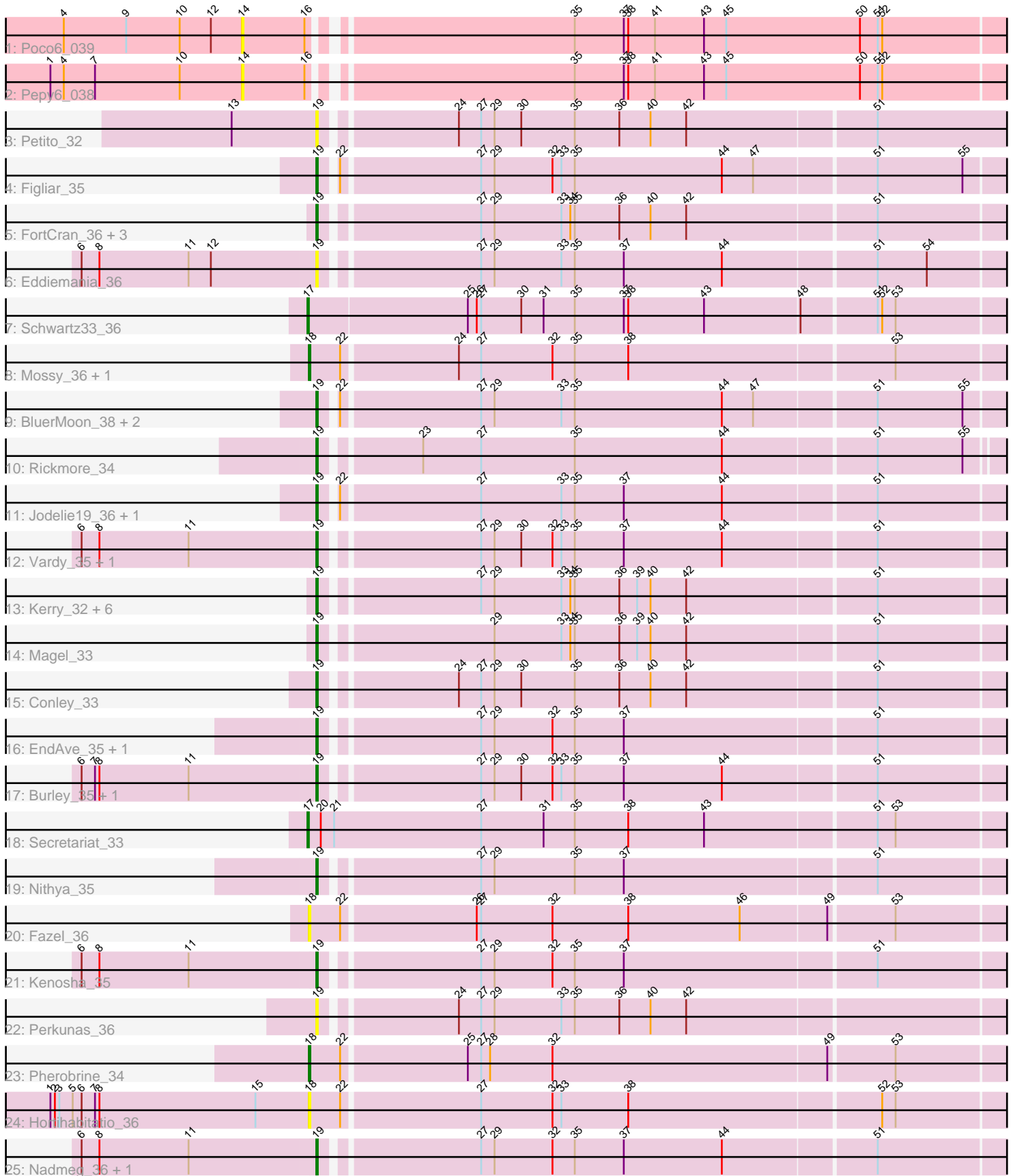


# Pham 86149



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 86149 Report

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

Pham number 86149 has 42 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Poco6\_039
- Track 2 : Pepy6\_038
- Track 3 : Petito\_32
- Track 4 : Figliar\_35
- Track 5 : FortCran\_36, Captrips\_34, Avazak\_32, Artorias\_32
- Track 6 : Eddiemania\_36
- Track 7 : Schwartz33\_36
- Track 8 : Mossy\_36, OhMyWard\_35
- Track 9 : BluerMoon\_38, Duffington\_35, Aflac\_35
- Track 10 : Rickmore\_34
- Track 11 : Jodelie19\_36, OlgasClover\_35
- Track 12 : Vardy\_35, Phepper\_35
- Track 13 : Kerry\_32, Roney\_32, Tanis\_32, Capybara\_32, Gill\_32, Gravy\_32, Odesza\_32
- Track 14 : Magel\_33
- Track 15 : Conley\_33
- Track 16 : EndAve\_35, AlainaMarie\_35
- Track 17 : Burley\_35, Runhaar\_35
- Track 18 : Secretariat\_33
- Track 19 : Nithya\_35
- Track 20 : Fazel\_36
- Track 21 : Kenosha\_35
- Track 22 : Perkunas\_36
- Track 23 : Pherobrine\_34
- Track 24 : Hortihabitatio\_36
- Track 25 : Nadmeg\_36, Zeph\_38

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

The start number called the most often in the published annotations is 19, it was called in 25 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aflac\_35, AlainaMarie\_35, Artorias\_32, Avazak\_32, BluerMoon\_38, Burley\_35, Captrips\_34, Cappybara\_32, Conley\_33, Duffington\_35, Eddiemania\_36, EndAve\_35, Figliar\_35, FortCran\_36, Gill\_32, Gravy\_32, Jodelie19\_36, Kenosha\_35, Kerry\_32, Magel\_33, Nadmeg\_36, Nithya\_35, Odesza\_32, OlgasClover\_35, Perkunas\_36, Petite\_32, Phepper\_35, Rickmore\_34, Roney\_32, Runhaar\_35, Tanis\_32, Vardy\_35, Zeph\_38,

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

- 

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

- Fazel\_36, Hortihabitatio\_36, Mossy\_36, OhMyWard\_35, Pepy6\_038, Pherobrine\_34, Poco6\_039, Schwartz33\_36, Secretariat\_33,

### Summary by start number:

Start 14:

- Found in 2 of 42 ( 4.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pepy6\_038 (CC), Poco6\_039 (CC),

Start 17:

- Found in 2 of 42 ( 4.8% ) 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: Schwartz33\_36 (DJ), Secretariat\_33 (DJ),

Start 18:

- Found in 5 of 42 ( 11.9% ) of genes in pham
- Manual Annotations of this start: 3 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fazel\_36 (DJ), Hortihabitatio\_36 (DJ), Mossy\_36 (DJ), OhMyWard\_35 (DJ), Pherobrine\_34 (DJ),

Start 19:

- Found in 33 of 42 ( 78.6% ) of genes in pham
- Manual Annotations of this start: 25 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aflac\_35 (DJ), AlainaMarie\_35 (DJ), Artorias\_32 (DJ), Avazak\_32 (DJ), BluerMoon\_38 (DJ), Burley\_35 (DJ), Captrips\_34 (DJ), Cappybara\_32 (DJ), Conley\_33 (DJ), Duffington\_35 (DJ), Eddiemania\_36 (DJ), EndAve\_35 (DJ), Figliar\_35 (DJ), FortCran\_36 (DJ), Gill\_32 (DJ), Gravy\_32 (DJ), Jodelie19\_36 (DJ), Kenosha\_35 (DJ), Kerry\_32 (DJ), Magel\_33 (DJ), Nadmeg\_36 (DJ), Nithya\_35 (DJ), Odesza\_32 (DJ), OlgasClover\_35 (DJ), Perkunas\_36 (DJ), Petite\_32 (DJ), Phepper\_35 (DJ), Rickmore\_34 (DJ), Roney\_32 (DJ), Runhaar\_35 (DJ), Tanis\_32 (DJ), Vardy\_35 (DJ), Zeph\_38 (DJ),

### Summary by clusters:

There are 2 clusters represented in this pham: CC, DJ,

Info for manual annotations of cluster DJ:

- Start number 17 was manually annotated 2 times for cluster DJ.
- Start number 18 was manually annotated 3 times for cluster DJ.
- Start number 19 was manually annotated 25 times for cluster DJ.

### **Gene Information:**

Gene: Aflac\_35 Start: 30932, Stop: 31501, Start Num: 19

Candidate Starts for Aflac\_35:

(Start: 19 @30932 has 25 MA's), (22, 30941), (27, 31031), (29, 31040), (33, 31085), (35, 31094), (44, 31193), (47, 31214), (51, 31292), (55, 31349),

Gene: AlainaMarie\_35 Start: 30914, Stop: 31483, Start Num: 19

Candidate Starts for AlainaMarie\_35:

(Start: 19 @30914 has 25 MA's), (27, 31013), (29, 31022), (32, 31061), (35, 31076), (37, 31109), (51, 31274),

Gene: Artorias\_32 Start: 27913, Stop: 28539, Start Num: 19

Candidate Starts for Artorias\_32:

(Start: 19 @27913 has 25 MA's), (27, 28012), (29, 28021), (33, 28066), (34, 28072), (35, 28075), (36, 28105), (40, 28126), (42, 28150), (51, 28273),

Gene: Avazak\_32 Start: 27920, Stop: 28546, Start Num: 19

Candidate Starts for Avazak\_32:

(Start: 19 @27920 has 25 MA's), (27, 28019), (29, 28028), (33, 28073), (34, 28079), (35, 28082), (36, 28112), (40, 28133), (42, 28157), (51, 28280),

Gene: BluerMoon\_38 Start: 30929, Stop: 31498, Start Num: 19

Candidate Starts for BluerMoon\_38:

(Start: 19 @30929 has 25 MA's), (22, 30938), (27, 31028), (29, 31037), (33, 31082), (35, 31091), (44, 31190), (47, 31211), (51, 31289), (55, 31346),

Gene: Burley\_35 Start: 30665, Stop: 31234, Start Num: 19

Candidate Starts for Burley\_35:

(6, 30512), (7, 30521), (8, 30524), (11, 30584), (Start: 19 @30665 has 25 MA's), (27, 30764), (29, 30773), (30, 30791), (32, 30812), (33, 30818), (35, 30827), (37, 30860), (44, 30926), (51, 31025),

Gene: Captrips\_34 Start: 27949, Stop: 28575, Start Num: 19

Candidate Starts for Captrips\_34:

(Start: 19 @27949 has 25 MA's), (27, 28048), (29, 28057), (33, 28102), (34, 28108), (35, 28111), (36, 28141), (40, 28162), (42, 28186), (51, 28309),

Gene: Capybara\_32 Start: 28024, Stop: 28683, Start Num: 19

Candidate Starts for Capybara\_32:

(Start: 19 @28024 has 25 MA's), (27, 28123), (29, 28132), (33, 28177), (34, 28183), (35, 28186), (36, 28216), (39, 28228), (40, 28237), (42, 28261), (51, 28384),

Gene: Conley\_33 Start: 28996, Stop: 29610, Start Num: 19

Candidate Starts for Conley\_33:

(Start: 19 @28996 has 25 MA's), (24, 29080), (27, 29095), (29, 29104), (30, 29122), (35, 29158), (36, 29188), (40, 29209), (42, 29233), (51, 29356),

Gene: Duffington\_35 Start: 30907, Stop: 31476, Start Num: 19

Candidate Starts for Duffington\_35:

(Start: 19 @30907 has 25 MA's), (22, 30916), (27, 31006), (29, 31015), (33, 31060), (35, 31069), (44, 31168), (47, 31189), (51, 31267), (55, 31324),

Gene: Eddiemania\_36 Start: 31566, Stop: 32135, Start Num: 19

Candidate Starts for Eddiemania\_36:

(6, 31413), (8, 31425), (11, 31485), (12, 31500), (Start: 19 @31566 has 25 MA's), (27, 31665), (29, 31674), (33, 31719), (35, 31728), (37, 31761), (44, 31827), (51, 31926), (54, 31959),

Gene: EndAve\_35 Start: 30917, Stop: 31486, Start Num: 19

Candidate Starts for EndAve\_35:

(Start: 19 @30917 has 25 MA's), (27, 31016), (29, 31025), (32, 31064), (35, 31079), (37, 31112), (51, 31277),

Gene: Fazel\_36 Start: 29941, Stop: 30567, Start Num: 18

Candidate Starts for Fazel\_36:

(Start: 18 @29941 has 3 MA's), (22, 29962), (26, 30049), (27, 30052), (32, 30100), (38, 30151), (46, 30226), (49, 30283), (53, 30325),

Gene: Figliar\_35 Start: 30917, Stop: 31486, Start Num: 19

Candidate Starts for Figliar\_35:

(Start: 19 @30917 has 25 MA's), (22, 30926), (27, 31016), (29, 31025), (32, 31064), (33, 31070), (35, 31079), (44, 31178), (47, 31199), (51, 31277), (55, 31334),

Gene: FortCran\_36 Start: 27913, Stop: 28539, Start Num: 19

Candidate Starts for FortCran\_36:

(Start: 19 @27913 has 25 MA's), (27, 28012), (29, 28021), (33, 28066), (34, 28072), (35, 28075), (36, 28105), (40, 28126), (42, 28150), (51, 28273),

Gene: Gill\_32 Start: 28036, Stop: 28695, Start Num: 19

Candidate Starts for Gill\_32:

(Start: 19 @28036 has 25 MA's), (27, 28135), (29, 28144), (33, 28189), (34, 28195), (35, 28198), (36, 28228), (39, 28240), (40, 28249), (42, 28273), (51, 28396),

Gene: Gravy\_32 Start: 28036, Stop: 28695, Start Num: 19

Candidate Starts for Gravy\_32:

(Start: 19 @28036 has 25 MA's), (27, 28135), (29, 28144), (33, 28189), (34, 28195), (35, 28198), (36, 28228), (39, 28240), (40, 28249), (42, 28273), (51, 28396),

Gene: Hortihabitatio\_36 Start: 30334, Stop: 30960, Start Num: 18

Candidate Starts for Hortihabitatio\_36:

(1, 30160), (2, 30163), (3, 30166), (5, 30175), (6, 30181), (7, 30190), (8, 30193), (15, 30298), (Start: 18 @30334 has 3 MA's), (22, 30355), (27, 30445), (32, 30493), (33, 30499), (38, 30544), (52, 30709), (53, 30718),

Gene: Jodelie19\_36 Start: 32356, Stop: 32925, Start Num: 19

Candidate Starts for Jodelie19\_36:

(Start: 19 @32356 has 25 MA's), (22, 32365), (27, 32455), (33, 32509), (35, 32518), (37, 32551), (44, 32617), (51, 32716),

Gene: Kenosha\_35 Start: 31467, Stop: 32036, Start Num: 19

Candidate Starts for Kenosha\_35:

(6, 31314), (8, 31326), (11, 31386), (Start: 19 @31467 has 25 MA's), (27, 31566), (29, 31575), (32, 31614), (35, 31629), (37, 31662), (51, 31827),

Gene: Kerry\_32 Start: 28036, Stop: 28695, Start Num: 19

Candidate Starts for Kerry\_32:

(Start: 19 @28036 has 25 MA's), (27, 28135), (29, 28144), (33, 28189), (34, 28195), (35, 28198), (36, 28228), (39, 28240), (40, 28249), (42, 28273), (51, 28396),

Gene: Magel\_33 Start: 27944, Stop: 28603, Start Num: 19

Candidate Starts for Magel\_33:

(Start: 19 @27944 has 25 MA's), (29, 28052), (33, 28097), (34, 28103), (35, 28106), (36, 28136), (39, 28148), (40, 28157), (42, 28181), (51, 28304),

Gene: Mossy\_36 Start: 32111, Stop: 32749, Start Num: 18

Candidate Starts for Mossy\_36:

(Start: 18 @32111 has 3 MA's), (22, 32132), (24, 32207), (27, 32222), (32, 32270), (35, 32285), (38, 32321), (53, 32495),

Gene: Nadmeg\_36 Start: 32130, Stop: 32699, Start Num: 19

Candidate Starts for Nadmeg\_36:

(6, 31977), (8, 31989), (11, 32049), (Start: 19 @32130 has 25 MA's), (27, 32229), (29, 32238), (32, 32277), (35, 32292), (37, 32325), (44, 32391), (51, 32490),

Gene: Nithya\_35 Start: 30914, Stop: 31483, Start Num: 19

Candidate Starts for Nithya\_35:

(Start: 19 @30914 has 25 MA's), (27, 31013), (29, 31022), (35, 31076), (37, 31109), (51, 31274),

Gene: Odesza\_32 Start: 28036, Stop: 28695, Start Num: 19

Candidate Starts for Odesza\_32:

(Start: 19 @28036 has 25 MA's), (27, 28135), (29, 28144), (33, 28189), (34, 28195), (35, 28198), (36, 28228), (39, 28240), (40, 28249), (42, 28273), (51, 28396),

Gene: OhMyWard\_35 Start: 31451, Stop: 32089, Start Num: 18

Candidate Starts for OhMyWard\_35:

(Start: 18 @31451 has 3 MA's), (22, 31472), (24, 31547), (27, 31562), (32, 31610), (35, 31625), (38, 31661), (53, 31835),

Gene: OlgasClover\_35 Start: 31640, Stop: 32209, Start Num: 19

Candidate Starts for OlgasClover\_35:

(Start: 19 @31640 has 25 MA's), (22, 31649), (27, 31739), (33, 31793), (35, 31802), (37, 31835), (44, 31901), (51, 32000),

Gene: Pepy6\_038 Start: 38078, Stop: 38704, Start Num: 14

Candidate Starts for Pepy6\_038:

(1, 37949), (4, 37958), (7, 37979), (10, 38036), (14, 38078), (16, 38120), (35, 38282), (37, 38315), (38, 38318), (41, 38336), (43, 38369), (45, 38384), (50, 38474), (51, 38486), (52, 38489),

Gene: Perkunas\_36 Start: 28436, Stop: 29062, Start Num: 19

Candidate Starts for Perkunas\_36:

(Start: 19 @28436 has 25 MA's), (24, 28520), (27, 28535), (29, 28544), (33, 28589), (35, 28598), (36, 28628), (40, 28649), (42, 28673),

Gene: Petito\_32 Start: 29193, Stop: 29855, Start Num: 19

Candidate Starts for Petito\_32:

(13, 29139), (Start: 19 @29193 has 25 MA's), (24, 29277), (27, 29292), (29, 29301), (30, 29319), (35, 29355), (36, 29385), (40, 29406), (42, 29430), (51, 29553),

Gene: Phepper\_35 Start: 30697, Stop: 31266, Start Num: 19

Candidate Starts for Phepper\_35:

(6, 30544), (8, 30556), (11, 30616), (Start: 19 @30697 has 25 MA's), (27, 30796), (29, 30805), (30, 30823), (32, 30844), (33, 30850), (35, 30859), (37, 30892), (44, 30958), (51, 31057),

Gene: Pherobrine\_34 Start: 30731, Stop: 31357, Start Num: 18

Candidate Starts for Pherobrine\_34:

(Start: 18 @30731 has 3 MA's), (22, 30752), (25, 30833), (27, 30842), (28, 30848), (32, 30890), (49, 31073), (53, 31115),

Gene: Poco6\_039 Start: 40100, Stop: 40726, Start Num: 14

Candidate Starts for Poco6\_039:

(4, 39980), (9, 40022), (10, 40058), (12, 40079), (14, 40100), (16, 40142), (35, 40304), (37, 40337), (38, 40340), (41, 40358), (43, 40391), (45, 40406), (50, 40496), (51, 40508), (52, 40511),

Gene: Rickmore\_34 Start: 29348, Stop: 29914, Start Num: 19

Candidate Starts for Rickmore\_34:

(Start: 19 @29348 has 25 MA's), (23, 29408), (27, 29447), (35, 29510), (44, 29609), (51, 29708), (55, 29765),

Gene: Roney\_32 Start: 28036, Stop: 28695, Start Num: 19

Candidate Starts for Roney\_32:

(Start: 19 @28036 has 25 MA's), (27, 28135), (29, 28144), (33, 28189), (34, 28195), (35, 28198), (36, 28228), (39, 28240), (40, 28249), (42, 28273), (51, 28396),

Gene: Runhaar\_35 Start: 30700, Stop: 31269, Start Num: 19

Candidate Starts for Runhaar\_35:

(6, 30547), (7, 30556), (8, 30559), (11, 30619), (Start: 19 @30700 has 25 MA's), (27, 30799), (29, 30808), (30, 30826), (32, 30847), (33, 30853), (35, 30862), (37, 30895), (44, 30961), (51, 31060),

Gene: Schwartz33\_36 Start: 31030, Stop: 31614, Start Num: 17

Candidate Starts for Schwartz33\_36:

(Start: 17 @31030 has 2 MA's), (25, 31135), (26, 31141), (27, 31144), (30, 31171), (31, 31186), (35, 31207), (37, 31240), (38, 31243), (43, 31294), (48, 31357), (51, 31405), (52, 31408), (53, 31417),

Gene: Secretariat\_33 Start: 29761, Stop: 30348, Start Num: 17

Candidate Starts for Secretariat\_33:

(Start: 17 @29761 has 2 MA's), (20, 29770), (21, 29779), (27, 29878), (31, 29920), (35, 29941), (38, 29977), (43, 30028), (51, 30139), (53, 30151),

Gene: Tanis\_32 Start: 27886, Stop: 28545, Start Num: 19

Candidate Starts for Tanis\_32:

(Start: 19 @27886 has 25 MA's), (27, 27985), (29, 27994), (33, 28039), (34, 28045), (35, 28048), (36, 28078), (39, 28090), (40, 28099), (42, 28123), (51, 28246),

Gene: Vardy\_35 Start: 30665, Stop: 31234, Start Num: 19

Candidate Starts for Vardy\_35:

(6, 30512), (8, 30524), (11, 30584), (Start: 19 @30665 has 25 MA's), (27, 30764), (29, 30773), (30, 30791), (32, 30812), (33, 30818), (35, 30827), (37, 30860), (44, 30926), (51, 31025),

Gene: Zeph\_38 Start: 31414, Stop: 31983, Start Num: 19

Candidate Starts for Zeph\_38:

(6, 31261), (8, 31273), (11, 31333), (Start: 19 @31414 has 25 MA's), (27, 31513), (29, 31522), (32, 31561), (35, 31576), (37, 31609), (44, 31675), (51, 31774),