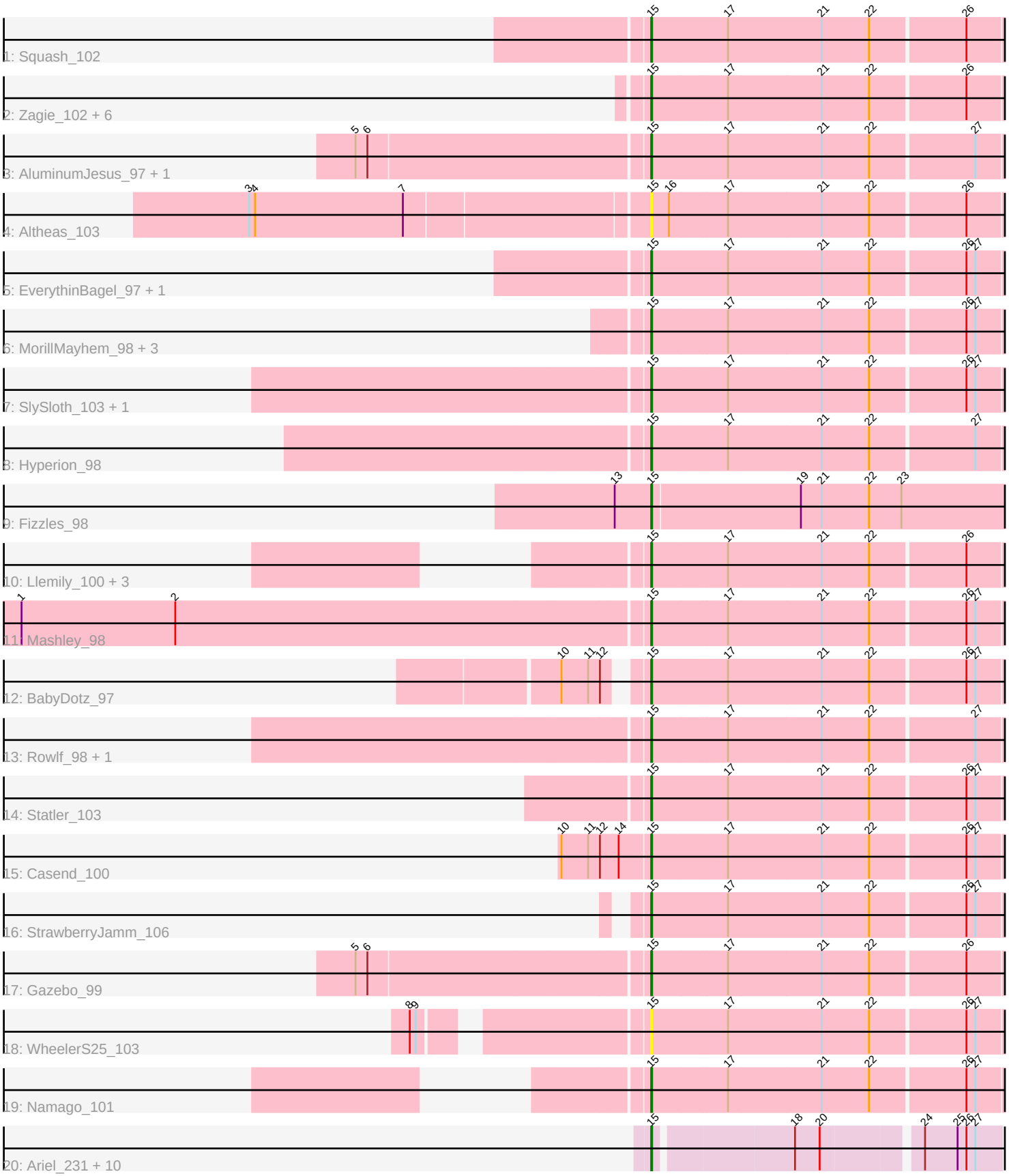
# Pham 296686


1: Squash_102
2: Zagie_102 + 6
3: AluminumJesus_97 + 1
4: Altheas_103
5: EverythinBagel_97 + 1
6: MorillMayhem_98 + 3
7: SlySloth_103 + 1
8: Hyperion_98
9: Fizzles_98
10: Llemily_100 + 3
11: Mashley_98
12: BabyDotz_97
13: Rowlf_98 + 1
14: Statler_103
15: Casend_100
16: StrawberryJamm_106
17: Gazebo_99
18: WheelerS25_103
19: Namago_101
20: Ariel_231 + 10

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 296686 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296686 has 46 members, 9 are drafts.

Phages represented in each track:
• Track 1 : Squash_102
• Track 2 : Zagie_102, Viceroy_99, Rudy_98, Kyva_105, Grassboy_105, Lonelysoil_98, Quammi_100
• Track 3 : AluminumJesus_97, Blab_97
• Track 4 : Altheas_103
• Track 5 : EverythinBagel_97, Judebell_99
• Track 6 : MorillMayhem_98, BaconCheese_102, Mila11_101, Nike_98
• Track 7 : SlySloth_103, FrankDeliGuy_98
• Track 8 : Hyperion_98
• Track 9 : Fizzles_98
• Track 10 : Llemily_100, DonaldDuck_100, Sillytadpoles_101, Zhafia_103
• Track 11 : Mashley_98
• Track 12 : BabyDotz_97
• Track 13 : Rowlf_98, Mentos_104
• Track 14 : Statler_103
• Track 15 : Casend_100
• Track 16 : StrawberryJamm_106
• Track 17 : Gazebo_99
• Track 18 : WheelerS25_103
• Track 19 : Namago_101
• Track 20 : Ariel_231, DmpstrDiver_224, Pound_214, Halley_227, Bombitas_209, Omega_226, Thibault_199, Courthouse_228, Rearden_223, Gonephishing_220, Superphikiman_223

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

The start number called the most often in the published annotations is 15, it was called in 37 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Altheas_103, AluminumJesus_97, Ariel_231, BabyDotz_97, BaconCheese_102, Blab_97, Bombitas_209, Casend_100, Courthouse_228, DmpstrDiver_224, DonaldDuck_100, EverythinBagel_97, Fizzles_98, FrankDeliGuy_98, Gazebo_99, Gonephishing_220, Grassboy_105, Halley_227, Hyperion_98, Judebell_99,

Kyva_105, Llemily_100, Lonelysoil_98, Mashley_98, Mentos_104, Mila11_101, MorillMayhem_98, Namago_101, Nike_98, Omega_226, Pound_214, Quammi_100, Rearden_223, Rowlf_98, Rudy_98, Sillytadpoles_101, SlySloth_103, Squash_102, Statler_103, StrawberryJamm_106, Superphikiman_223, Thibault_199, Viceroy_99, WheelerS25_103, Zagie_102, Zhafia_103,

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

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

**Summary by start number:**

Start 15:
• Found in 46 of 46 ( 100.0% ) of genes in pham
• Manual Annotations of this start: 37 of 37
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Altheas_103 (EG), AluminumJesus_97 (EG), Ariel_231 (J), BabyDotz_97 (EG), BaconCheese_102 (EG), Blab_97 (EG), Bombitas_209 (J), Casend_100 (EG), Courthouse_228 (J), DmpstrDiver_224 (J), DonaldDuck_100 (EG), EverythinBagel_97 (EG), Fizzles_98 (EG), FrankDeliGuy_98 (EG), Gazebo_99 (EG), Gonephishing_220 (J), Grassboy_105 (EG), Halley_227 (J), Hyperion_98 (EG), Judebell_99 (EG), Kyva_105 (EG), Llemily_100 (EG), Lonelysoil_98 (EG), Mashley_98 (EG), Mentos_104 (EG), Mila11_101 (EG), MorillMayhem_98 (EG), Namago_101 (EG), Nike_98 (EG), Omega_226 (J), Pound_214 (J), Quammi_100 (EG), Rearden_223 (J), Rowlf_98 (EG), Rudy_98 (EG), Sillytadpoles_101 (EG), SlySloth_103 (EG), Squash_102 (EG), Statler_103 (EG), StrawberryJamm_106 (EG), Superphikiman_223 (J), Thibault_199 (J), Viceroy_99 (EG), WheelerS25_103 (EG), Zagie_102 (EG), Zhafia_103 (EG),

**Summary by clusters:**

There are 2 clusters represented in this pham: EG, J,

Info for manual annotations of cluster EG:
•Start number 15 was manually annotated 28 times for cluster EG.

Info for manual annotations of cluster J:
•Start number 15 was manually annotated 9 times for cluster J.

***Gene Information:***

Gene: Altheas_103 Start: 60624, Stop: 60274, Start Num: 15
Candidate Starts for Altheas_103:
(3, 61017), (4, 61011), (7, 60861), (Start: 15 @60624 has 37 MA's), (16, 60606), (17, 60549), (21, 60456), (22, 60408), (26, 60315),

Gene: AluminumJesus_97 Start: 59060, Stop: 58710, Start Num: 15
Candidate Starts for AluminumJesus_97:

(5, 59345), (6, 59333), (Start: 15 @59060 has 37 MA's), (17, 58985), (21, 58892), (22, 58844), (27, 58742),

Gene: Ariel_231 Start: 105061, Stop: 104738, Start Num: 15
Candidate Starts for Ariel_231:
(Start: 15 @105061 has 37 MA's), (18, 104929), (20, 104905), (24, 104815), (25, 104782), (26, 104773), (27, 104764),

Gene: BabyDotz_97 Start: 60530, Stop: 60180, Start Num: 15
Candidate Starts for BabyDotz_97:
(10, 60596), (11, 60569), (12, 60557), (Start: 15 @60530 has 37 MA's), (17, 60455), (21, 60362), (22, 60314), (26, 60221), (27, 60212),

Gene: BaconCheese_102 Start: 60595, Stop: 60245, Start Num: 15
Candidate Starts for BaconCheese_102:
(Start: 15 @60595 has 37 MA's), (17, 60520), (21, 60427), (22, 60379), (26, 60286), (27, 60277),

Gene: Blab_97 Start: 59633, Stop: 59283, Start Num: 15
Candidate Starts for Blab_97:
(5, 59918), (6, 59906), (Start: 15 @59633 has 37 MA's), (17, 59558), (21, 59465), (22, 59417), (27, 59315),

Gene: Bombitas_209 Start: 104417, Stop: 104094, Start Num: 15
Candidate Starts for Bombitas_209:
(Start: 15 @104417 has 37 MA's), (18, 104285), (20, 104261), (24, 104171), (25, 104138), (26, 104129), (27, 104120),

Gene: Casend_100 Start: 59864, Stop: 59514, Start Num: 15
Candidate Starts for Casend_100:
(10, 59951), (11, 59924), (12, 59912), (14, 59894), (Start: 15 @59864 has 37 MA's), (17, 59789), (21, 59696), (22, 59648), (26, 59555), (27, 59546),

Gene: Courthouse_228 Start: 105921, Stop: 105598, Start Num: 15
Candidate Starts for Courthouse_228:
(Start: 15 @105921 has 37 MA's), (18, 105789), (20, 105765), (24, 105675), (25, 105642), (26, 105633), (27, 105624),

Gene: DmpstrDiver_224 Start: 106555, Stop: 106232, Start Num: 15
Candidate Starts for DmpstrDiver_224:
(Start: 15 @106555 has 37 MA's), (18, 106423), (20, 106399), (24, 106309), (25, 106276), (26, 106267), (27, 106258),

Gene: DonaldDuck_100 Start: 59448, Stop: 59098, Start Num: 15
Candidate Starts for DonaldDuck_100:
(Start: 15 @59448 has 37 MA's), (17, 59373), (21, 59280), (22, 59232), (26, 59139),

Gene: EverythinBagel_97 Start: 59029, Stop: 58679, Start Num: 15
Candidate Starts for EverythinBagel_97:
(Start: 15 @59029 has 37 MA's), (17, 58954), (21, 58861), (22, 58813), (26, 58720), (27, 58711),

Gene: Fizzles_98 Start: 59525, Stop: 59166, Start Num: 15
Candidate Starts for Fizzles_98:
(13, 59561), (Start: 15 @59525 has 37 MA's), (19, 59378), (21, 59357), (22, 59309), (23, 59276),

Gene: FrankDeliGuy_98 Start: 59788, Stop: 59438, Start Num: 15
Candidate Starts for FrankDeliGuy_98:
(Start: 15 @59788 has 37 MA's), (17, 59713), (21, 59620), (22, 59572), (26, 59479), (27, 59470),

Gene: Gazebo_99 Start: 59638, Stop: 59288, Start Num: 15
Candidate Starts for Gazebo_99:
(5, 59923), (6, 59911), (Start: 15 @59638 has 37 MA's), (17, 59563), (21, 59470), (22, 59422), (26, 59329),

Gene: Gonephishing_220 Start: 105314, Stop: 104991, Start Num: 15
Candidate Starts for Gonephishing_220:
(Start: 15 @105314 has 37 MA's), (18, 105182), (20, 105158), (24, 105068), (25, 105035), (26, 105026), (27, 105017),

Gene: Grassboy_105 Start: 60349, Stop: 59999, Start Num: 15
Candidate Starts for Grassboy_105:
(Start: 15 @60349 has 37 MA's), (17, 60274), (21, 60181), (22, 60133), (26, 60040),

Gene: Halley_227 Start: 106722, Stop: 106399, Start Num: 15
Candidate Starts for Halley_227:
(Start: 15 @106722 has 37 MA's), (18, 106590), (20, 106566), (24, 106476), (25, 106443), (26, 106434), (27, 106425),

Gene: Hyperion_98 Start: 59365, Stop: 59015, Start Num: 15
Candidate Starts for Hyperion_98:
(Start: 15 @59365 has 37 MA's), (17, 59290), (21, 59197), (22, 59149), (27, 59047),

Gene: Judebell_99 Start: 59264, Stop: 58914, Start Num: 15
Candidate Starts for Judebell_99:
(Start: 15 @59264 has 37 MA's), (17, 59189), (21, 59096), (22, 59048), (26, 58955), (27, 58946),

Gene: Kyva_105 Start: 60373, Stop: 60023, Start Num: 15
Candidate Starts for Kyva_105:
(Start: 15 @60373 has 37 MA's), (17, 60298), (21, 60205), (22, 60157), (26, 60064),

Gene: Llemily_100 Start: 59143, Stop: 58793, Start Num: 15
Candidate Starts for Llemily_100:
(Start: 15 @59143 has 37 MA's), (17, 59068), (21, 58975), (22, 58927), (26, 58834),

Gene: Lonelysoil_98 Start: 58904, Stop: 58554, Start Num: 15
Candidate Starts for Lonelysoil_98:
(Start: 15 @58904 has 37 MA's), (17, 58829), (21, 58736), (22, 58688), (26, 58595),

Gene: Mashley_98 Start: 59362, Stop: 59012, Start Num: 15
Candidate Starts for Mashley_98:
(1, 59989), (2, 59833), (Start: 15 @59362 has 37 MA's), (17, 59287), (21, 59194), (22, 59146), (26, 59053), (27, 59044),

Gene: Mentos_104 Start: 60481, Stop: 60134, Start Num: 15
Candidate Starts for Mentos_104:
(Start: 15 @60481 has 37 MA's), (17, 60406), (21, 60313), (22, 60265), (27, 60163),

Gene: Mila11_101 Start: 61146, Stop: 60796, Start Num: 15
Candidate Starts for Mila11_101:
(Start: 15 @61146 has 37 MA's), (17, 61071), (21, 60978), (22, 60930), (26, 60837), (27, 60828),

Gene: MorillMayhem_98 Start: 59485, Stop: 59135, Start Num: 15
Candidate Starts for MorillMayhem_98:
(Start: 15 @59485 has 37 MA's), (17, 59410), (21, 59317), (22, 59269), (26, 59176), (27, 59167),

Gene: Namago_101 Start: 59431, Stop: 59081, Start Num: 15
Candidate Starts for Namago_101:
(Start: 15 @59431 has 37 MA's), (17, 59356), (21, 59263), (22, 59215), (26, 59122), (27, 59113),

Gene: Nike_98 Start: 59974, Stop: 59624, Start Num: 15
Candidate Starts for Nike_98:
(Start: 15 @59974 has 37 MA's), (17, 59899), (21, 59806), (22, 59758), (26, 59665), (27, 59656),

Gene: Omega_226 Start: 107434, Stop: 107111, Start Num: 15
Candidate Starts for Omega_226:
(Start: 15 @107434 has 37 MA's), (18, 107302), (20, 107278), (24, 107188), (25, 107155), (26, 107146), (27, 107137),

Gene: Pound_214 Start: 105325, Stop: 105011, Start Num: 15
Candidate Starts for Pound_214:
(Start: 15 @105325 has 37 MA's), (18, 105193), (20, 105169), (24, 105088), (25, 105055), (26, 105046), (27, 105037),

Gene: Quammi_100 Start: 59425, Stop: 59075, Start Num: 15
Candidate Starts for Quammi_100:
(Start: 15 @59425 has 37 MA's), (17, 59350), (21, 59257), (22, 59209), (26, 59116),

Gene: Rearden_223 Start: 104471, Stop: 104148, Start Num: 15
Candidate Starts for Rearden_223:
(Start: 15 @104471 has 37 MA's), (18, 104339), (20, 104315), (24, 104225), (25, 104192), (26, 104183), (27, 104174),

Gene: Rowlf_98 Start: 59714, Stop: 59364, Start Num: 15
Candidate Starts for Rowlf_98:
(Start: 15 @59714 has 37 MA's), (17, 59639), (21, 59546), (22, 59498), (27, 59396),

Gene: Rudy_98 Start: 59291, Stop: 58941, Start Num: 15
Candidate Starts for Rudy_98:
(Start: 15 @59291 has 37 MA's), (17, 59216), (21, 59123), (22, 59075), (26, 58982),

Gene: Sillytadpoles_101 Start: 59131, Stop: 58781, Start Num: 15
Candidate Starts for Sillytadpoles_101:
(Start: 15 @59131 has 37 MA's), (17, 59056), (21, 58963), (22, 58915), (26, 58822),

Gene: SlySloth_103 Start: 59707, Stop: 59360, Start Num: 15
Candidate Starts for SlySloth_103:
(Start: 15 @59707 has 37 MA's), (17, 59632), (21, 59539), (22, 59491), (26, 59398), (27, 59389),

Gene: Squash_102 Start: 59899, Stop: 59549, Start Num: 15
Candidate Starts for Squash_102:

(Start: 15 @59899 has 37 MA's), (17, 59824), (21, 59731), (22, 59683), (26, 59590),

Gene: Statler_103 Start: 59985, Stop: 59635, Start Num: 15
Candidate Starts for Statler_103:
(Start: 15 @59985 has 37 MA's), (17, 59910), (21, 59817), (22, 59769), (26, 59676), (27, 59667),

Gene: StrawberryJamm_106 Start: 59386, Stop: 59039, Start Num: 15
Candidate Starts for StrawberryJamm_106:
(Start: 15 @59386 has 37 MA's), (17, 59311), (21, 59218), (22, 59170), (26, 59077), (27, 59068),

Gene: Superphikiman_223 Start: 104882, Stop: 104559, Start Num: 15
Candidate Starts for Superphikiman_223:
(Start: 15 @104882 has 37 MA's), (18, 104750), (20, 104726), (24, 104636), (25, 104603), (26, 104594), (27, 104585),

Gene: Thibault_199 Start: 101860, Stop: 101537, Start Num: 15
Candidate Starts for Thibault_199:
(Start: 15 @101860 has 37 MA's), (18, 101728), (20, 101704), (24, 101614), (25, 101581), (26, 101572), (27, 101563),

Gene: Viceroy_99 Start: 59246, Stop: 58896, Start Num: 15
Candidate Starts for Viceroy_99:
(Start: 15 @59246 has 37 MA's), (17, 59171), (21, 59078), (22, 59030), (26, 58937),

Gene: WheelerS25_103 Start: 59939, Stop: 59589, Start Num: 15
Candidate Starts for WheelerS25_103:
(8, 60140), (9, 60134), (Start: 15 @59939 has 37 MA's), (17, 59864), (21, 59771), (22, 59723), (26, 59630), (27, 59621),

Gene: Zagie_102 Start: 59891, Stop: 59541, Start Num: 15
Candidate Starts for Zagie_102:
(Start: 15 @59891 has 37 MA's), (17, 59816), (21, 59723), (22, 59675), (26, 59582),

Gene: Zhafia_103 Start: 59925, Stop: 59575, Start Num: 15
Candidate Starts for Zhafia_103:
(Start: 15 @59925 has 37 MA's), (17, 59850), (21, 59757), (22, 59709), (26, 59616),