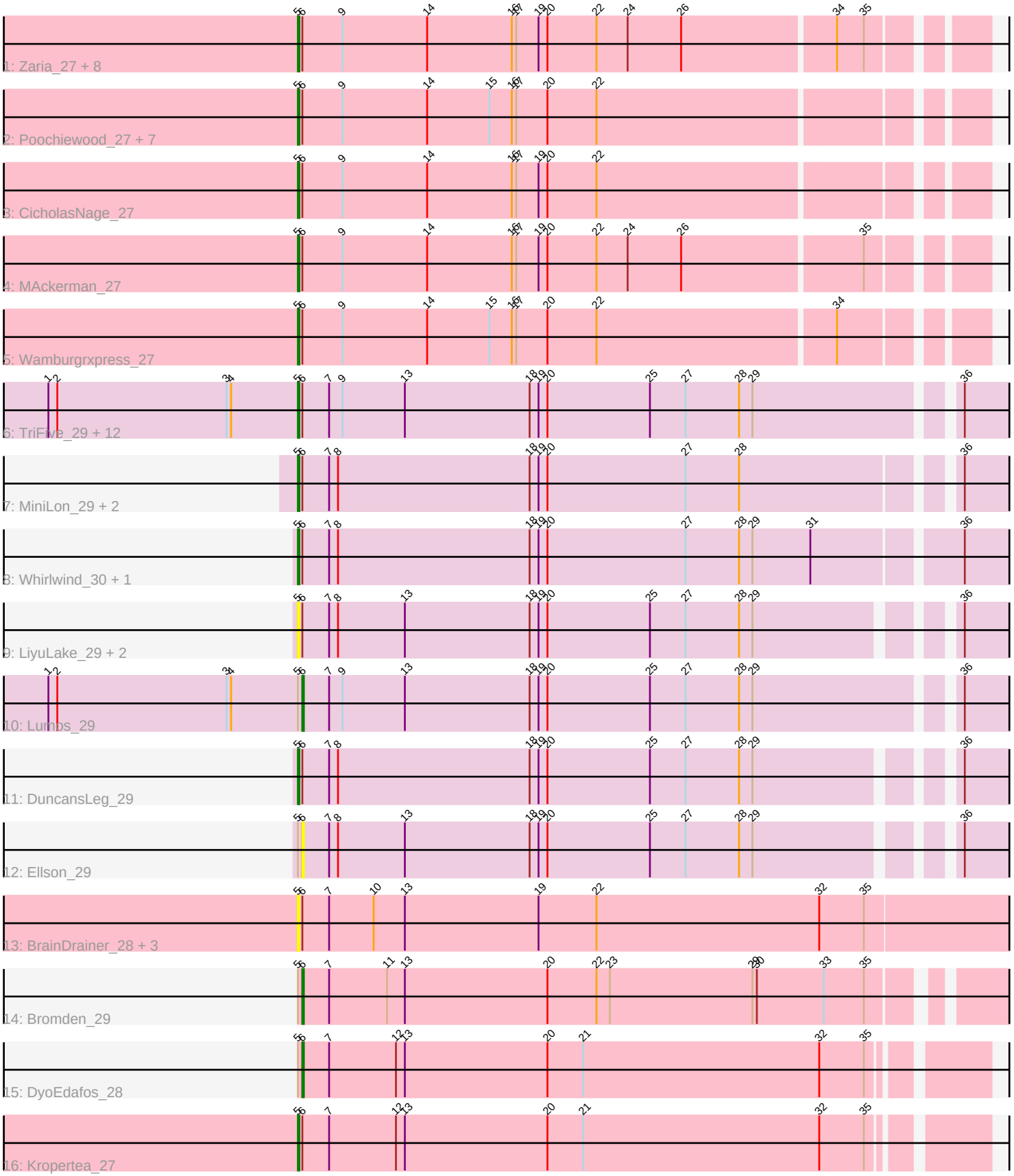
Pham 347708


1: Zaria_27 + 8
2: Poochiewood_27 + 7
3: CicholasNage_27
4: MAckerman_27
5: Wamburgrxpress_27
6: TriFive_29 + 12
7: MiniLon_29 + 2
8: Whirlwind_30 + 1
9: LiyuLake_29 + 2
10: Lumbs_29
11: DuncansLeg_29
12: Ellson_29
13: BrainDrainer_28 + 3
14: Bromden_29
15: DyoEdafos_28
16: Kropertea_27

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 347708 Report

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

Pham number 347708 has 51 members, 10 are drafts.

Phages represented in each track:
• Track 1 : Zaria_27, OhShagHennessy_27, DirkDirk_27, Enceladus_27, JoeDirt_27, Calm_27, Appletree2_27, LeBron_27, UPIE_27
• Track 2 : Poochiewood_27, AvadaKedavra_27, Halena_27, Wyatt2_27, Acquire49_27, Silverleaf_27, Rose5_27, Tyson_27
• Track 3 : CicholasNage_27
• Track 4 : MAckerman_27
• Track 5 : Wamburgrxpress_27
• Track 6 : TriFive_29, Nicholas_29, Snenia_29, Samty_29, Jubie_29, Finnry_29, MsGreen_29, Kingsolomon_29, Moostard_29, Red305_29, Jobypre_29, Bellis_29, Clautastrophe_29
• Track 7 : MiniLon_29, MiniMac_29, Lolly9_29
• Track 8 : Whirlwind_30, Krypton555_29
• Track 9 : LiyuLake_29, BourbonZero_28, KirDoubleO7_27
• Track 10 : Lumos_29
• Track 11 : DuncansLeg_29
• Track 12 : Ellson_29
• Track 13 : BrainDrainer_28, Douzhi_27, PYPDinur_27, Sheng711_27
• Track 14 : Bromden_29
• Track 15 : DyoEdafos_28
• Track 16 : Kropertea_27

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

The start number called the most often in the published annotations is 5, it was called in 38 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Acquire49_27, Appletree2_27, AvadaKedavra_27, Bellis_29, BourbonZero_28, BrainDrainer_28, Calm_27, CicholasNage_27, Clautastrophe_29, DirkDirk_27, Douzhi_27, DuncansLeg_29, Enceladus_27, Finnry_29, Halena_27, Jobypre_29, JoeDirt_27, Jubie_29, Kingsolomon_29, KirDoubleO7_27, Kropertea_27, Krypton555_29, LeBron_27, LiyuLake_29, Lolly9_29, MAckerman_27, MiniLon_29, MiniMac_29, Moostard_29, MsGreen_29, Nicholas_29, OhShagHennessy_27, PYPDinur_27, Poochiewood_27, Red305_29, Rose5_27, Samty_29, Sheng711_27,

Silverleaf_27, Snenia_29, TriFive_29, Tyson_27, UPIE_27, Wamburgrxpress_27, Whirlwind_30, Wyatt2_27, Zaria_27,

Genes that have the "Most Annotated" start but do not call it:
• Bromden_29, DyoEdafos_28, Ellson_29, Lumos_29,

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

Summary by start number:

Start 5:
• Found in 51 of 51 (100.0%) of genes in pham
• Manual Annotations of this start: 38 of 41
• Called 92.2% of time when present
• Phage (with cluster) where this start called: Acquire49_27 (L1), Appletree2_27 (L1), AvadaKedavra_27 (L1), Bellis_29 (L3), BourbonZero_28 (L3), BrainDrainer_28 (L4), Calm_27 (L1), CicholasNage_27 (L1), Clautastrophe_29 (L3), DirkDirk_27 (L1), Douzhi_27 (L4), DuncansLeg_29 (L3), Enceladus_27 (L1), Finnry_29 (L3), Halena_27 (L1), Jobypre_29 (L3), JoeDirt_27 (L1), Jubie_29 (L3), Kingsolomon_29 (L3), KirDoubleO7_27 (L3), Kropertea_27 (L4), Krypton555_29 (L3), LeBron_27 (L1), LiyuLake_29 (L3), Lolly9_29 (L3), MAckerman_27 (L1), MiniLon_29 (L3), MiniMac_29 (L3), Moostard_29 (L3), MsGreen_29 (L3), Nicholas_29 (L3), OhShagHennessy_27 (L1), PYPDinur_27 (L4), Poochiewood_27 (L1), Red305_29 (L3), Rose5_27 (L1), Samty_29 (L3), Sheng711_27 (L4), Silverleaf_27 (L1), Snenia_29 (L3), TriFive_29 (L3), Tyson_27 (L1), UPIE_27 (L1), Wamburgrxpress_27 (L1), Whirlwind_30 (L3), Wyatt2_27 (L1), Zaria_27 (L1),

Start 6:
• Found in 51 of 51 (100.0%) of genes in pham
• Manual Annotations of this start: 3 of 41
• Called 7.8% of time when present
• Phage (with cluster) where this start called: Bromden_29 (L4), DyoEdafos_28 (L4), Ellson_29 (L3), Lumos_29 (L3),

Summary by clusters:

There are 3 clusters represented in this pham: L4, L3, L1,

Info for manual annotations of cluster L1:
•Start number 5 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L3:
•Start number 5 was manually annotated 18 times for cluster L3.
•Start number 6 was manually annotated 1 time for cluster L3.

Info for manual annotations of cluster L4:
•Start number 5 was manually annotated 1 time for cluster L4.
•Start number 6 was manually annotated 2 times for cluster L4.

Gene Information:

Gene: Acquire49_27 Start: 26579, Stop: 27022, Start Num: 5
Candidate Starts for Acquire49_27:
(Start: 5 @26579 has 38 MA's), (Start: 6 @26582 has 3 MA's), (9, 26609), (14, 26666), (15, 26708), (16, 26723), (17, 26726), (20, 26747), (22, 26780),

Gene: Appletree2_27 Start: 26522, Stop: 26965, Start Num: 5
Candidate Starts for Appletree2_27:
(Start: 5 @26522 has 38 MA's), (Start: 6 @26525 has 3 MA's), (9, 26552), (14, 26609), (16, 26666), (17, 26669), (19, 26684), (20, 26690), (22, 26723), (24, 26744), (26, 26780), (34, 26879), (35, 26897),

Gene: AvadaKedavra_27 Start: 26589, Stop: 27032, Start Num: 5
Candidate Starts for AvadaKedavra_27:
(Start: 5 @26589 has 38 MA's), (Start: 6 @26592 has 3 MA's), (9, 26619), (14, 26676), (15, 26718), (16, 26733), (17, 26736), (20, 26757), (22, 26790),

Gene: Bellis_29 Start: 27910, Stop: 28374, Start Num: 5
Candidate Starts for Bellis_29:
(1, 27742), (2, 27748), (3, 27862), (4, 27865), (Start: 5 @27910 has 38 MA's), (Start: 6 @27913 has 3 MA's), (7, 27931), (9, 27940), (13, 27982), (18, 28066), (19, 28072), (20, 28078), (25, 28147), (27, 28171), (28, 28207), (29, 28216), (36, 28342),

Gene: BourbonZero_28 Start: 27867, Stop: 28322, Start Num: 5
Candidate Starts for BourbonZero_28:
(Start: 5 @27867 has 38 MA's), (Start: 6 @27870 has 3 MA's), (7, 27888), (8, 27894), (13, 27939), (18, 28023), (19, 28029), (20, 28035), (25, 28104), (27, 28128), (28, 28164), (29, 28173), (36, 28290),

Gene: BrainDrainer_28 Start: 26508, Stop: 26984, Start Num: 5
Candidate Starts for BrainDrainer_28:
(Start: 5 @26508 has 38 MA's), (Start: 6 @26511 has 3 MA's), (7, 26529), (10, 26559), (13, 26580), (19, 26670), (22, 26709), (32, 26859), (35, 26889),

Gene: Bromden_29 Start: 26939, Stop: 27391, Start Num: 6
Candidate Starts for Bromden_29:
(Start: 5 @26936 has 38 MA's), (Start: 6 @26939 has 3 MA's), (7, 26957), (11, 26996), (13, 27008), (20, 27104), (22, 27137), (23, 27146), (29, 27242), (30, 27245), (33, 27290), (35, 27317),

Gene: Calm_27 Start: 26593, Stop: 27036, Start Num: 5
Candidate Starts for Calm_27:
(Start: 5 @26593 has 38 MA's), (Start: 6 @26596 has 3 MA's), (9, 26623), (14, 26680), (16, 26737), (17, 26740), (19, 26755), (20, 26761), (22, 26794), (24, 26815), (26, 26851), (34, 26950), (35, 26968),

Gene: CicholasNage_27 Start: 26581, Stop: 27024, Start Num: 5
Candidate Starts for CicholasNage_27:
(Start: 5 @26581 has 38 MA's), (Start: 6 @26584 has 3 MA's), (9, 26611), (14, 26668), (16, 26725), (17, 26728), (19, 26743), (20, 26749), (22, 26782),

Gene: Clautastrophe_29 Start: 27907, Stop: 28371, Start Num: 5
Candidate Starts for Clautastrophe_29:
(1, 27739), (2, 27745), (3, 27859), (4, 27862), (Start: 5 @27907 has 38 MA's), (Start: 6 @27910 has 3 MA's), (7, 27928), (9, 27937), (13, 27979), (18, 28063), (19, 28069), (20, 28075), (25, 28144), (27, 28168), (28, 28204), (29, 28213), (36, 28339),

Gene: DirkDirk_27 Start: 26562, Stop: 27005, Start Num: 5

Candidate Starts for DirkDirk_27:
(Start: 5 @26562 has 38 MA's), (Start: 6 @26565 has 3 MA's), (9, 26592), (14, 26649), (16, 26706), (17, 26709), (19, 26724), (20, 26730), (22, 26763), (24, 26784), (26, 26820), (34, 26919), (35, 26937),

Gene: Douzhi_27 Start: 26369, Stop: 26845, Start Num: 5
Candidate Starts for Douzhi_27:
(Start: 5 @26369 has 38 MA's), (Start: 6 @26372 has 3 MA's), (7, 26390), (10, 26420), (13, 26441), (19, 26531), (22, 26570), (32, 26720), (35, 26750),

Gene: DuncansLeg_29 Start: 27890, Stop: 28345, Start Num: 5
Candidate Starts for DuncansLeg_29:
(Start: 5 @27890 has 38 MA's), (Start: 6 @27893 has 3 MA's), (7, 27911), (8, 27917), (18, 28046), (19, 28052), (20, 28058), (25, 28127), (27, 28151), (28, 28187), (29, 28196), (36, 28313),

Gene: DyoEdafos_28 Start: 26498, Stop: 26944, Start Num: 6
Candidate Starts for DyoEdafos_28:
(Start: 5 @26495 has 38 MA's), (Start: 6 @26498 has 3 MA's), (7, 26516), (12, 26561), (13, 26567), (20, 26663), (21, 26687), (32, 26846), (35, 26876),

Gene: Ellson_29 Start: 27880, Stop: 28332, Start Num: 6
Candidate Starts for Ellson_29:
(Start: 5 @27877 has 38 MA's), (Start: 6 @27880 has 3 MA's), (7, 27898), (8, 27904), (13, 27949), (18, 28033), (19, 28039), (20, 28045), (25, 28114), (27, 28138), (28, 28174), (29, 28183), (36, 28300),

Gene: Enceladus_27 Start: 26563, Stop: 27006, Start Num: 5
Candidate Starts for Enceladus_27:
(Start: 5 @26563 has 38 MA's), (Start: 6 @26566 has 3 MA's), (9, 26593), (14, 26650), (16, 26707), (17, 26710), (19, 26725), (20, 26731), (22, 26764), (24, 26785), (26, 26821), (34, 26920), (35, 26938),

Gene: Finnry_29 Start: 27911, Stop: 28375, Start Num: 5
Candidate Starts for Finnry_29:
(1, 27743), (2, 27749), (3, 27863), (4, 27866), (Start: 5 @27911 has 38 MA's), (Start: 6 @27914 has 3 MA's), (7, 27932), (9, 27941), (13, 27983), (18, 28067), (19, 28073), (20, 28079), (25, 28148), (27, 28172), (28, 28208), (29, 28217), (36, 28343),

Gene: Halena_27 Start: 26590, Stop: 27033, Start Num: 5
Candidate Starts for Halena_27:
(Start: 5 @26590 has 38 MA's), (Start: 6 @26593 has 3 MA's), (9, 26620), (14, 26677), (15, 26719), (16, 26734), (17, 26737), (20, 26758), (22, 26791),

Gene: Jobypre_29 Start: 27907, Stop: 28371, Start Num: 5
Candidate Starts for Jobypre_29:
(1, 27739), (2, 27745), (3, 27859), (4, 27862), (Start: 5 @27907 has 38 MA's), (Start: 6 @27910 has 3 MA's), (7, 27928), (9, 27937), (13, 27979), (18, 28063), (19, 28069), (20, 28075), (25, 28144), (27, 28168), (28, 28204), (29, 28213), (36, 28339),

Gene: JoeDirt_27 Start: 26561, Stop: 27004, Start Num: 5
Candidate Starts for JoeDirt_27:
(Start: 5 @26561 has 38 MA's), (Start: 6 @26564 has 3 MA's), (9, 26591), (14, 26648), (16, 26705), (17, 26708), (19, 26723), (20, 26729), (22, 26762), (24, 26783), (26, 26819), (34, 26918), (35, 26936),

Gene: Jubie_29 Start: 27908, Stop: 28372, Start Num: 5
Candidate Starts for Jubie_29:

(1, 27740), (2, 27746), (3, 27860), (4, 27863), (Start: 5 @27908 has 38 MA's), (Start: 6 @27911 has 3 MA's), (7, 27929), (9, 27938), (13, 27980), (18, 28064), (19, 28070), (20, 28076), (25, 28145), (27, 28169), (28, 28205), (29, 28214), (36, 28340),

Gene: Kingsolomon_29 Start: 27907, Stop: 28371, Start Num: 5
Candidate Starts for Kingsolomon_29:
(1, 27739), (2, 27745), (3, 27859), (4, 27862), (Start: 5 @27907 has 38 MA's), (Start: 6 @27910 has 3 MA's), (7, 27928), (9, 27937), (13, 27979), (18, 28063), (19, 28069), (20, 28075), (25, 28144), (27, 28168), (28, 28204), (29, 28213), (36, 28339),

Gene: KirDoubleO7_27 Start: 27899, Stop: 28354, Start Num: 5
Candidate Starts for KirDoubleO7_27:
(Start: 5 @27899 has 38 MA's), (Start: 6 @27902 has 3 MA's), (7, 27920), (8, 27926), (13, 27971), (18, 28055), (19, 28061), (20, 28067), (25, 28136), (27, 28160), (28, 28196), (29, 28205), (36, 28322),

Gene: Kropertea_27 Start: 26302, Stop: 26751, Start Num: 5
Candidate Starts for Kropertea_27:
(Start: 5 @26302 has 38 MA's), (Start: 6 @26305 has 3 MA's), (7, 26323), (12, 26368), (13, 26374), (20, 26470), (21, 26494), (32, 26653), (35, 26683),

Gene: Krypton555_29 Start: 27808, Stop: 28269, Start Num: 5
Candidate Starts for Krypton555_29:
(Start: 5 @27808 has 38 MA's), (Start: 6 @27811 has 3 MA's), (7, 27829), (8, 27835), (18, 27964), (19, 27970), (20, 27976), (27, 28069), (28, 28105), (29, 28114), (31, 28153), (36, 28237),

Gene: LeBron_27 Start: 26605, Stop: 27048, Start Num: 5
Candidate Starts for LeBron_27:
(Start: 5 @26605 has 38 MA's), (Start: 6 @26608 has 3 MA's), (9, 26635), (14, 26692), (16, 26749), (17, 26752), (19, 26767), (20, 26773), (22, 26806), (24, 26827), (26, 26863), (34, 26962), (35, 26980),

Gene: LiyuLake_29 Start: 27869, Stop: 28324, Start Num: 5
Candidate Starts for LiyuLake_29:
(Start: 5 @27869 has 38 MA's), (Start: 6 @27872 has 3 MA's), (7, 27890), (8, 27896), (13, 27941), (18, 28025), (19, 28031), (20, 28037), (25, 28106), (27, 28130), (28, 28166), (29, 28175), (36, 28292),

Gene: Lolly9_29 Start: 27674, Stop: 28135, Start Num: 5
Candidate Starts for Lolly9_29:
(Start: 5 @27674 has 38 MA's), (Start: 6 @27677 has 3 MA's), (7, 27695), (8, 27701), (18, 27830), (19, 27836), (20, 27842), (27, 27935), (28, 27971), (36, 28103),

Gene: Lumos_29 Start: 27907, Stop: 28368, Start Num: 6
Candidate Starts for Lumos_29:
(1, 27736), (2, 27742), (3, 27856), (4, 27859), (Start: 5 @27904 has 38 MA's), (Start: 6 @27907 has 3 MA's), (7, 27925), (9, 27934), (13, 27976), (18, 28060), (19, 28066), (20, 28072), (25, 28141), (27, 28165), (28, 28201), (29, 28210), (36, 28336),

Gene: MAckerman_27 Start: 26579, Stop: 27022, Start Num: 5
Candidate Starts for MAckerman_27:
(Start: 5 @26579 has 38 MA's), (Start: 6 @26582 has 3 MA's), (9, 26609), (14, 26666), (16, 26723), (17, 26726), (19, 26741), (20, 26747), (22, 26780), (24, 26801), (26, 26837), (35, 26954),

Gene: MiniLon_29 Start: 27674, Stop: 28135, Start Num: 5
Candidate Starts for MiniLon_29:

(Start: 5 @27674 has 38 MA's), (Start: 6 @27677 has 3 MA's), (7, 27695), (8, 27701), (18, 27830), (19, 27836), (20, 27842), (27, 27935), (28, 27971), (36, 28103),

Gene: MiniMac_29 Start: 27675, Stop: 28136, Start Num: 5
Candidate Starts for MiniMac_29:
(Start: 5 @27675 has 38 MA's), (Start: 6 @27678 has 3 MA's), (7, 27696), (8, 27702), (18, 27831), (19, 27837), (20, 27843), (27, 27936), (28, 27972), (36, 28104),

Gene: Moostard_29 Start: 27910, Stop: 28374, Start Num: 5
Candidate Starts for Moostard_29:
(1, 27742), (2, 27748), (3, 27862), (4, 27865), (Start: 5 @27910 has 38 MA's), (Start: 6 @27913 has 3 MA's), (7, 27931), (9, 27940), (13, 27982), (18, 28066), (19, 28072), (20, 28078), (25, 28147), (27, 28171), (28, 28207), (29, 28216), (36, 28342),

Gene: MsGreen_29 Start: 27907, Stop: 28371, Start Num: 5
Candidate Starts for MsGreen_29:
(1, 27739), (2, 27745), (3, 27859), (4, 27862), (Start: 5 @27907 has 38 MA's), (Start: 6 @27910 has 3 MA's), (7, 27928), (9, 27937), (13, 27979), (18, 28063), (19, 28069), (20, 28075), (25, 28144), (27, 28168), (28, 28204), (29, 28213), (36, 28339),

Gene: Nicholas_29 Start: 27907, Stop: 28371, Start Num: 5
Candidate Starts for Nicholas_29:
(1, 27739), (2, 27745), (3, 27859), (4, 27862), (Start: 5 @27907 has 38 MA's), (Start: 6 @27910 has 3 MA's), (7, 27928), (9, 27937), (13, 27979), (18, 28063), (19, 28069), (20, 28075), (25, 28144), (27, 28168), (28, 28204), (29, 28213), (36, 28339),

Gene: OhShagHennessy_27 Start: 26544, Stop: 26987, Start Num: 5
Candidate Starts for OhShagHennessy_27:
(Start: 5 @26544 has 38 MA's), (Start: 6 @26547 has 3 MA's), (9, 26574), (14, 26631), (16, 26688), (17, 26691), (19, 26706), (20, 26712), (22, 26745), (24, 26766), (26, 26802), (34, 26901), (35, 26919),

Gene: PYPDinur_27 Start: 26369, Stop: 26845, Start Num: 5
Candidate Starts for PYPDinur_27:
(Start: 5 @26369 has 38 MA's), (Start: 6 @26372 has 3 MA's), (7, 26390), (10, 26420), (13, 26441), (19, 26531), (22, 26570), (32, 26720), (35, 26750),

Gene: Poochiewood_27 Start: 26579, Stop: 27022, Start Num: 5
Candidate Starts for Poochiewood_27:
(Start: 5 @26579 has 38 MA's), (Start: 6 @26582 has 3 MA's), (9, 26609), (14, 26666), (15, 26708), (16, 26723), (17, 26726), (20, 26747), (22, 26780),

Gene: Red305_29 Start: 27907, Stop: 28371, Start Num: 5
Candidate Starts for Red305_29:
(1, 27739), (2, 27745), (3, 27859), (4, 27862), (Start: 5 @27907 has 38 MA's), (Start: 6 @27910 has 3 MA's), (7, 27928), (9, 27937), (13, 27979), (18, 28063), (19, 28069), (20, 28075), (25, 28144), (27, 28168), (28, 28204), (29, 28213), (36, 28339),

Gene: Rose5_27 Start: 26579, Stop: 27022, Start Num: 5
Candidate Starts for Rose5_27:
(Start: 5 @26579 has 38 MA's), (Start: 6 @26582 has 3 MA's), (9, 26609), (14, 26666), (15, 26708), (16, 26723), (17, 26726), (20, 26747), (22, 26780),

Gene: Samty_29 Start: 27910, Stop: 28374, Start Num: 5

Candidate Starts for Samty_29:
(1, 27742), (2, 27748), (3, 27862), (4, 27865), (Start: 5 @27910 has 38 MA's), (Start: 6 @27913 has 3 MA's), (7, 27931), (9, 27940), (13, 27982), (18, 28066), (19, 28072), (20, 28078), (25, 28147), (27, 28171), (28, 28207), (29, 28216), (36, 28342),

Gene: Sheng711_27 Start: 26369, Stop: 26845, Start Num: 5
Candidate Starts for Sheng711_27:
(Start: 5 @26369 has 38 MA's), (Start: 6 @26372 has 3 MA's), (7, 26390), (10, 26420), (13, 26441), (19, 26531), (22, 26570), (32, 26720), (35, 26750),

Gene: Silverleaf_27 Start: 26579, Stop: 27022, Start Num: 5
Candidate Starts for Silverleaf_27:
(Start: 5 @26579 has 38 MA's), (Start: 6 @26582 has 3 MA's), (9, 26609), (14, 26666), (15, 26708), (16, 26723), (17, 26726), (20, 26747), (22, 26780),

Gene: Snenia_29 Start: 27908, Stop: 28372, Start Num: 5
Candidate Starts for Snenia_29:
(1, 27740), (2, 27746), (3, 27860), (4, 27863), (Start: 5 @27908 has 38 MA's), (Start: 6 @27911 has 3 MA's), (7, 27929), (9, 27938), (13, 27980), (18, 28064), (19, 28070), (20, 28076), (25, 28145), (27, 28169), (28, 28205), (29, 28214), (36, 28340),

Gene: TriFive_29 Start: 27907, Stop: 28371, Start Num: 5
Candidate Starts for TriFive_29:
(1, 27739), (2, 27745), (3, 27859), (4, 27862), (Start: 5 @27907 has 38 MA's), (Start: 6 @27910 has 3 MA's), (7, 27928), (9, 27937), (13, 27979), (18, 28063), (19, 28069), (20, 28075), (25, 28144), (27, 28168), (28, 28204), (29, 28213), (36, 28339),

Gene: Tyson_27 Start: 26579, Stop: 27022, Start Num: 5
Candidate Starts for Tyson_27:
(Start: 5 @26579 has 38 MA's), (Start: 6 @26582 has 3 MA's), (9, 26609), (14, 26666), (15, 26708), (16, 26723), (17, 26726), (20, 26747), (22, 26780),

Gene: UPIE_27 Start: 26577, Stop: 27020, Start Num: 5
Candidate Starts for UPIE_27:
(Start: 5 @26577 has 38 MA's), (Start: 6 @26580 has 3 MA's), (9, 26607), (14, 26664), (16, 26721), (17, 26724), (19, 26739), (20, 26745), (22, 26778), (24, 26799), (26, 26835), (34, 26934), (35, 26952),

Gene: Wamburgrxpress_27 Start: 26592, Stop: 27035, Start Num: 5
Candidate Starts for Wamburgrxpress_27:
(Start: 5 @26592 has 38 MA's), (Start: 6 @26595 has 3 MA's), (9, 26622), (14, 26679), (15, 26721), (16, 26736), (17, 26739), (20, 26760), (22, 26793), (34, 26949),

Gene: Whirlwind_30 Start: 27642, Stop: 28112, Start Num: 5
Candidate Starts for Whirlwind_30:
(Start: 5 @27642 has 38 MA's), (Start: 6 @27645 has 3 MA's), (7, 27663), (8, 27669), (18, 27798), (19, 27804), (20, 27810), (27, 27903), (28, 27939), (29, 27948), (31, 27987), (36, 28080),

Gene: Wyatt2_27 Start: 26579, Stop: 27022, Start Num: 5
Candidate Starts for Wyatt2_27:
(Start: 5 @26579 has 38 MA's), (Start: 6 @26582 has 3 MA's), (9, 26609), (14, 26666), (15, 26708), (16, 26723), (17, 26726), (20, 26747), (22, 26780),

Gene: Zaria_27 Start: 26593, Stop: 27036, Start Num: 5

Candidate Starts for Zaria_27:
(Start: 5 @26593 has 38 MA's), (Start: 6 @26596 has 3 MA's), (9, 26623), (14, 26680), (16, 26737), (17, 26740), (19, 26755), (20, 26761), (22, 26794), (24, 26815), (26, 26851), (34, 26950), (35, 26968),