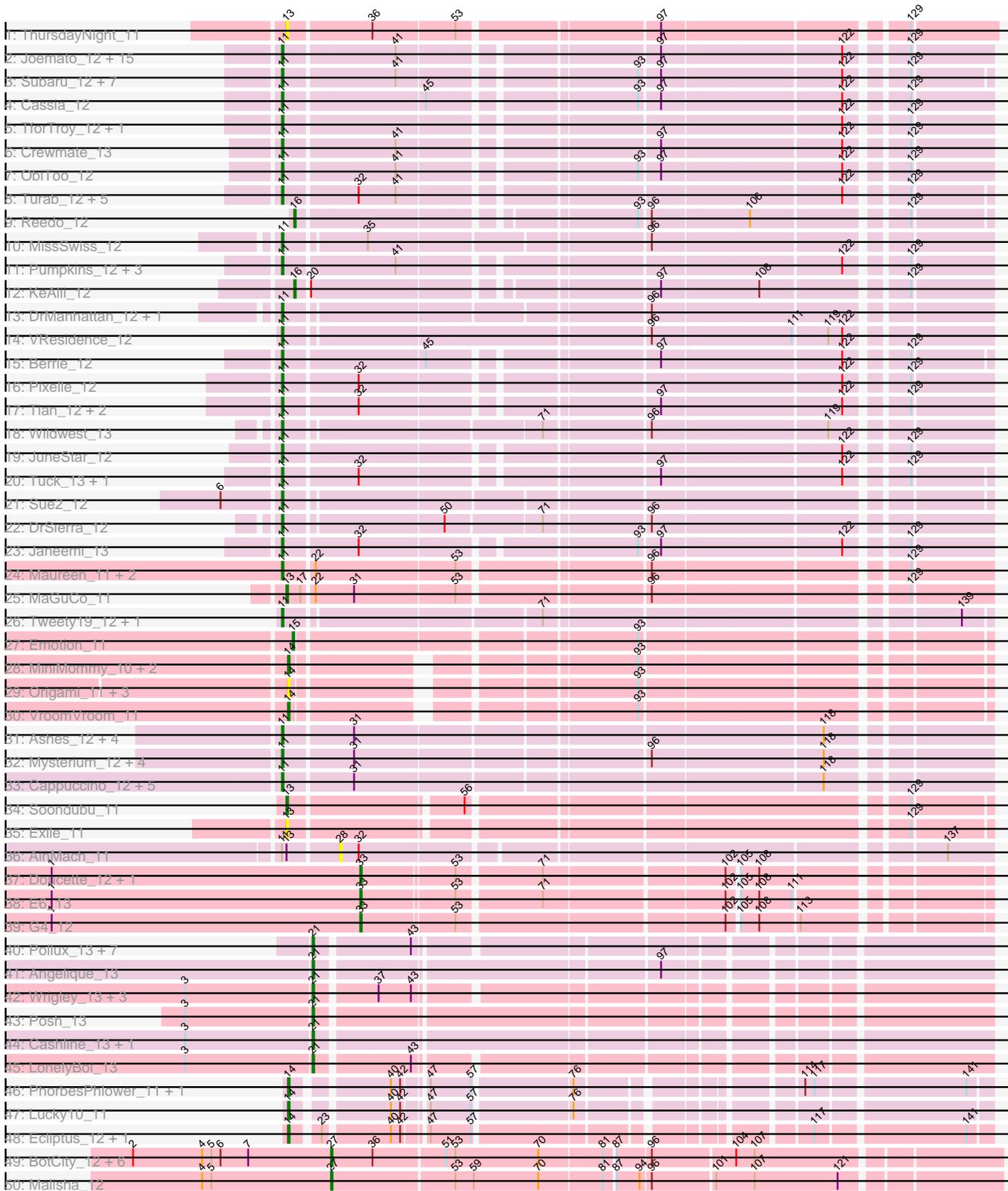


Pham 283495





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 283495 Report

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

Pham number 283495 has 202 members, 41 are drafts.

Phages represented in each track:

- Track 1 : ThursdayNight\_11
- Track 2 : Joemato\_12, Iter\_12, AGrandiflora\_12, JohnDoe\_12, Cyan\_12, YesChef\_12, Lizalica\_12, Simpson\_13, Kaylissa\_12, Lego\_12, Warda\_12, Tutumahutu\_12, Tbone\_12, Powerpuff\_12, Ascela\_12, Mudpuppy\_12
- Track 3 : Subaru\_12, Elezi\_12, Jstan\_12, Eraser\_12, London\_12, Niobe\_12, Skelbel\_12, Asa16\_12
- Track 4 : Cassia\_12
- Track 5 : TforTroy\_12, Yang\_12
- Track 6 : Crewmate\_13
- Track 7 : ObiToo\_12
- Track 8 : Turab\_12, Nitro\_12, Tallboi\_12, Adumb2043\_12, Amploria\_12, AEgle\_12
- Track 9 : Reedo\_12
- Track 10 : MissSwiss\_12
- Track 11 : Pumpkins\_12, IttyBittyPiggy\_12, Flutur\_12, Schaffner\_12
- Track 12 : KeAlii\_12
- Track 13 : DrManhattan\_12, Adolin\_12
- Track 14 : VResidence\_12
- Track 15 : Berrie\_12
- Track 16 : Pixelle\_12
- Track 17 : Tian\_12, Amyev\_12, Phives\_13
- Track 18 : Wildwest\_13
- Track 19 : JuneStar\_12
- Track 20 : Tuck\_13, Community\_13
- Track 21 : Sue2\_12
- Track 22 : DrSierra\_12
- Track 23 : Janeemi\_13
- Track 24 : Maureen\_11, IUFootball\_11, Liebe\_11
- Track 25 : MaGuCo\_11
- Track 26 : Tweety19\_12, Snek\_12
- Track 27 : Emotion\_11
- Track 28 : MiniMommy\_10, JasmineDragon\_11, ShakeltOph\_11
- Track 29 : Origami\_11, LadyAstra\_11, JohnThicc\_11, FiveHead\_11
- Track 30 : VroomVroom\_11
- Track 31 : Ashes\_12, RockScotty\_12, SpecialK\_12, Halsey\_12, Moss\_12
- Track 32 : Mysterium\_12, Beaupre\_12, Gumpizza\_12, Giorgio\_12, Stuu\_12
- Track 33 : Cappuccino\_12, Donkey\_12, Gambol\_12, Kalimba\_12, Sooty\_12, Sabourin\_12

- Track 34 : Soondubu\_11
- Track 35 : Exile\_11
- Track 36 : AinMach\_11
- Track 37 : Doucette\_12, B22\_12
- Track 38 : E6\_13
- Track 39 : G4\_12
- Track 40 : Pollux\_13, Lilas\_13, Bradissa\_13, BritBrat\_13, Floral\_13, EMSquaredA\_13, EnalisNailo\_13, Marteena\_13
- Track 41 : Angelique\_13
- Track 42 : Wrigley\_13, Pytheas\_13, Jablanski\_13, Confidence\_13
- Track 43 : Posh\_13
- Track 44 : Cashline\_13, BeeGee\_13
- Track 45 : LonelyBoi\_13
- Track 46 : PhorbessPhlower\_11, Morkie\_11
- Track 47 : Lucky10\_11
- Track 48 : Ecliptus\_12, ODay\_12
- Track 49 : BotCity\_12, Leroy\_12, Horus\_12, ShawBrad\_12, Frickyeah\_12, BENtherdunthat\_12, Asapag\_12
- Track 50 : Malisha\_12
- Track 51 : Lutum\_12, Kenna\_12
- Track 52 : CheeseTouch\_12, Budski\_12, Phabuloso\_12, LitninMcQueen\_12, Kamaru\_12, Holliday\_12
- Track 53 : Whitney\_12, Getalong\_12
- Track 54 : Periwinkle\_12
- Track 55 : Spooky\_12
- Track 56 : Squiddly\_13, Phistory\_12
- Track 57 : Crater\_12, BearBQ\_12, MortyNRick\_12, Birdsong\_12, Kuwabara\_12, Apricot\_12
- Track 58 : Zeta1847\_10
- Track 59 : Honk\_10
- Track 60 : Caron\_10
- Track 61 : Barnstormer\_10, UtzChips\_10
- Track 62 : Floof\_11, Percival\_11, SuperHands\_12, Forester\_20, Gretchen\_11
- Track 63 : SuMoo\_10
- Track 64 : IAmGroot\_11, GardenState\_11
- Track 65 : Mabodamaca\_11
- Track 66 : Cen1621\_10
- Track 67 : Jabbawokkie\_14, Avani\_13, Yoshi\_13, Demsculpinboyz\_13, Soul22\_13, Che9d\_13, SilverChicken\_13, Blarby\_14, Zapner\_14
- Track 68 : Elfy\_10
- Track 69 : BaileyBlu\_11
- Track 70 : GrimEater\_12, Jankie\_13
- Track 71 : CallinAllBarbz\_11
- Track 72 : ChamoyPickle\_13, AnnabelLee\_13, Roberts\_13, Gerri43\_13, Neuville\_13, CardboardBox\_13, ChipsNGuac\_13
- Track 73 : TripleC\_16
- Track 74 : LastNadiia\_16, Audell\_16
- Track 75 : Studio\_13
- Track 76 : Ezurina\_12
- Track 77 : Stellammi\_9
- Track 78 : Nebkiss\_9, Gaia\_9
- Track 79 : Hilltopfarm\_18, Typha\_18
- Track 80 : Faiyaz\_18, AuntGwenStacy\_18

- Track 81 : Bipper\_18, Cracklewink\_18
- Track 82 : Spartoi\_10
- Track 83 : TPA4\_12
- Track 84 : LilSpotty\_11
- Track 85 : Sleepyhead\_12
- Track 86 : Kromp\_13
- Track 87 : DS6A\_15

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

The start number called the most often in the published annotations is 11, it was called in 75 of the 161 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AEgle\_12, AGrandiflora\_12, Adolin\_12, Adumb2043\_12, Amploria\_12, Amyev\_12, Asa16\_12, Ascela\_12, Ashes\_12, Beaupre\_12, Berrie\_12, Bipper\_18, Cappuccino\_12, Cassia\_12, Cen1621\_10, Community\_13, Cracklewink\_18, Crewmate\_13, Cyan\_12, Donkey\_12, DrManhattan\_12, DrSierra\_12, Elezi\_12, Eraser\_12, Floof\_11, Flutur\_12, Forester\_20, Gambol\_12, GardenState\_11, Giorgio\_12, Gretchen\_11, Gumpizza\_12, Halsey\_12, Hilltopfarm\_18, Honk\_10, IAmGroot\_11, IUFootball\_11, Iter\_12, IttyBittyPiggy\_12, Janeemi\_13, Joemato\_12, JohnDoe\_12, Jstan\_12, JuneStar\_12, Kalimba\_12, Kaylissa\_12, Lego\_12, Liebe\_11, Lizalica\_12, London\_12, Maureen\_11, MissSwiss\_12, Moss\_12, Mudpuppy\_12, Mysterium\_12, Niobe\_12, Nitro\_12, ObiToo\_12, Percival\_11, Phives\_13, Pixelle\_12, Powerpuff\_12, Pumpkins\_12, RockScotty\_12, Sabourin\_12, Schaffner\_12, Simpson\_13, Skelbel\_12, Snek\_12, Sooty\_12, SpecialK\_12, Stuu\_12, Subaru\_12, Sue2\_12, SuperHands\_12, Tallboi\_12, Tbone\_12, TforTroy\_12, Tian\_12, Tuck\_13, Turab\_12, Tutumahutu\_12, Tweety19\_12, Typha\_18, VResidence\_12, Warda\_12, Wildwest\_13, Yang\_12, YesChef\_12,

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

- AinMach\_11, AuntGwenStacy\_18, Faiyaz\_18,

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

- Angelique\_13, AnnabelLee\_13, Apricot\_12, Asapag\_12, Audell\_16, Avani\_13, B22\_12, BENtherdunthat\_12, BaileyBlu\_11, Barnstormer\_10, BearBQ\_12, BeeGee\_13, Birdsong\_12, Blarby\_14, BotCity\_12, Bradissa\_13, BritBrat\_13, Budski\_12, CallinAllBarbz\_11, CardboardBox\_13, Caron\_10, Cashline\_13, ChamoyPickle\_13, Che9d\_13, CheeseTouch\_12, ChipsNGuac\_13, Confidence\_13, Crater\_12, DS6A\_15, Demsculpinboyz\_13, Doucette\_12, E6\_13, EMsquaredA\_13, Ecliptus\_12, Elfy\_10, Emotion\_11, EnalisNailo\_13, Exile\_11, Ezurina\_12, FiveHead\_11, Floral\_13, Frickyeah\_12, G4\_12, Gaia\_9, Gerri43\_13, Getalong\_12, GrimEater\_12, Holliday\_12, Horus\_12, Jabbawokkie\_14, Jablanski\_13, Jankie\_13, JasmineDragon\_11, JohnThicc\_11, Kamaru\_12, KeAlii\_12, Kenna\_12, Kromp\_13, Kuwabara\_12, LadyAstra\_11, LastNadiia\_16, Leroy\_12, LilSpotty\_11, Lilas\_13, LitninMcQueen\_12, LonelyBoi\_13, Lucky10\_11, Lutum\_12, MaGuCo\_11, Mabodamaca\_11, Malisha\_12, Marteena\_13, MiniMommy\_10, Morkie\_11, MortyNRick\_12, Nebkiss\_9, Neuvillelette\_13, ODay\_12, Origami\_11, Periwinkle\_12, Phabuloso\_12, Phistory\_12, PhorbesPhlower\_11, Pollux\_13, Posh\_13, Pytheas\_13, Reedo\_12, Roberts\_13, ShakeltOph\_11, ShawBrad\_12, SilverChicken\_13,

Sleepyhead\_12, Soondubu\_11, Soul22\_13, Spartoi\_10, Spooky\_12, Squiddly\_13, Stellammi\_9, Studio\_13, SuMoo\_10, TPA4\_12, ThursdayNight\_11, TripleC\_16, UtzChips\_10, VroomVroom\_11, Whitney\_12, Wrigley\_13, Yoshi\_13, Zapner\_14, Zeta1847\_10,

### Summary by start number:

#### Start 10:

- Found in 1 of 202 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 161
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Zeta1847\_10 (EH),

#### Start 11:

- Found in 92 of 202 ( 45.5% ) of genes in pham
- Manual Annotations of this start: 75 of 161
- Called 96.7% of time when present
- Phage (with cluster) where this start called: AEgle\_12 (AZ1), AGrandiflora\_12 (AZ1), Adolin\_12 (AZ1), Adumb2043\_12 (AZ1), Amploria\_12 (AZ1), Amyev\_12 (AZ1), Asa16\_12 (AZ1), Ascela\_12 (AZ1), Ashes\_12 (AZ5), Beaupre\_12 (AZ5), Berrie\_12 (AZ1), Bipper\_18 (Y), Cappuccino\_12 (AZ5), Cassia\_12 (AZ1), Cen1621\_10 (EH), Community\_13 (AZ1), Cracklewink\_18 (Y), Crewmate\_13 (AZ1), Cyan\_12 (AZ1), Donkey\_12 (AZ5), DrManhattan\_12 (AZ1), DrSierra\_12 (AZ1), Elezi\_12 (AZ1), Eraser\_12 (AZ1), Floof\_11 (EH), Flutur\_12 (AZ), Forester\_20 (EH), Gambol\_12 (AZ5), GardenState\_11 (EH), Giorgio\_12 (AZ5), Gretchen\_11 (EH), Gumpizza\_12 (AZ5), Halsey\_12 (AZ5), Hilltopfarm\_18 (Y), Honk\_10 (EH), IAmGroot\_11 (EH), IUFootball\_11 (AZ2), Iter\_12 (AZ1), IttyBittyPiggy\_12 (AZ1), Janeemi\_13 (AZ1), Joemato\_12 (AZ1), JohnDoe\_12 (AZ1), Jstan\_12 (AZ1), JuneStar\_12 (AZ1), Kalimba\_12 (AZ5), Kaylissa\_12 (AZ1), Lego\_12 (AZ1), Liebe\_11 (AZ2), Lizalica\_12 (AZ1), London\_12 (AZ1), Maureen\_11 (AZ2), MissSwiss\_12 (AZ1), Moss\_12 (AZ5), Mudpuppy\_12 (AZ1), Mysterium\_12 (AZ5), Niobe\_12 (AZ1), Nitro\_12 (AZ1), ObiToo\_12 (AZ1), Percival\_11 (EH), Phives\_13 (AZ1), Pixelle\_12 (AZ1), Powerpuff\_12 (AZ1), Pumpkins\_12 (AZ1), RockScotty\_12 (AZ5), Sabourin\_12 (AZ5), Schaffner\_12 (AZ1), Simpson\_13 (AZ1), Skelbel\_12 (AZ1), Snek\_12 (AZ3), Sooty\_12 (AZ5), SpecialK\_12 (AZ5), Stuu\_12 (AZ5), Subaru\_12 (AZ1), Sue2\_12 (AZ1), SuperHands\_12 (EH), Tallboi\_12 (AZ1), Tbone\_12 (AZ1), TforTroy\_12 (AZ1), Tian\_12 (AZ1), Tuck\_13 (AZ1), Turab\_12 (AZ1), Tutumahutu\_12 (AZ1), Tweety19\_12 (AZ3), Typha\_18 (Y), VResidence\_12 (AZ1), Warda\_12 (AZ1), Wildwest\_13 (AZ1), Yang\_12 (AZ1), YesChef\_12 (AZ1),

#### Start 13:

- Found in 16 of 202 ( 7.9% ) of genes in pham
- Manual Annotations of this start: 8 of 161
- Called 68.8% of time when present
- Phage (with cluster) where this start called: AuntGwenStacy\_18 (Y), Barnstormer\_10 (EH), Caron\_10 (EH), Exile\_11 (AZ6), Faiyaz\_18 (Y), MaGuCo\_11 (AZ2), Mabodamaca\_11 (EH), Soondubu\_11 (AZ6), SuMoo\_10 (EH), ThursdayNight\_11 (AZ), UtzChips\_10 (EH),

#### Start 14:

- Found in 19 of 202 ( 9.4% ) of genes in pham
- Manual Annotations of this start: 15 of 161
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Apricot\_12 (DN3), BearBQ\_12 (DN), Birdsong\_12 (DN), Crater\_12 (DN3), Ecliptus\_12 (DN), FiveHead\_11 (AZ4), JasmineDragon\_11 (AZ4), JohnThicc\_11 (AZ4), Kuwabara\_12 (DN4), LadyAstra\_11 (AZ4), Lucky10\_11 (DH), MiniMommy\_10 (AZ4), Morkie\_11 (DH), MortyNRick\_12 (DN), ODay\_12 (DN), Origami\_11 (AZ4), PhorbesPhlower\_11 (DH), ShakeltOph\_11 (AZ4), VroomVroom\_11 (AZ4),

#### Start 15:

- Found in 1 of 202 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 161
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Emotion\_11 (AZ4),

#### Start 16:

- Found in 2 of 202 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 2 of 161
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KeAlii\_12 (AZ1), Reedo\_12 (AZ1),

#### Start 19:

- Found in 1 of 202 ( 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: TPA4\_12 (singleton),

#### Start 21:

- Found in 18 of 202 ( 8.9% ) of genes in pham
- Manual Annotations of this start: 18 of 161
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique\_13 (CY1), BeeGee\_13 (CY5), Bradissa\_13 (CY1), BritBrat\_13 (CY2), Cashline\_13 (CY6), Confidence\_13 (CY1), EMSquaredA\_13 (CY1), EnalisNailo\_13 (CY1), Floral\_13 (CY1), Jablanski\_13 (CY3), Lilas\_13 (CY1), LonelyBoi\_13 (CY7), Marteenaa\_13 (CY1), Pollux\_13 (CY1), Posh\_13 (CY4), Pytheas\_13 (CY3), Sleepyhead\_12 (singleton), Wrigley\_13 (CY4),

#### Start 22:

- Found in 5 of 202 ( 2.5% ) of genes in pham
- Manual Annotations of this start: 1 of 161
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Kromp\_13 (singleton),

#### Start 24:

- Found in 12 of 202 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 2 of 161
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnnabelLee\_13 (FR), Audell\_16 (FR), CardboardBox\_13 (FR), ChamoyPickle\_13 (FR), ChipsNGuac\_13 (FR), Ezurina\_12 (FR), Gerri43\_13 (FR), LastNadiia\_16 (FR), Neuville\_13 (FR), Roberts\_13 (FR), Studio\_13 (FR), TripleC\_16 (FR),

#### Start 25:

- Found in 1 of 202 ( 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: Elfy\_10 (FP),

#### Start 27:

- Found in 32 of 202 ( 15.8% ) of genes in pham
- Manual Annotations of this start: 28 of 161
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Asapag\_12 (DN1), Avani\_13 (F2), BENTherdunthat\_12 (DN1), Blarby\_14 (F), BotCity\_12 (DN), Budski\_12 (DN), Che9d\_13 (F2), CheeseTouch\_12 (DN1), Demsculpinboyz\_13 (F2), Frickyeah\_12 (DN1), Getalong\_12 (DN1), Holliday\_12 (DN1), Horus\_12 (DN1), Jabbawokkie\_14 (F2), Kamaru\_12 (DN1), Kenna\_12 (DN1), Leroy\_12 (DN1), LitninMcQueen\_12 (DN1), Lutum\_12 (DN1), Malisha\_12 (DN), Periwinkle\_12 (DN1), Phabuloso\_12 (DN1), Phistory\_12 (DN1), ShawBrad\_12 (DN1), SilverChicken\_13 (F2), Soul22\_13 (F2), Spartoi\_10 (singleton), Spooky\_12 (DN2), Squiddly\_13 (DN2), Whitney\_12 (DN1), Yoshi\_13 (F2), Zapner\_14 (F2),

#### Start 28:

- Found in 1 of 202 ( 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: AinMach\_11 (AZ7),

#### Start 29:

- Found in 4 of 202 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 2 of 161
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaileyBlu\_11 (FP), CallinAllBarbz\_11 (FP), GrimEater\_12 (FP), Jankie\_13 (FP),

#### Start 31:

- Found in 22 of 202 ( 10.9% ) of genes in pham
- Manual Annotations of this start: 4 of 161
- Called 22.7% of time when present
- Phage (with cluster) where this start called: DS6A\_15 (singleton), Gaia\_9 (X), LilSpotty\_11 (singleton), Nebkiss\_9 (X), Stellammi\_9 (UNK),

#### Start 33:

- Found in 4 of 202 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 4 of 161
- Called 100.0% of time when present
- Phage (with cluster) where this start called: B22\_12 (BW), Doucette\_12 (BW), E6\_13 (BW), G4\_12 (BW),

### Summary by clusters:

There are 31 clusters represented in this pham: DN, FP, FR, DH, singleton, BW, CY6, AZ, F, DN4, DN1, DN3, DN2, CY3, CY2, CY1, CY7, EH, CY5, CY4, Y, X, UNK, F2, AZ1, AZ2, AZ3, AZ4, AZ5, AZ6, AZ7,

#### Info for manual annotations of cluster AZ1:

- Start number 11 was manually annotated 44 times for cluster AZ1.

- Start number 16 was manually annotated 2 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 11 was manually annotated 2 times for cluster AZ2.
- Start number 13 was manually annotated 1 time for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 11 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 14 was manually annotated 4 times for cluster AZ4.
- Start number 15 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster AZ5:

- Start number 11 was manually annotated 16 times for cluster AZ5.

Info for manual annotations of cluster AZ6:

- Start number 13 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster BW:

- Start number 33 was manually annotated 4 times for cluster BW.

Info for manual annotations of cluster CY1:

- Start number 21 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 21 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:

- Start number 21 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 21 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 21 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:

- Start number 21 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 21 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster DH:

- Start number 14 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 14 was manually annotated 5 times for cluster DN.
- Start number 27 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 27 was manually annotated 15 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 27 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 14 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 14 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster EH:

- Start number 10 was manually annotated 1 time for cluster EH.
- Start number 11 was manually annotated 7 times for cluster EH.
- Start number 13 was manually annotated 5 times for cluster EH.

Info for manual annotations of cluster F2:

- Start number 27 was manually annotated 7 times for cluster F2.

Info for manual annotations of cluster FP:

- Start number 29 was manually annotated 2 times for cluster FP.

Info for manual annotations of cluster FR:

- Start number 24 was manually annotated 2 times for cluster FR.

Info for manual annotations of cluster X:

- Start number 31 was manually annotated 2 times for cluster X.

Info for manual annotations of cluster Y:

- Start number 11 was manually annotated 4 times for cluster Y.
- Start number 13 was manually annotated 1 time for cluster Y.

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

Gene: AEgle\_12 Start: 9049, Stop: 9459, Start Num: 11

Candidate Starts for AEgle\_12:

(Start: 11 @9049 has 75 MA's), (32, 9094), (41, 9118), (122, 9379), (129, 9412),

Gene: AGrandiflora\_12 Start: 9036, Stop: 9449, Start Num: 11

Candidate Starts for AGrandiflora\_12:

(Start: 11 @9036 has 75 MA's), (41, 9105), (97, 9255), (122, 9366), (129, 9399),

Gene: Adolin\_12 Start: 9024, Stop: 9440, Start Num: 11

Candidate Starts for Adolin\_12:

(Start: 11 @9024 has 75 MA's), (96, 9240),

Gene: Adumb2043\_12 Start: 9048, Stop: 9458, Start Num: 11

Candidate Starts for Adumb2043\_12:

(Start: 11 @9048 has 75 MA's), (32, 9093), (41, 9117), (122, 9378), (129, 9411),

Gene: AinMach\_11 Start: 8183, Stop: 8566, Start Num: 28  
Candidate Starts for AinMach\_11:  
(Start: 11 @8150 has 75 MA's), (Start: 13 @8153 has 8 MA's), (28, 8183), (32, 8195), (137, 8537),

Gene: Amploria\_12 Start: 9048, Stop: 9458, Start Num: 11  
Candidate Starts for Amploria\_12:  
(Start: 11 @9048 has 75 MA's), (32, 9093), (41, 9117), (122, 9378), (129, 9411),

Gene: Amyev\_12 Start: 9064, Stop: 9477, Start Num: 11  
Candidate Starts for Amyev\_12:  
(Start: 11 @9064 has 75 MA's), (32, 9109), (97, 9283), (122, 9394), (129, 9427),

Gene: Angelique\_13 Start: 8261, Stop: 8653, Start Num: 21  
Candidate Starts for Angelique\_13:  
(Start: 21 @8261 has 18 MA's), (97, 8465),

Gene: AnnabelLee\_13 Start: 7727, Stop: 8119, Start Num: 24  
Candidate Starts for AnnabelLee\_13:  
(Start: 24 @7727 has 2 MA's), (65, 7826), (66, 7829), (82, 7880), (84, 7883), (107, 7970), (108, 7973),  
(137, 8087), (142, 8111),

Gene: Apricot\_12 Start: 7390, Stop: 7773, Start Num: 14  
Candidate Starts for Apricot\_12:  
(Start: 14 @7390 has 15 MA's), (40, 7444), (42, 7450), (47, 7462), (57, 7486), (117, 7669), (141, 7759),

Gene: Asa16\_12 Start: 9018, Stop: 9428, Start Num: 11  
Candidate Starts for Asa16\_12:  
(Start: 11 @9018 has 75 MA's), (41, 9087), (93, 9225), (97, 9237), (122, 9348), (129, 9381),

Gene: Asapag\_12 Start: 7041, Stop: 7451, Start Num: 27  
Candidate Starts for Asapag\_12:  
(2, 6912), (4, 6957), (5, 6963), (6, 6969), (7, 6987), (Start: 27 @7041 has 28 MA's), (36, 7068), (51,  
7113), (53, 7119), (70, 7173), (81, 7212), (87, 7218), (96, 7239), (104, 7290), (107, 7302),

Gene: Ascela\_12 Start: 9053, Stop: 9463, Start Num: 11  
Candidate Starts for Ascela\_12:  
(Start: 11 @9053 has 75 MA's), (41, 9122), (97, 9272), (122, 9383), (129, 9416),

Gene: Ashes\_12 Start: 8547, Stop: 8966, Start Num: 11  
Candidate Starts for Ashes\_12:  
(Start: 11 @8547 has 75 MA's), (Start: 31 @8589 has 4 MA's), (118, 8871),

Gene: Audell\_16 Start: 11067, Stop: 11459, Start Num: 24  
Candidate Starts for Audell\_16:  
(Start: 24 @11067 has 2 MA's), (48, 11130), (84, 11223), (97, 11253), (106, 11307), (107, 11310),  
(108, 11313), (117, 11349), (142, 11451),

Gene: AuntGwenStacy\_18 Start: 11997, Stop: 12434, Start Num: 13  
Candidate Starts for AuntGwenStacy\_18:  
(Start: 11 @11994 has 75 MA's), (Start: 13 @11997 has 8 MA's), (44, 12075), (48, 12084), (51, 12090),  
(54, 12096), (78, 12174), (98, 12240), (107, 12276), (126, 12351), (136, 12390),

Gene: Avani\_13 Start: 7213, Stop: 7617, Start Num: 27

Candidate Starts for Avani\_13:

(Start: 27 @7213 has 28 MA's), (38, 7246), (60, 7306), (80, 7372), (110, 7492), (115, 7504), (124, 7540), (130, 7570),

Gene: B22\_12 Start: 7687, Stop: 8055, Start Num: 33

Candidate Starts for B22\_12:

(1, 7486), (Start: 33 @7687 has 4 MA's), (53, 7744), (71, 7795), (102, 7906), (105, 7912), (108, 7924),

Gene: BENtherdunthat\_12 Start: 7041, Stop: 7451, Start Num: 27

Candidate Starts for BENtherdunthat\_12:

(2, 6912), (4, 6957), (5, 6963), (6, 6969), (7, 6987), (Start: 27 @7041 has 28 MA's), (36, 7068), (51, 7113), (53, 7119), (70, 7173), (81, 7212), (87, 7218), (96, 7239), (104, 7290), (107, 7302),

Gene: BaileyBlu\_11 Start: 6789, Stop: 7178, Start Num: 29

Candidate Starts for BaileyBlu\_11:

(Start: 29 @6789 has 2 MA's), (30, 6792), (91, 6951), (107, 7023), (109, 7032),

Gene: Barnstormer\_10 Start: 8216, Stop: 8632, Start Num: 13

Candidate Starts for Barnstormer\_10:

(Start: 13 @8216 has 8 MA's), (99, 8456), (112, 8513),

Gene: BearBQ\_12 Start: 7390, Stop: 7773, Start Num: 14

Candidate Starts for BearBQ\_12:

(Start: 14 @7390 has 15 MA's), (40, 7444), (42, 7450), (47, 7462), (57, 7486), (117, 7669), (141, 7759),

Gene: Beaupre\_12 Start: 8548, Stop: 8967, Start Num: 11

Candidate Starts for Beaupre\_12:

(Start: 11 @8548 has 75 MA's), (Start: 31 @8590 has 4 MA's), (96, 8767), (118, 8872),

Gene: BeeGee\_13 Start: 8263, Stop: 8649, Start Num: 21

Candidate Starts for BeeGee\_13:

(3, 8182), (Start: 21 @8263 has 18 MA's),

Gene: Berrie\_12 Start: 9020, Stop: 9430, Start Num: 11

Candidate Starts for Berrie\_12:

(Start: 11 @9020 has 75 MA's), (45, 9107), (97, 9239), (122, 9350), (129, 9383),

Gene: Bipper\_18 Start: 12080, Stop: 12517, Start Num: 11

Candidate Starts for Bipper\_18:

(Start: 11 @12080 has 75 MA's), (Start: 13 @12083 has 8 MA's), (41, 12146), (44, 12158), (48, 12167), (54, 12179), (72, 12239), (96, 12296), (98, 12323), (100, 12332), (108, 12362), (123, 12419), (128, 12449), (136, 12473),

Gene: Birdsong\_12 Start: 7390, Stop: 7773, Start Num: 14

Candidate Starts for Birdsong\_12:

(Start: 14 @7390 has 15 MA's), (40, 7444), (42, 7450), (47, 7462), (57, 7486), (117, 7669), (141, 7759),

Gene: Blarby\_14 Start: 7737, Stop: 8141, Start Num: 27

Candidate Starts for Blarby\_14:

(Start: 27 @7737 has 28 MA's), (38, 7770), (60, 7830), (80, 7896), (110, 8016), (115, 8028), (124, 8064), (130, 8094),

Gene: BotCity\_12 Start: 7039, Stop: 7449, Start Num: 27

Candidate Starts for BotCity\_12:

(2, 6910), (4, 6955), (5, 6961), (6, 6967), (7, 6985), (Start: 27 @7039 has 28 MA's), (36, 7066), (51, 7111), (53, 7117), (70, 7171), (81, 7210), (87, 7216), (96, 7237), (104, 7288), (107, 7300),

Gene: Bradissa\_13 Start: 8267, Stop: 8653, Start Num: 21

Candidate Starts for Bradissa\_13:

(Start: 21 @8267 has 18 MA's), (43, 8324),

Gene: BritBrat\_13 Start: 8269, Stop: 8655, Start Num: 21

Candidate Starts for BritBrat\_13:

(Start: 21 @8269 has 18 MA's), (43, 8326),

Gene: Budski\_12 Start: 7046, Stop: 7438, Start Num: 27

Candidate Starts for Budski\_12:

(2, 6917), (4, 6962), (5, 6968), (6, 6974), (7, 6992), (9, 7010), (Start: 27 @7046 has 28 MA's), (36, 7073), (51, 7118), (53, 7124), (59, 7136), (70, 7160), (81, 7199), (87, 7205), (94, 7220), (96, 7226), (104, 7277), (107, 7289), (121, 7343),

Gene: CallinAllBarbz\_11 Start: 6799, Stop: 7188, Start Num: 29

Candidate Starts for CallinAllBarbz\_11:

(Start: 29 @6799 has 2 MA's), (30, 6802), (91, 6961), (109, 7042), (116, 7069),

Gene: Cappuccino\_12 Start: 8456, Stop: 8875, Start Num: 11

Candidate Starts for Cappuccino\_12:

(Start: 11 @8456 has 75 MA's), (Start: 31 @8498 has 4 MA's), (118, 8780),

Gene: CardboardBox\_13 Start: 7727, Stop: 8119, Start Num: 24

Candidate Starts for CardboardBox\_13:

(Start: 24 @7727 has 2 MA's), (65, 7826), (66, 7829), (82, 7880), (84, 7883), (107, 7970), (108, 7973), (137, 8087), (142, 8111),

Gene: Caron\_10 Start: 8244, Stop: 8660, Start Num: 13

Candidate Starts for Caron\_10:

(Start: 13 @8244 has 8 MA's), (99, 8484),

Gene: Cashline\_13 Start: 8116, Stop: 8508, Start Num: 21

Candidate Starts for Cashline\_13:

(3, 8035), (Start: 21 @8116 has 18 MA's),

Gene: Cassia\_12 Start: 9139, Stop: 9552, Start Num: 11

Candidate Starts for Cassia\_12:

(Start: 11 @9139 has 75 MA's), (45, 9226), (93, 9346), (97, 9358), (122, 9469), (129, 9502),

Gene: Cen1621\_10 Start: 7355, Stop: 7771, Start Num: 11

Candidate Starts for Cen1621\_10:

(Start: 11 @7355 has 75 MA's), (129, 7724), (137, 7745),

Gene: ChamoyPickle\_13 Start: 7727, Stop: 8119, Start Num: 24

Candidate Starts for ChamoyPickle\_13:

(Start: 24 @7727 has 2 MA's), (65, 7826), (66, 7829), (82, 7880), (84, 7883), (107, 7970), (108, 7973), (137, 8087), (142, 8111),

Gene: Che9d\_13 Start: 7222, Stop: 7626, Start Num: 27

Candidate Starts for Che9d\_13:

(Start: 27 @7222 has 28 MA's), (38, 7255), (60, 7315), (80, 7381), (110, 7501), (115, 7513), (124, 7549), (130, 7579),

Gene: CheeseTouch\_12 Start: 7046, Stop: 7438, Start Num: 27

Candidate Starts for CheeseTouch\_12:

(2, 6917), (4, 6962), (5, 6968), (6, 6974), (7, 6992), (9, 7010), (Start: 27 @7046 has 28 MA's), (36, 7073), (51, 7118), (53, 7124), (59, 7136), (70, 7160), (81, 7199), (87, 7205), (94, 7220), (96, 7226), (104, 7277), (107, 7289), (121, 7343),

Gene: ChipsNGuac\_13 Start: 7727, Stop: 8119, Start Num: 24

Candidate Starts for ChipsNGuac\_13:

(Start: 24 @7727 has 2 MA's), (65, 7826), (66, 7829), (82, 7880), (84, 7883), (107, 7970), (108, 7973), (137, 8087), (142, 8111),

Gene: Community\_13 Start: 10099, Stop: 10509, Start Num: 11

Candidate Starts for Community\_13:

(Start: 11 @10099 has 75 MA's), (32, 10144), (97, 10318), (122, 10429), (129, 10462),

Gene: Confidence\_13 Start: 8263, Stop: 8649, Start Num: 21

Candidate Starts for Confidence\_13:

(3, 8182), (Start: 21 @8263 has 18 MA's), (37, 8299), (43, 8320),

Gene: Cracklewink\_18 Start: 12080, Stop: 12517, Start Num: 11

Candidate Starts for Cracklewink\_18:

(Start: 11 @12080 has 75 MA's), (Start: 13 @12083 has 8 MA's), (41, 12146), (44, 12158), (48, 12167), (54, 12179), (72, 12239), (96, 12296), (98, 12323), (100, 12332), (108, 12362), (123, 12419), (128, 12449), (136, 12473),

Gene: Crater\_12 Start: 7390, Stop: 7773, Start Num: 14

Candidate Starts for Crater\_12:

(Start: 14 @7390 has 15 MA's), (40, 7444), (42, 7450), (47, 7462), (57, 7486), (117, 7669), (141, 7759),

Gene: Crewmate\_13 Start: 9485, Stop: 9898, Start Num: 11

Candidate Starts for Crewmate\_13:

(Start: 11 @9485 has 75 MA's), (41, 9554), (97, 9704), (122, 9815), (129, 9848),

Gene: Cyan\_12 Start: 9040, Stop: 9453, Start Num: 11

Candidate Starts for Cyan\_12:

(Start: 11 @9040 has 75 MA's), (41, 9109), (97, 9259), (122, 9370), (129, 9403),

Gene: DS6A\_15 Start: 10364, Stop: 10735, Start Num: 31

Candidate Starts for DS6A\_15:

(Start: 31 @10364 has 4 MA's), (53, 10427), (59, 10439), (71, 10466), (85, 10511), (95, 10532), (104, 10586), (108, 10601), (116, 10628), (120, 10643), (125, 10664), (131, 10688),

Gene: Demsculpinboyz\_13 Start: 7213, Stop: 7617, Start Num: 27

Candidate Starts for Demsculpinboyz\_13:

(Start: 27 @7213 has 28 MA's), (38, 7246), (60, 7306), (80, 7372), (110, 7492), (115, 7504), (124, 7540), (130, 7570),

Gene: Donkey\_12 Start: 8456, Stop: 8875, Start Num: 11

Candidate Starts for Donkey\_12:

(Start: 11 @8456 has 75 MA's), (Start: 31 @8498 has 4 MA's), (118, 8780),

Gene: Doucette\_12 Start: 7747, Stop: 8115, Start Num: 33

Candidate Starts for Doucette\_12:

(1, 7546), (Start: 33 @7747 has 4 MA's), (53, 7804), (71, 7855), (102, 7966), (105, 7972), (108, 7984),

Gene: DrManhattan\_12 Start: 9014, Stop: 9430, Start Num: 11

Candidate Starts for DrManhattan\_12:

(Start: 11 @9014 has 75 MA's), (96, 9230),

Gene: DrSierra\_12 Start: 9047, Stop: 9463, Start Num: 11

Candidate Starts for DrSierra\_12:

(Start: 11 @9047 has 75 MA's), (50, 9143), (71, 9200), (96, 9263),

Gene: E6\_13 Start: 7798, Stop: 8166, Start Num: 33

Candidate Starts for E6\_13:

(1, 7597), (Start: 33 @7798 has 4 MA's), (53, 7855), (71, 7906), (102, 8017), (105, 8023), (108, 8035), (111, 8056),

Gene: EMSquaredA\_13 Start: 8269, Stop: 8655, Start Num: 21

Candidate Starts for EMSquaredA\_13:

(Start: 21 @8269 has 18 MA's), (43, 8326),

Gene: Ecliptus\_12 Start: 7118, Stop: 7501, Start Num: 14

Candidate Starts for Ecliptus\_12:

(Start: 14 @7118 has 15 MA's), (23, 7133), (40, 7172), (42, 7178), (47, 7190), (57, 7214), (117, 7397), (141, 7487),

Gene: Elezi\_12 Start: 9019, Stop: 9429, Start Num: 11

Candidate Starts for Elezi\_12:

(Start: 11 @9019 has 75 MA's), (41, 9088), (93, 9226), (97, 9238), (122, 9349), (129, 9382),

Gene: Elfy\_10 Start: 6715, Stop: 7113, Start Num: 25

Candidate Starts for Elfy\_10:

(12, 6688), (18, 6700), (25, 6715), (37, 6742), (61, 6796), (67, 6823), (75, 6850), (86, 6877), (91, 6889), (107, 6961), (111, 6985), (119, 7009),

Gene: Emotion\_11 Start: 7354, Stop: 7758, Start Num: 15

Candidate Starts for Emotion\_11:

(Start: 15 @7354 has 1 MA's), (93, 7555),

Gene: EnalisNailo\_13 Start: 8269, Stop: 8655, Start Num: 21

Candidate Starts for EnalisNailo\_13:

(Start: 21 @8269 has 18 MA's), (43, 8326),

Gene: Eraser\_12 Start: 9019, Stop: 9429, Start Num: 11

Candidate Starts for Eraser\_12:

(Start: 11 @9019 has 75 MA's), (41, 9088), (93, 9226), (97, 9238), (122, 9349), (129, 9382),

Gene: Exile\_11 Start: 8927, Stop: 9337, Start Num: 13

Candidate Starts for Exile\_11:

(Start: 13 @8927 has 8 MA's), (129, 9290),

Gene: Ezurina\_12 Start: 7295, Stop: 7687, Start Num: 24

Candidate Starts for Ezurina\_12:

(Start: 24 @7295 has 2 MA's), (34, 7316), (66, 7397), (82, 7448), (84, 7451), (107, 7538), (108, 7541), (137, 7655), (142, 7679),

Gene: Faiyaz\_18 Start: 11997, Stop: 12434, Start Num: 13

Candidate Starts for Faiyaz\_18:

(Start: 11 @11994 has 75 MA's), (Start: 13 @11997 has 8 MA's), (44, 12075), (48, 12084), (51, 12090), (54, 12096), (78, 12174), (98, 12240), (107, 12276), (126, 12351), (136, 12390),

Gene: FiveHead\_11 Start: 7283, Stop: 7678, Start Num: 14

Candidate Starts for FiveHead\_11:

(Start: 14 @7283 has 15 MA's), (93, 7475),

Gene: Floof\_11 Start: 7791, Stop: 8213, Start Num: 11

Candidate Starts for Floof\_11:

(Start: 11 @7791 has 75 MA's), (53, 7884), (56, 7890), (63, 7905), (93, 7995), (99, 8034), (104, 8052), (133, 8163),

Gene: Floral\_13 Start: 8269, Stop: 8655, Start Num: 21

Candidate Starts for Floral\_13:

(Start: 21 @8269 has 18 MA's), (43, 8326),

Gene: Flutur\_12 Start: 9039, Stop: 9452, Start Num: 11

Candidate Starts for Flutur\_12:

(Start: 11 @9039 has 75 MA's), (41, 9108), (122, 9369), (129, 9402),

Gene: Forester\_20 Start: 9343, Stop: 9765, Start Num: 11

Candidate Starts for Forester\_20:

(Start: 11 @9343 has 75 MA's), (53, 9436), (56, 9442), (63, 9457), (93, 9547), (99, 9586), (104, 9604), (133, 9715),

Gene: Frickyeah\_12 Start: 7041, Stop: 7451, Start Num: 27

Candidate Starts for Frickyeah\_12:

(2, 6912), (4, 6957), (5, 6963), (6, 6969), (7, 6987), (Start: 27 @7041 has 28 MA's), (36, 7068), (51, 7113), (53, 7119), (70, 7173), (81, 7212), (87, 7218), (96, 7239), (104, 7290), (107, 7302),

Gene: G4\_12 Start: 7735, Stop: 8103, Start Num: 33

Candidate Starts for G4\_12:

(1, 7534), (Start: 33 @7735 has 4 MA's), (53, 7792), (102, 7954), (105, 7960), (108, 7972), (113, 7996),

Gene: Gaia\_9 Start: 7642, Stop: 8013, Start Num: 31

Candidate Starts for Gaia\_9:

(Start: 31 @7642 has 4 MA's), (69, 7738), (74, 7759), (81, 7786), (83, 7789), (87, 7792), (94, 7807), (104, 7864), (107, 7876), (119, 7921), (135, 7981), (137, 7987), (138, 7993),

Gene: Gambol\_12 Start: 8456, Stop: 8875, Start Num: 11

Candidate Starts for Gambol\_12:

(Start: 11 @8456 has 75 MA's), (Start: 31 @8498 has 4 MA's), (118, 8780),

Gene: GardenState\_11 Start: 8458, Stop: 8877, Start Num: 11

Candidate Starts for GardenState\_11:

(Start: 11 @8458 has 75 MA's), (53, 8551), (56, 8557), (93, 8662), (99, 8701),

Gene: Gerri43\_13 Start: 7727, Stop: 8119, Start Num: 24

Candidate Starts for Gerri43\_13:

(Start: 24 @7727 has 2 MA's), (65, 7826), (66, 7829), (82, 7880), (84, 7883), (107, 7970), (108, 7973), (137, 8087), (142, 8111),

Gene: Getalong\_12 Start: 7041, Stop: 7433, Start Num: 27

Candidate Starts for Getalong\_12:

(2, 6912), (4, 6957), (5, 6963), (6, 6969), (7, 6987), (Start: 27 @7041 has 28 MA's), (36, 7068), (48, 7107), (51, 7113), (53, 7119), (59, 7131), (70, 7155), (81, 7194), (87, 7200), (92, 7212), (96, 7221), (104, 7272), (107, 7284),

Gene: Giorgio\_12 Start: 8549, Stop: 8968, Start Num: 11

Candidate Starts for Giorgio\_12:

(Start: 11 @8549 has 75 MA's), (Start: 31 @8591 has 4 MA's), (96, 8768), (118, 8873),

Gene: Gretchen\_11 Start: 9337, Stop: 9759, Start Num: 11

Candidate Starts for Gretchen\_11:

(Start: 11 @9337 has 75 MA's), (53, 9430), (56, 9436), (63, 9451), (93, 9541), (99, 9580), (104, 9598), (133, 9709),

Gene: GrimEater\_12 Start: 6797, Stop: 7189, Start Num: 29

Candidate Starts for GrimEater\_12:

(26, 6791), (Start: 29 @6797 has 2 MA's), (32, 6806), (91, 6962), (107, 7034), (109, 7043),

Gene: Gumpizza\_12 Start: 8548, Stop: 8967, Start Num: 11

Candidate Starts for Gumpizza\_12:

(Start: 11 @8548 has 75 MA's), (Start: 31 @8590 has 4 MA's), (96, 8767), (118, 8872),

Gene: Halsey\_12 Start: 8547, Stop: 8966, Start Num: 11

Candidate Starts for Halsey\_12:

(Start: 11 @8547 has 75 MA's), (Start: 31 @8589 has 4 MA's), (118, 8871),

Gene: Hilltopfarm\_18 Start: 12024, Stop: 12464, Start Num: 11

Candidate Starts for Hilltopfarm\_18:

(Start: 11 @12024 has 75 MA's), (Start: 13 @12027 has 8 MA's), (44, 12105), (48, 12114), (51, 12120), (54, 12126), (78, 12204), (98, 12270), (107, 12306), (126, 12381), (136, 12420),

Gene: Holliday\_12 Start: 7046, Stop: 7438, Start Num: 27

Candidate Starts for Holliday\_12:

(2, 6917), (4, 6962), (5, 6968), (6, 6974), (7, 6992), (9, 7010), (Start: 27 @7046 has 28 MA's), (36, 7073), (51, 7118), (53, 7124), (59, 7136), (70, 7160), (81, 7199), (87, 7205), (94, 7220), (96, 7226), (104, 7277), (107, 7289), (121, 7343),

Gene: Honk\_10 Start: 7323, Stop: 7739, Start Num: 11

Candidate Starts for Honk\_10:

(Start: 11 @7323 has 75 MA's), (50, 7416), (71, 7473), (129, 7692),

Gene: Horus\_12 Start: 7041, Stop: 7451, Start Num: 27

Candidate Starts for Horus\_12:

(2, 6912), (4, 6957), (5, 6963), (6, 6969), (7, 6987), (Start: 27 @7041 has 28 MA's), (36, 7068), (51, 7113), (53, 7119), (70, 7173), (81, 7212), (87, 7218), (96, 7239), (104, 7290), (107, 7302),

Gene: IAmGroot\_11 Start: 9102, Stop: 9521, Start Num: 11  
Candidate Starts for IAmGroot\_11:  
(Start: 11 @9102 has 75 MA's), (53, 9195), (56, 9201), (93, 9306), (99, 9345),

Gene: IUFootball\_11 Start: 7496, Stop: 7915, Start Num: 11  
Candidate Starts for IUFootball\_11:  
(Start: 11 @7496 has 75 MA's), (Start: 22 @7514 has 1 MA's), (53, 7601), (96, 7715), (129, 7865),

Gene: Iter\_12 Start: 9053, Stop: 9463, Start Num: 11  
Candidate Starts for Iter\_12:  
(Start: 11 @9053 has 75 MA's), (41, 9122), (97, 9272), (122, 9383), (129, 9416),

Gene: IttyBittyPiggy\_12 Start: 9041, Stop: 9454, Start Num: 11  
Candidate Starts for IttyBittyPiggy\_12:  
(Start: 11 @9041 has 75 MA's), (41, 9110), (122, 9371), (129, 9404),

Gene: Jabbawokkie\_14 Start: 7736, Stop: 8140, Start Num: 27  
Candidate Starts for Jabbawokkie\_14:  
(Start: 27 @7736 has 28 MA's), (38, 7769), (60, 7829), (80, 7895), (110, 8015), (115, 8027), (124, 8063), (130, 8093),

Gene: Jablanski\_13 Start: 8116, Stop: 8502, Start Num: 21  
Candidate Starts for Jablanski\_13:  
(3, 8035), (Start: 21 @8116 has 18 MA's), (37, 8152), (43, 8173),

Gene: Janeemi\_13 Start: 10130, Stop: 10543, Start Num: 11  
Candidate Starts for Janeemi\_13:  
(Start: 11 @10130 has 75 MA's), (32, 10175), (93, 10337), (97, 10349), (122, 10460), (129, 10493),

Gene: Jankie\_13 Start: 6796, Stop: 7188, Start Num: 29  
Candidate Starts for Jankie\_13:  
(26, 6790), (Start: 29 @6796 has 2 MA's), (32, 6805), (91, 6961), (107, 7033), (109, 7042),

Gene: JasmineDragon\_11 Start: 7286, Stop: 7681, Start Num: 14  
Candidate Starts for JasmineDragon\_11:  
(Start: 14 @7286 has 15 MA's), (93, 7478),

Gene: Joemato\_12 Start: 9040, Stop: 9453, Start Num: 11  
Candidate Starts for Joemato\_12:  
(Start: 11 @9040 has 75 MA's), (41, 9109), (97, 9259), (122, 9370), (129, 9403),

Gene: JohnDoe\_12 Start: 9038, Stop: 9451, Start Num: 11  
Candidate Starts for JohnDoe\_12:  
(Start: 11 @9038 has 75 MA's), (41, 9107), (97, 9257), (122, 9368), (129, 9401),

Gene: JohnThicc\_11 Start: 7283, Stop: 7678, Start Num: 14  
Candidate Starts for JohnThicc\_11:  
(Start: 14 @7283 has 15 MA's), (93, 7475),

Gene: Jstan\_12 Start: 9019, Stop: 9429, Start Num: 11  
Candidate Starts for Jstan\_12:  
(Start: 11 @9019 has 75 MA's), (41, 9088), (93, 9226), (97, 9238), (122, 9349), (129, 9382),

Gene: JuneStar\_12 Start: 9135, Stop: 9548, Start Num: 11

Candidate Starts for JuneStar\_12:

(Start: 11 @9135 has 75 MA's), (122, 9465), (129, 9498),

Gene: Kalimba\_12 Start: 8456, Stop: 8875, Start Num: 11

Candidate Starts for Kalimba\_12:

(Start: 11 @8456 has 75 MA's), (Start: 31 @8498 has 4 MA's), (118, 8780),

Gene: Kamaru\_12 Start: 7046, Stop: 7438, Start Num: 27

Candidate Starts for Kamaru\_12:

(2, 6917), (4, 6962), (5, 6968), (6, 6974), (7, 6992), (9, 7010), (Start: 27 @7046 has 28 MA's), (36, 7073), (51, 7118), (53, 7124), (59, 7136), (70, 7160), (81, 7199), (87, 7205), (94, 7220), (96, 7226), (104, 7277), (107, 7289), (121, 7343),

Gene: Kaylissa\_12 Start: 9041, Stop: 9454, Start Num: 11

Candidate Starts for Kaylissa\_12:

(Start: 11 @9041 has 75 MA's), (41, 9110), (97, 9260), (122, 9371), (129, 9404),

Gene: KeAlii\_12 Start: 9073, Stop: 9474, Start Num: 16

Candidate Starts for KeAlii\_12:

(Start: 16 @9073 has 2 MA's), (20, 9079), (97, 9280), (108, 9340), (129, 9424),

Gene: Kenna\_12 Start: 7041, Stop: 7451, Start Num: 27

Candidate Starts for Kenna\_12:

(2, 6912), (4, 6957), (5, 6963), (6, 6969), (7, 6987), (9, 7005), (Start: 27 @7041 has 28 MA's), (36, 7068), (51, 7113), (53, 7119), (70, 7173), (81, 7212), (87, 7218), (96, 7239), (104, 7290), (107, 7302),

Gene: Kromp\_13 Start: 9303, Stop: 9734, Start Num: 22

Candidate Starts for Kromp\_13:

(Start: 22 @9303 has 1 MA's), (66, 9426), (71, 9441), (72, 9447), (79, 9471), (90, 9495), (122, 9627), (134, 9687), (136, 9693), (137, 9696), (138, 9702),

Gene: Kuwabara\_12 Start: 7390, Stop: 7773, Start Num: 14

Candidate Starts for Kuwabara\_12:

(Start: 14 @7390 has 15 MA's), (40, 7444), (42, 7450), (47, 7462), (57, 7486), (117, 7669), (141, 7759),

Gene: LadyAstra\_11 Start: 7283, Stop: 7678, Start Num: 14

Candidate Starts for LadyAstra\_11:

(Start: 14 @7283 has 15 MA's), (93, 7475),

Gene: LastNadiia\_16 Start: 10019, Stop: 10411, Start Num: 24

Candidate Starts for LastNadiia\_16:

(Start: 24 @10019 has 2 MA's), (48, 10082), (84, 10175), (97, 10205), (106, 10259), (107, 10262), (108, 10265), (117, 10301), (142, 10403),

Gene: Lego\_12 Start: 9039, Stop: 9452, Start Num: 11

Candidate Starts for Lego\_12:

(Start: 11 @9039 has 75 MA's), (41, 9108), (97, 9258), (122, 9369), (129, 9402),

Gene: Leroy\_12 Start: 7042, Stop: 7452, Start Num: 27

Candidate Starts for Leroy\_12:

(2, 6913), (4, 6958), (5, 6964), (6, 6970), (7, 6988), (Start: 27 @7042 has 28 MA's), (36, 7069), (51, 7114), (53, 7120), (70, 7174), (81, 7213), (87, 7219), (96, 7240), (104, 7291), (107, 7303),

Gene: Liebe\_11 Start: 7496, Stop: 7915, Start Num: 11  
Candidate Starts for Liebe\_11:  
(Start: 11 @7496 has 75 MA's), (Start: 22 @7514 has 1 MA's), (53, 7601), (96, 7715), (129, 7865),

Gene: LilSpotty\_11 Start: 7105, Stop: 7479, Start Num: 31  
Candidate Starts for LilSpotty\_11:  
(30, 7102), (Start: 31 @7105 has 4 MA's), (74, 7219), (75, 7222), (104, 7330), (107, 7342), (108, 7345),  
(119, 7384), (140, 7459),

Gene: Lilas\_13 Start: 8269, Stop: 8655, Start Num: 21  
Candidate Starts for Lilas\_13:  
(Start: 21 @8269 has 18 MA's), (43, 8326),

Gene: LitninMcQueen\_12 Start: 7046, Stop: 7438, Start Num: 27  
Candidate Starts for LitninMcQueen\_12:  
(2, 6917), (4, 6962), (5, 6968), (6, 6974), (7, 6992), (9, 7010), (Start: 27 @7046 has 28 MA's), (36, 7073), (51, 7118), (53, 7124), (59, 7136), (70, 7160), (81, 7199), (87, 7205), (94, 7220), (96, 7226),  
(104, 7277), (107, 7289), (121, 7343),

Gene: Lizalica\_12 Start: 9025, Stop: 9438, Start Num: 11  
Candidate Starts for Lizalica\_12:  
(Start: 11 @9025 has 75 MA's), (41, 9094), (97, 9244), (122, 9355), (129, 9388),

Gene: London\_12 Start: 9019, Stop: 9429, Start Num: 11  
Candidate Starts for London\_12:  
(Start: 11 @9019 has 75 MA's), (41, 9088), (93, 9226), (97, 9238), (122, 9349), (129, 9382),

Gene: LonelyBoi\_13 Start: 8116, Stop: 8502, Start Num: 21  
Candidate Starts for LonelyBoi\_13:  
(3, 8035), (Start: 21 @8116 has 18 MA's), (43, 8173),

Gene: Lucky10\_11 Start: 6599, Stop: 6982, Start Num: 14  
Candidate Starts for Lucky10\_11:  
(Start: 14 @6599 has 15 MA's), (40, 6653), (42, 6659), (47, 6671), (57, 6695), (76, 6755),

Gene: Lutum\_12 Start: 7041, Stop: 7451, Start Num: 27  
Candidate Starts for Lutum\_12:  
(2, 6912), (4, 6957), (5, 6963), (6, 6969), (7, 6987), (9, 7005), (Start: 27 @7041 has 28 MA's), (36, 7068), (51, 7113), (53, 7119), (70, 7173), (81, 7212), (87, 7218), (96, 7239), (104, 7290), (107, 7302),

Gene: MaGuCo\_11 Start: 7435, Stop: 7851, Start Num: 13  
Candidate Starts for MaGuCo\_11:  
(Start: 13 @7435 has 8 MA's), (17, 7444), (Start: 22 @7450 has 1 MA's), (Start: 31 @7474 has 4 MA's), (53, 7537), (96, 7651), (129, 7801),

Gene: Mabodamaca\_11 Start: 8555, Stop: 8968, Start Num: 13  
Candidate Starts for Mabodamaca\_11:  
(Start: 13 @8555 has 8 MA's), (71, 8696),

Gene: Malisha\_12 Start: 8091, Stop: 8501, Start Num: 27  
Candidate Starts for Malisha\_12:

(4, 8007), (5, 8013), (Start: 27 @8091 has 28 MA's), (53, 8169), (59, 8181), (70, 8223), (81, 8262), (87, 8268), (94, 8283), (96, 8289), (101, 8328), (107, 8352), (121, 8406),

Gene: Marteena\_13 Start: 8269, Stop: 8655, Start Num: 21

Candidate Starts for Marteena\_13:

(Start: 21 @8269 has 18 MA's), (43, 8326),

Gene: Maureen\_11 Start: 7496, Stop: 7915, Start Num: 11

Candidate Starts for Maureen\_11:

(Start: 11 @7496 has 75 MA's), (Start: 22 @7514 has 1 MA's), (53, 7601), (96, 7715), (129, 7865),

Gene: MiniMommy\_10 Start: 7286, Stop: 7681, Start Num: 14

Candidate Starts for MiniMommy\_10:

(Start: 14 @7286 has 15 MA's), (93, 7478),

Gene: MissSwiss\_12 Start: 9018, Stop: 9434, Start Num: 11

Candidate Starts for MissSwiss\_12:

(Start: 11 @9018 has 75 MA's), (35, 9066), (96, 9234),

Gene: Morkie\_11 Start: 6561, Stop: 6944, Start Num: 14

Candidate Starts for Morkie\_11:

(Start: 14 @6561 has 15 MA's), (40, 6615), (42, 6621), (47, 6633), (57, 6657), (76, 6717), (114, 6834), (117, 6840), (141, 6930),

Gene: MortyNRick\_12 Start: 7390, Stop: 7773, Start Num: 14

Candidate Starts for MortyNRick\_12:

(Start: 14 @7390 has 15 MA's), (40, 7444), (42, 7450), (47, 7462), (57, 7486), (117, 7669), (141, 7759),

Gene: Moss\_12 Start: 8547, Stop: 8966, Start Num: 11

Candidate Starts for Moss\_12:

(Start: 11 @8547 has 75 MA's), (Start: 31 @8589 has 4 MA's), (118, 8871),

Gene: Mudpuppy\_12 Start: 9039, Stop: 9452, Start Num: 11

Candidate Starts for Mudpuppy\_12:

(Start: 11 @9039 has 75 MA's), (41, 9108), (97, 9258), (122, 9369), (129, 9402),

Gene: Mysterium\_12 Start: 8548, Stop: 8967, Start Num: 11

Candidate Starts for Mysterium\_12:

(Start: 11 @8548 has 75 MA's), (Start: 31 @8590 has 4 MA's), (96, 8767), (118, 8872),

Gene: Nebkiss\_9 Start: 7643, Stop: 8014, Start Num: 31

Candidate Starts for Nebkiss\_9:

(Start: 31 @7643 has 4 MA's), (69, 7739), (74, 7760), (81, 7787), (83, 7790), (87, 7793), (94, 7808), (104, 7865), (107, 7877), (119, 7922), (135, 7982), (137, 7988), (138, 7994),

Gene: Neuville\_13 Start: 7727, Stop: 8119, Start Num: 24

Candidate Starts for Neuville\_13:

(Start: 24 @7727 has 2 MA's), (65, 7826), (66, 7829), (82, 7880), (84, 7883), (107, 7970), (108, 7973), (137, 8087), (142, 8111),

Gene: Niobe\_12 Start: 9019, Stop: 9429, Start Num: 11

Candidate Starts for Niobe\_12:

(Start: 11 @9019 has 75 MA's), (41, 9088), (93, 9226), (97, 9238), (122, 9349), (129, 9382),

Gene: Nitro\_12 Start: 9042, Stop: 9452, Start Num: 11

Candidate Starts for Nitro\_12:

(Start: 11 @9042 has 75 MA's), (32, 9087), (41, 9111), (122, 9372), (129, 9405),

Gene: ODay\_12 Start: 7116, Stop: 7499, Start Num: 14

Candidate Starts for ODay\_12:

(Start: 14 @7116 has 15 MA's), (23, 7131), (40, 7170), (42, 7176), (47, 7188), (57, 7212), (117, 7395), (141, 7485),

Gene: ObiToo\_12 Start: 9222, Stop: 9635, Start Num: 11

Candidate Starts for ObiToo\_12:

(Start: 11 @9222 has 75 MA's), (41, 9291), (93, 9429), (97, 9441), (122, 9552), (129, 9585),

Gene: Origami\_11 Start: 7283, Stop: 7678, Start Num: 14

Candidate Starts for Origami\_11:

(Start: 14 @7283 has 15 MA's), (93, 7475),

Gene: Percival\_11 Start: 9171, Stop: 9593, Start Num: 11

Candidate Starts for Percival\_11:

(Start: 11 @9171 has 75 MA's), (53, 9264), (56, 9270), (63, 9285), (93, 9375), (99, 9414), (104, 9432), (133, 9543),

Gene: Periwinkle\_12 Start: 7041, Stop: 7433, Start Num: 27

Candidate Starts for Periwinkle\_12:

(2, 6912), (4, 6957), (5, 6963), (6, 6969), (Start: 27 @7041 has 28 MA's), (36, 7068), (48, 7107), (51, 7113), (53, 7119), (59, 7131), (70, 7155), (81, 7194), (87, 7200), (92, 7212), (96, 7221), (104, 7272), (107, 7284),

Gene: Phabuloso\_12 Start: 7046, Stop: 7438, Start Num: 27

Candidate Starts for Phabuloso\_12:

(2, 6917), (4, 6962), (5, 6968), (6, 6974), (7, 6992), (9, 7010), (Start: 27 @7046 has 28 MA's), (36, 7073), (51, 7118), (53, 7124), (59, 7136), (70, 7160), (81, 7199), (87, 7205), (94, 7220), (96, 7226), (104, 7277), (107, 7289), (121, 7343),

Gene: Phistory\_12 Start: 7030, Stop: 7422, Start Num: 27

Candidate Starts for Phistory\_12:

(2, 6901), (4, 6946), (5, 6952), (6, 6958), (7, 6976), (9, 6994), (Start: 27 @7030 has 28 MA's), (36, 7057), (51, 7102), (53, 7108), (59, 7120), (70, 7144), (87, 7189), (94, 7204), (96, 7210), (104, 7261), (107, 7273),

Gene: Phives\_13 Start: 10124, Stop: 10537, Start Num: 11

Candidate Starts for Phives\_13:

(Start: 11 @10124 has 75 MA's), (32, 10169), (97, 10343), (122, 10454), (129, 10487),

Gene: PhorbesPhlower\_11 Start: 6561, Stop: 6944, Start Num: 14

Candidate Starts for PhorbesPhlower\_11:

(Start: 14 @6561 has 15 MA's), (40, 6615), (42, 6621), (47, 6633), (57, 6657), (76, 6717), (114, 6834), (117, 6840), (141, 6930),

Gene: Pixelle\_12 Start: 9067, Stop: 9480, Start Num: 11

Candidate Starts for Pixelle\_12:

(Start: 11 @9067 has 75 MA's), (32, 9112), (122, 9397), (129, 9430),

Gene: Pollux\_13 Start: 8269, Stop: 8655, Start Num: 21

Candidate Starts for Pollux\_13:

(Start: 21 @8269 has 18 MA's), (43, 8326),

Gene: Posh\_13 Start: 8263, Stop: 8655, Start Num: 21

Candidate Starts for Posh\_13:

(3, 8182), (Start: 21 @8263 has 18 MA's),

Gene: Powerpuff\_12 Start: 9090, Stop: 9503, Start Num: 11

Candidate Starts for Powerpuff\_12:

(Start: 11 @9090 has 75 MA's), (41, 9159), (97, 9309), (122, 9420), (129, 9453),

Gene: Pumpkins\_12 Start: 9144, Stop: 9557, Start Num: 11

Candidate Starts for Pumpkins\_12:

(Start: 11 @9144 has 75 MA's), (41, 9213), (122, 9474), (129, 9507),

Gene: Pytheas\_13 Start: 8116, Stop: 8502, Start Num: 21

Candidate Starts for Pytheas\_13:

(3, 8035), (Start: 21 @8116 has 18 MA's), (37, 8152), (43, 8173),

Gene: Reedo\_12 Start: 9091, Stop: 9489, Start Num: 16

Candidate Starts for Reedo\_12:

(Start: 16 @9091 has 2 MA's), (93, 9286), (96, 9292), (106, 9352), (129, 9442),

Gene: Roberts\_13 Start: 7727, Stop: 8119, Start Num: 24

Candidate Starts for Roberts\_13:

(Start: 24 @7727 has 2 MA's), (65, 7826), (66, 7829), (82, 7880), (84, 7883), (107, 7970), (108, 7973), (137, 8087), (142, 8111),

Gene: RockScotty\_12 Start: 8547, Stop: 8966, Start Num: 11

Candidate Starts for RockScotty\_12:

(Start: 11 @8547 has 75 MA's), (Start: 31 @8589 has 4 MA's), (118, 8871),

Gene: Sabourin\_12 Start: 8456, Stop: 8875, Start Num: 11

Candidate Starts for Sabourin\_12:

(Start: 11 @8456 has 75 MA's), (Start: 31 @8498 has 4 MA's), (118, 8780),

Gene: Schaffner\_12 Start: 9132, Stop: 9545, Start Num: 11

Candidate Starts for Schaffner\_12:

(Start: 11 @9132 has 75 MA's), (41, 9201), (122, 9462), (129, 9495),

Gene: ShakeltOph\_11 Start: 7286, Stop: 7681, Start Num: 14

Candidate Starts for ShakeltOph\_11:

(Start: 14 @7286 has 15 MA's), (93, 7478),

Gene: ShawBrad\_12 Start: 7046, Stop: 7456, Start Num: 27

Candidate Starts for ShawBrad\_12:

(2, 6917), (4, 6962), (5, 6968), (6, 6974), (7, 6992), (Start: 27 @7046 has 28 MA's), (36, 7073), (51, 7118), (53, 7124), (70, 7178), (81, 7217), (87, 7223), (96, 7244), (104, 7295), (107, 7307),

Gene: SilverChicken\_13 Start: 7213, Stop: 7617, Start Num: 27

Candidate Starts for SilverChicken\_13:

(Start: 27 @7213 has 28 MA's), (38, 7246), (60, 7306), (80, 7372), (110, 7492), (115, 7504), (124, 7540), (130, 7570),

Gene: Simpson\_13 Start: 9040, Stop: 9453, Start Num: 11

Candidate Starts for Simpson\_13:

(Start: 11 @9040 has 75 MA's), (41, 9109), (97, 9259), (122, 9370), (129, 9403),

Gene: Skelbel\_12 Start: 9019, Stop: 9429, Start Num: 11

Candidate Starts for Skelbel\_12:

(Start: 11 @9019 has 75 MA's), (41, 9088), (93, 9226), (97, 9238), (122, 9349), (129, 9382),

Gene: Sleepyhead\_12 Start: 7869, Stop: 8279, Start Num: 21

Candidate Starts for Sleepyhead\_12:

(8, 7833), (Start: 21 @7869 has 18 MA's), (55, 7962), (68, 8004), (89, 8061), (93, 8070), (97, 8082), (103, 8124),

Gene: Snek\_12 Start: 8127, Stop: 8540, Start Num: 11

Candidate Starts for Snek\_12:

(Start: 11 @8127 has 75 MA's), (71, 8280), (139, 8523),

Gene: Soondubu\_11 Start: 8928, Stop: 9338, Start Num: 13

Candidate Starts for Soondubu\_11:

(Start: 13 @8928 has 8 MA's), (56, 9030), (129, 9291),

Gene: Sooty\_12 Start: 8457, Stop: 8876, Start Num: 11

Candidate Starts for Sooty\_12:

(Start: 11 @8457 has 75 MA's), (Start: 31 @8499 has 4 MA's), (118, 8781),

Gene: Soul22\_13 Start: 7212, Stop: 7616, Start Num: 27

Candidate Starts for Soul22\_13:

(Start: 27 @7212 has 28 MA's), (38, 7245), (60, 7305), (80, 7371), (110, 7491), (115, 7503), (124, 7539), (130, 7569),

Gene: Spartoi\_10 Start: 6599, Stop: 7030, Start Num: 27

Candidate Starts for Spartoi\_10:

(Start: 27 @6599 has 28 MA's), (39, 6635), (49, 6668), (52, 6674), (58, 6689), (88, 6785),

Gene: SpecialK\_12 Start: 8454, Stop: 8873, Start Num: 11

Candidate Starts for SpecialK\_12:

(Start: 11 @8454 has 75 MA's), (Start: 31 @8496 has 4 MA's), (118, 8778),

Gene: Spooky\_12 Start: 7039, Stop: 7449, Start Num: 27

Candidate Starts for Spooky\_12:

(4, 6955), (5, 6961), (6, 6967), (Start: 27 @7039 has 28 MA's), (51, 7111), (53, 7117), (59, 7129), (70, 7171), (81, 7210), (87, 7216), (96, 7237), (101, 7276), (107, 7300), (121, 7354),

Gene: Squiddly\_13 Start: 7726, Stop: 8118, Start Num: 27

Candidate Starts for Squiddly\_13:

(2, 7597), (4, 7642), (5, 7648), (6, 7654), (7, 7672), (9, 7690), (Start: 27 @7726 has 28 MA's), (36, 7753), (51, 7798), (53, 7804), (59, 7816), (70, 7840), (87, 7885), (94, 7900), (96, 7906), (104, 7957), (107, 7969),

Gene: Stellammi\_9 Start: 6533, Stop: 6904, Start Num: 31

Candidate Starts for Stellammi\_9:

(Start: 31 @6533 has 4 MA's), (46, 6581), (53, 6599), (59, 6611), (77, 6659), (83, 6680), (87, 6683), (101, 6743), (107, 6767), (118, 6809), (135, 6872), (137, 6878),

Gene: Studio\_13 Start: 7486, Stop: 7878, Start Num: 24

Candidate Starts for Studio\_13:

(Start: 24 @7486 has 2 MA's), (40, 7525), (41, 7528), (66, 7588), (82, 7639), (84, 7642), (108, 7732), (137, 7846), (142, 7870),

Gene: Stuu\_12 Start: 8547, Stop: 8966, Start Num: 11

Candidate Starts for Stuu\_12:

(Start: 11 @8547 has 75 MA's), (Start: 31 @8589 has 4 MA's), (96, 8766), (118, 8871),

Gene: SuMoo\_10 Start: 7515, Stop: 7928, Start Num: 13

Candidate Starts for SuMoo\_10:

(Start: 13 @7515 has 8 MA's),

Gene: Subaru\_12 Start: 9019, Stop: 9429, Start Num: 11

Candidate Starts for Subaru\_12:

(Start: 11 @9019 has 75 MA's), (41, 9088), (93, 9226), (97, 9238), (122, 9349), (129, 9382),

Gene: Sue2\_12 Start: 9043, Stop: 9456, Start Num: 11

Candidate Starts for Sue2\_12:

(6, 9007), (Start: 11 @9043 has 75 MA's),

Gene: SuperHands\_12 Start: 9343, Stop: 9765, Start Num: 11

Candidate Starts for SuperHands\_12:

(Start: 11 @9343 has 75 MA's), (53, 9436), (56, 9442), (63, 9457), (93, 9547), (99, 9586), (104, 9604), (133, 9715),

Gene: TPA4\_12 Start: 8635, Stop: 9036, Start Num: 19

Candidate Starts for TPA4\_12:

(19, 8635), (53, 8719), (62, 8731), (105, 8884), (113, 8923), (123, 8953), (127, 8974), (132, 8998),

Gene: Tallboi\_12 Start: 9050, Stop: 9463, Start Num: 11

Candidate Starts for Tallboi\_12:

(Start: 11 @9050 has 75 MA's), (32, 9095), (41, 9119), (122, 9380), (129, 9413),

Gene: Tbone\_12 Start: 9033, Stop: 9446, Start Num: 11

Candidate Starts for Tbone\_12:

(Start: 11 @9033 has 75 MA's), (41, 9102), (97, 9252), (122, 9363), (129, 9396),

Gene: TforTroy\_12 Start: 9164, Stop: 9577, Start Num: 11

Candidate Starts for TforTroy\_12:

(Start: 11 @9164 has 75 MA's), (122, 9494), (129, 9527),

Gene: ThursdayNight\_11 Start: 7530, Stop: 7949, Start Num: 13

Candidate Starts for ThursdayNight\_11:

(Start: 13 @7530 has 8 MA's), (36, 7581), (53, 7632), (97, 7752), (129, 7896),

Gene: Tian\_12 Start: 9064, Stop: 9477, Start Num: 11

Candidate Starts for Tian\_12:

(Start: 11 @9064 has 75 MA's), (32, 9109), (97, 9283), (122, 9394), (129, 9427),

Gene: TripleC\_16 Start: 11103, Stop: 11495, Start Num: 24  
Candidate Starts for TripleC\_16:  
(Start: 24 @11103 has 2 MA's), (64, 11199), (84, 11259), (106, 11343), (107, 11346), (142, 11487),

Gene: Tuck\_13 Start: 10079, Stop: 10489, Start Num: 11  
Candidate Starts for Tuck\_13:  
(Start: 11 @10079 has 75 MA's), (32, 10124), (97, 10298), (122, 10409), (129, 10442),

Gene: Turab\_12 Start: 9048, Stop: 9458, Start Num: 11  
Candidate Starts for Turab\_12:  
(Start: 11 @9048 has 75 MA's), (32, 9093), (41, 9117), (122, 9378), (129, 9411),

Gene: Tutumahutu\_12 Start: 9090, Stop: 9503, Start Num: 11  
Candidate Starts for Tutumahutu\_12:  
(Start: 11 @9090 has 75 MA's), (41, 9159), (97, 9309), (122, 9420), (129, 9453),

Gene: Tweety19\_12 Start: 8126, Stop: 8539, Start Num: 11  
Candidate Starts for Tweety19\_12:  
(Start: 11 @8126 has 75 MA's), (71, 8279), (139, 8522),

Gene: Typha\_18 Start: 11994, Stop: 12434, Start Num: 11  
Candidate Starts for Typha\_18:  
(Start: 11 @11994 has 75 MA's), (Start: 13 @11997 has 8 MA's), (44, 12075), (48, 12084), (51, 12090), (54, 12096), (78, 12174), (98, 12240), (107, 12276), (126, 12351), (136, 12390),

Gene: UtzChips\_10 Start: 8204, Stop: 8620, Start Num: 13  
Candidate Starts for UtzChips\_10:  
(Start: 13 @8204 has 8 MA's), (99, 8444), (112, 8501),

Gene: VResidence\_12 Start: 9113, Stop: 9535, Start Num: 11  
Candidate Starts for VResidence\_12:  
(Start: 11 @9113 has 75 MA's), (96, 9335), (111, 9422), (119, 9443), (122, 9452),

Gene: VroomVroom\_11 Start: 7298, Stop: 7693, Start Num: 14  
Candidate Starts for VroomVroom\_11:  
(Start: 14 @7298 has 15 MA's), (93, 7490),

Gene: Warda\_12 Start: 9036, Stop: 9449, Start Num: 11  
Candidate Starts for Warda\_12:  
(Start: 11 @9036 has 75 MA's), (41, 9105), (97, 9255), (122, 9366), (129, 9399),

Gene: Whitney\_12 Start: 7041, Stop: 7433, Start Num: 27  
Candidate Starts for Whitney\_12:  
(2, 6912), (4, 6957), (5, 6963), (6, 6969), (7, 6987), (Start: 27 @7041 has 28 MA's), (36, 7068), (48, 7107), (51, 7113), (53, 7119), (59, 7131), (70, 7155), (81, 7194), (87, 7200), (92, 7212), (96, 7221), (104, 7272), (107, 7284),

Gene: Wildwest\_13 Start: 9954, Stop: 10370, Start Num: 11  
Candidate Starts for Wildwest\_13:  
(Start: 11 @9954 has 75 MA's), (71, 10107), (96, 10170), (119, 10278),

Gene: Wrigley\_13 Start: 8113, Stop: 8499, Start Num: 21

Candidate Starts for Wrigley\_13:

(3, 8032), (Start: 21 @8113 has 18 MA's), (37, 8149), (43, 8170),

Gene: Yang\_12 Start: 9134, Stop: 9547, Start Num: 11

Candidate Starts for Yang\_12:

(Start: 11 @9134 has 75 MA's), (122, 9464), (129, 9497),

Gene: YesChef\_12 Start: 9090, Stop: 9503, Start Num: 11

Candidate Starts for YesChef\_12:

(Start: 11 @9090 has 75 MA's), (41, 9159), (97, 9309), (122, 9420), (129, 9453),

Gene: Yoshi\_13 Start: 7212, Stop: 7616, Start Num: 27

Candidate Starts for Yoshi\_13:

(Start: 27 @7212 has 28 MA's), (38, 7245), (60, 7305), (80, 7371), (110, 7491), (115, 7503), (124, 7539), (130, 7569),

Gene: Zapner\_14 Start: 7737, Stop: 8141, Start Num: 27

Candidate Starts for Zapner\_14:

(Start: 27 @7737 has 28 MA's), (38, 7770), (60, 7830), (80, 7896), (110, 8016), (115, 8028), (124, 8064), (130, 8094),

Gene: Zeta1847\_10 Start: 7300, Stop: 7692, Start Num: 10

Candidate Starts for Zeta1847\_10:

(Start: 10 @7300 has 1 MA's), (71, 7444), (73, 7453),