57:  
(Start: 2 @36960 has 42 MA's), (4, 36987), (6, 37017), (8, 37053), (12, 37089),

Gene: Shotgun\_56 Start: 36693, Stop: 36914, Start Num: 2  
Candidate Starts for Shotgun\_56:  
(Start: 2 @36693 has 42 MA's), (4, 36720), (6, 36750), (8, 36786),

Gene: Smarties\_65 Start: 38582, Stop: 38809, Start Num: 2  
Candidate Starts for Smarties\_65:  
(Start: 2 @38582 has 42 MA's), (4, 38609), (6, 38639), (7, 38645), (8, 38675), (10, 38681), (12, 38711), (20, 38768),

Gene: Sunny\_57 Start: 38579, Stop: 38806, Start Num: 2  
Candidate Starts for Sunny\_57:  
(Start: 2 @38579 has 42 MA's), (4, 38606), (8, 38672), (12, 38708), (14, 38738), (16, 38747),

Gene: Teamocil\_59 Start: 36857, Stop: 37084, Start Num: 2  
Candidate Starts for Teamocil\_59:  
(Start: 1 @36854 has 7 MA's), (Start: 2 @36857 has 42 MA's), (4, 36884), (6, 36914), (7, 36920), (8, 36950), (10, 36956), (12, 36986), (19, 37037), (20, 37043),

Gene: Terij\_54 Start: 36871, Stop: 37098, Start Num: 1  
Candidate Starts for Terij\_54:  
(Start: 1 @36871 has 7 MA's), (7, 36937), (9, 36970), (12, 37003), (13, 37006), (22, 37087),

Gene: Tyrumbra\_56 Start: 38069, Stop: 38305, Start Num: 2  
Candidate Starts for Tyrumbra\_56:

(Start: 2 @38069 has 42 MA's), (4, 38096), (6, 38126), (8, 38162), (10, 38168), (18, 38249), (20, 38264),

Gene: Yeti\_57 Start: 36762, Stop: 36983, Start Num: 2

Candidate Starts for Yeti\_57:

(Start: 2 @36762 has 42 MA's), (4, 36789), (5, 36792), (6, 36819), (8, 36855),