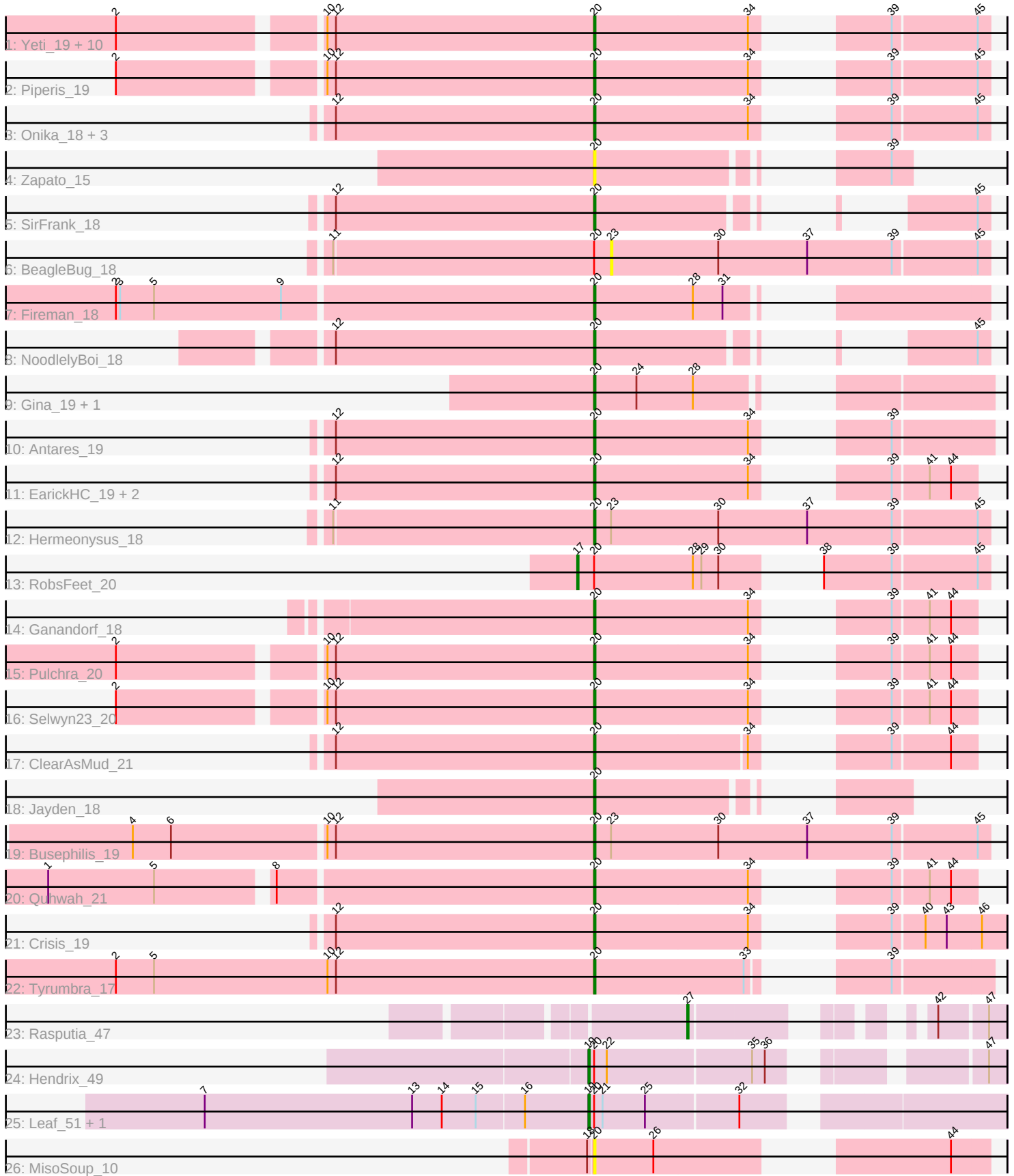


# Pham 278351



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 278351 Report

This analysis was run 02/07/26 on database version 634.

Pham number 278351 has 43 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Yeti\_19, Ramiel05\_18, LittleFortune\_20, Kowalski\_18, Phorgeous\_18, Rockwell\_18, Cranjis\_20, Savannah\_18, Honeyfin\_20, BrazzalePHS\_18, Scumberland\_20
- Track 2 : Piperis\_19
- Track 3 : Onika\_18, CrazyRich\_18, Shotgun\_18, Phrancesco\_20
- Track 4 : Zapato\_15
- Track 5 : SirFrank\_18
- Track 6 : BeagleBug\_18
- Track 7 : Fireman\_18
- Track 8 : NoodlelyBoi\_18
- Track 9 : Gina\_19, Teamocil\_19
- Track 10 : Antares\_19
- Track 11 : EarickHC\_19, PhedwardCullen\_17, KaiHaiDragon\_19
- Track 12 : Hermeonysus\_18
- Track 13 : RobsFeet\_20
- Track 14 : Ganandorf\_18
- Track 15 : Pulchra\_20
- Track 16 : Selwyn23\_20
- Track 17 : ClearAsMud\_21
- Track 18 : Jayden\_18
- Track 19 : Busephilis\_19
- Track 20 : Quhwah\_21
- Track 21 : Crisis\_19
- Track 22 : Tyrumbra\_17
- Track 23 : Rasputia\_47
- Track 24 : Hendrix\_49
- Track 25 : Leaf\_51, Dewdrop\_51
- Track 26 : MisoSoup\_10

### ***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 33 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Antares\_19, BrazzalePHS\_18, Busephilis\_19, ClearAsMud\_21, Cranjis\_20, CrazyRich\_18, Crisis\_19, EarickHC\_19, Fireman\_18, Ganandorf\_18, Gina\_19, Hermeonysus\_18, Honeyfin\_20, Jayden\_18, KaiHaiDragon\_19, Kowalski\_18, LittleFortune\_20, MisoSoup\_10, NoodlelyBoi\_18, Onika\_18, PhedwardCullen\_17, Phorgeous\_18, Phrancesco\_20, Piperis\_19, Pulchra\_20, Quhwah\_21, Ramiel05\_18, Rockwell\_18, Savannah\_18, Scumberland\_20, Selwyn23\_20, Shotgun\_18, SirFrank\_18, Teamocil\_19, Tyumbra\_17, Yeti\_19, Zapato\_15,

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

• BeagleBug\_18, Dewdrop\_51, Hendrix\_49, Leaf\_51, RobsFeet\_20,

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

• Rasputia\_47,

### Summary by start number:

Start 17:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RobsFeet\_20 (EC),

Start 19:

- Found in 3 of 43 ( 7.0% ) of genes in pham
- Manual Annotations of this start: 3 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dewdrop\_51 (GC), Hendrix\_49 (GC), Leaf\_51 (GC),

Start 20:

- Found in 42 of 43 ( 97.7% ) of genes in pham
- Manual Annotations of this start: 33 of 38
- Called 88.1% of time when present
- Phage (with cluster) where this start called: Antares\_19 (EC), BrazzalePHS\_18 (EC), Busephilis\_19 (EC), ClearAsMud\_21 (EC), Cranjis\_20 (EC), CrazyRich\_18 (EC), Crisis\_19 (EC), EarickHC\_19 (EC), Fireman\_18 (EC), Ganandorf\_18 (EC), Gina\_19 (EC), Hermeonysus\_18 (EC), Honeyfin\_20 (EC), Jayden\_18 (EC), KaiHaiDragon\_19 (EC), Kowalski\_18 (EC), LittleFortune\_20 (EC), MisoSoup\_10 (UNK), NoodlelyBoi\_18 (EC), Onika\_18 (EC), PhedwardCullen\_17 (EC), Phorgeous\_18 (EC), Phrancesco\_20 (EC), Piperis\_19 (EC), Pulchra\_20 (EC), Quhwah\_21 (EC), Ramiel05\_18 (EC), Rockwell\_18 (EC), Savannah\_18 (EC), Scumberland\_20 (EC), Selwyn23\_20 (EC), Shotgun\_18 (EC), SirFrank\_18 (EC), Teamocil\_19 (EC), Tyumbra\_17 (EC), Yeti\_19 (EC), Zapato\_15 (EC),

Start 23:

- Found in 3 of 43 ( 7.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: BeagleBug\_18 (EC),

Start 27:

- Found in 1 of 43 ( 2.3% ) of genes in pham

- Manual Annotations of this start: 1 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rasputia\_47 (GC),

### **Summary by clusters:**

There are 3 clusters represented in this pham: UNK, GC, EC,

Info for manual annotations of cluster EC:

- Start number 17 was manually annotated 1 time for cluster EC.
- Start number 20 was manually annotated 33 times for cluster EC.

Info for manual annotations of cluster GC:

- Start number 19 was manually annotated 3 times for cluster GC.
- Start number 27 was manually annotated 1 time for cluster GC.

### **Gene Information:**

Gene: Antares\_19 Start: 8205, Stop: 8429, Start Num: 20

Candidate Starts for Antares\_19:

(12, 8022), (Start: 20 @8205 has 33 MA's), (34, 8313), (39, 8361),

Gene: BeagleBug\_18 Start: 7964, Stop: 8227, Start Num: 23

Candidate Starts for BeagleBug\_18:

(11, 7769), (Start: 20 @7952 has 33 MA's), (23, 7964), (30, 8039), (37, 8102), (39, 8162), (45, 8219),

Gene: BrazzalePHS\_18 Start: 8020, Stop: 8241, Start Num: 20

Candidate Starts for BrazzalePHS\_18:

(2, 7699), (10, 7831), (12, 7837), (Start: 20 @8020 has 33 MA's), (34, 8128), (39, 8176), (45, 8233),

Gene: Busephilis\_19 Start: 7907, Stop: 8182, Start Num: 20

Candidate Starts for Busephilis\_19:

(4, 7586), (6, 7613), (10, 7718), (12, 7724), (Start: 20 @7907 has 33 MA's), (23, 7919), (30, 7994), (37, 8057), (39, 8117), (45, 8174),

Gene: ClearAsMud\_21 Start: 8723, Stop: 8932, Start Num: 20

Candidate Starts for ClearAsMud\_21:

(12, 8540), (Start: 20 @8723 has 33 MA's), (34, 8828), (39, 8876), (44, 8915),

Gene: Cranjis\_20 Start: 8186, Stop: 8407, Start Num: 20

Candidate Starts for Cranjis\_20:

(2, 7865), (10, 7997), (12, 8003), (Start: 20 @8186 has 33 MA's), (34, 8294), (39, 8342), (45, 8399),

Gene: CrazyRich\_18 Start: 7993, Stop: 8214, Start Num: 20

Candidate Starts for CrazyRich\_18:

(12, 7810), (Start: 20 @7993 has 33 MA's), (34, 8101), (39, 8149), (45, 8206),

Gene: Crisis\_19 Start: 7832, Stop: 8065, Start Num: 20

Candidate Starts for Crisis\_19:

(12, 7649), (Start: 20 @7832 has 33 MA's), (34, 7940), (39, 7988), (40, 8009), (43, 8024), (46, 8048),

Gene: Dewdrop\_51 Start: 22338, Stop: 22601, Start Num: 19

Candidate Starts for Dewdrop\_51:

(7, 22068), (13, 22215), (14, 22236), (15, 22260), (16, 22293), (Start: 19 @22338 has 3 MA's), (Start: 20 @22341 has 33 MA's), (21, 22347), (25, 22377), (32, 22440),

Gene: EarickHC\_19 Start: 7898, Stop: 8110, Start Num: 20

Candidate Starts for EarickHC\_19:

(12, 7715), (Start: 20 @7898 has 33 MA's), (34, 8006), (39, 8054), (41, 8078), (44, 8093),

Gene: Fireman\_18 Start: 7477, Stop: 7695, Start Num: 20

Candidate Starts for Fireman\_18:

(2, 7144), (3, 7147), (5, 7171), (9, 7261), (Start: 20 @7477 has 33 MA's), (28, 7546), (31, 7567),

Gene: Ganandorf\_18 Start: 8046, Stop: 8258, Start Num: 20

Candidate Starts for Ganandorf\_18:

(Start: 20 @8046 has 33 MA's), (34, 8154), (39, 8202), (41, 8226), (44, 8241),

Gene: Gina\_19 Start: 7149, Stop: 7367, Start Num: 20

Candidate Starts for Gina\_19:

(Start: 20 @7149 has 33 MA's), (24, 7179), (28, 7218),

Gene: Hendrix\_49 Start: 22783, Stop: 23025, Start Num: 19

Candidate Starts for Hendrix\_49:

(Start: 19 @22783 has 3 MA's), (Start: 20 @22786 has 33 MA's), (22, 22795), (35, 22894), (36, 22903), (47, 23014),

Gene: Hermeonysus\_18 Start: 7858, Stop: 8133, Start Num: 20

Candidate Starts for Hermeonysus\_18:

(11, 7675), (Start: 20 @7858 has 33 MA's), (23, 7870), (30, 7945), (37, 8008), (39, 8068), (45, 8125),

Gene: Honeyfin\_20 Start: 8201, Stop: 8422, Start Num: 20

Candidate Starts for Honeyfin\_20:

(2, 7880), (10, 8012), (12, 8018), (Start: 20 @8201 has 33 MA's), (34, 8309), (39, 8357), (45, 8414),

Gene: Jayden\_18 Start: 7649, Stop: 7807, Start Num: 20

Candidate Starts for Jayden\_18:

(Start: 20 @7649 has 33 MA's),

Gene: KaiHaiDragon\_19 Start: 7898, Stop: 8110, Start Num: 20

Candidate Starts for KaiHaiDragon\_19:

(12, 7715), (Start: 20 @7898 has 33 MA's), (34, 8006), (39, 8054), (41, 8078), (44, 8093),

Gene: Kowalski\_18 Start: 8020, Stop: 8241, Start Num: 20

Candidate Starts for Kowalski\_18:

(2, 7699), (10, 7831), (12, 7837), (Start: 20 @8020 has 33 MA's), (34, 8128), (39, 8176), (45, 8233),

Gene: Leaf\_51 Start: 22338, Stop: 22601, Start Num: 19

Candidate Starts for Leaf\_51:

(7, 22068), (13, 22215), (14, 22236), (15, 22260), (16, 22293), (Start: 19 @22338 has 3 MA's), (Start: 20 @22341 has 33 MA's), (21, 22347), (25, 22377), (32, 22440),

Gene: LittleFortune\_20 Start: 8243, Stop: 8464, Start Num: 20

Candidate Starts for LittleFortune\_20:

(2, 7922), (10, 8054), (12, 8060), (Start: 20 @8243 has 33 MA's), (34, 8351), (39, 8399), (45, 8456),

Gene: MisoSoup\_10 Start: 4024, Stop: 4248, Start Num: 20

Candidate Starts for MisoSoup\_10:

(18, 4021), (Start: 20 @4024 has 33 MA's), (26, 4066), (44, 4222),

Gene: NoodlelyBoi\_18 Start: 8086, Stop: 8250, Start Num: 20

Candidate Starts for NoodlelyBoi\_18:

(12, 7903), (Start: 20 @8086 has 33 MA's), (45, 8242),

Gene: Onika\_18 Start: 7993, Stop: 8214, Start Num: 20

Candidate Starts for Onika\_18:

(12, 7810), (Start: 20 @7993 has 33 MA's), (34, 8101), (39, 8149), (45, 8206),

Gene: PhedwardCullen\_17 Start: 7762, Stop: 7974, Start Num: 20

Candidate Starts for PhedwardCullen\_17:

(12, 7579), (Start: 20 @7762 has 33 MA's), (34, 7870), (39, 7918), (41, 7942), (44, 7957),

Gene: Phorgeous\_18 Start: 7837, Stop: 8058, Start Num: 20

Candidate Starts for Phorgeous\_18:

(2, 7516), (10, 7648), (12, 7654), (Start: 20 @7837 has 33 MA's), (34, 7945), (39, 7993), (45, 8050),

Gene: Phrancesco\_20 Start: 8116, Stop: 8337, Start Num: 20

Candidate Starts for Phrancesco\_20:

(12, 7933), (Start: 20 @8116 has 33 MA's), (34, 8224), (39, 8272), (45, 8329),

Gene: Piperis\_19 Start: 7992, Stop: 8213, Start Num: 20

Candidate Starts for Piperis\_19:

(2, 7671), (10, 7803), (12, 7809), (Start: 20 @7992 has 33 MA's), (34, 8100), (39, 8148), (45, 8205),

Gene: Pulchra\_20 Start: 8394, Stop: 8606, Start Num: 20

Candidate Starts for Pulchra\_20:

(2, 8073), (10, 8205), (12, 8211), (Start: 20 @8394 has 33 MA's), (34, 8502), (39, 8550), (41, 8574), (44, 8589),

Gene: Quhwah\_21 Start: 8340, Stop: 8552, Start Num: 20

Candidate Starts for Quhwah\_21:

(1, 7971), (5, 8046), (8, 8121), (Start: 20 @8340 has 33 MA's), (34, 8448), (39, 8496), (41, 8520), (44, 8535),

Gene: Ramiel05\_18 Start: 8020, Stop: 8241, Start Num: 20

Candidate Starts for Ramiel05\_18:

(2, 7699), (10, 7831), (12, 7837), (Start: 20 @8020 has 33 MA's), (34, 8128), (39, 8176), (45, 8233),

Gene: Rasputia\_47 Start: 22402, Stop: 22557, Start Num: 27

Candidate Starts for Rasputia\_47:

(Start: 27 @22402 has 1 MA's), (42, 22516), (47, 22546),

Gene: RobsFeet\_20 Start: 7731, Stop: 7973, Start Num: 17

Candidate Starts for RobsFeet\_20:

(Start: 17 @7731 has 1 MA's), (Start: 20 @7743 has 33 MA's), (28, 7812), (29, 7818), (30, 7830), (38, 7860), (39, 7908), (45, 7965),

Gene: Rockwell\_18 Start: 8020, Stop: 8241, Start Num: 20

Candidate Starts for Rockwell\_18:

(2, 7699), (10, 7831), (12, 7837), (Start: 20 @8020 has 33 MA's), (34, 8128), (39, 8176), (45, 8233),

Gene: Savannah\_18 Start: 8044, Stop: 8265, Start Num: 20

Candidate Starts for Savannah\_18:

(2, 7723), (10, 7855), (12, 7861), (Start: 20 @8044 has 33 MA's), (34, 8152), (39, 8200), (45, 8257),

Gene: Scumberland\_20 Start: 8210, Stop: 8431, Start Num: 20

Candidate Starts for Scumberland\_20:

(2, 7889), (10, 8021), (12, 8027), (Start: 20 @8210 has 33 MA's), (34, 8318), (39, 8366), (45, 8423),

Gene: Selwyn23\_20 Start: 8222, Stop: 8434, Start Num: 20

Candidate Starts for Selwyn23\_20:

(2, 7901), (10, 8033), (12, 8039), (Start: 20 @8222 has 33 MA's), (34, 8330), (39, 8378), (41, 8402),  
(44, 8417),

Gene: Shotgun\_18 Start: 7842, Stop: 8063, Start Num: 20

Candidate Starts for Shotgun\_18:

(12, 7659), (Start: 20 @7842 has 33 MA's), (34, 7950), (39, 7998), (45, 8055),

Gene: SirFrank\_18 Start: 7933, Stop: 8097, Start Num: 20

Candidate Starts for SirFrank\_18:

(12, 7750), (Start: 20 @7933 has 33 MA's), (45, 8089),

Gene: Teamocil\_19 Start: 7149, Stop: 7367, Start Num: 20

Candidate Starts for Teamocil\_19:

(Start: 20 @7149 has 33 MA's), (24, 7179), (28, 7218),

Gene: Tyrumbra\_17 Start: 6974, Stop: 7195, Start Num: 20

Candidate Starts for Tyrumbra\_17:

(2, 6635), (5, 6662), (10, 6785), (12, 6791), (Start: 20 @6974 has 33 MA's), (33, 7079), (39, 7127),

Gene: Yeti\_19 Start: 7992, Stop: 8213, Start Num: 20

Candidate Starts for Yeti\_19:

(2, 7671), (10, 7803), (12, 7809), (Start: 20 @7992 has 33 MA's), (34, 8100), (39, 8148), (45, 8205),

Gene: Zapato\_15 Start: 7116, Stop: 7274, Start Num: 20

Candidate Starts for Zapato\_15:

(Start: 20 @7116 has 33 MA's), (39, 7260),