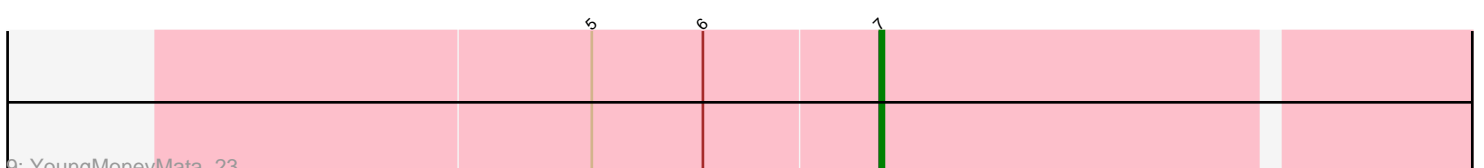
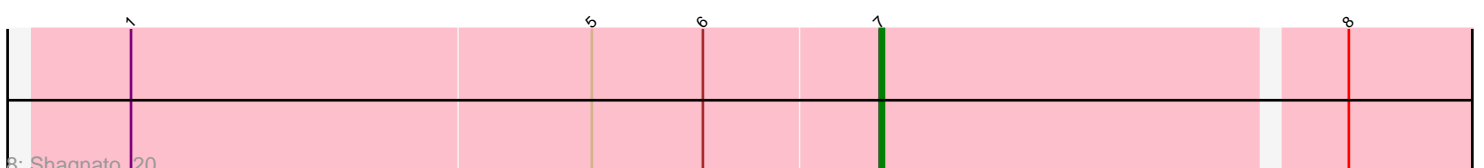
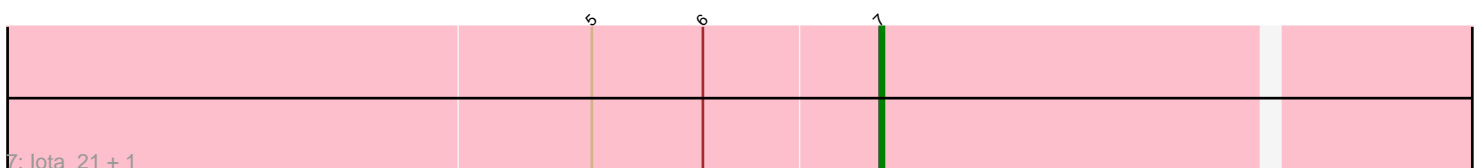
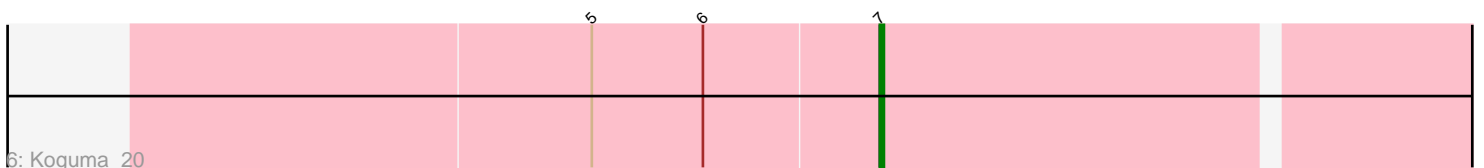
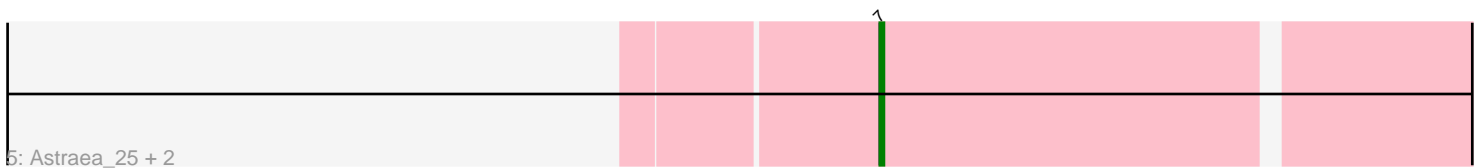
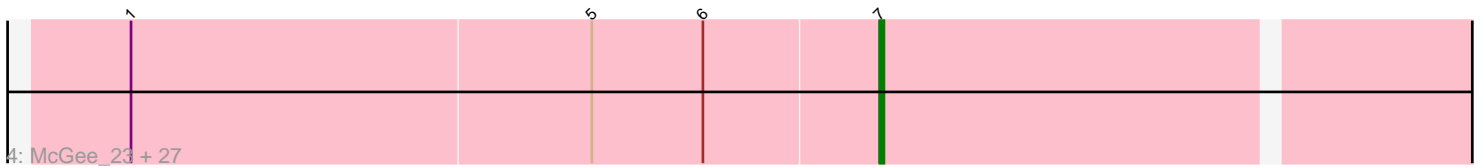
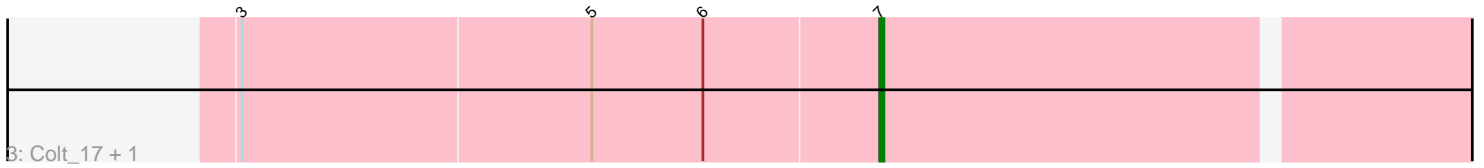
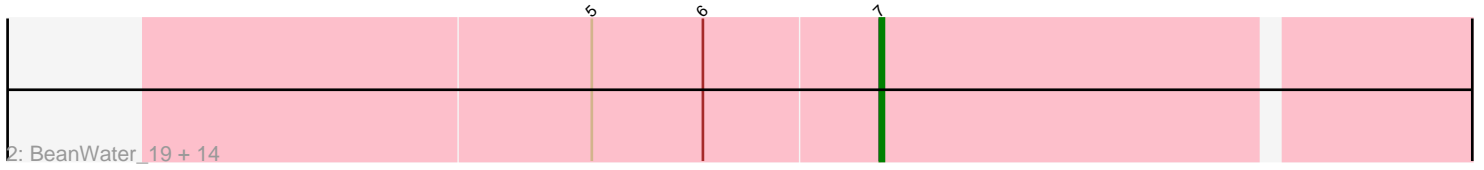
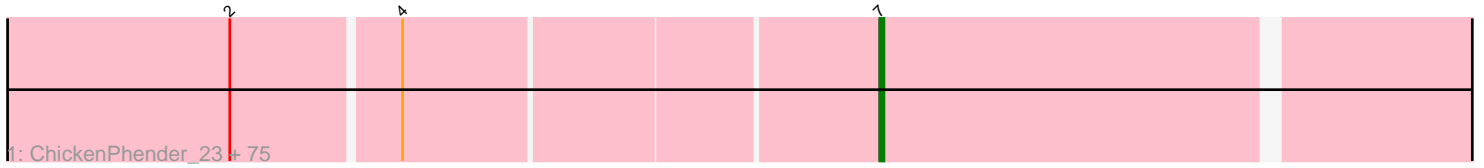


Pham 157691



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 157691 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157691 has 129 members, 4 are drafts.

Phages represented in each track:

- Track 1 : ChickenPhender\_23, Kboogie\_24, Quasimodo\_23, Babyland\_23, Pleione\_26, Ava3\_25, Adlitam\_23, Amataga\_23, EmToTheThree\_27, Izajani\_25, Jaygup\_23, Patter\_23, NedWong\_25, LifeSavor\_24, Zalkecks\_26, Bigswole\_30, Phlegm\_25, YemiJoy2021\_25, TinyTim\_24, SmallFry\_23, Bread\_25, Audrick\_25, Phusco\_23, Teardrop\_23, Morizzled23\_23, Atlantean\_23, Ading\_23, JustHall\_23, Shrimp\_24, Bonray\_24, Janiyra\_23, Norm\_24, Yucca\_24, Loanshark\_24, Delilah\_24, Darko\_23, Gangam\_23, Basquiat\_23, Pivoine\_23, Breeniome\_24, Daffodil\_26, Salacia\_26, Gabriel\_24, Jedediah\_24, Kamryn\_23, Guwapp\_23, Melpomini\_23, Latch\_23, CindyLou\_23, DrPhinkDaddy\_24, Derek\_24, Jemmno\_23, ShiaLabeouf\_23, FudgeTart\_25, ValleyTerrace\_23, ChaylaJr\_23, Erdmann\_25, Trinitium\_23, Megamind\_24, Chargie21\_23, Capablanca\_25, Roots515\_24, SilverDipper\_24, Shnickers\_23, Gizmo\_26, Fludd\_23, Tortoise16\_22, Rahel\_23, Specks\_28, Maby2021\_25, Mangeria\_27, Pio\_27, Wally\_23, Naija\_23, Napoleon13\_23, Ewok\_24
- Track 2 : BeanWater\_19, Jessibeth14\_23, IkeLoa\_19, Pier\_25, SrishMeg2525\_23, PurduePete\_23, EggyFarm\_28, NuevoMundo\_27, Naval22\_26, Burrough\_24, Grasshills\_28, Bipolarisk\_23, BigCity\_28, RoMag\_18, NoodleTree\_22
- Track 3 : Colt\_17, Cane17\_17
- Track 4 : McGee\_23, Turret\_22, Blackbrain\_22, CharlieB\_24, Phox\_23, Rabinovish\_23, Khaleesi\_23, Sprinklers\_24, Ronan\_19, Stubby\_22, Cactojaque\_21, Pinkcreek\_16, StubbySaigey\_23, Nidhogg\_25, HyRo\_22, FoxtrotP1\_24, BadAgartude\_25, Shelob\_26, QBert\_22, Ngannou\_22, Alice\_19, EmmaElysia\_22, EasyJones\_23, Flabslab\_25, Yassified\_21, Sauce\_25, JPickles\_22, McWolfish\_23
- Track 5 : Astraea\_25, FrayBell\_30, InterFolia\_30
- Track 6 : Koguma\_20
- Track 7 : Iota\_21, Essence\_22
- Track 8 : Shaqnato\_20
- Track 9 : YoungMoneyMata\_23

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

The start number called the most often in the published annotations is 7, it was called in 125 of the 125 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ading\_23, Adlitam\_23, Alice\_19, Amataga\_23, Astraea\_25, Atlantean\_23, Audrick\_25, Ava3\_25, Babyland\_23, BadAgartude\_25, Basquiat\_23, BeanWater\_19, BigCity\_28, Bigswole\_30, Bipolarisk\_23, Blackbrain\_22, Bonray\_24, Bread\_25, Breeniome\_24, Burrough\_24, Cactojaque\_21, Cane17\_17, Capablanca\_25, Chargie21\_23, CharlieB\_24, ChaylaJr\_23, ChickenPhender\_23, CindyLou\_23, Colt\_17, Daffodil\_26, Darko\_23, Delilah\_24, Derek\_24, DrPhinkDaddy\_24, EasyJones\_23, EggyFarm\_28, EmToTheThree\_27, EmmaElysia\_22, Erdmann\_25, Essence\_22, Ewok\_24, Flabslab\_25, Fludd\_23, FoxtrotP1\_24, FrayBell\_30, FudgeTart\_25, Gabriel\_24, Gamgam\_23, Gizmo\_26, Grasshills\_28, Guwapp\_23, HyRo\_22, IkeLoa\_19, InterFolia\_30, Iota\_21, Izajani\_25, JPickles\_22, Janiyra\_23, Jaygup\_23, Jedediah\_24, Jemmno\_23, Jessibeth14\_23, JustHall\_23, Kamryn\_23, Kboogie\_24, Khaleesi\_23, Koguma\_20, Latch\_23, LifeSavor\_24, Loanshark\_24, Maby2021\_25, Mangeria\_27, McGee\_23, McWolfish\_23, Megamind\_24, Melpomini\_23, Morizzled23\_23, Naija\_23, Napoleon13\_23, Naval22\_26, NedWong\_25, Ngannou\_22, Nidhogg\_25, NoodleTree\_22, Norm\_24, NuevoMundo\_27, Patter\_23, Phlegm\_25, Phox\_23, Phusco\_23, Pier\_25, Pinkcreek\_16, Pio\_27, Pivoine\_23, Pleione\_26, PurduePete\_23, QBert\_22, Quasimodo\_23, Rabinovish\_23, Rahel\_23, RoMag\_18, Ronan\_19, Roots515\_24, Salacia\_26, Sauce\_25, Shaqato\_20, Shelob\_26, ShiaLabeouf\_23, Shnickers\_23, Shrimp\_24, SilverDipper\_24, SmallFry\_23, Specks\_28, Sprinklers\_24, SrishMeg2525\_23, StubbySaigey\_23, Stubby\_22, Teardrop\_23, TinyTim\_24, Tortoise16\_22, Trinitium\_23, Turret\_22, ValleyTerrace\_23, Wally\_23, Yassified\_21, YemiJoy2021\_25, YoungMoneyMata\_23, Yucca\_24, Zalkecks\_26,

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

- 

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

- 

### Summary by start number:

Start 7:

- Found in 129 of 129 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 125 of 125
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ading\_23 (C1), Adlitam\_23 (C1), Alice\_19 (C1), Amataga\_23 (C1), Astraea\_25 (C1), Atlantean\_23 (C1), Audrick\_25 (C1), Ava3\_25 (C1), Babyland\_23 (C1), BadAgartude\_25 (C1), Basquiat\_23 (C1), BeanWater\_19 (C1), BigCity\_28 (C1), Bigswole\_30 (C1), Bipolarisk\_23 (C1), Blackbrain\_22 (C1), Bonray\_24 (C1), Bread\_25 (C1), Breeniome\_24 (C1), Burrough\_24 (C1), Cactojaque\_21 (C1), Cane17\_17 (C1), Capablanca\_25 (C1), Chargie21\_23 (C1), CharlieB\_24 (C1), ChaylaJr\_23 (C1), ChickenPhender\_23 (C1), CindyLou\_23 (C1), Colt\_17 (C1), Daffodil\_26 (C1), Darko\_23 (C1), Delilah\_24 (C1), Derek\_24 (C1), DrPhinkDaddy\_24 (C1), EasyJones\_23 (C1), EggyFarm\_28 (C1), EmToTheThree\_27 (C1), EmmaElysia\_22 (C1), Erdmann\_25 (C1), Essence\_22 (C1), Ewok\_24 (C1), Flabslab\_25 (C1), Fludd\_23 (C1), FoxtrotP1\_24 (C1), FrayBell\_30 (C1), FudgeTart\_25 (C1), Gabriel\_24 (C1), Gamgam\_23 (C1), Gizmo\_26 (C1), Grasshills\_28 (C1), Guwapp\_23 (C1), HyRo\_22 (C1), IkeLoa\_19 (C1), InterFolia\_30 (C1), Iota\_21 (C1), Izajani\_25 (C1), JPickles\_22 (C1), Janiyra\_23 (C1), Jaygup\_23 (C1), Jedediah\_24 (C1), Jemmno\_23 (C1), Jessibeth14\_23 (C1), JustHall\_23 (C1), Kamryn\_23 (C1), Kboogie\_24 (C1), Khaleesi\_23 (C1), Koguma\_20 (C1), Latch\_23

(C1), LifeSavor\_24 (C1), Loanshark\_24 (C1), Maby2021\_25 (C1), Mangeria\_27 (C1), McGee\_23 (C1), McWolfish\_23 (C1), Megamind\_24 (C1), Melpomini\_23 (C1), Morizzled23\_23 (C1), Naija\_23 (C1), Napoleon13\_23 (C1), Naval22\_26 (C1), NedWong\_25 (C1), Ngannou\_22 (C1), Nidhogg\_25 (C1), NoodleTree\_22 (C1), Norm\_24 (C1), NuevoMundo\_27 (C1), Patter\_23 (C1), Phlegm\_25 (C1), Phox\_23 (C1), Phusco\_23 (C1), Pier\_25 (C1), Pinkcreek\_16 (C1), Pio\_27 (C1), Pivoine\_23 (C1), Pleione\_26 (C1), PurduePete\_23 (C1), QBert\_22 (C1), Quasimodo\_23 (C1), Rabinovish\_23 (C1), Rahel\_23 (C1), RoMag\_18 (C1), Ronan\_19 (C1), Roots515\_24 (C1), Salacia\_26 (C1), Sauce\_25 (C1), Shaqnato\_20 (C1), Shelob\_26 (C1), ShiaLabeouf\_23 (C1), Shnickers\_23 (C1), Shrimp\_24 (C1), SilverDipper\_24 (C1), SmallFry\_23 (C1), Specks\_28 (C1), Sprinklers\_24 (C1), SrishMeg2525\_23 (C1), StubbySaigey\_23 (C1), Stubby\_22 (C1), Teardrop\_23 (C1), TinyTim\_24 (C1), Tortoise16\_22 (C1), Trinitium\_23 (C1), Turret\_22 (C1), ValleyTerrace\_23 (C1), Wally\_23 (C1), Yassified\_21 (C1), YemiJoy2021\_25 (C1), YoungMoneyMata\_23 (C1), Yucca\_24 (C1), Zalkecks\_26 (C1),

### **Summary by clusters:**

There is one cluster represented in this pham: C1

Info for manual annotations of cluster C1:

- Start number 7 was manually annotated 125 times for cluster C1.

### **Gene Information:**

Gene: Ading\_23 Start: 7002, Stop: 7154, Start Num: 7  
Candidate Starts for Ading\_23:  
(2, 6852), (4, 6891), (Start: 7 @7002 has 125 MA's),

Gene: Adlitam\_23 Start: 7019, Stop: 7171, Start Num: 7  
Candidate Starts for Adlitam\_23:  
(2, 6869), (4, 6908), (Start: 7 @7019 has 125 MA's),

Gene: Alice\_19 Start: 6611, Stop: 6769, Start Num: 7  
Candidate Starts for Alice\_19:  
(1, 6431), (5, 6542), (6, 6569), (Start: 7 @6611 has 125 MA's),

Gene: Amataga\_23 Start: 7023, Stop: 7175, Start Num: 7  
Candidate Starts for Amataga\_23:  
(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: Astraea\_25 Start: 7704, Stop: 7856, Start Num: 7  
Candidate Starts for Astraea\_25:  
(Start: 7 @7704 has 125 MA's),

Gene: Atlantean\_23 Start: 7023, Stop: 7175, Start Num: 7  
Candidate Starts for Atlantean\_23:  
(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: Audrick\_25 Start: 7002, Stop: 7154, Start Num: 7  
Candidate Starts for Audrick\_25:

(2, 6852), (4, 6891), (Start: 7 @7002 has 125 MA's),

Gene: Ava3\_25 Start: 8097, Stop: 8249, Start Num: 7

Candidate Starts for Ava3\_25:

(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Babyland\_23 Start: 6984, Stop: 7136, Start Num: 7

Candidate Starts for Babyland\_23:

(2, 6834), (4, 6873), (Start: 7 @6984 has 125 MA's),

Gene: BadAgartude\_25 Start: 8178, Stop: 8330, Start Num: 7

Candidate Starts for BadAgartude\_25:

(1, 7998), (5, 8109), (6, 8136), (Start: 7 @8178 has 125 MA's),

Gene: Basquiat\_23 Start: 6965, Stop: 7117, Start Num: 7

Candidate Starts for Basquiat\_23:

(2, 6815), (4, 6854), (Start: 7 @6965 has 125 MA's),

Gene: BeanWater\_19 Start: 7133, Stop: 7285, Start Num: 7

Candidate Starts for BeanWater\_19:

(5, 7064), (6, 7091), (Start: 7 @7133 has 125 MA's),

Gene: BigCity\_28 Start: 9083, Stop: 9235, Start Num: 7

Candidate Starts for BigCity\_28:

(5, 9014), (6, 9041), (Start: 7 @9083 has 125 MA's),

Gene: Bigswole\_30 Start: 9621, Stop: 9773, Start Num: 7

Candidate Starts for Bigswole\_30:

(2, 9471), (4, 9510), (Start: 7 @9621 has 125 MA's),

Gene: Bipolarisk\_23 Start: 7823, Stop: 7975, Start Num: 7

Candidate Starts for Bipolarisk\_23:

(5, 7754), (6, 7781), (Start: 7 @7823 has 125 MA's),

Gene: Blackbrain\_22 Start: 6781, Stop: 6933, Start Num: 7

Candidate Starts for Blackbrain\_22:

(1, 6601), (5, 6712), (6, 6739), (Start: 7 @6781 has 125 MA's),

Gene: Bonray\_24 Start: 8091, Stop: 8243, Start Num: 7

Candidate Starts for Bonray\_24:

(2, 7941), (4, 7980), (Start: 7 @8091 has 125 MA's),

Gene: Bread\_25 Start: 8097, Stop: 8249, Start Num: 7

Candidate Starts for Bread\_25:

(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Breeniome\_24 Start: 6980, Stop: 7132, Start Num: 7

Candidate Starts for Breeniome\_24:

(2, 6830), (4, 6869), (Start: 7 @6980 has 125 MA's),

Gene: Burrough\_24 Start: 7823, Stop: 7975, Start Num: 7

Candidate Starts for Burrough\_24:

(5, 7754), (6, 7781), (Start: 7 @7823 has 125 MA's),

Gene: Cactojaque\_21 Start: 6670, Stop: 6822, Start Num: 7  
Candidate Starts for Cactojaque\_21:  
(1, 6490), (5, 6601), (6, 6628), (Start: 7 @6670 has 125 MA's),

Gene: Cane17\_17 Start: 6159, Stop: 6311, Start Num: 7  
Candidate Starts for Cane17\_17:  
(3, 6006), (5, 6090), (6, 6117), (Start: 7 @6159 has 125 MA's),

Gene: Capablanca\_25 Start: 8148, Stop: 8300, Start Num: 7  
Candidate Starts for Capablanca\_25:  
(2, 7998), (4, 8037), (Start: 7 @8148 has 125 MA's),

Gene: Chargie21\_23 Start: 6965, Stop: 7117, Start Num: 7  
Candidate Starts for Chargie21\_23:  
(2, 6815), (4, 6854), (Start: 7 @6965 has 125 MA's),

Gene: CharlieB\_24 Start: 7119, Stop: 7271, Start Num: 7  
Candidate Starts for CharlieB\_24:  
(1, 6939), (5, 7050), (6, 7077), (Start: 7 @7119 has 125 MA's),

Gene: ChaylaJr\_23 Start: 7052, Stop: 7204, Start Num: 7  
Candidate Starts for ChaylaJr\_23:  
(2, 6902), (4, 6941), (Start: 7 @7052 has 125 MA's),

Gene: ChickenPhender\_23 Start: 7010, Stop: 7162, Start Num: 7  
Candidate Starts for ChickenPhender\_23:  
(2, 6860), (4, 6899), (Start: 7 @7010 has 125 MA's),

Gene: CindyLou\_23 Start: 7023, Stop: 7175, Start Num: 7  
Candidate Starts for CindyLou\_23:  
(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: Colt\_17 Start: 6165, Stop: 6317, Start Num: 7  
Candidate Starts for Colt\_17:  
(3, 6012), (5, 6096), (6, 6123), (Start: 7 @6165 has 125 MA's),

Gene: Daffodil\_26 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for Daffodil\_26:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Darko\_23 Start: 7959, Stop: 8111, Start Num: 7  
Candidate Starts for Darko\_23:  
(2, 7809), (4, 7848), (Start: 7 @7959 has 125 MA's),

Gene: Delilah\_24 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for Delilah\_24:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Derek\_24 Start: 6980, Stop: 7132, Start Num: 7  
Candidate Starts for Derek\_24:  
(2, 6830), (4, 6869), (Start: 7 @6980 has 125 MA's),

Gene: DrPhinkDaddy\_24 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for DrPhinkDaddy\_24:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: EasyJones\_23 Start: 6721, Stop: 6873, Start Num: 7  
Candidate Starts for EasyJones\_23:  
(1, 6541), (5, 6652), (6, 6679), (Start: 7 @6721 has 125 MA's),

Gene: EggyFarm\_28 Start: 9083, Stop: 9235, Start Num: 7  
Candidate Starts for EggyFarm\_28:  
(5, 9014), (6, 9041), (Start: 7 @9083 has 125 MA's),

Gene: EmToTheThree\_27 Start: 9511, Stop: 9663, Start Num: 7  
Candidate Starts for EmToTheThree\_27:  
(2, 9361), (4, 9400), (Start: 7 @9511 has 125 MA's),

Gene: EmmaElysia\_22 Start: 6736, Stop: 6888, Start Num: 7  
Candidate Starts for EmmaElysia\_22:  
(1, 6556), (5, 6667), (6, 6694), (Start: 7 @6736 has 125 MA's),

Gene: Erdmann\_25 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for Erdmann\_25:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Essence\_22 Start: 6745, Stop: 6897, Start Num: 7  
Candidate Starts for Essence\_22:  
(5, 6676), (6, 6703), (Start: 7 @6745 has 125 MA's),

Gene: Ewok\_24 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for Ewok\_24:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Flabslab\_25 Start: 8010, Stop: 8168, Start Num: 7  
Candidate Starts for Flabslab\_25:  
(1, 7830), (5, 7941), (6, 7968), (Start: 7 @8010 has 125 MA's),

Gene: Fludd\_23 Start: 6966, Stop: 7118, Start Num: 7  
Candidate Starts for Fludd\_23:  
(2, 6816), (4, 6855), (Start: 7 @6966 has 125 MA's),

Gene: FoxtrotP1\_24 Start: 8409, Stop: 8561, Start Num: 7  
Candidate Starts for FoxtrotP1\_24:  
(1, 8229), (5, 8340), (6, 8367), (Start: 7 @8409 has 125 MA's),

Gene: FrayBell\_30 Start: 9677, Stop: 9829, Start Num: 7  
Candidate Starts for FrayBell\_30:  
(Start: 7 @9677 has 125 MA's),

Gene: FudgeTart\_25 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for FudgeTart\_25:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Gabriel\_24 Start: 6980, Stop: 7132, Start Num: 7

Candidate Starts for Gabriel\_24:  
(2, 6830), (4, 6869), (Start: 7 @6980 has 125 MA's),

Gene: Gamgam\_23 Start: 7023, Stop: 7175, Start Num: 7  
Candidate Starts for Gamgam\_23:  
(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: Gizmo\_26 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for Gizmo\_26:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Grasshills\_28 Start: 9083, Stop: 9235, Start Num: 7  
Candidate Starts for Grasshills\_28:  
(5, 9014), (6, 9041), (Start: 7 @9083 has 125 MA's),

Gene: Guwapp\_23 Start: 6980, Stop: 7132, Start Num: 7  
Candidate Starts for Guwapp\_23:  
(2, 6830), (4, 6869), (Start: 7 @6980 has 125 MA's),

Gene: HyRo\_22 Start: 7746, Stop: 7904, Start Num: 7  
Candidate Starts for HyRo\_22:  
(1, 7566), (5, 7677), (6, 7704), (Start: 7 @7746 has 125 MA's),

Gene: IkeLoa\_19 Start: 6839, Stop: 6991, Start Num: 7  
Candidate Starts for IkeLoa\_19:  
(5, 6770), (6, 6797), (Start: 7 @6839 has 125 MA's),

Gene: InterFolia\_30 Start: 9674, Stop: 9826, Start Num: 7  
Candidate Starts for InterFolia\_30:  
(Start: 7 @9674 has 125 MA's),

Gene: Iota\_21 Start: 7638, Stop: 7790, Start Num: 7  
Candidate Starts for Iota\_21:  
(5, 7569), (6, 7596), (Start: 7 @7638 has 125 MA's),

Gene: Izajani\_25 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for Izajani\_25:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: JPickles\_22 Start: 6740, Stop: 6892, Start Num: 7  
Candidate Starts for JPickles\_22:  
(1, 6560), (5, 6671), (6, 6698), (Start: 7 @6740 has 125 MA's),

Gene: Janiyra\_23 Start: 7002, Stop: 7154, Start Num: 7  
Candidate Starts for Janiyra\_23:  
(2, 6852), (4, 6891), (Start: 7 @7002 has 125 MA's),

Gene: Jaygup\_23 Start: 7019, Stop: 7171, Start Num: 7  
Candidate Starts for Jaygup\_23:  
(2, 6869), (4, 6908), (Start: 7 @7019 has 125 MA's),

Gene: Jedediah\_24 Start: 7023, Stop: 7175, Start Num: 7  
Candidate Starts for Jedediah\_24:



(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: Jemmno\_23 Start: 7023, Stop: 7175, Start Num: 7

Candidate Starts for Jemmno\_23:

(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: Jessibeth14\_23 Start: 7823, Stop: 7975, Start Num: 7

Candidate Starts for Jessibeth14\_23:

(5, 7754), (6, 7781), (Start: 7 @7823 has 125 MA's),

Gene: JustHall\_23 Start: 7979, Stop: 8137, Start Num: 7

Candidate Starts for JustHall\_23:

(2, 7829), (4, 7868), (Start: 7 @7979 has 125 MA's),

Gene: Kamryn\_23 Start: 7347, Stop: 7499, Start Num: 7

Candidate Starts for Kamryn\_23:

(2, 7197), (4, 7236), (Start: 7 @7347 has 125 MA's),

Gene: Kboogie\_24 Start: 7021, Stop: 7173, Start Num: 7

Candidate Starts for Kboogie\_24:

(2, 6871), (4, 6910), (Start: 7 @7021 has 125 MA's),

Gene: Khaleesi\_23 Start: 7850, Stop: 8002, Start Num: 7

Candidate Starts for Khaleesi\_23:

(1, 7670), (5, 7781), (6, 7808), (Start: 7 @7850 has 125 MA's),

Gene: Koguma\_20 Start: 6308, Stop: 6460, Start Num: 7

Candidate Starts for Koguma\_20:

(5, 6239), (6, 6266), (Start: 7 @6308 has 125 MA's),

Gene: Latch\_23 Start: 7023, Stop: 7175, Start Num: 7

Candidate Starts for Latch\_23:

(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: LifeSavor\_24 Start: 7019, Stop: 7171, Start Num: 7

Candidate Starts for LifeSavor\_24:

(2, 6869), (4, 6908), (Start: 7 @7019 has 125 MA's),

Gene: Loanshark\_24 Start: 8097, Stop: 8249, Start Num: 7

Candidate Starts for Loanshark\_24:

(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Maby2021\_25 Start: 8097, Stop: 8249, Start Num: 7

Candidate Starts for Maby2021\_25:

(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Mangeria\_27 Start: 8632, Stop: 8784, Start Num: 7

Candidate Starts for Mangeria\_27:

(2, 8482), (4, 8521), (Start: 7 @8632 has 125 MA's),

Gene: McGee\_23 Start: 6738, Stop: 6890, Start Num: 7

Candidate Starts for McGee\_23:

(1, 6558), (5, 6669), (6, 6696), (Start: 7 @6738 has 125 MA's),

Gene: McWolfish\_23 Start: 7850, Stop: 8002, Start Num: 7  
Candidate Starts for McWolfish\_23:  
(1, 7670), (5, 7781), (6, 7808), (Start: 7 @7850 has 125 MA's),

Gene: Megamind\_24 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for Megamind\_24:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Melpomini\_23 Start: 6963, Stop: 7115, Start Num: 7  
Candidate Starts for Melpomini\_23:  
(2, 6813), (4, 6852), (Start: 7 @6963 has 125 MA's),

Gene: Morizzled23\_23 Start: 6963, Stop: 7115, Start Num: 7  
Candidate Starts for Morizzled23\_23:  
(2, 6813), (4, 6852), (Start: 7 @6963 has 125 MA's),

Gene: Naija\_23 Start: 7023, Stop: 7175, Start Num: 7  
Candidate Starts for Naija\_23:  
(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: Napoleon13\_23 Start: 6982, Stop: 7134, Start Num: 7  
Candidate Starts for Napoleon13\_23:  
(2, 6832), (4, 6871), (Start: 7 @6982 has 125 MA's),

Gene: Naval22\_26 Start: 8146, Stop: 8298, Start Num: 7  
Candidate Starts for Naval22\_26:  
(5, 8077), (6, 8104), (Start: 7 @8146 has 125 MA's),

Gene: NedWong\_25 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for NedWong\_25:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Ngannou\_22 Start: 6719, Stop: 6871, Start Num: 7  
Candidate Starts for Ngannou\_22:  
(1, 6539), (5, 6650), (6, 6677), (Start: 7 @6719 has 125 MA's),

Gene: Nidhogg\_25 Start: 8173, Stop: 8325, Start Num: 7  
Candidate Starts for Nidhogg\_25:  
(1, 7993), (5, 8104), (6, 8131), (Start: 7 @8173 has 125 MA's),

Gene: NoodleTree\_22 Start: 7040, Stop: 7192, Start Num: 7  
Candidate Starts for NoodleTree\_22:  
(5, 6971), (6, 6998), (Start: 7 @7040 has 125 MA's),

Gene: Norm\_24 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for Norm\_24:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: NuevoMundo\_27 Start: 9148, Stop: 9300, Start Num: 7  
Candidate Starts for NuevoMundo\_27:  
(5, 9079), (6, 9106), (Start: 7 @9148 has 125 MA's),

Gene: Patter\_23 Start: 7040, Stop: 7192, Start Num: 7  
Candidate Starts for Patter\_23:  
(2, 6890), (4, 6929), (Start: 7 @7040 has 125 MA's),

Gene: Phlegm\_25 Start: 7023, Stop: 7175, Start Num: 7  
Candidate Starts for Phlegm\_25:  
(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: Phox\_23 Start: 8255, Stop: 8407, Start Num: 7  
Candidate Starts for Phox\_23:  
(1, 8075), (5, 8186), (6, 8213), (Start: 7 @8255 has 125 MA's),

Gene: Phusco\_23 Start: 7019, Stop: 7171, Start Num: 7  
Candidate Starts for Phusco\_23:  
(2, 6869), (4, 6908), (Start: 7 @7019 has 125 MA's),

Gene: Pier\_25 Start: 7711, Stop: 7863, Start Num: 7  
Candidate Starts for Pier\_25:  
(5, 7642), (6, 7669), (Start: 7 @7711 has 125 MA's),

Gene: Pinkcreek\_16 Start: 5934, Stop: 6092, Start Num: 7  
Candidate Starts for Pinkcreek\_16:  
(1, 5754), (5, 5865), (6, 5892), (Start: 7 @5934 has 125 MA's),

Gene: Pio\_27 Start: 8955, Stop: 9107, Start Num: 7  
Candidate Starts for Pio\_27:  
(2, 8805), (4, 8844), (Start: 7 @8955 has 125 MA's),

Gene: Pivoine\_23 Start: 7023, Stop: 7175, Start Num: 7  
Candidate Starts for Pivoine\_23:  
(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: Pleione\_26 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for Pleione\_26:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: PurduePete\_23 Start: 7823, Stop: 7975, Start Num: 7  
Candidate Starts for PurduePete\_23:  
(5, 7754), (6, 7781), (Start: 7 @7823 has 125 MA's),

Gene: QBert\_22 Start: 8255, Stop: 8407, Start Num: 7  
Candidate Starts for QBert\_22:  
(1, 8075), (5, 8186), (6, 8213), (Start: 7 @8255 has 125 MA's),

Gene: Quasimodo\_23 Start: 7983, Stop: 8135, Start Num: 7  
Candidate Starts for Quasimodo\_23:  
(2, 7833), (4, 7872), (Start: 7 @7983 has 125 MA's),

Gene: Rabinovish\_23 Start: 8543, Stop: 8695, Start Num: 7  
Candidate Starts for Rabinovish\_23:  
(1, 8363), (5, 8474), (6, 8501), (Start: 7 @8543 has 125 MA's),

Gene: Rahel\_23 Start: 7019, Stop: 7171, Start Num: 7

Candidate Starts for Rahel\_23:  
(2, 6869), (4, 6908), (Start: 7 @7019 has 125 MA's),

Gene: RoMag\_18 Start: 6790, Stop: 6942, Start Num: 7  
Candidate Starts for RoMag\_18:  
(5, 6721), (6, 6748), (Start: 7 @6790 has 125 MA's),

Gene: Ronan\_19 Start: 5666, Stop: 5818, Start Num: 7  
Candidate Starts for Ronan\_19:  
(1, 5486), (5, 5597), (6, 5624), (Start: 7 @5666 has 125 MA's),

Gene: Roots515\_24 Start: 8096, Stop: 8248, Start Num: 7  
Candidate Starts for Roots515\_24:  
(2, 7946), (4, 7985), (Start: 7 @8096 has 125 MA's),

Gene: Salacia\_26 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for Salacia\_26:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Sauce\_25 Start: 8218, Stop: 8370, Start Num: 7  
Candidate Starts for Sauce\_25:  
(1, 8038), (5, 8149), (6, 8176), (Start: 7 @8218 has 125 MA's),

Gene: Shaqnato\_20 Start: 6671, Stop: 6823, Start Num: 7  
Candidate Starts for Shaqnato\_20:  
(1, 6491), (5, 6602), (6, 6629), (Start: 7 @6671 has 125 MA's), (8, 6779),

Gene: Shelob\_26 Start: 8979, Stop: 9137, Start Num: 7  
Candidate Starts for Shelob\_26:  
(1, 8799), (5, 8910), (6, 8937), (Start: 7 @8979 has 125 MA's),

Gene: ShiaLabeouf\_23 Start: 7019, Stop: 7171, Start Num: 7  
Candidate Starts for ShiaLabeouf\_23:  
(2, 6869), (4, 6908), (Start: 7 @7019 has 125 MA's),

Gene: Shnickers\_23 Start: 7019, Stop: 7171, Start Num: 7  
Candidate Starts for Shnickers\_23:  
(2, 6869), (4, 6908), (Start: 7 @7019 has 125 MA's),

Gene: Shrimp\_24 Start: 8101, Stop: 8253, Start Num: 7  
Candidate Starts for Shrimp\_24:  
(2, 7951), (4, 7990), (Start: 7 @8101 has 125 MA's),

Gene: SilverDipper\_24 Start: 7023, Stop: 7175, Start Num: 7  
Candidate Starts for SilverDipper\_24:  
(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: SmallFry\_23 Start: 7019, Stop: 7171, Start Num: 7  
Candidate Starts for SmallFry\_23:  
(2, 6869), (4, 6908), (Start: 7 @7019 has 125 MA's),

Gene: Specks\_28 Start: 8857, Stop: 9009, Start Num: 7  
Candidate Starts for Specks\_28:

(2, 8707), (4, 8746), (Start: 7 @8857 has 125 MA's),

Gene: Sprinklers\_24 Start: 7580, Stop: 7732, Start Num: 7

Candidate Starts for Sprinklers\_24:

(1, 7400), (5, 7511), (6, 7538), (Start: 7 @7580 has 125 MA's),

Gene: SrishMeg2525\_23 Start: 7823, Stop: 7975, Start Num: 7

Candidate Starts for SrishMeg2525\_23:

(5, 7754), (6, 7781), (Start: 7 @7823 has 125 MA's),

Gene: Stubby\_22 Start: 7357, Stop: 7515, Start Num: 7

Candidate Starts for Stubby\_22:

(1, 7177), (5, 7288), (6, 7315), (Start: 7 @7357 has 125 MA's),

Gene: StubbySaigey\_23 Start: 6740, Stop: 6892, Start Num: 7

Candidate Starts for StubbySaigey\_23:

(1, 6560), (5, 6671), (6, 6698), (Start: 7 @6740 has 125 MA's),

Gene: Teardrop\_23 Start: 7019, Stop: 7171, Start Num: 7

Candidate Starts for Teardrop\_23:

(2, 6869), (4, 6908), (Start: 7 @7019 has 125 MA's),

Gene: TinyTim\_24 Start: 8097, Stop: 8249, Start Num: 7

Candidate Starts for TinyTim\_24:

(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: Tortoise16\_22 Start: 7019, Stop: 7171, Start Num: 7

Candidate Starts for Tortoise16\_22:

(2, 6869), (4, 6908), (Start: 7 @7019 has 125 MA's),

Gene: Trinitium\_23 Start: 6980, Stop: 7132, Start Num: 7

Candidate Starts for Trinitium\_23:

(2, 6830), (4, 6869), (Start: 7 @6980 has 125 MA's),

Gene: Turret\_22 Start: 6719, Stop: 6871, Start Num: 7

Candidate Starts for Turret\_22:

(1, 6539), (5, 6650), (6, 6677), (Start: 7 @6719 has 125 MA's),

Gene: ValleyTerrace\_23 Start: 7023, Stop: 7175, Start Num: 7

Candidate Starts for ValleyTerrace\_23:

(2, 6873), (4, 6912), (Start: 7 @7023 has 125 MA's),

Gene: Wally\_23 Start: 6984, Stop: 7136, Start Num: 7

Candidate Starts for Wally\_23:

(2, 6834), (4, 6873), (Start: 7 @6984 has 125 MA's),

Gene: Yassified\_21 Start: 6743, Stop: 6895, Start Num: 7

Candidate Starts for Yassified\_21:

(1, 6563), (5, 6674), (6, 6701), (Start: 7 @6743 has 125 MA's),

Gene: YemiJoy2021\_25 Start: 8097, Stop: 8249, Start Num: 7

Candidate Starts for YemiJoy2021\_25:

(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),

Gene: YoungMoneyMata\_23 Start: 6753, Stop: 6905, Start Num: 7  
Candidate Starts for YoungMoneyMata\_23:  
(5, 6684), (6, 6711), (Start: 7 @6753 has 125 MA's),

Gene: Yucca\_24 Start: 8019, Stop: 8171, Start Num: 7  
Candidate Starts for Yucca\_24:  
(2, 7869), (4, 7908), (Start: 7 @8019 has 125 MA's),

Gene: Zalkecks\_26 Start: 8097, Stop: 8249, Start Num: 7  
Candidate Starts for Zalkecks\_26:  
(2, 7947), (4, 7986), (Start: 7 @8097 has 125 MA's),