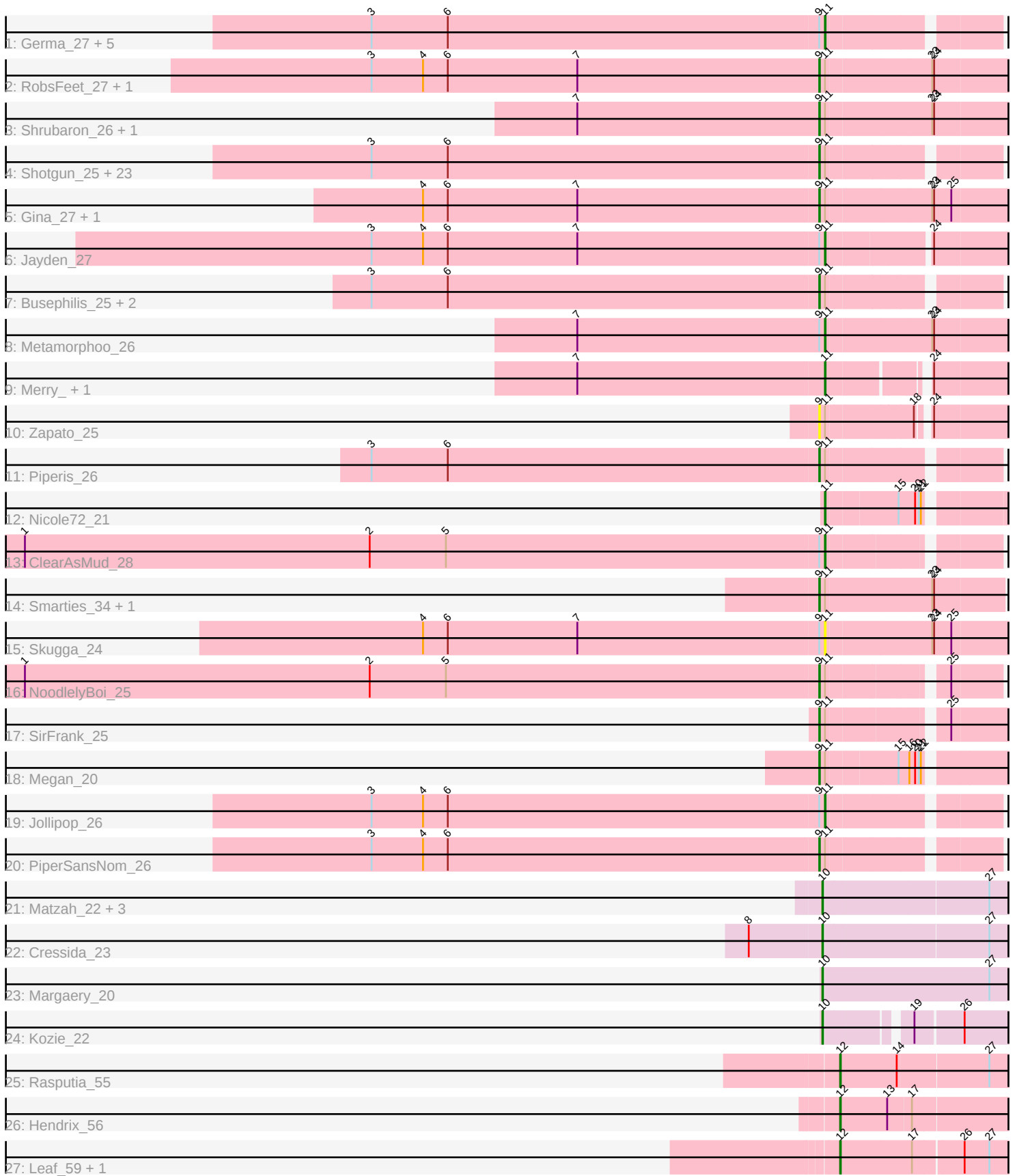


Pham 321397



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 321397 Report

This analysis was run 09/05/26 on database version 662.

Pham number 321397 has 66 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Germa_27, Quhwah_28, EarickHC_26, KaiHaiDragon_26, Ramiel05_25, Kowalski_25
- Track 2 : RobsFeet_27, Tyumbra_24
- Track 3 : Shrubaron_26, Fireman_26
- Track 4 : Shotgun_25, Paschalis_25, PhedwardCullen_25, Rockwell_25, Hermeonysus_25, LittleFortune_27, CrazyRich_25, Savannah_25, BeagleBug_25, BrazzalePHS_25, PierreOrion_26, Crisis_27, Onika_25, Yeti_26, Selwyn23_27, Cranjis_27, Lucretia_26, Glorp_27, Honeyfin_27, Jefe_26, Antares_26, Pulchra_27, Scumberland_27, Phrancesco_26
- Track 5 : Gina_27, Teamocil_27
- Track 6 : Jayden_27
- Track 7 : Busephilis_25, Ganandorf_25, Phorgeous_25
- Track 8 : Metamorphoo_26
- Track 9 : Merry_, Sunny_
- Track 10 : Zapato_25
- Track 11 : Piperis_26
- Track 12 : Nicole72_21
- Track 13 : ClearAsMud_28
- Track 14 : Smarties_34, Ariadne_34
- Track 15 : Skugga_24
- Track 16 : NoodlelyBoi_25
- Track 17 : SirFrank_25
- Track 18 : Megan_20
- Track 19 : Jollipop_26
- Track 20 : PiperSansNom_26
- Track 21 : Matzah_22, MementoMori_22, Terij_21, Cinna_21
- Track 22 : Cressida_23
- Track 23 : Margaery_20
- Track 24 : Kozie_22
- Track 25 : Rasputia_55
- Track 26 : Hendrix_56
- Track 27 : Leaf_59, Dewdrop_59

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 37 of the 60 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares_26, Ariadne_34, BeagleBug_25, BrazzalePHS_25, Busephilis_25, Cranjis_27, CrazyRich_25, Crisis_27, Fireman_26, Ganandorf_25, Gina_27, Glorp_27, Hermeonysus_25, Honeyfin_27, Jefe_26, LittleFortune_27, Lucretia_26, Megan_20, NoodlelyBoi_25, Onika_25, Paschalis_25, PhedwardCullen_25, Phorgeous_25, Phrancesco_26, PierreOrion_26, PiperSansNom_26, Piperis_26, Pulchra_27, RobsFeet_27, Rockwell_25, Savannah_25, Scumberland_27, Selwyn23_27, Shotgun_25, Shrubaron_26, SirFrank_25, Smarties_34, Teamocil_27, Tyumbra_24, Yeti_26, Zapato_25,

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

- ClearAsMud_28, EarickHC_26, Germa_27, Jayden_27, Jollipop_26, KaiHaiDragon_26, Kowalski_25, Metamorphoo_26, Quhwah_28, Ramiel05_25, Skugga_24,

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

- Cinna_21, Cressida_23, Dewdrop_59, Hendrix_56, Kozie_22, Leaf_59, Margaery_20, Matzah_22, MementoMori_22, Merry_, Nicole72_21, Rasputia_55, Sunny_, Terij_21,

Summary by start number:

Start 9:

- Found in 52 of 66 (78.8%) of genes in pham
- Manual Annotations of this start: 37 of 60
- Called 78.8% of time when present
- Phage (with cluster) where this start called: Antares_26 (EC), Ariadne_34 (EC), BeagleBug_25 (EC), BrazzalePHS_25 (EC), Busephilis_25 (EC), Cranjis_27 (EC), CrazyRich_25 (EC), Crisis_27 (EC), Fireman_26 (EC), Ganandorf_25 (EC), Gina_27 (EC), Glorp_27 (EC), Hermeonysus_25 (EC), Honeyfin_27 (EC), Jefe_26 (EC), LittleFortune_27 (EC), Lucretia_26 (EC), Megan_20 (EC), NoodlelyBoi_25 (EC), Onika_25 (EC), Paschalis_25 (EC), PhedwardCullen_25 (EC), Phorgeous_25 (EC), Phrancesco_26 (EC), PierreOrion_26 (EC), PiperSansNom_26 (EC), Piperis_26 (EC), Pulchra_27 (EC), RobsFeet_27 (EC), Rockwell_25 (EC), Savannah_25 (EC), Scumberland_27 (EC), Selwyn23_27 (EC), Shotgun_25 (EC), Shrubaron_26 (EC), SirFrank_25 (EC), Smarties_34 (EC), Teamocil_27 (EC), Tyumbra_24 (EC), Yeti_26 (EC), Zapato_25 (EC),

Start 10:

- Found in 7 of 66 (10.6%) of genes in pham
- Manual Annotations of this start: 7 of 60
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cinna_21 (EI), Cressida_23 (EI), Kozie_22 (EI), Margaery_20 (EI), Matzah_22 (EI), MementoMori_22 (EI), Terij_21 (EI),

Start 11:

- Found in 55 of 66 (83.3%) of genes in pham
- Manual Annotations of this start: 12 of 60

- Called 25.5% of time when present
- Phage (with cluster) where this start called: ClearAsMud_28 (EC), EarickHC_26 (EC), Germa_27 (EC), Jayden_27 (EC), Jollipop_26 (EC), KaiHaiDragon_26 (EC), Kowalski_25 (EC), Merry_ (EC), Metamorphoo_26 (EC), Nicole72_21 (EC), Quhwah_28 (EC), Ramiel05_25 (EC), Skugga_24 (EC), Sunny_ (EC),

Start 12:

- Found in 4 of 66 (6.1%) of genes in pham
- Manual Annotations of this start: 4 of 60
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dewdrop_59 (GC), Hendrix_56 (GC), Leaf_59 (GC), Rasputia_55 (GC),

Summary by clusters:

There are 3 clusters represented in this pham: GC, EI, EC,

Info for manual annotations of cluster EC:

- Start number 9 was manually annotated 37 times for cluster EC.
- Start number 11 was manually annotated 12 times for cluster EC.

Info for manual annotations of cluster EI:

- Start number 10 was manually annotated 7 times for cluster EI.

Info for manual annotations of cluster GC:

- Start number 12 was manually annotated 4 times for cluster GC.

Gene Information:

Gene: Antares_26 Start: 13622, Stop: 13864, Start Num: 9

Candidate Starts for Antares_26:

(3, 12920), (6, 13040), (Start: 9 @13622 has 37 MA's), (Start: 11 @13628 has 12 MA's),

Gene: Ariadne_34 Start: 15114, Stop: 15389, Start Num: 9

Candidate Starts for Ariadne_34:

(Start: 9 @15114 has 37 MA's), (Start: 11 @15120 has 12 MA's), (23, 15279), (24, 15282),

Gene: BeagleBug_25 Start: 13400, Stop: 13642, Start Num: 9

Candidate Starts for BeagleBug_25:

(3, 12698), (6, 12818), (Start: 9 @13400 has 37 MA's), (Start: 11 @13406 has 12 MA's),

Gene: BrazzalePHS_25 Start: 13415, Stop: 13657, Start Num: 9

Candidate Starts for BrazzalePHS_25:

(3, 12713), (6, 12833), (Start: 9 @13415 has 37 MA's), (Start: 11 @13421 has 12 MA's),

Gene: Busephilis_25 Start: 13353, Stop: 13595, Start Num: 9

Candidate Starts for Busephilis_25:

(3, 12651), (6, 12771), (Start: 9 @13353 has 37 MA's), (Start: 11 @13359 has 12 MA's),

Gene: Cinna_21 Start: 12839, Stop: 13123, Start Num: 10

Candidate Starts for Cinna_21:

(Start: 10 @12839 has 7 MA's), (27, 13088),

Gene: ClearAsMud_28 Start: 14156, Stop: 14386, Start Num: 11

Candidate Starts for ClearAsMud_28:

(1, 12902), (2, 13445), (5, 13565), (Start: 9 @14150 has 37 MA's), (Start: 11 @14156 has 12 MA's),

Gene: Cranjis_27 Start: 13577, Stop: 13819, Start Num: 9

Candidate Starts for Cranjis_27:

(3, 12875), (6, 12995), (Start: 9 @13577 has 37 MA's), (Start: 11 @13583 has 12 MA's),

Gene: CrazyRich_25 Start: 13387, Stop: 13629, Start Num: 9

Candidate Starts for CrazyRich_25:

(3, 12685), (6, 12805), (Start: 9 @13387 has 37 MA's), (Start: 11 @13393 has 12 MA's),

Gene: Cressida_23 Start: 12873, Stop: 13157, Start Num: 10

Candidate Starts for Cressida_23:

(8, 12762), (Start: 10 @12873 has 7 MA's), (27, 13122),

Gene: Crisis_27 Start: 13372, Stop: 13614, Start Num: 9

Candidate Starts for Crisis_27:

(3, 12670), (6, 12790), (Start: 9 @13372 has 37 MA's), (Start: 11 @13378 has 12 MA's),

Gene: Dewdrop_59 Start: 29132, Stop: 29386, Start Num: 12

Candidate Starts for Dewdrop_59:

(Start: 12 @29132 has 4 MA's), (17, 29243), (26, 29318), (27, 29357),

Gene: EarickHC_26 Start: 13304, Stop: 13540, Start Num: 11

Candidate Starts for EarickHC_26:

(3, 12596), (6, 12716), (Start: 9 @13298 has 37 MA's), (Start: 11 @13304 has 12 MA's),

Gene: Fireman_26 Start: 13019, Stop: 13297, Start Num: 9

Candidate Starts for Fireman_26:

(7, 12638), (Start: 9 @13019 has 37 MA's), (Start: 11 @13025 has 12 MA's), (23, 13181), (24, 13184),

Gene: Ganandorf_25 Start: 13434, Stop: 13676, Start Num: 9

Candidate Starts for Ganandorf_25:

(3, 12732), (6, 12852), (Start: 9 @13434 has 37 MA's), (Start: 11 @13440 has 12 MA's),

Gene: Germa_27 Start: 13269, Stop: 13505, Start Num: 11

Candidate Starts for Germa_27:

(3, 12561), (6, 12681), (Start: 9 @13263 has 37 MA's), (Start: 11 @13269 has 12 MA's),

Gene: Gina_27 Start: 12706, Stop: 12984, Start Num: 9

Candidate Starts for Gina_27:

(4, 12085), (6, 12124), (7, 12328), (Start: 9 @12706 has 37 MA's), (Start: 11 @12712 has 12 MA's),
(23, 12868), (24, 12871), (25, 12898),

Gene: Glorp_27 Start: 13436, Stop: 13678, Start Num: 9

Candidate Starts for Glorp_27:

(3, 12734), (6, 12854), (Start: 9 @13436 has 37 MA's), (Start: 11 @13442 has 12 MA's),

Gene: Hendrix_56 Start: 29152, Stop: 29406, Start Num: 12

Candidate Starts for Hendrix_56:

(Start: 12 @29152 has 4 MA's), (13, 29224), (17, 29260),

Gene: Hermeonysus_25 Start: 13304, Stop: 13546, Start Num: 9

Candidate Starts for Hermeonysus_25:

(3, 12602), (6, 12722), (Start: 9 @13304 has 37 MA's), (Start: 11 @13310 has 12 MA's),

Gene: Honeyfin_27 Start: 13619, Stop: 13861, Start Num: 9

Candidate Starts for Honeyfin_27:

(3, 12917), (6, 13037), (Start: 9 @13619 has 37 MA's), (Start: 11 @13625 has 12 MA's),

Gene: Jayden_27 Start: 13098, Stop: 13352, Start Num: 11

Candidate Starts for Jayden_27:

(3, 12390), (4, 12471), (6, 12510), (7, 12714), (Start: 9 @13092 has 37 MA's), (Start: 11 @13098 has 12 MA's), (24, 13239),

Gene: Jefe_26 Start: 13357, Stop: 13599, Start Num: 9

Candidate Starts for Jefe_26:

(3, 12655), (6, 12775), (Start: 9 @13357 has 37 MA's), (Start: 11 @13363 has 12 MA's),

Gene: Jollipop_26 Start: 13711, Stop: 13947, Start Num: 11

Candidate Starts for Jollipop_26:

(3, 13003), (4, 13084), (6, 13123), (Start: 9 @13705 has 37 MA's), (Start: 11 @13711 has 12 MA's),

Gene: KaiHaiDragon_26 Start: 13304, Stop: 13540, Start Num: 11

Candidate Starts for KaiHaiDragon_26:

(3, 12596), (6, 12716), (Start: 9 @13298 has 37 MA's), (Start: 11 @13304 has 12 MA's),

Gene: Kowalski_25 Start: 13420, Stop: 13656, Start Num: 11

Candidate Starts for Kowalski_25:

(3, 12712), (6, 12832), (Start: 9 @13414 has 37 MA's), (Start: 11 @13420 has 12 MA's),

Gene: Kozie_22 Start: 12878, Stop: 13129, Start Num: 10

Candidate Starts for Kozie_22:

(Start: 10 @12878 has 7 MA's), (19, 12989), (26, 13061),

Gene: Leaf_59 Start: 29132, Stop: 29386, Start Num: 12

Candidate Starts for Leaf_59:

(Start: 12 @29132 has 4 MA's), (17, 29243), (26, 29318), (27, 29357),

Gene: LittleFortune_27 Start: 13661, Stop: 13903, Start Num: 9

Candidate Starts for LittleFortune_27:

(3, 12959), (6, 13079), (Start: 9 @13661 has 37 MA's), (Start: 11 @13667 has 12 MA's),

Gene: Lucretia_26 Start: 13351, Stop: 13593, Start Num: 9

Candidate Starts for Lucretia_26:

(3, 12649), (6, 12769), (Start: 9 @13351 has 37 MA's), (Start: 11 @13357 has 12 MA's),

Gene: Margaery_20 Start: 12616, Stop: 12906, Start Num: 10

Candidate Starts for Margaery_20:

(Start: 10 @12616 has 7 MA's), (27, 12871),

Gene: Matzah_22 Start: 12816, Stop: 13100, Start Num: 10

Candidate Starts for Matzah_22:

(Start: 10 @12816 has 7 MA's), (27, 13065),

Gene: Megan_20 Start: 14422, Stop: 14679, Start Num: 9

Candidate Starts for Megan_20:

(Start: 9 @14422 has 37 MA's), (Start: 11 @14431 has 12 MA's), (15, 14533), (16, 14548), (20, 14557), (21, 14563), (22, 14566),

Gene: MementoMori_22 Start: 12532, Stop: 12816, Start Num: 10

Candidate Starts for MementoMori_22:

(Start: 10 @12532 has 7 MA's), (27, 12781),

Gene: Merry_ Start: 13679, Stop: 13921, Start Num: 11

Candidate Starts for Merry_:

(7, 13295), (Start: 11 @13679 has 12 MA's), (24, 13808),

Gene: Metamorphoo_26 Start: 13011, Stop: 13283, Start Num: 11

Candidate Starts for Metamorphoo_26:

(7, 12624), (Start: 9 @13005 has 37 MA's), (Start: 11 @13011 has 12 MA's), (23, 13167), (24, 13170),

Gene: Nicole72_21 Start: 14824, Stop: 15069, Start Num: 11

Candidate Starts for Nicole72_21:

(Start: 11 @14824 has 12 MA's), (15, 14926), (20, 14950), (21, 14956), (22, 14959),

Gene: NoodlelyBoi_25 Start: 13455, Stop: 13691, Start Num: 9

Candidate Starts for NoodlelyBoi_25:

(1, 12207), (2, 12750), (5, 12870), (Start: 9 @13455 has 37 MA's), (Start: 11 @13461 has 12 MA's), (25, 13614),

Gene: Onika_25 Start: 13388, Stop: 13630, Start Num: 9

Candidate Starts for Onika_25:

(3, 12686), (6, 12806), (Start: 9 @13388 has 37 MA's), (Start: 11 @13394 has 12 MA's),

Gene: Paschalis_25 Start: 13403, Stop: 13645, Start Num: 9

Candidate Starts for Paschalis_25:

(3, 12701), (6, 12821), (Start: 9 @13403 has 37 MA's), (Start: 11 @13409 has 12 MA's),

Gene: PhedwardCullen_25 Start: 13147, Stop: 13389, Start Num: 9

Candidate Starts for PhedwardCullen_25:

(3, 12445), (6, 12565), (Start: 9 @13147 has 37 MA's), (Start: 11 @13153 has 12 MA's),

Gene: Phorgeous_25 Start: 13255, Stop: 13497, Start Num: 9

Candidate Starts for Phorgeous_25:

(3, 12553), (6, 12673), (Start: 9 @13255 has 37 MA's), (Start: 11 @13261 has 12 MA's),

Gene: Phrancesco_26 Start: 13534, Stop: 13776, Start Num: 9

Candidate Starts for Phrancesco_26:

(3, 12832), (6, 12952), (Start: 9 @13534 has 37 MA's), (Start: 11 @13540 has 12 MA's),

Gene: PierreOrion_26 Start: 13558, Stop: 13800, Start Num: 9

Candidate Starts for PierreOrion_26:

(3, 12856), (6, 12976), (Start: 9 @13558 has 37 MA's), (Start: 11 @13564 has 12 MA's),

Gene: PiperSansNom_26 Start: 13710, Stop: 13952, Start Num: 9

Candidate Starts for PiperSansNom_26:

(3, 13008), (4, 13089), (6, 13128), (Start: 9 @13710 has 37 MA's), (Start: 11 @13716 has 12 MA's),

Gene: Piperis_26 Start: 13380, Stop: 13622, Start Num: 9

Candidate Starts for Piperis_26:

(3, 12678), (6, 12798), (Start: 9 @13380 has 37 MA's), (Start: 11 @13386 has 12 MA's),

Gene: Pulchra_27 Start: 13779, Stop: 14021, Start Num: 9

Candidate Starts for Pulchra_27:

(3, 13077), (6, 13197), (Start: 9 @13779 has 37 MA's), (Start: 11 @13785 has 12 MA's),

Gene: Quhwah_28 Start: 13776, Stop: 14012, Start Num: 11

Candidate Starts for Quhwah_28:

(3, 13068), (6, 13188), (Start: 9 @13770 has 37 MA's), (Start: 11 @13776 has 12 MA's),

Gene: Ramiel05_25 Start: 13420, Stop: 13656, Start Num: 11

Candidate Starts for Ramiel05_25:

(3, 12712), (6, 12832), (Start: 9 @13414 has 37 MA's), (Start: 11 @13420 has 12 MA's),

Gene: Rasputia_55 Start: 28838, Stop: 29092, Start Num: 12

Candidate Starts for Rasputia_55:

(Start: 12 @28838 has 4 MA's), (14, 28925), (27, 29063),

Gene: RobsFeet_27 Start: 13286, Stop: 13564, Start Num: 9

Candidate Starts for RobsFeet_27:

(3, 12581), (4, 12662), (6, 12701), (7, 12905), (Start: 9 @13286 has 37 MA's), (Start: 11 @13292 has 12 MA's), (23, 13448), (24, 13451),

Gene: Rockwell_25 Start: 13414, Stop: 13656, Start Num: 9

Candidate Starts for Rockwell_25:

(3, 12712), (6, 12832), (Start: 9 @13414 has 37 MA's), (Start: 11 @13420 has 12 MA's),

Gene: Savannah_25 Start: 13438, Stop: 13680, Start Num: 9

Candidate Starts for Savannah_25:

(3, 12736), (6, 12856), (Start: 9 @13438 has 37 MA's), (Start: 11 @13444 has 12 MA's),

Gene: Scumberland_27 Start: 13629, Stop: 13871, Start Num: 9

Candidate Starts for Scumberland_27:

(3, 12927), (6, 13047), (Start: 9 @13629 has 37 MA's), (Start: 11 @13635 has 12 MA's),

Gene: Selwyn23_27 Start: 13607, Stop: 13849, Start Num: 9

Candidate Starts for Selwyn23_27:

(3, 12905), (6, 13025), (Start: 9 @13607 has 37 MA's), (Start: 11 @13613 has 12 MA's),

Gene: Shotgun_25 Start: 13236, Stop: 13478, Start Num: 9

Candidate Starts for Shotgun_25:

(3, 12534), (6, 12654), (Start: 9 @13236 has 37 MA's), (Start: 11 @13242 has 12 MA's),

Gene: Shrubaron_26 Start: 12918, Stop: 13196, Start Num: 9

Candidate Starts for Shrubaron_26:

(7, 12537), (Start: 9 @12918 has 37 MA's), (Start: 11 @12924 has 12 MA's), (23, 13080), (24, 13083),

Gene: SirFrank_25 Start: 13305, Stop: 13550, Start Num: 9

Candidate Starts for SirFrank_25:

(Start: 9 @13305 has 37 MA's), (Start: 11 @13311 has 12 MA's), (25, 13464),

Gene: Skugga_24 Start: 12643, Stop: 12915, Start Num: 11

Candidate Starts for Skugga_24:

(4, 12016), (6, 12055), (7, 12259), (Start: 9 @12637 has 37 MA's), (Start: 11 @12643 has 12 MA's), (23, 12799), (24, 12802), (25, 12829),

Gene: Smarties_34 Start: 15114, Stop: 15389, Start Num: 9

Candidate Starts for Smarties_34:

(Start: 9 @15114 has 37 MA's), (Start: 11 @15120 has 12 MA's), (23, 15279), (24, 15282),

Gene: Sunny_ Start: 13679, Stop: 13921, Start Num: 11

Candidate Starts for Sunny_:

(7, 13295), (Start: 11 @13679 has 12 MA's), (24, 13808),

Gene: Teamocil_27 Start: 12805, Stop: 13083, Start Num: 9

Candidate Starts for Teamocil_27:

(4, 12184), (6, 12223), (7, 12427), (Start: 9 @12805 has 37 MA's), (Start: 11 @12811 has 12 MA's), (23, 12967), (24, 12970), (25, 12997),

Gene: Terij_21 Start: 12677, Stop: 12964, Start Num: 10

Candidate Starts for Terij_21:

(Start: 10 @12677 has 7 MA's), (27, 12929),

Gene: Tyumbra_24 Start: 12362, Stop: 12640, Start Num: 9

Candidate Starts for Tyumbra_24:

(3, 11657), (4, 11738), (6, 11777), (7, 11981), (Start: 9 @12362 has 37 MA's), (Start: 11 @12368 has 12 MA's), (23, 12524), (24, 12527),

Gene: Yeti_26 Start: 13410, Stop: 13652, Start Num: 9

Candidate Starts for Yeti_26:

(3, 12708), (6, 12828), (Start: 9 @13410 has 37 MA's), (Start: 11 @13416 has 12 MA's),

Gene: Zapato_25 Start: 13029, Stop: 13283, Start Num: 9

Candidate Starts for Zapato_25:

(Start: 9 @13029 has 37 MA's), (Start: 11 @13035 has 12 MA's), (18, 13158), (24, 13170),