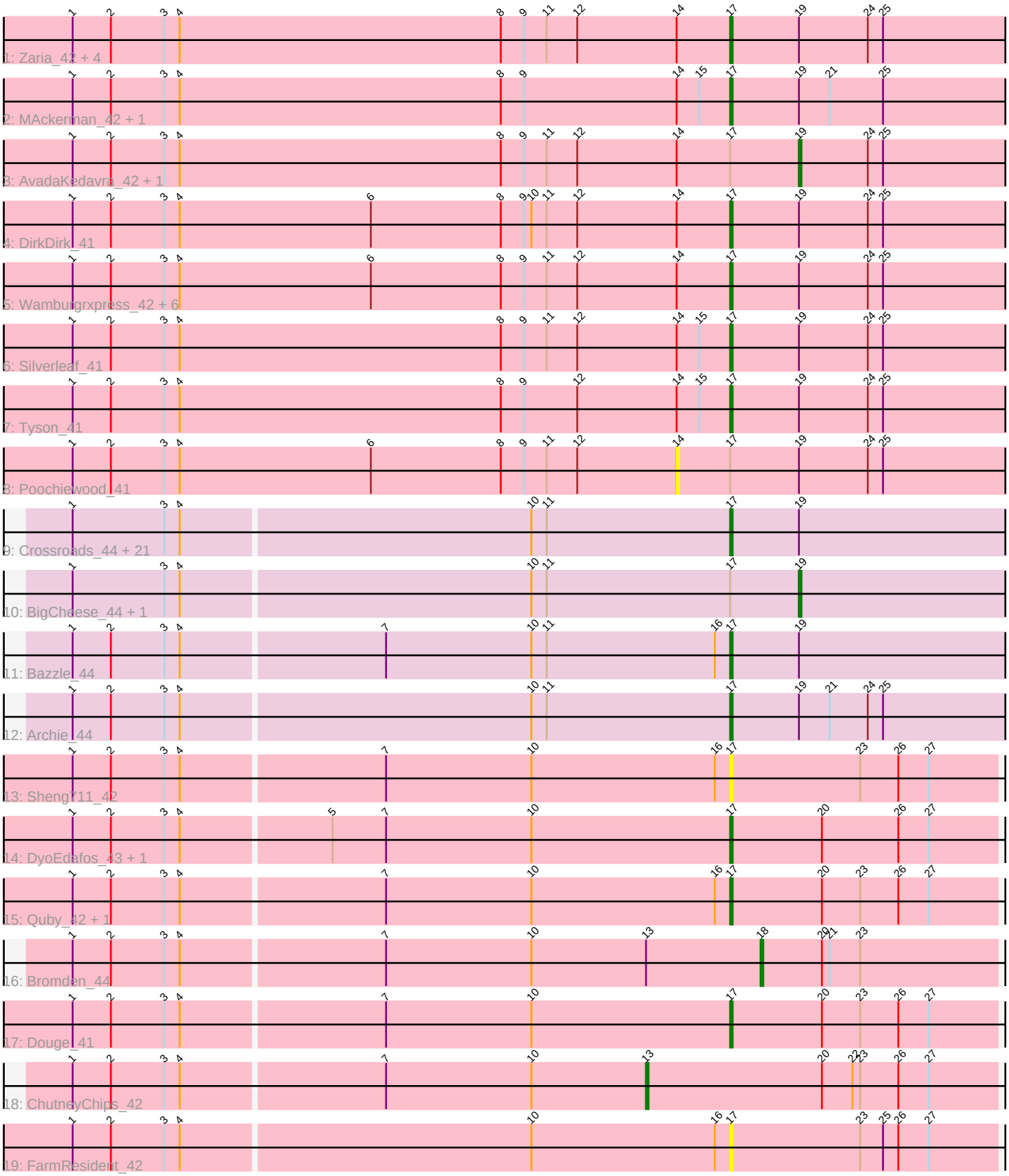
Pham 338316


1: Zaria_42 + 4
2: MAckerman_42 + 1
3: AvadaKedavra_42 + 1
4: DirkDirk_41
5: Wamburgrxpress_42 + 6
6: Silverleaf_41
7: Tyson_41
8: Poochiewood_41
9: Crossroads_44 + 21
10: BigCheese_44 + 1
11: Bazzle_44
12: Archie_44
13: Sheng711_42
14: DyoEdafos_43 + 1
15: Quby_42 + 1
16: Bromden_44
17: Douge_41
18: ChutneyChips_42
19: FarmResident_42

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 338316 Report

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

Pham number 338316 has 55 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Zaria_42, Wyatt2_42, Rose5_41, Calm_42, CicholasNage_42
• Track 2 : MAckerman_42, Halena_41
• Track 3 : AvadaKedavra_42, Acquire49_42
• Track 4 : DirkDirk_41
• Track 5 : Wamburgrxpress_42, OhShagHennessy_41, JoeDirt_41, Appletree2_41, LeBron_42, UPIE_42, Enceladus_41
• Track 6 : Silverleaf_41
• Track 7 : Tyson_41
• Track 8 : Poochiewood_41
• Track 9 : Crossroads_44, Vetrix_44, Breezona_44, Finemlucis_44, BobsGarage_44, Gardann_44, Nicholasp3_44, Wilder_44, Lewan_44, Miley16_44, Gabriela_44, Wigglewiggle_44, OverPar_44, Kahlid_44, Underpass_44, Zakai_44, Rumpelstiltskin_44, LilDestine_44, Itos_43, Winky_44, DrSeegs_44, Faith1_44
• Track 10 : BigCheese_44, Netyap_44
• Track 11 : Bazzle_44
• Track 12 : Archie_44
• Track 13 : Sheng711_42
• Track 14 : DyoEdafos_43, Kropertea_42
• Track 15 : Quby_42, Chaser_41
• Track 16 : Bromden_44
• Track 17 : Douge_41
• Track 18 : ChutneyChips_42
• Track 19 : FarmResident_42

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 45 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Appletree2_41, Archie_44, Bazzle_44, BobsGarage_44, Breezona_44, Calm_42, Chaser_41, CicholasNage_42, Crossroads_44, DirkDirk_41, Douge_41, DrSeegs_44, DyoEdafos_43, Enceladus_41, Faith1_44, FarmResident_42, Finemlucis_44, Gabriela_44, Gardann_44, Halena_41, Itos_43, JoeDirt_41, Kahlid_44,

Kropertea_42, LeBron_42, Lewan_44, LilDestine_44, MAckerman_42, Miley16_44, Nicholasp3_44, OhShagHennessy_41, OverPar_44, Quby_42, Rose5_41, Rumpelstiltskin_44, Sheng711_42, Silverleaf_41, Tyson_41, UPIE_42, Underpass_44, Vetrix_44, Wamburgrxpress_42, Wigglewiggle_44, Wilder_44, Winky_44, Wyatt2_42, Zakai_44, Zaria_42,

Genes that have the "Most Annotated" start but do not call it:
• Acquire49_42, AvadaKedavra_42, BigCheese_44, Netyap_44, Poochiewood_41,

Genes that do not have the "Most Annotated" start:
• Bromden_44, ChutneyChips_42,

Summary by start number:

Start 13:
• Found in 2 of 55 (3.6%) of genes in pham
• Manual Annotations of this start: 1 of 51
• Called 50.0% of time when present
• Phage (with cluster) where this start called: ChutneyChips_42 (L4),

Start 14:
• Found in 20 of 55 (36.4%) of genes in pham
• No Manual Annotations of this start.
• Called 5.0% of time when present
• Phage (with cluster) where this start called: Poochiewood_41 (L1),

Start 17:
• Found in 53 of 55 (96.4%) of genes in pham
• Manual Annotations of this start: 45 of 51
• Called 90.6% of time when present
• Phage (with cluster) where this start called: Appletree2_41 (L1), Archie_44 (L2), Bazzle_44 (L2), BobsGarage_44 (L2), Breezona_44 (L2), Calm_42 (L1), Chaser_41 (L4), CicholasNage_42 (L1), Crossroads_44 (L2), DirkDirk_41 (L1), Douge_41 (L4), DrSeegs_44 (L2), DyoEdafos_43 (L4), Enceladus_41 (L1), Faith1_44 (L2), FarmResident_42 (L4), Finemlucis_44 (L2), Gabriela_44 (L2), Gardann_44 (L2), Halena_41 (L1), Itos_43 (L2), JoeDirt_41 (L1), Kahlid_44 (L2), Kropertea_42 (L4), LeBron_42 (L1), Lewan_44 (L2), LilDestine_44 (L2), MAckerman_42 (L1), Miley16_44 (L2), Nicholasp3_44 (L2), OhShagHennessy_41 (L1), OverPar_44 (L2), Quby_42 (L4), Rose5_41 (L1), Rumpelstiltskin_44 (L2), Sheng711_42 (L4), Silverleaf_41 (L1), Tyson_41 (L1), UPIE_42 (L1), Underpass_44 (L2), Vetrix_44 (L2), Wamburgrxpress_42 (L1), Wigglewiggle_44 (L2), Wilder_44 (L2), Winky_44 (L2), Wyatt2_42 (L1), Zakai_44 (L2), Zaria_42 (L1),

Start 18:
• Found in 1 of 55 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 51
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bromden_44 (L4),

Start 19:
• Found in 46 of 55 (83.6%) of genes in pham
• Manual Annotations of this start: 4 of 51
• Called 8.7% of time when present

• Phage (with cluster) where this start called: Acquire49_42 (L1), AvadaKedavra_42 (L1), BigCheese_44 (L2), Netyap_44 (L2),

Summary by clusters:

There are 3 clusters represented in this pham: L4, L2, L1,

Info for manual annotations of cluster L1:
•Start number 17 was manually annotated 17 times for cluster L1.
•Start number 19 was manually annotated 2 times for cluster L1.

Info for manual annotations of cluster L2:
•Start number 17 was manually annotated 24 times for cluster L2.
•Start number 19 was manually annotated 2 times for cluster L2.

Info for manual annotations of cluster L4:
•Start number 13 was manually annotated 1 time for cluster L4.
•Start number 17 was manually annotated 4 times for cluster L4.
•Start number 18 was manually annotated 1 time for cluster L4.

Gene Information:

Gene: Acquire49_42 Start: 33945, Stop: 34028, Start Num: 19
Candidate Starts for Acquire49_42:
(1, 33660), (2, 33675), (3, 33696), (4, 33702), (8, 33828), (9, 33837), (11, 33846), (12, 33858), (14, 33897), (Start: 17 @33918 has 45 MA's), (Start: 19 @33945 has 4 MA's), (24, 33972), (25, 33978),

Gene: Appletree2_41 Start: 33845, Stop: 33955, Start Num: 17
Candidate Starts for Appletree2_41:
(1, 33587), (2, 33602), (3, 33623), (4, 33629), (6, 33704), (8, 33755), (9, 33764), (11, 33773), (12, 33785), (14, 33824), (Start: 17 @33845 has 45 MA's), (Start: 19 @33872 has 4 MA's), (24, 33899), (25, 33905),

Gene: Archie_44 Start: 35453, Stop: 35563, Start Num: 17
Candidate Starts for Archie_44:
(1, 35198), (2, 35213), (3, 35234), (4, 35240), (10, 35375), (11, 35381), (Start: 17 @35453 has 45 MA's), (Start: 19 @35480 has 4 MA's), (21, 35492), (24, 35507), (25, 35513),

Gene: AvadaKedavra_42 Start: 33954, Stop: 34037, Start Num: 19
Candidate Starts for AvadaKedavra_42:
(1, 33669), (2, 33684), (3, 33705), (4, 33711), (8, 33837), (9, 33846), (11, 33855), (12, 33867), (14, 33906), (Start: 17 @33927 has 45 MA's), (Start: 19 @33954 has 4 MA's), (24, 33981), (25, 33987),

Gene: Bazzle_44 Start: 35485, Stop: 35595, Start Num: 17
Candidate Starts for Bazzle_44:
(1, 35230), (2, 35245), (3, 35266), (4, 35272), (7, 35350), (10, 35407), (11, 35413), (16, 35479), (Start: 17 @35485 has 45 MA's), (Start: 19 @35512 has 4 MA's),

Gene: BigCheese_44 Start: 35276, Stop: 35359, Start Num: 19
Candidate Starts for BigCheese_44:

(1, 34994), (3, 35030), (4, 35036), (10, 35171), (11, 35177), (Start: 17 @35249 has 45 MA's), (Start: 19 @35276 has 4 MA's),

Gene: BobsGarage_44 Start: 35249, Stop: 35359, Start Num: 17
Candidate Starts for BobsGarage_44:
(1, 34994), (3, 35030), (4, 35036), (10, 35171), (11, 35177), (Start: 17 @35249 has 45 MA's), (Start: 19 @35276 has 4 MA's),

Gene: Breezona_44 Start: 35249, Stop: 35359, Start Num: 17
Candidate Starts for Breezona_44:
(1, 34994), (3, 35030), (4, 35036), (10, 35171), (11, 35177), (Start: 17 @35249 has 45 MA's), (Start: 19 @35276 has 4 MA's),

Gene: Bromden_44 Start: 35017, Stop: 35109, Start Num: 18
Candidate Starts for Bromden_44:
(1, 34750), (2, 34765), (3, 34786), (4, 34792), (7, 34870), (10, 34927), (Start: 13 @34972 has 1 MA's), (Start: 18 @35017 has 1 MA's), (20, 35041), (21, 35044), (23, 35056),

Gene: Calm_42 Start: 33933, Stop: 34043, Start Num: 17
Candidate Starts for Calm_42:
(1, 33675), (2, 33690), (3, 33711), (4, 33717), (8, 33843), (9, 33852), (11, 33861), (12, 33873), (14, 33912), (Start: 17 @33933 has 45 MA's), (Start: 19 @33960 has 4 MA's), (24, 33987), (25, 33993),

Gene: Chaser_41 Start: 33996, Stop: 34100, Start Num: 17
Candidate Starts for Chaser_41:
(1, 33741), (2, 33756), (3, 33777), (4, 33783), (7, 33861), (10, 33918), (16, 33990), (Start: 17 @33996 has 45 MA's), (20, 34032), (23, 34047), (26, 34062), (27, 34074),

Gene: ChutneyChips_42 Start: 34143, Stop: 34280, Start Num: 13
Candidate Starts for ChutneyChips_42:
(1, 33921), (2, 33936), (3, 33957), (4, 33963), (7, 34041), (10, 34098), (Start: 13 @34143 has 1 MA's), (20, 34212), (22, 34224), (23, 34227), (26, 34242), (27, 34254),

Gene: CicholasNage_42 Start: 33954, Stop: 34064, Start Num: 17
Candidate Starts for CicholasNage_42:
(1, 33696), (2, 33711), (3, 33732), (4, 33738), (8, 33864), (9, 33873), (11, 33882), (12, 33894), (14, 33933), (Start: 17 @33954 has 45 MA's), (Start: 19 @33981 has 4 MA's), (24, 34008), (25, 34014),

Gene: Crossroads_44 Start: 35251, Stop: 35361, Start Num: 17
Candidate Starts for Crossroads_44:
(1, 34996), (3, 35032), (4, 35038), (10, 35173), (11, 35179), (Start: 17 @35251 has 45 MA's), (Start: 19 @35278 has 4 MA's),

Gene: DirkDirk_41 Start: 33905, Stop: 34015, Start Num: 17
Candidate Starts for DirkDirk_41:
(1, 33647), (2, 33662), (3, 33683), (4, 33689), (6, 33764), (8, 33815), (9, 33824), (10, 33827), (11, 33833), (12, 33845), (14, 33884), (Start: 17 @33905 has 45 MA's), (Start: 19 @33932 has 4 MA's), (24, 33959), (25, 33965),

Gene: Douge_41 Start: 33934, Stop: 34038, Start Num: 17
Candidate Starts for Douge_41:
(1, 33679), (2, 33694), (3, 33715), (4, 33721), (7, 33799), (10, 33856), (Start: 17 @33934 has 45 MA's), (20, 33970), (23, 33985), (26, 34000), (27, 34012),

Gene: DrSeegs_44 Start: 35249, Stop: 35359, Start Num: 17
Candidate Starts for DrSeegs_44:
(1, 34994), (3, 35030), (4, 35036), (10, 35171), (11, 35177), (Start: 17 @35249 has 45 MA's), (Start: 19 @35276 has 4 MA's),

Gene: DyoEdafos_43 Start: 34256, Stop: 34360, Start Num: 17
Candidate Starts for DyoEdafos_43:
(1, 34001), (2, 34016), (3, 34037), (4, 34043), (5, 34100), (7, 34121), (10, 34178), (Start: 17 @34256 has 45 MA's), (20, 34292), (26, 34322), (27, 34334),

Gene: Enceladus_41 Start: 33888, Stop: 33998, Start Num: 17
Candidate Starts for Enceladus_41:
(1, 33630), (2, 33645), (3, 33666), (4, 33672), (6, 33747), (8, 33798), (9, 33807), (11, 33816), (12, 33828), (14, 33867), (Start: 17 @33888 has 45 MA's), (Start: 19 @33915 has 4 MA's), (24, 33942), (25, 33948),

Gene: Faith1_44 Start: 35249, Stop: 35359, Start Num: 17
Candidate Starts for Faith1_44:
(1, 34994), (3, 35030), (4, 35036), (10, 35171), (11, 35177), (Start: 17 @35249 has 45 MA's), (Start: 19 @35276 has 4 MA's),

Gene: FarmResident_42 Start: 33978, Stop: 34082, Start Num: 17
Candidate Starts for FarmResident_42:
(1, 33723), (2, 33738), (3, 33759), (4, 33765), (10, 33900), (16, 33972), (Start: 17 @33978 has 45 MA's), (23, 34029), (25, 34038), (26, 34044), (27, 34056),

Gene: Finemlucis_44 Start: 35525, Stop: 35635, Start Num: 17
Candidate Starts for Finemlucis_44:
(1, 35270), (3, 35306), (4, 35312), (10, 35447), (11, 35453), (Start: 17 @35525 has 45 MA's), (Start: 19 @35552 has 4 MA's),

Gene: Gabriela_44 Start: 35511, Stop: 35621, Start Num: 17
Candidate Starts for Gabriela_44:
(1, 35256), (3, 35292), (4, 35298), (10, 35433), (11, 35439), (Start: 17 @35511 has 45 MA's), (Start: 19 @35538 has 4 MA's),

Gene: Gardann_44 Start: 35250, Stop: 35360, Start Num: 17
Candidate Starts for Gardann_44:
(1, 34995), (3, 35031), (4, 35037), (10, 35172), (11, 35178), (Start: 17 @35250 has 45 MA's), (Start: 19 @35277 has 4 MA's),

Gene: Halena_41 Start: 33929, Stop: 34039, Start Num: 17
Candidate Starts for Halena_41:
(1, 33671), (2, 33686), (3, 33707), (4, 33713), (8, 33839), (9, 33848), (14, 33908), (15, 33917), (Start: 17 @33929 has 45 MA's), (Start: 19 @33956 has 4 MA's), (21, 33968), (25, 33989),

Gene: Itos_43 Start: 34155, Stop: 34265, Start Num: 17
Candidate Starts for Itos_43:
(1, 33900), (3, 33936), (4, 33942), (10, 34077), (11, 34083), (Start: 17 @34155 has 45 MA's), (Start: 19 @34182 has 4 MA's),

Gene: JoeDirt_41 Start: 33886, Stop: 33996, Start Num: 17

Candidate Starts for JoeDirt_41:
(1, 33628), (2, 33643), (3, 33664), (4, 33670), (6, 33745), (8, 33796), (9, 33805), (11, 33814), (12, 33826), (14, 33865), (Start: 17 @33886 has 45 MA's), (Start: 19 @33913 has 4 MA's), (24, 33940), (25, 33946),

Gene: Kahlid_44 Start: 35255, Stop: 35365, Start Num: 17
Candidate Starts for Kahlid_44:
(1, 35000), (3, 35036), (4, 35042), (10, 35177), (11, 35183), (Start: 17 @35255 has 45 MA's), (Start: 19 @35282 has 4 MA's),

Gene: Kropertea_42 Start: 34079, Stop: 34183, Start Num: 17
Candidate Starts for Kropertea_42:
(1, 33824), (2, 33839), (3, 33860), (4, 33866), (5, 33923), (7, 33944), (10, 34001), (Start: 17 @34079 has 45 MA's), (20, 34115), (26, 34145), (27, 34157),

Gene: LeBron_42 Start: 33930, Stop: 34040, Start Num: 17
Candidate Starts for LeBron_42:
(1, 33672), (2, 33687), (3, 33708), (4, 33714), (6, 33789), (8, 33840), (9, 33849), (11, 33858), (12, 33870), (14, 33909), (Start: 17 @33930 has 45 MA's), (Start: 19 @33957 has 4 MA's), (24, 33984), (25, 33990),

Gene: Lewan_44 Start: 35242, Stop: 35352, Start Num: 17
Candidate Starts for Lewan_44:
(1, 34987), (3, 35023), (4, 35029), (10, 35164), (11, 35170), (Start: 17 @35242 has 45 MA's), (Start: 19 @35269 has 4 MA's),

Gene: LilDestine_44 Start: 35247, Stop: 35357, Start Num: 17
Candidate Starts for LilDestine_44:
(1, 34992), (3, 35028), (4, 35034), (10, 35169), (11, 35175), (Start: 17 @35247 has 45 MA's), (Start: 19 @35274 has 4 MA's),

Gene: MAckerman_42 Start: 33923, Stop: 34033, Start Num: 17
Candidate Starts for MAckerman_42:
(1, 33665), (2, 33680), (3, 33701), (4, 33707), (8, 33833), (9, 33842), (14, 33902), (15, 33911), (Start: 17 @33923 has 45 MA's), (Start: 19 @33950 has 4 MA's), (21, 33962), (25, 33983),

Gene: Miley16_44 Start: 35249, Stop: 35359, Start Num: 17
Candidate Starts for Miley16_44:
(1, 34994), (3, 35030), (4, 35036), (10, 35171), (11, 35177), (Start: 17 @35249 has 45 MA's), (Start: 19 @35276 has 4 MA's),

Gene: Netyap_44 Start: 35276, Stop: 35359, Start Num: 19
Candidate Starts for Netyap_44:
(1, 34994), (3, 35030), (4, 35036), (10, 35171), (11, 35177), (Start: 17 @35249 has 45 MA's), (Start: 19 @35276 has 4 MA's),

Gene: Nicholasp3_44 Start: 35250, Stop: 35360, Start Num: 17
Candidate Starts for Nicholasp3_44:
(1, 34995), (3, 35031), (4, 35037), (10, 35172), (11, 35178), (Start: 17 @35250 has 45 MA's), (Start: 19 @35277 has 4 MA's),

Gene: OhShagHennessy_41 Start: 33876, Stop: 33986, Start Num: 17
Candidate Starts for OhShagHennessy_41:

(1, 33618), (2, 33633), (3, 33654), (4, 33660), (6, 33735), (8, 33786), (9, 33795), (11, 33804), (12, 33816), (14, 33855), (Start: 17 @33876 has 45 MA's), (Start: 19 @33903 has 4 MA's), (24, 33930), (25, 33936),

Gene: OverPar_44 Start: 35281, Stop: 35391, Start Num: 17
Candidate Starts for OverPar_44:
(1, 35026), (3, 35062), (4, 35068), (10, 35203), (11, 35209), (Start: 17 @35281 has 45 MA's), (Start: 19 @35308 has 4 MA's),

Gene: Poochiewood_41 Start: 33883, Stop: 34014, Start Num: 14
Candidate Starts for Poochiewood_41:
(1, 33646), (2, 33661), (3, 33682), (4, 33688), (6, 33763), (8, 33814), (9, 33823), (11, 33832), (12, 33844), (14, 33883), (Start: 17 @33904 has 45 MA's), (Start: 19 @33931 has 4 MA's), (24, 33958), (25, 33964),

Gene: Quby_42 Start: 33934, Stop: 34038, Start Num: 17
Candidate Starts for Quby_42:
(1, 33679), (2, 33694), (3, 33715), (4, 33721), (7, 33799), (10, 33856), (16, 33928), (Start: 17 @33934 has 45 MA's), (20, 33970), (23, 33985), (26, 34000), (27, 34012),

Gene: Rose5_41 Start: 33918, Stop: 34028, Start Num: 17
Candidate Starts for Rose5_41:
(1, 33660), (2, 33675), (3, 33696), (4, 33702), (8, 33828), (9, 33837), (11, 33846), (12, 33858), (14, 33897), (Start: 17 @33918 has 45 MA's), (Start: 19 @33945 has 4 MA's), (24, 33972), (25, 33978),

Gene: Rumpelstiltskin_44 Start: 35516, Stop: 35626, Start Num: 17
Candidate Starts for Rumpelstiltskin_44:
(1, 35261), (3, 35297), (4, 35303), (10, 35438), (11, 35444), (Start: 17 @35516 has 45 MA's), (Start: 19 @35543 has 4 MA's),

Gene: Sheng711_42 Start: 34040, Stop: 34144, Start Num: 17
Candidate Starts for Sheng711_42:
(1, 33785), (2, 33800), (3, 33821), (4, 33827), (7, 33905), (10, 33962), (16, 34034), (Start: 17 @34040 has 45 MA's), (23, 34091), (26, 34106), (27, 34118),

Gene: Silverleaf_41 Start: 33918, Stop: 34028, Start Num: 17
Candidate Starts for Silverleaf_41:
(1, 33660), (2, 33675), (3, 33696), (4, 33702), (8, 33828), (9, 33837), (11, 33846), (12, 33858), (14, 33897), (15, 33906), (Start: 17 @33918 has 45 MA's), (Start: 19 @33945 has 4 MA's), (24, 33972), (25, 33978),

Gene: Tyson_41 Start: 33919, Stop: 34029, Start Num: 17
Candidate Starts for Tyson_41:
(1, 33661), (2, 33676), (3, 33697), (4, 33703), (8, 33829), (9, 33838), (12, 33859), (14, 33898), (15, 33907), (Start: 17 @33919 has 45 MA's), (Start: 19 @33946 has 4 MA's), (24, 33973), (25, 33979),

Gene: UPIE_42 Start: 33902, Stop: 34012, Start Num: 17
Candidate Starts for UPIE_42:
(1, 33644), (2, 33659), (3, 33680), (4, 33686), (6, 33761), (8, 33812), (9, 33821), (11, 33830), (12, 33842), (14, 33881), (Start: 17 @33902 has 45 MA's), (Start: 19 @33929 has 4 MA's), (24, 33956), (25, 33962),

Gene: Underpass_44 Start: 35250, Stop: 35360, Start Num: 17

Candidate Starts for Underpass_44:
(1, 34995), (3, 35031), (4, 35037), (10, 35172), (11, 35178), (Start: 17 @35250 has 45 MA's), (Start: 19 @35277 has 4 MA's),

Gene: Vetrix_44 Start: 35256, Stop: 35366, Start Num: 17
Candidate Starts for Vetrix_44:
(1, 35001), (3, 35037), (4, 35043), (10, 35178), (11, 35184), (Start: 17 @35256 has 45 MA's), (Start: 19 @35283 has 4 MA's),

Gene: Wamburgrxpress_42 Start: 33917, Stop: 34027, Start Num: 17
Candidate Starts for Wamburgrxpress_42:
(1, 33659), (2, 33674), (3, 33695), (4, 33701), (6, 33776), (8, 33827), (9, 33836), (11, 33845), (12, 33857), (14, 33896), (Start: 17 @33917 has 45 MA's), (Start: 19 @33944 has 4 MA's), (24, 33971), (25, 33977),

Gene: Wigglewiggle_44 Start: 35282, Stop: 35392, Start Num: 17
Candidate Starts for Wigglewiggle_44:
(1, 35027), (3, 35063), (4, 35069), (10, 35204), (11, 35210), (Start: 17 @35282 has 45 MA's), (Start: 19 @35309 has 4 MA's),

Gene: Wilder_44 Start: 35255, Stop: 35365, Start Num: 17
Candidate Starts for Wilder_44:
(1, 35000), (3, 35036), (4, 35042), (10, 35177), (11, 35183), (Start: 17 @35255 has 45 MA's), (Start: 19 @35282 has 4 MA's),

Gene: Winky_44 Start: 35249, Stop: 35359, Start Num: 17
Candidate Starts for Winky_44:
(1, 34994), (3, 35030), (4, 35036), (10, 35171), (11, 35177), (Start: 17 @35249 has 45 MA's), (Start: 19 @35276 has 4 MA's),

Gene: Wyatt2_42 Start: 33918, Stop: 34028, Start Num: 17
Candidate Starts for Wyatt2_42:
(1, 33660), (2, 33675), (3, 33696), (4, 33702), (8, 33828), (9, 33837), (11, 33846), (12, 33858), (14, 33897), (Start: 17 @33918 has 45 MA's), (Start: 19 @33945 has 4 MA's), (24, 33972), (25, 33978),

Gene: Zakai_44 Start: 35507, Stop: 35617, Start Num: 17
Candidate Starts for Zakai_44:
(1, 35252), (3, 35288), (4, 35294), (10, 35429), (11, 35435), (Start: 17 @35507 has 45 MA's), (Start: 19 @35534 has 4 MA's),

Gene: Zaria_42 Start: 33933, Stop: 34043, Start Num: 17
Candidate Starts for Zaria_42:
(1, 33675), (2, 33690), (3, 33711), (4, 33717), (8, 33843), (9, 33852), (11, 33861), (12, 33873), (14, 33912), (Start: 17 @33933 has 45 MA's), (Start: 19 @33960 has 4 MA's), (24, 33987), (25, 33993),