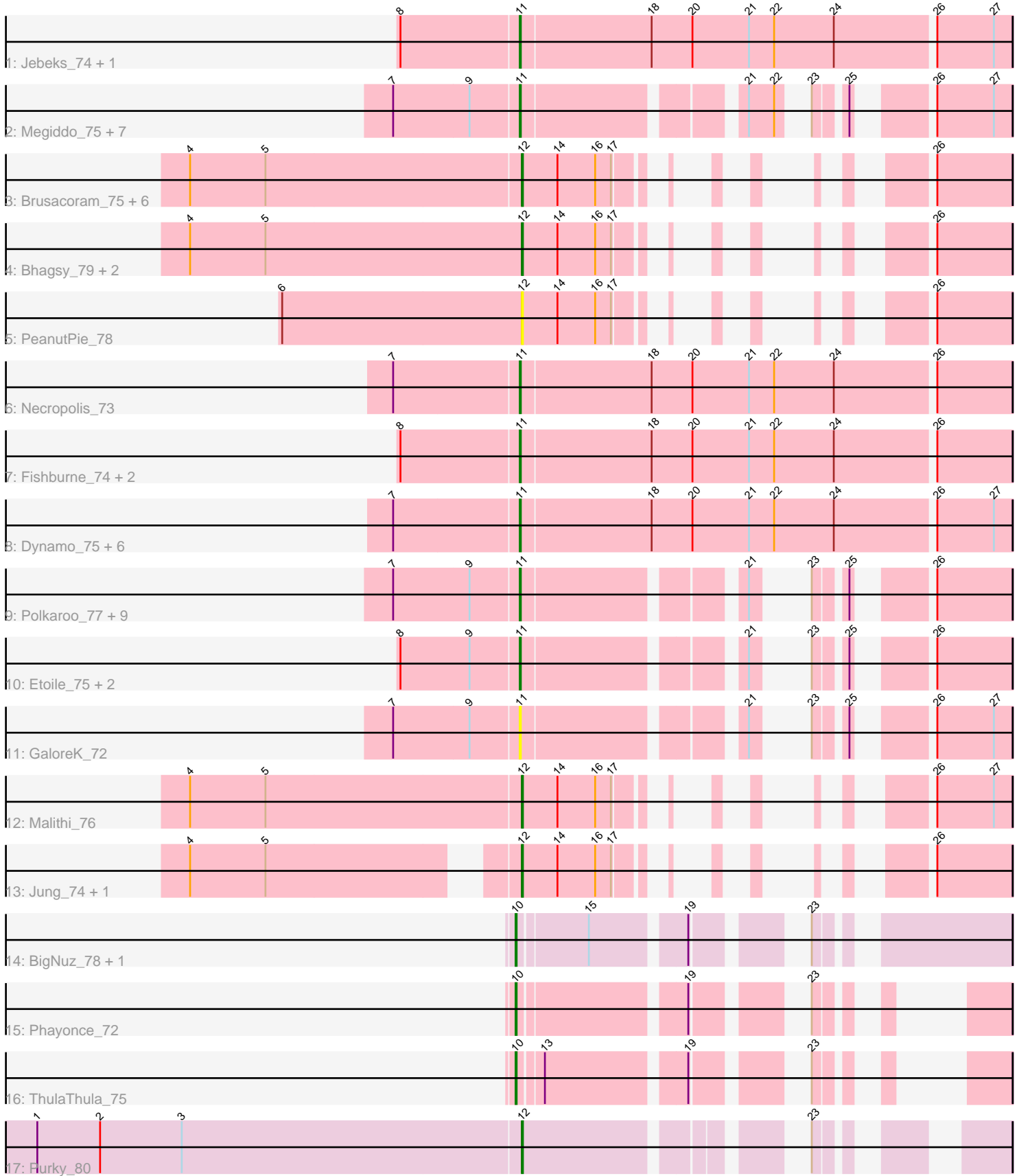


# Pham 292877



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 292877 Report

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

Pham number 292877 has 54 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Jebeks\_74, Langerak\_74
- Track 2 : Megiddo\_75, KilKor\_76, Phalm\_76, Gavriela\_74, StressBall\_75, CactusJack\_76, Glaske\_75, Willsammy\_77
- Track 3 : Brusacoram\_75, BronnyJr\_70, Camster\_77, Sonah\_78, Thespis\_75, Atcoo\_75, FirstPlacePfu\_79
- Track 4 : Bhagsy\_79, Bunnies\_78, Ksquared\_77
- Track 5 : PeanutPie\_78
- Track 6 : Necropolis\_73
- Track 7 : Fishburne\_74, Chubbello\_74, Zilizebeth\_80
- Track 8 : Dynamo\_75, Bogie\_78, HUHilltop\_78, Shipwreck\_78, Phineas\_75, Pygmy\_79, GreaseLightnin\_77
- Track 9 : Polkaroo\_77, Donovan\_75, Mangethe\_78, Juniormint\_71, Phegasus\_78, Techage\_76, Majeke\_78, Arib1\_75, Venti\_76, Bartholomew\_74
- Track 10 : Etoile\_75, Vidya\_73, Kari\_77
- Track 11 : GaloreK\_72
- Track 12 : Malithi\_76
- Track 13 : Jung\_74, StevieRay\_78
- Track 14 : BigNuz\_78, Nazo\_79
- Track 15 : Phayonce\_72
- Track 16 : ThulaThula\_75
- Track 17 : Purky\_80

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

The start number called the most often in the published annotations is 11, it was called in 31 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arib1\_75, Bartholomew\_74, Bogie\_78, CactusJack\_76, Chubbello\_74, Donovan\_75, Dynamo\_75, Etoile\_75, Fishburne\_74, GaloreK\_72, Gavriela\_74, Glaske\_75, GreaseLightnin\_77, HUHilltop\_78, Jebeks\_74, Juniormint\_71, Kari\_77, KilKor\_76, Langerak\_74, Majeke\_78, Mangethe\_78, Megiddo\_75, Necropolis\_73, Phalm\_76, Phegasus\_78, Phineas\_75, Polkaroo\_77, Pygmy\_79, Shipwreck\_78, StressBall\_75, Techage\_76, Venti\_76, Vidya\_73, Willsammy\_77, Zilizebeth\_80,

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

- 

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

- Atcoo\_75, Bhagsy\_79, BigNuz\_78, BronnyJr\_70, Brusacoram\_75, Bunnies\_78, Camster\_77, FirstPlacePfu\_79, Jung\_74, Ksquared\_77, Malithi\_76, Nazo\_79, PeanutPie\_78, Phayonce\_72, Purky\_80, Sonah\_78, StevieRay\_78, Thespis\_75, ThulaThula\_75,

### Summary by start number:

Start 10:

- Found in 4 of 54 ( 7.4% ) of genes in pham
- Manual Annotations of this start: 4 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigNuz\_78 (P4), Nazo\_79 (P4), Phayonce\_72 (P5), ThulaThula\_75 (P5),

Start 11:

- Found in 35 of 54 ( 64.8% ) of genes in pham
- Manual Annotations of this start: 31 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arib1\_75 (P1), Bartholomew\_74 (P1), Bogie\_78 (P1), CactusJack\_76 (P1), Chubbello\_74 (P1), Donovan\_75 (P1), Dynamo\_75 (P1), Etoile\_75 (P1), Fishburne\_74 (P1), GaloreK\_72 (P1), Gavriela\_74 (P1), Glaske\_75 (P1), GreaseLightnin\_77 (P1), HUHilltop\_78 (P1), Jebeks\_74 (P1), Juniormint\_71 (P1), Kari\_77 (P1), KilKor\_76 (P1), Langerak\_74 (P1), Majeke\_78 (P1), Mangethe\_78 (P1), Megiddo\_75 (P1), Necropolis\_73 (P1), Phalm\_76 (P1), Phegasus\_78 (P1), Phineas\_75 (P1), Polkaroo\_77 (P1), Pygmy\_79 (P1), Shipwreck\_78 (P1), StressBall\_75 (P1), Techage\_76 (P1), Venti\_76 (P1), Vidya\_73 (P1), Willsammy\_77 (P1), Zilizebeth\_80 (P1),

Start 12:

- Found in 15 of 54 ( 27.8% ) of genes in pham
- Manual Annotations of this start: 13 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atcoo\_75 (P1), Bhagsy\_79 (P1), BronnyJr\_70 (P1), Brusacoram\_75 (P1), Bunnies\_78 (P1), Camster\_77 (P1), FirstPlacePfu\_79 (P1), Jung\_74 (P1), Ksquared\_77 (P1), Malithi\_76 (P1), PeanutPie\_78 (P1), Purky\_80 (P6), Sonah\_78 (P1), StevieRay\_78 (P1), Thespis\_75 (P1),

### Summary by clusters:

There are 4 clusters represented in this pham: P1, P6, P4, P5,

Info for manual annotations of cluster P1:

- Start number 11 was manually annotated 31 times for cluster P1.
- Start number 12 was manually annotated 12 times for cluster P1.

Info for manual annotations of cluster P4:

- Start number 10 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 10 was manually annotated 2 times for cluster P5.

Info for manual annotations of cluster P6:

- Start number 12 was manually annotated 1 time for cluster P6.

### **Gene Information:**

Gene: Arib1\_75 Start: 45198, Stop: 45536, Start Num: 11

Candidate Starts for Arib1\_75:

(7, 45081), (9, 45153), (Start: 11 @45198 has 31 MA's), (21, 45381), (23, 45393), (25, 45417), (26, 45465),

Gene: Atcoo\_75 Start: 47621, Stop: 47878, Start Num: 12

Candidate Starts for Atcoo\_75:

(4, 47309), (5, 47381), (Start: 12 @47621 has 13 MA's), (14, 47654), (16, 47690), (17, 47705), (26, 47807),

Gene: Bartholomew\_74 Start: 44950, Stop: 45288, Start Num: 11

Candidate Starts for Bartholomew\_74:

(7, 44833), (9, 44905), (Start: 11 @44950 has 31 MA's), (21, 45133), (23, 45145), (25, 45169), (26, 45217),

Gene: Bhagsy\_79 Start: 46742, Stop: 46999, Start Num: 12

Candidate Starts for Bhagsy\_79:

(4, 46427), (5, 46499), (Start: 12 @46742 has 13 MA's), (14, 46775), (16, 46811), (17, 46826), (26, 46928),

Gene: BigNuz\_78 Start: 47050, Stop: 47418, Start Num: 10

Candidate Starts for BigNuz\_78:

(Start: 10 @47050 has 4 MA's), (15, 47113), (19, 47194), (23, 47266),

Gene: Bogie\_78 Start: 46985, Stop: 47443, Start Num: 11

Candidate Starts for Bogie\_78:

(7, 46868), (Start: 11 @46985 has 31 MA's), (18, 47108), (20, 47147), (21, 47201), (22, 47225), (24, 47282), (26, 47372), (27, 47426),

Gene: BronnyJr\_70 Start: 45686, Stop: 45943, Start Num: 12

Candidate Starts for BronnyJr\_70:

(4, 45374), (5, 45446), (Start: 12 @45686 has 13 MA's), (14, 45719), (16, 45755), (17, 45770), (26, 45872),

Gene: Brusacoram\_75 Start: 46164, Stop: 46421, Start Num: 12

Candidate Starts for Brusacoram\_75:

(4, 45852), (5, 45924), (Start: 12 @46164 has 13 MA's), (14, 46197), (16, 46233), (17, 46248), (26, 46350),

Gene: Bunnies\_78 Start: 47369, Stop: 47626, Start Num: 12

Candidate Starts for Bunnies\_78:

(4, 47054), (5, 47126), (Start: 12 @47369 has 13 MA's), (14, 47402), (16, 47438), (17, 47453), (26, 47555),

Gene: CactusJack\_76 Start: 46666, Stop: 47025, Start Num: 11

Candidate Starts for CactusJack\_76:

(7, 46549), (9, 46621), (Start: 11 @46666 has 31 MA's), (21, 46849), (22, 46873), (23, 46882), (25, 46906), (26, 46954), (27, 47008),

Gene: Camster\_77 Start: 45696, Stop: 45953, Start Num: 12

Candidate Starts for Camster\_77:

(4, 45384), (5, 45456), (Start: 12 @45696 has 13 MA's), (14, 45729), (16, 45765), (17, 45780), (26, 45882),

Gene: Chubbello\_74 Start: 44689, Stop: 45147, Start Num: 11

Candidate Starts for Chubbello\_74:

(8, 44578), (Start: 11 @44689 has 31 MA's), (18, 44812), (20, 44851), (21, 44905), (22, 44929), (24, 44986), (26, 45076),

Gene: Donovan\_75 Start: 45628, Stop: 45966, Start Num: 11

Candidate Starts for Donovan\_75:

(7, 45511), (9, 45583), (Start: 11 @45628 has 31 MA's), (21, 45811), (23, 45823), (25, 45847), (26, 45895),

Gene: Dynamo\_75 Start: 45019, Stop: 45477, Start Num: 11

Candidate Starts for Dynamo\_75:

(7, 44902), (Start: 11 @45019 has 31 MA's), (18, 45142), (20, 45181), (21, 45235), (22, 45259), (24, 45316), (26, 45406), (27, 45460),

Gene: Etoile\_75 Start: 45993, Stop: 46331, Start Num: 11

Candidate Starts for Etoile\_75:

(8, 45882), (9, 45948), (Start: 11 @45993 has 31 MA's), (21, 46176), (23, 46188), (25, 46212), (26, 46260),

Gene: FirstPlacePfu\_79 Start: 44227, Stop: 44484, Start Num: 12

Candidate Starts for FirstPlacePfu\_79:

(4, 43915), (5, 43987), (Start: 12 @44227 has 13 MA's), (14, 44260), (16, 44296), (17, 44311), (26, 44413),

Gene: Fishburne\_74 Start: 45455, Stop: 45913, Start Num: 11

Candidate Starts for Fishburne\_74:

(8, 45344), (Start: 11 @45455 has 31 MA's), (18, 45578), (20, 45617), (21, 45671), (22, 45695), (24, 45752), (26, 45842),

Gene: GaloreK\_72 Start: 45479, Stop: 45817, Start Num: 11

Candidate Starts for GaloreK\_72:

(7, 45362), (9, 45434), (Start: 11 @45479 has 31 MA's), (21, 45662), (23, 45674), (25, 45698), (26, 45746), (27, 45800),

Gene: Gavriela\_74 Start: 46360, Stop: 46719, Start Num: 11

Candidate Starts for Gavriela\_74:

(7, 46243), (9, 46315), (Start: 11 @46360 has 31 MA's), (21, 46543), (22, 46567), (23, 46576), (25, 46600), (26, 46648), (27, 46702),

Gene: Glaske\_75 Start: 46666, Stop: 47025, Start Num: 11

Candidate Starts for Glaske\_75:

(7, 46549), (9, 46621), (Start: 11 @46666 has 31 MA's), (21, 46849), (22, 46873), (23, 46882), (25, 46906), (26, 46954), (27, 47008),

Gene: GreaseLightnin\_77 Start: 46770, Stop: 47228, Start Num: 11

Candidate Starts for GreaseLightnin\_77:

(7, 46653), (Start: 11 @46770 has 31 MA's), (18, 46893), (20, 46932), (21, 46986), (22, 47010), (24, 47067), (26, 47157), (27, 47211),

Gene: HUHilltop\_78 Start: 45242, Stop: 45700, Start Num: 11

Candidate Starts for HUHilltop\_78:

(7, 45125), (Start: 11 @45242 has 31 MA's), (18, 45365), (20, 45404), (21, 45458), (22, 45482), (24, 45539), (26, 45629), (27, 45683),

Gene: Jebeks\_74 Start: 43926, Stop: 44384, Start Num: 11

Candidate Starts for Jebeks\_74:

(8, 43815), (Start: 11 @43926 has 31 MA's), (18, 44049), (20, 44088), (21, 44142), (22, 44166), (24, 44223), (26, 44313), (27, 44367),

Gene: Jung\_74 Start: 45106, Stop: 45363, Start Num: 12

Candidate Starts for Jung\_74:

(4, 44830), (5, 44902), (Start: 12 @45106 has 13 MA's), (14, 45139), (16, 45175), (17, 45190), (26, 45292),

Gene: Juniormint\_71 Start: 44041, Stop: 44379, Start Num: 11

Candidate Starts for Juniormint\_71:

(7, 43924), (9, 43996), (Start: 11 @44041 has 31 MA's), (21, 44224), (23, 44236), (25, 44260), (26, 44308),

Gene: Kari\_77 Start: 45989, Stop: 46327, Start Num: 11

Candidate Starts for Kari\_77:

(8, 45878), (9, 45944), (Start: 11 @45989 has 31 MA's), (21, 46172), (23, 46184), (25, 46208), (26, 46256),

Gene: KilKor\_76 Start: 47359, Stop: 47718, Start Num: 11

Candidate Starts for KilKor\_76:

(7, 47242), (9, 47314), (Start: 11 @47359 has 31 MA's), (21, 47542), (22, 47566), (23, 47575), (25, 47599), (26, 47647), (27, 47701),

Gene: Ksquared\_77 Start: 47246, Stop: 47503, Start Num: 12

Candidate Starts for Ksquared\_77:

(4, 46931), (5, 47003), (Start: 12 @47246 has 13 MA's), (14, 47279), (16, 47315), (17, 47330), (26, 47432),

Gene: Langerak\_74 Start: 45433, Stop: 45891, Start Num: 11

Candidate Starts for Langerak\_74:

(8, 45322), (Start: 11 @45433 has 31 MA's), (18, 45556), (20, 45595), (21, 45649), (22, 45673), (24, 45730), (26, 45820), (27, 45874),

Gene: Majeke\_78 Start: 46077, Stop: 46415, Start Num: 11

Candidate Starts for Majeke\_78:

(7, 45960), (9, 46032), (Start: 11 @46077 has 31 MA's), (21, 46260), (23, 46272), (25, 46296), (26, 46344),

Gene: Malithi\_76 Start: 45416, Stop: 45673, Start Num: 12

Candidate Starts for Malithi\_76:

(4, 45104), (5, 45176), (Start: 12 @45416 has 13 MA's), (14, 45449), (16, 45485), (17, 45500), (26, 45602), (27, 45656),

Gene: Mangethe\_78 Start: 46077, Stop: 46415, Start Num: 11

Candidate Starts for Mangethe\_78:

(7, 45960), (9, 46032), (Start: 11 @46077 has 31 MA's), (21, 46260), (23, 46272), (25, 46296), (26, 46344),

Gene: Megiddo\_75 Start: 47227, Stop: 47586, Start Num: 11

Candidate Starts for Megiddo\_75:

(7, 47110), (9, 47182), (Start: 11 @47227 has 31 MA's), (21, 47410), (22, 47434), (23, 47443), (25, 47467), (26, 47515), (27, 47569),

Gene: Nazo\_79 Start: 46936, Stop: 47304, Start Num: 10

Candidate Starts for Nazo\_79:

(Start: 10 @46936 has 4 MA's), (15, 46999), (19, 47080), (23, 47152),

Gene: Necropolis\_73 Start: 44609, Stop: 45067, Start Num: 11

Candidate Starts for Necropolis\_73:

(7, 44492), (Start: 11 @44609 has 31 MA's), (18, 44732), (20, 44771), (21, 44825), (22, 44849), (24, 44906), (26, 44996),

Gene: PeanutPie\_78 Start: 46746, Stop: 47003, Start Num: 12

Candidate Starts for PeanutPie\_78:

(6, 46518), (Start: 12 @46746 has 13 MA's), (14, 46779), (16, 46815), (17, 46830), (26, 46932),

Gene: Phalm\_76 Start: 46657, Stop: 47016, Start Num: 11

Candidate Starts for Phalm\_76:

(7, 46540), (9, 46612), (Start: 11 @46657 has 31 MA's), (21, 46840), (22, 46864), (23, 46873), (25, 46897), (26, 46945), (27, 46999),

Gene: Phayonce\_72 Start: 47098, Stop: 47397, Start Num: 10

Candidate Starts for Phayonce\_72:

(Start: 10 @47098 has 4 MA's), (19, 47242), (23, 47314),

Gene: Phegasus\_78 Start: 46044, Stop: 46382, Start Num: 11

Candidate Starts for Phegasus\_78:

(7, 45927), (9, 45999), (Start: 11 @46044 has 31 MA's), (21, 46227), (23, 46239), (25, 46263), (26, 46311),

Gene: Phineas\_75 Start: 45576, Stop: 46034, Start Num: 11

Candidate Starts for Phineas\_75:

(7, 45459), (Start: 11 @45576 has 31 MA's), (18, 45699), (20, 45738), (21, 45792), (22, 45816), (24, 45873), (26, 45963), (27, 46017),

Gene: Polkaroo\_77 Start: 47550, Stop: 47888, Start Num: 11

Candidate Starts for Polkaroo\_77:

(7, 47433), (9, 47505), (Start: 11 @47550 has 31 MA's), (21, 47733), (23, 47745), (25, 47769), (26, 47817),

Gene: Purky\_80 Start: 48824, Stop: 49156, Start Num: 12

Candidate Starts for Purky\_80:

(1, 48365), (2, 48425), (3, 48503), (Start: 12 @48824 has 13 MA's), (23, 49037),

Gene: Pygmy\_79 Start: 46958, Stop: 47416, Start Num: 11

Candidate Starts for Pygmy\_79:

(7, 46841), (Start: 11 @46958 has 31 MA's), (18, 47081), (20, 47120), (21, 47174), (22, 47198), (24, 47255), (26, 47345), (27, 47399),

Gene: Shipwreck\_78 Start: 47016, Stop: 47474, Start Num: 11

Candidate Starts for Shipwreck\_78:

(7, 46899), (Start: 11 @47016 has 31 MA's), (18, 47139), (20, 47178), (21, 47232), (22, 47256), (24, 47313), (26, 47403), (27, 47457),

Gene: Sonah\_78 Start: 44961, Stop: 45218, Start Num: 12

Candidate Starts for Sonah\_78:

(4, 44649), (5, 44721), (Start: 12 @44961 has 13 MA's), (14, 44994), (16, 45030), (17, 45045), (26, 45147),

Gene: StevieRay\_78 Start: 47362, Stop: 47619, Start Num: 12

Candidate Starts for StevieRay\_78:

(4, 47086), (5, 47158), (Start: 12 @47362 has 13 MA's), (14, 47395), (16, 47431), (17, 47446), (26, 47548),

Gene: StressBall\_75 Start: 46359, Stop: 46718, Start Num: 11

Candidate Starts for StressBall\_75:

(7, 46242), (9, 46314), (Start: 11 @46359 has 31 MA's), (21, 46542), (22, 46566), (23, 46575), (25, 46599), (26, 46647), (27, 46701),

Gene: Techage\_76 Start: 45560, Stop: 45898, Start Num: 11

Candidate Starts for Techage\_76:

(7, 45443), (9, 45515), (Start: 11 @45560 has 31 MA's), (21, 45743), (23, 45755), (25, 45779), (26, 45827),

Gene: Thespis\_75 Start: 46164, Stop: 46421, Start Num: 12

Candidate Starts for Thespis\_75:

(4, 45852), (5, 45924), (Start: 12 @46164 has 13 MA's), (14, 46197), (16, 46233), (17, 46248), (26, 46350),

Gene: ThulaThula\_75 Start: 48307, Stop: 48606, Start Num: 10

Candidate Starts for ThulaThula\_75:

(Start: 10 @48307 has 4 MA's), (13, 48328), (19, 48451), (23, 48523),

Gene: Venti\_76 Start: 44950, Stop: 45288, Start Num: 11

Candidate Starts for Venti\_76:

(7, 44833), (9, 44905), (Start: 11 @44950 has 31 MA's), (21, 45133), (23, 45145), (25, 45169), (26, 45217),

Gene: Vidya\_73 Start: 44968, Stop: 45306, Start Num: 11

Candidate Starts for Vidya\_73:

(8, 44857), (9, 44923), (Start: 11 @44968 has 31 MA's), (21, 45151), (23, 45163), (25, 45187), (26, 45235),

Gene: Willsammy\_77 Start: 46843, Stop: 47202, Start Num: 11

Candidate Starts for Willsammy\_77:

(7, 46726), (9, 46798), (Start: 11 @46843 has 31 MA's), (21, 47026), (22, 47050), (23, 47059), (25, 47083), (26, 47131), (27, 47185),

Gene: Zilizebeth\_80 Start: 46402, Stop: 46860, Start Num: 11

Candidate Starts for Zilizebeth\_80:

(8, 46291), (Start: 11 @46402 has 31 MA's), (18, 46525), (20, 46564), (21, 46618), (22, 46642), (24, 46699), (26, 46789),