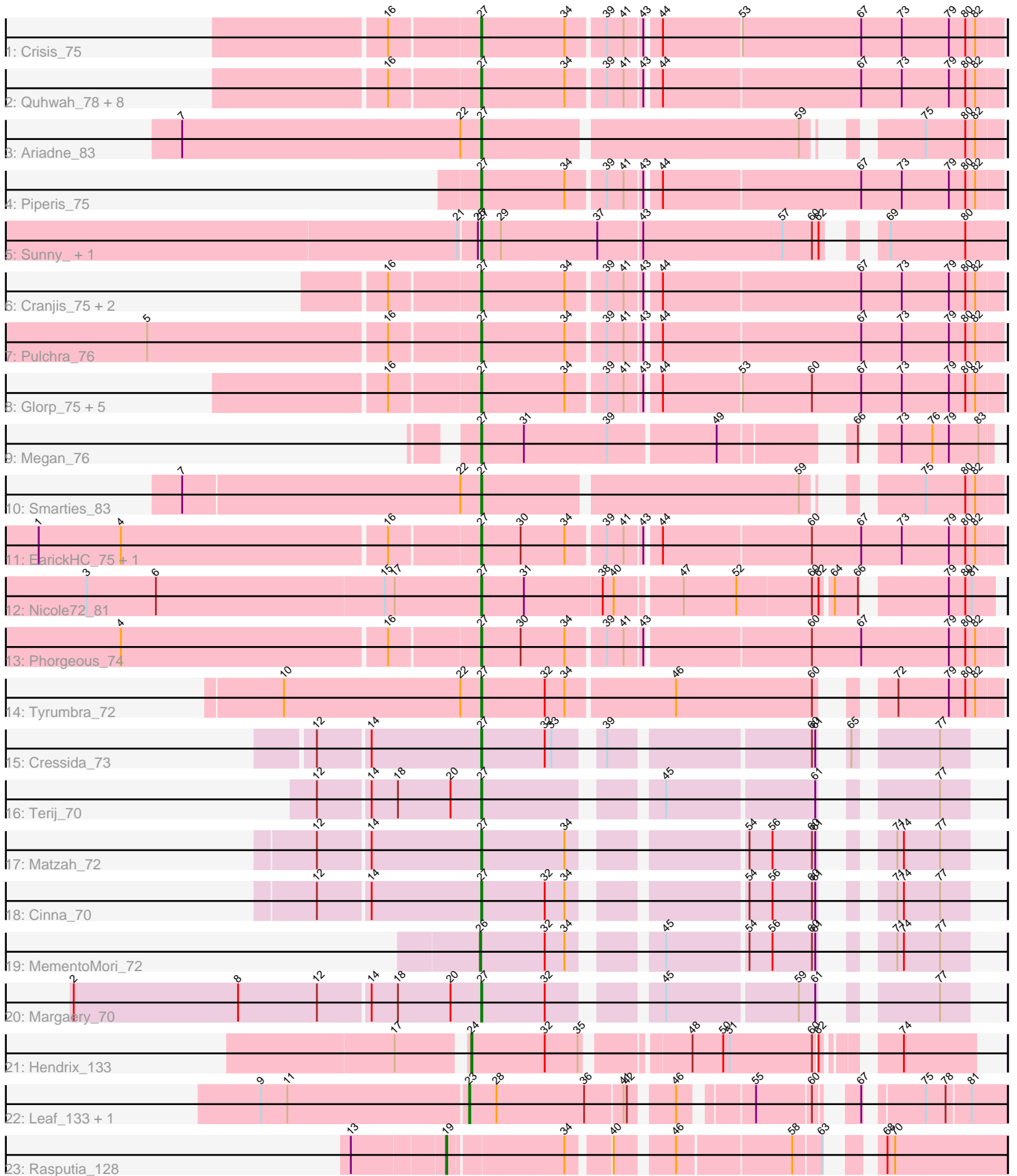


Pham 221569



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 221569 Report

This analysis was run 03/28/25 on database version 593.

Pham number 221569 has 41 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Crisis_75
- Track 2 : Quhwah_78, Scumberland_76, Onika_73, Ramiel05_73, Antares_74, PiperSansNom_75, Kowalski_73, Savannah_73, BrazzalePHS_73
- Track 3 : Ariadne_83
- Track 4 : Piperis_75
- Track 5 : Sunny_, Merry_
- Track 6 : Cranjjs_75, Phrancesco_74, Busephilis_73
- Track 7 : Pulchra_76
- Track 8 : Glorp_75, Jollipop_75, Hermeonysus_74, Paschalis_74, Selwyn23_75, Jefe_74
- Track 9 : Megan_76
- Track 10 : Smarties_83
- Track 11 : EarickHC_75, KaiHaiDragon_75
- Track 12 : Nicole72_81
- Track 13 : Phorgeous_74
- Track 14 : Tyumbra_72
- Track 15 : Cressida_73
- Track 16 : Terij_70
- Track 17 : Matzah_72
- Track 18 : Cinna_70
- Track 19 : MementoMori_72
- Track 20 : Margaery_70
- Track 21 : Hendrix_133
- Track 22 : Leaf_133, Dewdrop_133
- Track 23 : Rasputia_128

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

The start number called the most often in the published annotations is 27, it was called in 35 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares_74, Ariadne_83, BrazzalePHS_73, Busephilis_73, Cinna_70, Cranjjs_75, Cressida_73, Crisis_75, EarickHC_75, Glorp_75, Hermeonysus_74, Jefe_74,

Jollipop_75, KaiHaiDragon_75, Kowalski_73, Margaery_70, Matzah_72, Megan_76, Merry_, Nicole72_81, Onika_73, Paschalis_74, Phorgeous_74, Phrancesco_74, PiperSansNom_75, Piperis_75, Pulchra_76, Quhwah_78, Ramiel05_73, Savannah_73, Scumberland_76, Selwyn23_75, Smarties_83, Sunny_, Terij_70, Tyrumbra_72,

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

-

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

- Dewdrop_133, Hendrix_133, Leaf_133, MementoMori_72, Rasputia_128,

Summary by start number:

Start 19:

- Found in 1 of 41 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rasputia_128 (GC),

Start 23:

- Found in 2 of 41 (4.9%) of genes in pham
- Manual Annotations of this start: 2 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dewdrop_133 (GC), Leaf_133 (GC),

Start 24:

- Found in 1 of 41 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hendrix_133 (GC),

Start 26:

- Found in 1 of 41 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MementoMori_72 (EI),

Start 27:

- Found in 36 of 41 (87.8%) of genes in pham
- Manual Annotations of this start: 35 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares_74 (EC), Ariadne_83 (EC), BrazzalePHS_73 (EC), Busephilis_73 (EC), Cinna_70 (EI), Cranjis_75 (EC), Cressida_73 (EI), Crisis_75 (EC), EarickHC_75 (EC), Glorp_75 (EC), Hermeonysus_74 (EC), Jefe_74 (EC), Jollipop_75 (EC), KaiHaiDragon_75 (EC), Kowalski_73 (EC), Margaery_70 (EI), Matzah_72 (EI), Megan_76 (EC), Merry_ (EC), Nicole72_81 (EC), Onika_73 (EC), Paschalis_74 (EC), Phorgeous_74 (EC), Phrancesco_74 (EC), PiperSansNom_75 (EC), Piperis_75 (EC), Pulchra_76 (EC), Quhwah_78 (EC), Ramiel05_73 (EC), Savannah_73 (EC), Scumberland_76 (EC), Selwyn23_75 (EC), Smarties_83 (EC), Sunny_ (EC), Terij_70 (EI), Tyrumbra_72 (EC),

Summary by clusters:

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

Info for manual annotations of cluster EC:

- Start number 27 was manually annotated 30 times for cluster EC.

Info for manual annotations of cluster EI:

- Start number 26 was manually annotated 1 time for cluster EI.
- Start number 27 was manually annotated 5 times for cluster EI.

Info for manual annotations of cluster GC:

- Start number 19 was manually annotated 1 time for cluster GC.
- Start number 23 was manually annotated 2 times for cluster GC.
- Start number 24 was manually annotated 1 time for cluster GC.

Gene Information:

Gene: Antares_74 Start: 44256, Stop: 44708, Start Num: 27

Candidate Starts for Antares_74:

(16, 44178), (Start: 27 @44256 has 35 MA's), (34, 44331), (39, 44364), (41, 44379), (43, 44394), (44, 44406), (67, 44583), (73, 44619), (79, 44661), (80, 44676), (82, 44685),

Gene: Ariadne_83 Start: 45603, Stop: 46010, Start Num: 27

Candidate Starts for Ariadne_83:

(7, 45333), (22, 45585), (Start: 27 @45603 has 35 MA's), (59, 45879), (75, 45942), (80, 45978), (82, 45987),

Gene: BrazzalePHS_73 Start: 44024, Stop: 44476, Start Num: 27

Candidate Starts for BrazzalePHS_73:

(16, 43946), (Start: 27 @44024 has 35 MA's), (34, 44099), (39, 44132), (41, 44147), (43, 44162), (44, 44174), (67, 44351), (73, 44387), (79, 44429), (80, 44444), (82, 44453),

Gene: Busephilis_73 Start: 43963, Stop: 44415, Start Num: 27

Candidate Starts for Busephilis_73:

(16, 43885), (Start: 27 @43963 has 35 MA's), (34, 44038), (39, 44071), (41, 44086), (43, 44101), (44, 44113), (67, 44290), (73, 44326), (79, 44368), (80, 44383), (82, 44392),

Gene: Cinna_70 Start: 45002, Stop: 45364, Start Num: 27

Candidate Starts for Cinna_70:

(12, 44858), (14, 44903), (Start: 27 @45002 has 35 MA's), (32, 45059), (34, 45077), (54, 45209), (56, 45230), (60, 45266), (61, 45269), (71, 45299), (74, 45305), (77, 45338),

Gene: Cranjis_75 Start: 44211, Stop: 44663, Start Num: 27

Candidate Starts for Cranjis_75:

(16, 44133), (Start: 27 @44211 has 35 MA's), (34, 44286), (39, 44319), (41, 44334), (43, 44349), (44, 44361), (67, 44538), (73, 44574), (79, 44616), (80, 44631), (82, 44640),

Gene: Cressida_73 Start: 44617, Stop: 44979, Start Num: 27

Candidate Starts for Cressida_73:

(12, 44473), (14, 44518), (Start: 27 @44617 has 35 MA's), (32, 44674), (33, 44680), (39, 44713), (60, 44881), (61, 44884), (65, 44890), (77, 44953),

Gene: Crisis_75 Start: 44026, Stop: 44478, Start Num: 27

Candidate Starts for Crisis_75:

(16, 43948), (Start: 27 @44026 has 35 MA's), (34, 44101), (39, 44134), (41, 44149), (43, 44164), (44, 44176), (53, 44245), (67, 44353), (73, 44389), (79, 44431), (80, 44446), (82, 44455),

Gene: Dewdrop_133 Start: 80678, Stop: 81082, Start Num: 23

Candidate Starts for Dewdrop_133:

(9, 80492), (11, 80516), (Start: 23 @80678 has 2 MA's), (28, 80702), (36, 80780), (41, 80813), (42, 80816), (46, 80849), (55, 80903), (60, 80951), (67, 80972), (75, 81011), (78, 81029), (81, 81050),

Gene: EarickHC_75 Start: 43948, Stop: 44400, Start Num: 27

Candidate Starts for EarickHC_75:

(1, 43558), (4, 43633), (16, 43870), (Start: 27 @43948 has 35 MA's), (30, 43984), (34, 44023), (39, 44056), (41, 44071), (43, 44086), (44, 44098), (60, 44230), (67, 44275), (73, 44311), (79, 44353), (80, 44368), (82, 44377),

Gene: Glorp_75 Start: 44008, Stop: 44460, Start Num: 27

Candidate Starts for Glorp_75:

(16, 43930), (Start: 27 @44008 has 35 MA's), (34, 44083), (39, 44116), (41, 44131), (43, 44146), (44, 44158), (53, 44227), (60, 44290), (67, 44335), (73, 44371), (79, 44413), (80, 44428), (82, 44437),

Gene: Hendrix_133 Start: 84258, Stop: 84653, Start Num: 24

Candidate Starts for Hendrix_133:

(17, 84201), (Start: 24 @84258 has 1 MA's), (32, 84321), (35, 84351), (48, 84432), (50, 84459), (51, 84465), (60, 84540), (62, 84543), (74, 84591),

Gene: Hermeonysus_74 Start: 43932, Stop: 44384, Start Num: 27

Candidate Starts for Hermeonysus_74:

(16, 43854), (Start: 27 @43932 has 35 MA's), (34, 44007), (39, 44040), (41, 44055), (43, 44070), (44, 44082), (53, 44151), (60, 44214), (67, 44259), (73, 44295), (79, 44337), (80, 44352), (82, 44361),

Gene: Jefe_74 Start: 43993, Stop: 44445, Start Num: 27

Candidate Starts for Jefe_74:

(16, 43915), (Start: 27 @43993 has 35 MA's), (34, 44068), (39, 44101), (41, 44116), (43, 44131), (44, 44143), (53, 44212), (60, 44275), (67, 44320), (73, 44356), (79, 44398), (80, 44413), (82, 44422),

Gene: Jollipop_75 Start: 44382, Stop: 44834, Start Num: 27

Candidate Starts for Jollipop_75:

(16, 44304), (Start: 27 @44382 has 35 MA's), (34, 44457), (39, 44490), (41, 44505), (43, 44520), (44, 44532), (53, 44601), (60, 44664), (67, 44709), (73, 44745), (79, 44787), (80, 44802), (82, 44811),

Gene: KaiHaiDragon_75 Start: 43948, Stop: 44400, Start Num: 27

Candidate Starts for KaiHaiDragon_75:

(1, 43558), (4, 43633), (16, 43870), (Start: 27 @43948 has 35 MA's), (30, 43984), (34, 44023), (39, 44056), (41, 44071), (43, 44086), (44, 44098), (60, 44230), (67, 44275), (73, 44311), (79, 44353), (80, 44368), (82, 44377),

Gene: Kowalski_73 Start: 44019, Stop: 44471, Start Num: 27

Candidate Starts for Kowalski_73:

(16, 43941), (Start: 27 @44019 has 35 MA's), (34, 44094), (39, 44127), (41, 44142), (43, 44157), (44, 44169), (67, 44346), (73, 44382), (79, 44424), (80, 44439), (82, 44448),

Gene: Leaf_133 Start: 80609, Stop: 81013, Start Num: 23

Candidate Starts for Leaf_133:

(9, 80423), (11, 80447), (Start: 23 @80609 has 2 MA's), (28, 80633), (36, 80711), (41, 80744), (42, 80747), (46, 80780), (55, 80834), (60, 80882), (67, 80903), (75, 80942), (78, 80960), (81, 80981),

Gene: Margaery_70 Start: 44501, Stop: 44863, Start Num: 27

Candidate Starts for Margaery_70:

(2, 44135), (8, 44285), (12, 44357), (14, 44402), (18, 44426), (20, 44474), (Start: 27 @44501 has 35 MA's), (32, 44558), (45, 44639), (59, 44753), (61, 44768), (77, 44837),

Gene: Matzah_72 Start: 45069, Stop: 45431, Start Num: 27

Candidate Starts for Matzah_72:

(12, 44925), (14, 44970), (Start: 27 @45069 has 35 MA's), (34, 45144), (54, 45276), (56, 45297), (60, 45333), (61, 45336), (71, 45366), (74, 45372), (77, 45405),

Gene: Megan_76 Start: 49907, Stop: 50311, Start Num: 27

Candidate Starts for Megan_76:

(Start: 27 @49907 has 35 MA's), (31, 49946), (39, 50021), (49, 50114), (66, 50210), (73, 50231), (76, 50258), (79, 50273), (83, 50300),

Gene: MementoMori_72 Start: 44957, Stop: 45319, Start Num: 26

Candidate Starts for MementoMori_72:

(Start: 26 @44957 has 1 MA's), (32, 45014), (34, 45032), (45, 45095), (54, 45164), (56, 45185), (60, 45221), (61, 45224), (71, 45254), (74, 45260), (77, 45293),

Gene: Merry_ Start: 44999, Stop: 45430, Start Num: 27

Candidate Starts for Merry_:

(21, 44981), (25, 44996), (Start: 27 @44999 has 35 MA's), (29, 45017), (37, 45104), (43, 45143), (57, 45269), (60, 45296), (62, 45302), (69, 45329), (80, 45395),

Gene: Nicole72_81 Start: 52125, Stop: 52550, Start Num: 27

Candidate Starts for Nicole72_81:

(3, 51768), (6, 51831), (15, 52038), (17, 52047), (Start: 27 @52125 has 35 MA's), (31, 52164), (38, 52233), (40, 52242), (47, 52296), (52, 52344), (60, 52410), (62, 52416), (64, 52425), (66, 52446), (79, 52509), (80, 52524), (81, 52530),

Gene: Onika_73 Start: 44022, Stop: 44474, Start Num: 27

Candidate Starts for Onika_73:

(16, 43944), (Start: 27 @44022 has 35 MA's), (34, 44097), (39, 44130), (41, 44145), (43, 44160), (44, 44172), (67, 44349), (73, 44385), (79, 44427), (80, 44442), (82, 44451),

Gene: Paschalis_74 Start: 44047, Stop: 44499, Start Num: 27

Candidate Starts for Paschalis_74:

(16, 43969), (Start: 27 @44047 has 35 MA's), (34, 44122), (39, 44155), (41, 44170), (43, 44185), (44, 44197), (53, 44266), (60, 44329), (67, 44374), (73, 44410), (79, 44452), (80, 44467), (82, 44476),

Gene: Phorgeous_74 Start: 43830, Stop: 44282, Start Num: 27

Candidate Starts for Phorgeous_74:

(4, 43515), (16, 43752), (Start: 27 @43830 has 35 MA's), (30, 43866), (34, 43905), (39, 43938), (41, 43953), (43, 43968), (60, 44112), (67, 44157), (79, 44235), (80, 44250), (82, 44259),

Gene: Phrancesco_74 Start: 44153, Stop: 44605, Start Num: 27

Candidate Starts for Phrancesco_74:

(16, 44075), (Start: 27 @44153 has 35 MA's), (34, 44228), (39, 44261), (41, 44276), (43, 44291), (44, 44303), (67, 44480), (73, 44516), (79, 44558), (80, 44573), (82, 44582),

Gene: PiperSansNom_75 Start: 44332, Stop: 44784, Start Num: 27

Candidate Starts for PiperSansNom_75:

(16, 44254), (Start: 27 @44332 has 35 MA's), (34, 44407), (39, 44440), (41, 44455), (43, 44470), (44, 44482), (67, 44659), (73, 44695), (79, 44737), (80, 44752), (82, 44761),

Gene: Piperis_75 Start: 43955, Stop: 44407, Start Num: 27

Candidate Starts for Piperis_75:

(Start: 27 @43955 has 35 MA's), (34, 44030), (39, 44063), (41, 44078), (43, 44093), (44, 44105), (67, 44282), (73, 44318), (79, 44360), (80, 44375), (82, 44384),

Gene: Pulchra_76 Start: 44351, Stop: 44803, Start Num: 27

Candidate Starts for Pulchra_76:

(5, 44060), (16, 44273), (Start: 27 @44351 has 35 MA's), (34, 44426), (39, 44459), (41, 44474), (43, 44489), (44, 44501), (67, 44678), (73, 44714), (79, 44756), (80, 44771), (82, 44780),

Gene: Quhwah_78 Start: 44640, Stop: 45092, Start Num: 27

Candidate Starts for Quhwah_78:

(16, 44562), (Start: 27 @44640 has 35 MA's), (34, 44715), (39, 44748), (41, 44763), (43, 44778), (44, 44790), (67, 44967), (73, 45003), (79, 45045), (80, 45060), (82, 45069),

Gene: Ramiel05_73 Start: 44019, Stop: 44471, Start Num: 27

Candidate Starts for Ramiel05_73:

(16, 43941), (Start: 27 @44019 has 35 MA's), (34, 44094), (39, 44127), (41, 44142), (43, 44157), (44, 44169), (67, 44346), (73, 44382), (79, 44424), (80, 44439), (82, 44448),

Gene: Rasputia_128 Start: 81685, Stop: 82113, Start Num: 19

Candidate Starts for Rasputia_128:

(13, 81604), (Start: 19 @81685 has 1 MA's), (34, 81781), (40, 81814), (46, 81859), (58, 81958), (63, 81982), (68, 82006), (70, 82012),

Gene: Savannah_73 Start: 44070, Stop: 44522, Start Num: 27

Candidate Starts for Savannah_73:

(16, 43992), (Start: 27 @44070 has 35 MA's), (34, 44145), (39, 44178), (41, 44193), (43, 44208), (44, 44220), (67, 44397), (73, 44433), (79, 44475), (80, 44490), (82, 44499),

Gene: Scumberland_76 Start: 44265, Stop: 44717, Start Num: 27

Candidate Starts for Scumberland_76:

(16, 44187), (Start: 27 @44265 has 35 MA's), (34, 44340), (39, 44373), (41, 44388), (43, 44403), (44, 44415), (67, 44592), (73, 44628), (79, 44670), (80, 44685), (82, 44694),

Gene: Selwyn23_75 Start: 44182, Stop: 44634, Start Num: 27

Candidate Starts for Selwyn23_75:

(16, 44104), (Start: 27 @44182 has 35 MA's), (34, 44257), (39, 44290), (41, 44305), (43, 44320), (44, 44332), (53, 44401), (60, 44464), (67, 44509), (73, 44545), (79, 44587), (80, 44602), (82, 44611),

Gene: Smarties_83 Start: 45600, Stop: 46007, Start Num: 27

Candidate Starts for Smarties_83:

(7, 45333), (22, 45582), (Start: 27 @45600 has 35 MA's), (59, 45876), (75, 45939), (80, 45975), (82, 45984),

Gene: Sunny_ Start: 45001, Stop: 45432, Start Num: 27

Candidate Starts for Sunny_:

(21, 44983), (25, 44998), (Start: 27 @45001 has 35 MA's), (29, 45019), (37, 45106), (43, 45145), (57, 45271), (60, 45298), (62, 45304), (69, 45331), (80, 45397),

Gene: Terij_70 Start: 43556, Stop: 43918, Start Num: 27

Candidate Starts for Terij_70:

(12, 43412), (14, 43457), (18, 43481), (20, 43529), (Start: 27 @43556 has 35 MA's), (45, 43694), (61, 43823), (77, 43892),

Gene: Tyrumbra_72 Start: 44541, Stop: 44960, Start Num: 27

Candidate Starts for Tyrumbra_72:

(10, 44364), (22, 44523), (Start: 27 @44541 has 35 MA's), (32, 44598), (34, 44616), (46, 44712), (60, 44835), (72, 44868), (79, 44913), (80, 44928), (82, 44937),