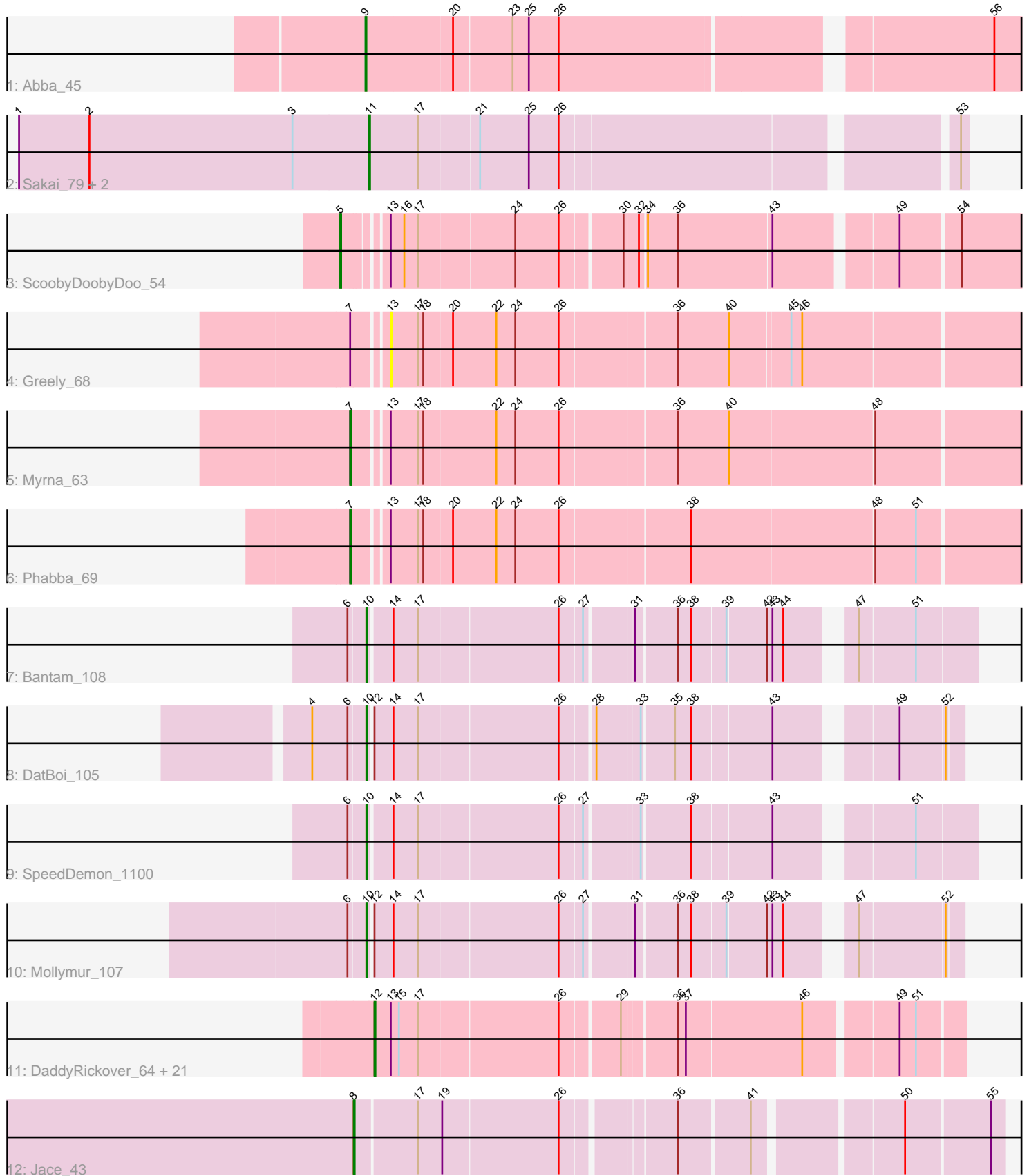


# Pham 86173



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 86173 Report

This analysis was run 04/28/24 on database version 559.

Pham number 86173 has 35 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Abba\_45
- Track 2 : Sakai\_79, Gorpy\_80, CookieBear\_79
- Track 3 : ScoobyDoobyDoo\_54
- Track 4 : Greely\_68
- Track 5 : Myrna\_63
- Track 6 : Phabba\_69
- Track 7 : Bantam\_108
- Track 8 : DatBoi\_105
- Track 9 : SpeedDemon\_1100
- Track 10 : Mollymur\_107
- Track 11 : DaddyRickover\_64, Deb65\_60, Leperchaun\_57, Dorothy\_63, Scottish\_63, PHappiness\_60, Sassafras\_63, Polka14\_63, Daenerys\_59, KingMidas\_64, Empress\_63, Geralt\_59, Nimbo\_58, Stap\_62, OldBen\_62, JoeyJr\_60, Inventum\_60, RitaG\_60, IbOuu\_66, RedBird\_63, Spoonbill\_62, BodEinwohner17\_65
- Track 12 : Jace\_43

### ***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 19 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BodEinwohner17\_65, DaddyRickover\_64, Daenerys\_59, Deb65\_60, Dorothy\_63, Empress\_63, Geralt\_59, IbOuu\_66, Inventum\_60, JoeyJr\_60, KingMidas\_64, Leperchaun\_57, Nimbo\_58, OldBen\_62, PHappiness\_60, Polka14\_63, RedBird\_63, RitaG\_60, Sassafras\_63, Scottish\_63, Spoonbill\_62, Stap\_62,

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

- DatBoi\_105, Mollymur\_107,

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

- Abba\_45, Bantam\_108, CookieBear\_79, Gorpy\_80, Greely\_68, Jace\_43, Myrna\_63, Phabba\_69, Sakai\_79, ScoobyDoobyDoo\_54, SpeedDemon\_1100,

## Summary by start number:

### Start 5:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ScoobyDoobyDoo\_54 (C2),

### Start 7:

- Found in 3 of 35 ( 8.6% ) of genes in pham
- Manual Annotations of this start: 2 of 30
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Myrna\_63 (C2), Phabba\_69 (C2),

### Start 8:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jace\_43 (singleton),

### Start 9:

- Found in 1 of 35 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abba\_45 (AO3),

### Start 10:

- Found in 4 of 35 ( 11.4% ) of genes in pham
- Manual Annotations of this start: 4 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam\_108 (DL), DatBoi\_105 (DL), Mollymur\_107 (DL), SpeedDemon\_1100 (DL),

### Start 11:

- Found in 3 of 35 ( 8.6% ) of genes in pham
- Manual Annotations of this start: 2 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CookieBear\_79 (AY), Gorpy\_80 (AY), Sakai\_79 (AY),

### Start 12:

- Found in 24 of 35 ( 68.6% ) of genes in pham
- Manual Annotations of this start: 19 of 30
- Called 91.7% of time when present
- Phage (with cluster) where this start called: BodEinwohner17\_65 (F1), DaddyRickover\_64 (F1), Daenerys\_59 (F1), Deb65\_60 (F1), Dorothy\_63 (F1), Empress\_63 (F1), Geralt\_59 (F1), IbOuu\_66 (F1), Inventum\_60 (F1), JoeyJr\_60 (F1), KingMidas\_64 (F1), Leperchaun\_57 (F1), Nimbo\_58 (F1), OldBen\_62 (F1), PHappiness\_60 (F1), Polka14\_63 (F1), RedBird\_63 (F1), RitaG\_60 (F1), Sassafras\_63 (F1), Scottish\_63 (F1), Spoonbill\_62 (F1), Stap\_62 (F1),

### Start 13:

- Found in 26 of 35 ( 74.3% ) of genes in pham

- No Manual Annotations of this start.
- Called 3.8% of time when present
- Phage (with cluster) where this start called: Greely\_68 (C2),

### **Summary by clusters:**

There are 6 clusters represented in this pham: F1, DL, singleton, AO3, AY, C2,

Info for manual annotations of cluster AO3:

- Start number 9 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster AY:

- Start number 11 was manually annotated 2 times for cluster AY.

Info for manual annotations of cluster C2:

- Start number 5 was manually annotated 1 time for cluster C2.
- Start number 7 was manually annotated 2 times for cluster C2.

Info for manual annotations of cluster DL:

- Start number 10 was manually annotated 4 times for cluster DL.

Info for manual annotations of cluster F1:

- Start number 12 was manually annotated 19 times for cluster F1.

### **Gene Information:**

Gene: Abba\_45 Start: 33459, Stop: 34169, Start Num: 9

Candidate Starts for Abba\_45:

(Start: 9 @33459 has 1 MA's), (20, 33552), (23, 33615), (25, 33633), (26, 33666), (56, 34110),

Gene: Bantam\_108 Start: 69737, Stop: 70342, Start Num: 10

Candidate Starts for Bantam\_108:

(6, 69719), (Start: 10 @69737 has 4 MA's), (14, 69761), (17, 69788), (26, 69938), (27, 69962), (31, 70010), (36, 70052), (38, 70067), (39, 70103), (42, 70145), (43, 70148), (44, 70160), (47, 70217), (51, 70277),

Gene: BodEinwohner17\_65 Start: 41919, Stop: 42527, Start Num: 12

Candidate Starts for BodEinwohner17\_65:

(Start: 12 @41919 has 19 MA's), (13, 41937), (15, 41946), (17, 41967), (26, 42117), (29, 42177), (36, 42231), (37, 42240), (46, 42366), (49, 42459), (51, 42477),

Gene: CookieBear\_79 Start: 45964, Stop: 46581, Start Num: 11

Candidate Starts for CookieBear\_79:

(1, 45577), (2, 45655), (3, 45880), (Start: 11 @45964 has 2 MA's), (17, 46018), (21, 46081), (25, 46135), (26, 46168), (53, 46573),

Gene: DaddyRickover\_64 Start: 42482, Stop: 43090, Start Num: 12

Candidate Starts for DaddyRickover\_64:

(Start: 12 @42482 has 19 MA's), (13, 42500), (15, 42509), (17, 42530), (26, 42680), (29, 42740), (36, 42794), (37, 42803), (46, 42929), (49, 43022), (51, 43040),

Gene: Daenerys\_59 Start: 40724, Stop: 41332, Start Num: 12

Candidate Starts for Daenerys\_59:

(Start: 12 @40724 has 19 MA's), (13, 40742), (15, 40751), (17, 40772), (26, 40922), (29, 40982), (36, 41036), (37, 41045), (46, 41171), (49, 41264), (51, 41282),

Gene: DatBoi\_105 Start: 69050, Stop: 69637, Start Num: 10

Candidate Starts for DatBoi\_105:

(4, 68993), (6, 69032), (Start: 10 @69050 has 4 MA's), (Start: 12 @69053 has 19 MA's), (14, 69074), (17, 69101), (26, 69251), (28, 69284), (33, 69329), (35, 69362), (38, 69380), (43, 69461), (49, 69572), (52, 69620),

Gene: Deb65\_60 Start: 40694, Stop: 41302, Start Num: 12

Candidate Starts for Deb65\_60:

(Start: 12 @40694 has 19 MA's), (13, 40712), (15, 40721), (17, 40742), (26, 40892), (29, 40952), (36, 41006), (37, 41015), (46, 41141), (49, 41234), (51, 41252),

Gene: Dorothy\_63 Start: 41656, Stop: 42264, Start Num: 12

Candidate Starts for Dorothy\_63:

(Start: 12 @41656 has 19 MA's), (13, 41674), (15, 41683), (17, 41704), (26, 41854), (29, 41914), (36, 41968), (37, 41977), (46, 42103), (49, 42196), (51, 42214),

Gene: Empress\_63 Start: 42138, Stop: 42746, Start Num: 12

Candidate Starts for Empress\_63:

(Start: 12 @42138 has 19 MA's), (13, 42156), (15, 42165), (17, 42186), (26, 42336), (29, 42396), (36, 42450), (37, 42459), (46, 42585), (49, 42678), (51, 42696),

Gene: Geralt\_59 Start: 40693, Stop: 41301, Start Num: 12

Candidate Starts for Geralt\_59:

(Start: 12 @40693 has 19 MA's), (13, 40711), (15, 40720), (17, 40741), (26, 40891), (29, 40951), (36, 41005), (37, 41014), (46, 41140), (49, 41233), (51, 41251),

Gene: Gorpy\_80 Start: 47306, Stop: 47923, Start Num: 11

Candidate Starts for Gorpy\_80:

(1, 46919), (2, 46997), (3, 47222), (Start: 11 @47306 has 2 MA's), (17, 47360), (21, 47423), (25, 47477), (26, 47510), (53, 47915),

Gene: Greely\_68 Start: 24476, Stop: 25159, Start Num: 13

Candidate Starts for Greely\_68:

(Start: 7 @24443 has 2 MA's), (13, 24476), (17, 24506), (18, 24512), (20, 24542), (22, 24590), (24, 24611), (26, 24659), (36, 24782), (40, 24839), (45, 24902), (46, 24914),

Gene: IbOuu\_66 Start: 42743, Stop: 43351, Start Num: 12

Candidate Starts for IbOuu\_66:

(Start: 12 @42743 has 19 MA's), (13, 42761), (15, 42770), (17, 42791), (26, 42941), (29, 43001), (36, 43055), (37, 43064), (46, 43190), (49, 43283), (51, 43301),

Gene: Inventum\_60 Start: 41854, Stop: 42462, Start Num: 12

Candidate Starts for Inventum\_60:

(Start: 12 @41854 has 19 MA's), (13, 41872), (15, 41881), (17, 41902), (26, 42052), (29, 42112), (36, 42166), (37, 42175), (46, 42301), (49, 42394), (51, 42412),

Gene: Jace\_43 Start: 30595, Stop: 31251, Start Num: 8

Candidate Starts for Jace\_43:

(Start: 8 @30595 has 1 MA's), (17, 30661), (19, 30688), (26, 30814), (36, 30925), (41, 31000), (50, 31147), (55, 31237),

Gene: JoeyJr\_60 Start: 40892, Stop: 41500, Start Num: 12

Candidate Starts for JoeyJr\_60:

(Start: 12 @40892 has 19 MA's), (13, 40910), (15, 40919), (17, 40940), (26, 41090), (29, 41150), (36, 41204), (37, 41213), (46, 41339), (49, 41432), (51, 41450),

Gene: KingMidas\_64 Start: 42554, Stop: 43162, Start Num: 12

Candidate Starts for KingMidas\_64:

(Start: 12 @42554 has 19 MA's), (13, 42572), (15, 42581), (17, 42602), (26, 42752), (29, 42812), (36, 42866), (37, 42875), (46, 43001), (49, 43094), (51, 43112),

Gene: Leperchaun\_57 Start: 40122, Stop: 40730, Start Num: 12

Candidate Starts for Leperchaun\_57:

(Start: 12 @40122 has 19 MA's), (13, 40140), (15, 40149), (17, 40170), (26, 40320), (29, 40380), (36, 40434), (37, 40443), (46, 40569), (49, 40662), (51, 40680),

Gene: Mollymur\_107 Start: 70157, Stop: 70744, Start Num: 10

Candidate Starts for Mollymur\_107:

(6, 70139), (Start: 10 @70157 has 4 MA's), (Start: 12 @70160 has 19 MA's), (14, 70181), (17, 70208), (26, 70358), (27, 70382), (31, 70430), (36, 70472), (38, 70487), (39, 70523), (42, 70565), (43, 70568), (44, 70580), (47, 70637), (52, 70727),

Gene: Myrna\_63 Start: 23804, Stop: 24523, Start Num: 7

Candidate Starts for Myrna\_63:

(Start: 7 @23804 has 2 MA's), (13, 23837), (17, 23867), (18, 23873), (22, 23951), (24, 23972), (26, 24020), (36, 24143), (40, 24200), (48, 24356),

Gene: Nimbo\_58 Start: 40696, Stop: 41304, Start Num: 12

Candidate Starts for Nimbo\_58:

(Start: 12 @40696 has 19 MA's), (13, 40714), (15, 40723), (17, 40744), (26, 40894), (29, 40954), (36, 41008), (37, 41017), (46, 41143), (49, 41236), (51, 41254),

Gene: OldBen\_62 Start: 42089, Stop: 42697, Start Num: 12

Candidate Starts for OldBen\_62:

(Start: 12 @42089 has 19 MA's), (13, 42107), (15, 42116), (17, 42137), (26, 42287), (29, 42347), (36, 42401), (37, 42410), (46, 42536), (49, 42629), (51, 42647),

Gene: PHappiness\_60 Start: 40668, Stop: 41276, Start Num: 12

Candidate Starts for PHappiness\_60:

(Start: 12 @40668 has 19 MA's), (13, 40686), (15, 40695), (17, 40716), (26, 40866), (29, 40926), (36, 40980), (37, 40989), (46, 41115), (49, 41208), (51, 41226),

Gene: Phabba\_69 Start: 24269, Stop: 24988, Start Num: 7

Candidate Starts for Phabba\_69:

(Start: 7 @24269 has 2 MA's), (13, 24302), (17, 24332), (18, 24338), (20, 24368), (22, 24416), (24, 24437), (26, 24485), (38, 24623), (48, 24821), (51, 24866),

Gene: Polka14\_63 Start: 41732, Stop: 42340, Start Num: 12

Candidate Starts for Polka14\_63:

(Start: 12 @41732 has 19 MA's), (13, 41750), (15, 41759), (17, 41780), (26, 41930), (29, 41990), (36, 42044), (37, 42053), (46, 42179), (49, 42272), (51, 42290),

Gene: RedBird\_63 Start: 41535, Stop: 42143, Start Num: 12

Candidate Starts for RedBird\_63:

(Start: 12 @41535 has 19 MA's), (13, 41553), (15, 41562), (17, 41583), (26, 41733), (29, 41793), (36, 41847), (37, 41856), (46, 41982), (49, 42075), (51, 42093),

Gene: RitaG\_60 Start: 41013, Stop: 41621, Start Num: 12

Candidate Starts for RitaG\_60:

(Start: 12 @41013 has 19 MA's), (13, 41031), (15, 41040), (17, 41061), (26, 41211), (29, 41271), (36, 41325), (37, 41334), (46, 41460), (49, 41553), (51, 41571),

Gene: Sakai\_79 Start: 46017, Stop: 46634, Start Num: 11

Candidate Starts for Sakai\_79:

(1, 45630), (2, 45708), (3, 45933), (Start: 11 @46017 has 2 MA's), (17, 46071), (21, 46134), (25, 46188), (26, 46221), (53, 46626),

Gene: Sassafras\_63 Start: 41853, Stop: 42461, Start Num: 12

Candidate Starts for Sassafras\_63:

(Start: 12 @41853 has 19 MA's), (13, 41871), (15, 41880), (17, 41901), (26, 42051), (29, 42111), (36, 42165), (37, 42174), (46, 42300), (49, 42393), (51, 42411),

Gene: ScoobyDoobyDoo\_54 Start: 18880, Stop: 19575, Start Num: 5

Candidate Starts for ScoobyDoobyDoo\_54:

(Start: 5 @18880 has 1 MA's), (13, 18919), (16, 18934), (17, 18949), (24, 19051), (26, 19099), (30, 19162), (32, 19177), (34, 19183), (36, 19216), (43, 19315), (49, 19438), (54, 19501),

Gene: Scottish\_63 Start: 41809, Stop: 42417, Start Num: 12

Candidate Starts for Scottish\_63:

(Start: 12 @41809 has 19 MA's), (13, 41827), (15, 41836), (17, 41857), (26, 42007), (29, 42067), (36, 42121), (37, 42130), (46, 42256), (49, 42349), (51, 42367),

Gene: SpeedDemon\_1100 Start: 72257, Stop: 72862, Start Num: 10

Candidate Starts for SpeedDemon\_1100:

(6, 72239), (Start: 10 @72257 has 4 MA's), (14, 72281), (17, 72308), (26, 72458), (27, 72482), (33, 72536), (38, 72587), (43, 72668), (51, 72797),

Gene: Spoonbill\_62 Start: 40973, Stop: 41581, Start Num: 12

Candidate Starts for Spoonbill\_62:

(Start: 12 @40973 has 19 MA's), (13, 40991), (15, 41000), (17, 41021), (26, 41171), (29, 41231), (36, 41285), (37, 41294), (46, 41420), (49, 41513), (51, 41531),

Gene: Stap\_62 Start: 41742, Stop: 42350, Start Num: 12

Candidate Starts for Stap\_62:

(Start: 12 @41742 has 19 MA's), (13, 41760), (15, 41769), (17, 41790), (26, 41940), (29, 42000), (36, 42054), (37, 42063), (46, 42189), (49, 42282), (51, 42300),