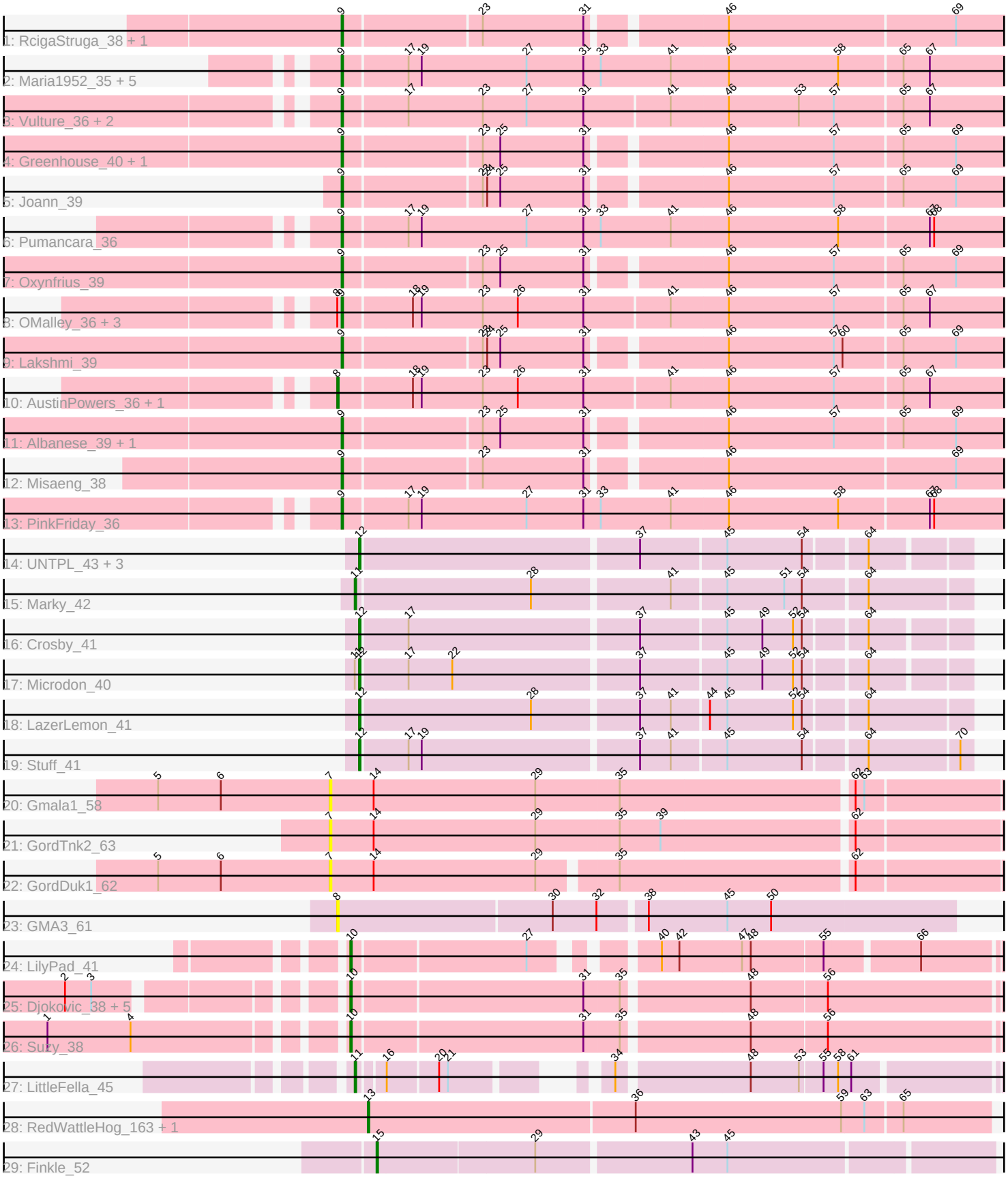
Pham 347699


1: RcigaStruga_38 + 1
2: Maria1952_35 + 5
3: Vulture_36 + 2
4: Greenhouse_40 + 1
5: Joann_39
6: Pumancara_36
7: Oxynfrius_39
8: OMalley_36 + 3
9: Lakshmi_39
10: AustinPowers_36 + 1
11: Albanese_39 + 1
12: Misaeng_38
13: PinkFriday_36
14: UNTPL_43 + 3
15: Marky_42
16: Crosby_41
17: Microdon_40
18: LazerLemon_41
19: Stuff_41
20: Gmala1_58
21: GordTnk2_63
22: GordDuk1_62
23: GMA3_61
24: LilyPad_41
25: Djokovic_38 + 5
26: Suzy_38
27: LittleFella_45
28: RedWattleHog_163 + 1
29: Finkle_52

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 347699 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347699 has 52 members, 4 are drafts.

Phages represented in each track:
• Track 1 : RcigaStruga_38, Huntingdon_38
• Track 2 : Maria1952_35, Temper16_36, Sergei_36, Daiboju_36, KingBob_36, Herb_36
• Track 3 : Vulture_36, Chridison_35, HunterDalle_36
• Track 4 : Greenhouse_40, GreenHearts_39
• Track 5 : Joann_39
• Track 6 : Pumancara_36
• Track 7 : Oxynfrius_39
• Track 8 : OMalley_36, Riovina_36, Eunoia_36, Aledel_36
• Track 9 : Lakshmi_39
• Track 10 : AustinPowers_36, Supakev_36
• Track 11 : Albanese_39, Nubia_39
• Track 12 : Misaeng_38
• Track 13 : PinkFriday_36
• Track 14 : UNTPL_43, Shynx_41, Intolerant_40, Bogota_42
• Track 15 : Marky_42
• Track 16 : Crosby_41
• Track 17 : Microdon_40
• Track 18 : LazerLemon_41
• Track 19 : Stuff_41
• Track 20 : Gmala1_58
• Track 21 : GordTnk2_63
• Track 22 : GordDuk1_62
• Track 23 : GMA3_61
• Track 24 : LilyPad_41
• Track 25 : Djokovic_38, Sienna_38, Madi_38, BiteSize_38, Terapin_39, Beyoncage_38
• Track 26 : Suzy_38
• Track 27 : LittleFella_45
• Track 28 : RedWattleHog_163, Stormageddon_164
• Track 29 : Finkle_52

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

The start number called the most often in the published annotations is 9, it was called in 25 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albanese_39, Aledel_36, Chridison_35, Daiboju_36, Eunoia_36, GreenHearts_39, Greenhouse_40, Herb_36, HunterDalle_36, Huntingdon_38, Joann_39, KingBob_36, Lakshmi_39, Maria1952_35, Misaeng_38, Nubia_39, OMalley_36, Oxynfrius_39, PinkFriday_36, Pumancara_36, RcigaStruga_38, Riovina_36, Sergei_36, Temper16_36, Vulture_36,

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

Genes that do not have the "Most Annotated" start:
• AustinPowers_36, Beyoncage_38, BiteSize_38, Bogota_42, Crosby_41, Djokovic_38, Finkle_52, GMA3_61, Gmala1_58, GordDuk1_62, GordTnk2_63, Intolerant_40, LazerLemon_41, LilyPad_41, LittleFella_45, Madi_38, Marky_42, Microdon_40, RedWattleHog_163, Shynx_41, Sienna_38, Stormageddon_164, Stuff_41, Supakev_36, Suzy_38, Terapin_39, UNTPL_43,

Summary by start number:

Start 7:
• Found in 3 of 52 (5.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gmala1_58 (DF1), GordDuk1_62 (DF1), GordTnk2_63 (DF1),

Start 8:
• Found in 7 of 52 (13.5%) of genes in pham
• Manual Annotations of this start: 2 of 48
• Called 42.9% of time when present
• Phage (with cluster) where this start called: AustinPowers_36 (AK), GMA3_61 (DF2), Supakev_36 (AK),

Start 9:
• Found in 25 of 52 (48.1%) of genes in pham
• Manual Annotations of this start: 25 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Albanese_39 (AK), Aledel_36 (AK), Chridison_35 (AK), Daiboju_36 (AK), Eunoia_36 (AK), GreenHearts_39 (AK), Greenhouse_40 (AK), Herb_36 (AK), HunterDalle_36 (AK), Huntingdon_38 (AK), Joann_39 (AK), KingBob_36 (AK), Lakshmi_39 (AK), Maria1952_35 (AK), Misaeng_38 (AK), Nubia_39 (AK), OMalley_36 (AK), Oxynfrius_39 (AK), PinkFriday_36 (AK), Pumancara_36 (AK), RcigaStruga_38 (AK), Riovina_36 (AK), Sergei_36 (AK), Temper16_36 (AK), Vulture_36 (AK),

Start 10:
• Found in 8 of 52 (15.4%) of genes in pham
• Manual Annotations of this start: 8 of 48
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Beyoncage_38 (DG1), BiteSize_38 (DG1), Djokovic_38 (DG1), LilyPad_41 (DG1), Madi_38 (DG1), Sienna_38 (DG1), Suzy_38 (DG1), Terapin_39 (DG1),

Start 11:
• Found in 3 of 52 (5.8%) of genes in pham
• Manual Annotations of this start: 2 of 48
• Called 66.7% of time when present
• Phage (with cluster) where this start called: LittleFella_45 (DG2), Marky_42 (BH),

Start 12:
• Found in 8 of 52 (15.4%) of genes in pham
• Manual Annotations of this start: 8 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bogota_42 (BH), Crosby_41 (BH), Intolerant_40 (BH), LazerLemon_41 (BH), Microdon_40 (BH), Shynx_41 (BH), Stuff_41 (BH), UNTPL_43 (BH),

Start 13:
• Found in 2 of 52 (3.8%) of genes in pham
• Manual Annotations of this start: 2 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RedWattleHog_163 (DX), Stormageddon_164 (DX),

Start 15:
• Found in 1 of 52 (1.9%) of genes in pham
• Manual Annotations of this start: 1 of 48
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Finkle_52 (singleton),

Summary by clusters:

There are 8 clusters represented in this pham: singleton, BH, AK, DF1, DF2, DG2, DG1, DX,

Info for manual annotations of cluster AK:
•Start number 8 was manually annotated 2 times for cluster AK.
•Start number 9 was manually annotated 25 times for cluster AK.

Info for manual annotations of cluster BH:
•Start number 11 was manually annotated 1 time for cluster BH.
•Start number 12 was manually annotated 8 times for cluster BH.

Info for manual annotations of cluster DG1:
•Start number 10 was manually annotated 8 times for cluster DG1.

Info for manual annotations of cluster DG2:
•Start number 11 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster DX:

•Start number 13 was manually annotated 2 times for cluster DX.

Gene Information:

Gene: Albanese_39 Start: 27314, Stop: 27745, Start Num: 9
Candidate Starts for Albanese_39:
(Start: 9 @27314 has 25 MA's), (23, 27404), (25, 27416), (31, 27473), (46, 27557), (57, 27629), (65, 27674), (69, 27710),

Gene: Aledel_36 Start: 26621, Stop: 27067, Start Num: 9
Candidate Starts for Aledel_36:
(Start: 8 @26618 has 2 MA's), (Start: 9 @26621 has 25 MA's), (18, 26666), (19, 26672), (23, 26714), (26, 26738), (31, 26783), (41, 26840), (46, 26879), (57, 26951), (65, 26996), (67, 27014),

Gene: AustinPowers_36 Start: 26616, Stop: 27065, Start Num: 8
Candidate Starts for AustinPowers_36:
(Start: 8 @26616 has 2 MA's), (18, 26664), (19, 26670), (23, 26712), (26, 26736), (31, 26781), (41, 26838), (46, 26877), (57, 26949), (65, 26994), (67, 27012),

Gene: Beyoncage_38 Start: 32274, Stop: 32699, Start Num: 10
Candidate Starts for Beyoncage_38:
(2, 32115), (3, 32133), (Start: 10 @32274 has 8 MA's), (31, 32427), (35, 32451), (48, 32532), (56, 32583),

Gene: BiteSize_38 Start: 32360, Stop: 32785, Start Num: 10
Candidate Starts for BiteSize_38:
(2, 32201), (3, 32219), (Start: 10 @32360 has 8 MA's), (31, 32513), (35, 32537), (48, 32618), (56, 32669),

Gene: Bogota_42 Start: 30898, Stop: 31290, Start Num: 12
Candidate Starts for Bogota_42:
(Start: 12 @30898 has 8 MA's), (37, 31081), (45, 31138), (54, 31189), (64, 31228),

Gene: Chridison_35 Start: 26586, Stop: 27032, Start Num: 9
Candidate Starts for Chridison_35:
(Start: 9 @26586 has 25 MA's), (17, 26628), (23, 26679), (27, 26709), (31, 26748), (41, 26805), (46, 26844), (53, 26892), (57, 26916), (65, 26961), (67, 26979),

Gene: Crosby_41 Start: 30643, Stop: 31035, Start Num: 12
Candidate Starts for Crosby_41:
(Start: 12 @30643 has 8 MA's), (17, 30673), (37, 30826), (45, 30883), (49, 30907), (52, 30928), (54, 30934), (64, 30973),

Gene: Daiboju_36 Start: 26655, Stop: 27104, Start Num: 9
Candidate Starts for Daiboju_36:
(Start: 9 @26655 has 25 MA's), (17, 26697), (19, 26706), (27, 26778), (31, 26817), (33, 26829), (41, 26877), (46, 26916), (58, 26991), (65, 27033), (67, 27051),

Gene: Djokovic_38 Start: 32273, Stop: 32698, Start Num: 10
Candidate Starts for Djokovic_38:

(2, 32114), (3, 32132), (Start: 10 @32273 has 8 MA's), (31, 32426), (35, 32450), (48, 32531), (56, 32582),

Gene: Eunoia_36 Start: 26621, Stop: 27067, Start Num: 9
Candidate Starts for Eunoia_36:
(Start: 8 @26618 has 2 MA's), (Start: 9 @26621 has 25 MA's), (18, 26666), (19, 26672), (23, 26714), (26, 26738), (31, 26783), (41, 26840), (46, 26879), (57, 26951), (65, 26996), (67, 27014),

Gene: Finkle_52 Start: 35374, Stop: 35778, Start Num: 15
Candidate Starts for Finkle_52:
(Start: 15 @35374 has 1 MA's), (29, 35479), (43, 35581), (45, 35605),

Gene: GMA3_61 Start: 51882, Stop: 51469, Start Num: 8
Candidate Starts for GMA3_61:
(Start: 8 @51882 has 2 MA's), (30, 51738), (32, 51708), (38, 51678), (45, 51624), (50, 51594),

Gene: Gmala1_58 Start: 49679, Stop: 49224, Start Num: 7
Candidate Starts for Gmala1_58:
(5, 49796), (6, 49754), (7, 49679), (14, 49649), (29, 49538), (35, 49481), (62, 49328), (63, 49322),

Gene: GordDuk1_62 Start: 50228, Stop: 49782, Start Num: 7
Candidate Starts for GordDuk1_62:
(5, 50345), (6, 50303), (7, 50228), (14, 50198), (29, 50087), (35, 50039), (62, 49886),

Gene: GordTnk2_63 Start: 50397, Stop: 49942, Start Num: 7
Candidate Starts for GordTnk2_63:
(7, 50397), (14, 50367), (29, 50256), (35, 50199), (39, 50172), (62, 50046),

Gene: GreenHearts_39 Start: 27409, Stop: 27840, Start Num: 9
Candidate Starts for GreenHearts_39:
(Start: 9 @27409 has 25 MA's), (23, 27499), (25, 27511), (31, 27568), (46, 27652), (57, 27724), (65, 27769), (69, 27805),

Gene: Greenhouse_40 Start: 27322, Stop: 27753, Start Num: 9
Candidate Starts for Greenhouse_40:
(Start: 9 @27322 has 25 MA's), (23, 27412), (25, 27424), (31, 27481), (46, 27565), (57, 27637), (65, 27682), (69, 27718),

Gene: Herb_36 Start: 26654, Stop: 27103, Start Num: 9
Candidate Starts for Herb_36:
(Start: 9 @26654 has 25 MA's), (17, 26696), (19, 26705), (27, 26777), (31, 26816), (33, 26828), (41, 26876), (46, 26915), (58, 26990), (65, 27032), (67, 27050),

Gene: HunterDalle_36 Start: 26585, Stop: 27031, Start Num: 9
Candidate Starts for HunterDalle_36:
(Start: 9 @26585 has 25 MA's), (17, 26627), (23, 26678), (27, 26708), (31, 26747), (41, 26804), (46, 26843), (53, 26891), (57, 26915), (65, 26960), (67, 26978),

Gene: Huntingdon_38 Start: 27052, Stop: 27483, Start Num: 9
Candidate Starts for Huntingdon_38:
(Start: 9 @27052 has 25 MA's), (23, 27142), (31, 27211), (46, 27295), (69, 27448),

Gene: Intolerant_40 Start: 30536, Stop: 30928, Start Num: 12

Candidate Starts for Intolerant_40:
(Start: 12 @30536 has 8 MA's), (37, 30719), (45, 30776), (54, 30827), (64, 30866),

Gene: Joann_39 Start: 27287, Stop: 27718, Start Num: 9
Candidate Starts for Joann_39:
(Start: 9 @27287 has 25 MA's), (23, 27377), (24, 27380), (25, 27389), (31, 27446), (46, 27530), (57, 27602), (65, 27647), (69, 27683),

Gene: KingBob_36 Start: 26655, Stop: 27104, Start Num: 9
Candidate Starts for KingBob_36:
(Start: 9 @26655 has 25 MA's), (17, 26697), (19, 26706), (27, 26778), (31, 26817), (33, 26829), (41, 26877), (46, 26916), (58, 26991), (65, 27033), (67, 27051),

Gene: Lakshmi_39 Start: 27288, Stop: 27719, Start Num: 9
Candidate Starts for Lakshmi_39:
(Start: 9 @27288 has 25 MA's), (23, 27378), (24, 27381), (25, 27390), (31, 27447), (46, 27531), (57, 27603), (60, 27609), (65, 27648), (69, 27684),

Gene: LazerLemon_41 Start: 31019, Stop: 31417, Start Num: 12
Candidate Starts for LazerLemon_41:
(Start: 12 @31019 has 8 MA's), (28, 31133), (37, 31202), (41, 31223), (44, 31247), (45, 31259), (52, 31304), (54, 31310), (64, 31349),

Gene: LilyPad_41 Start: 33565, Stop: 33963, Start Num: 10
Candidate Starts for LilyPad_41:
(Start: 10 @33565 has 8 MA's), (27, 33679), (40, 33742), (42, 33754), (47, 33796), (48, 33802), (55, 33850), (66, 33910),

Gene: LittleFella_45 Start: 35131, Stop: 35502, Start Num: 11
Candidate Starts for LittleFella_45:
(Start: 11 @35131 has 2 MA's), (16, 35146), (20, 35179), (21, 35185), (34, 35257), (48, 35341), (53, 35374), (55, 35389), (58, 35398), (61, 35407),

Gene: Madi_38 Start: 32351, Stop: 32776, Start Num: 10
Candidate Starts for Madi_38:
(2, 32192), (3, 32210), (Start: 10 @32351 has 8 MA's), (31, 32504), (35, 32528), (48, 32609), (56, 32660),

Gene: Maria1952_35 Start: 26654, Stop: 27103, Start Num: 9
Candidate Starts for Maria1952_35:
(Start: 9 @26654 has 25 MA's), (17, 26696), (19, 26705), (27, 26777), (31, 26816), (33, 26828), (41, 26876), (46, 26915), (58, 26990), (65, 27032), (67, 27050),

Gene: Marky_42 Start: 30657, Stop: 31061, Start Num: 11
Candidate Starts for Marky_42:
(Start: 11 @30657 has 2 MA's), (28, 30774), (41, 30864), (45, 30900), (51, 30939), (54, 30951), (64, 30993),

Gene: Microdon_40 Start: 30342, Stop: 30734, Start Num: 12
Candidate Starts for Microdon_40:
(Start: 11 @30339 has 2 MA's), (Start: 12 @30342 has 8 MA's), (17, 30372), (22, 30402), (37, 30525), (45, 30582), (49, 30606), (52, 30627), (54, 30633), (64, 30672),

Gene: Misaeng_38 Start: 27285, Stop: 27716, Start Num: 9
Candidate Starts for Misaeng_38:
(Start: 9 @27285 has 25 MA's), (23, 27375), (31, 27444), (46, 27528), (69, 27681),

Gene: Nubia_39 Start: 27239, Stop: 27670, Start Num: 9
Candidate Starts for Nubia_39:
(Start: 9 @27239 has 25 MA's), (23, 27329), (25, 27341), (31, 27398), (46, 27482), (57, 27554), (65, 27599), (69, 27635),

Gene: OMalley_36 Start: 26621, Stop: 27067, Start Num: 9
Candidate Starts for OMalley_36:
(Start: 8 @26618 has 2 MA's), (Start: 9 @26621 has 25 MA's), (18, 26666), (19, 26672), (23, 26714), (26, 26738), (31, 26783), (41, 26840), (46, 26879), (57, 26951), (65, 26996), (67, 27014),

Gene: Oxynfrius_39 Start: 27266, Stop: 27697, Start Num: 9
Candidate Starts for Oxynfrius_39:
(Start: 9 @27266 has 25 MA's), (23, 27356), (25, 27368), (31, 27425), (46, 27509), (57, 27581), (65, 27626), (69, 27662),

Gene: PinkFriday_36 Start: 25767, Stop: 26216, Start Num: 9
Candidate Starts for PinkFriday_36:
(Start: 9 @25767 has 25 MA's), (17, 25809), (19, 25818), (27, 25890), (31, 25929), (33, 25941), (41, 25989), (46, 26028), (58, 26103), (67, 26163), (68, 26166),

Gene: Pumancara_36 Start: 25679, Stop: 26128, Start Num: 9
Candidate Starts for Pumancara_36:
(Start: 9 @25679 has 25 MA's), (17, 25721), (19, 25730), (27, 25802), (31, 25841), (33, 25853), (41, 25901), (46, 25940), (58, 26015), (67, 26075), (68, 26078),

Gene: RcigaStruga_38 Start: 27052, Stop: 27483, Start Num: 9
Candidate Starts for RcigaStruga_38:
(Start: 9 @27052 has 25 MA's), (23, 27142), (31, 27211), (46, 27295), (69, 27448),

Gene: RedWattleHog_163 Start: 108315, Stop: 108734, Start Num: 13
Candidate Starts for RedWattleHog_163:
(Start: 13 @108315 has 2 MA's), (36, 108495), (59, 108636), (63, 108651), (65, 108675),

Gene: Riovina_36 Start: 26621, Stop: 27067, Start Num: 9
Candidate Starts for Riovina_36:
(Start: 8 @26618 has 2 MA's), (Start: 9 @26621 has 25 MA's), (18, 26666), (19, 26672), (23, 26714), (26, 26738), (31, 26783), (41, 26840), (46, 26879), (57, 26951), (65, 26996), (67, 27014),

Gene: Sergei_36 Start: 26655, Stop: 27104, Start Num: 9
Candidate Starts for Sergei_36:
(Start: 9 @26655 has 25 MA's), (17, 26697), (19, 26706), (27, 26778), (31, 26817), (33, 26829), (41, 26877), (46, 26916), (58, 26991), (65, 27033), (67, 27051),

Gene: Shynx_41 Start: 30826, Stop: 31218, Start Num: 12
Candidate Starts for Shynx_41:
(Start: 12 @30826 has 8 MA's), (37, 31009), (45, 31066), (54, 31117), (64, 31156),

Gene: Sienna_38 Start: 32351, Stop: 32776, Start Num: 10
Candidate Starts for Sienna_38:

(2, 32192), (3, 32210), (Start: 10 @32351 has 8 MA's), (31, 32504), (35, 32528), (48, 32609), (56, 32660),

Gene: Stormageddon_164 Start: 109280, Stop: 109699, Start Num: 13
Candidate Starts for Stormageddon_164:
(Start: 13 @109280 has 2 MA's), (36, 109460), (59, 109601), (63, 109616), (65, 109640),

Gene: Stuff_41 Start: 30816, Stop: 31214, Start Num: 12
Candidate Starts for Stuff_41:
(Start: 12 @30816 has 8 MA's), (17, 30846), (19, 30855), (37, 30999), (41, 31020), (45, 31056), (54, 31107), (64, 31146), (70, 31206),

Gene: Supakev_36 Start: 26618, Stop: 27067, Start Num: 8
Candidate Starts for Supakev_36:
(Start: 8 @26618 has 2 MA's), (18, 26666), (19, 26672), (23, 26714), (26, 26738), (31, 26783), (41, 26840), (46, 26879), (57, 26951), (65, 26996), (67, 27014),

Gene: Suzy_38 Start: 32875, Stop: 33300, Start Num: 10
Candidate Starts for Suzy_38:
(1, 32692), (4, 32749), (Start: 10 @32875 has 8 MA's), (31, 33028), (35, 33052), (48, 33133), (56, 33184),

Gene: Temper16_36 Start: 26655, Stop: 27104, Start Num: 9
Candidate Starts for Temper16_36:
(Start: 9 @26655 has 25 MA's), (17, 26697), (19, 26706), (27, 26778), (31, 26817), (33, 26829), (41, 26877), (46, 26916), (58, 26991), (65, 27033), (67, 27051),

Gene: Terapin_39 Start: 32275, Stop: 32700, Start Num: 10
Candidate Starts for Terapin_39:
(2, 32116), (3, 32134), (Start: 10 @32275 has 8 MA's), (31, 32428), (35, 32452), (48, 32533), (56, 32584),

Gene: UNTPL_43 Start: 30879, Stop: 31271, Start Num: 12
Candidate Starts for UNTPL_43:
(Start: 12 @30879 has 8 MA's), (37, 31062), (45, 31119), (54, 31170), (64, 31209),

Gene: Vulture_36 Start: 26585, Stop: 27031, Start Num: 9
Candidate Starts for Vulture_36:
(Start: 9 @26585 has 25 MA's), (17, 26627), (23, 26678), (27, 26708), (31, 26747), (41, 26804), (46, 26843), (53, 26891), (57, 26915), (65, 26960), (67, 26978),