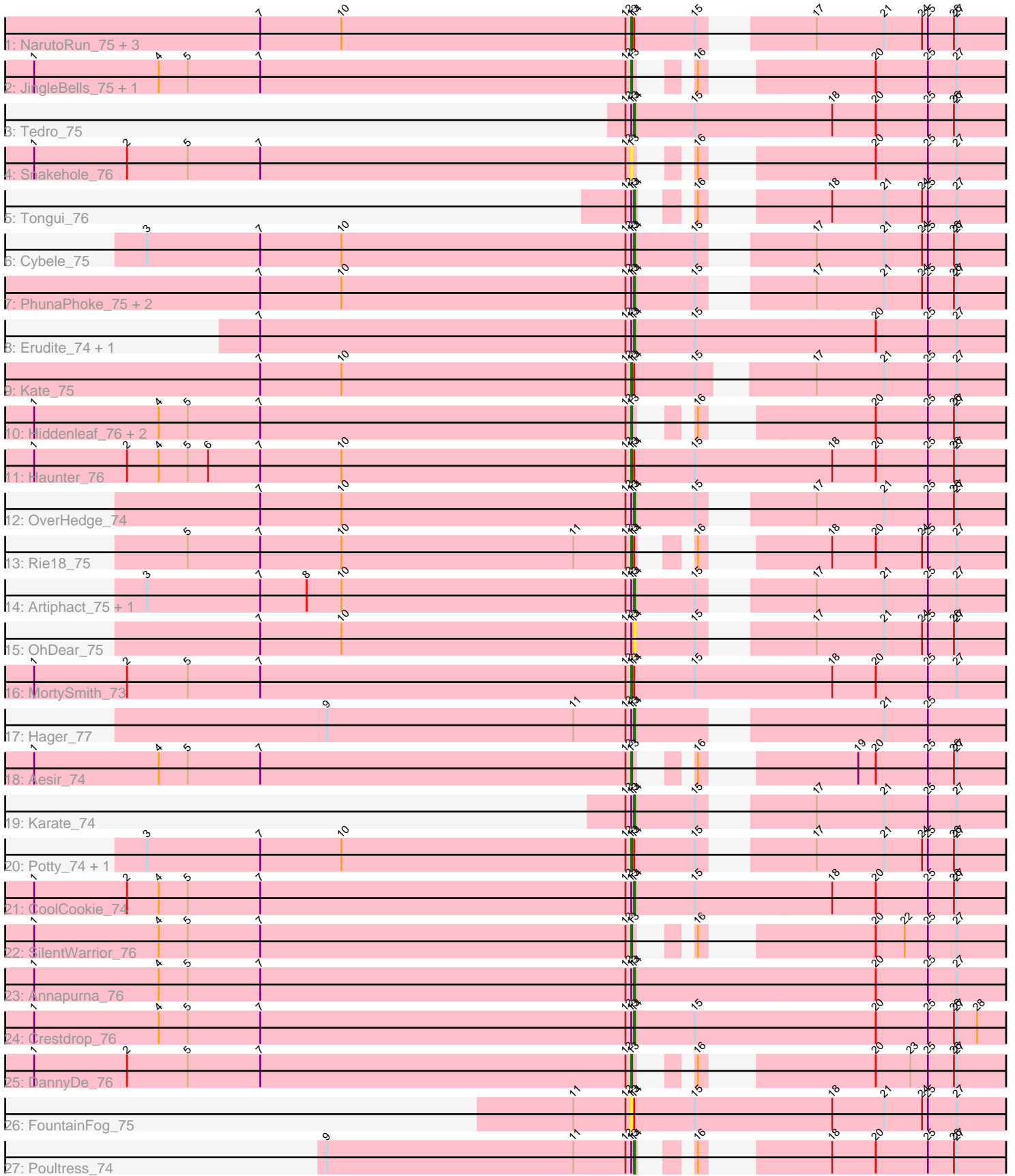


Pham 303517



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 303517 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303517 has 38 members, 3 are drafts.

Phages represented in each track:

- Track 1 : NarutoRun\_75, AnnaSerena\_75, Anakin\_75, Krampus\_75
- Track 2 : JingleBells\_75, JDawG\_74
- Track 3 : Tedro\_75
- Track 4 : Snakehole\_76
- Track 5 : Tongui\_76
- Track 6 : Cybele\_75
- Track 7 : PhunaPhoke\_75, Gilda\_75, Rachella\_75
- Track 8 : Erudite\_74, Dauntless\_74
- Track 9 : Kate\_75
- Track 10 : Hiddenleaf\_76, FreddieHg\_76, Chivey\_76
- Track 11 : Haunter\_76
- Track 12 : OverHedge\_74
- Track 13 : Rie18\_75
- Track 14 : Artiphact\_75, Pharpay\_74
- Track 15 : OhDear\_75
- Track 16 : MortySmith\_73
- Track 17 : Hager\_77
- Track 18 : Aesir\_74
- Track 19 : Karate\_74
- Track 20 : Potty\_74, Neptune\_75
- Track 21 : CoolCookie\_74
- Track 22 : SilentWarrior\_76
- Track 23 : Annapurna\_76
- Track 24 : Crestdrop\_76
- Track 25 : DannyDe\_76
- Track 26 : FountainFog\_75
- Track 27 : Poultruss\_74

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

The start number called the most often in the published annotations is 13, it was called in 18 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aesir\_74, Anakin\_75, AnnaSerena\_75, Chivey\_76, DannyDe\_76, FountainFog\_75, FreddieHg\_76, Haunter\_76, Hiddenleaf\_76, JDawG\_74, JingleBells\_75, Kate\_75, Krampus\_75, MortySmith\_73, NarutoRun\_75, Neptune\_75, Potty\_74, Rie18\_75, SilentWarrior\_76, Snakehole\_76,

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

- Annapurna\_76, Artiphact\_75, CoolCookie\_74, Crestdrop\_76, Cybele\_75, Dauntless\_74, Erudite\_74, Gilda\_75, Hager\_77, Karate\_74, OhDear\_75, OverHedge\_74, Pharpay\_74, PhunaPhoke\_75, Poultruss\_74, Rachella\_75, Tedro\_75, Tongui\_76,

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

- 

### Summary by start number:

Start 13:

- Found in 38 of 38 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 18 of 35
- Called 52.6% of time when present
- Phage (with cluster) where this start called: Aesir\_74 (EF), Anakin\_75 (EF), AnnaSerena\_75 (EF), Chivey\_76 (EF), DannyDe\_76 (EF), FountainFog\_75 (EF), FreddieHg\_76 (EF), Haunter\_76 (EF), Hiddenleaf\_76 (EF), JDawG\_74 (EF), JingleBells\_75 (EF), Kate\_75 (EF), Krampus\_75 (EF), MortySmith\_73 (EF), NarutoRun\_75 (EF), Neptune\_75 (EF), Potty\_74 (EF), Rie18\_75 (EF), SilentWarrior\_76 (EF), Snakehole\_76 (EF),

Start 14:

- Found in 29 of 38 ( 76.3% ) of genes in pham
- Manual Annotations of this start: 17 of 35
- Called 62.1% of time when present
- Phage (with cluster) where this start called: Annapurna\_76 (EF), Artiphact\_75 (EF), CoolCookie\_74 (EF), Crestdrop\_76 (EF), Cybele\_75 (EF), Dauntless\_74 (EF), Erudite\_74 (EF), Gilda\_75 (EF), Hager\_77 (EF), Karate\_74 (EF), OhDear\_75 (EF), OverHedge\_74 (EF), Pharpay\_74 (EF), PhunaPhoke\_75 (EF), Poultruss\_74 (EF), Rachella\_75 (EF), Tedro\_75 (EF), Tongui\_76 (EF),

### Summary by clusters:

There is one cluster represented in this pham: EF

Info for manual annotations of cluster EF:

- Start number 13 was manually annotated 18 times for cluster EF.
- Start number 14 was manually annotated 17 times for cluster EF.

### Gene Information:

Gene: Aesir\_74 Start: 52626, Stop: 53003, Start Num: 13

Candidate Starts for Aesir\_74:

(1, 52008), (4, 52137), (5, 52167), (7, 52242), (12, 52620), (Start: 13 @52626 has 18 MA's), (16, 52650), (19, 52764), (20, 52782), (25, 52836), (26, 52863), (27, 52866),

Gene: Anakin\_75 Start: 52940, Stop: 53368, Start Num: 13

Candidate Starts for Anakin\_75:

(7, 52556), (10, 52640), (12, 52934), (Start: 13 @52940 has 18 MA's), (Start: 14 @52943 has 17 MA's), (15, 53006), (17, 53087), (21, 53156), (24, 53195), (25, 53201), (26, 53228), (27, 53231),

Gene: AnnaSerena\_75 Start: 52974, Stop: 53402, Start Num: 13

Candidate Starts for AnnaSerena\_75:

(7, 52590), (10, 52674), (12, 52968), (Start: 13 @52974 has 18 MA's), (Start: 14 @52977 has 17 MA's), (15, 53040), (17, 53121), (21, 53190), (24, 53229), (25, 53235), (26, 53262), (27, 53265),

Gene: Annapurna\_76 Start: 52532, Stop: 53002, Start Num: 14

Candidate Starts for Annapurna\_76:

(1, 51911), (4, 52040), (5, 52070), (7, 52145), (12, 52523), (Start: 13 @52529 has 18 MA's), (Start: 14 @52532 has 17 MA's), (20, 52781), (25, 52835), (27, 52865),

Gene: Artiphact\_75 Start: 52967, Stop: 53392, Start Num: 14

Candidate Starts for Artiphact\_75:

(3, 52463), (7, 52580), (8, 52628), (10, 52664), (12, 52958), (Start: 13 @52964 has 18 MA's), (Start: 14 @52967 has 17 MA's), (15, 53030), (17, 53111), (21, 53180), (25, 53225), (27, 53255),

Gene: Chivey\_76 Start: 52428, Stop: 52805, Start Num: 13

Candidate Starts for Chivey\_76:

(1, 51810), (4, 51939), (5, 51969), (7, 52044), (12, 52422), (Start: 13 @52428 has 18 MA's), (16, 52452), (20, 52584), (25, 52638), (26, 52665), (27, 52668),

Gene: CoolCookie\_74 Start: 53031, Stop: 53501, Start Num: 14

Candidate Starts for CoolCookie\_74:

(1, 52410), (2, 52506), (4, 52539), (5, 52569), (7, 52644), (12, 53022), (Start: 13 @53028 has 18 MA's), (Start: 14 @53031 has 17 MA's), (15, 53094), (18, 53235), (20, 53280), (25, 53334), (26, 53361), (27, 53364),

Gene: Crestdrop\_76 Start: 52855, Stop: 53322, Start Num: 14

Candidate Starts for Crestdrop\_76:

(1, 52234), (4, 52363), (5, 52393), (7, 52468), (12, 52846), (Start: 13 @52852 has 18 MA's), (Start: 14 @52855 has 17 MA's), (15, 52918), (20, 53104), (25, 53158), (26, 53185), (27, 53188), (28, 53209),

Gene: Cybele\_75 Start: 52973, Stop: 53398, Start Num: 14

Candidate Starts for Cybele\_75:

(3, 52469), (7, 52586), (10, 52670), (12, 52964), (Start: 13 @52970 has 18 MA's), (Start: 14 @52973 has 17 MA's), (15, 53036), (17, 53117), (21, 53186), (24, 53225), (25, 53231), (26, 53258), (27, 53261),

Gene: DannyDe\_76 Start: 52430, Stop: 52807, Start Num: 13

Candidate Starts for DannyDe\_76:

(1, 51812), (2, 51908), (5, 51971), (7, 52046), (12, 52424), (Start: 13 @52430 has 18 MA's), (16, 52454), (20, 52586), (23, 52622), (25, 52640), (26, 52667), (27, 52670),

Gene: Dauntless\_74 Start: 52564, Stop: 53034, Start Num: 14

Candidate Starts for Dauntless\_74:

(7, 52177), (12, 52555), (Start: 13 @52561 has 18 MA's), (Start: 14 @52564 has 17 MA's), (15, 52627), (20, 52813), (25, 52867), (27, 52897),

Gene: Erudite\_74 Start: 52564, Stop: 53034, Start Num: 14

Candidate Starts for Erudite\_74:

(7, 52177), (12, 52555), (Start: 13 @52561 has 18 MA's), (Start: 14 @52564 has 17 MA's), (15, 52627), (20, 52813), (25, 52867), (27, 52897),

Gene: FountainFog\_75 Start: 52404, Stop: 52877, Start Num: 13

Candidate Starts for FountainFog\_75:

(11, 52344), (12, 52398), (Start: 13 @52404 has 18 MA's), (Start: 14 @52407 has 17 MA's), (15, 52470), (18, 52611), (21, 52665), (24, 52704), (25, 52710), (27, 52740),

Gene: FreddieHg\_76 Start: 52445, Stop: 52822, Start Num: 13

Candidate Starts for FreddieHg\_76:

(1, 51827), (4, 51956), (5, 51986), (7, 52061), (12, 52439), (Start: 13 @52445 has 18 MA's), (16, 52469), (20, 52601), (25, 52655), (26, 52682), (27, 52685),

Gene: Gilda\_75 Start: 52965, Stop: 53390, Start Num: 14

Candidate Starts for Gilda\_75:

(7, 52578), (10, 52662), (12, 52956), (Start: 13 @52962 has 18 MA's), (Start: 14 @52965 has 17 MA's), (15, 53028), (17, 53109), (21, 53178), (24, 53217), (25, 53223), (26, 53250), (27, 53253),

Gene: Hager\_77 Start: 52431, Stop: 52856, Start Num: 14

Candidate Starts for Hager\_77:

(9, 52113), (11, 52368), (12, 52422), (Start: 13 @52428 has 18 MA's), (Start: 14 @52431 has 17 MA's), (21, 52644), (25, 52689),

Gene: Haunter\_76 Start: 52338, Stop: 52811, Start Num: 13

Candidate Starts for Haunter\_76:

(1, 51720), (2, 51816), (4, 51849), (5, 51879), (6, 51900), (7, 51954), (10, 52038), (12, 52332), (Start: 13 @52338 has 18 MA's), (Start: 14 @52341 has 17 MA's), (15, 52404), (18, 52545), (20, 52590), (25, 52644), (26, 52671), (27, 52674),

Gene: Hiddenleaf\_76 Start: 52428, Stop: 52805, Start Num: 13

Candidate Starts for Hiddenleaf\_76:

(1, 51810), (4, 51939), (5, 51969), (7, 52044), (12, 52422), (Start: 13 @52428 has 18 MA's), (16, 52452), (20, 52584), (25, 52638), (26, 52665), (27, 52668),

Gene: JDawG\_74 Start: 52621, Stop: 52998, Start Num: 13

Candidate Starts for JDawG\_74:

(1, 52003), (4, 52132), (5, 52162), (7, 52237), (12, 52615), (Start: 13 @52621 has 18 MA's), (16, 52645), (20, 52777), (25, 52831), (27, 52861),

Gene: JingleBells\_75 Start: 52533, Stop: 52910, Start Num: 13

Candidate Starts for JingleBells\_75:

(1, 51915), (4, 52044), (5, 52074), (7, 52149), (12, 52527), (Start: 13 @52533 has 18 MA's), (16, 52557), (20, 52689), (25, 52743), (27, 52773),

Gene: Karate\_74 Start: 52677, Stop: 53102, Start Num: 14

Candidate Starts for Karate\_74:

(12, 52668), (Start: 13 @52674 has 18 MA's), (Start: 14 @52677 has 17 MA's), (15, 52740), (17, 52821), (21, 52890), (25, 52935), (27, 52965),

Gene: Kate\_75 Start: 52879, Stop: 53313, Start Num: 13

Candidate Starts for Kate\_75:

(7, 52495), (10, 52579), (12, 52873), (Start: 13 @52879 has 18 MA's), (Start: 14 @52882 has 17 MA's), (15, 52945), (17, 53032), (21, 53101), (25, 53146), (27, 53176),

Gene: Krampus\_75 Start: 52975, Stop: 53403, Start Num: 13

Candidate Starts for Krampus\_75:

(7, 52591), (10, 52675), (12, 52969), (Start: 13 @52975 has 18 MA's), (Start: 14 @52978 has 17 MA's), (15, 53041), (17, 53122), (21, 53191), (24, 53230), (25, 53236), (26, 53263), (27, 53266),

Gene: MortySmith\_73 Start: 52035, Stop: 52508, Start Num: 13

Candidate Starts for MortySmith\_73:

(1, 51417), (2, 51513), (5, 51576), (7, 51651), (12, 52029), (Start: 13 @52035 has 18 MA's), (Start: 14 @52038 has 17 MA's), (15, 52101), (18, 52242), (20, 52287), (25, 52341), (27, 52371),

Gene: NarutoRun\_75 Start: 52940, Stop: 53368, Start Num: 13

Candidate Starts for NarutoRun\_75:

(7, 52556), (10, 52640), (12, 52934), (Start: 13 @52940 has 18 MA's), (Start: 14 @52943 has 17 MA's), (15, 53006), (17, 53087), (21, 53156), (24, 53195), (25, 53201), (26, 53228), (27, 53231),

Gene: Neptune\_75 Start: 52970, Stop: 53398, Start Num: 13

Candidate Starts for Neptune\_75:

(3, 52469), (7, 52586), (10, 52670), (12, 52964), (Start: 13 @52970 has 18 MA's), (Start: 14 @52973 has 17 MA's), (15, 53036), (17, 53117), (21, 53186), (24, 53225), (25, 53231), (26, 53258), (27, 53261),

Gene: OhDear\_75 Start: 52941, Stop: 53366, Start Num: 14

Candidate Starts for OhDear\_75:

(7, 52554), (10, 52638), (12, 52932), (Start: 13 @52938 has 18 MA's), (Start: 14 @52941 has 17 MA's), (15, 53004), (17, 53085), (21, 53154), (24, 53193), (25, 53199), (26, 53226), (27, 53229),

Gene: OverHedge\_74 Start: 52839, Stop: 53264, Start Num: 14

Candidate Starts for OverHedge\_74:

(7, 52452), (10, 52536), (12, 52830), (Start: 13 @52836 has 18 MA's), (Start: 14 @52839 has 17 MA's), (15, 52902), (17, 52983), (21, 53052), (25, 53097), (26, 53124), (27, 53127),

Gene: Pharpay\_74 Start: 52988, Stop: 53413, Start Num: 14

Candidate Starts for Pharpay\_74:

(3, 52484), (7, 52601), (8, 52649), (10, 52685), (12, 52979), (Start: 13 @52985 has 18 MA's), (Start: 14 @52988 has 17 MA's), (15, 53051), (17, 53132), (21, 53201), (25, 53246), (27, 53276),

Gene: PhunaPhoke\_75 Start: 52958, Stop: 53383, Start Num: 14

Candidate Starts for PhunaPhoke\_75:

(7, 52571), (10, 52655), (12, 52949), (Start: 13 @52955 has 18 MA's), (Start: 14 @52958 has 17 MA's), (15, 53021), (17, 53102), (21, 53171), (24, 53210), (25, 53216), (26, 53243), (27, 53246),

Gene: Potty\_74 Start: 52885, Stop: 53313, Start Num: 13

Candidate Starts for Potty\_74:

(3, 52384), (7, 52501), (10, 52585), (12, 52879), (Start: 13 @52885 has 18 MA's), (Start: 14 @52888 has 17 MA's), (15, 52951), (17, 53032), (21, 53101), (24, 53140), (25, 53146), (26, 53173), (27, 53176),

Gene: Poultriss\_74 Start: 53233, Stop: 53610, Start Num: 14

Candidate Starts for Poultriss\_74:

(9, 52915), (11, 53170), (12, 53224), (Start: 13 @53230 has 18 MA's), (Start: 14 @53233 has 17 MA's), (16, 53257), (18, 53344), (20, 53389), (25, 53443), (26, 53470), (27, 53473),

Gene: Rachella\_75 Start: 52969, Stop: 53394, Start Num: 14

Candidate Starts for Rachella\_75:

(7, 52582), (10, 52666), (12, 52960), (Start: 13 @52966 has 18 MA's), (Start: 14 @52969 has 17 MA's), (15, 53032), (17, 53113), (21, 53182), (24, 53221), (25, 53227), (26, 53254), (27, 53257),

Gene: Rie18\_75 Start: 52756, Stop: 53136, Start Num: 13

Candidate Starts for Rie18\_75:

(5, 52297), (7, 52372), (10, 52456), (11, 52696), (12, 52750), (Start: 13 @52756 has 18 MA's), (Start: 14 @52759 has 17 MA's), (16, 52783), (18, 52870), (20, 52915), (24, 52963), (25, 52969), (27, 52999),

Gene: SilentWarrior\_76 Start: 52394, Stop: 52771, Start Num: 13

Candidate Starts for SilentWarrior\_76:

(1, 51776), (4, 51905), (5, 51935), (7, 52010), (12, 52388), (Start: 13 @52394 has 18 MA's), (16, 52418), (20, 52550), (22, 52580), (25, 52604), (27, 52634),

Gene: Snakehole\_76 Start: 52377, Stop: 52754, Start Num: 13

Candidate Starts for Snakehole\_76:

(1, 51759), (2, 51855), (5, 51918), (7, 51993), (12, 52371), (Start: 13 @52377 has 18 MA's), (16, 52401), (20, 52533), (25, 52587), (27, 52617),

Gene: Tedro\_75 Start: 52428, Stop: 52898, Start Num: 14

Candidate Starts for Tedro\_75:

(12, 52419), (Start: 13 @52425 has 18 MA's), (Start: 14 @52428 has 17 MA's), (15, 52491), (18, 52632), (20, 52677), (25, 52731), (26, 52758), (27, 52761),

Gene: Tongui\_76 Start: 52871, Stop: 53248, Start Num: 14

Candidate Starts for Tongui\_76:

(12, 52862), (Start: 13 @52868 has 18 MA's), (Start: 14 @52871 has 17 MA's), (16, 52895), (18, 52982), (21, 53036), (24, 53075), (25, 53081), (27, 53111),