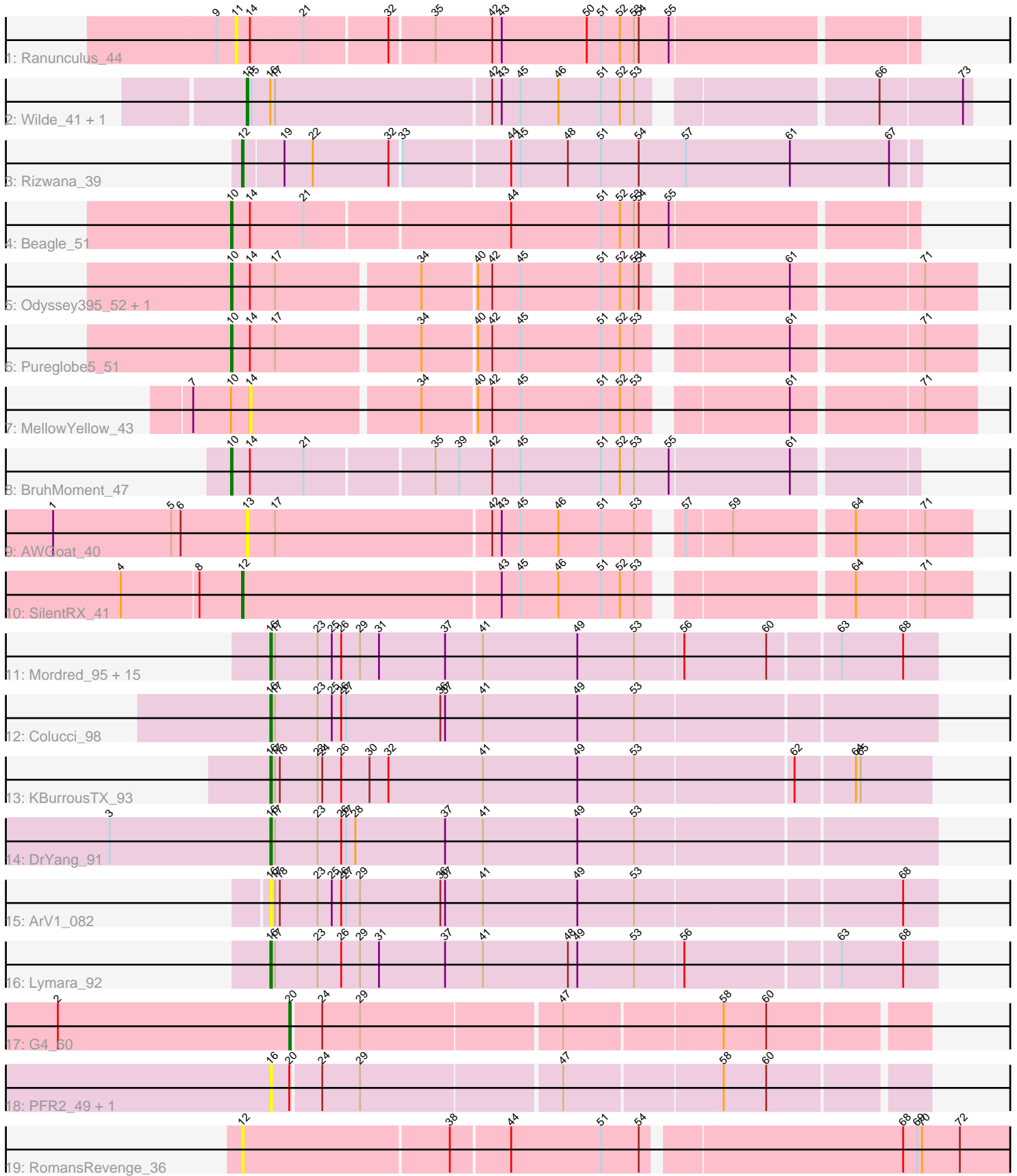


Pham 163763



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 163763 Report

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

Pham number 163763 has 37 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Ranunculus_44
- Track 2 : Wilde_41, Tank_41
- Track 3 : Rizwana_39
- Track 4 : Beagle_51
- Track 5 : Odyssey395_52, Pointis_48
- Track 6 : Pureglobe5_51
- Track 7 : MellowYellow_43
- Track 8 : BruhMoment_47
- Track 9 : AWGoat_40
- Track 10 : SilentRX_41
- Track 11 : Mordred_95, HumptyDumpty_95, PrincessTrina_96, JayCookie_95, Chubster_95, JaNo_94, RosiePosie_95, Conboy_93, EdgarPoe_94, Linus_95, Tophat_96, Chocolat_95, MoyaNatalis_94, Kabreeze_95, Chipper1996_960, Scavito_96
- Track 12 : Colucci_98
- Track 13 : KBurrousTX_93
- Track 14 : DrYang_91
- Track 15 : ArV1_082
- Track 16 : Lymara_92
- Track 17 : G4_60
- Track 18 : PFR2_49, PFR1_47
- Track 19 : RomansRevenge_36

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

The start number called the most often in the published annotations is 16, it was called in 18 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArV1_082, Chipper1996_960, Chocolat_95, Chubster_95, Colucci_98, Conboy_93, DrYang_91, EdgarPoe_94, HumptyDumpty_95, JaNo_94, JayCookie_95, KBurrousTX_93, Kabreeze_95, Linus_95, Lymara_92, Mordred_95, MoyaNatalis_94, PFR1_47, PFR2_49, PrincessTrina_96, RosiePosie_95, Scavito_96, Tophat_96,

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

- Tank_41, Wilde_41,

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

- AWGoat_40, Beagle_51, BruhMoment_47, G4_60, MellowYellow_43, Odyssey395_52, Pointis_48, Pureglobe5_51, Ranunculus_44, Rizwana_39, RomansRevenge_36, SilentRX_41,

Summary by start number:

Start 10:

- Found in 6 of 37 (16.2%) of genes in pham
- Manual Annotations of this start: 4 of 27
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Beagle_51 (AP2), BruhMoment_47 (AP3), Odyssey395_52 (AP2), Pointis_48 (AP2), Pureglobe5_51 (AP2),

Start 11:

- Found in 1 of 37 (2.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ranunculus_44 (AP),

Start 12:

- Found in 3 of 37 (8.1%) of genes in pham
- Manual Annotations of this start: 2 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rizwana_39 (AP1), RomansRevenge_36 (singleton), SilentRX_41 (AP4),

Start 13:

- Found in 3 of 37 (8.1%) of genes in pham
- Manual Annotations of this start: 2 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat_40 (AP4), Tank_41 (AP1), Wilde_41 (AP1),

Start 14:

- Found in 7 of 37 (18.9%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: MellowYellow_43 (AP2),

Start 16:

- Found in 25 of 37 (67.6%) of genes in pham
- Manual Annotations of this start: 18 of 27
- Called 92.0% of time when present
- Phage (with cluster) where this start called: ArV1_082 (AR), Chipper1996_960 (AR), Chocolat_95 (AR), Chubster_95 (AR), Colucci_98 (AR), Conboy_93 (AR), DrYang_91 (AR), EdgarPoe_94 (AR), HumptyDumpty_95 (AR), JaNo_94 (AR), JayCookie_95 (AR), KBurrousTX_93 (AR), Kabreeze_95 (AR), Linus_95 (AR), Lymara_92 (AR), Mordred_95 (AR), MoyaNatalis_94 (AR), PFR1_47 (BX), PFR2_49 (BX), PrincessTrina_96 (AR), RosiePosie_95 (AR), Scavito_96 (AR), Tophat_96

(AR),

Start 20:

- Found in 3 of 37 (8.1%) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 33.3% of time when present
- Phage (with cluster) where this start called: G4_60 (BW),

Summary by clusters:

There are 9 clusters represented in this pham: singleton, AP2, AP3, AP1, AP4, BW, AP, AR, BX,

Info for manual annotations of cluster AP1:

- Start number 12 was manually annotated 1 time for cluster AP1.
- Start number 13 was manually annotated 2 times for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 10 was manually annotated 3 times for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 10 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 12 was manually annotated 1 time for cluster AP4.

Info for manual annotations of cluster AR:

- Start number 16 was manually annotated 18 times for cluster AR.

Info for manual annotations of cluster BW:

- Start number 20 was manually annotated 1 time for cluster BW.

Gene Information:

Gene: AWGoat_40 Start: 35301, Stop: 34870, Start Num: 13

Candidate Starts for AWGoat_40:

(1, 35424), (5, 35349), (6, 35343), (Start: 13 @35301 has 2 MA's), (17, 35283), (42, 35148), (43, 35142), (45, 35130), (46, 35106), (51, 35079), (53, 35058), (57, 35040), (59, 35013), (64, 34941), (71, 34899),

Gene: ArV1_082 Start: 60520, Stop: 60933, Start Num: 16

Candidate Starts for ArV1_082:

(Start: 16 @60520 has 18 MA's), (17, 60523), (18, 60526), (23, 60550), (25, 60559), (26, 60565), (27, 60568), (29, 60577), (36, 60628), (37, 60631), (41, 60655), (49, 60715), (53, 60751), (68, 60913),

Gene: Beagle_51 Start: 38228, Stop: 37809, Start Num: 10

Candidate Starts for Beagle_51:

(Start: 10 @38228 has 4 MA's), (14, 38216), (21, 38183), (44, 38057), (51, 38000), (52, 37988), (53, 37979), (54, 37976), (55, 37958),

Gene: BruhMoment_47 Start: 39339, Stop: 38920, Start Num: 10

Candidate Starts for BruhMoment_47:

(Start: 10 @39339 has 4 MA's), (14, 39327), (21, 39294), (35, 39216), (39, 39201), (42, 39180), (45, 39162), (51, 39111), (52, 39099), (53, 39090), (55, 39069), (61, 38994),

Gene: Chipper1996_960 Start: 62228, Stop: 62641, Start Num: 16

Candidate Starts for Chipper1996_960:

(Start: 16 @62228 has 18 MA's), (17, 62231), (23, 62258), (25, 62267), (26, 62273), (29, 62285), (31, 62297), (37, 62339), (41, 62363), (49, 62423), (53, 62459), (56, 62489), (60, 62540), (63, 62582), (68, 62621),

Gene: Chocolat_95 Start: 61935, Stop: 62348, Start Num: 16

Candidate Starts for Chocolat_95:

(Start: 16 @61935 has 18 MA's), (17, 61938), (23, 61965), (25, 61974), (26, 61980), (29, 61992), (31, 62004), (37, 62046), (41, 62070), (49, 62130), (53, 62166), (56, 62196), (60, 62247), (63, 62289), (68, 62328),

Gene: Chubster_95 Start: 62175, Stop: 62588, Start Num: 16

Candidate Starts for Chubster_95:

(Start: 16 @62175 has 18 MA's), (17, 62178), (23, 62205), (25, 62214), (26, 62220), (29, 62232), (31, 62244), (37, 62286), (41, 62310), (49, 62370), (53, 62406), (56, 62436), (60, 62487), (63, 62529), (68, 62568),

Gene: Colucci_98 Start: 62563, Stop: 62976, Start Num: 16

Candidate Starts for Colucci_98:

(Start: 16 @62563 has 18 MA's), (17, 62566), (23, 62593), (25, 62602), (26, 62608), (27, 62611), (36, 62671), (37, 62674), (41, 62698), (49, 62758), (53, 62794),

Gene: Conboy_93 Start: 61684, Stop: 62097, Start Num: 16

Candidate Starts for Conboy_93:

(Start: 16 @61684 has 18 MA's), (17, 61687), (23, 61714), (25, 61723), (26, 61729), (29, 61741), (31, 61753), (37, 61795), (41, 61819), (49, 61879), (53, 61915), (56, 61945), (60, 61996), (63, 62038), (68, 62077),

Gene: DrYang_91 Start: 61721, Stop: 62134, Start Num: 16

Candidate Starts for DrYang_91:

(3, 61619), (Start: 16 @61721 has 18 MA's), (17, 61724), (23, 61751), (26, 61766), (27, 61769), (28, 61775), (37, 61832), (41, 61856), (49, 61916), (53, 61952),

Gene: EdgarPoe_94 Start: 62092, Stop: 62505, Start Num: 16

Candidate Starts for EdgarPoe_94:

(Start: 16 @62092 has 18 MA's), (17, 62095), (23, 62122), (25, 62131), (26, 62137), (29, 62149), (31, 62161), (37, 62203), (41, 62227), (49, 62287), (53, 62323), (56, 62353), (60, 62404), (63, 62446), (68, 62485),

Gene: G4_60 Start: 34029, Stop: 34412, Start Num: 20

Candidate Starts for G4_60:

(2, 33882), (Start: 20 @34029 has 1 MA's), (24, 34047), (29, 34071), (47, 34194), (58, 34290), (60, 34317),

Gene: HumptyDumpty_95 Start: 61895, Stop: 62308, Start Num: 16

Candidate Starts for HumptyDumpty_95:

(Start: 16 @61895 has 18 MA's), (17, 61898), (23, 61925), (25, 61934), (26, 61940), (29, 61952), (31, 61964), (37, 62006), (41, 62030), (49, 62090), (53, 62126), (56, 62156), (60, 62207), (63, 62249), (68, 62288),

Gene: JaNo_94 Start: 61866, Stop: 62279, Start Num: 16

Candidate Starts for JaNo_94:

(Start: 16 @61866 has 18 MA's), (17, 61869), (23, 61896), (25, 61905), (26, 61911), (29, 61923), (31, 61935), (37, 61977), (41, 62001), (49, 62061), (53, 62097), (56, 62127), (60, 62178), (63, 62220), (68, 62259),

Gene: JayCookie_95 Start: 62428, Stop: 62841, Start Num: 16

Candidate Starts for JayCookie_95:

(Start: 16 @62428 has 18 MA's), (17, 62431), (23, 62458), (25, 62467), (26, 62473), (29, 62485), (31, 62497), (37, 62539), (41, 62563), (49, 62623), (53, 62659), (56, 62689), (60, 62740), (63, 62782), (68, 62821),

Gene: KBurrousTX_93 Start: 63304, Stop: 63714, Start Num: 16

Candidate Starts for KBurrousTX_93:

(Start: 16 @63304 has 18 MA's), (17, 63307), (18, 63310), (23, 63334), (24, 63337), (26, 63349), (30, 63367), (32, 63379), (41, 63439), (49, 63499), (53, 63535), (62, 63631), (64, 63667), (65, 63670),

Gene: Kabreeze_95 Start: 61952, Stop: 62365, Start Num: 16

Candidate Starts for Kabreeze_95:

(Start: 16 @61952 has 18 MA's), (17, 61955), (23, 61982), (25, 61991), (26, 61997), (29, 62009), (31, 62021), (37, 62063), (41, 62087), (49, 62147), (53, 62183), (56, 62213), (60, 62264), (63, 62306), (68, 62345),

Gene: Linus_95 Start: 62400, Stop: 62813, Start Num: 16

Candidate Starts for Linus_95:

(Start: 16 @62400 has 18 MA's), (17, 62403), (23, 62430), (25, 62439), (26, 62445), (29, 62457), (31, 62469), (37, 62511), (41, 62535), (49, 62595), (53, 62631), (56, 62661), (60, 62712), (63, 62754), (68, 62793),

Gene: Lymara_92 Start: 60859, Stop: 61272, Start Num: 16

Candidate Starts for Lymara_92:

(Start: 16 @60859 has 18 MA's), (17, 60862), (23, 60889), (26, 60904), (29, 60916), (31, 60928), (37, 60970), (41, 60994), (48, 61048), (49, 61054), (53, 61090), (56, 61120), (63, 61213), (68, 61252),

Gene: MellowYellow_43 Start: 36974, Stop: 36549, Start Num: 14

Candidate Starts for MellowYellow_43:

(7, 37010), (Start: 10 @36986 has 4 MA's), (14, 36974), (34, 36872), (40, 36839), (42, 36830), (45, 36812), (51, 36761), (52, 36749), (53, 36740), (61, 36659), (71, 36581),

Gene: Mordred_95 Start: 61991, Stop: 62404, Start Num: 16

Candidate Starts for Mordred_95:

(Start: 16 @61991 has 18 MA's), (17, 61994), (23, 62021), (25, 62030), (26, 62036), (29, 62048), (31, 62060), (37, 62102), (41, 62126), (49, 62186), (53, 62222), (56, 62252), (60, 62303), (63, 62345), (68, 62384),

Gene: MoyaNatalis_94 Start: 61874, Stop: 62287, Start Num: 16

Candidate Starts for MoyaNatalis_94:

(Start: 16 @61874 has 18 MA's), (17, 61877), (23, 61904), (25, 61913), (26, 61919), (29, 61931), (31, 61943), (37, 61985), (41, 62009), (49, 62069), (53, 62105), (56, 62135), (60, 62186), (63, 62228), (68,

62267),

Gene: Odyssey395_52 Start: 38270, Stop: 37833, Start Num: 10

Candidate Starts for Odyssey395_52:

(Start: 10 @38270 has 4 MA's), (14, 38258), (17, 38243), (34, 38156), (40, 38123), (42, 38114), (45, 38096), (51, 38045), (52, 38033), (53, 38024), (54, 38021), (61, 37943), (71, 37865),

Gene: PFR1_47 Start: 32984, Stop: 33379, Start Num: 16

Candidate Starts for PFR1_47:

(Start: 16 @32984 has 18 MA's), (Start: 20 @32996 has 1 MA's), (24, 33014), (29, 33038), (47, 33161), (58, 33257), (60, 33284),

Gene: PFR2_49 Start: 34553, Stop: 34948, Start Num: 16

Candidate Starts for PFR2_49:

(Start: 16 @34553 has 18 MA's), (Start: 20 @34565 has 1 MA's), (24, 34583), (29, 34607), (47, 34730), (58, 34826), (60, 34853),

Gene: Pointis_48 Start: 38268, Stop: 37831, Start Num: 10

Candidate Starts for Pointis_48:

(Start: 10 @38268 has 4 MA's), (14, 38256), (17, 38241), (34, 38154), (40, 38121), (42, 38112), (45, 38094), (51, 38043), (52, 38031), (53, 38022), (54, 38019), (61, 37941), (71, 37863),

Gene: PrincessTrina_96 Start: 62182, Stop: 62595, Start Num: 16

Candidate Starts for PrincessTrina_96:

(Start: 16 @62182 has 18 MA's), (17, 62185), (23, 62212), (25, 62221), (26, 62227), (29, 62239), (31, 62251), (37, 62293), (41, 62317), (49, 62377), (53, 62413), (56, 62443), (60, 62494), (63, 62536), (68, 62575),

Gene: Pureglobe5_51 Start: 38451, Stop: 38014, Start Num: 10

Candidate Starts for Pureglobe5_51:

(Start: 10 @38451 has 4 MA's), (14, 38439), (17, 38424), (34, 38337), (40, 38304), (42, 38295), (45, 38277), (51, 38226), (52, 38214), (53, 38205), (61, 38124), (71, 38046),

Gene: Ranunculus_44 Start: 40272, Stop: 39856, Start Num: 11

Candidate Starts for Ranunculus_44:

(9, 40284), (11, 40272), (14, 40263), (21, 40230), (32, 40179), (35, 40152), (42, 40116), (43, 40110), (50, 40056), (51, 40047), (52, 40035), (53, 40026), (54, 40023), (55, 40005),

Gene: Rizwana_39 Start: 36865, Stop: 36446, Start Num: 12

Candidate Starts for Rizwana_39:

(Start: 12 @36865 has 2 MA's), (19, 36841), (22, 36823), (32, 36775), (33, 36769), (44, 36703), (45, 36697), (48, 36667), (51, 36646), (54, 36622), (57, 36592), (61, 36526), (67, 36463),

Gene: RomansRevenge_36 Start: 34253, Stop: 33783, Start Num: 12

Candidate Starts for RomansRevenge_36:

(Start: 12 @34253 has 2 MA's), (38, 34124), (44, 34088), (51, 34031), (54, 34007), (68, 33851), (69, 33842), (70, 33839), (72, 33815),

Gene: RosiePosie_95 Start: 62047, Stop: 62460, Start Num: 16

Candidate Starts for RosiePosie_95:

(Start: 16 @62047 has 18 MA's), (17, 62050), (23, 62077), (25, 62086), (26, 62092), (29, 62104), (31, 62116), (37, 62158), (41, 62182), (49, 62242), (53, 62278), (56, 62308), (60, 62359), (63, 62401), (68, 62440),

Gene: Scavito_96 Start: 62040, Stop: 62453, Start Num: 16

Candidate Starts for Scavito_96:

(Start: 16 @62040 has 18 MA's), (17, 62043), (23, 62070), (25, 62079), (26, 62085), (29, 62097), (31, 62109), (37, 62151), (41, 62175), (49, 62235), (53, 62271), (56, 62301), (60, 62352), (63, 62394), (68, 62433),

Gene: SilentRX_41 Start: 36325, Stop: 35891, Start Num: 12

Candidate Starts for SilentRX_41:

(4, 36400), (8, 36352), (Start: 12 @36325 has 2 MA's), (43, 36163), (45, 36151), (46, 36127), (51, 36100), (52, 36088), (53, 36079), (64, 35962), (71, 35920),

Gene: Tank_41 Start: 36839, Stop: 36408, Start Num: 13

Candidate Starts for Tank_41:

(Start: 13 @36839 has 2 MA's), (15, 36836), (Start: 16 @36824 has 18 MA's), (17, 36821), (42, 36686), (43, 36680), (45, 36668), (46, 36644), (51, 36617), (52, 36605), (53, 36596), (66, 36464), (73, 36413),

Gene: Tophat_96 Start: 62229, Stop: 62642, Start Num: 16

Candidate Starts for Tophat_96:

(Start: 16 @62229 has 18 MA's), (17, 62232), (23, 62259), (25, 62268), (26, 62274), (29, 62286), (31, 62298), (37, 62340), (41, 62364), (49, 62424), (53, 62460), (56, 62490), (60, 62541), (63, 62583), (68, 62622),

Gene: Wilde_41 Start: 36681, Stop: 36250, Start Num: 13

Candidate Starts for Wilde_41:

(Start: 13 @36681 has 2 MA's), (15, 36678), (Start: 16 @36666 has 18 MA's), (17, 36663), (42, 36528), (43, 36522), (45, 36510), (46, 36486), (51, 36459), (52, 36447), (53, 36438), (66, 36306), (73, 36255),