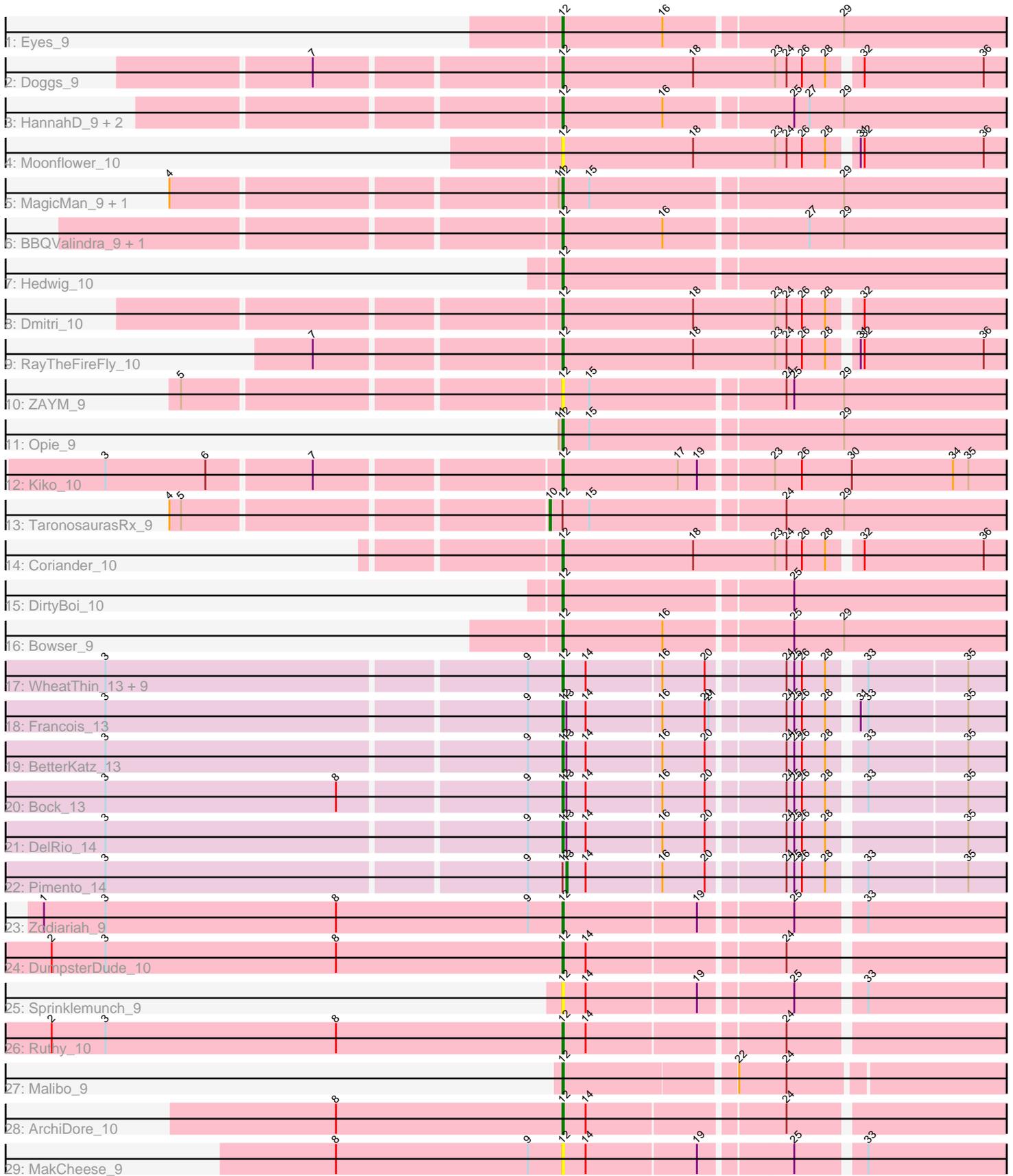


Pham 289535



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 289535 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289535 has 42 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Eyes\_9
- Track 2 : Doggs\_9
- Track 3 : HannahD\_9, BackstagePass\_9, GEazy\_9
- Track 4 : Moonflower\_10
- Track 5 : MagicMan\_9, Schnabeltier\_9
- Track 6 : BBQValindra\_9, Bunker\_9
- Track 7 : Hedwig\_10
- Track 8 : Dmitri\_10
- Track 9 : RayTheFireFly\_10
- Track 10 : ZAYM\_9
- Track 11 : Opie\_9
- Track 12 : Kiko\_10
- Track 13 : TaronosaurusRx\_9
- Track 14 : Coriander\_10
- Track 15 : DirtyBoi\_10
- Track 16 : Bowser\_9
- Track 17 : WheatThin\_13, Nadeem\_13, Chop\_13, Brylie\_13, Parada\_13, Hamood\_13, Mulch\_13, GrandSlam\_13, NancyRae\_13, Ayotoya\_13
- Track 18 : Francois\_13
- Track 19 : BetterKatz\_13
- Track 20 : Bock\_13
- Track 21 : DelRio\_14
- Track 22 : Pimento\_14
- Track 23 : Zodiariah\_9
- Track 24 : DumpsterDude\_10
- Track 25 : Sprinklemunch\_9
- Track 26 : Ruthy\_10
- Track 27 : Malibo\_9
- Track 28 : ArchiDore\_10
- Track 29 : MakCheese\_9

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

The start number called the most often in the published annotations is 12, it was called in 35 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArchiDore\_10, Ayotoya\_13, BBQValindra\_9, BackstagePass\_9, BetterKatz\_13, Bock\_13, Bowser\_9, Brylie\_13, Bunker\_9, Chop\_13, Coriander\_10, DelRio\_14, DirtyBoi\_10, Dmitri\_10, Doggs\_9, DumpsterDude\_10, Eyes\_9, Francois\_13, GEazy\_9, GrandSlam\_13, Hamood\_13, HannahD\_9, Hedwig\_10, Kiko\_10, MagicMan\_9, MakCheese\_9, Malibo\_9, Moonflower\_10, Mulch\_13, Nadeem\_13, NancyRae\_13, Opie\_9, Parada\_13, RayTheFireFly\_10, Ruthy\_10, Schnabeltier\_9, Sprinklemunch\_9, WheatThin\_13, ZAYM\_9, Zodiariah\_9,

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

- Pimento\_14, TaronosaurusRx\_9,

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

- 

### Summary by start number:

Start 10:

- Found in 1 of 42 ( 2.4% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TaronosaurusRx\_9 (DB),

Start 12:

- Found in 42 of 42 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 35 of 37
- Called 95.2% of time when present
- Phage (with cluster) where this start called: ArchiDore\_10 (DW), Ayotoya\_13 (DI), BBQValindra\_9 (DB), BackstagePass\_9 (DB), BetterKatz\_13 (DI), Bock\_13 (DI), Bowser\_9 (DB), Brylie\_13 (DI), Bunker\_9 (DB), Chop\_13 (DI), Coriander\_10 (DB), DelRio\_14 (DI), DirtyBoi\_10 (DB), Dmitri\_10 (DB), Doggs\_9 (DB), DumpsterDude\_10 (DW), Eyes\_9 (DB), Francois\_13 (DI), GEazy\_9 (DB), GrandSlam\_13 (DI), Hamood\_13 (DI), HannahD\_9 (DB), Hedwig\_10 (DB), Kiko\_10 (DB), MagicMan\_9 (DB), MakCheese\_9 (DW), Malibo\_9 (DW), Moonflower\_10 (DB), Mulch\_13 (DI), Nadeem\_13 (DI), NancyRae\_13 (DI), Opie\_9 (DB), Parada\_13 (DI), RayTheFireFly\_10 (DB), Ruthy\_10 (DW), Schnabeltier\_9 (DB), Sprinklemunch\_9 (DW), WheatThin\_13 (DI), ZAYM\_9 (DB), Zodiariah\_9 (DW),

Start 13:

- Found in 5 of 42 ( 11.9% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Pimento\_14 (DI),

### Summary by clusters:

There are 3 clusters represented in this pham: DW, DB, DI,

Info for manual annotations of cluster DB:

- Start number 10 was manually annotated 1 time for cluster DB.

- Start number 12 was manually annotated 16 times for cluster DB.

Info for manual annotations of cluster DI:

- Start number 12 was manually annotated 14 times for cluster DI.
- Start number 13 was manually annotated 1 time for cluster DI.

Info for manual annotations of cluster DW:

- Start number 12 was manually annotated 5 times for cluster DW.

### **Gene Information:**

Gene: ArchiDore\_10 Start: 7354, Stop: 7677, Start Num: 12

Candidate Starts for ArchiDore\_10:

(8, 7177), (Start: 12 @7354 has 35 MA's), (14, 7372), (24, 7516),

Gene: Ayotoya\_13 Start: 8911, Stop: 9231, Start Num: 12

Candidate Starts for Ayotoya\_13:

(3, 8566), (9, 8884), (Start: 12 @8911 has 35 MA's), (14, 8929), (16, 8986), (20, 9019), (24, 9073), (25, 9079), (26, 9085), (28, 9103), (33, 9127), (35, 9202),

Gene: BBQValindra\_9 Start: 6868, Stop: 7203, Start Num: 12

Candidate Starts for BBQValindra\_9:

(Start: 12 @6868 has 35 MA's), (16, 6946), (27, 7051), (29, 7078),

Gene: BackstagePass\_9 Start: 6845, Stop: 7180, Start Num: 12

Candidate Starts for BackstagePass\_9:

(Start: 12 @6845 has 35 MA's), (16, 6923), (25, 7016), (27, 7028), (29, 7055),

Gene: BetterKatz\_13 Start: 8879, Stop: 9199, Start Num: 12

Candidate Starts for BetterKatz\_13:

(3, 8534), (9, 8852), (Start: 12 @8879 has 35 MA's), (Start: 13 @8882 has 1 MA's), (14, 8897), (16, 8954), (20, 8987), (24, 9041), (25, 9047), (26, 9053), (28, 9071), (33, 9095), (35, 9170),

Gene: Bock\_13 Start: 8629, Stop: 8949, Start Num: 12

Candidate Starts for Bock\_13:

(3, 8284), (8, 8464), (9, 8602), (Start: 12 @8629 has 35 MA's), (Start: 13 @8632 has 1 MA's), (14, 8647), (16, 8704), (20, 8737), (24, 8791), (25, 8797), (26, 8803), (28, 8821), (33, 8845), (35, 8920),

Gene: Bowser\_9 Start: 6866, Stop: 7201, Start Num: 12

Candidate Starts for Bowser\_9:

(Start: 12 @6866 has 35 MA's), (16, 6944), (25, 7037), (29, 7076),

Gene: Brylie\_13 Start: 8626, Stop: 8946, Start Num: 12

Candidate Starts for Brylie\_13:

(3, 8281), (9, 8599), (Start: 12 @8626 has 35 MA's), (14, 8644), (16, 8701), (20, 8734), (24, 8788), (25, 8794), (26, 8800), (28, 8818), (33, 8842), (35, 8917),

Gene: Bunker\_9 Start: 6868, Stop: 7203, Start Num: 12

Candidate Starts for Bunker\_9:

(Start: 12 @6868 has 35 MA's), (16, 6946), (27, 7051), (29, 7078),

Gene: Chop\_13 Start: 8659, Stop: 8979, Start Num: 12

Candidate Starts for Chop\_13:

(3, 8314), (9, 8632), (Start: 12 @8659 has 35 MA's), (14, 8677), (16, 8734), (20, 8767), (24, 8821), (25, 8827), (26, 8833), (28, 8851), (33, 8875), (35, 8950),

Gene: Coriander\_10 Start: 7265, Stop: 7600, Start Num: 12

Candidate Starts for Coriander\_10:

(Start: 12 @7265 has 35 MA's), (18, 7367), (23, 7430), (24, 7439), (26, 7451), (28, 7469), (32, 7490), (36, 7583),

Gene: DelRio\_14 Start: 9136, Stop: 9456, Start Num: 12

Candidate Starts for DelRio\_14:

(3, 8791), (9, 9109), (Start: 12 @9136 has 35 MA's), (Start: 13 @9139 has 1 MA's), (14, 9154), (16, 9211), (20, 9244), (24, 9298), (25, 9304), (26, 9310), (28, 9328), (35, 9427),

Gene: DirtyBoi\_10 Start: 7238, Stop: 7573, Start Num: 12

Candidate Starts for DirtyBoi\_10:

(Start: 12 @7238 has 35 MA's), (25, 7409),

Gene: Dmitri\_10 Start: 7247, Stop: 7582, Start Num: 12

Candidate Starts for Dmitri\_10:

(Start: 12 @7247 has 35 MA's), (18, 7349), (23, 7412), (24, 7421), (26, 7433), (28, 7451), (32, 7472),

Gene: Doggs\_9 Start: 6962, Stop: 7297, Start Num: 12

Candidate Starts for Doggs\_9:

(7, 6782), (Start: 12 @6962 has 35 MA's), (18, 7064), (23, 7127), (24, 7136), (26, 7148), (28, 7166), (32, 7187), (36, 7280),

Gene: DumpsterDude\_10 Start: 7367, Stop: 7690, Start Num: 12

Candidate Starts for DumpsterDude\_10:

(2, 6968), (3, 7010), (8, 7190), (Start: 12 @7367 has 35 MA's), (14, 7385), (24, 7529),

Gene: Eyes\_9 Start: 6875, Stop: 7210, Start Num: 12

Candidate Starts for Eyes\_9:

(Start: 12 @6875 has 35 MA's), (16, 6953), (29, 7085),

Gene: Francois\_13 Start: 8640, Stop: 8960, Start Num: 12

Candidate Starts for Francois\_13:

(3, 8295), (9, 8613), (Start: 12 @8640 has 35 MA's), (Start: 13 @8643 has 1 MA's), (14, 8658), (16, 8715), (20, 8748), (21, 8751), (24, 8802), (25, 8808), (26, 8814), (28, 8832), (31, 8850), (33, 8856), (35, 8931),

Gene: GEazy\_9 Start: 6877, Stop: 7212, Start Num: 12

Candidate Starts for GEazy\_9:

(Start: 12 @6877 has 35 MA's), (16, 6955), (25, 7048), (27, 7060), (29, 7087),

Gene: GrandSlam\_13 Start: 8659, Stop: 8979, Start Num: 12

Candidate Starts for GrandSlam\_13:

(3, 8314), (9, 8632), (Start: 12 @8659 has 35 MA's), (14, 8677), (16, 8734), (20, 8767), (24, 8821), (25, 8827), (26, 8833), (28, 8851), (33, 8875), (35, 8950),

Gene: Hamood\_13 Start: 8659, Stop: 8979, Start Num: 12

Candidate Starts for Hamood\_13:

(3, 8314), (9, 8632), (Start: 12 @8659 has 35 MA's), (14, 8677), (16, 8734), (20, 8767), (24, 8821), (25, 8827), (26, 8833), (28, 8851), (33, 8875), (35, 8950),

Gene: HannahD\_9 Start: 6877, Stop: 7212, Start Num: 12

Candidate Starts for HannahD\_9:

(Start: 12 @6877 has 35 MA's), (16, 6955), (25, 7048), (27, 7060), (29, 7087),

Gene: Hedwig\_10 Start: 7238, Stop: 7573, Start Num: 12

Candidate Starts for Hedwig\_10:

(Start: 12 @7238 has 35 MA's),

Gene: Kiko\_10 Start: 7078, Stop: 7413, Start Num: 12

Candidate Starts for Kiko\_10:

(3, 6742), (6, 6820), (7, 6898), (Start: 12 @7078 has 35 MA's), (17, 7168), (19, 7183), (23, 7234), (26, 7255), (30, 7294), (34, 7372), (35, 7384),

Gene: MagicMan\_9 Start: 7205, Stop: 7540, Start Num: 12

Candidate Starts for MagicMan\_9:

(4, 6920), (11, 7202), (Start: 12 @7205 has 35 MA's), (15, 7226), (29, 7415),

Gene: MakCheese\_9 Start: 7174, Stop: 7497, Start Num: 12

Candidate Starts for MakCheese\_9:

(8, 6997), (9, 7147), (Start: 12 @7174 has 35 MA's), (14, 7192), (19, 7276), (25, 7342), (33, 7390),

Gene: Malibo\_9 Start: 7157, Stop: 7480, Start Num: 12

Candidate Starts for Malibo\_9:

(Start: 12 @7157 has 35 MA's), (22, 7283), (24, 7319),

Gene: Moonflower\_10 Start: 7270, Stop: 7605, Start Num: 12

Candidate Starts for Moonflower\_10:

(Start: 12 @7270 has 35 MA's), (18, 7372), (23, 7435), (24, 7444), (26, 7456), (28, 7474), (31, 7492), (32, 7495), (36, 7588),

Gene: Mulch\_13 Start: 8626, Stop: 8946, Start Num: 12

Candidate Starts for Mulch\_13:

(3, 8281), (9, 8599), (Start: 12 @8626 has 35 MA's), (14, 8644), (16, 8701), (20, 8734), (24, 8788), (25, 8794), (26, 8800), (28, 8818), (33, 8842), (35, 8917),

Gene: Nadeem\_13 Start: 8626, Stop: 8946, Start Num: 12

Candidate Starts for Nadeem\_13:

(3, 8281), (9, 8599), (Start: 12 @8626 has 35 MA's), (14, 8644), (16, 8701), (20, 8734), (24, 8788), (25, 8794), (26, 8800), (28, 8818), (33, 8842), (35, 8917),

Gene: NancyRae\_13 Start: 8626, Stop: 8946, Start Num: 12

Candidate Starts for NancyRae\_13:

(3, 8281), (9, 8599), (Start: 12 @8626 has 35 MA's), (14, 8644), (16, 8701), (20, 8734), (24, 8788), (25, 8794), (26, 8800), (28, 8818), (33, 8842), (35, 8917),

Gene: Opie\_9 Start: 7220, Stop: 7555, Start Num: 12

Candidate Starts for Opie\_9:

(11, 7217), (Start: 12 @7220 has 35 MA's), (15, 7241), (29, 7430),

Gene: Parada\_13 Start: 8626, Stop: 8946, Start Num: 12

Candidate Starts for Parada\_13:

(3, 8281), (9, 8599), (Start: 12 @8626 has 35 MA's), (14, 8644), (16, 8701), (20, 8734), (24, 8788), (25, 8794), (26, 8800), (28, 8818), (33, 8842), (35, 8917),

Gene: Pimento\_14 Start: 8833, Stop: 9150, Start Num: 13

Candidate Starts for Pimento\_14:

(3, 8485), (9, 8803), (Start: 12 @8830 has 35 MA's), (Start: 13 @8833 has 1 MA's), (14, 8848), (16, 8905), (20, 8938), (24, 8992), (25, 8998), (26, 9004), (28, 9022), (33, 9046), (35, 9121),

Gene: RayTheFireFly\_10 Start: 7271, Stop: 7606, Start Num: 12

Candidate Starts for RayTheFireFly\_10:

(7, 7091), (Start: 12 @7271 has 35 MA's), (18, 7373), (23, 7436), (24, 7445), (26, 7457), (28, 7475), (31, 7493), (32, 7496), (36, 7589),

Gene: Ruthy\_10 Start: 7438, Stop: 7761, Start Num: 12

Candidate Starts for Ruthy\_10:

(2, 7039), (3, 7081), (8, 7261), (Start: 12 @7438 has 35 MA's), (14, 7456), (24, 7600),

Gene: Schnabeltier\_9 Start: 7206, Stop: 7541, Start Num: 12

Candidate Starts for Schnabeltier\_9:

(4, 6921), (11, 7203), (Start: 12 @7206 has 35 MA's), (15, 7227), (29, 7416),

Gene: Sprinklemunch\_9 Start: 7214, Stop: 7537, Start Num: 12

Candidate Starts for Sprinklemunch\_9:

(Start: 12 @7214 has 35 MA's), (14, 7232), (19, 7316), (25, 7382), (33, 7430),

Gene: TaronosaurusRx\_9 Start: 7210, Stop: 7554, Start Num: 10

Candidate Starts for TaronosaurusRx\_9:

(4, 6934), (5, 6943), (Start: 10 @7210 has 1 MA's), (Start: 12 @7219 has 35 MA's), (15, 7240), (24, 7384), (29, 7429),

Gene: WheatThin\_13 Start: 8626, Stop: 8946, Start Num: 12

Candidate Starts for WheatThin\_13:

(3, 8281), (9, 8599), (Start: 12 @8626 has 35 MA's), (14, 8644), (16, 8701), (20, 8734), (24, 8788), (25, 8794), (26, 8800), (28, 8818), (33, 8842), (35, 8917),

Gene: ZAYM\_9 Start: 7212, Stop: 7547, Start Num: 12

Candidate Starts for ZAYM\_9:

(5, 6936), (Start: 12 @7212 has 35 MA's), (15, 7233), (24, 7377), (25, 7383), (29, 7422),

Gene: Zodiariah\_9 Start: 7164, Stop: 7487, Start Num: 12

Candidate Starts for Zodiariah\_9:

(1, 6759), (3, 6807), (8, 6987), (9, 7137), (Start: 12 @7164 has 35 MA's), (19, 7266), (25, 7332), (33, 7380),