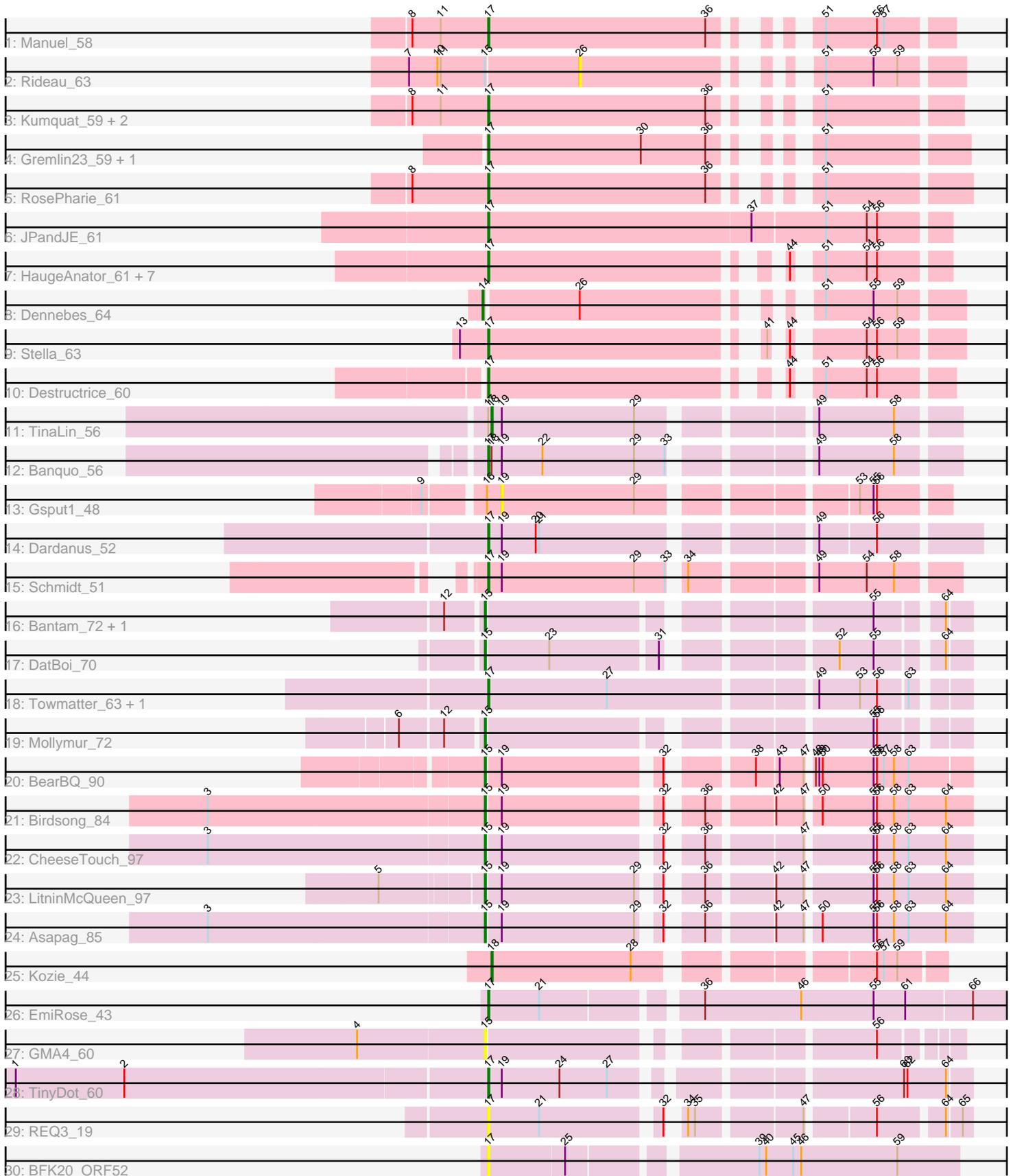


Pham 291306



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 291306 Report

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

Pham number 291306 has 42 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Manuel_58
- Track 2 : Rideau_63
- Track 3 : Kumquat_59, WRightOn_63, Zeigle_59
- Track 4 : Gremlin23_59, Vorvolakos_59
- Track 5 : RosePharie_61
- Track 6 : JPandJE_61
- Track 7 : HaugeAnator_61, ZooBear_61, Olicious_61, Treat_61, Immanuel3_60, Romero_61, Percastrophe_61, ToriToki_61
- Track 8 : Dennebes_64
- Track 9 : Stella_63
- Track 10 : Destructrice_60
- Track 11 : TinaLin_56
- Track 12 : Banquo_56
- Track 13 : Gspu1_48
- Track 14 : Dardanus_52
- Track 15 : Schmidt_51
- Track 16 : Bantam_72, SpeedDemon_740
- Track 17 : DatBoi_70
- Track 18 : Towmatter_63, Daredevil_63
- Track 19 : Mollymur_72
- Track 20 : BearBQ_90
- Track 21 : Birdsong_84
- Track 22 : CheeseTouch_97
- Track 23 : LitninMcQueen_97
- Track 24 : Asapag_85
- Track 25 : Kozie_44
- Track 26 : EmiRose_43
- Track 27 : GMA4_60
- Track 28 : TinyDot_60
- Track 29 : REQ3_19
- Track 30 : BFK20_ORF52

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

The start number called the most often in the published annotations is 17, it was called in 25 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BFK20_ORF52, Banquo_56, Dardanus_52, Daredevil_63, Destructrice_60, EmiRose_43, Gremlin23_59, HaugeAnator_61, Immanuel3_60, JPandJE_61, Kumquat_59, Manuel_58, Olicious_61, Percastrophe_61, REQ3_19, Romero_61, RosePharie_61, Schmidt_51, Stella_63, TinyDot_60, ToriToki_61, Towmatter_63, Treat_61, Vorvolakos_59, WRightOn_63, Zeigle_59, ZooBear_61,

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

- TinaLin_56,

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

- Asapag_85, Bantam_72, BearBQ_90, Birdsong_84, CheeseTouch_97, DatBoi_70, Dennebes_64, GMA4_60, Gsput1_48, Kozie_44, LitninMcQueen_97, Mollymur_72, Rideau_63, SpeedDemon_740,

Summary by start number:

Start 14:

- 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: Dennebes_64 (BF),

Start 15:

- Found in 11 of 42 (26.2%) of genes in pham
- Manual Annotations of this start: 9 of 37
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Asapag_85 (DN1), Bantam_72 (DL), BearBQ_90 (DN), Birdsong_84 (DN), CheeseTouch_97 (DN1), DatBoi_70 (DL), GMA4_60 (singleton), LitninMcQueen_97 (DN1), Mollymur_72 (DL), SpeedDemon_740 (DL),

Start 17:

- Found in 28 of 42 (66.7%) of genes in pham
- Manual Annotations of this start: 25 of 37
- Called 96.4% of time when present
- Phage (with cluster) where this start called: BFK20_ORF52 (singleton), Banquo_56 (CU1), Dardanus_52 (CU3), Daredevil_63 (DL), Destructrice_60 (BF), EmiRose_43 (singleton), Gremlin23_59 (BF), HaugeAnator_61 (BF), Immanuel3_60 (BF), JPandJE_61 (BF), Kumquat_59 (BF), Manuel_58 (BF), Olicious_61 (BF), Percastrophe_61 (BF), REQ3_19 (singleton), Romero_61 (BF), RosePharie_61 (BF), Schmidt_51 (CU4), Stella_63 (BF), TinyDot_60 (singleton), ToriToki_61 (BF), Towmatter_63 (DL), Treat_61 (BF), Vorvolakos_59 (BF), WRightOn_63 (BF), Zeigle_59 (BF), ZooBear_61 (BF),

Start 18:

- Found in 3 of 42 (7.1%) of genes in pham
- Manual Annotations of this start: 2 of 37
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Kozie_44 (EI), TinaLin_56 (CU1),

Start 19:

- Found in 11 of 42 (26.2%) of genes in pham
- No Manual Annotations of this start.
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Gspu1_48 (CU2),

Start 26:

- Found in 2 of 42 (4.8%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Rideau_63 (BF),

Summary by clusters:

There are 10 clusters represented in this pham: DN, DL, CU4, EI, CU2, CU1, singleton, BF, DN1, CU3,

Info for manual annotations of cluster BF:

- Start number 14 was manually annotated 1 time for cluster BF.
- Start number 17 was manually annotated 18 times for cluster BF.

Info for manual annotations of cluster CU1:

- Start number 17 was manually annotated 1 time for cluster CU1.
- Start number 18 was manually annotated 1 time for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 17 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 17 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster DL:

- Start number 15 was manually annotated 4 times for cluster DL.
- Start number 17 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster DN:

- Start number 15 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 15 was manually annotated 3 times for cluster DN1.

Info for manual annotations of cluster EI:

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

Gene Information:

Gene: Asapag_85 Start: 49353, Stop: 49730, Start Num: 15

Candidate Starts for Asapag_85:

(3, 49113), (Start: 15 @49353 has 9 MA's), (19, 49365), (29, 49482), (32, 49494), (36, 49515), (42, 49566), (47, 49590), (50, 49599), (55, 49644), (56, 49647), (58, 49662), (63, 49674), (64, 49707),

Gene: BFK20_ORF52 Start: 41172, Stop: 41558, Start Num: 17

Candidate Starts for BFK20_ORF52:

(Start: 17 @41172 has 25 MA's), (25, 41238), (39, 41385), (40, 41391), (45, 41415), (46, 41421), (59, 41505),

Gene: Banquo_56 Start: 37048, Stop: 37422, Start Num: 17

Candidate Starts for Banquo_56:

(Start: 17 @37048 has 25 MA's), (Start: 18 @37051 has 2 MA's), (19, 37060), (22, 37096), (29, 37177), (33, 37204), (49, 37306), (58, 37372),

Gene: Bantam_72 Start: 52490, Stop: 52125, Start Num: 15

Candidate Starts for Bantam_72:

(12, 52520), (Start: 15 @52490 has 9 MA's), (55, 52193), (64, 52145),

Gene: BearBQ_90 Start: 50811, Stop: 51185, Start Num: 15

Candidate Starts for BearBQ_90:

(Start: 15 @50811 has 9 MA's), (19, 50823), (32, 50952), (38, 51009), (43, 51027), (47, 51048), (48, 51051), (49, 51054), (50, 51057), (55, 51102), (56, 51105), (57, 51111), (58, 51120), (63, 51132),

Gene: Birdsong_84 Start: 49089, Stop: 49466, Start Num: 15

Candidate Starts for Birdsong_84:

(3, 48849), (Start: 15 @49089 has 9 MA's), (19, 49101), (32, 49230), (36, 49251), (42, 49302), (47, 49326), (50, 49335), (55, 49380), (56, 49383), (58, 49398), (63, 49410), (64, 49443),

Gene: CheeseTouch_97 Start: 48676, Stop: 49053, Start Num: 15

Candidate Starts for CheeseTouch_97:

(3, 48436), (Start: 15 @48676 has 9 MA's), (19, 48688), (32, 48817), (36, 48838), (47, 48913), (55, 48967), (56, 48970), (58, 48985), (63, 48997), (64, 49030),

Gene: Dardanus_52 Start: 35477, Stop: 35866, Start Num: 17

Candidate Starts for Dardanus_52:

(Start: 17 @35477 has 25 MA's), (19, 35489), (20, 35519), (21, 35522), (49, 35735), (56, 35783),

Gene: Daredevil_63 Start: 48481, Stop: 48092, Start Num: 17

Candidate Starts for Daredevil_63:

(Start: 17 @48481 has 25 MA's), (27, 48376), (49, 48208), (53, 48172), (56, 48157), (63, 48133),

Gene: DatBoi_70 Start: 52480, Stop: 52115, Start Num: 15

Candidate Starts for DatBoi_70:

(Start: 15 @52480 has 9 MA's), (23, 52426), (31, 52336), (52, 52213), (55, 52183), (64, 52135),

Gene: Dennebes_64 Start: 31702, Stop: 31352, Start Num: 14

Candidate Starts for Dennebes_64:

(Start: 14 @31702 has 1 MA's), (26, 31621), (51, 31465), (55, 31423), (59, 31402),

Gene: Destructrice_60 Start: 31598, Stop: 31254, Start Num: 17

Candidate Starts for Destructrice_60:

(Start: 17 @31598 has 25 MA's), (44, 31373), (51, 31358), (54, 31322), (56, 31313),

Gene: EmiRose_43 Start: 35914, Stop: 36360, Start Num: 17

Candidate Starts for EmiRose_43:

(Start: 17 @35914 has 25 MA's), (21, 35959), (36, 36082), (46, 36166), (55, 36229), (61, 36256), (66, 36313),

Gene: GMA4_60 Start: 40216, Stop: 40572, Start Num: 15

Candidate Starts for GMA4_60:

(4, 40105), (Start: 15 @40216 has 9 MA's), (56, 40510),

Gene: Gremlin23_59 Start: 31138, Stop: 30782, Start Num: 17

Candidate Starts for Gremlin23_59:

(Start: 17 @31138 has 25 MA's), (30, 31003), (36, 30946), (51, 30898),

Gene: Gspu1_48 Start: 35124, Stop: 35474, Start Num: 19

Candidate Starts for Gspu1_48:

(9, 35067), (16, 35112), (19, 35124), (29, 35241), (53, 35403), (55, 35415), (56, 35418),

Gene: HaugeAnator_61 Start: 31665, Stop: 31324, Start Num: 17

Candidate Starts for HaugeAnator_61:

(Start: 17 @31665 has 25 MA's), (44, 31440), (51, 31425), (54, 31389), (56, 31380),

Gene: Immanuel3_60 Start: 31668, Stop: 31327, Start Num: 17

Candidate Starts for Immanuel3_60:

(Start: 17 @31668 has 25 MA's), (44, 31443), (51, 31428), (54, 31392), (56, 31383),

Gene: JPandJE_61 Start: 32184, Stop: 31789, Start Num: 17

Candidate Starts for JPandJE_61:

(Start: 17 @32184 has 25 MA's), (37, 31953), (51, 31890), (54, 31854), (56, 31845),

Gene: Kozie_44 Start: 32286, Stop: 32642, Start Num: 18

Candidate Starts for Kozie_44:

(Start: 18 @32286 has 2 MA's), (28, 32409), (56, 32586), (57, 32592), (59, 32604),

Gene: Kumquat_59 Start: 31123, Stop: 30773, Start Num: 17

Candidate Starts for Kumquat_59:

(8, 31189), (11, 31165), (Start: 17 @31123 has 25 MA's), (36, 30931), (51, 30883),

Gene: LitninMcQueen_97 Start: 51856, Stop: 52233, Start Num: 15

Candidate Starts for LitninMcQueen_97:

(5, 51772), (Start: 15 @51856 has 9 MA's), (19, 51868), (29, 51985), (32, 51997), (36, 52018), (42, 52069), (47, 52093), (55, 52147), (56, 52150), (58, 52165), (63, 52177), (64, 52210),

Gene: Manuel_58 Start: 31424, Stop: 31080, Start Num: 17

Candidate Starts for Manuel_58:

(8, 31490), (11, 31466), (Start: 17 @31424 has 25 MA's), (36, 31232), (51, 31184), (56, 31139), (57, 31133),

Gene: Mollymur_72 Start: 52998, Stop: 52633, Start Num: 15

Candidate Starts for Mollymur_72:

(6, 53064), (12, 53028), (Start: 15 @52998 has 9 MA's), (55, 52701), (56, 52698),

Gene: Olicious_61 Start: 31665, Stop: 31324, Start Num: 17

Candidate Starts for Olicious_61:

(Start: 17 @31665 has 25 MA's), (44, 31440), (51, 31425), (54, 31389), (56, 31380),

Gene: Percastrophe_61 Start: 31599, Stop: 31258, Start Num: 17
Candidate Starts for Percastrophe_61:
(Start: 17 @31599 has 25 MA's), (44, 31374), (51, 31359), (54, 31323), (56, 31314),

Gene: REQ3_19 Start: 8920, Stop: 9282, Start Num: 17
Candidate Starts for REQ3_19:
(Start: 17 @8920 has 25 MA's), (21, 8965), (32, 9061), (34, 9067), (35, 9073), (47, 9157), (56, 9211),
(64, 9262), (65, 9274),

Gene: Rideau_63 Start: 31621, Stop: 31352, Start Num: 26
Candidate Starts for Rideau_63:
(7, 31768), (10, 31744), (11, 31741), (Start: 15 @31702 has 9 MA's), (26, 31621), (51, 31465), (55,
31423), (59, 31402),

Gene: Romero_61 Start: 31658, Stop: 31317, Start Num: 17
Candidate Starts for Romero_61:
(Start: 17 @31658 has 25 MA's), (44, 31433), (51, 31418), (54, 31382), (56, 31373),

Gene: RosePharie_61 Start: 31485, Stop: 31126, Start Num: 17
Candidate Starts for RosePharie_61:
(8, 31551), (Start: 17 @31485 has 25 MA's), (36, 31293), (51, 31245),

Gene: Schmidt_51 Start: 34772, Stop: 35146, Start Num: 17
Candidate Starts for Schmidt_51:
(Start: 17 @34772 has 25 MA's), (19, 34784), (29, 34901), (33, 34928), (34, 34934), (49, 35030), (54,
35072), (58, 35096),

Gene: SpeedDemon_740 Start: 54721, Stop: 54356, Start Num: 15
Candidate Starts for SpeedDemon_740:
(12, 54751), (Start: 15 @54721 has 9 MA's), (55, 54424), (64, 54376),

Gene: Stella_63 Start: 32170, Stop: 31820, Start Num: 17
Candidate Starts for Stella_63:
(13, 32194), (Start: 17 @32170 has 25 MA's), (41, 31954), (44, 31948), (54, 31897), (56, 31888), (59,
31870),

Gene: TinaLin_56 Start: 36975, Stop: 37346, Start Num: 18
Candidate Starts for TinaLin_56:
(Start: 17 @36972 has 25 MA's), (Start: 18 @36975 has 2 MA's), (19, 36984), (29, 37101), (49, 37230),
(58, 37296),

Gene: TinyDot_60 Start: 38014, Stop: 38394, Start Num: 17
Candidate Starts for TinyDot_60:
(1, 37603), (2, 37699), (Start: 17 @38014 has 25 MA's), (19, 38026), (24, 38077), (27, 38119), (60,
38338), (62, 38341), (64, 38374),

Gene: ToriToki_61 Start: 31661, Stop: 31320, Start Num: 17
Candidate Starts for ToriToki_61:
(Start: 17 @31661 has 25 MA's), (44, 31436), (51, 31421), (54, 31385), (56, 31376),

Gene: Towmatter_63 Start: 48560, Stop: 48171, Start Num: 17
Candidate Starts for Towmatter_63:

(Start: 17 @48560 has 25 MA's), (27, 48455), (49, 48287), (53, 48251), (56, 48236), (63, 48212),

Gene: Treat_61 Start: 31602, Stop: 31261, Start Num: 17

Candidate Starts for Treat_61:

(Start: 17 @31602 has 25 MA's), (44, 31377), (51, 31362), (54, 31326), (56, 31317),

Gene: Vorvolakos_59 Start: 31137, Stop: 30781, Start Num: 17

Candidate Starts for Vorvolakos_59:

(Start: 17 @31137 has 25 MA's), (30, 31002), (36, 30945), (51, 30897),

Gene: WRightOn_63 Start: 31279, Stop: 30929, Start Num: 17

Candidate Starts for WRightOn_63:

(8, 31345), (11, 31321), (Start: 17 @31279 has 25 MA's), (36, 31087), (51, 31039),

Gene: Zeigle_59 Start: 31123, Stop: 30773, Start Num: 17

Candidate Starts for Zeigle_59:

(8, 31189), (11, 31165), (Start: 17 @31123 has 25 MA's), (36, 30931), (51, 30883),

Gene: ZooBear_61 Start: 31665, Stop: 31324, Start Num: 17

Candidate Starts for ZooBear_61:

(Start: 17 @31665 has 25 MA's), (44, 31440), (51, 31425), (54, 31389), (56, 31380),