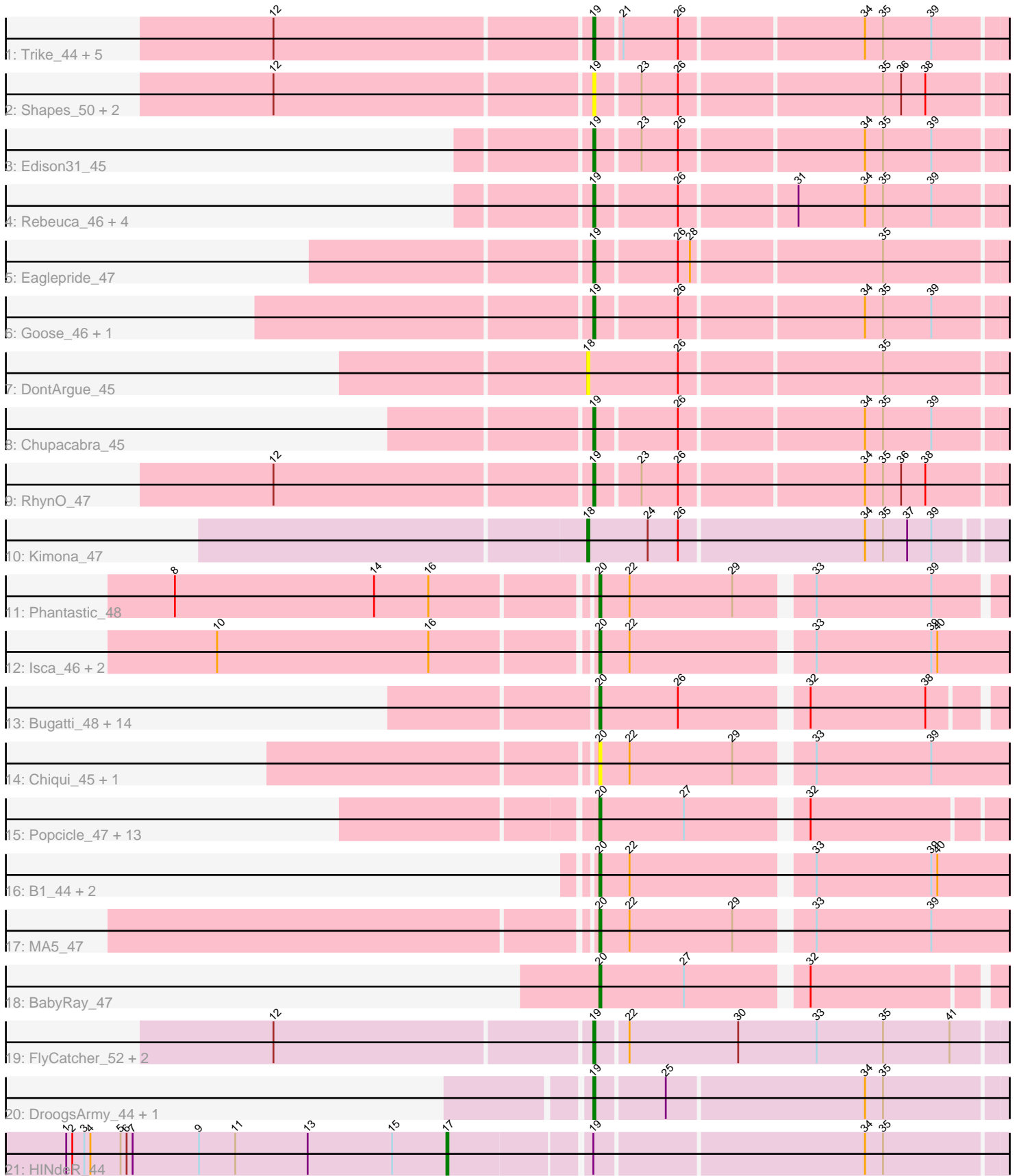


# Pham 191311



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 191311 Report

This analysis was run 11/02/24 on database version 579.

Pham number 191311 has 68 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Trike\_44, KittenMittens\_43, Drake94\_44, PeaceMeal1\_44, Severus\_44, Poompha\_45
- Track 2 : Shapes\_50, DustyMartin\_50, Rowdy\_50
- Track 3 : Edison31\_45
- Track 4 : Rebeuca\_46, Twister\_44, Topanga\_44, WalterMcMickey\_44, Kristoff\_46
- Track 5 : Eaglepride\_47
- Track 6 : Goose\_46, OKCentral2016\_45
- Track 7 : DontArgue\_45
- Track 8 : Chupacabra\_45
- Track 9 : RhynO\_47
- Track 10 : Kimona\_47
- Track 11 : Phantastic\_48
- Track 12 : Isca\_46, Rockstar\_47, MK4\_47
- Track 13 : Bugatti\_48, Puppy\_49, SaturnRing\_48, Scout\_47, BlueBird\_49, Kachowdy\_47, HelDan\_47, Marchesa\_47, TNguyen7\_48, Idleandcovert\_48, Giroux\_48, Fred313\_47, Heathen\_47, Pistachio\_49, DropBear\_47
- Track 14 : Chiqui\_45, BabyJohn\_45
- Track 15 : Popcicle\_47, Margo\_47, Hookmount\_47, Caviar\_47, Veracruz\_46, QuinnKiro\_46, Pocahontas\_47, Todacoro\_47, Lambert1\_47, Texage\_46, Norbert\_46, ResDef\_47, Panamaxus\_45, Noella\_47
- Track 16 : B1\_44, JF2\_47, JF4\_47
- Track 17 : MA5\_47
- Track 18 : BabyRay\_47
- Track 19 : FlyCatcher\_52, Sheen\_48, Toro\_50
- Track 20 : DroogsArmy\_44, Timshel\_46
- Track 21 : HINdeR\_44

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

The start number called the most often in the published annotations is 20, it was called in 32 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- B1\_44, BabyJohn\_45, BabyRay\_47, BlueBird\_49, Bugatti\_48, Caviar\_47, Chiqui\_45, DropBear\_47, Fred313\_47, Giroux\_48, Heathen\_47, HelDan\_47, Hookmount\_47, Idleandcovert\_48, Isca\_46, JF2\_47, JF4\_47, Kachowdy\_47, Lambert1\_47, MA5\_47, MK4\_47, Marchesa\_47, Margo\_47, Noella\_47, Norbert\_46, Panamaxus\_45, Phantastic\_48, Pistachio\_49, Pocahontas\_47, Popcicle\_47, Puppy\_49, QuinnKiro\_46, ResDef\_47, Rockstar\_47, SaturnRing\_48, Scout\_47, TNguyen7\_48, Texage\_46, Todacoro\_47, Veracruz\_46,

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

- 

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

- Chupacabra\_45, DontArgue\_45, Drake94\_44, DroogsArmy\_44, DustyMartin\_50, Eaglepride\_47, Edison31\_45, FlyCatcher\_52, Goose\_46, HINdeR\_44, Kimona\_47, KittenMittens\_43, Kristoff\_46, OKCentral2016\_45, PeaceMeal1\_44, Poompha\_45, Rebeuca\_46, RhynO\_47, Rowdy\_50, Severus\_44, Shapes\_50, Sheen\_48, Timshel\_46, Topanga\_44, Toro\_50, Trike\_44, Twister\_44, WalterMcMickey\_44,

### Summary by start number:

Start 17:

- Found in 1 of 68 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 1 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HINdeR\_44 (A7),

Start 18:

- Found in 2 of 68 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DontArgue\_45 (A10), Kimona\_47 (A19),

Start 19:

- Found in 26 of 68 ( 38.2% ) of genes in pham
- Manual Annotations of this start: 20 of 54
- Called 96.2% of time when present
- Phage (with cluster) where this start called: Chupacabra\_45 (A10), Drake94\_44 (A10), DroogsArmy\_44 (A7), DustyMartin\_50 (A10), Eaglepride\_47 (A10), Edison31\_45 (A10), FlyCatcher\_52 (A7), Goose\_46 (A10), KittenMittens\_43 (A10), Kristoff\_46 (A10), OKCentral2016\_45 (A10), PeaceMeal1\_44 (A10), Poompha\_45 (A10), Rebeuca\_46 (A10), RhynO\_47 (A10), Rowdy\_50 (A10), Severus\_44 (A10), Shapes\_50 (A10), Sheen\_48 (A7), Timshel\_46 (A7), Topanga\_44 (A10), Toro\_50 (A7), Trike\_44 (A10), Twister\_44 (A10), WalterMcMickey\_44 (A10),

Start 20:

- Found in 40 of 68 ( 58.8% ) of genes in pham
- Manual Annotations of this start: 32 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: B1\_44 (A3), BabyJohn\_45 (A3), BabyRay\_47 (A3), BlueBird\_49 (A3), Bugatti\_48 (A3), Caviar\_47 (A3), Chiqui\_45 (A3), DropBear\_47 (A3), Fred313\_47 (A3), Giroux\_48 (A3), Heathen\_47 (A3), HelDan\_47 (A3), Hookmount\_47 (A3), Idleandcovert\_48 (A3), Isca\_46 (A3), JF2\_47 (A3), JF4\_47 (A3), Kachowdy\_47 (A3), Lambert1\_47 (A3), MA5\_47 (A3), MK4\_47

(A3), Marchesa\_47 (A3), Margo\_47 (A3), Noella\_47 (A3), Norbert\_46 (A3), Panamaxus\_45 (A3), Phantastic\_48 (A3), Pistachio\_49 (A3), Pocahontas\_47 (A3), Popcicle\_47 (A3), Puppy\_49 (A3), QuinnKiro\_46 (A3), ResDef\_47 (A3), Rockstar\_47 (A3), SaturnRing\_48 (A3), Scout\_47 (A3), TNguyen7\_48 (A3), Texage\_46 (A3), Todacoro\_47 (A3), Veracruz\_46 (A3),

### **Summary by clusters:**

There are 4 clusters represented in this pham: A3, A19, A10, A7,

Info for manual annotations of cluster A10:

- Start number 19 was manually annotated 17 times for cluster A10.

Info for manual annotations of cluster A19:

- Start number 18 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A3:

- Start number 20 was manually annotated 32 times for cluster A3.

Info for manual annotations of cluster A7:

- Start number 17 was manually annotated 1 time for cluster A7.
- Start number 19 was manually annotated 3 times for cluster A7.

### **Gene Information:**

Gene: B1\_44 Start: 31212, Stop: 31006, Start Num: 20

Candidate Starts for B1\_44:

(Start: 20 @31212 has 32 MA's), (22, 31197), (33, 31113), (39, 31056), (40, 31053),

Gene: BabyJohn\_45 Start: 32004, Stop: 31798, Start Num: 20

Candidate Starts for BabyJohn\_45:

(Start: 20 @32004 has 32 MA's), (22, 31989), (29, 31938), (33, 31905), (39, 31848),

Gene: BabyRay\_47 Start: 31939, Stop: 31742, Start Num: 20

Candidate Starts for BabyRay\_47:

(Start: 20 @31939 has 32 MA's), (27, 31897), (32, 31843),

Gene: BlueBird\_49 Start: 32028, Stop: 31831, Start Num: 20

Candidate Starts for BlueBird\_49:

(Start: 20 @32028 has 32 MA's), (26, 31989), (32, 31932), (38, 31875),

Gene: Bugatti\_48 Start: 32028, Stop: 31831, Start Num: 20

Candidate Starts for Bugatti\_48:

(Start: 20 @32028 has 32 MA's), (26, 31989), (32, 31932), (38, 31875),

Gene: Caviar\_47 Start: 32274, Stop: 32074, Start Num: 20

Candidate Starts for Caviar\_47:

(Start: 20 @32274 has 32 MA's), (27, 32232), (32, 32178),

Gene: Chiqui\_45 Start: 32013, Stop: 31807, Start Num: 20

Candidate Starts for Chiqui\_45:

(Start: 20 @32013 has 32 MA's), (22, 31998), (29, 31947), (33, 31914), (39, 31857),

Gene: Chupacabra\_45 Start: 31666, Stop: 31460, Start Num: 19

Candidate Starts for Chupacabra\_45:

(Start: 19 @31666 has 20 MA's), (26, 31627), (34, 31540), (35, 31531), (39, 31507),

Gene: DontArgue\_45 Start: 30902, Stop: 30693, Start Num: 18

Candidate Starts for DontArgue\_45:

(Start: 18 @30902 has 1 MA's), (26, 30857), (35, 30761),

Gene: Drake94\_44 Start: 30942, Stop: 30736, Start Num: 19

Candidate Starts for Drake94\_44:

(12, 31095), (Start: 19 @30942 has 20 MA's), (21, 30930), (26, 30903), (34, 30816), (35, 30807), (39, 30783),

Gene: DroogsArmy\_44 Start: 33755, Stop: 33543, Start Num: 19

Candidate Starts for DroogsArmy\_44:

(Start: 19 @33755 has 20 MA's), (25, 33722), (34, 33626), (35, 33617),

Gene: DropBear\_47 Start: 31916, Stop: 31719, Start Num: 20

Candidate Starts for DropBear\_47:

(Start: 20 @31916 has 32 MA's), (26, 31877), (32, 31820), (38, 31763),

Gene: DustyMartin\_50 Start: 31746, Stop: 31540, Start Num: 19

Candidate Starts for DustyMartin\_50:

(12, 31899), (Start: 19 @31746 has 20 MA's), (23, 31725), (26, 31707), (35, 31611), (36, 31602), (38, 31590),

Gene: Eaglepride\_47 Start: 31736, Stop: 31527, Start Num: 19

Candidate Starts for Eaglepride\_47:

(Start: 19 @31736 has 20 MA's), (26, 31697), (28, 31691), (35, 31601),

Gene: Edison31\_45 Start: 31686, Stop: 31480, Start Num: 19

Candidate Starts for Edison31\_45:

(Start: 19 @31686 has 20 MA's), (23, 31665), (26, 31647), (34, 31560), (35, 31551), (39, 31527),

Gene: FlyCatcher\_52 Start: 34416, Stop: 34204, Start Num: 19

Candidate Starts for FlyCatcher\_52:

(12, 34569), (Start: 19 @34416 has 20 MA's), (22, 34401), (30, 34347), (33, 34308), (35, 34275), (41, 34242),

Gene: Fred313\_47 Start: 31601, Stop: 31404, Start Num: 20

Candidate Starts for Fred313\_47:

(Start: 20 @31601 has 32 MA's), (26, 31562), (32, 31505), (38, 31448),

Gene: Giroux\_48 Start: 32027, Stop: 31830, Start Num: 20

Candidate Starts for Giroux\_48:

(Start: 20 @32027 has 32 MA's), (26, 31988), (32, 31931), (38, 31874),

Gene: Goose\_46 Start: 31470, Stop: 31264, Start Num: 19

Candidate Starts for Goose\_46:

(Start: 19 @31470 has 20 MA's), (26, 31431), (34, 31344), (35, 31335), (39, 31311),

Gene: HINdeR\_44 Start: 33644, Stop: 33369, Start Num: 17

Candidate Starts for HINdeR\_44:

(1, 33833), (2, 33830), (3, 33824), (4, 33821), (5, 33806), (6, 33803), (7, 33800), (9, 33767), (11, 33749), (13, 33713), (15, 33671), (Start: 17 @33644 has 1 MA's), (Start: 19 @33578 has 20 MA's), (34, 33449), (35, 33440),

Gene: Heathen\_47 Start: 31657, Stop: 31460, Start Num: 20

Candidate Starts for Heathen\_47:

(Start: 20 @31657 has 32 MA's), (26, 31618), (32, 31561), (38, 31504),

Gene: HelDan\_47 Start: 31909, Stop: 31712, Start Num: 20

Candidate Starts for HelDan\_47:

(Start: 20 @31909 has 32 MA's), (26, 31870), (32, 31813), (38, 31756),

Gene: Hookmount\_47 Start: 32275, Stop: 32075, Start Num: 20

Candidate Starts for Hookmount\_47:

(Start: 20 @32275 has 32 MA's), (27, 32233), (32, 32179),

Gene: Idleandcovert\_48 Start: 32028, Stop: 31831, Start Num: 20

Candidate Starts for Idleandcovert\_48:

(Start: 20 @32028 has 32 MA's), (26, 31989), (32, 31932), (38, 31875),

Gene: Isca\_46 Start: 31461, Stop: 31255, Start Num: 20

Candidate Starts for Isca\_46:

(10, 31641), (16, 31536), (Start: 20 @31461 has 32 MA's), (22, 31446), (33, 31362), (39, 31305), (40, 31302),

Gene: JF2\_47 Start: 31212, Stop: 31006, Start Num: 20

Candidate Starts for JF2\_47:

(Start: 20 @31212 has 32 MA's), (22, 31197), (33, 31113), (39, 31056), (40, 31053),

Gene: JF4\_47 Start: 31212, Stop: 31006, Start Num: 20

Candidate Starts for JF4\_47:

(Start: 20 @31212 has 32 MA's), (22, 31197), (33, 31113), (39, 31056), (40, 31053),

Gene: Kachowdy\_47 Start: 31909, Stop: 31712, Start Num: 20

Candidate Starts for Kachowdy\_47:

(Start: 20 @31909 has 32 MA's), (26, 31870), (32, 31813), (38, 31756),

Gene: Kimona\_47 Start: 30659, Stop: 30456, Start Num: 18

Candidate Starts for Kimona\_47:

(Start: 18 @30659 has 1 MA's), (24, 30629), (26, 30614), (34, 30524), (35, 30515), (37, 30503), (39, 30491),

Gene: KittenMittens\_43 Start: 30950, Stop: 30744, Start Num: 19

Candidate Starts for KittenMittens\_43:

(12, 31103), (Start: 19 @30950 has 20 MA's), (21, 30938), (26, 30911), (34, 30824), (35, 30815), (39, 30791),

Gene: Kristoff\_46 Start: 32038, Stop: 31832, Start Num: 19

Candidate Starts for Kristoff\_46:

(Start: 19 @32038 has 20 MA's), (26, 31999), (31, 31945), (34, 31912), (35, 31903), (39, 31879),

Gene: Lambert1\_47 Start: 32274, Stop: 32074, Start Num: 20

Candidate Starts for Lambert1\_47:

(Start: 20 @32274 has 32 MA's), (27, 32232), (32, 32178),

Gene: MA5\_47 Start: 31363, Stop: 31157, Start Num: 20

Candidate Starts for MA5\_47:

(Start: 20 @31363 has 32 MA's), (22, 31348), (29, 31297), (33, 31264), (39, 31207),

Gene: MK4\_47 Start: 31446, Stop: 31240, Start Num: 20

Candidate Starts for MK4\_47:

(10, 31626), (16, 31521), (Start: 20 @31446 has 32 MA's), (22, 31431), (33, 31347), (39, 31290), (40, 31287),

Gene: Marchesa\_47 Start: 31907, Stop: 31710, Start Num: 20

Candidate Starts for Marchesa\_47:

(Start: 20 @31907 has 32 MA's), (26, 31868), (32, 31811), (38, 31754),

Gene: Margo\_47 Start: 32300, Stop: 32100, Start Num: 20

Candidate Starts for Margo\_47:

(Start: 20 @32300 has 32 MA's), (27, 32258), (32, 32204),

Gene: Noella\_47 Start: 32275, Stop: 32075, Start Num: 20

Candidate Starts for Noella\_47:

(Start: 20 @32275 has 32 MA's), (27, 32233), (32, 32179),

Gene: Norbert\_46 Start: 32274, Stop: 32074, Start Num: 20

Candidate Starts for Norbert\_46:

(Start: 20 @32274 has 32 MA's), (27, 32232), (32, 32178),

Gene: OKCentral2016\_45 Start: 31373, Stop: 31167, Start Num: 19

Candidate Starts for OKCentral2016\_45:

(Start: 19 @31373 has 20 MA's), (26, 31334), (34, 31247), (35, 31238), (39, 31214),

Gene: Panamaxus\_45 Start: 32274, Stop: 32074, Start Num: 20

Candidate Starts for Panamaxus\_45:

(Start: 20 @32274 has 32 MA's), (27, 32232), (32, 32178),

Gene: PeaceMeal1\_44 Start: 30951, Stop: 30745, Start Num: 19

Candidate Starts for PeaceMeal1\_44:

(12, 31104), (Start: 19 @30951 has 20 MA's), (21, 30939), (26, 30912), (34, 30825), (35, 30816), (39, 30792),

Gene: Phantastic\_48 Start: 31650, Stop: 31450, Start Num: 20

Candidate Starts for Phantastic\_48:

(8, 31851), (14, 31752), (16, 31725), (Start: 20 @31650 has 32 MA's), (22, 31635), (29, 31584), (33, 31551), (39, 31494),

Gene: Pistachio\_49 Start: 31575, Stop: 31378, Start Num: 20

Candidate Starts for Pistachio\_49:

(Start: 20 @31575 has 32 MA's), (26, 31536), (32, 31479), (38, 31422),

Gene: Pocahontas\_47 Start: 32271, Stop: 32071, Start Num: 20

Candidate Starts for Pocahontas\_47:

(Start: 20 @32271 has 32 MA's), (27, 32229), (32, 32175),

Gene: Poompha\_45 Start: 30949, Stop: 30743, Start Num: 19

Candidate Starts for Poompha\_45:

(12, 31102), (Start: 19 @30949 has 20 MA's), (21, 30937), (26, 30910), (34, 30823), (35, 30814), (39, 30790),

Gene: Popcicle\_47 Start: 32271, Stop: 32071, Start Num: 20

Candidate Starts for Popcicle\_47:

(Start: 20 @32271 has 32 MA's), (27, 32229), (32, 32175),

Gene: Puppy\_49 Start: 31648, Stop: 31451, Start Num: 20

Candidate Starts for Puppy\_49:

(Start: 20 @31648 has 32 MA's), (26, 31609), (32, 31552), (38, 31495),

Gene: QuinnKiro\_46 Start: 32274, Stop: 32074, Start Num: 20

Candidate Starts for QuinnKiro\_46:

(Start: 20 @32274 has 32 MA's), (27, 32232), (32, 32178),

Gene: Rebeuca\_46 Start: 32039, Stop: 31833, Start Num: 19

Candidate Starts for Rebeuca\_46:

(Start: 19 @32039 has 20 MA's), (26, 32000), (31, 31946), (34, 31913), (35, 31904), (39, 31880),

Gene: ResDef\_47 Start: 32274, Stop: 32074, Start Num: 20

Candidate Starts for ResDef\_47:

(Start: 20 @32274 has 32 MA's), (27, 32232), (32, 32178),

Gene: RhynO\_47 Start: 31838, Stop: 31632, Start Num: 19

Candidate Starts for RhynO\_47:

(12, 31991), (Start: 19 @31838 has 20 MA's), (23, 31817), (26, 31799), (34, 31712), (35, 31703), (36, 31694), (38, 31682),

Gene: Rockstar\_47 Start: 31455, Stop: 31249, Start Num: 20

Candidate Starts for Rockstar\_47:

(10, 31635), (16, 31530), (Start: 20 @31455 has 32 MA's), (22, 31440), (33, 31356), (39, 31299), (40, 31296),

Gene: Rowdy\_50 Start: 31746, Stop: 31540, Start Num: 19

Candidate Starts for Rowdy\_50:

(12, 31899), (Start: 19 @31746 has 20 MA's), (23, 31725), (26, 31707), (35, 31611), (36, 31602), (38, 31590),

Gene: SaturnRing\_48 Start: 32028, Stop: 31831, Start Num: 20

Candidate Starts for SaturnRing\_48:

(Start: 20 @32028 has 32 MA's), (26, 31989), (32, 31932), (38, 31875),

Gene: Scout\_47 Start: 31156, Stop: 30959, Start Num: 20

Candidate Starts for Scout\_47:

(Start: 20 @31156 has 32 MA's), (26, 31117), (32, 31060), (38, 31003),

Gene: Severus\_44 Start: 30949, Stop: 30743, Start Num: 19

Candidate Starts for Severus\_44:



(12, 31102), (Start: 19 @30949 has 20 MA's), (21, 30937), (26, 30910), (34, 30823), (35, 30814), (39, 30790),

Gene: Shapes\_50 Start: 31746, Stop: 31540, Start Num: 19

Candidate Starts for Shapes\_50:

(12, 31899), (Start: 19 @31746 has 20 MA's), (23, 31725), (26, 31707), (35, 31611), (36, 31602), (38, 31590),

Gene: Sheen\_48 Start: 34305, Stop: 34093, Start Num: 19

Candidate Starts for Sheen\_48:

(12, 34458), (Start: 19 @34305 has 20 MA's), (22, 34290), (30, 34236), (33, 34197), (35, 34164), (41, 34131),

Gene: TNguyen7\_48 Start: 31995, Stop: 31798, Start Num: 20

Candidate Starts for TNguyen7\_48:

(Start: 20 @31995 has 32 MA's), (26, 31956), (32, 31899), (38, 31842),

Gene: Texage\_46 Start: 32275, Stop: 32075, Start Num: 20

Candidate Starts for Texage\_46:

(Start: 20 @32275 has 32 MA's), (27, 32233), (32, 32179),

Gene: Timshel\_46 Start: 34012, Stop: 33800, Start Num: 19

Candidate Starts for Timshel\_46:

(Start: 19 @34012 has 20 MA's), (25, 33979), (34, 33883), (35, 33874),

Gene: Todacoro\_47 Start: 32274, Stop: 32074, Start Num: 20

Candidate Starts for Todacoro\_47:

(Start: 20 @32274 has 32 MA's), (27, 32232), (32, 32178),

Gene: Topanga\_44 Start: 31688, Stop: 31482, Start Num: 19

Candidate Starts for Topanga\_44:

(Start: 19 @31688 has 20 MA's), (26, 31649), (31, 31595), (34, 31562), (35, 31553), (39, 31529),

Gene: Toro\_50 Start: 34416, Stop: 34204, Start Num: 19

Candidate Starts for Toro\_50:

(12, 34569), (Start: 19 @34416 has 20 MA's), (22, 34401), (30, 34347), (33, 34308), (35, 34275), (41, 34242),

Gene: Trike\_44 Start: 30957, Stop: 30751, Start Num: 19

Candidate Starts for Trike\_44:

(12, 31110), (Start: 19 @30957 has 20 MA's), (21, 30945), (26, 30918), (34, 30831), (35, 30822), (39, 30798),

Gene: Twister\_44 Start: 31599, Stop: 31393, Start Num: 19

Candidate Starts for Twister\_44:

(Start: 19 @31599 has 20 MA's), (26, 31560), (31, 31506), (34, 31473), (35, 31464), (39, 31440),

Gene: Veracruz\_46 Start: 32274, Stop: 32074, Start Num: 20

Candidate Starts for Veracruz\_46:

(Start: 20 @32274 has 32 MA's), (27, 32232), (32, 32178),

Gene: WalterMcMickey\_44 Start: 31599, Stop: 31393, Start Num: 19

Candidate Starts for WalterMcMickey\_44:

(Start: 19 @31599 has 20 MA's), (26, 31560), (31, 31506), (34, 31473), (35, 31464), (39, 31440),