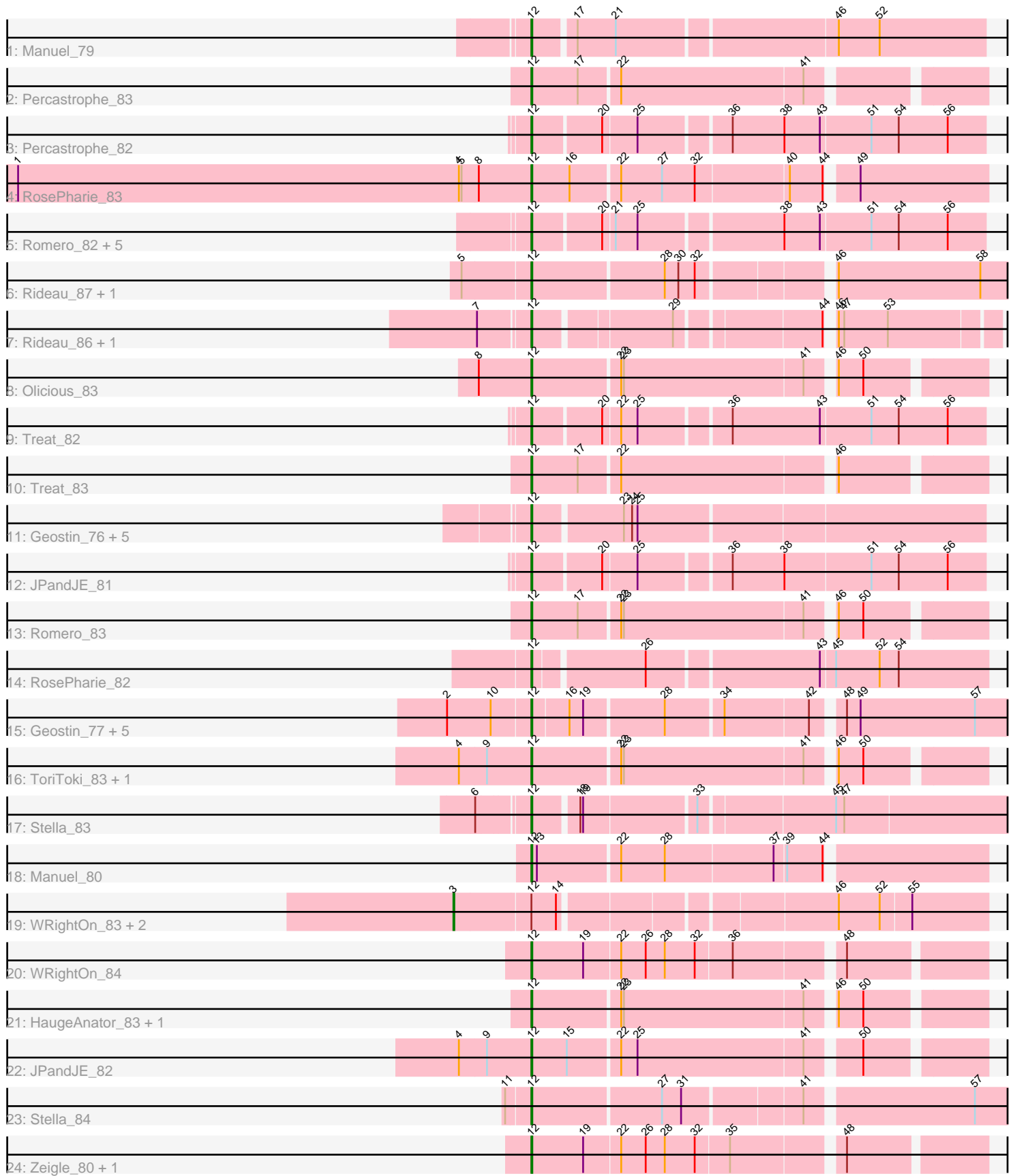


Pham 61013



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 61013 Report

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

Pham number 61013 has 46 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Manuel_79
- Track 2 : Percastrophe_83
- Track 3 : Percastrophe_82
- Track 4 : RosePharie_83
- Track 5 : Romero_82, ZooBear_82, Immanuel3_80, Olidious_82, ToriToki_82, HaugeAnator_82
- Track 6 : Rideau_87, Dennebes_87
- Track 7 : Rideau_86, Dennebes_86
- Track 8 : Olidious_83
- Track 9 : Treat_82
- Track 10 : Treat_83
- Track 11 : Geostin_76, Fabian_80, RetrieverFever_81, Gremlin23_81, Vorvolakos_82, FlowerPower_81
- Track 12 : JPandJE_81
- Track 13 : Romero_83
- Track 14 : RosePharie_82
- Track 15 : Geostin_77, RetrieverFever_82, Fabian_81, Gremlin23_82, Vorvolakos_83, FlowerPower_82
- Track 16 : ToriToki_83, Immanuel3_81
- Track 17 : Stella_83
- Track 18 : Manuel_80
- Track 19 : WRightOn_83, Kumquat_79, Zeigle_79
- Track 20 : WRightOn_84
- Track 21 : HaugeAnator_83, ZooBear_83
- Track 22 : JPandJE_82
- Track 23 : Stella_84
- Track 24 : Zeigle_80, Kumquat_80

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 39 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Dennebes_86, Dennebes_87, Fabian_80, Fabian_81, FlowerPower_81, FlowerPower_82, Geostin_76, Geostin_77, Gremlin23_81, Gremlin23_82, HaugeAnator_82, HaugeAnator_83, Immanuel3_80, Immanuel3_81, JPandJE_81, JPandJE_82, Kumquat_80, Manuel_79, Manuel_80, Olacious_82, Olacious_83, Percastrophe_82, Percastrophe_83, RetrieverFever_81, RetrieverFever_82, Rideau_86, Rideau_87, Romero_82, Romero_83, RosePharie_82, RosePharie_83, Stella_83, Stella_84, ToriToki_82, ToriToki_83, Treat_82, Treat_83, Vorvolakos_82, Vorvolakos_83, WRightOn_84, Zeigle_80, ZooBear_82, ZooBear_83,

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

- Kumquat_79, WRightOn_83, Zeigle_79,

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

-

Summary by start number:

Start 3:

- Found in 3 of 46 (6.5%) of genes in pham
- Manual Annotations of this start: 3 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumquat_79 (BF), WRightOn_83 (BF), Zeigle_79 (BF),

Start 12:

- Found in 46 of 46 (100.0%) of genes in pham
- Manual Annotations of this start: 39 of 42
- Called 93.5% of time when present
- Phage (with cluster) where this start called: Dennebes_86 (BF), Dennebes_87 (BF), Fabian_80 (BF), Fabian_81 (BF), FlowerPower_81 (BF), FlowerPower_82 (BF), Geostin_76 (BF), Geostin_77 (BF), Gremlin23_81 (BF), Gremlin23_82 (BF), HaugeAnator_82 (BF), HaugeAnator_83 (BF), Immanuel3_80 (BF), Immanuel3_81 (BF), JPandJE_81 (BF), JPandJE_82 (BF), Kumquat_80 (BF), Manuel_79 (BF), Manuel_80 (BF), Olacious_82 (BF), Olacious_83 (BF), Percastrophe_82 (BF), Percastrophe_83 (BF), RetrieverFever_81 (BF), RetrieverFever_82 (BF), Rideau_86 (BF), Rideau_87 (BF), Romero_82 (BF), Romero_83 (BF), RosePharie_82 (BF), RosePharie_83 (BF), Stella_83 (BF), Stella_84 (BF), ToriToki_82 (BF), ToriToki_83 (BF), Treat_82 (BF), Treat_83 (BF), Vorvolakos_82 (BF), Vorvolakos_83 (BF), WRightOn_84 (BF), Zeigle_80 (BF), ZooBear_82 (BF), ZooBear_83 (BF),

Summary by clusters:

There is one cluster represented in this pham: BF

Info for manual annotations of cluster BF:

- Start number 3 was manually annotated 3 times for cluster BF.
- Start number 12 was manually annotated 39 times for cluster BF.

Gene Information:

Gene: Dennebes_87 Start: 42766, Stop: 42275, Start Num: 12

Candidate Starts for Dennebes_87:

(5, 42838), (Start: 12 @42766 has 39 MA's), (28, 42625), (30, 42610), (32, 42592), (46, 42460), (58, 42304),

Gene: Dennebes_86 Start: 42179, Stop: 41718, Start Num: 12

Candidate Starts for Dennebes_86:

(7, 42230), (Start: 12 @42179 has 39 MA's), (29, 42038), (44, 41891), (46, 41888), (47, 41882), (53, 41834),

Gene: Fabian_80 Start: 42413, Stop: 41934, Start Num: 12

Candidate Starts for Fabian_80:

(Start: 12 @42413 has 39 MA's), (23, 42320), (24, 42311), (25, 42305),

Gene: Fabian_81 Start: 42989, Stop: 42498, Start Num: 12

Candidate Starts for Fabian_81:

(2, 43076), (10, 43028), (Start: 12 @42989 has 39 MA's), (16, 42950), (19, 42935), (28, 42851), (34, 42791), (42, 42701), (48, 42674), (49, 42659), (57, 42533),

Gene: FlowerPower_81 Start: 42041, Stop: 41562, Start Num: 12

Candidate Starts for FlowerPower_81:

(Start: 12 @42041 has 39 MA's), (23, 41948), (24, 41939), (25, 41933),

Gene: FlowerPower_82 Start: 42617, Stop: 42126, Start Num: 12

Candidate Starts for FlowerPower_82:

(2, 42704), (10, 42656), (Start: 12 @42617 has 39 MA's), (16, 42578), (19, 42563), (28, 42479), (34, 42419), (42, 42329), (48, 42302), (49, 42287), (57, 42161),

Gene: Geostin_76 Start: 42083, Stop: 41604, Start Num: 12

Candidate Starts for Geostin_76:

(Start: 12 @42083 has 39 MA's), (23, 41990), (24, 41981), (25, 41975),

Gene: Geostin_77 Start: 42659, Stop: 42168, Start Num: 12

Candidate Starts for Geostin_77:

(2, 42746), (10, 42698), (Start: 12 @42659 has 39 MA's), (16, 42620), (19, 42605), (28, 42521), (34, 42461), (42, 42371), (48, 42344), (49, 42329), (57, 42203),

Gene: Gremlin23_82 Start: 42659, Stop: 42168, Start Num: 12

Candidate Starts for Gremlin23_82:

(2, 42746), (10, 42698), (Start: 12 @42659 has 39 MA's), (16, 42620), (19, 42605), (28, 42521), (34, 42461), (42, 42371), (48, 42344), (49, 42329), (57, 42203),

Gene: Gremlin23_81 Start: 42083, Stop: 41604, Start Num: 12

Candidate Starts for Gremlin23_81:

(Start: 12 @42083 has 39 MA's), (23, 41990), (24, 41981), (25, 41975),

Gene: HaugeAnator_83 Start: 42854, Stop: 42390, Start Num: 12

Candidate Starts for HaugeAnator_83:

(Start: 12 @42854 has 39 MA's), (22, 42761), (23, 42758), (41, 42563), (46, 42539), (50, 42512),

Gene: HaugeAnator_82 Start: 42298, Stop: 41822, Start Num: 12

Candidate Starts for HaugeAnator_82:

(Start: 12 @42298 has 39 MA's), (20, 42226), (21, 42214), (25, 42190), (38, 42040), (43, 42001), (51, 41947), (54, 41917), (56, 41863),

Gene: Immanuel3_80 Start: 42303, Stop: 41827, Start Num: 12

Candidate Starts for Immanuel3_80:

(Start: 12 @42303 has 39 MA's), (20, 42231), (21, 42219), (25, 42195), (38, 42045), (43, 42006), (51, 41952), (54, 41922), (56, 41868),

Gene: Immanuel3_81 Start: 42859, Stop: 42395, Start Num: 12

Candidate Starts for Immanuel3_81:

(4, 42937), (9, 42907), (Start: 12 @42859 has 39 MA's), (22, 42766), (23, 42763), (41, 42568), (46, 42544), (50, 42517),

Gene: JPandJE_81 Start: 42649, Stop: 42173, Start Num: 12

Candidate Starts for JPandJE_81:

(Start: 12 @42649 has 39 MA's), (20, 42577), (25, 42541), (36, 42448), (38, 42391), (51, 42298), (54, 42268), (56, 42214),

Gene: JPandJE_82 Start: 43204, Stop: 42740, Start Num: 12

Candidate Starts for JPandJE_82:

(4, 43282), (9, 43252), (Start: 12 @43204 has 39 MA's), (15, 43165), (22, 43111), (25, 43093), (41, 42913), (50, 42862),

Gene: Kumquat_79 Start: 40891, Stop: 40343, Start Num: 3

Candidate Starts for Kumquat_79:

(Start: 3 @40891 has 3 MA's), (Start: 12 @40810 has 39 MA's), (14, 40783), (46, 40504), (52, 40459), (55, 40426),

Gene: Kumquat_80 Start: 41372, Stop: 40905, Start Num: 12

Candidate Starts for Kumquat_80:

(Start: 12 @41372 has 39 MA's), (19, 41315), (22, 41276), (26, 41249), (28, 41228), (32, 41195), (35, 41159), (48, 41048),

Gene: Manuel_79 Start: 41367, Stop: 40891, Start Num: 12

Candidate Starts for Manuel_79:

(Start: 12 @41367 has 39 MA's), (17, 41325), (21, 41283), (46, 41052), (52, 41007),

Gene: Manuel_80 Start: 41935, Stop: 41459, Start Num: 12

Candidate Starts for Manuel_80:

(Start: 12 @41935 has 39 MA's), (13, 41929), (22, 41842), (28, 41794), (37, 41677), (39, 41665), (44, 41626),

Gene: Olacious_82 Start: 42301, Stop: 41825, Start Num: 12

Candidate Starts for Olacious_82:

(Start: 12 @42301 has 39 MA's), (20, 42229), (21, 42217), (25, 42193), (38, 42043), (43, 42004), (51, 41950), (54, 41920), (56, 41866),

Gene: Olacious_83 Start: 42857, Stop: 42393, Start Num: 12

Candidate Starts for Olacious_83:

(8, 42914), (Start: 12 @42857 has 39 MA's), (22, 42764), (23, 42761), (41, 42566), (46, 42542), (50, 42515),

Gene: Percastrophe_83 Start: 42788, Stop: 42324, Start Num: 12

Candidate Starts for Percastrophe_83:

(Start: 12 @42788 has 39 MA's), (17, 42737), (22, 42695), (41, 42497),

Gene: Percastrophe_82 Start: 42233, Stop: 41757, Start Num: 12

Candidate Starts for Percastrophe_82:

(Start: 12 @42233 has 39 MA's), (20, 42161), (25, 42125), (36, 42032), (38, 41975), (43, 41936), (51, 41882), (54, 41852), (56, 41798),

Gene: RetrieverFever_82 Start: 42659, Stop: 42168, Start Num: 12

Candidate Starts for RetrieverFever_82:

(2, 42746), (10, 42698), (Start: 12 @42659 has 39 MA's), (16, 42620), (19, 42605), (28, 42521), (34, 42461), (42, 42371), (48, 42344), (49, 42329), (57, 42203),

Gene: RetrieverFever_81 Start: 42083, Stop: 41604, Start Num: 12

Candidate Starts for RetrieverFever_81:

(Start: 12 @42083 has 39 MA's), (23, 41990), (24, 41981), (25, 41975),

Gene: Rideau_87 Start: 42657, Stop: 42166, Start Num: 12

Candidate Starts for Rideau_87:

(5, 42729), (Start: 12 @42657 has 39 MA's), (28, 42516), (30, 42501), (32, 42483), (46, 42351), (58, 42195),

Gene: Rideau_86 Start: 42070, Stop: 41609, Start Num: 12

Candidate Starts for Rideau_86:

(7, 42121), (Start: 12 @42070 has 39 MA's), (29, 41929), (44, 41782), (46, 41779), (47, 41773), (53, 41725),

Gene: Romero_82 Start: 42294, Stop: 41818, Start Num: 12

Candidate Starts for Romero_82:

(Start: 12 @42294 has 39 MA's), (20, 42222), (21, 42210), (25, 42186), (38, 42036), (43, 41997), (51, 41943), (54, 41913), (56, 41859),

Gene: Romero_83 Start: 42850, Stop: 42386, Start Num: 12

Candidate Starts for Romero_83:

(Start: 12 @42850 has 39 MA's), (17, 42799), (22, 42757), (23, 42754), (41, 42559), (46, 42535), (50, 42508),

Gene: RosePharie_83 Start: 42438, Stop: 41962, Start Num: 12

Candidate Starts for RosePharie_83:

(1, 43002), (4, 42516), (5, 42513), (8, 42495), (Start: 12 @42438 has 39 MA's), (16, 42396), (22, 42345), (27, 42300), (32, 42264), (40, 42165), (44, 42129), (49, 42102),

Gene: RosePharie_82 Start: 41867, Stop: 41391, Start Num: 12

Candidate Starts for RosePharie_82:

(Start: 12 @41867 has 39 MA's), (26, 41753), (43, 41573), (45, 41558), (52, 41510), (54, 41489),

Gene: Stella_83 Start: 42339, Stop: 41845, Start Num: 12

Candidate Starts for Stella_83:

(6, 42390), (Start: 12 @42339 has 39 MA's), (18, 42294), (19, 42291), (33, 42174), (45, 42033), (47, 42024),

Gene: Stella_84 Start: 42918, Stop: 42427, Start Num: 12

Candidate Starts for Stella_84:

(11, 42942), (Start: 12 @42918 has 39 MA's), (27, 42780), (31, 42759), (41, 42636), (57, 42462),

Gene: ToriToki_82 Start: 42297, Stop: 41821, Start Num: 12

Candidate Starts for ToriToki_82:

(Start: 12 @42297 has 39 MA's), (20, 42225), (21, 42213), (25, 42189), (38, 42039), (43, 42000), (51, 41946), (54, 41916), (56, 41862),

Gene: ToriToki_83 Start: 42853, Stop: 42389, Start Num: 12

Candidate Starts for ToriToki_83:

(4, 42931), (9, 42901), (Start: 12 @42853 has 39 MA's), (22, 42760), (23, 42757), (41, 42562), (46, 42538), (50, 42511),

Gene: Treat_82 Start: 42168, Stop: 41692, Start Num: 12

Candidate Starts for Treat_82:

(Start: 12 @42168 has 39 MA's), (20, 42096), (22, 42078), (25, 42060), (36, 41967), (43, 41871), (51, 41817), (54, 41787), (56, 41733),

Gene: Treat_83 Start: 42728, Stop: 42264, Start Num: 12

Candidate Starts for Treat_83:

(Start: 12 @42728 has 39 MA's), (17, 42677), (22, 42635), (46, 42413),

Gene: Vorvolakos_82 Start: 42082, Stop: 41603, Start Num: 12

Candidate Starts for Vorvolakos_82:

(Start: 12 @42082 has 39 MA's), (23, 41989), (24, 41980), (25, 41974),

Gene: Vorvolakos_83 Start: 42658, Stop: 42167, Start Num: 12

Candidate Starts for Vorvolakos_83:

(2, 42745), (10, 42697), (Start: 12 @42658 has 39 MA's), (16, 42619), (19, 42604), (28, 42520), (34, 42460), (42, 42370), (48, 42343), (49, 42328), (57, 42202),

Gene: WRightOn_83 Start: 41047, Stop: 40499, Start Num: 3

Candidate Starts for WRightOn_83:

(Start: 3 @41047 has 3 MA's), (Start: 12 @40966 has 39 MA's), (14, 40939), (46, 40660), (52, 40615), (55, 40582),

Gene: WRightOn_84 Start: 41528, Stop: 41061, Start Num: 12

Candidate Starts for WRightOn_84:

(Start: 12 @41528 has 39 MA's), (19, 41471), (22, 41432), (26, 41405), (28, 41384), (32, 41351), (36, 41312), (48, 41204),

Gene: Zeigle_79 Start: 40891, Stop: 40343, Start Num: 3

Candidate Starts for Zeigle_79:

(Start: 3 @40891 has 3 MA's), (Start: 12 @40810 has 39 MA's), (14, 40783), (46, 40504), (52, 40459), (55, 40426),

Gene: Zeigle_80 Start: 41372, Stop: 40905, Start Num: 12

Candidate Starts for Zeigle_80:

(Start: 12 @41372 has 39 MA's), (19, 41315), (22, 41276), (26, 41249), (28, 41228), (32, 41195), (35, 41159), (48, 41048),

Gene: ZooBear_82 Start: 42298, Stop: 41822, Start Num: 12

Candidate Starts for ZooBear_82:

(Start: 12 @42298 has 39 MA's), (20, 42226), (21, 42214), (25, 42190), (38, 42040), (43, 42001), (51, 41947), (54, 41917), (56, 41863),

Gene: ZooBear_83 Start: 42854, Stop: 42390, Start Num: 12

Candidate Starts for ZooBear_83:

(Start: 12 @42854 has 39 MA's), (22, 42761), (23, 42758), (41, 42563), (46, 42539), (50, 42512),