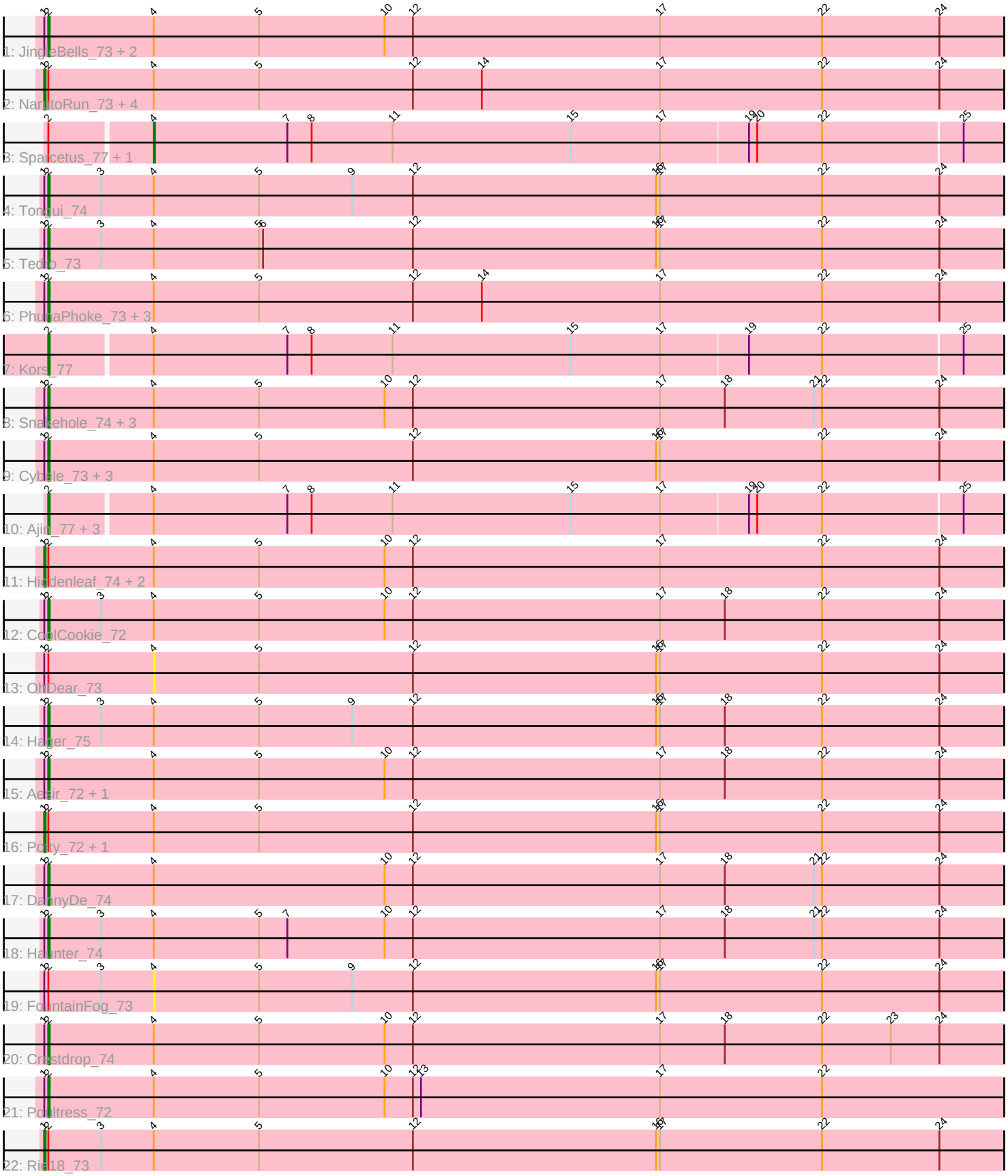
Pham 296697


1: JingleBells_73 + 2
2: NarutoRun_73 + 4
3: Spartacus_77 + 1
4: Tonbui_74
5: Tedro_73
6: PhumaPhoke_73 + 3
7: Korsi_77
8: Snakehole_74 + 3
9: Cybele_73 + 3
10: Ajin_77 + 3
11: Hiddenleaf_74 + 2
12: CoolCookie_72
13: OhDear_73
14: Hager_75
15: Aesir_72 + 1
16: Potty_72 + 1
17: DannyDe_74
18: Hainter_74
19: FountainFog_73
20: Crestdrop_74
21: Poultress_72
22: Ris18_73

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 296697 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296697 has 45 members, 3 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, Artiphact_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 : 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 : Poultress_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 29 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aesir_72, Ajin_77, Annapurna_74, Artiphact_73, 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, Poultress_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, 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 42
• 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: 29 of 42
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Aesir_72 (EF), Ajin_77 (EF), Annapurna_74 (EF), Artiphact_73 (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), Poultress_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 42
• Called 8.9% of time when present
• Phage (with cluster) where this start called: 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 29 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 29 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 29 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 29 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 29 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 29 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_73 Start: 51976, Stop: 52686, Start Num: 2
Candidate Starts for Artiphact_73:
(Start: 1 @51973 has 11 MA's), (Start: 2 @51976 has 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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),