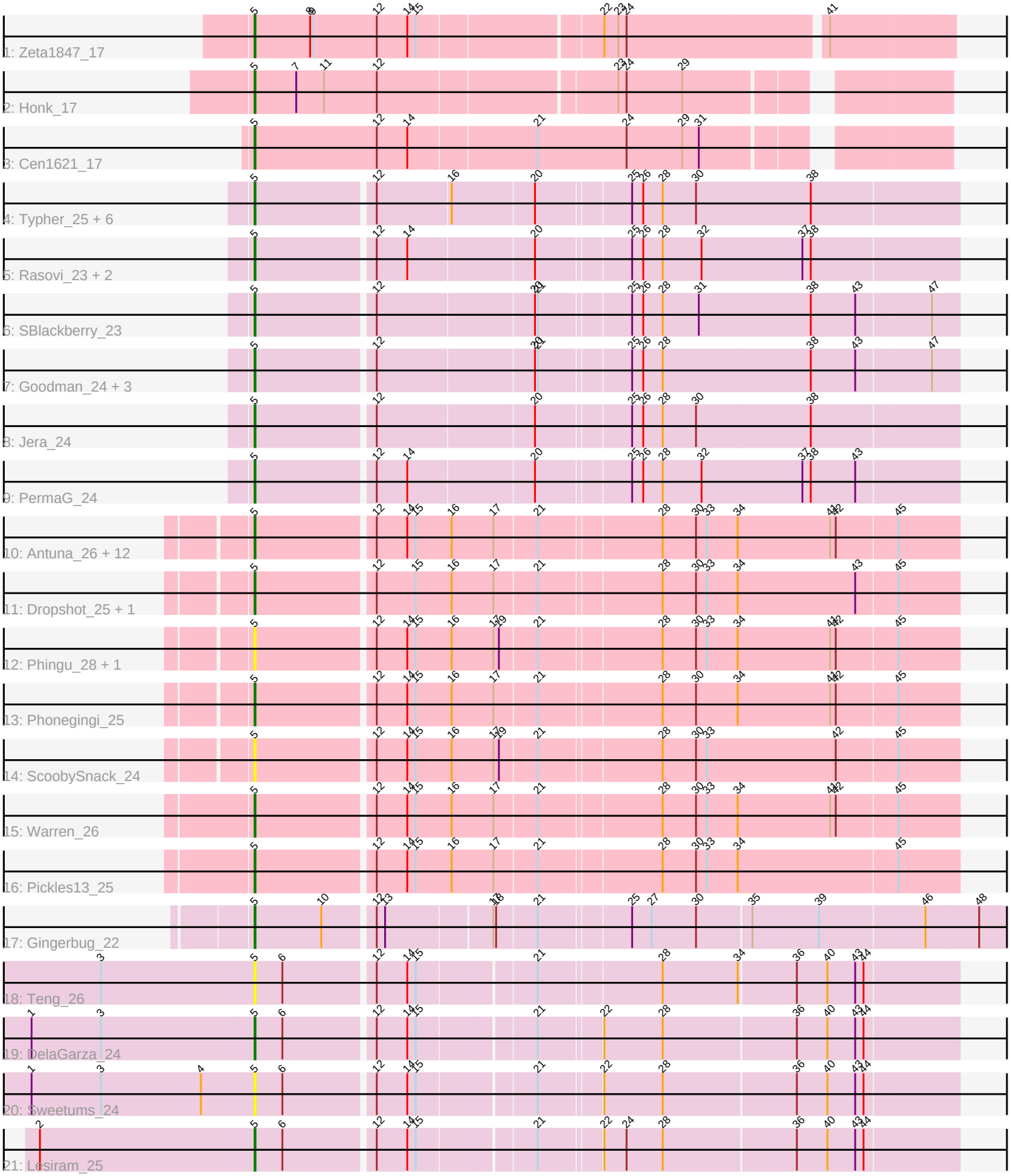
Pham 291286


1: Zeta1847_17
2: Honk_17
3: Cen1621_17
4: Typher_25 + 6
5: Rasovi_23 + 2
6: SBlackberry_23
7: Goodman_24 + 3
8: Jera_24
9: PermaG_24
10: Antuna_26 + 12
11: Dropshot_25 + 1
12: Phingu_28 + 1
13: Phonegingi_25
14: ScoobySnack_24
15: Warren_26
16: Pickles13_25
17: Gingerbug_22
18: Teng_26
19: DelaGarza_24
20: Sweetums_24
21: Lesiram_25

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 291286 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291286 has 46 members, 16 are drafts.

Phages represented in each track:
• Track 1 : Zeta1847_17
• Track 2 : Honk_17
• Track 3 : Cen1621_17
• Track 4 : Typher_25, Alove_23, Zanella_23, TurboVicky_23, Labella_25, Rootkit7_23, AyoTeo_25
• Track 5 : Rasovi_23, Htur_23, Linayshia_23
• Track 6 : SBlackberry_23
• Track 7 : Goodman_24, Cicada_25, Johann_24, Olympi_25
• Track 8 : Jera_24
• Track 9 : PermaG_24
• Track 10 : Antuna_26, Mariel_29, Carrillo_27, Losacky_27, Blett_26, Appa_25, NCRodriguez_27, PhillyJawn_26, Winchester007_41, Jakelyne_28, Bush_26, Violeta_27, MenE_26
• Track 11 : Dropshot_25, CookieDog_26
• Track 12 : Phingu_28, Guzman_27
• Track 13 : Phonegingi_25
• Track 14 : ScoobySnack_24
• Track 15 : Warren_26
• Track 16 : Pickles13_25
• Track 17 : Gingerbug_22
• Track 18 : Teng_26
• Track 19 : DelaGarza_24
• Track 20 : Sweetums_24
• Track 21 : Lesiram_25

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 30 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alove_23, Antuna_26, Appa_25, AyoTeo_25, Blett_26, Bush_26, Carrillo_27, Cen1621_17, Cicada_25, CookieDog_26, DelaGarza_24, Dropshot_25, Gingerbug_22, Goodman_24, Guzman_27, Honk_17, Htur_23, Jakelyne_28,

Jera_24, Johann_24, Labella_25, Lesiram_25, Linayshia_23, Losacky_27, Mariel_29, MenE_26, NCRodriguez_27, Olympi_25, PermaG_24, PhillyJawn_26, Phingu_28, Phonegingi_25, Pickles13_25, Rasovi_23, Rootkit7_23, SBlackberry_23, ScoobySnack_24, Sweetums_24, Teng_26, TurboVicky_23, Typher_25, Violeta_27, Warren_26, Winchester007_41, Zanella_23, Zeta1847_17,

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 5:
• Found in 46 of 46 (100.0%) of genes in pham
• Manual Annotations of this start: 30 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alove_23 (EJ), Antuna_26 (GA), Appa_25 (GA), AyoTeo_25 (EJ), Blett_26 (GA), Bush_26 (GA), Carrillo_27 (GA), Cen1621_17 (EH), Cicada_25 (EJ), CookieDog_26 (GA), DelaGarza_24 (GF), Dropshot_25 (GA), Gingerbug_22 (GF), Goodman_24 (EJ), Guzman_27 (GA), Honk_17 (EH), Htur_23 (EJ), Jakelyne_28 (GA), Jera_24 (EJ), Johann_24 (EJ), Labella_25 (EJ), Lesiram_25 (GF), Linayshia_23 (EJ), Losacky_27 (GA), Mariel_29 (GA), MenE_26 (GA), NCRodriguez_27 (GA), Olympi_25 (EJ), PermaG_24 (EJ), PhillyJawn_26 (GA), Phingu_28 (GA), Phonegingi_25 (GA), Pickles13_25 (GA), Rasovi_23 (EJ), Rootkit7_23 (EJ), SBlackberry_23 (EJ), ScoobySnack_24 (GA), Sweetums_24 (GF), Teng_26 (GF), TurboVicky_23 (EJ), Typher_25 (EJ), Violeta_27 (GA), Warren_26 (GA), Winchester007_41 (GA), Zanella_23 (EJ), Zeta1847_17 (EH),

Summary by clusters:

There are 4 clusters represented in this pham: GF, EH, GA, EJ,

Info for manual annotations of cluster EH:
•Start number 5 was manually annotated 3 times for cluster EH.

Info for manual annotations of cluster EJ:
•Start number 5 was manually annotated 13 times for cluster EJ.

Info for manual annotations of cluster GA:
•Start number 5 was manually annotated 11 times for cluster GA.

Info for manual annotations of cluster GF:
•Start number 5 was manually annotated 3 times for cluster GF.

Gene Information:

Gene: Alove_23 Start: 18450, Stop: 19181, Start Num: 5
Candidate Starts for Alove_23:

(Start: 5 @18450 has 30 MA's), (12, 18573), (16, 18651), (20, 18738), (25, 18834), (26, 18846), (28, 18867), (30, 18903), (38, 19026),

Gene: Antuna_26 Start: 16757, Stop: 17491, Start Num: 5
Candidate Starts for Antuna_26:
(Start: 5 @16757 has 30 MA's), (12, 16880), (14, 16913), (15, 16922), (16, 16961), (17, 17006), (21, 17051), (28, 17177), (30, 17213), (33, 17225), (34, 17258), (41, 17357), (42, 17363), (45, 17426),

Gene: Appa_25 Start: 16619, Stop: 17353, Start Num: 5
Candidate Starts for Appa_25:
(Start: 5 @16619 has 30 MA's), (12, 16742), (14, 16775), (15, 16784), (16, 16823), (17, 16868), (21, 16913), (28, 17039), (30, 17075), (33, 17087), (34, 17120), (41, 17219), (42, 17225), (45, 17288),

Gene: AyoTeo_25 Start: 18576, Stop: 19307, Start Num: 5
Candidate Starts for AyoTeo_25:
(Start: 5 @18576 has 30 MA's), (12, 18699), (16, 18777), (20, 18864), (25, 18960), (26, 18972), (28, 18993), (30, 19029), (38, 19152),

Gene: Blett_26 Start: 16772, Stop: 17506, Start Num: 5
Candidate Starts for Blett_26:
(Start: 5 @16772 has 30 MA's), (12, 16895), (14, 16928), (15, 16937), (16, 16976), (17, 17021), (21, 17066), (28, 17192), (30, 17228), (33, 17240), (34, 17273), (41, 17372), (42, 17378), (45, 17441),

Gene: Bush_26 Start: 16747, Stop: 17481, Start Num: 5
Candidate Starts for Bush_26:
(Start: 5 @16747 has 30 MA's), (12, 16870), (14, 16903), (15, 16912), (16, 16951), (17, 16996), (21, 17041), (28, 17167), (30, 17203), (33, 17215), (34, 17248), (41, 17347), (42, 17353), (45, 17416),

Gene: Carrillo_27 Start: 16726, Stop: 17460, Start Num: 5
Candidate Starts for Carrillo_27:
(Start: 5 @16726 has 30 MA's), (12, 16849), (14, 16882), (15, 16891), (16, 16930), (17, 16975), (21, 17020), (28, 17146), (30, 17182), (33, 17194), (34, 17227), (41, 17326), (42, 17332), (45, 17395),

Gene: Cen1621_17 Start: 14753, Stop: 15457, Start Num: 5
Candidate Starts for Cen1621_17:
(Start: 5 @14753 has 30 MA's), (12, 14885), (14, 14918), (21, 15053), (24, 15149), (29, 15209), (31, 15227),

Gene: Cicada_25 Start: 18670, Stop: 19401, Start Num: 5
Candidate Starts for Cicada_25:
(Start: 5 @18670 has 30 MA's), (12, 18793), (20, 18958), (21, 18961), (25, 19054), (26, 19066), (28, 19087), (38, 19246), (43, 19294), (47, 19372),

Gene: CookieDog_26 Start: 16747, Stop: 17481, Start Num: 5
Candidate Starts for CookieDog_26:
(Start: 5 @16747 has 30 MA's), (12, 16870), (15, 16912), (16, 16951), (17, 16996), (21, 17041), (28, 17167), (30, 17203), (33, 17215), (34, 17248), (43, 17374), (45, 17416),

Gene: DelaGarza_24 Start: 17110, Stop: 17832, Start Num: 5
Candidate Starts for DelaGarza_24:
(1, 16870), (3, 16945), (Start: 5 @17110 has 30 MA's), (6, 17140), (12, 17233), (14, 17266), (15, 17275), (21, 17395), (22, 17458), (28, 17521), (36, 17662), (40, 17695), (43, 17725), (44, 17734),

Gene: Dropshot_25 Start: 16619, Stop: 17353, Start Num: 5
Candidate Starts for Dropshot_25:
(Start: 5 @16619 has 30 MA's), (12, 16742), (15, 16784), (16, 16823), (17, 16868), (21, 16913), (28, 17039), (30, 17075), (33, 17087), (34, 17120), (43, 17246), (45, 17288),

Gene: Gingerbug_22 Start: 16985, Stop: 17878, Start Num: 5
Candidate Starts for Gingerbug_22:
(Start: 5 @16985 has 30 MA's), (10, 17057), (12, 17108), (13, 17117), (17, 17225), (18, 17228), (21, 17270), (25, 17363), (27, 17384), (30, 17432), (35, 17489), (39, 17561), (46, 17672), (48, 17729),

Gene: Goodman_24 Start: 18583, Stop: 19314, Start Num: 5
Candidate Starts for Goodman_24:
(Start: 5 @18583 has 30 MA's), (12, 18706), (20, 18871), (21, 18874), (25, 18967), (26, 18979), (28, 19000), (38, 19159), (43, 19207), (47, 19285),

Gene: Guzman_27 Start: 17028, Stop: 17762, Start Num: 5
Candidate Starts for Guzman_27:
(Start: 5 @17028 has 30 MA's), (12, 17151), (14, 17184), (15, 17193), (16, 17232), (17, 17277), (19, 17283), (21, 17322), (28, 17448), (30, 17484), (33, 17496), (34, 17529), (41, 17628), (42, 17634), (45, 17697),

Gene: Honk_17 Start: 14329, Stop: 15024, Start Num: 5
Candidate Starts for Honk_17:
(Start: 5 @14329 has 30 MA's), (7, 14374), (11, 14404), (12, 14461), (23, 14707), (24, 14716), (29, 14776),

Gene: Htur_23 Start: 18637, Stop: 19368, Start Num: 5
Candidate Starts for Htur_23:
(Start: 5 @18637 has 30 MA's), (12, 18760), (14, 18793), (20, 18925), (25, 19021), (26, 19033), (28, 19054), (32, 19096), (37, 19204), (38, 19213),

Gene: Jakelyne_28 Start: 16835, Stop: 17569, Start Num: 5
Candidate Starts for Jakelyne_28:
(Start: 5 @16835 has 30 MA's), (12, 16958), (14, 16991), (15, 17000), (16, 17039), (17, 17084), (21, 17129), (28, 17255), (30, 17291), (33, 17303), (34, 17336), (41, 17435), (42, 17441), (45, 17504),

Gene: Jera_24 Start: 17697, Stop: 18428, Start Num: 5
Candidate Starts for Jera_24:
(Start: 5 @17697 has 30 MA's), (12, 17820), (20, 17985), (25, 18081), (26, 18093), (28, 18114), (30, 18150), (38, 18273),

Gene: Johann_24 Start: 18583, Stop: 19314, Start Num: 5
Candidate Starts for Johann_24:
(Start: 5 @18583 has 30 MA's), (12, 18706), (20, 18871), (21, 18874), (25, 18967), (26, 18979), (28, 19000), (38, 19159), (43, 19207), (47, 19285),

Gene: Labella_25 Start: 18578, Stop: 19309, Start Num: 5
Candidate Starts for Labella_25:
(Start: 5 @18578 has 30 MA's), (12, 18701), (16, 18779), (20, 18866), (25, 18962), (26, 18974), (28, 18995), (30, 19031), (38, 19154),

Gene: Lesiram_25 Start: 17079, Stop: 17801, Start Num: 5
Candidate Starts for Lesiram_25:

(2, 16848), (Start: 5 @17079 has 30 MA's), (6, 17109), (12, 17202), (14, 17235), (15, 17244), (21, 17364), (22, 17427), (24, 17451), (28, 17490), (36, 17631), (40, 17664), (43, 17694), (44, 17703),

Gene: Linayshia_23 Start: 18629, Stop: 19360, Start Num: 5
Candidate Starts for Linayshia_23:
(Start: 5 @18629 has 30 MA's), (12, 18752), (14, 18785), (20, 18917), (25, 19013), (26, 19025), (28, 19046), (32, 19088), (37, 19196), (38, 19205),

Gene: Losacky_27 Start: 16899, Stop: 17633, Start Num: 5
Candidate Starts for Losacky_27:
(Start: 5 @16899 has 30 MA's), (12, 17022), (14, 17055), (15, 17064), (16, 17103), (17, 17148), (21, 17193), (28, 17319), (30, 17355), (33, 17367), (34, 17400), (41, 17499), (42, 17505), (45, 17568),

Gene: Mariel_29 Start: 17191, Stop: 17925, Start Num: 5
Candidate Starts for Mariel_29:
(Start: 5 @17191 has 30 MA's), (12, 17314), (14, 17347), (15, 17356), (16, 17395), (17, 17440), (21, 17485), (28, 17611), (30, 17647), (33, 17659), (34, 17692), (41, 17791), (42, 17797), (45, 17860),

Gene: MenE_26 Start: 16887, Stop: 17621, Start Num: 5
Candidate Starts for MenE_26:
(Start: 5 @16887 has 30 MA's), (12, 17010), (14, 17043), (15, 17052), (16, 17091), (17, 17136), (21, 17181), (28, 17307), (30, 17343), (33, 17355), (34, 17388), (41, 17487), (42, 17493), (45, 17556),

Gene: NCRodriguez_27 Start: 16939, Stop: 17673, Start Num: 5
Candidate Starts for NCRodriguez_27:
(Start: 5 @16939 has 30 MA's), (12, 17062), (14, 17095), (15, 17104), (16, 17143), (17, 17188), (21, 17233), (28, 17359), (30, 17395), (33, 17407), (34, 17440), (41, 17539), (42, 17545), (45, 17608),

Gene: Olympi_25 Start: 18570, Stop: 19301, Start Num: 5
Candidate Starts for Olympi_25:
(Start: 5 @18570 has 30 MA's), (12, 18693), (20, 18858), (21, 18861), (25, 18954), (26, 18966), (28, 18987), (38, 19146), (43, 19194), (47, 19272),

Gene: PermaG_24 Start: 18650, Stop: 19381, Start Num: 5
Candidate Starts for PermaG_24:
(Start: 5 @18650 has 30 MA's), (12, 18773), (14, 18806), (20, 18938), (25, 19034), (26, 19046), (28, 19067), (32, 19109), (37, 19217), (38, 19226), (43, 19274),

Gene: PhillyJawn_26 Start: 16619, Stop: 17353, Start Num: 5
Candidate Starts for PhillyJawn_26:
(Start: 5 @16619 has 30 MA's), (12, 16742), (14, 16775), (15, 16784), (16, 16823), (17, 16868), (21, 16913), (28, 17039), (30, 17075), (33, 17087), (34, 17120), (41, 17219), (42, 17225), (45, 17288),

Gene: Phingu_28 Start: 16838, Stop: 17572, Start Num: 5
Candidate Starts for Phingu_28:
(Start: 5 @16838 has 30 MA's), (12, 16961), (14, 16994), (15, 17003), (16, 17042), (17, 17087), (19, 17093), (21, 17132), (28, 17258), (30, 17294), (33, 17306), (34, 17339), (41, 17438), (42, 17444), (45, 17507),

Gene: Phonegingi_25 Start: 16664, Stop: 17398, Start Num: 5
Candidate Starts for Phonegingi_25:
(Start: 5 @16664 has 30 MA's), (12, 16787), (14, 16820), (15, 16829), (16, 16868), (17, 16913), (21, 16958), (28, 17084), (30, 17120), (34, 17165), (41, 17264), (42, 17270), (45, 17333),

Gene: Pickles13_25 Start: 17050, Stop: 17784, Start Num: 5
Candidate Starts for Pickles13_25:
(Start: 5 @17050 has 30 MA's), (12, 17173), (14, 17206), (15, 17215), (16, 17254), (17, 17299), (21, 17344), (28, 17470), (30, 17506), (33, 17518), (34, 17551), (45, 17719),

Gene: Rasovi_23 Start: 18637, Stop: 19368, Start Num: 5
Candidate Starts for Rasovi_23:
(Start: 5 @18637 has 30 MA's), (12, 18760), (14, 18793), (20, 18925), (25, 19021), (26, 19033), (28, 19054), (32, 19096), (37, 19204), (38, 19213),

Gene: Rootkit7_23 Start: 18450, Stop: 19181, Start Num: 5
Candidate Starts for Rootkit7_23:
(Start: 5 @18450 has 30 MA's), (12, 18573), (16, 18651), (20, 18738), (25, 18834), (26, 18846), (28, 18867), (30, 18903), (38, 19026),

Gene: SBlackberry_23 Start: 18448, Stop: 19179, Start Num: 5
Candidate Starts for SBlackberry_23:
(Start: 5 @18448 has 30 MA's), (12, 18571), (20, 18736), (21, 18739), (25, 18832), (26, 18844), (28, 18865), (31, 18904), (38, 19024), (43, 19072), (47, 19150),

Gene: ScoobySnack_24 Start: 16748, Stop: 17482, Start Num: 5
Candidate Starts for ScoobySnack_24:
(Start: 5 @16748 has 30 MA's), (12, 16871), (14, 16904), (15, 16913), (16, 16952), (17, 16997), (19, 17003), (21, 17042), (28, 17168), (30, 17204), (33, 17216), (42, 17354), (45, 17417),

Gene: Sweetums_24 Start: 17191, Stop: 17913, Start Num: 5
Candidate Starts for Sweetums_24:
(1, 16951), (3, 17026), (4, 17134), (Start: 5 @17191 has 30 MA's), (6, 17221), (12, 17314), (14, 17347), (15, 17356), (21, 17476), (22, 17539), (28, 17602), (36, 17743), (40, 17776), (43, 17806), (44, 17815),

Gene: Teng_26 Start: 17129, Stop: 17851, Start Num: 5
Candidate Starts for Teng_26:
(3, 16964), (Start: 5 @17129 has 30 MA's), (6, 17159), (12, 17252), (14, 17285), (15, 17294), (21, 17414), (28, 17540), (34, 17621), (36, 17681), (40, 17714), (43, 17744), (44, 17753),

Gene: TurboVicky_23 Start: 18449, Stop: 19180, Start Num: 5
Candidate Starts for TurboVicky_23:
(Start: 5 @18449 has 30 MA's), (12, 18572), (16, 18650), (20, 18737), (25, 18833), (26, 18845), (28, 18866), (30, 18902), (38, 19025),

Gene: Typher_25 Start: 18578, Stop: 19309, Start Num: 5
Candidate Starts for Typher_25:
(Start: 5 @18578 has 30 MA's), (12, 18701), (16, 18779), (20, 18866), (25, 18962), (26, 18974), (28, 18995), (30, 19031), (38, 19154),

Gene: Violeta_27 Start: 16717, Stop: 17451, Start Num: 5
Candidate Starts for Violeta_27:
(Start: 5 @16717 has 30 MA's), (12, 16840), (14, 16873), (15, 16882), (16, 16921), (17, 16966), (21, 17011), (28, 17137), (30, 17173), (33, 17185), (34, 17218), (41, 17317), (42, 17323), (45, 17386),

Gene: Warren_26 Start: 16823, Stop: 17557, Start Num: 5
Candidate Starts for Warren_26:

(Start: 5 @16823 has 30 MA's), (12, 16946), (14, 16979), (15, 16988), (16, 17027), (17, 17072), (21, 17117), (28, 17243), (30, 17279), (33, 17291), (34, 17324), (41, 17423), (42, 17429), (45, 17492),

Gene: Winchester007_41 Start: 22737, Stop: 23471, Start Num: 5
Candidate Starts for Winchester007_41:
(Start: 5 @22737 has 30 MA's), (12, 22860), (14, 22893), (15, 22902), (16, 22941), (17, 22986), (21, 23031), (28, 23157), (30, 23193), (33, 23205), (34, 23238), (41, 23337), (42, 23343), (45, 23406),

Gene: Zanella_23 Start: 18452, Stop: 19183, Start Num: 5
Candidate Starts for Zanella_23:
(Start: 5 @18452 has 30 MA's), (12, 18575), (16, 18653), (20, 18740), (25, 18836), (26, 18848), (28, 18869), (30, 18905), (38, 19028),

Gene: Zeta1847_17 Start: 16152, Stop: 16877, Start Num: 5
Candidate Starts for Zeta1847_17:
(Start: 5 @16152 has 30 MA's), (8, 16212), (9, 16215), (12, 16284), (14, 16317), (15, 16326), (22, 16515), (23, 16530), (24, 16539), (41, 16746),