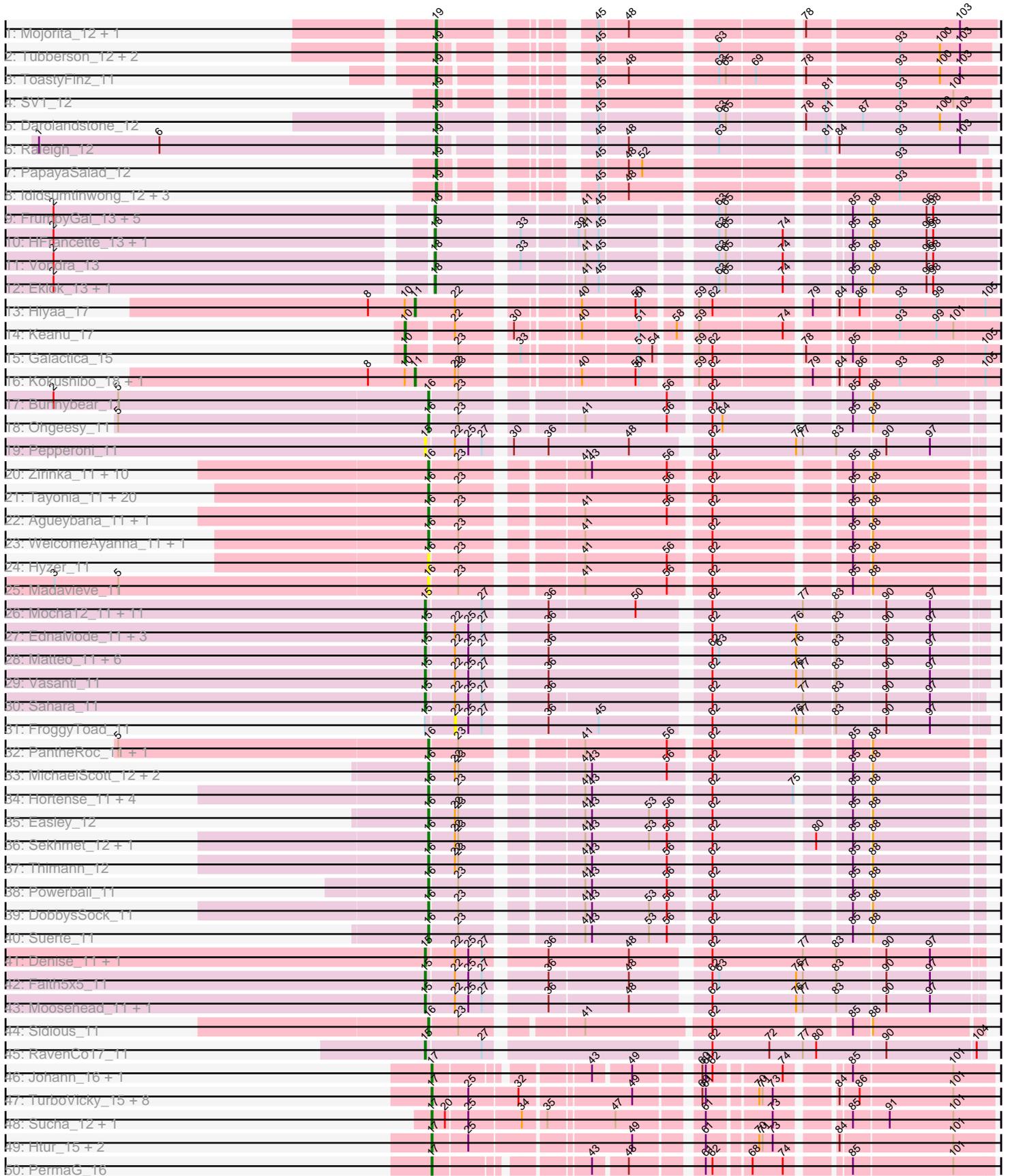
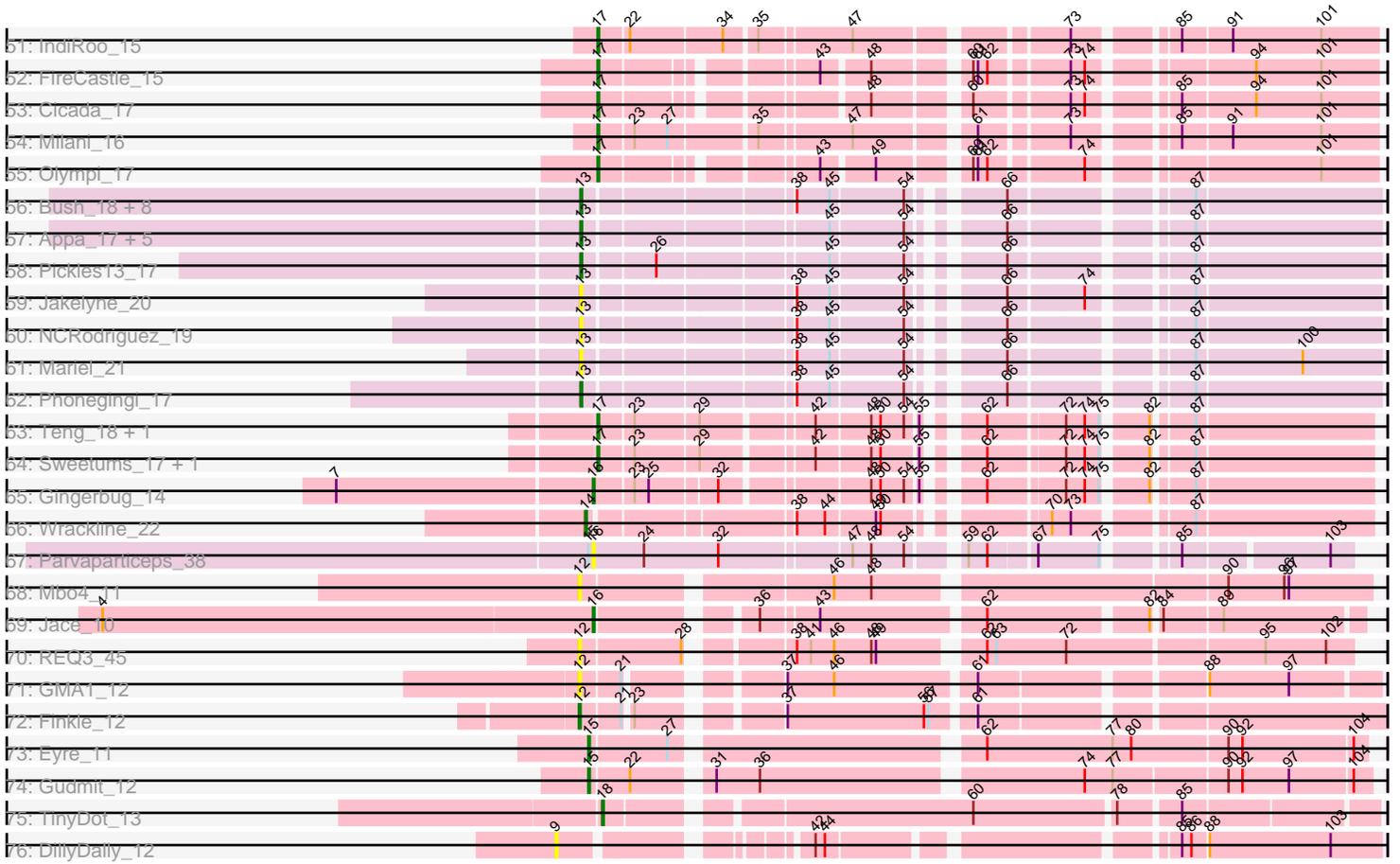


Pham 282008



Pham 282008



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 282008 Report

This analysis was run 02/23/26 on database version 636.

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 282008 has 179 members, 31 are drafts.

Phages represented in each track:

- Track 1 : Mojorita\_12, Picard\_12
- Track 2 : Tubberson\_12, SoJo\_12, DaRealMyers\_12
- Track 3 : ToastyFinz\_11
- Track 4 : SV1\_12
- Track 5 : Darolandstone\_12
- Track 6 : Raleigh\_12
- Track 7 : PapayaSalad\_12
- Track 8 : Ididsumtinwong\_12, Austintatious\_12, Lishka\_12, Bioscum\_12
- Track 9 : FrumpyGal\_13, Eastland\_13, Cumberbatch\_13, Piccadilly\_13, Schlegelian\_13, ArizonaGT\_13
- Track 10 : HFrancette\_13, Ignacio\_13
- Track 11 : Vondra\_13
- Track 12 : Eklok\_13, AxeJC\_13
- Track 13 : Hiyaa\_17
- Track 14 : Keanu\_17
- Track 15 : Galactica\_15
- Track 16 : Kokushibo\_18, Spocter\_17
- Track 17 : Bunnybear\_11
- Track 18 : Ohgeesy\_11
- Track 19 : Pepperoni\_11
- Track 20 : Zirinka\_11, Mcklovin\_12, Clark\_12, PhriskyACE\_11, Annalisa\_12, WinkNick\_12, Bialota\_11, Oregano\_12, Dolores\_12, Dorito\_11, Samman98\_12
- Track 21 : Tayonia\_11, BatStarr\_11, Maridalia\_11, TimTam\_11, Hugley\_11, Zameen\_11, BaxterFox\_11, Kita\_11, Suscepit\_11, Neobush\_11, Bosnia\_11, Antonio\_11, AlumE\_11, Herod\_11, Eviarto\_11, Manasvini\_11, Polly\_11, Eudoria\_11, BoyNamedSue\_11, Nymphadora\_11, Trumpet\_11
- Track 22 : Agueybana\_11, Madeline\_11
- Track 23 : WelcomeAyanna\_11, ThankyouJordi\_11
- Track 24 : Hyzer\_11
- Track 25 : Madavieve\_11
- Track 26 : Mocha12\_11, Gizermo\_11, GemG\_11, Whiteclaw\_11, Haley23\_11, TuertoX\_11, Sproutie\_11, Savage\_11, Cynthia\_11, JCole\_11, Ebert\_11, Clap\_11
- Track 27 : EdnaMode\_11, Nettuno\_11, Jalleen\_12, Lamberg\_11

- Track 28 : Matteo\_11, Attis\_11, SoilAssassin\_11, Bjanes7\_11, Pickett\_11, Yeet412\_11, LordFarquaad\_11
- Track 29 : Vasanti\_11
- Track 30 : Sahara\_11
- Track 31 : FroggyToad\_11
- Track 32 : PantheRoc\_11, Yeezy\_11
- Track 33 : MichaelScott\_12, Tuti\_13, Beenie\_12
- Track 34 : Hortense\_11, Howe\_11, Twinkle\_11, Adora\_11, Shlim410\_11
- Track 35 : Easley\_12
- Track 36 : Sekhmet\_12, Invecetra\_12
- Track 37 : Thimann\_12
- Track 38 : Powerball\_11
- Track 39 : DobbysSock\_11
- Track 40 : Suerte\_11
- Track 41 : Denise\_11, Lton\_11
- Track 42 : Faith5x5\_11
- Track 43 : Moosehead\_11, OneDirection\_11
- Track 44 : Sidious\_11
- Track 45 : RavenCo17\_11
- Track 46 : Johann\_16, Goodman\_16
- Track 47 : TurboVicky\_15, Jera\_16, AyoTeo\_17, SBlackberry\_15, Typher\_17, Zanella\_15, Rootkit7\_15, Labella\_17, Alove\_15
- Track 48 : Sucha\_12, Benry\_15
- Track 49 : Htur\_15, Linayshia\_15, Rasovi\_15
- Track 50 : PermaG\_16
- Track 51 : IndiRoo\_15
- Track 52 : FireCastle\_15
- Track 53 : Cicada\_17
- Track 54 : Milani\_16
- Track 55 : Olympi\_17
- Track 56 : Bush\_18, MenE\_18, Carrillo\_19, Antuna\_18, Phingu\_20, Blett\_18, Guzman\_19, Dropshot\_17, Violeta\_19
- Track 57 : Appa\_17, PhillyJawn\_18, Losacky\_19, Warren\_18, CookieDog\_18, Winchester007\_33
- Track 58 : Pickles13\_17
- Track 59 : Jakelyne\_20
- Track 60 : NCRodriguez\_19
- Track 61 : Mariel\_21
- Track 62 : Phonegingi\_17
- Track 63 : Teng\_18, Lesiram\_17
- Track 64 : Sweetums\_17, DelaGarza\_17
- Track 65 : Gingerbug\_14
- Track 66 : Wrackline\_22
- Track 67 : Parvarticeps\_38
- Track 68 : Mbo4\_11
- Track 69 : Jace\_10
- Track 70 : REQ3\_45
- Track 71 : GMA1\_12
- Track 72 : Finkle\_12
- Track 73 : Eyre\_11
- Track 74 : Gudmit\_12
- Track 75 : TinyDot\_13
- Track 76 : DillyDally\_12

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

The start number called the most often in the published annotations is 16, it was called in 55 of the 148 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adora\_11, Agueybana\_11, AlumE\_11, Annalisa\_12, Antonio\_11, BatStarr\_11, BaxterFox\_11, Beenie\_12, Bialota\_11, Bosnia\_11, BoyNamedSue\_11, Bunnybear\_11, Clark\_12, DobbysSock\_11, Dolores\_12, Dorito\_11, Easley\_12, Eudoria\_11, Eviarto\_11, Gingerbug\_14, Herod\_11, Hortense\_11, Howe\_11, Hugley\_11, Hyzer\_11, Invecetra\_12, Jace\_10, Kita\_11, Madavieve\_11, Madeline\_11, Manasvini\_11, Maridalia\_11, Mcklovin\_12, MichaelScott\_12, Neobush\_11, Nymphadora\_11, Ohgeesy\_11, Oregano\_12, PantheRoc\_11, Parvaparticeps\_38, PhriskyACE\_11, Polly\_11, Powerball\_11, Samman98\_12, Sekhmet\_12, Shlim410\_11, Sidious\_11, Suerte\_11, Suscepit\_11, Tayonia\_11, ThankyouJordi\_11, Thimann\_12, TimTam\_11, Trumpet\_11, Tuti\_13, Twinkle\_11, WelcomeAyanna\_11, WinkNick\_12, Yeezy\_11, Zameen\_11, Zirinka\_11,

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

- 

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

- Alove\_15, Antuna\_18, Appa\_17, ArizonaGT\_13, Attis\_11, Austintatious\_12, AxeJC\_13, AyoTeo\_17, Benry\_15, Bioscum\_12, Bjaner7\_11, Blett\_18, Bush\_18, Carrillo\_19, Cicada\_17, Clap\_11, CookieDog\_18, Cumberbatch\_13, Cynthia\_11, DaRealMyers\_12, Darolandstone\_12, DelaGarza\_17, Denise\_11, DillyDally\_12, Dropshot\_17, Eastland\_13, Ebert\_11, EdnaMode\_11, Eklok\_13, Eyre\_11, Faith5x5\_11, Finkle\_12, FireCastle\_15, FroggyToad\_11, FrumpyGal\_13, GMA1\_12, Galactica\_15, GemG\_11, Gizermo\_11, Goodman\_16, Gudmit\_12, Guzman\_19, HFrancette\_13, Haley23\_11, Hiyaa\_17, Htur\_15, Ididsumtinwong\_12, Ignacio\_13, IndiRoo\_15, JCole\_11, Jakelyne\_20, Jalleen\_12, Jera\_16, Johann\_16, Keanu\_17, Kokushibo\_18, Labella\_17, Lamberg\_11, Lesiram\_17, Linayshia\_15, Lishka\_12, LordFarquaad\_11, Losacky\_19, Lton\_11, Mariel\_21, Matteo\_11, Mbo4\_11, MenE\_18, Milani\_16, Mocha12\_11, Moajorita\_12, Moosehead\_11, NCRodriguez\_19, Nettuno\_11, Olympi\_17, OneDirection\_11, PapayaSalad\_12, Pepperoni\_11, PermaG\_16, PhillyJawn\_18, Phingu\_20, Phonegingi\_17, Picard\_12, Piccadilly\_13, Pickett\_11, Pickles13\_17, REQ3\_45, Raleigh\_12, Rasovi\_15, RavenCo17\_11, Rootkit7\_15, SBlackberry\_15, SV1\_12, Sahara\_11, Savage\_11, Schlegelian\_13, SoJo\_12, SoilAssassin\_11, Spocter\_17, Sproutie\_11, Sucha\_12, Sweetums\_17, Teng\_18, TinyDot\_13, ToastyFinz\_11, Tubberson\_12, TuertoX\_11, TurboVicky\_15, Typher\_17, Vasanti\_11, Violeta\_19, Vondra\_13, Warren\_18, Whiteclaw\_11, Winchester007\_33, Wrackline\_22, Yeet412\_11, Zanella\_15,

### **Summary by start number:**

Start 9:

- Found in 1 of 179 ( 0.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present

- Phage (with cluster) where this start called: DillyDally\_12 (singleton),

#### Start 10:

- Found in 5 of 179 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 2 of 148
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Galactica\_15 (BQ), Keanu\_17 (BQ),

#### Start 11:

- Found in 3 of 179 ( 1.7% ) of genes in pham
- Manual Annotations of this start: 2 of 148
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hiyaa\_17 (BQ), Kokushibo\_18 (BQ), Spocter\_17 (BQ),

#### Start 12:

- Found in 4 of 179 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 1 of 148
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finkle\_12 (singleton), GMA1\_12 (singleton), Mbo4\_11 (singleton), REQ3\_45 (singleton),

#### Start 13:

- Found in 20 of 179 ( 11.2% ) of genes in pham
- Manual Annotations of this start: 11 of 148
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antuna\_18 (GA), Appa\_17 (GA), Blett\_18 (GA), Bush\_18 (GA), Carrillo\_19 (GA), CookieDog\_18 (GA), Dropshot\_17 (GA), Guzman\_19 (GA), Jakelyne\_20 (GA), Losacky\_19 (GA), Mariel\_21 (GA), MenE\_18 (GA), NCRodriguez\_19 (GA), PhillyJawn\_18 (GA), Phingu\_20 (GA), Phonegingi\_17 (GA), Pickles13\_17 (GA), Violeta\_19 (GA), Warren\_18 (GA), Winchester007\_33 (GA),

#### Start 14:

- Found in 1 of 179 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 148
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wrackline\_22 (GF),

#### Start 15:

- Found in 36 of 179 ( 20.1% ) of genes in pham
- Manual Annotations of this start: 31 of 148
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Attis\_11 (CZ2), Bjanes7\_11 (CZ2), Clap\_11 (CZ2), Cynthia\_11 (CZ2), Denise\_11 (CZ5), Ebert\_11 (CZ2), EdnaMode\_11 (CZ2), Eyre\_11 (singleton), Faith5x5\_11 (CZ6), GemG\_11 (CZ2), Gizermo\_11 (CZ2), Gudmit\_12 (singleton), Haley23\_11 (CZ2), JCole\_11 (CZ2), Jalleen\_12 (CZ2), Lamberg\_11 (CZ2), LordFarquaad\_11 (CZ2), Lton\_11 (CZ), Matteo\_11 (CZ2), Mocha12\_11 (CZ2), Moosehead\_11 (CZ6), Nettuno\_11 (CZ2), OneDirection\_11 (CZ6), Pepperoni\_11 (CZ), Pickett\_11 (CZ2), RavenCo17\_11 (CZ8), Sahara\_11 (CZ2), Savage\_11 (CZ2), SoilAssassin\_11 (CZ2), Sproutie\_11 (CZ2), TuertoX\_11 (CZ2), Vasanti\_11 (CZ2), Whiteclaw\_11 (CZ2), Yeet412\_11 (CZ2),

Start 16:

- Found in 61 of 179 ( 34.1% ) of genes in pham
- Manual Annotations of this start: 55 of 148
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adora\_11 (CZ4), Agueybana\_11 (CZ1), AlumE\_11 (CZ1), Annalisa\_12 (CZ4), Antonio\_11 (CZ1), BatStarr\_11 (CZ1), BaxterFox\_11 (CZ3), Beenie\_12 (CZ4), Bialota\_11 (CZ1), Bosnia\_11 (CZ1), BoyNamedSue\_11 (CZ1), Bunnybear\_11 (CZ), Clark\_12 (CZ4), DobbysSock\_11 (CZ4), Dolores\_12 (CZ4), Dorito\_11 (CZ4), Easley\_12 (CZ4), Eudoria\_11 (CZ1), Eviarto\_11 (CZ1), Gingerbug\_14 (GF), Herod\_11 (CZ1), Hortense\_11 (CZ4), Howe\_11 (CZ4), Hugley\_11 (CZ1), Hyzer\_11 (CZ1), Invectra\_12 (CZ4), Jace\_10 (singleton), Kita\_11 (CZ1), Madavieve\_11 (CZ1), Madeline\_11 (CZ1), Manasvini\_11 (CZ1), Maridalia\_11 (CZ1), Mcklovin\_12 (CZ4), MichaelScott\_12 (CZ4), Neobush\_11 (CZ1), Nymphadora\_11 (CZ1), Ohgeesy\_11 (CZ), Oregono\_12 (CZ4), PantheRoc\_11 (CZ3), Parvapaticeps\_38 (UNK), PhriskyACE\_11 (CZ4), Polly\_11 (CZ1), Powerball\_11 (CZ4), Samman98\_12 (CZ4), Sekhmet\_12 (CZ4), Shlim410\_11 (CZ4), Sidious\_11 (CZ7), Suerte\_11 (CZ4), Suscepit\_11 (CZ1), Tayonia\_11 (CZ1), ThankyouJordi\_11 (CZ1), Thimann\_12 (CZ4), TimTam\_11 (CZ1), Trumpet\_11 (CZ1), Tuti\_13 (CZ4), Twinkle\_11 (CZ4), WelcomeAyanna\_11 (CZ1), WinkNick\_12 (CZ4), Yeezy\_11 (CZ3), Zameen\_11 (CZ1), Zirinka\_11 (CZ1),

Start 17:

- Found in 26 of 179 ( 14.5% ) of genes in pham
- Manual Annotations of this start: 20 of 148
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alove\_15 (EJ), AyoTeo\_17 (EJ), Benry\_15 (EJ), Cicada\_17 (EJ), DelaGarza\_17 (GF), FireCastle\_15 (EJ), Goodman\_16 (EJ), Htur\_15 (EJ), IndiRoo\_15 (EJ), Jera\_16 (EJ), Johann\_16 (EJ), Labella\_17 (EJ), Lesiram\_17 (GF), Linayshia\_15 (EJ), Milani\_16 (EJ), Olympi\_17 (EJ), PermaG\_16 (EJ), Rasovi\_15 (EJ), Rootkit7\_15 (EJ), SBlackberry\_15 (EJ), Sucha\_12 (EJ), Sweetums\_17 (GF), Teng\_18 (GF), TurboVicky\_15 (EJ), Typher\_17 (EJ), Zanella\_15 (EJ),

Start 18:

- Found in 12 of 179 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 12 of 148
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArizonaGT\_13 (BP), AxeJC\_13 (BP), Cumberbatch\_13 (BP), Eastland\_13 (BP), Eklok\_13 (BP), FrumpyGal\_13 (BP), HFrancette\_13 (BP), Ignacio\_13 (BP), Piccadilly\_13 (BP), Schlegelian\_13 (BP), TinyDot\_13 (singleton), Vondra\_13 (BP),

Start 19:

- Found in 14 of 179 ( 7.8% ) of genes in pham
- Manual Annotations of this start: 13 of 148
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Austintatious\_12 (BC3), Bioscum\_12 (BC3), DaRealMyers\_12 (BC1), Darolandstone\_12 (BC2), Ididsumtinwong\_12 (BC3), Lishka\_12 (BC3), Moajorita\_12 (BC1), PapayaSalad\_12 (BC3), Picard\_12 (BC1), Raleigh\_12 (BC2), SV1\_12 (BC1), SoJo\_12 (BC1), ToastyFinz\_11 (BC1), Tubberson\_12 (BC1),

Start 22:

- Found in 33 of 179 ( 18.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 3.0% of time when present
- Phage (with cluster) where this start called: FroggyToad\_11 (CZ2),

### **Summary by clusters:**

There are 19 clusters represented in this pham: CZ8, EJ, CZ2, CZ3, CZ1, CZ6, CZ7, CZ4, CZ5, GF, BP, BQ, GA, CZ, singleton, UNK, BC1, BC2, BC3,

Info for manual annotations of cluster BC1:

- Start number 19 was manually annotated 6 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 19 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 19 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BP:

- Start number 18 was manually annotated 11 times for cluster BP.

Info for manual annotations of cluster BQ:

- Start number 10 was manually annotated 2 times for cluster BQ.
- Start number 11 was manually annotated 2 times for cluster BQ.

Info for manual annotations of cluster CZ:

- Start number 15 was manually annotated 1 time for cluster CZ.
- Start number 16 was manually annotated 2 times for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 16 was manually annotated 25 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 15 was manually annotated 23 times for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 16 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:

- Start number 16 was manually annotated 22 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

- Start number 15 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 15 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster CZ7:

- Start number 16 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster CZ8:

- Start number 15 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster EJ:

- Start number 17 was manually annotated 18 times for cluster EJ.

Info for manual annotations of cluster GA:

- Start number 13 was manually annotated 11 times for cluster GA.

Info for manual annotations of cluster GF:

- Start number 14 was manually annotated 1 time for cluster GF.
- Start number 16 was manually annotated 1 time for cluster GF.
- Start number 17 was manually annotated 2 times for cluster GF.

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

Gene: Adora\_11 Start: 7377, Stop: 7817, Start Num: 16

Candidate Starts for Adora\_11:

(Start: 16 @7377 has 55 MA's), (23, 7401), (41, 7491), (43, 7497), (62, 7596), (75, 7668), (85, 7707), (88, 7722),

Gene: Agueybana\_11 Start: 8036, Stop: 8476, Start Num: 16

Candidate Starts for Agueybana\_11:

(Start: 16 @8036 has 55 MA's), (23, 8060), (41, 8150), (56, 8222), (62, 8255), (85, 8366), (88, 8381),

Gene: Alove\_15 Start: 11577, Stop: 12017, Start Num: 17

Candidate Starts for Alove\_15:

(Start: 17 @11577 has 20 MA's), (25, 11607), (32, 11649), (49, 11739), (60, 11787), (61, 11790), (70, 11829), (71, 11832), (73, 11841), (84, 11886), (86, 11901), (101, 11982),

Gene: AlumE\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for AlumE\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Annalisa\_12 Start: 7684, Stop: 8124, Start Num: 16

Candidate Starts for Annalisa\_12:

(Start: 16 @7684 has 55 MA's), (23, 7708), (41, 7798), (43, 7804), (56, 7870), (62, 7903), (85, 8014), (88, 8029),

Gene: Antonio\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Antonio\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Antuna\_18 Start: 9659, Stop: 10102, Start Num: 13

Candidate Starts for Antuna\_18:

(Start: 13 @9659 has 11 MA's), (38, 9779), (45, 9800), (54, 9845), (66, 9887), (87, 9986),

Gene: Appa\_17 Start: 9521, Stop: 9964, Start Num: 13

Candidate Starts for Appa\_17:

(Start: 13 @9521 has 11 MA's), (45, 9662), (54, 9707), (66, 9749), (87, 9848),

Gene: ArizonaGT\_13 Start: 8312, Stop: 8746, Start Num: 18

Candidate Starts for ArizonaGT\_13:

(2, 7988), (Start: 18 @8312 has 12 MA's), (41, 8423), (45, 8435), (63, 8522), (65, 8528), (85, 8621), (88, 8636), (96, 8684), (98, 8690),

Gene: Attis\_11 Start: 7161, Stop: 7622, Start Num: 15

Candidate Starts for Attis\_11:

(Start: 15 @7161 has 31 MA's), (22, 7185), (25, 7197), (27, 7209), (36, 7254), (62, 7386), (63, 7392), (76, 7461), (83, 7494), (90, 7536), (97, 7575),

Gene: Austintatious\_12 Start: 8176, Stop: 8589, Start Num: 19

Candidate Starts for Austintatious\_12:

(Start: 19 @8176 has 13 MA's), (45, 8275), (48, 8299), (93, 8512),

Gene: AxeJC\_13 Start: 8325, Stop: 8759, Start Num: 18

Candidate Starts for AxeJC\_13:

(2, 8001), (Start: 18 @8325 has 12 MA's), (41, 8436), (45, 8448), (63, 8535), (65, 8541), (74, 8589), (85, 8634), (88, 8649), (96, 8697), (98, 8703),

Gene: AyoTeo\_17 Start: 11708, Stop: 12148, Start Num: 17

Candidate Starts for AyoTeo\_17:

(Start: 17 @11708 has 20 MA's), (25, 11738), (32, 11780), (49, 11870), (60, 11918), (61, 11921), (70, 11960), (71, 11963), (73, 11972), (84, 12017), (86, 12032), (101, 12113),

Gene: BatStarr\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for BatStarr\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: BaxterFox\_11 Start: 7383, Stop: 7823, Start Num: 16

Candidate Starts for BaxterFox\_11:

(Start: 16 @7383 has 55 MA's), (23, 7407), (56, 7569), (62, 7602), (85, 7713), (88, 7728),

Gene: Beenie\_12 Start: 7677, Stop: 8117, Start Num: 16

Candidate Starts for Beenie\_12:

(Start: 16 @7677 has 55 MA's), (22, 7698), (23, 7701), (41, 7791), (43, 7797), (56, 7863), (62, 7896), (85, 8007), (88, 8022),

Gene: Benry\_15 Start: 9762, Stop: 10202, Start Num: 17

Candidate Starts for Benry\_15:

(Start: 17 @9762 has 20 MA's), (20, 9774), (25, 9792), (34, 9837), (35, 9855), (47, 9909), (61, 9975), (73, 10026), (85, 10080), (91, 10110), (101, 10167),

Gene: Bialota\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Bialota\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (41, 8149), (43, 8155), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Bioscum\_12 Start: 8212, Stop: 8625, Start Num: 19

Candidate Starts for Bioscum\_12:

(Start: 19 @8212 has 13 MA's), (45, 8311), (48, 8335), (93, 8548),

Gene: Bjaner7\_11 Start: 7161, Stop: 7622, Start Num: 15

Candidate Starts for Bjaner7\_11:

(Start: 15 @7161 has 31 MA's), (22, 7185), (25, 7197), (27, 7209), (36, 7254), (62, 7386), (63, 7392), (76, 7461), (83, 7494), (90, 7536), (97, 7575),

Gene: Blett\_18 Start: 9674, Stop: 10117, Start Num: 13

Candidate Starts for Blett\_18:

(Start: 13 @9674 has 11 MA's), (38, 9794), (45, 9815), (54, 9860), (66, 9902), (87, 10001),

Gene: Bosnia\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Bosnia\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: BoyNamedSue\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for BoyNamedSue\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Bunnybear\_11 Start: 8026, Stop: 8466, Start Num: 16

Candidate Starts for Bunnybear\_11:

(2, 7693), (5, 7750), (Start: 16 @8026 has 55 MA's), (23, 8050), (56, 8212), (62, 8245), (85, 8356), (88, 8371),

Gene: Bush\_18 Start: 9655, Stop: 10098, Start Num: 13

Candidate Starts for Bush\_18:

(Start: 13 @9655 has 11 MA's), (38, 9775), (45, 9796), (54, 9841), (66, 9883), (87, 9982),

Gene: Carrillo\_19 Start: 9628, Stop: 10071, Start Num: 13

Candidate Starts for Carrillo\_19:

(Start: 13 @9628 has 11 MA's), (38, 9748), (45, 9769), (54, 9814), (66, 9856), (87, 9955),

Gene: Cicada\_17 Start: 11831, Stop: 12253, Start Num: 17

Candidate Starts for Cicada\_17:

(Start: 17 @11831 has 20 MA's), (48, 11972), (60, 12023), (73, 12077), (74, 12086), (85, 12131), (94, 12176), (101, 12218),

Gene: Clap\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for Clap\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: Clark\_12 Start: 7684, Stop: 8124, Start Num: 16

Candidate Starts for Clark\_12:

(Start: 16 @7684 has 55 MA's), (23, 7708), (41, 7798), (43, 7804), (56, 7870), (62, 7903), (85, 8014), (88, 8029),

Gene: CookieDog\_18 Start: 9655, Stop: 10098, Start Num: 13

Candidate Starts for CookieDog\_18:

(Start: 13 @9655 has 11 MA's), (45, 9796), (54, 9841), (66, 9883), (87, 9982),

Gene: Cumberbatch\_13 Start: 8312, Stop: 8746, Start Num: 18

Candidate Starts for Cumberbatch\_13:

(2, 7988), (Start: 18 @8312 has 12 MA's), (41, 8423), (45, 8435), (63, 8522), (65, 8528), (85, 8621), (88, 8636), (96, 8684), (98, 8690),

Gene: Cynthia\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for Cynthia\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: DaRealMyers\_12 Start: 8406, Stop: 8822, Start Num: 19

Candidate Starts for DaRealMyers\_12:

(Start: 19 @8406 has 13 MA's), (45, 8505), (63, 8598), (93, 8742), (100, 8778), (103, 8796),

Gene: Darolandstone\_12 Start: 8646, Stop: 9074, Start Num: 19

Candidate Starts for Darolandstone\_12:

(Start: 19 @8646 has 13 MA's), (45, 8751), (63, 8844), (65, 8850), (78, 8910), (81, 8928), (87, 8955), (93, 8988), (100, 9024), (103, 9042),

Gene: DelaGarza\_17 Start: 10313, Stop: 10741, Start Num: 17

Candidate Starts for DelaGarza\_17:

(Start: 17 @10313 has 20 MA's), (23, 10334), (29, 10373), (42, 10436), (48, 10469), (50, 10475), (55, 10496), (62, 10520), (72, 10565), (74, 10577), (75, 10586), (82, 10610), (87, 10631),

Gene: Denise\_11 Start: 7170, Stop: 7631, Start Num: 15

Candidate Starts for Denise\_11:

(Start: 15 @7170 has 31 MA's), (22, 7194), (25, 7206), (27, 7218), (36, 7263), (48, 7335), (62, 7395), (77, 7476), (83, 7506), (90, 7548), (97, 7587),

Gene: DillyDally\_12 Start: 8249, Stop: 8698, Start Num: 9

Candidate Starts for DillyDally\_12:

(9, 8249), (42, 8375), (44, 8381), (85, 8573), (86, 8579), (88, 8588), (103, 8666),

Gene: DobbysSock\_11 Start: 7176, Stop: 7616, Start Num: 16

Candidate Starts for DobbysSock\_11:

(Start: 16 @7176 has 55 MA's), (23, 7200), (41, 7290), (43, 7296), (53, 7347), (56, 7362), (62, 7395), (85, 7506), (88, 7521),

Gene: Dolores\_12 Start: 7678, Stop: 8118, Start Num: 16

Candidate Starts for Dolores\_12:

(Start: 16 @7678 has 55 MA's), (23, 7702), (41, 7792), (43, 7798), (56, 7864), (62, 7897), (85, 8008), (88, 8023),

Gene: Dorito\_11 Start: 7181, Stop: 7621, Start Num: 16

Candidate Starts for Dorito\_11:

(Start: 16 @7181 has 55 MA's), (23, 7205), (41, 7295), (43, 7301), (56, 7367), (62, 7400), (85, 7511), (88, 7526),

Gene: Dropshot\_17 Start: 9521, Stop: 9964, Start Num: 13

Candidate Starts for Dropshot\_17:

(Start: 13 @9521 has 11 MA's), (38, 9641), (45, 9662), (54, 9707), (66, 9749), (87, 9848),

Gene: Easley\_12 Start: 7677, Stop: 8117, Start Num: 16

Candidate Starts for Easley\_12:

(Start: 16 @7677 has 55 MA's), (22, 7698), (23, 7701), (41, 7791), (43, 7797), (53, 7848), (56, 7863), (62, 7896), (85, 8007), (88, 8022),

Gene: Eastland\_13 Start: 8313, Stop: 8747, Start Num: 18

Candidate Starts for Eastland\_13:

(2, 7989), (Start: 18 @8313 has 12 MA's), (41, 8424), (45, 8436), (63, 8523), (65, 8529), (85, 8622), (88, 8637), (96, 8685), (98, 8691),

Gene: Ebert\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for Ebert\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: EdnaMode\_11 Start: 7161, Stop: 7622, Start Num: 15

Candidate Starts for EdnaMode\_11:

(Start: 15 @7161 has 31 MA's), (22, 7185), (25, 7197), (27, 7209), (36, 7254), (62, 7386), (76, 7461), (83, 7494), (90, 7536), (97, 7575),

Gene: Eklok\_13 Start: 8325, Stop: 8759, Start Num: 18

Candidate Starts for Eklok\_13:

(2, 8001), (Start: 18 @8325 has 12 MA's), (41, 8436), (45, 8448), (63, 8535), (65, 8541), (74, 8589), (85, 8634), (88, 8649), (96, 8697), (98, 8703),

Gene: Eudoria\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Eudoria\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Eviarto\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Eviarto\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Eyre\_11 Start: 7827, Stop: 8291, Start Num: 15

Candidate Starts for Eyre\_11:

(Start: 15 @7827 has 31 MA's), (27, 7875), (62, 8052), (77, 8133), (80, 8145), (90, 8205), (92, 8214), (104, 8283),

Gene: Faith5x5\_11 Start: 7132, Stop: 7590, Start Num: 15

Candidate Starts for Faith5x5\_11:

(Start: 15 @7132 has 31 MA's), (22, 7156), (25, 7168), (27, 7180), (36, 7225), (48, 7294), (62, 7354), (63, 7360), (76, 7429), (77, 7435), (83, 7465), (90, 7507), (97, 7546),

Gene: Finkle\_12 Start: 7640, Stop: 8095, Start Num: 12

Candidate Starts for Finkle\_12:

(Start: 12 @7640 has 1 MA's), (21, 7664), (23, 7667), (37, 7742), (56, 7829), (57, 7832), (61, 7853),

Gene: FireCastle\_15 Start: 11492, Stop: 11914, Start Num: 17

Candidate Starts for FireCastle\_15:

(Start: 17 @11492 has 20 MA's), (43, 11606), (48, 11633), (60, 11684), (61, 11687), (62, 11693), (73, 11738), (74, 11747), (94, 11837), (101, 11879),

Gene: FroggyToad\_11 Start: 7201, Stop: 7638, Start Num: 22

Candidate Starts for FroggyToad\_11:

(Start: 15 @7177 has 31 MA's), (22, 7201), (25, 7213), (27, 7225), (36, 7270), (45, 7315), (62, 7402), (76, 7477), (77, 7483), (83, 7510), (90, 7552), (97, 7591),

Gene: FrumpyGal\_13 Start: 8313, Stop: 8747, Start Num: 18

Candidate Starts for FrumpyGal\_13:

(2, 7989), (Start: 18 @8313 has 12 MA's), (41, 8424), (45, 8436), (63, 8523), (65, 8529), (85, 8622), (88, 8637), (96, 8685), (98, 8691),

Gene: GMA1\_12 Start: 7805, Stop: 8254, Start Num: 12

Candidate Starts for GMA1\_12:

(Start: 12 @7805 has 1 MA's), (21, 7829), (37, 7907), (46, 7937), (61, 8021), (88, 8150), (97, 8201),

Gene: Galactica\_15 Start: 13154, Stop: 13606, Start Num: 10

Candidate Starts for Galactica\_15:

(Start: 10 @13154 has 2 MA's), (23, 13196), (33, 13238), (51, 13328), (54, 13340), (59, 13364), (62, 13376), (78, 13448), (85, 13481), (105, 13595),

Gene: GemG\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for GemG\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: Gingerbug\_14 Start: 9495, Stop: 9923, Start Num: 16

Candidate Starts for Gingerbug\_14:

(7, 9333), (Start: 16 @9495 has 55 MA's), (23, 9519), (25, 9528), (32, 9567), (48, 9651), (50, 9657), (54, 9672), (55, 9678), (62, 9702), (72, 9747), (74, 9759), (75, 9768), (82, 9792), (87, 9813),

Gene: Gizermo\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for Gizermo\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: Goodman\_16 Start: 11743, Stop: 12165, Start Num: 17

Candidate Starts for Goodman\_16:

(Start: 17 @11743 has 20 MA's), (43, 11857), (49, 11887), (60, 11935), (61, 11938), (62, 11944), (74, 11998), (85, 12043), (101, 12130),

Gene: Gudmit\_12 Start: 7950, Stop: 8414, Start Num: 15

Candidate Starts for Gudmit\_12:

(Start: 15 @7950 has 31 MA's), (22, 7974), (31, 8016), (36, 8043), (74, 8238), (77, 8256), (90, 8325), (92, 8334), (97, 8364), (104, 8403),

Gene: Guzman\_19 Start: 9936, Stop: 10379, Start Num: 13

Candidate Starts for Guzman\_19:

(Start: 13 @9936 has 11 MA's), (38, 10056), (45, 10077), (54, 10122), (66, 10164), (87, 10263),

Gene: HFrancette\_13 Start: 8321, Stop: 8758, Start Num: 18

Candidate Starts for HFrancette\_13:

(2, 7997), (Start: 18 @8321 has 12 MA's), (33, 8384), (39, 8429), (41, 8435), (45, 8447), (63, 8534), (65, 8540), (74, 8588), (85, 8633), (88, 8648), (96, 8696), (98, 8702),

Gene: Haley23\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for Haley23\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: Herod\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Herod\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Hiyaa\_17 Start: 14197, Stop: 14646, Start Num: 11

Candidate Starts for Hiyaa\_17:

(8, 14155), (Start: 10 @14188 has 2 MA's), (Start: 11 @14197 has 2 MA's), (22, 14233), (40, 14320), (50, 14365), (51, 14368), (59, 14404), (62, 14416), (79, 14494), (84, 14512), (86, 14527), (93, 14560), (99, 14593), (105, 14635),

Gene: Hortense\_11 Start: 7377, Stop: 7817, Start Num: 16

Candidate Starts for Hortense\_11:

(Start: 16 @7377 has 55 MA's), (23, 7401), (41, 7491), (43, 7497), (62, 7596), (75, 7668), (85, 7707), (88, 7722),

Gene: Howe\_11 Start: 7377, Stop: 7817, Start Num: 16

Candidate Starts for Howe\_11:

(Start: 16 @7377 has 55 MA's), (23, 7401), (41, 7491), (43, 7497), (62, 7596), (75, 7668), (85, 7707), (88, 7722),

Gene: Htur\_15 Start: 11746, Stop: 12186, Start Num: 17

Candidate Starts for Htur\_15:

(Start: 17 @11746 has 20 MA's), (25, 11776), (49, 11908), (61, 11959), (70, 11998), (71, 12001), (73, 12010), (84, 12055), (101, 12151),

Gene: Hugley\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Hugley\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Hyzer\_11 Start: 8036, Stop: 8476, Start Num: 16

Candidate Starts for Hyzer\_11:

(Start: 16 @8036 has 55 MA's), (23, 8060), (41, 8150), (56, 8222), (62, 8255), (85, 8366), (88, 8381),

Gene: Ididsumtinwong\_12 Start: 8212, Stop: 8625, Start Num: 19

Candidate Starts for Ididsumtinwong\_12:

(Start: 19 @8212 has 13 MA's), (45, 8311), (48, 8335), (93, 8548),

Gene: Ignacio\_13 Start: 8321, Stop: 8758, Start Num: 18

Candidate Starts for Ignacio\_13:

(2, 7997), (Start: 18 @8321 has 12 MA's), (33, 8384), (39, 8429), (41, 8435), (45, 8447), (63, 8534), (65, 8540), (74, 8588), (85, 8633), (88, 8648), (96, 8696), (98, 8702),

Gene: IndiRoo\_15 Start: 9770, Stop: 10210, Start Num: 17

Candidate Starts for IndiRoo\_15:

(Start: 17 @9770 has 20 MA's), (22, 9788), (34, 9845), (35, 9863), (47, 9917), (73, 10034), (85, 10088), (91, 10118), (101, 10175),

Gene: Invectra\_12 Start: 7677, Stop: 8117, Start Num: 16

Candidate Starts for Invectra\_12:

(Start: 16 @7677 has 55 MA's), (22, 7698), (23, 7701), (41, 7791), (43, 7797), (53, 7848), (56, 7863), (62, 7896), (80, 7980), (85, 8007), (88, 8022),

Gene: JCole\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for JCole\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: Jace\_10 Start: 7713, Stop: 8150, Start Num: 16

Candidate Starts for Jace\_10:

(4, 7398), (Start: 16 @7713 has 55 MA's), (36, 7797), (43, 7830), (62, 7929), (82, 8025), (84, 8028), (89, 8064),

Gene: Jakelyne\_20 Start: 9677, Stop: 10120, Start Num: 13

Candidate Starts for Jakelyne\_20:

(Start: 13 @9677 has 11 MA's), (38, 9797), (45, 9818), (54, 9863), (66, 9905), (74, 9950), (87, 10004),

Gene: Jalleen\_12 Start: 7161, Stop: 7622, Start Num: 15

Candidate Starts for Jalleen\_12:

(Start: 15 @7161 has 31 MA's), (22, 7185), (25, 7197), (27, 7209), (36, 7254), (62, 7386), (76, 7461), (83, 7494), (90, 7536), (97, 7575),

Gene: Jera\_16 Start: 10824, Stop: 11264, Start Num: 17

Candidate Starts for Jera\_16:

(Start: 17 @10824 has 20 MA's), (25, 10854), (32, 10896), (49, 10986), (60, 11034), (61, 11037), (70, 11076), (71, 11079), (73, 11088), (84, 11133), (86, 11148), (101, 11229),

Gene: Johann\_16 Start: 11743, Stop: 12165, Start Num: 17

Candidate Starts for Johann\_16:

(Start: 17 @11743 has 20 MA's), (43, 11857), (49, 11887), (60, 11935), (61, 11938), (62, 11944), (74, 11998), (85, 12043), (101, 12130),

Gene: Keanu\_17 Start: 14234, Stop: 14686, Start Num: 10

Candidate Starts for Keanu\_17:

(Start: 10 @14234 has 2 MA's), (22, 14273), (30, 14312), (40, 14360), (51, 14408), (58, 14435), (59, 14444), (74, 14516), (93, 14600), (99, 14633), (101, 14648),

Gene: Kita\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Kita\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Kokushibo\_18 Start: 14212, Stop: 14661, Start Num: 11

Candidate Starts for Kokushibo\_18:

(8, 14170), (Start: 10 @14203 has 2 MA's), (Start: 11 @14212 has 2 MA's), (22, 14248), (23, 14251), (40, 14335), (50, 14380), (51, 14383), (59, 14419), (62, 14431), (79, 14509), (84, 14527), (86, 14542), (93, 14575), (99, 14608), (105, 14650),

Gene: Labella\_17 Start: 11712, Stop: 12152, Start Num: 17

Candidate Starts for Labella\_17:

(Start: 17 @11712 has 20 MA's), (25, 11742), (32, 11784), (49, 11874), (60, 11922), (61, 11925), (70, 11964), (71, 11967), (73, 11976), (84, 12021), (86, 12036), (101, 12117),

Gene: Lamberg\_11 Start: 7161, Stop: 7622, Start Num: 15

Candidate Starts for Lamberg\_11:

(Start: 15 @7161 has 31 MA's), (22, 7185), (25, 7197), (27, 7209), (36, 7254), (62, 7386), (76, 7461), (83, 7494), (90, 7536), (97, 7575),

Gene: Lesiram\_17 Start: 10289, Stop: 10717, Start Num: 17

Candidate Starts for Lesiram\_17:

(Start: 17 @10289 has 20 MA's), (23, 10310), (29, 10349), (42, 10412), (48, 10445), (50, 10451), (54, 10466), (55, 10472), (62, 10496), (72, 10541), (74, 10553), (75, 10562), (82, 10586), (87, 10607),

Gene: Linayshia\_15 Start: 11738, Stop: 12178, Start Num: 17

Candidate Starts for Linayshia\_15:

(Start: 17 @11738 has 20 MA's), (25, 11768), (49, 11900), (61, 11951), (70, 11990), (71, 11993), (73, 12002), (84, 12047), (101, 12143),

Gene: Lishka\_12 Start: 8176, Stop: 8589, Start Num: 19

Candidate Starts for Lishka\_12:

(Start: 19 @8176 has 13 MA's), (45, 8275), (48, 8299), (93, 8512),

Gene: LordFarquaad\_11 Start: 7161, Stop: 7622, Start Num: 15

Candidate Starts for LordFarquaad\_11:

(Start: 15 @7161 has 31 MA's), (22, 7185), (25, 7197), (27, 7209), (36, 7254), (62, 7386), (63, 7392), (76, 7461), (83, 7494), (90, 7536), (97, 7575),

Gene: Losacky\_19 Start: 9801, Stop: 10244, Start Num: 13

Candidate Starts for Losacky\_19:

(Start: 13 @9801 has 11 MA's), (45, 9942), (54, 9987), (66, 10029), (87, 10128),

Gene: Lton\_11 Start: 7186, Stop: 7647, Start Num: 15

Candidate Starts for Lton\_11:

(Start: 15 @7186 has 31 MA's), (22, 7210), (25, 7222), (27, 7234), (36, 7279), (48, 7351), (62, 7411), (77, 7492), (83, 7522), (90, 7564), (97, 7603),

Gene: Madavieve\_11 Start: 8036, Stop: 8476, Start Num: 16

Candidate Starts for Madavieve\_11:

(3, 7703), (5, 7760), (Start: 16 @8036 has 55 MA's), (23, 8060), (41, 8150), (56, 8222), (62, 8255), (85, 8366), (88, 8381),

Gene: Madeline\_11 Start: 8036, Stop: 8476, Start Num: 16

Candidate Starts for Madeline\_11:

(Start: 16 @8036 has 55 MA's), (23, 8060), (41, 8150), (56, 8222), (62, 8255), (85, 8366), (88, 8381),

Gene: Manasvini\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Manasvini\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Maridalia\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Maridalia\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Mariel\_21 Start: 9832, Stop: 10275, Start Num: 13

Candidate Starts for Mariel\_21:

(Start: 13 @9832 has 11 MA's), (38, 9952), (45, 9973), (54, 10018), (66, 10060), (87, 10159), (100, 10225),

Gene: Matteo\_11 Start: 7161, Stop: 7622, Start Num: 15

Candidate Starts for Matteo\_11:

(Start: 15 @7161 has 31 MA's), (22, 7185), (25, 7197), (27, 7209), (36, 7254), (62, 7386), (63, 7392), (76, 7461), (83, 7494), (90, 7536), (97, 7575),

Gene: Mbo4\_11 Start: 7841, Stop: 8311, Start Num: 12

Candidate Starts for Mbo4\_11:

(Start: 12 @7841 has 1 MA's), (46, 7985), (48, 8009), (90, 8219), (96, 8255), (97, 8258),

Gene: Mcklovin\_12 Start: 8494, Stop: 8934, Start Num: 16

Candidate Starts for Mcklovin\_12:

(Start: 16 @8494 has 55 MA's), (23, 8518), (41, 8608), (43, 8614), (56, 8680), (62, 8713), (85, 8824), (88, 8839),

Gene: MenE\_18 Start: 9789, Stop: 10232, Start Num: 13

Candidate Starts for MenE\_18:

(Start: 13 @9789 has 11 MA's), (38, 9909), (45, 9930), (54, 9975), (66, 10017), (87, 10116),

Gene: MichaelScott\_12 Start: 7677, Stop: 8117, Start Num: 16

Candidate Starts for MichaelScott\_12:

(Start: 16 @7677 has 55 MA's), (22, 7698), (23, 7701), (41, 7791), (43, 7797), (56, 7863), (62, 7896), (85, 8007), (88, 8022),

Gene: Milani\_16 Start: 10421, Stop: 10861, Start Num: 17

Candidate Starts for Milani\_16:

(Start: 17 @10421 has 20 MA's), (23, 10442), (27, 10463), (35, 10514), (47, 10568), (61, 10634), (73, 10685), (85, 10739), (91, 10769), (101, 10826),

Gene: Mocha12\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for Mocha12\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: Mojarita\_12 Start: 8489, Stop: 8917, Start Num: 19

Candidate Starts for Mojarita\_12:

(Start: 19 @8489 has 13 MA's), (45, 8594), (48, 8618), (78, 8753), (103, 8885),

Gene: Moosehead\_11 Start: 7129, Stop: 7587, Start Num: 15

Candidate Starts for Moosehead\_11:

(Start: 15 @7129 has 31 MA's), (22, 7153), (25, 7165), (27, 7177), (36, 7222), (48, 7291), (62, 7351), (76, 7426), (77, 7432), (83, 7462), (90, 7504), (97, 7543),

Gene: NCRodriguez\_19 Start: 9790, Stop: 10233, Start Num: 13

Candidate Starts for NCRodriguez\_19:

(Start: 13 @9790 has 11 MA's), (38, 9910), (45, 9931), (54, 9976), (66, 10018), (87, 10117),

Gene: Neobush\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Neobush\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Nettuno\_11 Start: 7161, Stop: 7622, Start Num: 15

Candidate Starts for Nettuno\_11:

(Start: 15 @7161 has 31 MA's), (22, 7185), (25, 7197), (27, 7209), (36, 7254), (62, 7386), (76, 7461), (83, 7494), (90, 7536), (97, 7575),

Gene: Nymphadora\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Nymphadora\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Ohgeesy\_11 Start: 7383, Stop: 7823, Start Num: 16

Candidate Starts for Ohgeesy\_11:

(5, 7107), (Start: 16 @7383 has 55 MA's), (23, 7407), (41, 7497), (56, 7569), (62, 7602), (64, 7611), (85, 7713), (88, 7728),

Gene: Olympi\_17 Start: 11734, Stop: 12156, Start Num: 17

Candidate Starts for Olympi\_17:

(Start: 17 @11734 has 20 MA's), (43, 11848), (49, 11878), (60, 11926), (61, 11929), (62, 11935), (74, 11989), (101, 12121),

Gene: OneDirection\_11 Start: 7130, Stop: 7591, Start Num: 15

Candidate Starts for OneDirection\_11:

(Start: 15 @7130 has 31 MA's), (22, 7154), (25, 7166), (27, 7178), (36, 7223), (48, 7295), (62, 7355), (76, 7430), (77, 7436), (83, 7466), (90, 7508), (97, 7547),

Gene: Oregano\_12 Start: 7348, Stop: 7788, Start Num: 16

Candidate Starts for Oregano\_12:

(Start: 16 @7348 has 55 MA's), (23, 7372), (41, 7462), (43, 7468), (56, 7534), (62, 7567), (85, 7678), (88, 7693),

Gene: PantheRoc\_11 Start: 7383, Stop: 7823, Start Num: 16

Candidate Starts for PantheRoc\_11:

(5, 7107), (Start: 16 @7383 has 55 MA's), (23, 7407), (41, 7497), (56, 7569), (62, 7602), (85, 7713), (88, 7728),

Gene: PapayaSalad\_12 Start: 8184, Stop: 8594, Start Num: 19

Candidate Starts for PapayaSalad\_12:

(Start: 19 @8184 has 13 MA's), (45, 8283), (48, 8307), (52, 8319), (93, 8520),

Gene: Parvaparticeps\_38 Start: 28458, Stop: 28024, Start Num: 16

Candidate Starts for Parvaparticeps\_38:

(Start: 15 @28461 has 31 MA's), (Start: 16 @28458 has 55 MA's), (24, 28425), (32, 28377), (47, 28299), (48, 28287), (54, 28266), (59, 28239), (62, 28227), (67, 28200), (75, 28161), (85, 28125), (103, 28038),

Gene: Pepperoni\_11 Start: 7480, Stop: 7941, Start Num: 15

Candidate Starts for Pepperoni\_11:

(Start: 15 @7480 has 31 MA's), (22, 7504), (25, 7516), (27, 7528), (30, 7543), (36, 7573), (48, 7645), (62, 7705), (76, 7780), (77, 7786), (83, 7816), (90, 7858), (97, 7897),

Gene: PermaG\_16 Start: 11806, Stop: 12228, Start Num: 17

Candidate Starts for PermaG\_16:

(Start: 17 @11806 has 20 MA's), (43, 11920), (48, 11947), (61, 12001), (62, 12007), (68, 12034), (74, 12061), (85, 12106), (101, 12193),

Gene: PhillyJawn\_18 Start: 9521, Stop: 9964, Start Num: 13

Candidate Starts for PhillyJawn\_18:

(Start: 13 @9521 has 11 MA's), (45, 9662), (54, 9707), (66, 9749), (87, 9848),

Gene: Phingu\_20 Start: 9680, Stop: 10123, Start Num: 13

Candidate Starts for Phingu\_20:

(Start: 13 @9680 has 11 MA's), (38, 9800), (45, 9821), (54, 9866), (66, 9908), (87, 10007),

Gene: Phonegingi\_17 Start: 9521, Stop: 9964, Start Num: 13

Candidate Starts for Phonegingi\_17:

(Start: 13 @9521 has 11 MA's), (38, 9641), (45, 9662), (54, 9707), (66, 9749), (87, 9848),

Gene: PhriskyACE\_11 Start: 7181, Stop: 7621, Start Num: 16

Candidate Starts for PhriskyACE\_11:

(Start: 16 @7181 has 55 MA's), (23, 7205), (41, 7295), (43, 7301), (56, 7367), (62, 7400), (85, 7511), (88, 7526),

Gene: Picard\_12 Start: 8489, Stop: 8917, Start Num: 19

Candidate Starts for Picard\_12:

(Start: 19 @8489 has 13 MA's), (45, 8594), (48, 8618), (78, 8753), (103, 8885),

Gene: Piccadilly\_13 Start: 8312, Stop: 8746, Start Num: 18

Candidate Starts for Piccadilly\_13:

(2, 7988), (Start: 18 @8312 has 12 MA's), (41, 8423), (45, 8435), (63, 8522), (65, 8528), (85, 8621), (88, 8636), (96, 8684), (98, 8690),

Gene: Pickett\_11 Start: 7161, Stop: 7622, Start Num: 15

Candidate Starts for Pickett\_11:

(Start: 15 @7161 has 31 MA's), (22, 7185), (25, 7197), (27, 7209), (36, 7254), (62, 7386), (63, 7392), (76, 7461), (83, 7494), (90, 7536), (97, 7575),

Gene: Pickles13\_17 Start: 9691, Stop: 10134, Start Num: 13

Candidate Starts for Pickles13\_17:

(Start: 13 @9691 has 11 MA's), (26, 9733), (45, 9832), (54, 9877), (66, 9919), (87, 10018),

Gene: Polly\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Polly\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Powerball\_11 Start: 7182, Stop: 7622, Start Num: 16

Candidate Starts for Powerball\_11:

(Start: 16 @7182 has 55 MA's), (23, 7206), (41, 7296), (43, 7302), (56, 7368), (62, 7401), (85, 7512), (88, 7527),

Gene: REQ3\_45 Start: 24570, Stop: 25019, Start Num: 12

Candidate Starts for REQ3\_45:

(Start: 12 @24570 has 1 MA's), (28, 24633), (38, 24684), (41, 24693), (46, 24708), (48, 24732), (49, 24735), (62, 24792), (63, 24798), (72, 24843), (95, 24963), (102, 25002),

Gene: Raleigh\_12 Start: 8614, Stop: 9027, Start Num: 19

Candidate Starts for Raleigh\_12:

(1, 8278), (6, 8386), (Start: 19 @8614 has 13 MA's), (45, 8713), (48, 8737), (63, 8806), (81, 8890), (84, 8896), (93, 8950), (103, 9004),

Gene: Rasovi\_15 Start: 11746, Stop: 12186, Start Num: 17

Candidate Starts for Rasovi\_15:

(Start: 17 @11746 has 20 MA's), (25, 11776), (49, 11908), (61, 11959), (70, 11998), (71, 12001), (73, 12010), (84, 12055), (101, 12151),

Gene: RavenCo17\_11 Start: 8008, Stop: 8472, Start Num: 15

Candidate Starts for RavenCo17\_11:

(Start: 15 @8008 has 31 MA's), (27, 8056), (62, 8233), (72, 8284), (77, 8314), (80, 8326), (90, 8386), (104, 8464),

Gene: Rootkit7\_15 Start: 11577, Stop: 12017, Start Num: 17

Candidate Starts for Rootkit7\_15:

(Start: 17 @11577 has 20 MA's), (25, 11607), (32, 11649), (49, 11739), (60, 11787), (61, 11790), (70, 11829), (71, 11832), (73, 11841), (84, 11886), (86, 11901), (101, 11982),

Gene: SBlackberry\_15 Start: 11583, Stop: 12023, Start Num: 17

Candidate Starts for SBlackberry\_15:

(Start: 17 @11583 has 20 MA's), (25, 11613), (32, 11655), (49, 11745), (60, 11793), (61, 11796), (70, 11835), (71, 11838), (73, 11847), (84, 11892), (86, 11907), (101, 11988),

Gene: SV1\_12 Start: 8384, Stop: 8800, Start Num: 19

Candidate Starts for SV1\_12:

(Start: 19 @8384 has 13 MA's), (45, 8483), (81, 8660), (93, 8720), (101, 8768),

Gene: Sahara\_11 Start: 7177, Stop: 7632, Start Num: 15

Candidate Starts for Sahara\_11:

(Start: 15 @7177 has 31 MA's), (22, 7201), (25, 7213), (27, 7225), (36, 7270), (62, 7399), (77, 7480), (83, 7507), (90, 7549), (97, 7588),

Gene: Samman98\_12 Start: 7678, Stop: 8118, Start Num: 16

Candidate Starts for Samman98\_12:

(Start: 16 @7678 has 55 MA's), (23, 7702), (41, 7792), (43, 7798), (56, 7864), (62, 7897), (85, 8008), (88, 8023),

Gene: Savage\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for Savage\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: Schlegelian\_13 Start: 8312, Stop: 8746, Start Num: 18

Candidate Starts for Schlegelian\_13:

(2, 7988), (Start: 18 @8312 has 12 MA's), (41, 8423), (45, 8435), (63, 8522), (65, 8528), (85, 8621), (88, 8636), (96, 8684), (98, 8690),

Gene: Sekhmet\_12 Start: 7677, Stop: 8117, Start Num: 16

Candidate Starts for Sekhmet\_12:

(Start: 16 @7677 has 55 MA's), (22, 7698), (23, 7701), (41, 7791), (43, 7797), (53, 7848), (56, 7863), (62, 7896), (80, 7980), (85, 8007), (88, 8022),

Gene: Shlim410\_11 Start: 7377, Stop: 7817, Start Num: 16

Candidate Starts for Shlim410\_11:

(Start: 16 @7377 has 55 MA's), (23, 7401), (41, 7491), (43, 7497), (62, 7596), (75, 7668), (85, 7707), (88, 7722),

Gene: Sidious\_11 Start: 7378, Stop: 7818, Start Num: 16

Candidate Starts for Sidious\_11:

(Start: 16 @7378 has 55 MA's), (23, 7402), (41, 7492), (62, 7597), (85, 7708), (88, 7723),

Gene: SoJo\_12 Start: 8406, Stop: 8822, Start Num: 19

Candidate Starts for SoJo\_12:

(Start: 19 @8406 has 13 MA's), (45, 8505), (63, 8598), (93, 8742), (100, 8778), (103, 8796),

Gene: SoilAssassin\_11 Start: 7161, Stop: 7622, Start Num: 15

Candidate Starts for SoilAssassin\_11:

(Start: 15 @7161 has 31 MA's), (22, 7185), (25, 7197), (27, 7209), (36, 7254), (62, 7386), (63, 7392), (76, 7461), (83, 7494), (90, 7536), (97, 7575),

Gene: Spocter\_17 Start: 14185, Stop: 14634, Start Num: 11

Candidate Starts for Spocter\_17:

(8, 14143), (Start: 10 @14176 has 2 MA's), (Start: 11 @14185 has 2 MA's), (22, 14221), (23, 14224), (40, 14308), (50, 14353), (51, 14356), (59, 14392), (62, 14404), (79, 14482), (84, 14500), (86, 14515), (93, 14548), (99, 14581), (105, 14623),

Gene: Sproutie\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for Sproutie\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: Sucha\_12 Start: 8759, Stop: 9199, Start Num: 17

Candidate Starts for Sucha\_12:

(Start: 17 @8759 has 20 MA's), (20, 8771), (25, 8789), (34, 8834), (35, 8852), (47, 8906), (61, 8972), (73, 9023), (85, 9077), (91, 9107), (101, 9164),

Gene: Suerte\_11 Start: 7176, Stop: 7616, Start Num: 16

Candidate Starts for Suerte\_11:

(Start: 16 @7176 has 55 MA's), (23, 7200), (41, 7290), (43, 7296), (53, 7347), (56, 7362), (62, 7395), (85, 7506), (88, 7521),

Gene: Suscepit\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Suscepit\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Sweetums\_17 Start: 10387, Stop: 10815, Start Num: 17

Candidate Starts for Sweetums\_17:

(Start: 17 @10387 has 20 MA's), (23, 10408), (29, 10447), (42, 10510), (48, 10543), (50, 10549), (55, 10570), (62, 10594), (72, 10639), (74, 10651), (75, 10660), (82, 10684), (87, 10705),

Gene: Tayonia\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Tayonia\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Teng\_18 Start: 10310, Stop: 10738, Start Num: 17

Candidate Starts for Teng\_18:

(Start: 17 @10310 has 20 MA's), (23, 10331), (29, 10370), (42, 10433), (48, 10466), (50, 10472), (54, 10487), (55, 10493), (62, 10517), (72, 10562), (74, 10574), (75, 10583), (82, 10607), (87, 10628),

Gene: ThankyouJordi\_11 Start: 8033, Stop: 8473, Start Num: 16

Candidate Starts for ThankyouJordi\_11:

(Start: 16 @8033 has 55 MA's), (23, 8057), (41, 8147), (62, 8252), (85, 8363), (88, 8378),

Gene: Thimann\_12 Start: 7678, Stop: 8118, Start Num: 16

Candidate Starts for Thimann\_12:

(Start: 16 @7678 has 55 MA's), (22, 7699), (23, 7702), (41, 7792), (43, 7798), (56, 7864), (62, 7897), (85, 8008), (88, 8023),

Gene: TimTam\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for TimTam\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: TinyDot\_13 Start: 8300, Stop: 8752, Start Num: 18

Candidate Starts for TinyDot\_13:

(Start: 18 @8300 has 12 MA's), (60, 8513), (78, 8600), (85, 8636),

Gene: ToastyFinz\_11 Start: 8267, Stop: 8689, Start Num: 19

Candidate Starts for ToastyFinz\_11:

(Start: 19 @8267 has 13 MA's), (45, 8366), (48, 8390), (63, 8459), (65, 8465), (69, 8489), (78, 8525), (93, 8603), (100, 8639), (103, 8657),

Gene: Trumpet\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Trumpet\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Tubberson\_12 Start: 8406, Stop: 8822, Start Num: 19

Candidate Starts for Tubberson\_12:

(Start: 19 @8406 has 13 MA's), (45, 8505), (63, 8598), (93, 8742), (100, 8778), (103, 8796),

Gene: TuertoX\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for TuertoX\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: TurboVicky\_15 Start: 11577, Stop: 12017, Start Num: 17

Candidate Starts for TurboVicky\_15:

(Start: 17 @11577 has 20 MA's), (25, 11607), (32, 11649), (49, 11739), (60, 11787), (61, 11790), (70, 11829), (71, 11832), (73, 11841), (84, 11886), (86, 11901), (101, 11982),

Gene: Tuti\_13 Start: 7677, Stop: 8117, Start Num: 16

Candidate Starts for Tuti\_13:

(Start: 16 @7677 has 55 MA's), (22, 7698), (23, 7701), (41, 7791), (43, 7797), (56, 7863), (62, 7896), (85, 8007), (88, 8022),

Gene: Twinkle\_11 Start: 7377, Stop: 7817, Start Num: 16

Candidate Starts for Twinkle\_11:

(Start: 16 @7377 has 55 MA's), (23, 7401), (41, 7491), (43, 7497), (62, 7596), (75, 7668), (85, 7707), (88, 7722),

Gene: Typher\_17 Start: 11711, Stop: 12151, Start Num: 17

Candidate Starts for Typher\_17:

(Start: 17 @11711 has 20 MA's), (25, 11741), (32, 11783), (49, 11873), (60, 11921), (61, 11924), (70, 11963), (71, 11966), (73, 11975), (84, 12020), (86, 12035), (101, 12116),

Gene: Vasanti\_11 Start: 7180, Stop: 7641, Start Num: 15

Candidate Starts for Vasanti\_11:

(Start: 15 @7180 has 31 MA's), (22, 7204), (25, 7216), (27, 7228), (36, 7273), (62, 7405), (76, 7480), (77, 7486), (83, 7513), (90, 7555), (97, 7594),

Gene: Violeta\_19 Start: 9619, Stop: 10062, Start Num: 13

Candidate Starts for Violeta\_19:

(Start: 13 @9619 has 11 MA's), (38, 9739), (45, 9760), (54, 9805), (66, 9847), (87, 9946),

Gene: Vondra\_13 Start: 8321, Stop: 8755, Start Num: 18

Candidate Starts for Vondra\_13:

(2, 7997), (Start: 18 @8321 has 12 MA's), (33, 8384), (41, 8432), (45, 8444), (63, 8531), (65, 8537), (74, 8585), (85, 8630), (88, 8645), (96, 8693), (98, 8699),

Gene: Warren\_18 Start: 9718, Stop: 10161, Start Num: 13

Candidate Starts for Warren\_18:

(Start: 13 @9718 has 11 MA's), (45, 9859), (54, 9904), (66, 9946), (87, 10045),

Gene: WelcomeAyanna\_11 Start: 8033, Stop: 8473, Start Num: 16

Candidate Starts for WelcomeAyanna\_11:

(Start: 16 @8033 has 55 MA's), (23, 8057), (41, 8147), (62, 8252), (85, 8363), (88, 8378),

Gene: Whiteclaw\_11 Start: 7161, Stop: 7619, Start Num: 15

Candidate Starts for Whiteclaw\_11:

(Start: 15 @7161 has 31 MA's), (27, 7209), (36, 7254), (50, 7329), (62, 7383), (77, 7464), (83, 7491), (90, 7533), (97, 7572),

Gene: Winchester007\_33 Start: 15638, Stop: 16081, Start Num: 13

Candidate Starts for Winchester007\_33:

(Start: 13 @15638 has 11 MA's), (45, 15779), (54, 15824), (66, 15866), (87, 15965),

Gene: WinkNick\_12 Start: 7678, Stop: 8118, Start Num: 16

Candidate Starts for WinkNick\_12:

(Start: 16 @7678 has 55 MA's), (23, 7702), (41, 7792), (43, 7798), (56, 7864), (62, 7897), (85, 8008), (88, 8023),

Gene: Wrackline\_22 Start: 10963, Stop: 11397, Start Num: 14

Candidate Starts for Wrackline\_22:

(Start: 14 @10963 has 1 MA's), (38, 11080), (44, 11098), (49, 11128), (50, 11131), (70, 11212), (73, 11224), (87, 11287),

Gene: Yeet412\_11 Start: 7161, Stop: 7622, Start Num: 15

Candidate Starts for Yeet412\_11:

(Start: 15 @7161 has 31 MA's), (22, 7185), (25, 7197), (27, 7209), (36, 7254), (62, 7386), (63, 7392), (76, 7461), (83, 7494), (90, 7536), (97, 7575),

Gene: Yeezy\_11 Start: 7380, Stop: 7820, Start Num: 16

Candidate Starts for Yeezy\_11:

(5, 7104), (Start: 16 @7380 has 55 MA's), (23, 7404), (41, 7494), (56, 7566), (62, 7599), (85, 7710), (88, 7725),

Gene: Zameen\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Zameen\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (56, 8221), (62, 8254), (85, 8365), (88, 8380),

Gene: Zanella\_15 Start: 11580, Stop: 12020, Start Num: 17

Candidate Starts for Zanella\_15:

(Start: 17 @11580 has 20 MA's), (25, 11610), (32, 11652), (49, 11742), (60, 11790), (61, 11793), (70, 11832), (71, 11835), (73, 11844), (84, 11889), (86, 11904), (101, 11985),

Gene: Zirinka\_11 Start: 8035, Stop: 8475, Start Num: 16

Candidate Starts for Zirinka\_11:

(Start: 16 @8035 has 55 MA's), (23, 8059), (41, 8149), (43, 8155), (56, 8221), (62, 8254), (85, 8365), (88, 8380),