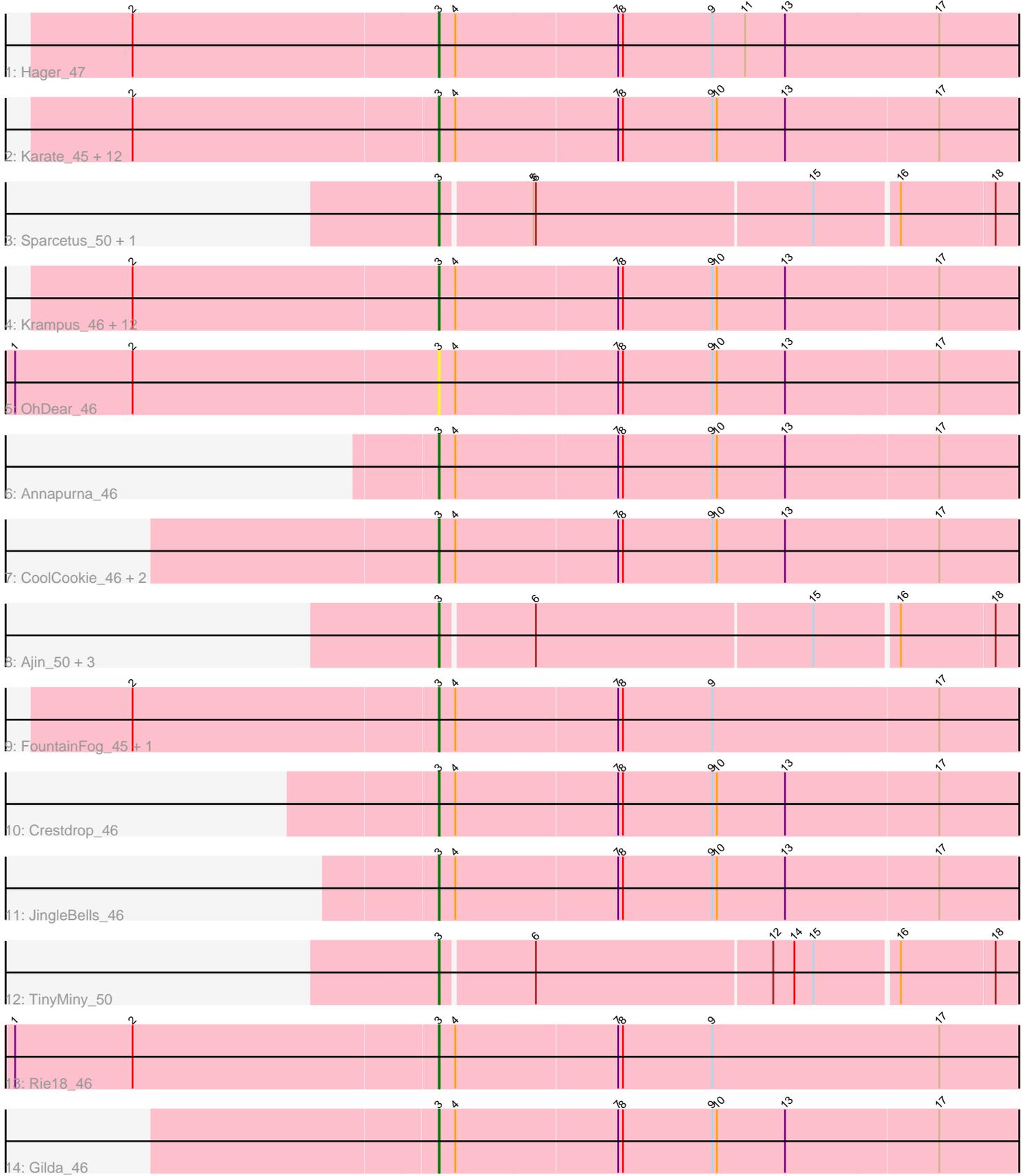


# Pham 291287



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 291287 Report

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

Pham number 291287 has 45 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Hager\_47
- Track 2 : Karate\_45, Aesir\_45, Chivey\_46, JDawG\_45, DannyDe\_46, Snakehole\_46, Dauntless\_45, MortySmith\_44, Haunter\_46, Hiddenleaf\_46, Tedro\_46, Erudite\_45, FreddieHg\_46
- Track 3 : Sparcetus\_50, RikSengupta\_50
- Track 4 : Krampus\_46, Pharpay\_46, Anakin\_46, Rachella\_46, Poultruss\_45, Neptune\_46, OverHedge\_46, NarutoRun\_46, Cybele\_46, SilentWarrior\_46, Kate\_47, AnnaSerena\_46, Artiphact\_46
- Track 5 : OhDear\_46
- Track 6 : Annapurna\_46
- Track 7 : CoolCookie\_46, Potty\_46, PhunaPhoke\_46
- Track 8 : Ajin\_50, Kors\_50, Bramble\_50, LordBart\_50
- Track 9 : FountainFog\_45, Tongui\_46
- Track 10 : Crestdrop\_46
- Track 11 : JingleBells\_46
- Track 12 : TinyMiny\_50
- Track 13 : Rie18\_46
- Track 14 : Gilda\_46

### ***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 41 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aesir\_45, Ajin\_50, Anakin\_46, AnnaSerena\_46, Annapurna\_46, Artiphact\_46, Bramble\_50, Chivey\_46, CoolCookie\_46, Crestdrop\_46, Cybele\_46, DannyDe\_46, Dauntless\_45, Erudite\_45, FountainFog\_45, FreddieHg\_46, Gilda\_46, Hager\_47, Haunter\_46, Hiddenleaf\_46, JDawG\_45, JingleBells\_46, Karate\_45, Kate\_47, Kors\_50, Krampus\_46, LordBart\_50, MortySmith\_44, NarutoRun\_46, Neptune\_46, OhDear\_46, OverHedge\_46, Pharpay\_46, PhunaPhoke\_46, Potty\_46, Poultruss\_45, Rachella\_46, Rie18\_46, RikSengupta\_50, SilentWarrior\_46, Snakehole\_46, Sparcetus\_50, Tedro\_46, TinyMiny\_50, Tongui\_46,

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

- 

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

- 

### Summary by start number:

Start 3:

- Found in 45 of 45 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 41 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aesir\_45 (EF), Ajin\_50 (EF), Anakin\_46 (EF), AnnaSerena\_46 (EF), Annapurna\_46 (EF), Artiphact\_46 (EF), Bramble\_50 (EF), Chivey\_46 (EF), CoolCookie\_46 (EF), Crestdrop\_46 (EF), Cybele\_46 (EF), DannyDe\_46 (EF), Dauntless\_45 (EF), Erudite\_45 (EF), FountainFog\_45 (EF), FreddieHg\_46 (EF), Gilda\_46 (EF), Hager\_47 (EF), Haunter\_46 (EF), Hiddenleaf\_46 (EF), JDawG\_45 (EF), JingleBells\_46 (EF), Karate\_45 (EF), Kate\_47 (EF), Kors\_50 (EF), Krampus\_46 (EF), LordBart\_50 (EF), MortySmith\_44 (EF), NarutoRun\_46 (EF), Neptune\_46 (EF), OhDear\_46 (EF), OverHedge\_46 (EF), Pharpay\_46 (EF), PhunaPhoke\_46 (EF), Potty\_46 (EF), Poultruss\_45 (EF), Rachella\_46 (EF), Rie18\_46 (EF), RikSengupta\_50 (EF), SilentWarrior\_46 (EF), Snakehole\_46 (EF), Sparcetus\_50 (EF), Tedro\_46 (EF), TinyMiny\_50 (EF), Tongui\_46 (EF),

### Summary by clusters:

There is one cluster represented in this pham: EF

Info for manual annotations of cluster EF:

- Start number 3 was manually annotated 41 times for cluster EF.

### Gene Information:

Gene: Aesir\_45 Start: 30636, Stop: 31667, Start Num: 3

Candidate Starts for Aesir\_45:

(2, 30252), (Start: 3 @30636 has 41 MA's), (4, 30657), (7, 30861), (8, 30867), (9, 30981), (10, 30987), (13, 31074), (17, 31266),

Gene: Ajin\_50 Start: 31955, Stop: 32980, Start Num: 3

Candidate Starts for Ajin\_50:

(Start: 3 @31955 has 41 MA's), (6, 32069), (15, 32417), (16, 32519), (18, 32636),

Gene: Anakin\_46 Start: 30992, Stop: 32026, Start Num: 3

Candidate Starts for Anakin\_46:

(2, 30605), (Start: 3 @30992 has 41 MA's), (4, 31013), (7, 31217), (8, 31223), (9, 31337), (10, 31343), (13, 31430), (17, 31622),

Gene: AnnaSerena\_46 Start: 31027, Stop: 32061, Start Num: 3

Candidate Starts for AnnaSerena\_46:

(2, 30640), (Start: 3 @31027 has 41 MA's), (4, 31048), (7, 31252), (8, 31258), (9, 31372), (10, 31378), (13, 31465), (17, 31657),

Gene: Annapurna\_46 Start: 30265, Stop: 31296, Start Num: 3  
Candidate Starts for Annapurna\_46:  
(Start: 3 @30265 has 41 MA's), (4, 30286), (7, 30490), (8, 30496), (9, 30610), (10, 30616), (13, 30703),  
(17, 30895),

Gene: Artiphact\_46 Start: 31016, Stop: 32050, Start Num: 3  
Candidate Starts for Artiphact\_46:  
(2, 30629), (Start: 3 @31016 has 41 MA's), (4, 31037), (7, 31241), (8, 31247), (9, 31361), (10, 31367),  
(13, 31454), (17, 31646),

Gene: Bramble\_50 Start: 32004, Stop: 33029, Start Num: 3  
Candidate Starts for Bramble\_50:  
(Start: 3 @32004 has 41 MA's), (6, 32118), (15, 32466), (16, 32568), (18, 32685),

Gene: Chivey\_46 Start: 30214, Stop: 31257, Start Num: 3  
Candidate Starts for Chivey\_46:  
(2, 29830), (Start: 3 @30214 has 41 MA's), (4, 30235), (7, 30439), (8, 30445), (9, 30559), (10, 30565),  
(13, 30652), (17, 30844),

Gene: CoolCookie\_46 Start: 31022, Stop: 32053, Start Num: 3  
Candidate Starts for CoolCookie\_46:  
(Start: 3 @31022 has 41 MA's), (4, 31043), (7, 31247), (8, 31253), (9, 31367), (10, 31373), (13, 31460),  
(17, 31652),

Gene: Crestdrop\_46 Start: 30245, Stop: 31276, Start Num: 3  
Candidate Starts for Crestdrop\_46:  
(Start: 3 @30245 has 41 MA's), (4, 30266), (7, 30470), (8, 30476), (9, 30590), (10, 30596), (13, 30683),  
(17, 30875),

Gene: Cybele\_46 Start: 30992, Stop: 32026, Start Num: 3  
Candidate Starts for Cybele\_46:  
(2, 30605), (Start: 3 @30992 has 41 MA's), (4, 31013), (7, 31217), (8, 31223), (9, 31337), (10, 31343),  
(13, 31430), (17, 31622),

Gene: DannyDe\_46 Start: 30220, Stop: 31251, Start Num: 3  
Candidate Starts for DannyDe\_46:  
(2, 29836), (Start: 3 @30220 has 41 MA's), (4, 30241), (7, 30445), (8, 30451), (9, 30565), (10, 30571),  
(13, 30658), (17, 30850),

Gene: Dauntless\_45 Start: 30572, Stop: 31603, Start Num: 3  
Candidate Starts for Dauntless\_45:  
(2, 30188), (Start: 3 @30572 has 41 MA's), (4, 30593), (7, 30797), (8, 30803), (9, 30917), (10, 30923),  
(13, 31010), (17, 31202),

Gene: Erudite\_45 Start: 30572, Stop: 31603, Start Num: 3  
Candidate Starts for Erudite\_45:  
(2, 30188), (Start: 3 @30572 has 41 MA's), (4, 30593), (7, 30797), (8, 30803), (9, 30917), (10, 30923),  
(13, 31010), (17, 31202),

Gene: FountainFog\_45 Start: 30256, Stop: 31287, Start Num: 3  
Candidate Starts for FountainFog\_45:  
(2, 29872), (Start: 3 @30256 has 41 MA's), (4, 30277), (7, 30481), (8, 30487), (9, 30601), (17, 30886),

Gene: FreddieHg\_46 Start: 30230, Stop: 31267, Start Num: 3

Candidate Starts for FreddieHg\_46:

(2, 29846), (Start: 3 @30230 has 41 MA's), (4, 30251), (7, 30455), (8, 30461), (9, 30575), (10, 30581), (13, 30668), (17, 30860),

Gene: Gilda\_46 Start: 31013, Stop: 32047, Start Num: 3

Candidate Starts for Gilda\_46:

(Start: 3 @31013 has 41 MA's), (4, 31034), (7, 31238), (8, 31244), (9, 31358), (10, 31364), (13, 31451), (17, 31643),

Gene: Hager\_47 Start: 30441, Stop: 31469, Start Num: 3

Candidate Starts for Hager\_47:

(2, 30054), (Start: 3 @30441 has 41 MA's), (4, 30462), (7, 30666), (8, 30672), (9, 30786), (11, 30828), (13, 30879), (17, 31074),

Gene: Haunter\_46 Start: 30396, Stop: 31430, Start Num: 3

Candidate Starts for Haunter\_46:

(2, 30012), (Start: 3 @30396 has 41 MA's), (4, 30417), (7, 30621), (8, 30627), (9, 30741), (10, 30747), (13, 30834), (17, 31026),

Gene: Hiddenleaf\_46 Start: 30214, Stop: 31257, Start Num: 3

Candidate Starts for Hiddenleaf\_46:

(2, 29830), (Start: 3 @30214 has 41 MA's), (4, 30235), (7, 30439), (8, 30445), (9, 30559), (10, 30565), (13, 30652), (17, 30844),

Gene: JDawG\_45 Start: 30631, Stop: 31662, Start Num: 3

Candidate Starts for JDawG\_45:

(2, 30247), (Start: 3 @30631 has 41 MA's), (4, 30652), (7, 30856), (8, 30862), (9, 30976), (10, 30982), (13, 31069), (17, 31261),

Gene: JingleBells\_46 Start: 30365, Stop: 31393, Start Num: 3

Candidate Starts for JingleBells\_46:

(Start: 3 @30365 has 41 MA's), (4, 30386), (7, 30590), (8, 30596), (9, 30710), (10, 30716), (13, 30803), (17, 30995),

Gene: Karate\_45 Start: 31014, Stop: 32048, Start Num: 3

Candidate Starts for Karate\_45:

(2, 30630), (Start: 3 @31014 has 41 MA's), (4, 31035), (7, 31239), (8, 31245), (9, 31359), (10, 31365), (13, 31452), (17, 31644),

Gene: Kate\_47 Start: 31024, Stop: 32058, Start Num: 3

Candidate Starts for Kate\_47:

(2, 30637), (Start: 3 @31024 has 41 MA's), (4, 31045), (7, 31249), (8, 31255), (9, 31369), (10, 31375), (13, 31462), (17, 31654),

Gene: Kors\_50 Start: 32032, Stop: 33069, Start Num: 3

Candidate Starts for Kors\_50:

(Start: 3 @32032 has 41 MA's), (6, 32146), (15, 32494), (16, 32596), (18, 32713),

Gene: Krampus\_46 Start: 31024, Stop: 32061, Start Num: 3

Candidate Starts for Krampus\_46:

(2, 30637), (Start: 3 @31024 has 41 MA's), (4, 31045), (7, 31249), (8, 31255), (9, 31369), (10, 31375), (13, 31462), (17, 31654),

Gene: LordBart\_50 Start: 31941, Stop: 32966, Start Num: 3

Candidate Starts for LordBart\_50:

(Start: 3 @31941 has 41 MA's), (6, 32055), (15, 32403), (16, 32505), (18, 32622),

Gene: MortySmith\_44 Start: 30049, Stop: 31080, Start Num: 3

Candidate Starts for MortySmith\_44:

(2, 29665), (Start: 3 @30049 has 41 MA's), (4, 30070), (7, 30274), (8, 30280), (9, 30394), (10, 30400), (13, 30487), (17, 30679),

Gene: NarutoRun\_46 Start: 30992, Stop: 32026, Start Num: 3

Candidate Starts for NarutoRun\_46:

(2, 30605), (Start: 3 @30992 has 41 MA's), (4, 31013), (7, 31217), (8, 31223), (9, 31337), (10, 31343), (13, 31430), (17, 31622),

Gene: Neptune\_46 Start: 30992, Stop: 32026, Start Num: 3

Candidate Starts for Neptune\_46:

(2, 30605), (Start: 3 @30992 has 41 MA's), (4, 31013), (7, 31217), (8, 31223), (9, 31337), (10, 31343), (13, 31430), (17, 31622),

Gene: OhDear\_46 Start: 30990, Stop: 32024, Start Num: 3

Candidate Starts for OhDear\_46:

(1, 30453), (2, 30603), (Start: 3 @30990 has 41 MA's), (4, 31011), (7, 31215), (8, 31221), (9, 31335), (10, 31341), (13, 31428), (17, 31620),

Gene: OverHedge\_46 Start: 30982, Stop: 32016, Start Num: 3

Candidate Starts for OverHedge\_46:

(2, 30595), (Start: 3 @30982 has 41 MA's), (4, 31003), (7, 31207), (8, 31213), (9, 31327), (10, 31333), (13, 31420), (17, 31612),

Gene: Pharpay\_46 Start: 31037, Stop: 32071, Start Num: 3

Candidate Starts for Pharpay\_46:

(2, 30650), (Start: 3 @31037 has 41 MA's), (4, 31058), (7, 31262), (8, 31268), (9, 31382), (10, 31388), (13, 31475), (17, 31667),

Gene: PhunaPhoke\_46 Start: 31010, Stop: 32041, Start Num: 3

Candidate Starts for PhunaPhoke\_46:

(Start: 3 @31010 has 41 MA's), (4, 31031), (7, 31235), (8, 31241), (9, 31355), (10, 31361), (13, 31448), (17, 31640),

Gene: Potty\_46 Start: 31015, Stop: 32046, Start Num: 3

Candidate Starts for Potty\_46:

(Start: 3 @31015 has 41 MA's), (4, 31036), (7, 31240), (8, 31246), (9, 31360), (10, 31366), (13, 31453), (17, 31645),

Gene: Poultruss\_45 Start: 31330, Stop: 32364, Start Num: 3

Candidate Starts for Poultruss\_45:

(2, 30943), (Start: 3 @31330 has 41 MA's), (4, 31351), (7, 31555), (8, 31561), (9, 31675), (10, 31681), (13, 31768), (17, 31960),

Gene: Rachella\_46 Start: 31018, Stop: 32052, Start Num: 3

Candidate Starts for Rachella\_46:

(2, 30631), (Start: 3 @31018 has 41 MA's), (4, 31039), (7, 31243), (8, 31249), (9, 31363), (10, 31369), (13, 31456), (17, 31648),

Gene: Rie18\_46 Start: 30512, Stop: 31552, Start Num: 3

Candidate Starts for Rie18\_46:

(1, 29978), (2, 30128), (Start: 3 @30512 has 41 MA's), (4, 30533), (7, 30737), (8, 30743), (9, 30857), (17, 31145),

Gene: RikSengupta\_50 Start: 32069, Stop: 33094, Start Num: 3

Candidate Starts for RikSengupta\_50:

(Start: 3 @32069 has 41 MA's), (5, 32180), (6, 32183), (15, 32531), (16, 32633), (18, 32750),

Gene: SilentWarrior\_46 Start: 30230, Stop: 31261, Start Num: 3

Candidate Starts for SilentWarrior\_46:

(2, 29843), (Start: 3 @30230 has 41 MA's), (4, 30251), (7, 30455), (8, 30461), (9, 30575), (10, 30581), (13, 30668), (17, 30860),

Gene: Snakehole\_46 Start: 30192, Stop: 31235, Start Num: 3

Candidate Starts for Snakehole\_46:

(2, 29808), (Start: 3 @30192 has 41 MA's), (4, 30213), (7, 30417), (8, 30423), (9, 30537), (10, 30543), (13, 30630), (17, 30822),

Gene: Sparcetus\_50 Start: 31946, Stop: 32971, Start Num: 3

Candidate Starts for Sparcetus\_50:

(Start: 3 @31946 has 41 MA's), (5, 32057), (6, 32060), (15, 32408), (16, 32510), (18, 32627),

Gene: Tedro\_46 Start: 30446, Stop: 31486, Start Num: 3

Candidate Starts for Tedro\_46:

(2, 30062), (Start: 3 @30446 has 41 MA's), (4, 30467), (7, 30671), (8, 30677), (9, 30791), (10, 30797), (13, 30884), (17, 31076),

Gene: TinyMiny\_50 Start: 31967, Stop: 32992, Start Num: 3

Candidate Starts for TinyMiny\_50:

(Start: 3 @31967 has 41 MA's), (6, 32081), (12, 32378), (14, 32405), (15, 32429), (16, 32531), (18, 32648),

Gene: Tongui\_46 Start: 30566, Stop: 31612, Start Num: 3

Candidate Starts for Tongui\_46:

(2, 30182), (Start: 3 @30566 has 41 MA's), (4, 30587), (7, 30791), (8, 30797), (9, 30911), (17, 31199),