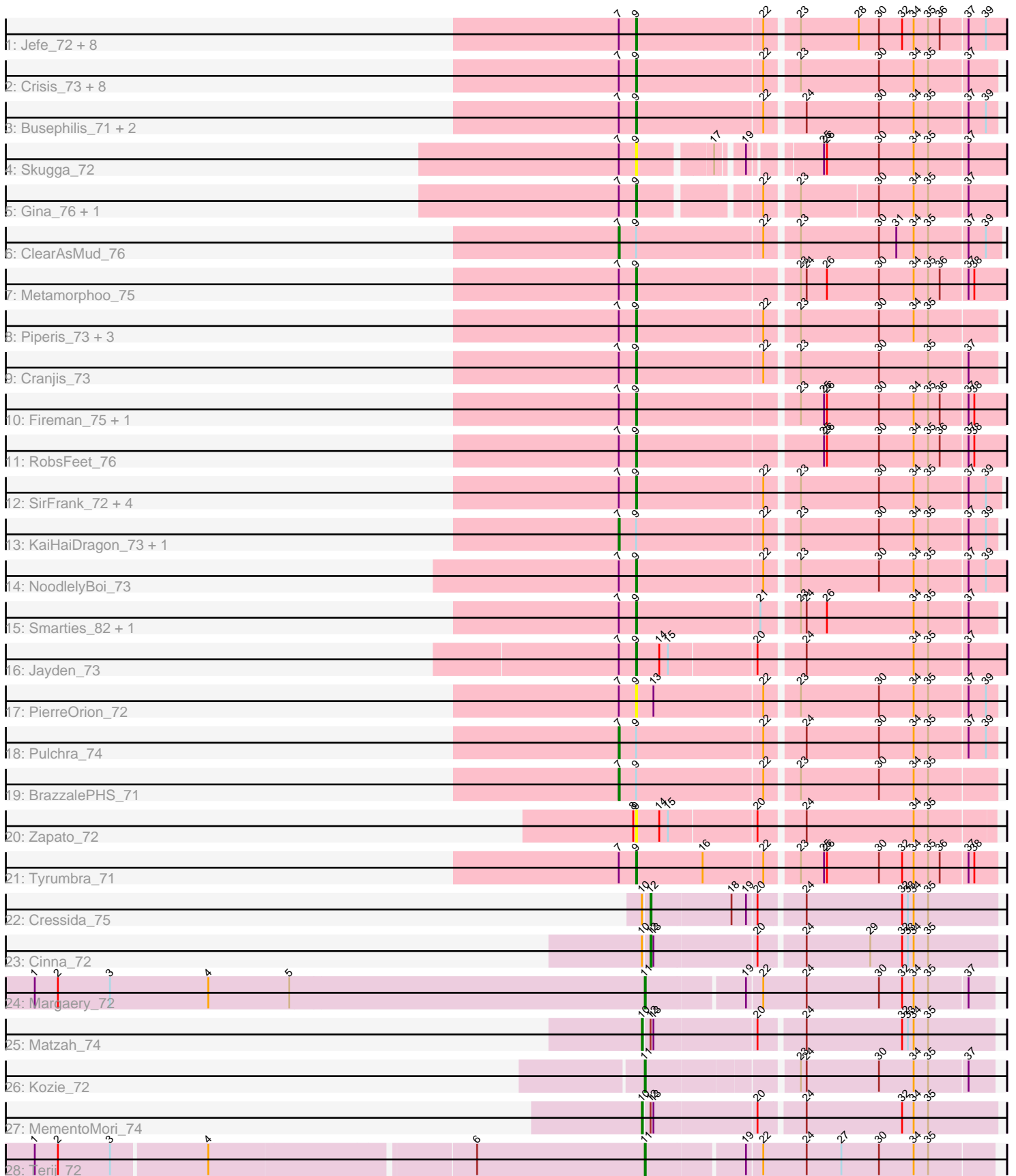


Pham 294770



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 294770 Report

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

Pham number 294770 has 57 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Jefe_72, BeagleBug_71, CrazyRich_71, Honeyfin_73, Yeti_74, Shotgun_72, PhedwardCullen_70, LittleFortune_74, Hermeonysus_72
- Track 2 : Crisis_73, Selwyn23_73, Scumberland_74, Quhwah_76, Savannah_71, Jollipop_73, Glorp_73, Antares_72, Paschalis_72
- Track 3 : Busephilis_71, Lucretia_72, Phrancesco_72
- Track 4 : Skugga_72
- Track 5 : Gina_76, Teamocil_76
- Track 6 : ClearAsMud_76
- Track 7 : Metamorphoo_75
- Track 8 : Piperis_73, Ramiel05_71, Kowalski_71, Onika_71
- Track 9 : Cranjis_73
- Track 10 : Fireman_75, Shrubaron_76
- Track 11 : RobsFeet_76
- Track 12 : SirFrank_72, PiperSansNom_73, Ganandorf_71, Rockwell_71, Phorgeous_72
- Track 13 : KaiHaiDragon_73, EarickHC_73
- Track 14 : NoodlelyBoi_73
- Track 15 : Smarties_82, Ariadne_82
- Track 16 : Jayden_73
- Track 17 : PierreOrion_72
- Track 18 : Pulchra_74
- Track 19 : BrazzalePHS_71
- Track 20 : Zapato_72
- Track 21 : Tyumbra_71
- Track 22 : Cressida_75
- Track 23 : Cinna_72
- Track 24 : Margaery_72
- Track 25 : Matzah_74
- Track 26 : Kozie_72
- Track 27 : MementoMori_74
- Track 28 : Terij_72

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

The start number called the most often in the published annotations is 9, it was called in 38 of the 50 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares_72, Ariadne_82, BeagleBug_71, Busephilis_71, Cranjjs_73, CrazyRich_71, Crisis_73, Fireman_75, Ganandorf_71, Gina_76, Glorp_73, Hermeonysus_72, Honeyfin_73, Jayden_73, Jefe_72, Jollipop_73, Kowalski_71, LittleFortune_74, Lucretia_72, Metamorphoo_75, NoodlelyBoi_73, Onika_71, Paschalis_72, PhedwardCullen_70, Phorgeous_72, Phrancesco_72, PierreOrion_72, PiperSansNom_73, Piperis_73, Quhwah_76, Ramiel05_71, RobsFeet_76, Rockwell_71, Savannah_71, Scumberland_74, Selwyn23_73, Shotgun_72, Shrubaron_76, SirFrank_72, Skugga_72, Smarties_82, Teamocil_76, Tyrumbra_71, Yeti_74, Zapato_72,

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

- BrazzalePHS_71, ClearAsMud_76, EarickHC_73, KaiHaiDragon_73, Pulchra_74,

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

- Cinna_72, Cressida_75, Kozi_72, Margaery_72, Matzah_74, MementoMori_74, Terij_72,

Summary by start number:

Start 7:

- Found in 49 of 57 (86.0%) of genes in pham
- Manual Annotations of this start: 5 of 50
- Called 10.2% of time when present
- Phage (with cluster) where this start called: BrazzalePHS_71 (EC), ClearAsMud_76 (EC), EarickHC_73 (EC), KaiHaiDragon_73 (EC), Pulchra_74 (EC),

Start 9:

- Found in 50 of 57 (87.7%) of genes in pham
- Manual Annotations of this start: 38 of 50
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Antares_72 (EC), Ariadne_82 (EC), BeagleBug_71 (EC), Busephilis_71 (EC), Cranjjs_73 (EC), CrazyRich_71 (EC), Crisis_73 (EC), Fireman_75 (EC), Ganandorf_71 (EC), Gina_76 (EC), Glorp_73 (EC), Hermeonysus_72 (EC), Honeyfin_73 (EC), Jayden_73 (EC), Jefe_72 (EC), Jollipop_73 (EC), Kowalski_71 (EC), LittleFortune_74 (EC), Lucretia_72 (EC), Metamorphoo_75 (EC), NoodlelyBoi_73 (EC), Onika_71 (EC), Paschalis_72 (EC), PhedwardCullen_70 (EC), Phorgeous_72 (EC), Phrancesco_72 (EC), PierreOrion_72 (EC), PiperSansNom_73 (EC), Piperis_73 (EC), Quhwah_76 (EC), Ramiel05_71 (EC), RobsFeet_76 (EC), Rockwell_71 (EC), Savannah_71 (EC), Scumberland_74 (EC), Selwyn23_73 (EC), Shotgun_72 (EC), Shrubaron_76 (EC), SirFrank_72 (EC), Skugga_72 (EC), Smarties_82 (EC), Teamocil_76 (EC), Tyrumbra_71 (EC), Yeti_74 (EC), Zapato_72 (EC),

Start 10:

- Found in 4 of 57 (7.0%) of genes in pham
- Manual Annotations of this start: 2 of 50
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Matzah_74 (EI), MementoMori_74 (EI),

Start 11:

- Found in 3 of 57 (5.3%) of genes in pham
- Manual Annotations of this start: 3 of 50
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kozie_72 (EI), Margaery_72 (EI), Terij_72 (EI),

Start 12:

- Found in 4 of 57 (7.0%) of genes in pham
- Manual Annotations of this start: 2 of 50
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Cinna_72 (EI), Cressida_75 (EI),

Summary by clusters:

There are 2 clusters represented in this pham: EI, EC,

Info for manual annotations of cluster EC:

- Start number 7 was manually annotated 5 times for cluster EC.
- Start number 9 was manually annotated 38 times for cluster EC.

Info for manual annotations of cluster EI:

- Start number 10 was manually annotated 2 times for cluster EI.
- Start number 11 was manually annotated 3 times for cluster EI.
- Start number 12 was manually annotated 2 times for cluster EI.

Gene Information:

Gene: Antares_72 Start: 43655, Stop: 44014, Start Num: 9

Candidate Starts for Antares_72:

(Start: 7 @43637 has 5 MA's), (Start: 9 @43655 has 38 MA's), (22, 43784), (23, 43814), (30, 43895), (34, 43931), (35, 43946), (37, 43985),

Gene: Ariadne_82 Start: 45244, Stop: 45606, Start Num: 9

Candidate Starts for Ariadne_82:

(Start: 7 @45226 has 5 MA's), (Start: 9 @45244 has 38 MA's), (21, 45373), (23, 45406), (24, 45412), (26, 45433), (34, 45523), (35, 45538), (37, 45577),

Gene: BeagleBug_71 Start: 43435, Stop: 43803, Start Num: 9

Candidate Starts for BeagleBug_71:

(Start: 7 @43417 has 5 MA's), (Start: 9 @43435 has 38 MA's), (22, 43564), (23, 43594), (28, 43654), (30, 43675), (32, 43699), (34, 43711), (35, 43726), (36, 43738), (37, 43765), (39, 43783),

Gene: BrazzalePHS_71 Start: 43405, Stop: 43782, Start Num: 7

Candidate Starts for BrazzalePHS_71:

(Start: 7 @43405 has 5 MA's), (Start: 9 @43423 has 38 MA's), (22, 43552), (23, 43582), (30, 43663), (34, 43699), (35, 43714),

Gene: Busephilis_71 Start: 43362, Stop: 43721, Start Num: 9

Candidate Starts for Busephilis_71:

(Start: 7 @43344 has 5 MA's), (Start: 9 @43362 has 38 MA's), (22, 43491), (24, 43527), (30, 43602), (34, 43638), (35, 43653), (37, 43692), (39, 43710),

Gene: Cinna_72 Start: 46239, Stop: 46583, Start Num: 12

Candidate Starts for Cinna_72:

(Start: 10 @46233 has 2 MA's), (Start: 12 @46239 has 2 MA's), (13, 46242), (20, 46344), (24, 46386), (29, 46452), (32, 46485), (33, 46491), (34, 46497), (35, 46512),

Gene: ClearAsMud_76 Start: 43925, Stop: 44305, Start Num: 7

Candidate Starts for ClearAsMud_76:

(Start: 7 @43925 has 5 MA's), (Start: 9 @43943 has 38 MA's), (22, 44072), (23, 44102), (30, 44183), (31, 44201), (34, 44219), (35, 44234), (37, 44273), (39, 44291),

Gene: Cranjjs_73 Start: 43610, Stop: 43969, Start Num: 9

Candidate Starts for Cranjjs_73:

(Start: 7 @43592 has 5 MA's), (Start: 9 @43610 has 38 MA's), (22, 43739), (23, 43769), (30, 43850), (35, 43901), (37, 43940),

Gene: CrazyRich_71 Start: 43416, Stop: 43784, Start Num: 9

Candidate Starts for CrazyRich_71:

(Start: 7 @43398 has 5 MA's), (Start: 9 @43416 has 38 MA's), (22, 43545), (23, 43575), (28, 43635), (30, 43656), (32, 43680), (34, 43692), (35, 43707), (36, 43719), (37, 43746), (39, 43764),

Gene: Cressida_75 Start: 45854, Stop: 46198, Start Num: 12

Candidate Starts for Cressida_75:

(Start: 10 @45848 has 2 MA's), (Start: 12 @45854 has 2 MA's), (18, 45935), (19, 45950), (20, 45959), (24, 46001), (32, 46100), (33, 46106), (34, 46112), (35, 46127),

Gene: Crisis_73 Start: 43425, Stop: 43784, Start Num: 9

Candidate Starts for Crisis_73:

(Start: 7 @43407 has 5 MA's), (Start: 9 @43425 has 38 MA's), (22, 43554), (23, 43584), (30, 43665), (34, 43701), (35, 43716), (37, 43755),

Gene: EarickHC_73 Start: 43329, Stop: 43706, Start Num: 7

Candidate Starts for EarickHC_73:

(Start: 7 @43329 has 5 MA's), (Start: 9 @43347 has 38 MA's), (22, 43476), (23, 43506), (30, 43587), (34, 43623), (35, 43638), (37, 43677), (39, 43695),

Gene: Fireman_75 Start: 45380, Stop: 45748, Start Num: 9

Candidate Starts for Fireman_75:

(Start: 7 @45362 has 5 MA's), (Start: 9 @45380 has 38 MA's), (23, 45539), (25, 45563), (26, 45566), (30, 45620), (34, 45656), (35, 45671), (36, 45683), (37, 45710), (38, 45716),

Gene: Ganandorf_71 Start: 43443, Stop: 43802, Start Num: 9

Candidate Starts for Ganandorf_71:

(Start: 7 @43425 has 5 MA's), (Start: 9 @43443 has 38 MA's), (22, 43572), (23, 43602), (30, 43683), (34, 43719), (35, 43734), (37, 43773), (39, 43791),

Gene: Gina_76 Start: 43497, Stop: 43844, Start Num: 9

Candidate Starts for Gina_76:

(Start: 7 @43479 has 5 MA's), (Start: 9 @43497 has 38 MA's), (22, 43608), (23, 43638), (30, 43716), (34, 43752), (35, 43767), (37, 43806),

Gene: Glorp_73 Start: 43407, Stop: 43766, Start Num: 9

Candidate Starts for Glorp_73:

(Start: 7 @43389 has 5 MA's), (Start: 9 @43407 has 38 MA's), (22, 43536), (23, 43566), (30, 43647), (34, 43683), (35, 43698), (37, 43737),

Gene: Hermeonysus_72 Start: 43332, Stop: 43700, Start Num: 9

Candidate Starts for Hermeonysus_72:

(Start: 7 @43314 has 5 MA's), (Start: 9 @43332 has 38 MA's), (22, 43461), (23, 43491), (28, 43551), (30, 43572), (32, 43596), (34, 43608), (35, 43623), (36, 43635), (37, 43662), (39, 43680),

Gene: Honeyfin_73 Start: 43592, Stop: 43960, Start Num: 9

Candidate Starts for Honeyfin_73:

(Start: 7 @43574 has 5 MA's), (Start: 9 @43592 has 38 MA's), (22, 43721), (23, 43751), (28, 43811), (30, 43832), (32, 43856), (34, 43868), (35, 43883), (36, 43895), (37, 43922), (39, 43940),

Gene: Jayden_73 Start: 43850, Stop: 44215, Start Num: 9

Candidate Starts for Jayden_73:

(Start: 7 @43832 has 5 MA's), (Start: 9 @43850 has 38 MA's), (14, 43874), (15, 43883), (20, 43970), (24, 44012), (34, 44123), (35, 44138), (37, 44177),

Gene: Jefe_72 Start: 43393, Stop: 43761, Start Num: 9

Candidate Starts for Jefe_72:

(Start: 7 @43375 has 5 MA's), (Start: 9 @43393 has 38 MA's), (22, 43522), (23, 43552), (28, 43612), (30, 43633), (32, 43657), (34, 43669), (35, 43684), (36, 43696), (37, 43723), (39, 43741),

Gene: Jollipop_73 Start: 43781, Stop: 44140, Start Num: 9

Candidate Starts for Jollipop_73:

(Start: 7 @43763 has 5 MA's), (Start: 9 @43781 has 38 MA's), (22, 43910), (23, 43940), (30, 44021), (34, 44057), (35, 44072), (37, 44111),

Gene: KaiHaiDragon_73 Start: 43329, Stop: 43706, Start Num: 7

Candidate Starts for KaiHaiDragon_73:

(Start: 7 @43329 has 5 MA's), (Start: 9 @43347 has 38 MA's), (22, 43476), (23, 43506), (30, 43587), (34, 43623), (35, 43638), (37, 43677), (39, 43695),

Gene: Kowalski_71 Start: 43418, Stop: 43777, Start Num: 9

Candidate Starts for Kowalski_71:

(Start: 7 @43400 has 5 MA's), (Start: 9 @43418 has 38 MA's), (22, 43547), (23, 43577), (30, 43658), (34, 43694), (35, 43709),

Gene: Kozie_72 Start: 45577, Stop: 45918, Start Num: 11

Candidate Starts for Kozie_72:

(Start: 11 @45577 has 3 MA's), (23, 45721), (24, 45727), (30, 45802), (34, 45838), (35, 45853), (37, 45892),

Gene: LittleFortune_74 Start: 43703, Stop: 44071, Start Num: 9

Candidate Starts for LittleFortune_74:

(Start: 7 @43685 has 5 MA's), (Start: 9 @43703 has 38 MA's), (22, 43832), (23, 43862), (28, 43922), (30, 43943), (32, 43967), (34, 43979), (35, 43994), (36, 44006), (37, 44033), (39, 44051),

Gene: Lucretia_72 Start: 43325, Stop: 43684, Start Num: 9

Candidate Starts for Lucretia_72:

(Start: 7 @43307 has 5 MA's), (Start: 9 @43325 has 38 MA's), (22, 43454), (24, 43490), (30, 43565), (34, 43601), (35, 43616), (37, 43655), (39, 43673),

Gene: Margaery_72 Start: 45765, Stop: 46112, Start Num: 11

Candidate Starts for Margaery_72:

(1, 45135), (2, 45159), (3, 45213), (4, 45315), (5, 45399), (Start: 11 @45765 has 3 MA's), (19, 45861), (22, 45876), (24, 45921), (30, 45996), (32, 46020), (34, 46032), (35, 46047), (37, 46086),

Gene: Matzah_74 Start: 46300, Stop: 46647, Start Num: 10

Candidate Starts for Matzah_74:

(Start: 10 @46300 has 2 MA's), (Start: 12 @46306 has 2 MA's), (13, 46309), (20, 46411), (24, 46453), (32, 46552), (33, 46558), (34, 46564), (35, 46579),

Gene: MementoMori_74 Start: 46188, Stop: 46538, Start Num: 10

Candidate Starts for MementoMori_74:

(Start: 10 @46188 has 2 MA's), (Start: 12 @46194 has 2 MA's), (13, 46197), (20, 46299), (24, 46341), (32, 46440), (34, 46452), (35, 46467),

Gene: Metamorphoo_75 Start: 44674, Stop: 45042, Start Num: 9

Candidate Starts for Metamorphoo_75:

(Start: 7 @44656 has 5 MA's), (Start: 9 @44674 has 38 MA's), (23, 44833), (24, 44839), (26, 44860), (30, 44914), (34, 44950), (35, 44965), (36, 44977), (37, 45004), (38, 45010),

Gene: NoodlelyBoi_73 Start: 44192, Stop: 44560, Start Num: 9

Candidate Starts for NoodlelyBoi_73:

(Start: 7 @44174 has 5 MA's), (Start: 9 @44192 has 38 MA's), (22, 44321), (23, 44351), (30, 44432), (34, 44468), (35, 44483), (37, 44522), (39, 44540),

Gene: Onika_71 Start: 43421, Stop: 43780, Start Num: 9

Candidate Starts for Onika_71:

(Start: 7 @43403 has 5 MA's), (Start: 9 @43421 has 38 MA's), (22, 43550), (23, 43580), (30, 43661), (34, 43697), (35, 43712),

Gene: Paschalis_72 Start: 43446, Stop: 43805, Start Num: 9

Candidate Starts for Paschalis_72:

(Start: 7 @43428 has 5 MA's), (Start: 9 @43446 has 38 MA's), (22, 43575), (23, 43605), (30, 43686), (34, 43722), (35, 43737), (37, 43776),

Gene: PhedwardCullen_70 Start: 43163, Stop: 43531, Start Num: 9

Candidate Starts for PhedwardCullen_70:

(Start: 7 @43145 has 5 MA's), (Start: 9 @43163 has 38 MA's), (22, 43292), (23, 43322), (28, 43382), (30, 43403), (32, 43427), (34, 43439), (35, 43454), (36, 43466), (37, 43493), (39, 43511),

Gene: Phorgeous_72 Start: 43229, Stop: 43588, Start Num: 9

Candidate Starts for Phorgeous_72:

(Start: 7 @43211 has 5 MA's), (Start: 9 @43229 has 38 MA's), (22, 43358), (23, 43388), (30, 43469), (34, 43505), (35, 43520), (37, 43559), (39, 43577),

Gene: Phrancesco_72 Start: 43552, Stop: 43911, Start Num: 9

Candidate Starts for Phrancesco_72:

(Start: 7 @43534 has 5 MA's), (Start: 9 @43552 has 38 MA's), (22, 43681), (24, 43717), (30, 43792), (34, 43828), (35, 43843), (37, 43882), (39, 43900),

Gene: PierreOrion_72 Start: 43658, Stop: 44017, Start Num: 9

Candidate Starts for PierreOrion_72:

(Start: 7 @43640 has 5 MA's), (Start: 9 @43658 has 38 MA's), (13, 43676), (22, 43787), (23, 43817), (30, 43898), (34, 43934), (35, 43949), (37, 43988), (39, 44006),

Gene: PiperSansNom_73 Start: 43731, Stop: 44090, Start Num: 9

Candidate Starts for PiperSansNom_73:

(Start: 7 @43713 has 5 MA's), (Start: 9 @43731 has 38 MA's), (22, 43860), (23, 43890), (30, 43971), (34, 44007), (35, 44022), (37, 44061), (39, 44079),

Gene: Piperis_73 Start: 43354, Stop: 43713, Start Num: 9

Candidate Starts for Piperis_73:

(Start: 7 @43336 has 5 MA's), (Start: 9 @43354 has 38 MA's), (22, 43483), (23, 43513), (30, 43594), (34, 43630), (35, 43645),

Gene: Pulchra_74 Start: 43732, Stop: 44109, Start Num: 7

Candidate Starts for Pulchra_74:

(Start: 7 @43732 has 5 MA's), (Start: 9 @43750 has 38 MA's), (22, 43879), (24, 43915), (30, 43990), (34, 44026), (35, 44041), (37, 44080), (39, 44098),

Gene: Quhwah_76 Start: 44039, Stop: 44398, Start Num: 9

Candidate Starts for Quhwah_76:

(Start: 7 @44021 has 5 MA's), (Start: 9 @44039 has 38 MA's), (22, 44168), (23, 44198), (30, 44279), (34, 44315), (35, 44330), (37, 44369),

Gene: Ramiel05_71 Start: 43418, Stop: 43777, Start Num: 9

Candidate Starts for Ramiel05_71:

(Start: 7 @43400 has 5 MA's), (Start: 9 @43418 has 38 MA's), (22, 43547), (23, 43577), (30, 43658), (34, 43694), (35, 43709),

Gene: RobsFeet_76 Start: 44960, Stop: 45328, Start Num: 9

Candidate Starts for RobsFeet_76:

(Start: 7 @44942 has 5 MA's), (Start: 9 @44960 has 38 MA's), (25, 45143), (26, 45146), (30, 45200), (34, 45236), (35, 45251), (36, 45263), (37, 45290), (38, 45296),

Gene: Rockwell_71 Start: 43442, Stop: 43801, Start Num: 9

Candidate Starts for Rockwell_71:

(Start: 7 @43424 has 5 MA's), (Start: 9 @43442 has 38 MA's), (22, 43571), (23, 43601), (30, 43682), (34, 43718), (35, 43733), (37, 43772), (39, 43790),

Gene: Savannah_71 Start: 43469, Stop: 43828, Start Num: 9

Candidate Starts for Savannah_71:

(Start: 7 @43451 has 5 MA's), (Start: 9 @43469 has 38 MA's), (22, 43598), (23, 43628), (30, 43709), (34, 43745), (35, 43760), (37, 43799),

Gene: Scumberland_74 Start: 43664, Stop: 44023, Start Num: 9

Candidate Starts for Scumberland_74:

(Start: 7 @43646 has 5 MA's), (Start: 9 @43664 has 38 MA's), (22, 43793), (23, 43823), (30, 43904), (34, 43940), (35, 43955), (37, 43994),

Gene: Selwyn23_73 Start: 43581, Stop: 43940, Start Num: 9

Candidate Starts for Selwyn23_73:

(Start: 7 @43563 has 5 MA's), (Start: 9 @43581 has 38 MA's), (22, 43710), (23, 43740), (30, 43821), (34, 43857), (35, 43872), (37, 43911),

Gene: Shotgun_72 Start: 43348, Stop: 43716, Start Num: 9

Candidate Starts for Shotgun_72:

(Start: 7 @43330 has 5 MA's), (Start: 9 @43348 has 38 MA's), (22, 43477), (23, 43507), (28, 43567), (30, 43588), (32, 43612), (34, 43624), (35, 43639), (36, 43651), (37, 43678), (39, 43696),

Gene: Shrubaron_76 Start: 44555, Stop: 44923, Start Num: 9

Candidate Starts for Shrubaron_76:

(Start: 7 @44537 has 5 MA's), (Start: 9 @44555 has 38 MA's), (23, 44714), (25, 44738), (26, 44741), (30, 44795), (34, 44831), (35, 44846), (36, 44858), (37, 44885), (38, 44891),

Gene: SirFrank_72 Start: 43638, Stop: 44000, Start Num: 9

Candidate Starts for SirFrank_72:

(Start: 7 @43620 has 5 MA's), (Start: 9 @43638 has 38 MA's), (22, 43767), (23, 43797), (30, 43878), (34, 43914), (35, 43929), (37, 43968), (39, 43986),

Gene: Skugga_72 Start: 43886, Stop: 44221, Start Num: 9

Candidate Starts for Skugga_72:

(Start: 7 @43868 has 5 MA's), (Start: 9 @43886 has 38 MA's), (17, 43955), (19, 43976), (25, 44036), (26, 44039), (30, 44093), (34, 44129), (35, 44144), (37, 44183),

Gene: Smarties_82 Start: 45244, Stop: 45603, Start Num: 9

Candidate Starts for Smarties_82:

(Start: 7 @45226 has 5 MA's), (Start: 9 @45244 has 38 MA's), (21, 45370), (23, 45403), (24, 45409), (26, 45430), (34, 45520), (35, 45535), (37, 45574),

Gene: Teamocil_76 Start: 43590, Stop: 43937, Start Num: 9

Candidate Starts for Teamocil_76:

(Start: 7 @43572 has 5 MA's), (Start: 9 @43590 has 38 MA's), (22, 43701), (23, 43731), (30, 43809), (34, 43845), (35, 43860), (37, 43899),

Gene: Terij_72 Start: 44790, Stop: 45137, Start Num: 11

Candidate Starts for Terij_72:

(1, 44181), (2, 44205), (3, 44259), (4, 44355), (6, 44616), (Start: 11 @44790 has 3 MA's), (19, 44886), (22, 44901), (24, 44946), (27, 44982), (30, 45021), (34, 45057), (35, 45072),

Gene: Tyrumbra_71 Start: 44185, Stop: 44544, Start Num: 9

Candidate Starts for Tyrumbra_71:

(Start: 7 @44167 has 5 MA's), (Start: 9 @44185 has 38 MA's), (16, 44254), (22, 44314), (23, 44344), (25, 44368), (26, 44371), (30, 44425), (32, 44449), (34, 44461), (35, 44476), (36, 44488), (37, 44515), (38, 44521),

Gene: Yeti_74 Start: 43380, Stop: 43748, Start Num: 9

Candidate Starts for Yeti_74:

(Start: 7 @43362 has 5 MA's), (Start: 9 @43380 has 38 MA's), (22, 43509), (23, 43539), (28, 43599), (30, 43620), (32, 43644), (34, 43656), (35, 43671), (36, 43683), (37, 43710), (39, 43728),

Gene: Zapato_72 Start: 44119, Stop: 44472, Start Num: 9

Candidate Starts for Zapato_72:

(8, 44116), (Start: 9 @44119 has 38 MA's), (14, 44143), (15, 44152), (20, 44239), (24, 44281), (34, 44392), (35, 44407),

