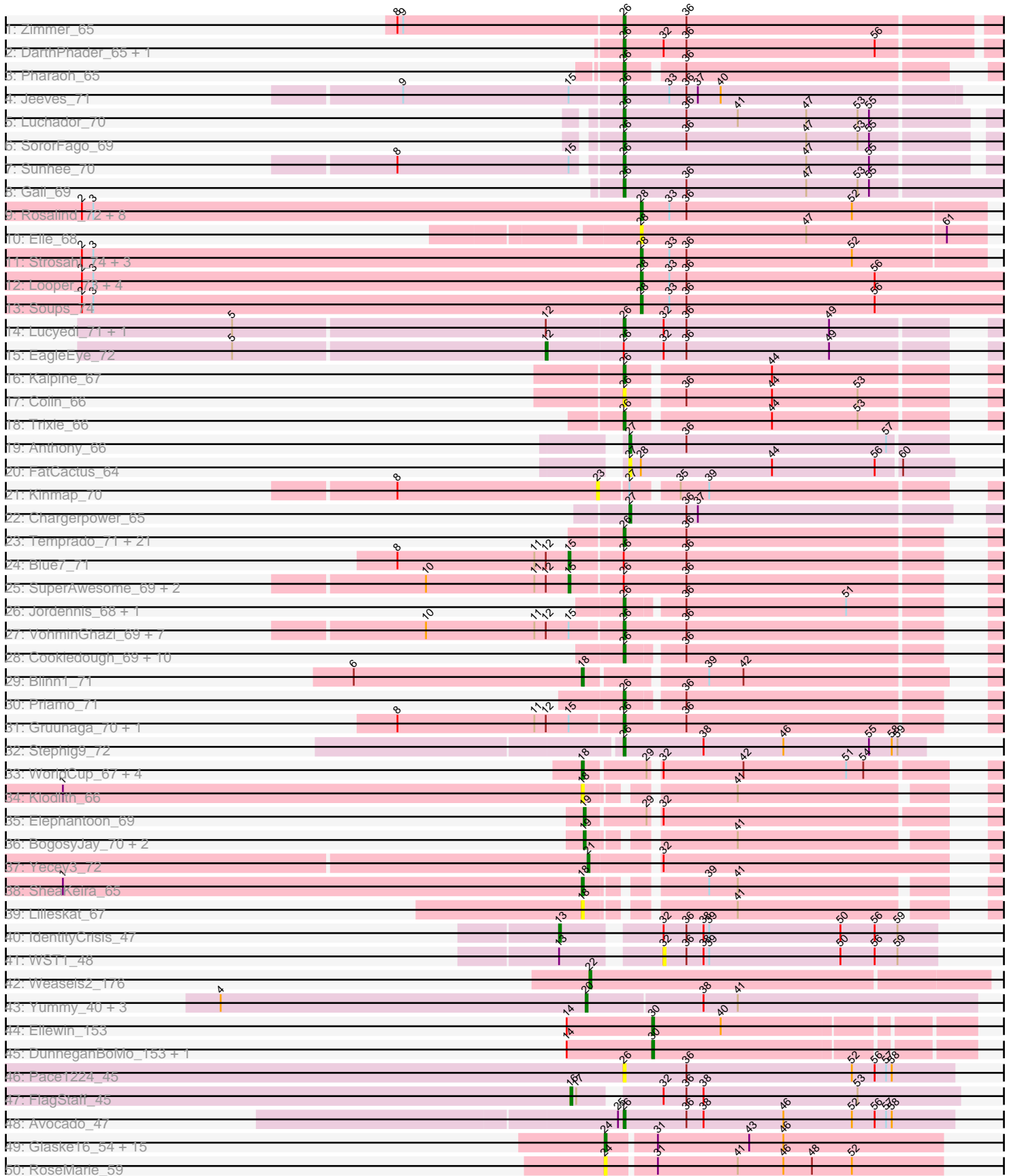


Pham 304796



Pham 304796



Track	Position	Score
51: Reindeer_55	1	1
51: Reindeer_55	24	24
51: Reindeer_55	46	46
52: Nanosmite_58	1	1
52: Nanosmite_58	24	24
52: Nanosmite_58	34	34
52: Nanosmite_58	46	46
52: Nanosmite_58	53	53

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 304796 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304796 has 136 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Zimmer\_65
- Track 2 : DarthPhader\_65, Refuge\_65
- Track 3 : Pharaoh\_65
- Track 4 : Jeeves\_71
- Track 5 : Luchador\_70
- Track 6 : SororFago\_69
- Track 7 : Sunhee\_70
- Track 8 : Gail\_69
- Track 9 : Rosalind\_72, KatherineG\_74, Epsocamisio\_70, DekHockey33\_75, Nebulosus\_71, Battleship\_76, ShayRa\_74, Switzerland\_73, MinecraftSteve\_74
- Track 10 : Elle\_68
- Track 11 : Strosahl\_74, Waits\_74, JSwag\_73, Remus\_74
- Track 12 : Looper\_73, ReMo\_72, Anaysia\_74, LastResort\_72, Boohoo\_74
- Track 13 : Soups\_74
- Track 14 : Lucyedi\_71, PainterBoy\_70
- Track 15 : EagleEye\_72
- Track 16 : Kalpine\_67
- Track 17 : Colin\_66
- Track 18 : Trixie\_66
- Track 19 : Anthony\_66
- Track 20 : FatCactus\_64
- Track 21 : Kinmap\_70
- Track 22 : Chargerpower\_65
- Track 23 : Temprado\_71, Rifter\_70, Tucker\_70, Hexamo\_70, Jeffabunny\_70, Hammer\_70, Lilbunny\_69, ToneTone\_67, BennyP\_70, Artemis2UCLA\_70, Zaka\_70, Koko\_72, Yokurt\_69, WunderPhul\_70, BlessJoy\_70, Zulu\_71, Helmet\_72, Gladiator\_67, Wiks\_69, Garak\_71, CloudWang3\_71, Indra\_73
- Track 24 : Blue7\_71
- Track 25 : SuperAwesome\_69, Kazan\_70, SmellyB\_69
- Track 26 : Jordennis\_68, BABullseye\_62
- Track 27 : VohminGhazi\_69, Hoot\_64, Candra\_67, GreedyLawyer\_66, Polyphemos\_71, Newrala\_69, Kipper29\_69, EricB\_68
- Track 28 : Cookiedough\_69, DelvinSonDorr\_66, McFly\_69, Isiphiwo\_67, Neeharika16\_68, SuperCallie99\_66, Dorothea\_69, Pmask\_68, Chartreuse\_68, DaVinci\_67, JewelBug\_69
- Track 29 : Blinn1\_71
- Track 30 : Priamo\_71

- Track 31 : Gruunaga\_70, Roksolana\_71
- Track 32 : Stephig9\_72
- Track 33 : WorldCup\_67, Bellris\_67, CogOmlette\_67, Minispark\_67, Rahalelujah\_69
- Track 34 : Klodlith\_66
- Track 35 : Elephantoon\_69
- Track 36 : BogosyJay\_70, Maminiaina\_70, LoneWolf\_70
- Track 37 : Yecey3\_72
- Track 38 : SheaKeira\_65
- Track 39 : Lilleskat\_67
- Track 40 : IdentityCrisis\_47
- Track 41 : WST1\_48
- Track 42 : Weasels2\_176
- Track 43 : Yummy\_40, Buttrmilkdreams\_40, Horseradish\_40, MScarn\_41
- Track 44 : Ellewin\_153
- Track 45 : DunneganBoMo\_153, BooTeria\_162
- Track 46 : Pace1224\_45
- Track 47 : FlagStaff\_45
- Track 48 : Avocado\_47
- Track 49 : Glaske16\_54, LilhomieP\_52, Diminimus\_54, KleverKiS\_54, PegLeg\_53, TyDawg\_53, Bongo\_53, Skinny\_54, SlimJimmy\_52, FreakyGoo\_54, Bricole\_53, Dulcita\_54, Auspice\_53, TpudiCK\_55, IPhane7\_53, Izel\_54
- Track 50 : RoseMarie\_59
- Track 51 : Reindeer\_55
- Track 52 : Nanosmite\_58

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

The start number called the most often in the published annotations is 26, it was called in 58 of the 117 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artemis2UCLA\_70, Avocado\_47, BABullseye\_62, BennyP\_70, BlessJoy\_70, Candra\_67, Chartreuse\_68, CloudWang3\_71, Colin\_66, Cookiedough\_69, DaVinci\_67, DARTHPhader\_65, DelvinSonDorr\_66, Dorothea\_69, EricB\_68, Gail\_69, Garak\_71, Gladiator\_67, GreedyLawyer\_66, Gruunaga\_70, Hammer\_70, Helmet\_72, Hexamo\_70, Hoot\_64, Indra\_73, Isiphiwo\_67, Jeeves\_71, Jeffabunny\_70, JewelBug\_69, Jordennis\_68, Kalpine\_67, Kipper29\_69, Koko\_72, Lilbunny\_69, Luchador\_70, Lucyedi\_71, McFly\_69, Neeharika16\_68, Newrala\_69, Pace1224\_45, PainterBoy\_70, Pharaoh\_65, Pmask\_68, Polyphemus\_71, Priamo\_71, Refuge\_65, Rifter\_70, Roksolana\_71, SororFago\_69, Stephig9\_72, Sunhee\_70, SuperCallie99\_66, Temprado\_71, ToneTone\_67, Trixie\_66, Tucker\_70, VohminGhazi\_69, Wiks\_69, WunderPhul\_70, Yokurt\_69, Zaka\_70, Zimmer\_65, Zulu\_71,

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

- Blue7\_71, EagleEye\_72, Kazan\_70, SmellyB\_69, SuperAwesome\_69,

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

- Anaysia\_74, Anthony\_66, Auspice\_53, Battleship\_76, Bellris\_67, Blinn1\_71, BogosyJay\_70, Bongo\_53, BooTeria\_162, Boohoo\_74, Bricole\_53,

Buttrmldreams\_40, Chargerpower\_65, CogOmlette\_67, DekHockey33\_75, Diminimus\_54, Dulcita\_54, DunneganBoMo\_153, Elephantoon\_69, Elle\_68, Ellewin\_153, Epsocamisio\_70, FatCactus\_64, FlagStaff\_45, FreakyGoo\_54, Glaske16\_54, Horseradish\_40, IPhane7\_53, IdentityCrisis\_47, Izel\_54, JSwag\_73, KatherineG\_74, Kinmap\_70, KleverKiS\_54, Klodlith\_66, LastResort\_72, LilhomieP\_52, Lilleskat\_67, LoneWolf\_70, Looper\_73, MScarn\_41, Maminiaina\_70, MinecraftSteve\_74, Minispark\_67, Nanosmite\_58, Nebulosus\_71, PegLeg\_53, Rahalelujah\_69, ReMo\_72, Reindeer\_55, Remus\_74, Rosalind\_72, RoseMarie\_59, ShayRa\_74, SheaKeira\_65, Skinny\_54, SlimJimmy\_52, Soups\_74, Strosahl\_74, Switzerland\_73, TpudiCK\_55, TyDawg\_53, WST1\_48, Waits\_74, Weasels2\_176, WorldCup\_67, Yecey3\_72, Yummy\_40,

### Summary by start number:

#### Start 12:

- Found in 17 of 136 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 5.9% of time when present
- Phage (with cluster) where this start called: EagleEye\_72 (A16),

#### Start 13:

- Found in 2 of 136 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 50.0% of time when present
- Phage (with cluster) where this start called: IdentityCrisis\_47 (AJ),

#### Start 15:

- Found in 16 of 136 ( 11.8% ) of genes in pham
- Manual Annotations of this start: 4 of 117
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Blue7\_71 (A6), Kazan\_70 (A6), SmellyB\_69 (A6), SuperAwesome\_69 (A6),

#### Start 16:

- Found in 1 of 136 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FlagStaff\_45 (G2),

#### Start 18:

- Found in 9 of 136 ( 6.6% ) of genes in pham
- Manual Annotations of this start: 3 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bellris\_67 (A9), Blinn1\_71 (A6), CogOmlette\_67 (A9), Klodlith\_66 (A9), Lilleskat\_67 (A9), Minispark\_67 (A9), Rahalelujah\_69 (A9), SheaKeira\_65 (A9), WorldCup\_67 (A9),

#### Start 19:

- Found in 4 of 136 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 4 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BogosyJay\_70 (A9), Elephantoon\_69 (A9), LoneWolf\_70 (A9), Maminiaina\_70 (A9),

Start 20:

- Found in 4 of 136 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 4 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Buttrmilkdreams\_40 (CT), Horseradish\_40 (CT), MScarn\_41 (CT), Yummy\_40 (CT),

Start 21:

- Found in 1 of 136 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yecey3\_72 (A9),

Start 22:

- Found in 1 of 136 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Weasels2\_176 (CB),

Start 23:

- Found in 1 of 136 ( 0.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kinmap\_70 (A21),

Start 24:

- Found in 19 of 136 ( 14.0% ) of genes in pham
- Manual Annotations of this start: 16 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Auspice\_53 (M1), Bongo\_53 (M1), Bricole\_53 (M1), Diminimus\_54 (M1), Dulcita\_54 (M1), FreakyGoo\_54 (M1), Glaske16\_54 (M1), IPhane7\_53 (M1), Izel\_54 (M1), KleverKiS\_54 (M1), LilhomieP\_52 (M1), Nanosmite\_58 (M3), PegLeg\_53 (M1), Reindeer\_55 (M1), RoseMarie\_59 (M1), Skinny\_54 (M1), SlimJimmy\_52 (M1), TpudiCK\_55 (M1), TyDawg\_53 (M1),

Start 26:

- Found in 68 of 136 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 58 of 117
- Called 92.6% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA\_70 (A6), Avocado\_47 (G2), BABullseye\_62 (A6), BennyP\_70 (A6), BlessJoy\_70 (A6), Candra\_67 (A6), Chartreuse\_68 (A6), CloudWang3\_71 (A6), Colin\_66 (A2), Cookiedough\_69 (A6), DaVinci\_67 (A6), DarthPhader\_65 (A12), DelvinSonDorr\_66 (A6), Dorothea\_69 (A6), EricB\_68 (A6), Gail\_69 (A14), Garak\_71 (A6), Gladiator\_67 (A6), GreedyLawyer\_66 (A6), Gruunaga\_70 (A6), Hammer\_70 (A6), Helmet\_72 (A6), Hexamo\_70 (A6), Hoot\_64 (A6), Indra\_73 (A6), Isiphiwo\_67 (A6), Jeeves\_71 (A14), Jeffabunny\_70 (A6), JewelBug\_69 (A6), Jordennis\_68 (A6), Kalpine\_67 (A2), Kipper29\_69 (A6), Koko\_72 (A6), Lilbunny\_69 (A6), Luchador\_70 (A14), Lucyedi\_71 (A16), McFly\_69 (A6), Neeharika16\_68 (A6), Newrala\_69 (A6), Pace1224\_45 (G2), PainterBoy\_70 (A16), Pharaoh\_65 (A12), Pmask\_68 (A6), Polyphemus\_71 (A6), Priamo\_71 (A6), Refuge\_65 (A12), Rifter\_70 (A6), Roksolana\_71 (A6), SororFago\_69 (A14),

Stephig9\_72 (A8), Sunhee\_70 (A14), SuperCallie99\_66 (A6), Temprado\_71 (A6), ToneTone\_67 (A6), Trixie\_66 (A2), Tucker\_70 (A6), VohminGhazi\_69 (A6), Wiks\_69 (A6), WunderPhul\_70 (A6), Yokurt\_69 (A6), Zaka\_70 (A6), Zimmer\_65 (A12), Zulu\_71 (A6),

Start 27:

- Found in 4 of 136 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 2 of 117
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Anthony\_66 (A20), Chargerpower\_65 (A22), FatCactus\_64 (A20),

Start 28:

- Found in 21 of 136 ( 15.4% ) of genes in pham
- Manual Annotations of this start: 19 of 117
- Called 95.2% of time when present
- Phage (with cluster) where this start called: Anaysia\_74 (A15), Battleship\_76 (A15), Boohoo\_74 (A15), DekHockey33\_75 (A15), Elle\_68 (A15), Epsocamisio\_70 (A15), JSwag\_73 (A15), KatherineG\_74 (A15), LastResort\_72 (A15), Looper\_73 (A15), MinecraftSteve\_74 (A15), Nebulosus\_71 (A15), ReMo\_72 (A15), Remus\_74 (A15), Rosalind\_72 (A15), ShayRa\_74 (A15), Soups\_74 (A15), Strosahl\_74 (A15), Switzerland\_73 (A15), Waits\_74 (A15),

Start 30:

- Found in 3 of 136 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 2 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BooTeria\_162 (FC), DunneganBoMo\_153 (FC), Ellewin\_153 (FC),

Start 32:

- Found in 15 of 136 ( 11.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 6.7% of time when present
- Phage (with cluster) where this start called: WST1\_48 (AJ),

### **Summary by clusters:**

There are 18 clusters represented in this pham: A15, A14, A22, A16, G2, A12, FC, CB, AJ, A21, A20, A2, M1, M3, A6, A9, A8, CT,

Info for manual annotations of cluster A12:

- Start number 26 was manually annotated 4 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 26 was manually annotated 5 times for cluster A14.

Info for manual annotations of cluster A15:

- Start number 28 was manually annotated 19 times for cluster A15.

Info for manual annotations of cluster A16:

- Start number 12 was manually annotated 1 time for cluster A16.
- Start number 26 was manually annotated 2 times for cluster A16.

Info for manual annotations of cluster A2:

- Start number 26 was manually annotated 2 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 27 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A22:

- Start number 27 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A6:

- Start number 15 was manually annotated 4 times for cluster A6.
- Start number 18 was manually annotated 1 time for cluster A6.
- Start number 26 was manually annotated 43 times for cluster A6.

Info for manual annotations of cluster A8:

- Start number 26 was manually annotated 1 time for cluster A8.

Info for manual annotations of cluster A9:

- Start number 18 was manually annotated 2 times for cluster A9.
- Start number 19 was manually annotated 4 times for cluster A9.
- Start number 21 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AJ:

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

Info for manual annotations of cluster CB:

- Start number 22 was manually annotated 1 time for cluster CB.

Info for manual annotations of cluster CT:

- Start number 20 was manually annotated 4 times for cluster CT.

Info for manual annotations of cluster FC:

- Start number 30 was manually annotated 2 times for cluster FC.

Info for manual annotations of cluster G2:

- Start number 16 was manually annotated 1 time for cluster G2.
- Start number 26 was manually annotated 1 time for cluster G2.

Info for manual annotations of cluster M1:

- Start number 24 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M3:

- Start number 24 was manually annotated 1 time for cluster M3.

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

Gene: Anaysia\_74 Start: 40835, Stop: 40641, Start Num: 28

Candidate Starts for Anaysia\_74:

(2, 41129), (3, 41123), (Start: 28 @40835 has 19 MA's), (33, 40820), (36, 40811), (56, 40712),

Gene: Anthony\_66 Start: 40829, Stop: 40665, Start Num: 27

Candidate Starts for Anthony\_66:

(Start: 27 @40829 has 2 MA's), (36, 40799), (57, 40694),

Gene: Artemis2UCLA\_70 Start: 40238, Stop: 40059, Start Num: 26

Candidate Starts for Artemis2UCLA\_70:

(Start: 26 @40238 has 58 MA's), (36, 40205),

Gene: Auspice\_53 Start: 38208, Stop: 38381, Start Num: 24

Candidate Starts for Auspice\_53:

(Start: 24 @38208 has 16 MA's), (31, 38232), (43, 38280), (46, 38298),

Gene: Avocado\_47 Start: 37189, Stop: 37362, Start Num: 26

Candidate Starts for Avocado\_47:

(25, 37186), (Start: 26 @37189 has 58 MA's), (36, 37222), (38, 37231), (46, 37273), (52, 37309), (56, 37321), (57, 37327), (58, 37330),

Gene: BABullseye\_62 Start: 37899, Stop: 37726, Start Num: 26

Candidate Starts for BABullseye\_62:

(Start: 26 @37899 has 58 MA's), (36, 37872), (51, 37788),

Gene: Battleship\_76 Start: 41041, Stop: 40862, Start Num: 28

Candidate Starts for Battleship\_76:

(2, 41335), (3, 41329), (Start: 28 @41041 has 19 MA's), (33, 41026), (36, 41017), (52, 40930),

Gene: Bellris\_67 Start: 41041, Stop: 40850, Start Num: 18

Candidate Starts for Bellris\_67:

(Start: 18 @41041 has 3 MA's), (29, 41011), (32, 41008), (42, 40966), (51, 40912), (54, 40903),

Gene: BennyP\_70 Start: 40308, Stop: 40129, Start Num: 26

Candidate Starts for BennyP\_70:

(Start: 26 @40308 has 58 MA's), (36, 40275),

Gene: BlessJoy\_70 Start: 40664, Stop: 40485, Start Num: 26

Candidate Starts for BlessJoy\_70:

(Start: 26 @40664 has 58 MA's), (36, 40631),

Gene: Blinn1\_71 Start: 39967, Stop: 39776, Start Num: 18

Candidate Starts for Blinn1\_71:

(6, 40087), (Start: 18 @39967 has 3 MA's), (39, 39910), (42, 39892),

Gene: Blue7\_71 Start: 40393, Stop: 40187, Start Num: 15

Candidate Starts for Blue7\_71:

(8, 40483), (11, 40411), (Start: 12 @40405 has 1 MA's), (Start: 15 @40393 has 4 MA's), (Start: 26 @40366 has 58 MA's), (36, 40333),

Gene: BogosyJay\_70 Start: 41590, Stop: 41414, Start Num: 19

Candidate Starts for BogosyJay\_70:

(Start: 19 @41590 has 4 MA's), (41, 41524),

Gene: Bongo\_53 Start: 38212, Stop: 38385, Start Num: 24

Candidate Starts for Bongo\_53:

(Start: 24 @38212 has 16 MA's), (31, 38236), (43, 38284), (46, 38302),

Gene: BooTeria\_162 Start: 107851, Stop: 108009, Start Num: 30

Candidate Starts for BooTeria\_162:

(14, 107806), (Start: 30 @107851 has 2 MA's),

Gene: Boohoo\_74 Start: 40835, Stop: 40641, Start Num: 28

Candidate Starts for Boohoo\_74:

(2, 41129), (3, 41123), (Start: 28 @40835 has 19 MA's), (33, 40820), (36, 40811), (56, 40712),

Gene: Bricole\_53 Start: 38194, Stop: 38367, Start Num: 24

Candidate Starts for Bricole\_53:

(Start: 24 @38194 has 16 MA's), (31, 38218), (43, 38266), (46, 38284),

Gene: Buttrmlkdreams\_40 Start: 27645, Stop: 27442, Start Num: 20

Candidate Starts for Buttrmlkdreams\_40:

(4, 27837), (Start: 20 @27645 has 4 MA's), (38, 27585), (41, 27567),

Gene: Candra\_67 Start: 40269, Stop: 40090, Start Num: 26

Candidate Starts for Candra\_67:

(10, 40371), (11, 40314), (Start: 12 @40308 has 1 MA's), (Start: 15 @40296 has 4 MA's), (Start: 26 @40269 has 58 MA's), (36, 40236),

Gene: Chargerpower\_65 Start: 39591, Stop: 39409, Start Num: 27

Candidate Starts for Chargerpower\_65:

(Start: 27 @39591 has 2 MA's), (36, 39561), (37, 39555),

Gene: Chartreuse\_68 Start: 39579, Stop: 39406, Start Num: 26

Candidate Starts for Chartreuse\_68:

(Start: 26 @39579 has 58 MA's), (36, 39552),

Gene: CloudWang3\_71 Start: 40750, Stop: 40571, Start Num: 26

Candidate Starts for CloudWang3\_71:

(Start: 26 @40750 has 58 MA's), (36, 40717),

Gene: CogOmlette\_67 Start: 41038, Stop: 40847, Start Num: 18

Candidate Starts for CogOmlette\_67:

(Start: 18 @41038 has 3 MA's), (29, 41008), (32, 41005), (42, 40963), (51, 40909), (54, 40900),

Gene: Colin\_66 Start: 42014, Stop: 41838, Start Num: 26

Candidate Starts for Colin\_66:

(Start: 26 @42014 has 58 MA's), (36, 41987), (44, 41942), (53, 41897),

Gene: Cookiedough\_69 Start: 40207, Stop: 40034, Start Num: 26

Candidate Starts for Cookiedough\_69:

(Start: 26 @40207 has 58 MA's), (36, 40180),

Gene: DaVinci\_67 Start: 39633, Stop: 39460, Start Num: 26

Candidate Starts for DaVinci\_67:

(Start: 26 @39633 has 58 MA's), (36, 39606),

Gene: DarthPhader\_65 Start: 42262, Stop: 42065, Start Num: 26

Candidate Starts for DarthPhader\_65:

(Start: 26 @42262 has 58 MA's), (32, 42241), (36, 42229), (56, 42130),

Gene: DekHockey33\_75 Start: 41126, Stop: 40947, Start Num: 28

Candidate Starts for DekHockey33\_75:

(2, 41420), (3, 41414), (Start: 28 @41126 has 19 MA's), (33, 41111), (36, 41102), (52, 41015),

Gene: DelvinSonDorr\_66 Start: 40438, Stop: 40265, Start Num: 26

Candidate Starts for DelvinSonDorr\_66:

(Start: 26 @40438 has 58 MA's), (36, 40411),

Gene: Diminimus\_54 Start: 38207, Stop: 38380, Start Num: 24

Candidate Starts for Diminimus\_54:

(Start: 24 @38207 has 16 MA's), (31, 38231), (43, 38279), (46, 38297),

Gene: Dorothea\_69 Start: 40205, Stop: 40032, Start Num: 26

Candidate Starts for Dorothea\_69:

(Start: 26 @40205 has 58 MA's), (36, 40178),

Gene: Dulcita\_54 Start: 38208, Stop: 38381, Start Num: 24

Candidate Starts for Dulcita\_54:

(Start: 24 @38208 has 16 MA's), (31, 38232), (43, 38280), (46, 38298),

Gene: DunneganBoMo\_153 Start: 107120, Stop: 107278, Start Num: 30

Candidate Starts for DunneganBoMo\_153:

(14, 107075), (Start: 30 @107120 has 2 MA's),

Gene: EagleEye\_72 Start: 41949, Stop: 41728, Start Num: 12

Candidate Starts for EagleEye\_72:

(5, 42111), (Start: 12 @41949 has 1 MA's), (Start: 26 @41910 has 58 MA's), (32, 41889), (36, 41877), (49, 41802),

Gene: Elephantoon\_69 Start: 40932, Stop: 40738, Start Num: 19

Candidate Starts for Elephantoon\_69:

(Start: 19 @40932 has 4 MA's), (29, 40902), (32, 40899),

Gene: Elle\_68 Start: 39328, Stop: 39149, Start Num: 28

Candidate Starts for Elle\_68:

(Start: 28 @39328 has 19 MA's), (47, 39241), (61, 39169),

Gene: Ellewin\_153 Start: 107224, Stop: 107382, Start Num: 30

Candidate Starts for Ellewin\_153:

(14, 107179), (Start: 30 @107224 has 2 MA's), (40, 107260),

Gene: Epsocamisio\_70 Start: 40273, Stop: 40094, Start Num: 28

Candidate Starts for Epsocamisio\_70:

(2, 40567), (3, 40561), (Start: 28 @40273 has 19 MA's), (33, 40258), (36, 40249), (52, 40162),

Gene: EricB\_68 Start: 40226, Stop: 40047, Start Num: 26

Candidate Starts for EricB\_68:

(10, 40328), (11, 40271), (Start: 12 @40265 has 1 MA's), (Start: 15 @40253 has 4 MA's), (Start: 26 @40226 has 58 MA's), (36, 40193),

Gene: FatCactus\_64 Start: 40465, Stop: 40298, Start Num: 27

Candidate Starts for FatCactus\_64:

(Start: 27 @40465 has 2 MA's), (Start: 28 @40459 has 19 MA's), (44, 40390), (56, 40336), (60, 40324),

Gene: FlagStaff\_45 Start: 36055, Stop: 36249, Start Num: 16

Candidate Starts for FlagStaff\_45:

(Start: 16 @36055 has 1 MA's), (17, 36058), (32, 36094), (36, 36106), (38, 36115), (53, 36196),

Gene: FreakyGoo\_54 Start: 38208, Stop: 38381, Start Num: 24

Candidate Starts for FreakyGoo\_54:

(Start: 24 @38208 has 16 MA's), (31, 38232), (43, 38280), (46, 38298),

Gene: Gail\_69 Start: 42059, Stop: 41856, Start Num: 26

Candidate Starts for Gail\_69:

(Start: 26 @42059 has 58 MA's), (36, 42026), (47, 41963), (53, 41936), (55, 41930),

Gene: Garak\_71 Start: 40605, Stop: 40426, Start Num: 26

Candidate Starts for Garak\_71:

(Start: 26 @40605 has 58 MA's), (36, 40572),

Gene: Gladiator\_67 Start: 39830, Stop: 39651, Start Num: 26

Candidate Starts for Gladiator\_67:

(Start: 26 @39830 has 58 MA's), (36, 39797),

Gene: Glaske16\_54 Start: 38207, Stop: 38380, Start Num: 24

Candidate Starts for Glaske16\_54:

(Start: 24 @38207 has 16 MA's), (31, 38231), (43, 38279), (46, 38297),

Gene: GreedyLawyer\_66 Start: 40199, Stop: 40020, Start Num: 26

Candidate Starts for GreedyLawyer\_66:

(10, 40301), (11, 40244), (Start: 12 @40238 has 1 MA's), (Start: 15 @40226 has 4 MA's), (Start: 26 @40199 has 58 MA's), (36, 40166),

Gene: Gruunaga\_70 Start: 40563, Stop: 40384, Start Num: 26

Candidate Starts for Gruunaga\_70:

(8, 40680), (11, 40608), (Start: 12 @40602 has 1 MA's), (Start: 15 @40590 has 4 MA's), (Start: 26 @40563 has 58 MA's), (36, 40530),

Gene: Hammer\_70 Start: 40170, Stop: 39991, Start Num: 26

Candidate Starts for Hammer\_70:

(Start: 26 @40170 has 58 MA's), (36, 40137),

Gene: Helmet\_72 Start: 40605, Stop: 40426, Start Num: 26

Candidate Starts for Helmet\_72:

(Start: 26 @40605 has 58 MA's), (36, 40572),

Gene: Hexamo\_70 Start: 40235, Stop: 40056, Start Num: 26

Candidate Starts for Hexamo\_70:

(Start: 26 @40235 has 58 MA's), (36, 40202),

Gene: Hoot\_64 Start: 38084, Stop: 37905, Start Num: 26

Candidate Starts for Hoot\_64:

(10, 38186), (11, 38129), (Start: 12 @38123 has 1 MA's), (Start: 15 @38111 has 4 MA's), (Start: 26 @38084 has 58 MA's), (36, 38051),

Gene: Horseradish\_40 Start: 27173, Stop: 26970, Start Num: 20  
Candidate Starts for Horseradish\_40:  
(4, 27365), (Start: 20 @27173 has 4 MA's), (38, 27113), (41, 27095),

Gene: IPhone7\_53 Start: 38212, Stop: 38385, Start Num: 24  
Candidate Starts for IPhone7\_53:  
(Start: 24 @38212 has 16 MA's), (31, 38236), (43, 38284), (46, 38302),

Gene: IdentityCrisis\_47 Start: 31026, Stop: 31214, Start Num: 13  
Candidate Starts for IdentityCrisis\_47:  
(Start: 13 @31026 has 1 MA's), (32, 31071), (36, 31083), (38, 31092), (39, 31095), (50, 31164), (56, 31182), (59, 31194),

Gene: Indra\_73 Start: 40606, Stop: 40427, Start Num: 26  
Candidate Starts for Indra\_73:  
(Start: 26 @40606 has 58 MA's), (36, 40573),

Gene: Isiphiwo\_67 Start: 39765, Stop: 39586, Start Num: 26  
Candidate Starts for Isiphiwo\_67:  
(Start: 26 @39765 has 58 MA's), (36, 39732),

Gene: Izel\_54 Start: 38207, Stop: 38380, Start Num: 24  
Candidate Starts for Izel\_54:  
(Start: 24 @38207 has 16 MA's), (31, 38231), (43, 38279), (46, 38297),

Gene: JSwag\_73 Start: 40558, Stop: 40379, Start Num: 28  
Candidate Starts for JSwag\_73:  
(2, 40852), (3, 40846), (Start: 28 @40558 has 19 MA's), (33, 40543), (36, 40534), (52, 40447),

Gene: Jeeves\_71 Start: 41042, Stop: 40869, Start Num: 26  
Candidate Starts for Jeeves\_71:  
(9, 41156), (Start: 15 @41069 has 4 MA's), (Start: 26 @41042 has 58 MA's), (33, 41018), (36, 41009), (37, 41003), (40, 40991),

Gene: Jeffabunny\_70 Start: 40232, Stop: 40053, Start Num: 26  
Candidate Starts for Jeffabunny\_70:  
(Start: 26 @40232 has 58 MA's), (36, 40199),

Gene: JewelBug\_69 Start: 40499, Stop: 40326, Start Num: 26  
Candidate Starts for JewelBug\_69:  
(Start: 26 @40499 has 58 MA's), (36, 40472),

Gene: Jordennis\_68 Start: 39980, Stop: 39807, Start Num: 26  
Candidate Starts for Jordennis\_68:  
(Start: 26 @39980 has 58 MA's), (36, 39953), (51, 39869),

Gene: Kalpine\_67 Start: 42195, Stop: 42019, Start Num: 26  
Candidate Starts for Kalpine\_67:  
(Start: 26 @42195 has 58 MA's), (44, 42123),

Gene: KatherineG\_74 Start: 41031, Stop: 40852, Start Num: 28  
Candidate Starts for KatherineG\_74:

(2, 41325), (3, 41319), (Start: 28 @41031 has 19 MA's), (33, 41016), (36, 41007), (52, 40920),

Gene: Kazan\_70 Start: 40266, Stop: 40060, Start Num: 15

Candidate Starts for Kazan\_70:

(10, 40341), (11, 40284), (Start: 12 @40278 has 1 MA's), (Start: 15 @40266 has 4 MA's), (Start: 26 @40239 has 58 MA's), (36, 40206),

Gene: Kinmap\_70 Start: 40504, Stop: 40307, Start Num: 23

Candidate Starts for Kinmap\_70:

(8, 40609), (23, 40504), (Start: 27 @40489 has 2 MA's), (35, 40468), (39, 40453),

Gene: Kipper29\_69 Start: 40252, Stop: 40073, Start Num: 26

Candidate Starts for Kipper29\_69:

(10, 40354), (11, 40297), (Start: 12 @40291 has 1 MA's), (Start: 15 @40279 has 4 MA's), (Start: 26 @40252 has 58 MA's), (36, 40219),

Gene: KleverKiS\_54 Start: 38188, Stop: 38361, Start Num: 24

Candidate Starts for KleverKiS\_54:

(Start: 24 @38188 has 16 MA's), (31, 38212), (43, 38260), (46, 38278),

Gene: Klodlith\_66 Start: 40644, Stop: 40468, Start Num: 18

Candidate Starts for Klodlith\_66:

(1, 40917), (Start: 18 @40644 has 3 MA's), (41, 40578),

Gene: Koko\_72 Start: 41090, Stop: 40911, Start Num: 26

Candidate Starts for Koko\_72:

(Start: 26 @41090 has 58 MA's), (36, 41057),

Gene: LastResort\_72 Start: 40611, Stop: 40417, Start Num: 28

Candidate Starts for LastResort\_72:

(2, 40905), (3, 40899), (Start: 28 @40611 has 19 MA's), (33, 40596), (36, 40587), (56, 40488),

Gene: Lilbunny\_69 Start: 40236, Stop: 40057, Start Num: 26

Candidate Starts for Lilbunny\_69:

(Start: 26 @40236 has 58 MA's), (36, 40203),

Gene: LilhomieP\_52 Start: 38212, Stop: 38385, Start Num: 24

Candidate Starts for LilhomieP\_52:

(Start: 24 @38212 has 16 MA's), (31, 38236), (43, 38284), (46, 38302),

Gene: Lilleskat\_67 Start: 41392, Stop: 41216, Start Num: 18

Candidate Starts for Lilleskat\_67:

(Start: 18 @41392 has 3 MA's), (41, 41326),

Gene: LoneWolf\_70 Start: 41439, Stop: 41263, Start Num: 19

Candidate Starts for LoneWolf\_70:

(Start: 19 @41439 has 4 MA's), (41, 41373),

Gene: Looper\_73 Start: 40523, Stop: 40329, Start Num: 28

Candidate Starts for Looper\_73:

(2, 40817), (3, 40811), (Start: 28 @40523 has 19 MA's), (33, 40508), (36, 40499), (56, 40400),

Gene: Luchador\_70 Start: 42522, Stop: 42328, Start Num: 26

Candidate Starts for Luchador\_70:

(Start: 26 @42522 has 58 MA's), (36, 42489), (41, 42462), (47, 42426), (53, 42399), (55, 42393),

Gene: Lucyedi\_71 Start: 42106, Stop: 41924, Start Num: 26

Candidate Starts for Lucyedi\_71:

(5, 42307), (Start: 12 @42145 has 1 MA's), (Start: 26 @42106 has 58 MA's), (32, 42085), (36, 42073), (49, 41998),

Gene: MScarn\_41 Start: 27313, Stop: 27110, Start Num: 20

Candidate Starts for MScarn\_41:

(4, 27505), (Start: 20 @27313 has 4 MA's), (38, 27253), (41, 27235),

Gene: Maminiaina\_70 Start: 41572, Stop: 41396, Start Num: 19

Candidate Starts for Maminiaina\_70:

(Start: 19 @41572 has 4 MA's), (41, 41506),

Gene: McFly\_69 Start: 40192, Stop: 40019, Start Num: 26

Candidate Starts for McFly\_69:

(Start: 26 @40192 has 58 MA's), (36, 40165),

Gene: MinecraftSteve\_74 Start: 40846, Stop: 40667, Start Num: 28

Candidate Starts for MinecraftSteve\_74:

(2, 41140), (3, 41134), (Start: 28 @40846 has 19 MA's), (33, 40831), (36, 40822), (52, 40735),

Gene: Minispark\_67 Start: 41035, Stop: 40844, Start Num: 18

Candidate Starts for Minispark\_67:

(Start: 18 @41035 has 3 MA's), (29, 41005), (32, 41002), (42, 40960), (51, 40906), (54, 40897),

Gene: Nanosmite\_58 Start: 39866, Stop: 40042, Start Num: 24

Candidate Starts for Nanosmite\_58:

(7, 39743), (Start: 24 @39866 has 16 MA's), (34, 39902), (46, 39959), (53, 39998),

Gene: Nebulosus\_71 Start: 40510, Stop: 40331, Start Num: 28

Candidate Starts for Nebulosus\_71:

(2, 40804), (3, 40798), (Start: 28 @40510 has 19 MA's), (33, 40495), (36, 40486), (52, 40399),

Gene: Neeharika16\_68 Start: 39659, Stop: 39486, Start Num: 26

Candidate Starts for Neeharika16\_68:

(Start: 26 @39659 has 58 MA's), (36, 39632),

Gene: Newrala\_69 Start: 40200, Stop: 40021, Start Num: 26

Candidate Starts for Newrala\_69:

(10, 40302), (11, 40245), (Start: 12 @40239 has 1 MA's), (Start: 15 @40227 has 4 MA's), (Start: 26 @40200 has 58 MA's), (36, 40167),

Gene: Pace1224\_45 Start: 36103, Stop: 36276, Start Num: 26

Candidate Starts for Pace1224\_45:

(Start: 26 @36103 has 58 MA's), (36, 36136), (52, 36223), (56, 36235), (57, 36241), (58, 36244),

Gene: PainterBoy\_70 Start: 41815, Stop: 41633, Start Num: 26

Candidate Starts for PainterBoy\_70:

(5, 42016), (Start: 12 @41854 has 1 MA's), (Start: 26 @41815 has 58 MA's), (32, 41794), (36, 41782), (49, 41707),

Gene: PegLeg\_53 Start: 38211, Stop: 38384, Start Num: 24  
Candidate Starts for PegLeg\_53:  
(Start: 24 @38211 has 16 MA's), (31, 38235), (43, 38283), (46, 38301),

Gene: Pharaoh\_65 Start: 41502, Stop: 41326, Start Num: 26  
Candidate Starts for Pharaoh\_65:  
(Start: 26 @41502 has 58 MA's), (36, 41475),

Gene: Pmask\_68 Start: 40195, Stop: 40022, Start Num: 26  
Candidate Starts for Pmask\_68:  
(Start: 26 @40195 has 58 MA's), (36, 40168),

Gene: Polyphemus\_71 Start: 40586, Stop: 40407, Start Num: 26  
Candidate Starts for Polyphemus\_71:  
(10, 40688), (11, 40631), (Start: 12 @40625 has 1 MA's), (Start: 15 @40613 has 4 MA's), (Start: 26 @40586 has 58 MA's), (36, 40553),

Gene: Priamo\_71 Start: 40046, Stop: 39873, Start Num: 26  
Candidate Starts for Priamo\_71:  
(Start: 26 @40046 has 58 MA's), (36, 40019),

Gene: Rahalelujah\_69 Start: 41050, Stop: 40859, Start Num: 18  
Candidate Starts for Rahalelujah\_69:  
(Start: 18 @41050 has 3 MA's), (29, 41020), (32, 41017), (42, 40975), (51, 40921), (54, 40912),

Gene: ReMo\_72 Start: 40608, Stop: 40414, Start Num: 28  
Candidate Starts for ReMo\_72:  
(2, 40902), (3, 40896), (Start: 28 @40608 has 19 MA's), (33, 40593), (36, 40584), (56, 40485),

Gene: Refuge\_65 Start: 42312, Stop: 42115, Start Num: 26  
Candidate Starts for Refuge\_65:  
(Start: 26 @42312 has 58 MA's), (32, 42291), (36, 42279), (56, 42180),

Gene: Reindeer\_55 Start: 39414, Stop: 39587, Start Num: 24  
Candidate Starts for Reindeer\_55:  
(7, 39291), (Start: 24 @39414 has 16 MA's), (45, 39501), (46, 39504),

Gene: Remus\_74 Start: 40598, Stop: 40419, Start Num: 28  
Candidate Starts for Remus\_74:  
(2, 40892), (3, 40886), (Start: 28 @40598 has 19 MA's), (33, 40583), (36, 40574), (52, 40487),

Gene: Rifter\_70 Start: 39766, Stop: 39587, Start Num: 26  
Candidate Starts for Rifter\_70:  
(Start: 26 @39766 has 58 MA's), (36, 39733),

Gene: Roksolana\_71 Start: 40600, Stop: 40421, Start Num: 26  
Candidate Starts for Roksolana\_71:  
(8, 40717), (11, 40645), (Start: 12 @40639 has 1 MA's), (Start: 15 @40627 has 4 MA's), (Start: 26 @40600 has 58 MA's), (36, 40567),

Gene: Rosalind\_72 Start: 40765, Stop: 40586, Start Num: 28  
Candidate Starts for Rosalind\_72:

(2, 41059), (3, 41053), (Start: 28 @40765 has 19 MA's), (33, 40750), (36, 40741), (52, 40654),

Gene: RoseMarie\_59 Start: 41858, Stop: 42031, Start Num: 24

Candidate Starts for RoseMarie\_59:

(Start: 24 @41858 has 16 MA's), (31, 41882), (41, 41924), (46, 41948), (48, 41963), (52, 41984),

Gene: ShayRa\_74 Start: 40794, Stop: 40615, Start Num: 28

Candidate Starts for ShayRa\_74:

(2, 41088), (3, 41082), (Start: 28 @40794 has 19 MA's), (33, 40779), (36, 40770), (52, 40683),

Gene: SheaKeira\_65 Start: 40520, Stop: 40344, Start Num: 18

Candidate Starts for SheaKeira\_65:

(1, 40793), (Start: 18 @40520 has 3 MA's), (39, 40469), (41, 40454),

Gene: Skinny\_54 Start: 38641, Stop: 38814, Start Num: 24

Candidate Starts for Skinny\_54:

(Start: 24 @38641 has 16 MA's), (31, 38665), (43, 38713), (46, 38731),

Gene: SlimJimmy\_52 Start: 38195, Stop: 38368, Start Num: 24

Candidate Starts for SlimJimmy\_52:

(Start: 24 @38195 has 16 MA's), (31, 38219), (43, 38267), (46, 38285),

Gene: SmellyB\_69 Start: 40260, Stop: 40054, Start Num: 15

Candidate Starts for SmellyB\_69:

(10, 40335), (11, 40278), (Start: 12 @40272 has 1 MA's), (Start: 15 @40260 has 4 MA's), (Start: 26 @40233 has 58 MA's), (36, 40200),

Gene: SororFago\_69 Start: 42242, Stop: 42048, Start Num: 26

Candidate Starts for SororFago\_69:

(Start: 26 @42242 has 58 MA's), (36, 42209), (47, 42146), (53, 42119), (55, 42113),

Gene: Soups\_74 Start: 41058, Stop: 40864, Start Num: 28

Candidate Starts for Soups\_74:

(2, 41352), (3, 41346), (Start: 28 @41058 has 19 MA's), (33, 41043), (36, 41034), (56, 40935),

Gene: Stephig9\_72 Start: 40770, Stop: 40612, Start Num: 26

Candidate Starts for Stephig9\_72:

(Start: 26 @40770 has 58 MA's), (38, 40728), (46, 40686), (55, 40641), (58, 40629), (59, 40626),

Gene: Strosahl\_74 Start: 40598, Stop: 40419, Start Num: 28

Candidate Starts for Strosahl\_74:

(2, 40892), (3, 40886), (Start: 28 @40598 has 19 MA's), (33, 40583), (36, 40574), (52, 40487),

Gene: Sunhee\_70 Start: 40582, Stop: 40388, Start Num: 26

Candidate Starts for Sunhee\_70:

(8, 40693), (Start: 15 @40603 has 4 MA's), (Start: 26 @40582 has 58 MA's), (47, 40486), (55, 40453),

Gene: SuperAwesome\_69 Start: 40265, Stop: 40059, Start Num: 15

Candidate Starts for SuperAwesome\_69:

(10, 40340), (11, 40283), (Start: 12 @40277 has 1 MA's), (Start: 15 @40265 has 4 MA's), (Start: 26 @40238 has 58 MA's), (36, 40205),

Gene: SuperCallie99\_66 Start: 40079, Stop: 39906, Start Num: 26

Candidate Starts for SuperCallie99\_66:  
(Start: 26 @40079 has 58 MA's), (36, 40052),

Gene: Switzerland\_73 Start: 40933, Stop: 40754, Start Num: 28  
Candidate Starts for Switzerland\_73:  
(2, 41227), (3, 41221), (Start: 28 @40933 has 19 MA's), (33, 40918), (36, 40909), (52, 40822),

Gene: Temprado\_71 Start: 40605, Stop: 40426, Start Num: 26  
Candidate Starts for Temprado\_71:  
(Start: 26 @40605 has 58 MA's), (36, 40572),

Gene: ToneTone\_67 Start: 40165, Stop: 39986, Start Num: 26  
Candidate Starts for ToneTone\_67:  
(Start: 26 @40165 has 58 MA's), (36, 40132),

Gene: TpudiCK\_55 Start: 38211, Stop: 38384, Start Num: 24  
Candidate Starts for TpudiCK\_55:  
(Start: 24 @38211 has 16 MA's), (31, 38235), (43, 38283), (46, 38301),

Gene: Trixie\_66 Start: 41830, Stop: 41654, Start Num: 26  
Candidate Starts for Trixie\_66:  
(Start: 26 @41830 has 58 MA's), (44, 41758), (53, 41713),

Gene: Tucker\_70 Start: 40368, Stop: 40189, Start Num: 26  
Candidate Starts for Tucker\_70:  
(Start: 26 @40368 has 58 MA's), (36, 40335),

Gene: TyDawg\_53 Start: 38212, Stop: 38385, Start Num: 24  
Candidate Starts for TyDawg\_53:  
(Start: 24 @38212 has 16 MA's), (31, 38236), (43, 38284), (46, 38302),

Gene: VohminGhazi\_69 Start: 40234, Stop: 40055, Start Num: 26  
Candidate Starts for VohminGhazi\_69:  
(10, 40336), (11, 40279), (Start: 12 @40273 has 1 MA's), (Start: 15 @40261 has 4 MA's), (Start: 26 @40234 has 58 MA's), (36, 40201),

Gene: WST1\_48 Start: 30928, Stop: 31071, Start Num: 32  
Candidate Starts for WST1\_48:  
(Start: 13 @30883 has 1 MA's), (32, 30928), (36, 30940), (38, 30949), (39, 30952), (50, 31021), (56, 31039), (59, 31051),

Gene: Waits\_74 Start: 40830, Stop: 40651, Start Num: 28  
Candidate Starts for Waits\_74:  
(2, 41124), (3, 41118), (Start: 28 @40830 has 19 MA's), (33, 40815), (36, 40806), (52, 40719),

Gene: Weasels2\_176 Start: 96304, Stop: 96510, Start Num: 22  
Candidate Starts for Weasels2\_176:  
(Start: 22 @96304 has 1 MA's),

Gene: Wiks\_69 Start: 40236, Stop: 40057, Start Num: 26  
Candidate Starts for Wiks\_69:  
(Start: 26 @40236 has 58 MA's), (36, 40203),

Gene: WorldCup\_67 Start: 41044, Stop: 40853, Start Num: 18  
Candidate Starts for WorldCup\_67:  
(Start: 18 @41044 has 3 MA's), (29, 41014), (32, 41011), (42, 40969), (51, 40915), (54, 40906),

Gene: WunderPhul\_70 Start: 40234, Stop: 40055, Start Num: 26  
Candidate Starts for WunderPhul\_70:  
(Start: 26 @40234 has 58 MA's), (36, 40201),

Gene: Yecey3\_72 Start: 41315, Stop: 41127, Start Num: 21  
Candidate Starts for Yecey3\_72:  
(Start: 21 @41315 has 1 MA's), (32, 41282),

Gene: Yokurt\_69 Start: 40236, Stop: 40057, Start Num: 26  
Candidate Starts for Yokurt\_69:  
(Start: 26 @40236 has 58 MA's), (36, 40203),

Gene: Yummy\_40 Start: 27287, Stop: 27084, Start Num: 20  
Candidate Starts for Yummy\_40:  
(4, 27479), (Start: 20 @27287 has 4 MA's), (38, 27227), (41, 27209),

Gene: Zaka\_70 Start: 40236, Stop: 40057, Start Num: 26  
Candidate Starts for Zaka\_70:  
(Start: 26 @40236 has 58 MA's), (36, 40203),

Gene: Zimmer\_65 Start: 42012, Stop: 41815, Start Num: 26  
Candidate Starts for Zimmer\_65:  
(8, 42129), (9, 42126), (Start: 26 @42012 has 58 MA's), (36, 41979),

Gene: Zulu\_71 Start: 40614, Stop: 40435, Start Num: 26  
Candidate Starts for Zulu\_71:  
(Start: 26 @40614 has 58 MA's), (36, 40581),