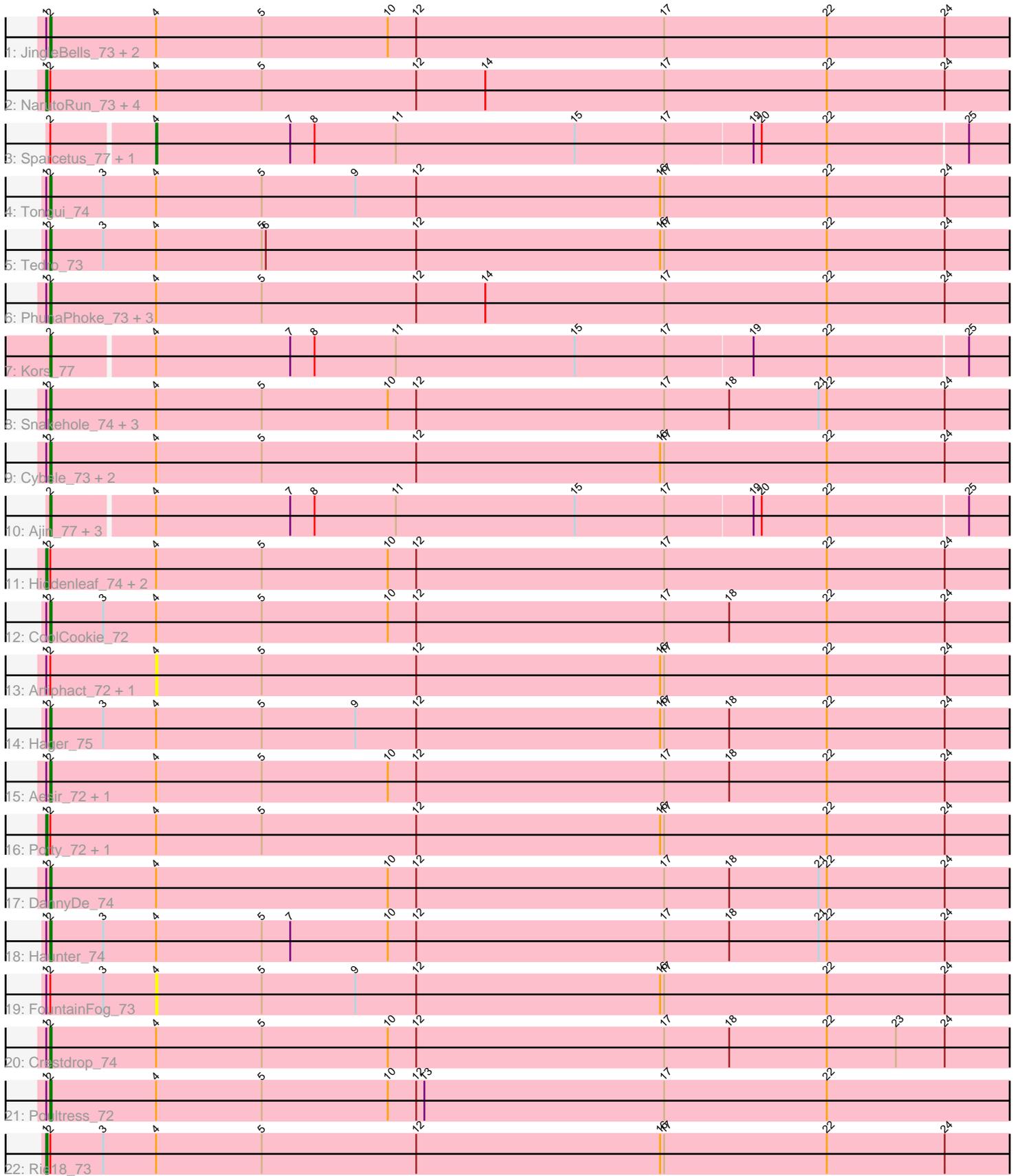


Pham 283932



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 283932 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283932 has 45 members, 4 are drafts.

Phages represented in each track:

- Track 1 : JingleBells\_73, JDawG\_72, SilentWarrior\_74
- Track 2 : NarutoRun\_73, AnnaSerena\_73, Kate\_73, Krampus\_73, Anakin\_73
- Track 3 : Sparcetus\_77, RikSengupta\_77
- Track 4 : Tongui\_74
- Track 5 : Tedro\_73
- Track 6 : PhunaPhoke\_73, Gilda\_73, Karate\_72, Rachella\_73
- Track 7 : Kors\_77
- Track 8 : Snakehole\_74, Erudite\_72, MortySmith\_71, Dauntless\_72
- Track 9 : Cybele\_73, Pharpay\_72, OverHedge\_72
- Track 10 : Ajin\_77, Bramble\_77, LordBart\_77, TinyMiny\_77
- Track 11 : Hiddenleaf\_74, FreddieHg\_74, Chivey\_74
- Track 12 : CoolCookie\_72
- Track 13 : Artiphact\_72, OhDear\_73
- Track 14 : Hager\_75
- Track 15 : Aesir\_72, Annapurna\_74
- Track 16 : Potty\_72, Neptune\_73
- Track 17 : DannyDe\_74
- Track 18 : Haunter\_74
- Track 19 : FountainFog\_73
- Track 20 : Crestdrop\_74
- Track 21 : Poultruss\_72
- Track 22 : Rie18\_73

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

Genes that call this "Most Annotated" start:

- Aesir\_72, Ajin\_77, Annapurna\_74, Bramble\_77, CoolCookie\_72, Crestdrop\_74, Cybele\_73, DannyDe\_74, Dauntless\_72, Erudite\_72, Gilda\_73, Hager\_75, Haunter\_74, JDawG\_72, JingleBells\_73, Karate\_72, Kors\_77, LordBart\_77, MortySmith\_71, OverHedge\_72, Pharpay\_72, PhunaPhoke\_73, Poultruss\_72, Rachella\_73, SilentWarrior\_74, Snakehole\_74, Tedro\_73, TinyMiny\_77, Tongui\_74,

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

- Anakin\_73, AnnaSerena\_73, Artiphact\_72, Chivey\_74, FountainFog\_73, FreddieHg\_74, Hiddenleaf\_74, Kate\_73, Krampus\_73, NarutoRun\_73, Neptune\_73, OhDear\_73, Potty\_72, Rie18\_73, RikSengupta\_77, Sparcetus\_77,

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

- 

### Summary by start number:

Start 1:

- Found in 38 of 45 ( 84.4% ) of genes in pham
- Manual Annotations of this start: 11 of 41
- Called 28.9% of time when present
- Phage (with cluster) where this start called: Anakin\_73 (EF), AnnaSerena\_73 (EF), Chivey\_74 (EF), FreddieHg\_74 (EF), Hiddenleaf\_74 (EF), Kate\_73 (EF), Krampus\_73 (EF), NarutoRun\_73 (EF), Neptune\_73 (EF), Potty\_72 (EF), Rie18\_73 (EF),

Start 2:

- Found in 45 of 45 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 28 of 41
- Called 64.4% of time when present
- Phage (with cluster) where this start called: Aesir\_72 (EF), Ajin\_77 (EF), Annapurna\_74 (EF), Bramble\_77 (EF), CoolCookie\_72 (EF), Crestdrop\_74 (EF), Cybele\_73 (EF), DannyDe\_74 (EF), Dauntless\_72 (EF), Erudite\_72 (EF), Gilda\_73 (EF), Hager\_75 (EF), Haunter\_74 (EF), JDawG\_72 (EF), JingleBells\_73 (EF), Karate\_72 (EF), Kors\_77 (EF), LordBart\_77 (EF), MortySmith\_71 (EF), OverHedge\_72 (EF), Pharpay\_72 (EF), PhunaPhoke\_73 (EF), Poultruss\_72 (EF), Rachella\_73 (EF), SilentWarrior\_74 (EF), Snakehole\_74 (EF), Tedro\_73 (EF), TinyMiny\_77 (EF), Tongui\_74 (EF),

Start 4:

- Found in 45 of 45 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 2 of 41
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Artiphact\_72 (EF), FountainFog\_73 (EF), OhDear\_73 (EF), RikSengupta\_77 (EF), Sparcetus\_77 (EF),

### Summary by clusters:

There is one cluster represented in this pham: EF

Info for manual annotations of cluster EF:

- Start number 1 was manually annotated 11 times for cluster EF.
- Start number 2 was manually annotated 28 times for cluster EF.
- Start number 4 was manually annotated 2 times for cluster EF.

### Gene Information:

Gene: Aesir\_72 Start: 51638, Stop: 52348, Start Num: 2

Candidate Starts for Aesir\_72:

(Start: 1 @51635 has 11 MA's), (Start: 2 @51638 has 28 MA's), (Start: 4 @51716 has 2 MA's), (5, 51794), (10, 51887), (12, 51908), (17, 52091), (18, 52139), (22, 52211), (24, 52298),

Gene: Ajin\_77 Start: 52086, Stop: 52784, Start Num: 2

Candidate Starts for Ajin\_77:

(Start: 2 @52086 has 28 MA's), (Start: 4 @52158 has 2 MA's), (7, 52257), (8, 52275), (11, 52335), (15, 52467), (17, 52533), (19, 52596), (20, 52602), (22, 52650), (25, 52752),

Gene: Anakin\_73 Start: 51949, Stop: 52662, Start Num: 1

Candidate Starts for Anakin\_73:

(Start: 1 @51949 has 11 MA's), (Start: 2 @51952 has 28 MA's), (Start: 4 @52030 has 2 MA's), (5, 52108), (12, 52222), (14, 52273), (17, 52405), (22, 52525), (24, 52612),

Gene: AnnaSerena\_73 Start: 51983, Stop: 52696, Start Num: 1

Candidate Starts for AnnaSerena\_73:

(Start: 1 @51983 has 11 MA's), (Start: 2 @51986 has 28 MA's), (Start: 4 @52064 has 2 MA's), (5, 52142), (12, 52256), (14, 52307), (17, 52439), (22, 52559), (24, 52646),

Gene: Annapurna\_74 Start: 51541, Stop: 52251, Start Num: 2

Candidate Starts for Annapurna\_74:

(Start: 1 @51538 has 11 MA's), (Start: 2 @51541 has 28 MA's), (Start: 4 @51619 has 2 MA's), (5, 51697), (10, 51790), (12, 51811), (17, 51994), (18, 52042), (22, 52114), (24, 52201),

Gene: Artiphact\_72 Start: 52054, Stop: 52686, Start Num: 4

Candidate Starts for Artiphact\_72:

(Start: 1 @51973 has 11 MA's), (Start: 2 @51976 has 28 MA's), (Start: 4 @52054 has 2 MA's), (5, 52132), (12, 52246), (16, 52426), (17, 52429), (22, 52549), (24, 52636),

Gene: Bramble\_77 Start: 52053, Stop: 52751, Start Num: 2

Candidate Starts for Bramble\_77:

(Start: 2 @52053 has 28 MA's), (Start: 4 @52125 has 2 MA's), (7, 52224), (8, 52242), (11, 52302), (15, 52434), (17, 52500), (19, 52563), (20, 52569), (22, 52617), (25, 52719),

Gene: Chivey\_74 Start: 51437, Stop: 52150, Start Num: 1

Candidate Starts for Chivey\_74:

(Start: 1 @51437 has 11 MA's), (Start: 2 @51440 has 28 MA's), (Start: 4 @51518 has 2 MA's), (5, 51596), (10, 51689), (12, 51710), (17, 51893), (22, 52013), (24, 52100),

Gene: CoolCookie\_72 Start: 52040, Stop: 52750, Start Num: 2

Candidate Starts for CoolCookie\_72:

(Start: 1 @52037 has 11 MA's), (Start: 2 @52040 has 28 MA's), (3, 52079), (Start: 4 @52118 has 2 MA's), (5, 52196), (10, 52289), (12, 52310), (17, 52493), (18, 52541), (22, 52613), (24, 52700),

Gene: Crestdrop\_74 Start: 51864, Stop: 52574, Start Num: 2

Candidate Starts for Crestdrop\_74:

(Start: 1 @51861 has 11 MA's), (Start: 2 @51864 has 28 MA's), (Start: 4 @51942 has 2 MA's), (5, 52020), (10, 52113), (12, 52134), (17, 52317), (18, 52365), (22, 52437), (23, 52488), (24, 52524),

Gene: Cybele\_73 Start: 51982, Stop: 52692, Start Num: 2

Candidate Starts for Cybele\_73:

(Start: 1 @51979 has 11 MA's), (Start: 2 @51982 has 28 MA's), (Start: 4 @52060 has 2 MA's), (5, 52138), (12, 52252), (16, 52432), (17, 52435), (22, 52555), (24, 52642),

Gene: DannyDe\_74 Start: 51442, Stop: 52152, Start Num: 2

Candidate Starts for DannyDe\_74:

(Start: 1 @51439 has 11 MA's), (Start: 2 @51442 has 28 MA's), (Start: 4 @51520 has 2 MA's), (10, 51691), (12, 51712), (17, 51895), (18, 51943), (21, 52009), (22, 52015), (24, 52102),

Gene: Dauntless\_72 Start: 51573, Stop: 52283, Start Num: 2

Candidate Starts for Dauntless\_72:

(Start: 1 @51570 has 11 MA's), (Start: 2 @51573 has 28 MA's), (Start: 4 @51651 has 2 MA's), (5, 51729), (10, 51822), (12, 51843), (17, 52026), (18, 52074), (21, 52140), (22, 52146), (24, 52233),

Gene: Erudite\_72 Start: 51573, Stop: 52283, Start Num: 2

Candidate Starts for Erudite\_72:

(Start: 1 @51570 has 11 MA's), (Start: 2 @51573 has 28 MA's), (Start: 4 @51651 has 2 MA's), (5, 51729), (10, 51822), (12, 51843), (17, 52026), (18, 52074), (21, 52140), (22, 52146), (24, 52233),

Gene: FountainFog\_73 Start: 51494, Stop: 52126, Start Num: 4

Candidate Starts for FountainFog\_73:

(Start: 1 @51413 has 11 MA's), (Start: 2 @51416 has 28 MA's), (3, 51455), (Start: 4 @51494 has 2 MA's), (5, 51572), (9, 51641), (12, 51686), (16, 51866), (17, 51869), (22, 51989), (24, 52076),

Gene: FreddieHg\_74 Start: 51454, Stop: 52167, Start Num: 1

Candidate Starts for FreddieHg\_74:

(Start: 1 @51454 has 11 MA's), (Start: 2 @51457 has 28 MA's), (Start: 4 @51535 has 2 MA's), (5, 51613), (10, 51706), (12, 51727), (17, 51910), (22, 52030), (24, 52117),

Gene: Gilda\_73 Start: 51974, Stop: 52684, Start Num: 2

Candidate Starts for Gilda\_73:

(Start: 1 @51971 has 11 MA's), (Start: 2 @51974 has 28 MA's), (Start: 4 @52052 has 2 MA's), (5, 52130), (12, 52244), (14, 52295), (17, 52427), (22, 52547), (24, 52634),

Gene: Hager\_75 Start: 51440, Stop: 52150, Start Num: 2

Candidate Starts for Hager\_75:

(Start: 1 @51437 has 11 MA's), (Start: 2 @51440 has 28 MA's), (3, 51479), (Start: 4 @51518 has 2 MA's), (5, 51596), (9, 51665), (12, 51710), (16, 51890), (17, 51893), (18, 51941), (22, 52013), (24, 52100),

Gene: Haunter\_74 Start: 51350, Stop: 52060, Start Num: 2

Candidate Starts for Haunter\_74:

(Start: 1 @51347 has 11 MA's), (Start: 2 @51350 has 28 MA's), (3, 51389), (Start: 4 @51428 has 2 MA's), (5, 51506), (7, 51527), (10, 51599), (12, 51620), (17, 51803), (18, 51851), (21, 51917), (22, 51923), (24, 52010),

Gene: Hiddenleaf\_74 Start: 51437, Stop: 52150, Start Num: 1

Candidate Starts for Hiddenleaf\_74:

(Start: 1 @51437 has 11 MA's), (Start: 2 @51440 has 28 MA's), (Start: 4 @51518 has 2 MA's), (5, 51596), (10, 51689), (12, 51710), (17, 51893), (22, 52013), (24, 52100),

Gene: JDawG\_72 Start: 51633, Stop: 52343, Start Num: 2

Candidate Starts for JDawG\_72:

(Start: 1 @51630 has 11 MA's), (Start: 2 @51633 has 28 MA's), (Start: 4 @51711 has 2 MA's), (5, 51789), (10, 51882), (12, 51903), (17, 52086), (22, 52206), (24, 52293),

Gene: JingleBells\_73 Start: 51545, Stop: 52255, Start Num: 2

Candidate Starts for JingleBells\_73:

(Start: 1 @51542 has 11 MA's), (Start: 2 @51545 has 28 MA's), (Start: 4 @51623 has 2 MA's), (5, 51701), (10, 51794), (12, 51815), (17, 51998), (22, 52118), (24, 52205),

Gene: Karate\_72 Start: 51686, Stop: 52396, Start Num: 2

Candidate Starts for Karate\_72:

(Start: 1 @51683 has 11 MA's), (Start: 2 @51686 has 28 MA's), (Start: 4 @51764 has 2 MA's), (5, 51842), (12, 51956), (14, 52007), (17, 52139), (22, 52259), (24, 52346),

Gene: Kate\_73 Start: 51888, Stop: 52601, Start Num: 1

Candidate Starts for Kate\_73:

(Start: 1 @51888 has 11 MA's), (Start: 2 @51891 has 28 MA's), (Start: 4 @51969 has 2 MA's), (5, 52047), (12, 52161), (14, 52212), (17, 52344), (22, 52464), (24, 52551),

Gene: Kors\_77 Start: 52158, Stop: 52856, Start Num: 2

Candidate Starts for Kors\_77:

(Start: 2 @52158 has 28 MA's), (Start: 4 @52230 has 2 MA's), (7, 52329), (8, 52347), (11, 52407), (15, 52539), (17, 52605), (19, 52668), (22, 52722), (25, 52824),

Gene: Krampus\_73 Start: 51984, Stop: 52697, Start Num: 1

Candidate Starts for Krampus\_73:

(Start: 1 @51984 has 11 MA's), (Start: 2 @51987 has 28 MA's), (Start: 4 @52065 has 2 MA's), (5, 52143), (12, 52257), (14, 52308), (17, 52440), (22, 52560), (24, 52647),

Gene: LordBart\_77 Start: 52068, Stop: 52766, Start Num: 2

Candidate Starts for LordBart\_77:

(Start: 2 @52068 has 28 MA's), (Start: 4 @52140 has 2 MA's), (7, 52239), (8, 52257), (11, 52317), (15, 52449), (17, 52515), (19, 52578), (20, 52584), (22, 52632), (25, 52734),

Gene: MortySmith\_71 Start: 51047, Stop: 51757, Start Num: 2

Candidate Starts for MortySmith\_71:

(Start: 1 @51044 has 11 MA's), (Start: 2 @51047 has 28 MA's), (Start: 4 @51125 has 2 MA's), (5, 51203), (10, 51296), (12, 51317), (17, 51500), (18, 51548), (21, 51614), (22, 51620), (24, 51707),

Gene: NarutoRun\_73 Start: 51949, Stop: 52662, Start Num: 1

Candidate Starts for NarutoRun\_73:

(Start: 1 @51949 has 11 MA's), (Start: 2 @51952 has 28 MA's), (Start: 4 @52030 has 2 MA's), (5, 52108), (12, 52222), (14, 52273), (17, 52405), (22, 52525), (24, 52612),

Gene: Neptune\_73 Start: 51979, Stop: 52692, Start Num: 1

Candidate Starts for Neptune\_73:

(Start: 1 @51979 has 11 MA's), (Start: 2 @51982 has 28 MA's), (Start: 4 @52060 has 2 MA's), (5, 52138), (12, 52252), (16, 52432), (17, 52435), (22, 52555), (24, 52642),

Gene: OhDear\_73 Start: 52028, Stop: 52660, Start Num: 4

Candidate Starts for OhDear\_73:

(Start: 1 @51947 has 11 MA's), (Start: 2 @51950 has 28 MA's), (Start: 4 @52028 has 2 MA's), (5, 52106), (12, 52220), (16, 52400), (17, 52403), (22, 52523), (24, 52610),

Gene: OverHedge\_72 Start: 51848, Stop: 52558, Start Num: 2

Candidate Starts for OverHedge\_72:

(Start: 1 @51845 has 11 MA's), (Start: 2 @51848 has 28 MA's), (Start: 4 @51926 has 2 MA's), (5, 52004), (12, 52118), (16, 52298), (17, 52301), (22, 52421), (24, 52508),

Gene: Pharpay\_72 Start: 51997, Stop: 52707, Start Num: 2

Candidate Starts for Pharpay\_72:

(Start: 1 @51994 has 11 MA's), (Start: 2 @51997 has 28 MA's), (Start: 4 @52075 has 2 MA's), (5, 52153), (12, 52267), (16, 52447), (17, 52450), (22, 52570), (24, 52657),

Gene: PhunaPhoke\_73 Start: 51967, Stop: 52677, Start Num: 2

Candidate Starts for PhunaPhoke\_73:

(Start: 1 @51964 has 11 MA's), (Start: 2 @51967 has 28 MA's), (Start: 4 @52045 has 2 MA's), (5, 52123), (12, 52237), (14, 52288), (17, 52420), (22, 52540), (24, 52627),

Gene: Potty\_72 Start: 51894, Stop: 52607, Start Num: 1

Candidate Starts for Potty\_72:

(Start: 1 @51894 has 11 MA's), (Start: 2 @51897 has 28 MA's), (Start: 4 @51975 has 2 MA's), (5, 52053), (12, 52167), (16, 52347), (17, 52350), (22, 52470), (24, 52557),

Gene: Poultress\_72 Start: 52242, Stop: 52952, Start Num: 2

Candidate Starts for Poultress\_72:

(Start: 1 @52239 has 11 MA's), (Start: 2 @52242 has 28 MA's), (Start: 4 @52320 has 2 MA's), (5, 52398), (10, 52491), (12, 52512), (13, 52518), (17, 52695), (22, 52815),

Gene: Rachella\_73 Start: 51978, Stop: 52688, Start Num: 2

Candidate Starts for Rachella\_73:

(Start: 1 @51975 has 11 MA's), (Start: 2 @51978 has 28 MA's), (Start: 4 @52056 has 2 MA's), (5, 52134), (12, 52248), (14, 52299), (17, 52431), (22, 52551), (24, 52638),

Gene: Rie18\_73 Start: 51765, Stop: 52478, Start Num: 1

Candidate Starts for Rie18\_73:

(Start: 1 @51765 has 11 MA's), (Start: 2 @51768 has 28 MA's), (3, 51807), (Start: 4 @51846 has 2 MA's), (5, 51924), (12, 52038), (16, 52218), (17, 52221), (22, 52341), (24, 52428),

Gene: RikSengupta\_77 Start: 52261, Stop: 52887, Start Num: 4

Candidate Starts for RikSengupta\_77:

(Start: 2 @52189 has 28 MA's), (Start: 4 @52261 has 2 MA's), (7, 52360), (8, 52378), (11, 52438), (15, 52570), (17, 52636), (19, 52699), (20, 52705), (22, 52753), (25, 52855),

Gene: SilentWarrior\_74 Start: 51406, Stop: 52116, Start Num: 2

Candidate Starts for SilentWarrior\_74:

(Start: 1 @51403 has 11 MA's), (Start: 2 @51406 has 28 MA's), (Start: 4 @51484 has 2 MA's), (5, 51562), (10, 51655), (12, 51676), (17, 51859), (22, 51979), (24, 52066),

Gene: Snakehole\_74 Start: 51389, Stop: 52099, Start Num: 2

Candidate Starts for Snakehole\_74:

(Start: 1 @51386 has 11 MA's), (Start: 2 @51389 has 28 MA's), (Start: 4 @51467 has 2 MA's), (5, 51545), (10, 51638), (12, 51659), (17, 51842), (18, 51890), (21, 51956), (22, 51962), (24, 52049),

Gene: Sparcetus\_77 Start: 52075, Stop: 52701, Start Num: 4

Candidate Starts for Sparcetus\_77:

(Start: 2 @52003 has 28 MA's), (Start: 4 @52075 has 2 MA's), (7, 52174), (8, 52192), (11, 52252), (15, 52384), (17, 52450), (19, 52513), (20, 52519), (22, 52567), (25, 52669),

Gene: Tedro\_73 Start: 51437, Stop: 52147, Start Num: 2

Candidate Starts for Tedro\_73:

(Start: 1 @51434 has 11 MA's), (Start: 2 @51437 has 28 MA's), (3, 51476), (Start: 4 @51515 has 2 MA's), (5, 51593), (6, 51596), (12, 51707), (16, 51887), (17, 51890), (22, 52010), (24, 52097),

Gene: TinyMiny\_77 Start: 52093, Stop: 52791, Start Num: 2

Candidate Starts for TinyMiny\_77:

(Start: 2 @52093 has 28 MA's), (Start: 4 @52165 has 2 MA's), (7, 52264), (8, 52282), (11, 52342), (15, 52474), (17, 52540), (19, 52603), (20, 52609), (22, 52657), (25, 52759),

Gene: Tongui\_74 Start: 51880, Stop: 52590, Start Num: 2

Candidate Starts for Tongui\_74:

(Start: 1 @51877 has 11 MA's), (Start: 2 @51880 has 28 MA's), (3, 51919), (Start: 4 @51958 has 2 MA's), (5, 52036), (9, 52105), (12, 52150), (16, 52330), (17, 52333), (22, 52453), (24, 52540),