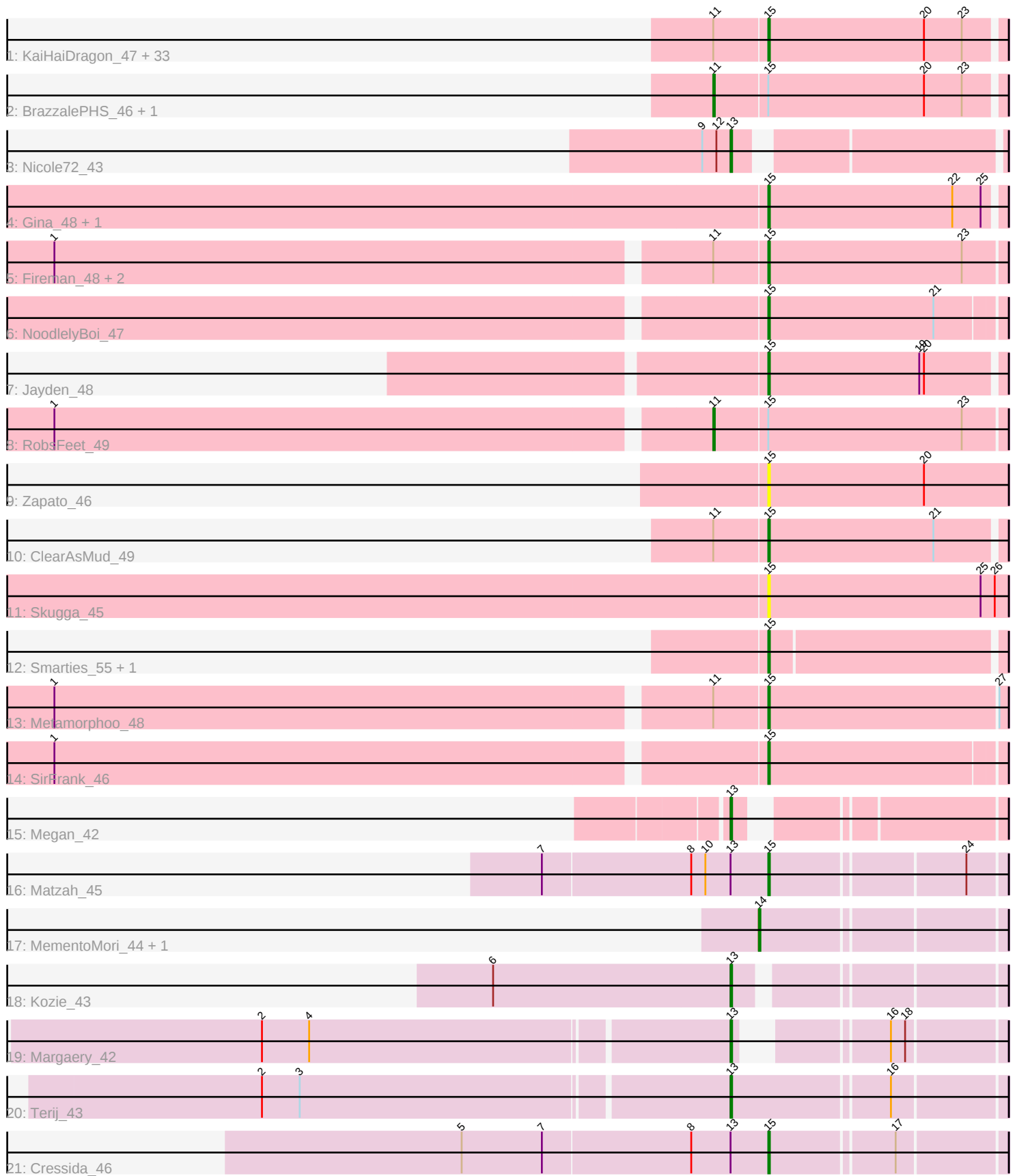


# Pham 327062



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 327062 Report

This analysis was run 09/05/26 on database version 662.

Pham number 327062 has 60 members, 6 are drafts.

Phages represented in each track:

- Track 1 : KaiHaiDragon\_47, Hermeonysus\_46, EarickHC\_47, Rockwell\_46, PhedwardCullen\_46, CrazyRich\_46, Paschalis\_46, Germa\_48, Savannah\_46, PierreOrion\_47, Crisis\_48, Jefe\_47, Phorgeous\_46, Ganandorf\_46, Selwyn23\_48, Antares\_47, Glorp\_48, Scumberland\_48, BeagleBug\_46, Ramiel05\_46, Lucretia\_47, Piperis\_47, LittleFortune\_48, Quhwah\_50, Jollipop\_47, Cranjis\_48, Pulchra\_48, Phrancesco\_47, Kowalski\_46, Honeyfin\_48, Shotgun\_46, Onika\_46, PiperSansNom\_47, Yeti\_47
- Track 2 : BrazzalePHS\_46, Busephilis\_46
- Track 3 : Nicole72\_43
- Track 4 : Gina\_48, Teamocil\_48
- Track 5 : Fireman\_48, Tyumbra\_46, Shrubaron\_48
- Track 6 : NoodlelyBoi\_47
- Track 7 : Jayden\_48
- Track 8 : RobsFeet\_49
- Track 9 : Zapato\_46
- Track 10 : ClearAsMud\_49
- Track 11 : Skugga\_45
- Track 12 : Smarties\_55, Ariadne\_55
- Track 13 : Metamorphoo\_48
- Track 14 : SirFrank\_46
- Track 15 : Megan\_42
- Track 16 : Matzah\_45
- Track 17 : MementoMori\_44, Cinna\_43
- Track 18 : Kozie\_43
- Track 19 : Margaery\_42
- Track 20 : Terij\_43
- Track 21 : Cressida\_46

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

The start number called the most often in the published annotations is 15, it was called in 44 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares\_47, Ariadne\_55, BeagleBug\_46, ClearAsMud\_49, Cranjis\_48, CrazyRich\_46, Cressida\_46, Crisis\_48, EarickHC\_47, Fireman\_48, Ganandorf\_46, Germa\_48, Gina\_48, Glorp\_48, Hermeonysus\_46, Honeyfin\_48, Jayden\_48, Jefe\_47, Jollipop\_47, KaiHaiDragon\_47, Kowalski\_46, LittleFortune\_48, Lucretia\_47, Matzah\_45, Metamorphoo\_48, NoodlelyBoi\_47, Onika\_46, Paschalis\_46, PhedwardCullen\_46, Phorgeous\_46, Phrancesco\_47, PierreOrion\_47, PiperSansNom\_47, Piperis\_47, Pulchra\_48, Quhwah\_50, Ramiel05\_46, Rockwell\_46, Savannah\_46, Scumberland\_48, Selwyn23\_48, Shotgun\_46, Shrubaron\_48, SirFrank\_46, Skugga\_45, Smarties\_55, Teamocil\_48, Tyrumbra\_46, Yeti\_47, Zapato\_46,

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

- BrazzalePHS\_46, Busephilis\_46, RobsFeet\_49,

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

- Cinna\_43, Kozie\_43, Margaery\_42, Megan\_42, MementoMori\_44, Nicole72\_43, Terij\_43,

### Summary by start number:

Start 11:

- Found in 42 of 60 ( 70.0% ) of genes in pham
- Manual Annotations of this start: 3 of 54
- Called 7.1% of time when present
- Phage (with cluster) where this start called: BrazzalePHS\_46 (EC), Busephilis\_46 (EC), RobsFeet\_49 (EC),

Start 13:

- Found in 7 of 60 ( 11.7% ) of genes in pham
- Manual Annotations of this start: 5 of 54
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Kozie\_43 (EI), Margaery\_42 (EI), Megan\_42 (EC), Nicole72\_43 (EC), Terij\_43 (EI),

Start 14:

- Found in 2 of 60 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 2 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cinna\_43 (EI), MementoMori\_44 (EI),

Start 15:

- Found in 53 of 60 ( 88.3% ) of genes in pham
- Manual Annotations of this start: 44 of 54
- Called 94.3% of time when present
- Phage (with cluster) where this start called: Antares\_47 (EC), Ariadne\_55 (EC), BeagleBug\_46 (EC), ClearAsMud\_49 (EC), Cranjis\_48 (EC), CrazyRich\_46 (EC), Cressida\_46 (EI), Crisis\_48 (EC), EarickHC\_47 (EC), Fireman\_48 (EC), Ganandorf\_46 (EC), Germa\_48 (EC), Gina\_48 (EC), Glorp\_48 (EC), Hermeonysus\_46 (EC), Honeyfin\_48 (EC), Jayden\_48 (EC), Jefe\_47 (EC), Jollipop\_47 (EC), KaiHaiDragon\_47 (EC), Kowalski\_46 (EC), LittleFortune\_48 (EC), Lucretia\_47 (EC), Matzah\_45 (EI), Metamorphoo\_48 (EC), NoodlelyBoi\_47 (EC), Onika\_46 (EC), Paschalis\_46 (EC), PhedwardCullen\_46 (EC), Phorgeous\_46 (EC), Phrancesco\_47 (EC), PierreOrion\_47 (EC), PiperSansNom\_47 (EC), Piperis\_47

(EC), Pulchra\_48 (EC), Quhwah\_50 (EC), Ramiel05\_46 (EC), Rockwell\_46 (EC), Savannah\_46 (EC), Scumberland\_48 (EC), Selwyn23\_48 (EC), Shotgun\_46 (EC), Shrubaron\_48 (EC), SirFrank\_46 (EC), Skugga\_45 (EC), Smarties\_55 (EC), Teamocil\_48 (EC), Tyumbra\_46 (EC), Yeti\_47 (EC), Zapato\_46 (EC),

### **Summary by clusters:**

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

Info for manual annotations of cluster EC:

- Start number 11 was manually annotated 3 times for cluster EC.
- Start number 13 was manually annotated 2 times for cluster EC.
- Start number 15 was manually annotated 42 times for cluster EC.

Info for manual annotations of cluster EI:

- Start number 13 was manually annotated 3 times for cluster EI.
- Start number 14 was manually annotated 2 times for cluster EI.
- Start number 15 was manually annotated 2 times for cluster EI.

### **Gene Information:**

Gene: Antares\_47 Start: 32488, Stop: 32634, Start Num: 15

Candidate Starts for Antares\_47:

(Start: 11 @32455 has 3 MA's), (Start: 15 @32488 has 44 MA's), (20, 32587), (23, 32611),

Gene: Ariadne\_55 Start: 34108, Stop: 34251, Start Num: 15

Candidate Starts for Ariadne\_55:

(Start: 15 @34108 has 44 MA's),

Gene: BeagleBug\_46 Start: 32269, Stop: 32415, Start Num: 15

Candidate Starts for BeagleBug\_46:

(Start: 11 @32236 has 3 MA's), (Start: 15 @32269 has 44 MA's), (20, 32368), (23, 32392),

Gene: BrazzalePHS\_46 Start: 32250, Stop: 32429, Start Num: 11

Candidate Starts for BrazzalePHS\_46:

(Start: 11 @32250 has 3 MA's), (Start: 15 @32283 has 44 MA's), (20, 32382), (23, 32406),

Gene: Busephilis\_46 Start: 32191, Stop: 32370, Start Num: 11

Candidate Starts for Busephilis\_46:

(Start: 11 @32191 has 3 MA's), (Start: 15 @32224 has 44 MA's), (20, 32323), (23, 32347),

Gene: Cinna\_43 Start: 32599, Stop: 32745, Start Num: 14

Candidate Starts for Cinna\_43:

(Start: 14 @32599 has 2 MA's),

Gene: ClearAsMud\_49 Start: 32364, Stop: 32510, Start Num: 15

Candidate Starts for ClearAsMud\_49:

(Start: 11 @32331 has 3 MA's), (Start: 15 @32364 has 44 MA's), (21, 32469),

Gene: Cranjis\_48 Start: 32443, Stop: 32589, Start Num: 15

Candidate Starts for Cranjis\_48:

(Start: 11 @32410 has 3 MA's), (Start: 15 @32443 has 44 MA's), (20, 32542), (23, 32566),

Gene: CrazyRich\_46 Start: 32252, Stop: 32398, Start Num: 15

Candidate Starts for CrazyRich\_46:

(Start: 11 @32219 has 3 MA's), (Start: 15 @32252 has 44 MA's), (20, 32351), (23, 32375),

Gene: Cressida\_46 Start: 32230, Stop: 32370, Start Num: 15

Candidate Starts for Cressida\_46:

(5, 32038), (7, 32089), (8, 32182), (Start: 13 @32206 has 5 MA's), (Start: 15 @32230 has 44 MA's), (17, 32305),

Gene: Crisis\_48 Start: 32243, Stop: 32389, Start Num: 15

Candidate Starts for Crisis\_48:

(Start: 11 @32210 has 3 MA's), (Start: 15 @32243 has 44 MA's), (20, 32342), (23, 32366),

Gene: EarickHC\_47 Start: 32166, Stop: 32312, Start Num: 15

Candidate Starts for EarickHC\_47:

(Start: 11 @32133 has 3 MA's), (Start: 15 @32166 has 44 MA's), (20, 32265), (23, 32289),

Gene: Fireman\_48 Start: 33773, Stop: 33922, Start Num: 15

Candidate Starts for Fireman\_48:

(1, 33335), (Start: 11 @33740 has 3 MA's), (Start: 15 @33773 has 44 MA's), (23, 33896),

Gene: Ganandorf\_46 Start: 32305, Stop: 32451, Start Num: 15

Candidate Starts for Ganandorf\_46:

(Start: 11 @32272 has 3 MA's), (Start: 15 @32305 has 44 MA's), (20, 32404), (23, 32428),

Gene: Germa\_48 Start: 32134, Stop: 32280, Start Num: 15

Candidate Starts for Germa\_48:

(Start: 11 @32101 has 3 MA's), (Start: 15 @32134 has 44 MA's), (20, 32233), (23, 32257),

Gene: Gina\_48 Start: 31918, Stop: 32064, Start Num: 15

Candidate Starts for Gina\_48:

(Start: 15 @31918 has 44 MA's), (22, 32035), (25, 32053),

Gene: Glorp\_48 Start: 32306, Stop: 32452, Start Num: 15

Candidate Starts for Glorp\_48:

(Start: 11 @32273 has 3 MA's), (Start: 15 @32306 has 44 MA's), (20, 32405), (23, 32429),

Gene: Hermeonysus\_46 Start: 32172, Stop: 32318, Start Num: 15

Candidate Starts for Hermeonysus\_46:

(Start: 11 @32139 has 3 MA's), (Start: 15 @32172 has 44 MA's), (20, 32271), (23, 32295),

Gene: Honeyfin\_48 Start: 32493, Stop: 32639, Start Num: 15

Candidate Starts for Honeyfin\_48:

(Start: 11 @32460 has 3 MA's), (Start: 15 @32493 has 44 MA's), (20, 32592), (23, 32616),

Gene: Jayden\_48 Start: 32615, Stop: 32761, Start Num: 15

Candidate Starts for Jayden\_48:

(Start: 15 @32615 has 44 MA's), (19, 32711), (20, 32714),

Gene: Jefe\_47 Start: 32230, Stop: 32376, Start Num: 15

Candidate Starts for Jefe\_47:

(Start: 11 @32197 has 3 MA's), (Start: 15 @32230 has 44 MA's), (20, 32329), (23, 32353),

Gene: Jollipop\_47 Start: 32569, Stop: 32715, Start Num: 15

Candidate Starts for Jollipop\_47:

(Start: 11 @32536 has 3 MA's), (Start: 15 @32569 has 44 MA's), (20, 32668), (23, 32692),

Gene: KaiHaiDragon\_47 Start: 32166, Stop: 32312, Start Num: 15

Candidate Starts for KaiHaiDragon\_47:

(Start: 11 @32133 has 3 MA's), (Start: 15 @32166 has 44 MA's), (20, 32265), (23, 32289),

Gene: Kowalski\_46 Start: 32279, Stop: 32425, Start Num: 15

Candidate Starts for Kowalski\_46:

(Start: 11 @32246 has 3 MA's), (Start: 15 @32279 has 44 MA's), (20, 32378), (23, 32402),

Gene: Kozie\_43 Start: 32123, Stop: 32275, Start Num: 13

Candidate Starts for Kozie\_43:

(6, 31973), (Start: 13 @32123 has 5 MA's),

Gene: LittleFortune\_48 Start: 32535, Stop: 32681, Start Num: 15

Candidate Starts for LittleFortune\_48:

(Start: 11 @32502 has 3 MA's), (Start: 15 @32535 has 44 MA's), (20, 32634), (23, 32658),

Gene: Lucretia\_47 Start: 32222, Stop: 32368, Start Num: 15

Candidate Starts for Lucretia\_47:

(Start: 11 @32189 has 3 MA's), (Start: 15 @32222 has 44 MA's), (20, 32321), (23, 32345),

Gene: Margaery\_42 Start: 31857, Stop: 31997, Start Num: 13

Candidate Starts for Margaery\_42:

(2, 31569), (4, 31599), (Start: 13 @31857 has 5 MA's), (16, 31929), (18, 31938),

Gene: Matzah\_45 Start: 32700, Stop: 32840, Start Num: 15

Candidate Starts for Matzah\_45:

(7, 32559), (8, 32652), (10, 32661), (Start: 13 @32676 has 5 MA's), (Start: 15 @32700 has 44 MA's), (24, 32817),

Gene: Megan\_42 Start: 33574, Stop: 33720, Start Num: 13

Candidate Starts for Megan\_42:

(Start: 13 @33574 has 5 MA's),

Gene: MementoMori\_44 Start: 32287, Stop: 32433, Start Num: 14

Candidate Starts for MementoMori\_44:

(Start: 14 @32287 has 2 MA's),

Gene: Metamorphoo\_48 Start: 33035, Stop: 33184, Start Num: 15

Candidate Starts for Metamorphoo\_48:

(1, 32597), (Start: 11 @33002 has 3 MA's), (Start: 15 @33035 has 44 MA's), (27, 33179),

Gene: Nicole72\_43 Start: 34182, Stop: 34334, Start Num: 13

Candidate Starts for Nicole72\_43:

(9, 34164), (12, 34173), (Start: 13 @34182 has 5 MA's),

Gene: NoodlelyBoi\_47 Start: 32576, Stop: 32722, Start Num: 15

Candidate Starts for NoodlelyBoi\_47:

(Start: 15 @32576 has 44 MA's), (21, 32681),

Gene: Onika\_46 Start: 32254, Stop: 32400, Start Num: 15

Candidate Starts for Onika\_46:

(Start: 11 @32221 has 3 MA's), (Start: 15 @32254 has 44 MA's), (20, 32353), (23, 32377),

Gene: Paschalis\_46 Start: 32261, Stop: 32407, Start Num: 15

Candidate Starts for Paschalis\_46:

(Start: 11 @32228 has 3 MA's), (Start: 15 @32261 has 44 MA's), (20, 32360), (23, 32384),

Gene: PhedwardCullen\_46 Start: 32012, Stop: 32158, Start Num: 15

Candidate Starts for PhedwardCullen\_46:

(Start: 11 @31979 has 3 MA's), (Start: 15 @32012 has 44 MA's), (20, 32111), (23, 32135),

Gene: Phorgeous\_46 Start: 32124, Stop: 32270, Start Num: 15

Candidate Starts for Phorgeous\_46:

(Start: 11 @32091 has 3 MA's), (Start: 15 @32124 has 44 MA's), (20, 32223), (23, 32247),

Gene: Phrancesco\_47 Start: 32414, Stop: 32560, Start Num: 15

Candidate Starts for Phrancesco\_47:

(Start: 11 @32381 has 3 MA's), (Start: 15 @32414 has 44 MA's), (20, 32513), (23, 32537),

Gene: PierreOrion\_47 Start: 32428, Stop: 32574, Start Num: 15

Candidate Starts for PierreOrion\_47:

(Start: 11 @32395 has 3 MA's), (Start: 15 @32428 has 44 MA's), (20, 32527), (23, 32551),

Gene: PiperSansNom\_47 Start: 32568, Stop: 32714, Start Num: 15

Candidate Starts for PiperSansNom\_47:

(Start: 11 @32535 has 3 MA's), (Start: 15 @32568 has 44 MA's), (20, 32667), (23, 32691),

Gene: Piperis\_47 Start: 32247, Stop: 32393, Start Num: 15

Candidate Starts for Piperis\_47:

(Start: 11 @32214 has 3 MA's), (Start: 15 @32247 has 44 MA's), (20, 32346), (23, 32370),

Gene: Pulchra\_48 Start: 32644, Stop: 32790, Start Num: 15

Candidate Starts for Pulchra\_48:

(Start: 11 @32611 has 3 MA's), (Start: 15 @32644 has 44 MA's), (20, 32743), (23, 32767),

Gene: Quhwah\_50 Start: 32876, Stop: 33022, Start Num: 15

Candidate Starts for Quhwah\_50:

(Start: 11 @32843 has 3 MA's), (Start: 15 @32876 has 44 MA's), (20, 32975), (23, 32999),

Gene: Ramiel05\_46 Start: 32279, Stop: 32425, Start Num: 15

Candidate Starts for Ramiel05\_46:

(Start: 11 @32246 has 3 MA's), (Start: 15 @32279 has 44 MA's), (20, 32378), (23, 32402),

Gene: RobsFeet\_49 Start: 33283, Stop: 33465, Start Num: 11

Candidate Starts for RobsFeet\_49:

(1, 32878), (Start: 11 @33283 has 3 MA's), (Start: 15 @33316 has 44 MA's), (23, 33439),

Gene: Rockwell\_46 Start: 32279, Stop: 32425, Start Num: 15

Candidate Starts for Rockwell\_46:

(Start: 11 @32246 has 3 MA's), (Start: 15 @32279 has 44 MA's), (20, 32378), (23, 32402),

Gene: Savannah\_46 Start: 32306, Stop: 32452, Start Num: 15

Candidate Starts for Savannah\_46:

(Start: 11 @32273 has 3 MA's), (Start: 15 @32306 has 44 MA's), (20, 32405), (23, 32429),

Gene: Scumberland\_48 Start: 32501, Stop: 32647, Start Num: 15

Candidate Starts for Scumberland\_48:

(Start: 11 @32468 has 3 MA's), (Start: 15 @32501 has 44 MA's), (20, 32600), (23, 32624),

Gene: Selwyn23\_48 Start: 32478, Stop: 32624, Start Num: 15

Candidate Starts for Selwyn23\_48:

(Start: 11 @32445 has 3 MA's), (Start: 15 @32478 has 44 MA's), (20, 32577), (23, 32601),

Gene: Shotgun\_46 Start: 32105, Stop: 32251, Start Num: 15

Candidate Starts for Shotgun\_46:

(Start: 11 @32072 has 3 MA's), (Start: 15 @32105 has 44 MA's), (20, 32204), (23, 32228),

Gene: Shrubaron\_48 Start: 32950, Stop: 33099, Start Num: 15

Candidate Starts for Shrubaron\_48:

(1, 32512), (Start: 11 @32917 has 3 MA's), (Start: 15 @32950 has 44 MA's), (23, 33073),

Gene: SirFrank\_46 Start: 32146, Stop: 32292, Start Num: 15

Candidate Starts for SirFrank\_46:

(1, 31708), (Start: 15 @32146 has 44 MA's),

Gene: Skugga\_45 Start: 31934, Stop: 32086, Start Num: 15

Candidate Starts for Skugga\_45:

(Start: 15 @31934 has 44 MA's), (25, 32069), (26, 32078),

Gene: Smarties\_55 Start: 34108, Stop: 34251, Start Num: 15

Candidate Starts for Smarties\_55:

(Start: 15 @34108 has 44 MA's),

Gene: Teamocil\_48 Start: 32017, Stop: 32163, Start Num: 15

Candidate Starts for Teamocil\_48:

(Start: 15 @32017 has 44 MA's), (22, 32134), (25, 32152),

Gene: Terij\_43 Start: 31296, Stop: 31460, Start Num: 13

Candidate Starts for Terij\_43:

(2, 31008), (3, 31032), (Start: 13 @31296 has 5 MA's), (16, 31392),

Gene: Tyumbra\_46 Start: 33116, Stop: 33265, Start Num: 15

Candidate Starts for Tyumbra\_46:

(1, 32678), (Start: 11 @33083 has 3 MA's), (Start: 15 @33116 has 44 MA's), (23, 33239),

Gene: Yeti\_47 Start: 32280, Stop: 32426, Start Num: 15

Candidate Starts for Yeti\_47:

(Start: 11 @32247 has 3 MA's), (Start: 15 @32280 has 44 MA's), (20, 32379), (23, 32403),

Gene: Zapato\_46 Start: 32426, Stop: 32578, Start Num: 15

Candidate Starts for Zapato\_46:

(Start: 15 @32426 has 44 MA's), (20, 32525),