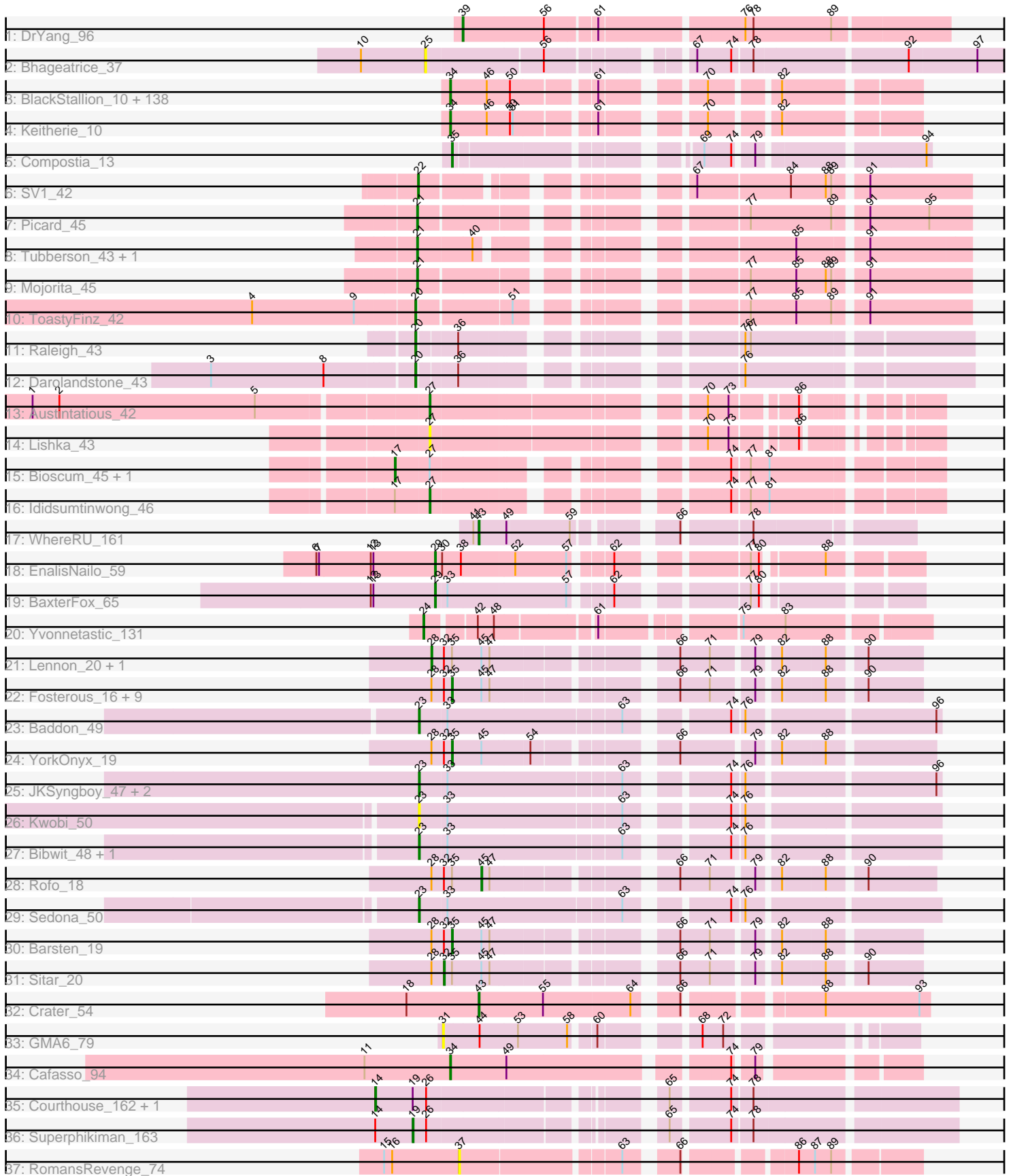


Pham 215868



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 215868 Report

This analysis was run 02/22/25 on database version 588.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 215868 has 191 members, 7 are drafts.

Phages represented in each track:

- Track 1 : DrYang\_96
- Track 2 : Bhageatrice\_37
- Track 3 : BlackStallion\_10, Pops\_10, Puhltonio\_10, Durga\_10, Sigman\_10, Chunky\_10, Riggan\_10, Soto\_10, Inchworm\_10, HSavege\_10, Omniscient\_10, SDcharge11\_10, Lego3393\_10, Zaider\_11, Mesh1\_10, Gyarad\_0010, Swish\_10, Dingo\_10, Fringe\_10, Haimas\_10, TomBombadil\_10, Oosterbaan\_10, Quisquilliae\_10, DirtJuice\_10, Anderson\_10, Roliet\_10, JacAttac\_10, Phipps\_10, Harvey\_10, Pherdinand\_10, Phamished\_10, OliverWalter\_10, Tomlarah\_10, Andre\_10, Waterdiva\_10, Matalotodo\_10, Gwilliam\_10, PhrodoBaggins\_105, JangoPhett\_10, Surely\_10, Yoshand\_10, Chah\_10, Sheila\_10, LeeLot\_10, Hetaeria\_10, Inverness\_10, Slatt\_10, Basato\_11, Hertubise\_10, Vivaldi\_10, Craff\_10, Zelda\_10, Plmatters\_10, Buckeye\_10, EmpTee\_10, Melc17\_10, Newman\_10, KLucky39\_10, Kikipoo\_10, Badfish\_10, Podrick\_10, Frankicide\_10, Cannibal\_10, Scoot17C\_10, Adriana\_10, Nacho\_0010, Lasso\_10, Thora\_10, Valjean\_10, CheetO\_10, Hartsy\_10, Spartan300\_10, LasagnaCat\_10, Virapocalypse\_10, Pipsqueak\_10, Samaymay\_10, CamL\_10, Morty\_10, GeneCoco\_10, Eremos\_10, Roscoe\_11, Tooj\_10, CampRoach\_10, Etaye\_10, Katniss\_10, Daka\_10, Fang\_10, Weher20\_10, Serpentine\_0010, ABU\_10, KlimbOn\_10, BlueHusk\_10, Hamish\_10, Prickles\_10, Olive\_10, Suffolk\_10, AltPhacts\_10, IsaacEli\_10, Mikota\_10, Orion\_10, MiniBoss\_10, OSmaximus\_10, Lulwa\_10, Colbert\_10, UAch1\_10, Trypo\_10, Vista\_10, Gophee\_10, Emiris\_10, ThreeOh3D2\_10, Kailash\_10, Charles1\_10, Horchata\_10, ProfessorX\_10, PG1\_10, Megatron\_10, Skippy\_10, Usavi\_10, QueenBeane\_10, Magic8\_10, PhatLouie\_10, FluffyNinja\_10, Phunky\_10, Zonia\_10, Nicole21\_10, YouGoGlencoco\_10, Boehler\_10, Eugenia\_10, ShiVal\_10, Murdoc\_10, KingVeVeVe\_10, Iridoclysis\_10, Kloppinator\_10, DoesntMatter\_10, PhatCats2014\_10, Numberten\_10, FriarPreacher\_10, Cobra\_10, Serendipity\_10
- Track 4 : Keitherie\_10
- Track 5 : Compostia\_13
- Track 6 : SV1\_42
- Track 7 : Picard\_45
- Track 8 : Tubberson\_43, SoJo\_43
- Track 9 : Mojourita\_45
- Track 10 : ToastyFinz\_42

- Track 11 : Raleigh\_43
- Track 12 : Darolandstone\_43
- Track 13 : Austintatious\_42
- Track 14 : Lishka\_43
- Track 15 : Bioscum\_45, PapayaSalad\_44
- Track 16 : Ididsumtinwong\_46
- Track 17 : WhereRU\_161
- Track 18 : EnalisNailo\_59
- Track 19 : BaxterFox\_65
- Track 20 : Yvonnestic\_131
- Track 21 : Lennon\_20, Vivi2\_18
- Track 22 : Fosterous\_16, Love\_20, Paries\_19, BobBob\_16, Galadriel\_20, Bibwit\_19, Tangent\_16, Keitabear\_20, Charming\_16, Nordenberg\_13
- Track 23 : Baddon\_49
- Track 24 : YorkOnyx\_19
- Track 25 : JKSyngboy\_47, Saronaya\_49, Gustavo\_49
- Track 26 : Kwobi\_50
- Track 27 : Bibwit\_48, YorkOnyx\_50
- Track 28 : Rofo\_18
- Track 29 : Sedona\_50
- Track 30 : Barsten\_19
- Track 31 : Sitar\_20
- Track 32 : Crater\_54
- Track 33 : GMA6\_79
- Track 34 : Cafasso\_94
- Track 35 : Courthouse\_162, Ariel\_165
- Track 36 : Superphikiman\_163
- Track 37 : RomansRevenge\_74

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

The start number called the most often in the published annotations is 34, it was called in 141 of the 184 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU\_10, Adriana\_10, AltPhacts\_10, Anderson\_10, Andre\_10, Badfish\_10, Basato\_11, BlackStallion\_10, BlueHusk\_10, Boehler\_10, Buckeye\_10, Cafasso\_94, CamL\_10, CampRoach\_10, Cannibal\_10, Chah\_10, Charles1\_10, CheetO\_10, Chunky\_10, Cobra\_10, Colbert\_10, Craff\_10, Daka\_10, Dingo\_10, DirtJuice\_10, DoesntMatter\_10, Durga\_10, Emiris\_10, EmpTee\_10, Eremos\_10, Etaye\_10, Eugenia\_10, Fang\_10, FluffyNinja\_10, Frankicide\_10, FriarPreacher\_10, Fringe\_10, GeneCoco\_10, Gophee\_10, Gwilliam\_10, Gyarad\_0010, HSavage\_10, Haimas\_10, Hamish\_10, Hartsy\_10, Harvey\_10, Hertubise\_10, Hetaeria\_10, Horchata\_10, Inchworm\_10, Inverness\_10, Iridoclysis\_10, IsaacEli\_10, JacAttac\_10, JangoPhett\_10, KLucky39\_10, Kailash\_10, Katniss\_10, Keitherie\_10, Kikipoo\_10, KingVeVeVe\_10, KlimbOn\_10, Kloppinator\_10, LasagnaCat\_10, Lasso\_10, LeeLot\_10, Lego3393\_10, Lulwa\_10, Magic8\_10, Matalotodo\_10, Megatron\_10, Melc17\_10, Mesh1\_10, Mikota\_10, MiniBoss\_10, Morty\_10, Murdoc\_10, Nacho\_0010, Newman\_10, Nicole21\_10, Numberten\_10, OSmaximus\_10, Olive\_10, OliverWalter\_10, Omniscient\_10, Oosterbaan\_10, Orion\_10, PG1\_10,

Phamished\_10, PhatCats2014\_10, PhatLouie\_10, Pherdinand\_10, Phipps\_10, PhrodoBaggins\_105, Phunky\_10, Pipsqueak\_10, Plmatters\_10, Podrick\_10, Pops\_10, Prickles\_10, ProfessorX\_10, Puhltonio\_10, QueenBeane\_10, Quisquiliae\_10, Riggan\_10, Roliet\_10, Roscoe\_11, SDcharge11\_10, Samaymay\_10, Scoot17C\_10, Serendipity\_10, Serpentine\_0010, Sheila\_10, ShiVal\_10, Sigman\_10, Skippy\_10, Slatt\_10, Soto\_10, Spartan300\_10, Suffolk\_10, Surely\_10, Swish\_10, Thora\_10, ThreeOh3D2\_10, TomBombadil\_10, Tomlarah\_10, Tooj\_10, Trypo\_10, UAch1\_10, Usavi\_10, Valjean\_10, Virapocalypse\_10, Vista\_10, Vivaldi\_10, Waterdiva\_10, Weher20\_10, Yoshand\_10, YouGoGlencoco\_10, Zaider\_11, Zelda\_10, Zonia\_10,

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

- 

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

- Ariel\_165, Austintatious\_42, Baddon\_49, Barsten\_19, BaxterFox\_65, Bhageatrice\_37, Bibwit\_19, Bibwit\_48, Bioscum\_45, BobBob\_16, Charming\_16, Compostia\_13, Courthouse\_162, Crater\_54, Darolandstone\_43, DrYang\_96, EnalisNailo\_59, Fosterous\_16, GMA6\_79, Galadriel\_20, Gustavo\_49, Ididsumtinwong\_46, JKSyngboy\_47, Keitabear\_20, Kwobi\_50, Lennon\_20, Lishka\_43, Love\_20, Mojarita\_45, Nordenberg\_13, PapayaSalad\_44, Paries\_19, Picard\_45, Raleigh\_43, Rofo\_18, RomansRevenge\_74, SV1\_42, Saronaya\_49, Sedona\_50, Sitar\_20, SoJo\_43, Superphikiman\_163, Tangent\_16, ToastyFinz\_42, Tubberson\_43, Vivi2\_18, WhereRU\_161, YorkOnyx\_19, YorkOnyx\_50, Yvonnestic\_131,

### Summary by start number:

Start 14:

- Found in 3 of 191 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 2 of 184
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Ariel\_165 (J), Courthouse\_162 (J),

Start 17:

- Found in 3 of 191 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 2 of 184
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bioscum\_45 (BC3), PapayaSalad\_44 (BC3),

Start 19:

- Found in 3 of 191 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 1 of 184
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Superphikiman\_163 (J),

Start 20:

- Found in 3 of 191 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 3 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darolandstone\_43 (BC2), Raleigh\_43 (BC2), ToastyFinz\_42 (BC1),

Start 21:

- Found in 4 of 191 ( 2.1% ) of genes in pham
- Manual Annotations of this start: 4 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mojorita\_45 (BC1), Picard\_45 (BC1), SoJo\_43 (BC1), Tubberson\_43 (BC1),

Start 22:

- Found in 1 of 191 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SV1\_42 (BC1),

Start 23:

- Found in 8 of 191 ( 4.2% ) of genes in pham
- Manual Annotations of this start: 5 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Baddon\_49 (DE1), Bibwit\_48 (DE1), Gustavo\_49 (DE1), JKSyngboy\_47 (DE1), Kwobi\_50 (DE1), Saronaya\_49 (DE1), Sedona\_50 (DE1), YorkOnyx\_50 (DE1),

Start 24:

- Found in 1 of 191 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yvonnestic\_131 (DD),

Start 25:

- Found in 1 of 191 ( 0.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bhageatrice\_37 (AY),

Start 27:

- Found in 5 of 191 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 2 of 184
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Austintatious\_42 (BC3), Ididsumtinwong\_46 (BC3), Lishka\_43 (BC3),

Start 28:

- Found in 16 of 191 ( 8.4% ) of genes in pham
- Manual Annotations of this start: 2 of 184
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Lennon\_20 (DE1), Vivi2\_18 (DE1),

Start 29:

- Found in 2 of 191 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 2 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaxterFox\_65 (CZ3), EnalisNailo\_59 (CY1),

Start 31:

- Found in 1 of 191 ( 0.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6\_79 (DQ),

Start 32:

- Found in 16 of 191 ( 8.4% ) of genes in pham
- Manual Annotations of this start: 1 of 184
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Sitar\_20 (DE1),

Start 34:

- Found in 141 of 191 ( 73.8% ) of genes in pham
- Manual Annotations of this start: 141 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ABU\_10 (B1), Adriana\_10 (B1), AltPhacts\_10 (B1), Anderson\_10 (B1), Andre\_10 (B1), Badfish\_10 (B1), Basato\_11 (B1), BlackStallion\_10 (B1), BlueHusk\_10 (B1), Boehler\_10 (B1), Buckeye\_10 (B1), Cafasso\_94 (DZ), CamL\_10 (B1), CampRoach\_10 (B1), Cannibal\_10 (B1), Chah\_10 (B1), Charles1\_10 (B1), CheetO\_10 (B1), Chunky\_10 (B1), Cobra\_10 (B1), Colbert\_10 (B1), Craff\_10 (B1), Daka\_10 (B1), Dingo\_10 (B1), DirtJuice\_10 (B1), DoesntMatter\_10 (B1), Durga\_10 (B1), Emiris\_10 (B1), EmpTee\_10 (B1), Eremos\_10 (B1), Etaye\_10 (B1), Eugenia\_10 (B1), Fang\_10 (B1), FluffyNinja\_10 (B1), Frankicide\_10 (B1), FriarPreacher\_10 (B1), Fringe\_10 (B1), GeneCoco\_10 (B1), Gophee\_10 (B1), Gwilliam\_10 (B1), Gyarad\_0010 (B1), HSavage\_10 (B1), Haimas\_10 (B1), Hamish\_10 (B1), Hartsy\_10 (B1), Harvey\_10 (B1), Hertubise\_10 (B1), Hetaeria\_10 (B1), Horchata\_10 (B1), Inchworm\_10 (B1), Inverness\_10 (B1), Iridoclysis\_10 (B1), IsaacEli\_10 (B1), JacAttac\_10 (B1), JangoPhett\_10 (B1), KLucky39\_10 (B1), Kailash\_10 (B1), Katniss\_10 (B1), Keitherie\_10 (B1), Kikipoo\_10 (B1), KingVeVeVe\_10 (B1), KlimbOn\_10 (B1), Kloppinator\_10 (B1), LasagnaCat\_10 (B1), Lasso\_10 (B1), LeeLot\_10 (B1), Lego3393\_10 (B1), Lulwa\_10 (B1), Magic8\_10 (B1), Matalotodo\_10 (B1), Megatron\_10 (B1), Melc17\_10 (B1), Mesh1\_10 (B1), Mikota\_10 (B1), MiniBoss\_10 (B1), Morty\_10 (B1), Murdoc\_10 (B1), Nacho\_0010 (B1), Newman\_10 (B1), Nicole21\_10 (B1), Numberten\_10 (B1), OSmaximus\_10 (B1), Olive\_10 (B1), OliverWalter\_10 (B1), Omniscient\_10 (B1), Oosterbaan\_10 (B1), Orion\_10 (B1), PG1\_10 (B1), Phamished\_10 (B1), PhatCats2014\_10 (B1), PhatLouie\_10 (B1), Pherdinand\_10 (B1), Phipps\_10 (B1), PhrodoBaggins\_105 (B1), Phunky\_10 (B1), Pipsqueak\_10 (B1), Pimatters\_10 (B1), Podrick\_10 (B1), Pops\_10 (B1), Prickles\_10 (B1), ProfessorX\_10 (B1), Puhltonio\_10 (B1), QueenBeane\_10 (B1), Quisquilliae\_10 (B1), Riggan\_10 (B1), Roliet\_10 (B1), Roscoe\_11 (B1), SDcharge11\_10 (B1), Samaymay\_10 (B1), Scoot17C\_10 (B1), Serendipity\_10 (B1), Serpentine\_0010 (B1), Sheila\_10 (B1), ShiVal\_10 (B1), Sigman\_10 (B1), Skippy\_10 (B1), Slatt\_10 (B1), Soto\_10 (B1), Spartan300\_10 (B1), Suffolk\_10 (B1), Surely\_10 (B1), Swish\_10 (B1), Thora\_10 (B1), ThreeOh3D2\_10 (B1), TomBombadil\_10 (B1), Tomlarah\_10 (B1), Tooj\_10 (B1), Trypo\_10 (B1), UAch1\_10 (B1), Usavi\_10 (B1), Valjean\_10 (B1), Virapocalypse\_10 (B1), Vista\_10 (B1), Vivaldi\_10 (B1), Waterdiva\_10 (B1), Weher20\_10 (B1), Yoshand\_10 (B1), YouGoGlencoco\_10 (B1), Zaider\_11 (B1), Zelda\_10 (B1), Zonia\_10 (B1),

Start 35:

- Found in 17 of 191 ( 8.9% ) of genes in pham

- Manual Annotations of this start: 13 of 184
- Called 76.5% of time when present
- Phage (with cluster) where this start called: Barsten\_19 (DE1), Bibwit\_19 (DE1), BobBob\_16 (DE1), Charming\_16 (DE1), Compostia\_13 (B3), Fosterous\_16 (DE1), Galadriel\_20 (DE1), Keitabear\_20 (DE1), Love\_20 (DE1), Nordenberg\_13 (DE1), Paries\_19 (DE1), Tangent\_16 (DE1), YorkOnyx\_19 (DE1),

Start 37:

- Found in 1 of 191 ( 0.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RomansRevenge\_74 (singleton),

Start 39:

- Found in 1 of 191 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DrYang\_96 (AR),

Start 43:

- Found in 2 of 191 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 2 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Crater\_54 (DN3), WhereRU\_161 (BE1),

Start 45:

- Found in 16 of 191 ( 8.4% ) of genes in pham
- Manual Annotations of this start: 1 of 184
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Rofo\_18 (DE1),

### **Summary by clusters:**

There are 17 clusters represented in this pham: CY1, BE1, B3, DE1, DD, J, singleton, AR, DZ, B1, DN3, CZ3, AY, DQ, BC1, BC2, BC3,

Info for manual annotations of cluster AR:

- Start number 39 was manually annotated 1 time for cluster AR.

Info for manual annotations of cluster B1:

- Start number 34 was manually annotated 140 times for cluster B1.

Info for manual annotations of cluster B3:

- Start number 35 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster BC1:

- Start number 20 was manually annotated 1 time for cluster BC1.
- Start number 21 was manually annotated 4 times for cluster BC1.
- Start number 22 was manually annotated 1 time for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 20 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 17 was manually annotated 2 times for cluster BC3.
- Start number 27 was manually annotated 2 times for cluster BC3.

Info for manual annotations of cluster BE1:

- Start number 43 was manually annotated 1 time for cluster BE1.

Info for manual annotations of cluster CY1:

- Start number 29 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CZ3:

- Start number 29 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster DD:

- Start number 24 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster DE1:

- Start number 23 was manually annotated 5 times for cluster DE1.
- Start number 28 was manually annotated 2 times for cluster DE1.
- Start number 32 was manually annotated 1 time for cluster DE1.
- Start number 35 was manually annotated 12 times for cluster DE1.
- Start number 45 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster DN3:

- Start number 43 was manually annotated 1 time for cluster DN3.

Info for manual annotations of cluster DZ:

- Start number 34 was manually annotated 1 time for cluster DZ.

Info for manual annotations of cluster J:

- Start number 14 was manually annotated 2 times for cluster J.
- Start number 19 was manually annotated 1 time for cluster J.

### ***Gene Information:***

Gene: ABU\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for ABU\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Adriana\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Adriana\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: AltPhacts\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for AltPhacts\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: Anderson\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Anderson\_10:



(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Andre\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for Andre\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: Ariel\_165 Start: 84168, Stop: 84737, Start Num: 14

Candidate Starts for Ariel\_165:

(Start: 14 @84168 has 2 MA's), (Start: 19 @84210 has 1 MA's), (26, 84225), (65, 84447), (74, 84504), (78, 84525),

Gene: Austintatious\_42 Start: 27716, Stop: 28177, Start Num: 27

Candidate Starts for Austintatious\_42:

(1, 27290), (2, 27320), (5, 27539), (Start: 27 @27716 has 2 MA's), (70, 27980), (73, 28001), (86, 28064),

Gene: Baddon\_49 Start: 43084, Stop: 43602, Start Num: 23

Candidate Starts for Baddon\_49:

(Start: 23 @43084 has 5 MA's), (33, 43114), (63, 43300), (74, 43390), (76, 43402), (96, 43597),

Gene: Badfish\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Badfish\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Barsten\_19 Start: 14612, Stop: 15058, Start Num: 35

Candidate Starts for Barsten\_19:

(Start: 28 @14591 has 2 MA's), (Start: 32 @14603 has 1 MA's), (Start: 35 @14612 has 13 MA's), (Start: 45 @14642 has 1 MA's), (47, 14651), (66, 14822), (71, 14855), (79, 14897), (82, 14918), (88, 14963),

Gene: Basato\_11 Start: 9177, Stop: 9611, Start Num: 34

Candidate Starts for Basato\_11:

(Start: 34 @9177 has 141 MA's), (46, 9216), (50, 9240), (61, 9321), (70, 9411), (82, 9474),

Gene: BaxterFox\_65 Start: 44276, Stop: 44731, Start Num: 29

Candidate Starts for BaxterFox\_65:

(12, 44204), (13, 44207), (Start: 29 @44276 has 2 MA's), (33, 44288), (57, 44417), (62, 44453), (77, 44570), (80, 44579),

Gene: Bhageatrice\_37 Start: 26729, Stop: 27340, Start Num: 25

Candidate Starts for Bhageatrice\_37:

(10, 26657), (25, 26729), (56, 26855), (67, 26984), (74, 27020), (78, 27041), (92, 27203), (97, 27278),

Gene: Bibwit\_48 Start: 41643, Stop: 42161, Start Num: 23

Candidate Starts for Bibwit\_48:

(Start: 23 @41643 has 5 MA's), (33, 41673), (63, 41859), (74, 41949), (76, 41961),

Gene: Bibwit\_19 Start: 14856, Stop: 15302, Start Num: 35

Candidate Starts for Bibwit\_19:

(Start: 28 @14835 has 2 MA's), (Start: 32 @14847 has 1 MA's), (Start: 35 @14856 has 13 MA's), (Start: 45 @14886 has 1 MA's), (47, 14895), (66, 15066), (71, 15099), (79, 15141), (82, 15162), (88, 15207), (90, 15243),

Gene: Bioscum\_45 Start: 29978, Stop: 30484, Start Num: 17  
Candidate Starts for Bioscum\_45:  
(Start: 17 @29978 has 2 MA's), (Start: 27 @30014 has 2 MA's), (74, 30272), (77, 30290), (81, 30311),

Gene: BlackStallion\_10 Start: 8941, Stop: 9375, Start Num: 34  
Candidate Starts for BlackStallion\_10:  
(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: BlueHusk\_10 Start: 8940, Stop: 9374, Start Num: 34  
Candidate Starts for BlueHusk\_10:  
(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: BobBob\_16 Start: 13466, Stop: 13912, Start Num: 35  
Candidate Starts for BobBob\_16:  
(Start: 28 @13445 has 2 MA's), (Start: 32 @13457 has 1 MA's), (Start: 35 @13466 has 13 MA's),  
(Start: 45 @13496 has 1 MA's), (47, 13505), (66, 13676), (71, 13709), (79, 13751), (82, 13772), (88,  
13817), (90, 13853),

Gene: Boehler\_10 Start: 8943, Stop: 9377, Start Num: 34  
Candidate Starts for Boehler\_10:  
(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Buckeye\_10 Start: 8945, Stop: 9379, Start Num: 34  
Candidate Starts for Buckeye\_10:  
(Start: 34 @8945 has 141 MA's), (46, 8984), (50, 9008), (61, 9089), (70, 9179), (82, 9242),

Gene: Cafasso\_94 Start: 55360, Stop: 55818, Start Num: 34  
Candidate Starts for Cafasso\_94:  
(11, 55264), (Start: 34 @55360 has 141 MA's), (49, 55423), (74, 55645), (79, 55663),

Gene: CamL\_10 Start: 8940, Stop: 9374, Start Num: 34  
Candidate Starts for CamL\_10:  
(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: CampRoach\_10 Start: 8940, Stop: 9374, Start Num: 34  
Candidate Starts for CampRoach\_10:  
(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Cannibal\_10 Start: 8943, Stop: 9377, Start Num: 34  
Candidate Starts for Cannibal\_10:  
(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Chah\_10 Start: 8941, Stop: 9375, Start Num: 34  
Candidate Starts for Chah\_10:  
(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Charles1\_10 Start: 8943, Stop: 9377, Start Num: 34  
Candidate Starts for Charles1\_10:  
(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Charming\_16 Start: 13468, Stop: 13914, Start Num: 35  
Candidate Starts for Charming\_16:

(Start: 28 @13447 has 2 MA's), (Start: 32 @13459 has 1 MA's), (Start: 35 @13468 has 13 MA's), (Start: 45 @13498 has 1 MA's), (47, 13507), (66, 13678), (71, 13711), (79, 13753), (82, 13774), (88, 13819), (90, 13855),

Gene: CheetO\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for CheetO\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Chunky\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Chunky\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Cobra\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Cobra\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Colbert\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Colbert\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Compostia\_13 Start: 10667, Stop: 11107, Start Num: 35

Candidate Starts for Compostia\_13:

(Start: 35 @10667 has 13 MA's), (69, 10889), (74, 10919), (79, 10937), (94, 11102),

Gene: Courthouse\_162 Start: 84612, Stop: 85181, Start Num: 14

Candidate Starts for Courthouse\_162:

(Start: 14 @84612 has 2 MA's), (Start: 19 @84654 has 1 MA's), (26, 84669), (65, 84891), (74, 84948), (78, 84969),

Gene: Craff\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Craff\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Crater\_54 Start: 35514, Stop: 35963, Start Num: 43

Candidate Starts for Crater\_54:

(18, 35433), (Start: 43 @35514 has 2 MA's), (55, 35586), (64, 35682), (66, 35718), (88, 35847), (93, 35952),

Gene: Daka\_10 Start: 8946, Stop: 9380, Start Num: 34

Candidate Starts for Daka\_10:

(Start: 34 @8946 has 141 MA's), (46, 8985), (50, 9009), (61, 9090), (70, 9180), (82, 9243),

Gene: Darolandstone\_43 Start: 33080, Stop: 33595, Start Num: 20

Candidate Starts for Darolandstone\_43:

(3, 32861), (8, 32987), (Start: 20 @33080 has 3 MA's), (36, 33119), (76, 33359),

Gene: Dingo\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Dingo\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: DirtJuice\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for DirtJuice\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: DoesntMatter\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for DoesntMatter\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: DrYang\_96 Start: 63051, Stop: 63563, Start Num: 39

Candidate Starts for DrYang\_96:

(Start: 39 @63051 has 1 MA's), (56, 63141), (61, 63192), (76, 63342), (78, 63351), (89, 63438),

Gene: Durga\_10 Start: 8957, Stop: 9391, Start Num: 34

Candidate Starts for Durga\_10:

(Start: 34 @8957 has 141 MA's), (46, 8996), (50, 9020), (61, 9101), (70, 9191), (82, 9254),

Gene: Emiris\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for Emiris\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: EmpTee\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for EmpTee\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: EnalisNailo\_59 Start: 42622, Stop: 43077, Start Num: 29

Candidate Starts for EnalisNailo\_59:

(6, 42490), (7, 42493), (12, 42550), (13, 42553), (Start: 29 @42622 has 2 MA's), (30, 42628), (38, 42649), (52, 42706), (57, 42763), (62, 42799), (77, 42916), (80, 42925), (88, 42985),

Gene: Eremos\_10 Start: 8937, Stop: 9371, Start Num: 34

Candidate Starts for Eremos\_10:

(Start: 34 @8937 has 141 MA's), (46, 8976), (50, 9000), (61, 9081), (70, 9171), (82, 9234),

Gene: Etaye\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Etaye\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Eugenia\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for Eugenia\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: Fang\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for Fang\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: FluffyNinja\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for FluffyNinja\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Fosterous\_16 Start: 14357, Stop: 14803, Start Num: 35

Candidate Starts for Fosterous\_16:

(Start: 28 @14336 has 2 MA's), (Start: 32 @14348 has 1 MA's), (Start: 35 @14357 has 13 MA's), (Start: 45 @14387 has 1 MA's), (47, 14396), (66, 14567), (71, 14600), (79, 14642), (82, 14663), (88, 14708), (90, 14744),

Gene: Frankicide\_10 Start: 8945, Stop: 9379, Start Num: 34

Candidate Starts for Frankicide\_10:

(Start: 34 @8945 has 141 MA's), (46, 8984), (50, 9008), (61, 9089), (70, 9179), (82, 9242),

Gene: FriarPreacher\_10 Start: 8946, Stop: 9380, Start Num: 34

Candidate Starts for FriarPreacher\_10:

(Start: 34 @8946 has 141 MA's), (46, 8985), (50, 9009), (61, 9090), (70, 9180), (82, 9243),

Gene: Fringe\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Fringe\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: GMA6\_79 Start: 60811, Stop: 61245, Start Num: 31

Candidate Starts for GMA6\_79:

(31, 60811), (44, 60850), (53, 60892), (58, 60946), (60, 60967), (68, 61051), (72, 61072),

Gene: Galadriel\_20 Start: 14216, Stop: 14662, Start Num: 35

Candidate Starts for Galadriel\_20:

(Start: 28 @14195 has 2 MA's), (Start: 32 @14207 has 1 MA's), (Start: 35 @14216 has 13 MA's),  
(Start: 45 @14246 has 1 MA's), (47, 14255), (66, 14426), (71, 14459), (79, 14501), (82, 14522), (88,  
14567), (90, 14603),

Gene: GeneCoco\_10 Start: 8949, Stop: 9383, Start Num: 34

Candidate Starts for GeneCoco\_10:

(Start: 34 @8949 has 141 MA's), (46, 8988), (50, 9012), (61, 9093), (70, 9183), (82, 9246),

Gene: Gophee\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Gophee\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Gustavo\_49 Start: 42016, Stop: 42534, Start Num: 23

Candidate Starts for Gustavo\_49:

(Start: 23 @42016 has 5 MA's), (33, 42046), (63, 42232), (74, 42322), (76, 42334), (96, 42529),

Gene: Gwilliam\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Gwilliam\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Gyarad\_0010 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Gyarad\_0010:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: HSavage\_10 Start: 8945, Stop: 9379, Start Num: 34

Candidate Starts for HSavage\_10:

(Start: 34 @8945 has 141 MA's), (46, 8984), (50, 9008), (61, 9089), (70, 9179), (82, 9242),

Gene: Haimas\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Haimas\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Hamish\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Hamish\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Hartsy\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Hartsy\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Harvey\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for Harvey\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: Hertubise\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Hertubise\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Hetaeria\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Hetaeria\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Horchata\_10 Start: 8942, Stop: 9376, Start Num: 34

Candidate Starts for Horchata\_10:

(Start: 34 @8942 has 141 MA's), (46, 8981), (50, 9005), (61, 9086), (70, 9176), (82, 9239),

Gene: Ididsumtinwong\_46 Start: 30014, Stop: 30484, Start Num: 27

Candidate Starts for Ididsumtinwong\_46:

(Start: 17 @29978 has 2 MA's), (Start: 27 @30014 has 2 MA's), (74, 30272), (77, 30290), (81, 30311),

Gene: Inchworm\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Inchworm\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Inverness\_10 Start: 8945, Stop: 9379, Start Num: 34

Candidate Starts for Inverness\_10:

(Start: 34 @8945 has 141 MA's), (46, 8984), (50, 9008), (61, 9089), (70, 9179), (82, 9242),

Gene: Iridoclysis\_10 Start: 8947, Stop: 9381, Start Num: 34

Candidate Starts for Iridoclysis\_10:

(Start: 34 @8947 has 141 MA's), (46, 8986), (50, 9010), (61, 9091), (70, 9181), (82, 9244),

Gene: IsaacEli\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for IsaacEli\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: JKSyngboy\_47 Start: 42615, Stop: 43133, Start Num: 23

Candidate Starts for JKSyngboy\_47:

(Start: 23 @42615 has 5 MA's), (33, 42645), (63, 42831), (74, 42921), (76, 42933), (96, 43128),

Gene: JacAttac\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for JacAttac\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: JangoPhett\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for JangoPhett\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: KLucky39\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for KLucky39\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Kailash\_10 Start: 8952, Stop: 9386, Start Num: 34

Candidate Starts for Kailash\_10:

(Start: 34 @8952 has 141 MA's), (46, 8991), (50, 9015), (61, 9096), (70, 9186), (82, 9249),

Gene: Katniss\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for Katniss\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: Keitabear\_20 Start: 16560, Stop: 17006, Start Num: 35

Candidate Starts for Keitabear\_20:

(Start: 28 @16539 has 2 MA's), (Start: 32 @16551 has 1 MA's), (Start: 35 @16560 has 13 MA's),  
(Start: 45 @16590 has 1 MA's), (47, 16599), (66, 16770), (71, 16803), (79, 16845), (82, 16866), (88,  
16911), (90, 16947),

Gene: Keitherie\_10 Start: 8957, Stop: 9391, Start Num: 34

Candidate Starts for Keitherie\_10:

(Start: 34 @8957 has 141 MA's), (46, 8996), (50, 9020), (51, 9023), (61, 9101), (70, 9191), (82, 9254),

Gene: Kikipoo\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Kikipoo\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: KingVeVeVe\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for KingVeVeVe\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: KlimbOn\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for KlimbOn\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Kloppinator\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Kloppinator\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Kwobi\_50 Start: 42725, Stop: 43243, Start Num: 23

Candidate Starts for Kwobi\_50:

(Start: 23 @42725 has 5 MA's), (33, 42755), (63, 42941), (74, 43031), (76, 43043),

Gene: LasagnaCat\_10 Start: 8952, Stop: 9386, Start Num: 34

Candidate Starts for LasagnaCat\_10:

(Start: 34 @8952 has 141 MA's), (46, 8991), (50, 9015), (61, 9096), (70, 9186), (82, 9249),

Gene: Lasso\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Lasso\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: LeeLot\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for LeeLot\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Lego3393\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Lego3393\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Lennon\_20 Start: 15643, Stop: 16110, Start Num: 28

Candidate Starts for Lennon\_20:

(Start: 28 @15643 has 2 MA's), (Start: 32 @15655 has 1 MA's), (Start: 35 @15664 has 13 MA's),  
(Start: 45 @15694 has 1 MA's), (47, 15703), (66, 15874), (71, 15907), (79, 15949), (82, 15970), (88,  
16015), (90, 16051),

Gene: Lishka\_43 Start: 27718, Stop: 28179, Start Num: 27

Candidate Starts for Lishka\_43:

(Start: 27 @27718 has 2 MA's), (70, 27982), (73, 28003), (86, 28066),

Gene: Love\_20 Start: 14527, Stop: 14973, Start Num: 35

Candidate Starts for Love\_20:

(Start: 28 @14506 has 2 MA's), (Start: 32 @14518 has 1 MA's), (Start: 35 @14527 has 13 MA's),  
(Start: 45 @14557 has 1 MA's), (47, 14566), (66, 14737), (71, 14770), (79, 14812), (82, 14833), (88,  
14878), (90, 14914),

Gene: Lulwa\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Lulwa\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Magic8\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Magic8\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Matalotodo\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for Matalotodo\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: Megatron\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Megatron\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Melc17\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Melc17\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Mesh1\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Mesh1\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Mikota\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Mikota\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: MiniBoss\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for MiniBoss\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Mojerita\_45 Start: 30760, Stop: 31281, Start Num: 21



Candidate Starts for Mojorita\_45:

(Start: 21 @30760 has 4 MA's), (77, 31048), (85, 31099), (88, 31132), (89, 31138), (91, 31168),

Gene: Morty\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Morty\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Murdoc\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Murdoc\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Nacho\_0010 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Nacho\_0010:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Newman\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Newman\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Nicole21\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Nicole21\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Nordenberg\_13 Start: 12847, Stop: 13293, Start Num: 35

Candidate Starts for Nordenberg\_13:

(Start: 28 @12826 has 2 MA's), (Start: 32 @12838 has 1 MA's), (Start: 35 @12847 has 13 MA's),  
(Start: 45 @12877 has 1 MA's), (47, 12886), (66, 13057), (71, 13090), (79, 13132), (82, 13153), (88,  
13198), (90, 13234),

Gene: Numberten\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Numberten\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: OSmaximus\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for OSmaximus\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Olive\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Olive\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: OliverWalter\_10 Start: 8939, Stop: 9373, Start Num: 34

Candidate Starts for OliverWalter\_10:

(Start: 34 @8939 has 141 MA's), (46, 8978), (50, 9002), (61, 9083), (70, 9173), (82, 9236),

Gene: Omniscient\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Omniscient\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Oosterbaan\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for Oosterbaan\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: Orion\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Orion\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: PG1\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for PG1\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: PapayaSalad\_44 Start: 30268, Stop: 30774, Start Num: 17

Candidate Starts for PapayaSalad\_44:

(Start: 17 @30268 has 2 MA's), (Start: 27 @30304 has 2 MA's), (74, 30562), (77, 30580), (81, 30601),

Gene: Paries\_19 Start: 14215, Stop: 14661, Start Num: 35

Candidate Starts for Paries\_19:

(Start: 28 @14194 has 2 MA's), (Start: 32 @14206 has 1 MA's), (Start: 35 @14215 has 13 MA's),  
(Start: 45 @14245 has 1 MA's), (47, 14254), (66, 14425), (71, 14458), (79, 14500), (82, 14521), (88,  
14566), (90, 14602),

Gene: Phamished\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Phamished\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: PhatCats2014\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for PhatCats2014\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: PhatLouie\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for PhatLouie\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Pherdinand\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Pherdinand\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Phipps\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Phipps\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: PhrodoBaggins\_105 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for PhrodoBaggins\_105:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Phunky\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Phunky\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Picard\_45 Start: 30958, Stop: 31479, Start Num: 21

Candidate Starts for Picard\_45:

(Start: 21 @30958 has 4 MA's), (77, 31246), (89, 31336), (91, 31366), (95, 31432),

Gene: Pipsqueak\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Pipsqueak\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Plmatters\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Plmatters\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Podrick\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Podrick\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Pops\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Pops\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Prickles\_10 Start: 8949, Stop: 9383, Start Num: 34

Candidate Starts for Prickles\_10:

(Start: 34 @8949 has 141 MA's), (46, 8988), (50, 9012), (61, 9093), (70, 9183), (82, 9246),

Gene: ProfessorX\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for ProfessorX\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Puhltonio\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Puhltonio\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: QueenBeane\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for QueenBeane\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Quisquilliae\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Quisquilliae\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Raleigh\_43 Start: 33449, Stop: 33964, Start Num: 20

Candidate Starts for Raleigh\_43:

(Start: 20 @33449 has 3 MA's), (36, 33488), (76, 33728), (77, 33734),

Gene: Riggan\_10 Start: 8947, Stop: 9381, Start Num: 34

Candidate Starts for Riggan\_10:

(Start: 34 @8947 has 141 MA's), (46, 8986), (50, 9010), (61, 9091), (70, 9181), (82, 9244),

Gene: Rofo\_18 Start: 14497, Stop: 14928, Start Num: 45

Candidate Starts for Rofo\_18:

(Start: 28 @14446 has 2 MA's), (Start: 32 @14458 has 1 MA's), (Start: 35 @14467 has 13 MA's),  
(Start: 45 @14497 has 1 MA's), (47, 14506), (66, 14677), (71, 14710), (79, 14752), (82, 14773), (88,  
14818), (90, 14854),

Gene: Roliet\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Roliet\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: RomansRevenge\_74 Start: 50908, Stop: 50471, Start Num: 37

Candidate Starts for RomansRevenge\_74:

(15, 50992), (16, 50983), (37, 50908), (63, 50743), (66, 50698), (86, 50596), (87, 50578), (89, 50560),

Gene: Roscoe\_11 Start: 9178, Stop: 9612, Start Num: 34

Candidate Starts for Roscoe\_11:

(Start: 34 @9178 has 141 MA's), (46, 9217), (50, 9241), (61, 9322), (70, 9412), (82, 9475),

Gene: SDcharge11\_10 Start: 8936, Stop: 9370, Start Num: 34

Candidate Starts for SDcharge11\_10:

(Start: 34 @8936 has 141 MA's), (46, 8975), (50, 8999), (61, 9080), (70, 9170), (82, 9233),

Gene: SV1\_42 Start: 29657, Stop: 30169, Start Num: 22

Candidate Starts for SV1\_42:

(Start: 22 @29657 has 1 MA's), (67, 29882), (84, 29981), (88, 30020), (89, 30026), (91, 30056),

Gene: Samaymay\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Samaymay\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Saronaya\_49 Start: 42016, Stop: 42534, Start Num: 23

Candidate Starts for Saronaya\_49:

(Start: 23 @42016 has 5 MA's), (33, 42046), (63, 42232), (74, 42322), (76, 42334), (96, 42529),

Gene: Scoot17C\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for Scoot17C\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: Sedona\_50 Start: 43310, Stop: 43828, Start Num: 23

Candidate Starts for Sedona\_50:

(Start: 23 @43310 has 5 MA's), (33, 43340), (63, 43526), (74, 43616), (76, 43628),

Gene: Serendipity\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Serendipity\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Serpentine\_0010 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Serpentine\_0010:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Sheila\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Sheila\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: ShiVal\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for ShiVal\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Sigman\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Sigman\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Sitar\_20 Start: 15655, Stop: 16110, Start Num: 32

Candidate Starts for Sitar\_20:

(Start: 28 @15643 has 2 MA's), (Start: 32 @15655 has 1 MA's), (Start: 35 @15664 has 13 MA's),  
(Start: 45 @15694 has 1 MA's), (47, 15703), (66, 15874), (71, 15907), (79, 15949), (82, 15970), (88,  
16015), (90, 16051),

Gene: Skippy\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Skippy\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Slatt\_10 Start: 8945, Stop: 9379, Start Num: 34

Candidate Starts for Slatt\_10:

(Start: 34 @8945 has 141 MA's), (46, 8984), (50, 9008), (61, 9089), (70, 9179), (82, 9242),

Gene: SoJo\_43 Start: 31466, Stop: 31978, Start Num: 21

Candidate Starts for SoJo\_43:

(Start: 21 @31466 has 4 MA's), (40, 31523), (85, 31799), (91, 31868),

Gene: Soto\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Soto\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Spartan300\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Spartan300\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Suffolk\_10 Start: 8942, Stop: 9376, Start Num: 34

Candidate Starts for Suffolk\_10:

(Start: 34 @8942 has 141 MA's), (46, 8981), (50, 9005), (61, 9086), (70, 9176), (82, 9239),

Gene: Superphikiman\_163 Start: 84350, Stop: 84877, Start Num: 19

Candidate Starts for Superphikiman\_163:

(Start: 14 @84308 has 2 MA's), (Start: 19 @84350 has 1 MA's), (26, 84365), (65, 84587), (74, 84644),  
(78, 84665),

Gene: Surely\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Surely\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Swish\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for Swish\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: Tangent\_16 Start: 13468, Stop: 13914, Start Num: 35

Candidate Starts for Tangent\_16:

(Start: 28 @13447 has 2 MA's), (Start: 32 @13459 has 1 MA's), (Start: 35 @13468 has 13 MA's),  
(Start: 45 @13498 has 1 MA's), (47, 13507), (66, 13678), (71, 13711), (79, 13753), (82, 13774), (88,  
13819), (90, 13855),

Gene: Thora\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Thora\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: ThreeOh3D2\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for ThreeOh3D2\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: ToastyFinz\_42 Start: 32290, Stop: 32811, Start Num: 20

Candidate Starts for ToastyFinz\_42:

(4, 32113), (9, 32227), (Start: 20 @32290 has 3 MA's), (51, 32383), (77, 32578), (85, 32629), (89, 32668), (91, 32698),

Gene: TomBombadil\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for TomBombadil\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Tomlarah\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Tomlarah\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Tooj\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Tooj\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Trypo\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Trypo\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Tubberson\_43 Start: 31467, Stop: 31979, Start Num: 21

Candidate Starts for Tubberson\_43:

(Start: 21 @31467 has 4 MA's), (40, 31524), (85, 31800), (91, 31869),

Gene: UAch1\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for UAch1\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Usavi\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Usavi\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Valjean\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Valjean\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Virapocalypse\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Virapocalypse\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Vista\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Vista\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Vivaldi\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Vivaldi\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: Vivi2\_18 Start: 14618, Stop: 15085, Start Num: 28

Candidate Starts for Vivi2\_18:

(Start: 28 @14618 has 2 MA's), (Start: 32 @14630 has 1 MA's), (Start: 35 @14639 has 13 MA's), (Start: 45 @14669 has 1 MA's), (47, 14678), (66, 14849), (71, 14882), (79, 14924), (82, 14945), (88, 14990), (90, 15026),

Gene: Waterdiva\_10 Start: 8944, Stop: 9378, Start Num: 34

Candidate Starts for Waterdiva\_10:

(Start: 34 @8944 has 141 MA's), (46, 8983), (50, 9007), (61, 9088), (70, 9178), (82, 9241),

Gene: Weher20\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for Weher20\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: WhereRU\_161 Start: 91595, Stop: 92011, Start Num: 43

Candidate Starts for WhereRU\_161:

(41, 91589), (Start: 43 @91595 has 2 MA's), (49, 91625), (59, 91694), (66, 91781), (78, 91847),

Gene: YorkOnyx\_19 Start: 14161, Stop: 14622, Start Num: 35

Candidate Starts for YorkOnyx\_19:

(Start: 28 @14140 has 2 MA's), (Start: 32 @14152 has 1 MA's), (Start: 35 @14161 has 13 MA's), (Start: 45 @14191 has 1 MA's), (54, 14242), (66, 14371), (79, 14446), (82, 14467), (88, 14512),

Gene: YorkOnyx\_50 Start: 42214, Stop: 42732, Start Num: 23

Candidate Starts for YorkOnyx\_50:

(Start: 23 @42214 has 5 MA's), (33, 42244), (63, 42430), (74, 42520), (76, 42532),

Gene: Yoshand\_10 Start: 8941, Stop: 9375, Start Num: 34

Candidate Starts for Yoshand\_10:

(Start: 34 @8941 has 141 MA's), (46, 8980), (50, 9004), (61, 9085), (70, 9175), (82, 9238),

Gene: YouGoGlencoco\_10 Start: 8940, Stop: 9374, Start Num: 34

Candidate Starts for YouGoGlencoco\_10:

(Start: 34 @8940 has 141 MA's), (46, 8979), (50, 9003), (61, 9084), (70, 9174), (82, 9237),

Gene: Yvonnetastic\_131 Start: 74014, Stop: 74502, Start Num: 24

Candidate Starts for Yvonnetastic\_131:

(Start: 24 @74014 has 1 MA's), (42, 74062), (48, 74080), (61, 74179), (75, 74311), (83, 74356),

Gene: Zaider\_11 Start: 9173, Stop: 9607, Start Num: 34

Candidate Starts for Zaider\_11:

(Start: 34 @9173 has 141 MA's), (46, 9212), (50, 9236), (61, 9317), (70, 9407), (82, 9470),

Gene: Zelda\_10 Start: 8943, Stop: 9377, Start Num: 34

Candidate Starts for Zelda\_10:

(Start: 34 @8943 has 141 MA's), (46, 8982), (50, 9006), (61, 9087), (70, 9177), (82, 9240),

Gene: Zonia\_10 Start: 8957, Stop: 9391, Start Num: 34

Candidate Starts for Zonia\_10:

(Start: 34 @8957 has 141 MA's), (46, 8996), (50, 9020), (61, 9101), (70, 9191), (82, 9254),