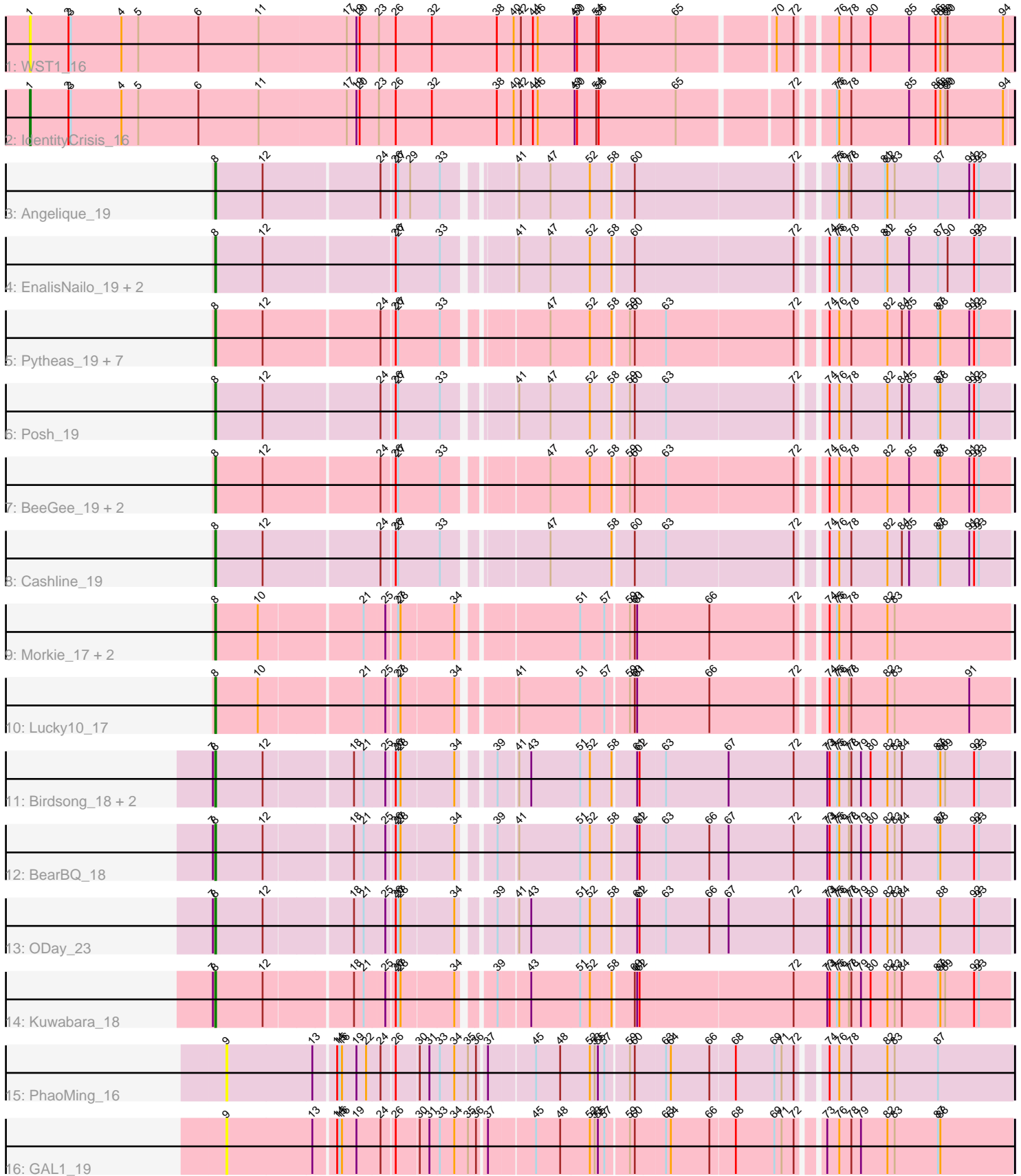


Pham 309028



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 309028 Report

This analysis was run 06/27/26 on database version 652.

Pham number 309028 has 31 members, 4 are drafts.

Phages represented in each track:

- Track 1 : WST1_16
- Track 2 : IdentityCrisis_16
- Track 3 : Angelique_19
- Track 4 : EnalisNailo_19, Lilas_19, Bradissa_19
- Track 5 : Pytheas_19, BritBrat_19, Wrigley_19, Floral_19, EMSquaredA_19, Marteena_19, Pollux_19, Jablanski_19
- Track 6 : Posh_19
- Track 7 : BeeGee_19, Confidence_19, LonelyBoi_19
- Track 8 : Cashline_19
- Track 9 : Morkie_17, PhorbesPhlower_17, InLimbo_18
- Track 10 : Lucky10_17
- Track 11 : Birdsong_18, Ecliptus_23, MortyNRick_18
- Track 12 : BearBQ_18
- Track 13 : ODay_23
- Track 14 : Kuwabara_18
- Track 15 : PhaoMing_16
- Track 16 : GAL1_19

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

The start number called the most often in the published annotations is 8, it was called in 26 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Angelique_19, BearBQ_18, BeeGee_19, Birdsong_18, Bradissa_19, BritBrat_19, Cashline_19, Confidence_19, EMSquaredA_19, Ecliptus_23, EnalisNailo_19, Floral_19, InLimbo_18, Jablanski_19, Kuwabara_18, Lilas_19, LonelyBoi_19, Lucky10_17, Marteena_19, Morkie_17, MortyNRick_18, ODay_23, PhorbesPhlower_17, Pollux_19, Posh_19, Pytheas_19, Wrigley_19,

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

-

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

- GAL1_19, IdentityCrisis_16, PhaoMing_16, WST1_16,

Summary by start number:

Start 1:

- Found in 2 of 31 (6.5%) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: IdentityCrisis_16 (AJ), WST1_16 (AJ),

Start 8:

- Found in 27 of 31 (87.1%) of genes in pham
- Manual Annotations of this start: 26 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique_19 (CY1), BearBQ_18 (DN), BeeGee_19 (CY5), Birdsong_18 (DN), Bradissa_19 (CY1), BritBrat_19 (CY2), Cashline_19 (CY6), Confidence_19 (CY1), EMsquaredA_19 (CY1), Ecliptus_23 (DN), EnalisNailo_19 (CY1), Floral_19 (CY1), InLimbo_18 (DH), Jablanski_19 (CY3), Kuwabara_18 (DN4), Lilas_19 (CY1), LonelyBoi_19 (CY7), Lucky10_17 (DH), Marteena_19 (CY1), Morkie_17 (DH), MortyNRick_18 (DN), ODay_23 (DN), PhorbesPhlower_17 (DH), Pollux_19 (CY1), Posh_19 (CY4), Pytheas_19 (CY3), Wrigley_19 (CY4),

Start 9:

- Found in 2 of 31 (6.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GAL1_19 (singleton), PhaoMing_16 (UNK),

Summary by clusters:

There are 13 clusters represented in this pham: DN, CY3, CY1, AJ, CY7, CY5, DH, CY2, CY4, singleton, DN4, UNK, CY6,

Info for manual annotations of cluster AJ:

- Start number 1 was manually annotated 1 time for cluster AJ.

Info for manual annotations of cluster CY1:

- Start number 8 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 8 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:

- Start number 8 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 8 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 8 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:

- Start number 8 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 8 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster DH:

- Start number 8 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 8 was manually annotated 5 times for cluster DN.

Info for manual annotations of cluster DN4:

- Start number 8 was manually annotated 1 time for cluster DN4.

Gene Information:

Gene: Angelique_19 Start: 16805, Stop: 17713, Start Num: 8

Candidate Starts for Angelique_19:

(Start: 8 @16805 has 26 MA's), (12, 16862), (24, 16997), (26, 17012), (27, 17015), (29, 17030), (33, 17066), (41, 17135), (47, 17174), (52, 17222), (58, 17246), (60, 17270), (72, 17462), (75, 17498), (76, 17501), (77, 17513), (78, 17516), (81, 17558), (82, 17561), (83, 17570), (87, 17624), (91, 17663), (92, 17669), (93, 17675),

Gene: BearBQ_18 Start: 16477, Stop: 17403, Start Num: 8

Candidate Starts for BearBQ_18:

(7, 16474), (Start: 8 @16477 has 26 MA's), (12, 16534), (18, 16636), (21, 16648), (25, 16672), (26, 16681), (27, 16684), (28, 16687), (34, 16750), (39, 16783), (41, 16804), (51, 16879), (52, 16891), (58, 16915), (61, 16942), (62, 16945), (63, 16975), (66, 17029), (67, 17053), (72, 17134), (73, 17176), (74, 17179), (75, 17188), (76, 17191), (77, 17203), (78, 17206), (79, 17218), (80, 17230), (82, 17251), (83, 17260), (84, 17269), (87, 17314), (88, 17317), (92, 17359), (93, 17365),

Gene: BeeGee_19 Start: 16625, Stop: 17533, Start Num: 8

Candidate Starts for BeeGee_19:

(Start: 8 @16625 has 26 MA's), (12, 16682), (24, 16817), (26, 16832), (27, 16835), (33, 16886), (47, 16994), (52, 17042), (58, 17066), (59, 17084), (60, 17090), (63, 17126), (72, 17282), (74, 17309), (76, 17321), (78, 17336), (82, 17381), (85, 17408), (87, 17444), (88, 17447), (91, 17483), (92, 17489), (93, 17495),

Gene: Birdsong_18 Start: 15370, Stop: 16296, Start Num: 8

Candidate Starts for Birdsong_18:

(7, 15367), (Start: 8 @15370 has 26 MA's), (12, 15427), (18, 15529), (21, 15541), (25, 15565), (26, 15574), (27, 15577), (28, 15580), (34, 15643), (39, 15676), (41, 15697), (43, 15712), (51, 15772), (52, 15784), (58, 15808), (61, 15835), (62, 15838), (63, 15868), (67, 15946), (72, 16027), (73, 16069), (74, 16072), (75, 16081), (76, 16084), (77, 16096), (78, 16099), (79, 16111), (80, 16123), (82, 16144), (83, 16153), (84, 16162), (87, 16207), (88, 16210), (89, 16216), (92, 16252), (93, 16258),

Gene: Bradissa_19 Start: 16808, Stop: 17716, Start Num: 8

Candidate Starts for Bradissa_19:

(Start: 8 @16808 has 26 MA's), (12, 16865), (26, 17015), (27, 17018), (33, 17069), (41, 17138), (47, 17177), (52, 17225), (58, 17249), (60, 17273), (72, 17465), (74, 17492), (75, 17501), (76, 17504), (78, 17519), (81, 17561), (82, 17564), (85, 17591), (87, 17627), (90, 17639), (92, 17672), (93, 17678),

Gene: BritBrat_19 Start: 16661, Stop: 17569, Start Num: 8

Candidate Starts for BritBrat_19:

(Start: 8 @16661 has 26 MA's), (12, 16718), (24, 16853), (26, 16868), (27, 16871), (33, 16922), (47, 17030), (52, 17078), (58, 17102), (59, 17120), (60, 17126), (63, 17162), (72, 17318), (74, 17345), (76, 17357), (78, 17372), (82, 17417), (84, 17435), (85, 17444), (87, 17480), (88, 17483), (91, 17519), (92, 17525), (93, 17531),

Gene: Cashline_19 Start: 16485, Stop: 17393, Start Num: 8

Candidate Starts for Cashline_19:

(Start: 8 @16485 has 26 MA's), (12, 16542), (24, 16677), (26, 16692), (27, 16695), (33, 16746), (47, 16854), (58, 16926), (60, 16950), (63, 16986), (72, 17142), (74, 17169), (76, 17181), (78, 17196), (82, 17241), (84, 17259), (85, 17268), (87, 17304), (88, 17307), (91, 17343), (92, 17349), (93, 17355),

Gene: Confidence_19 Start: 16655, Stop: 17563, Start Num: 8

Candidate Starts for Confidence_19:

(Start: 8 @16655 has 26 MA's), (12, 16712), (24, 16847), (26, 16862), (27, 16865), (33, 16916), (47, 17024), (52, 17072), (58, 17096), (59, 17114), (60, 17120), (63, 17156), (72, 17312), (74, 17339), (76, 17351), (78, 17366), (82, 17411), (85, 17438), (87, 17474), (88, 17477), (91, 17513), (92, 17519), (93, 17525),

Gene: EMSquaredA_19 Start: 16661, Stop: 17569, Start Num: 8

Candidate Starts for EMSquaredA_19:

(Start: 8 @16661 has 26 MA's), (12, 16718), (24, 16853), (26, 16868), (27, 16871), (33, 16922), (47, 17030), (52, 17078), (58, 17102), (59, 17120), (60, 17126), (63, 17162), (72, 17318), (74, 17345), (76, 17357), (78, 17372), (82, 17417), (84, 17435), (85, 17444), (87, 17480), (88, 17483), (91, 17519), (92, 17525), (93, 17531),

Gene: Ecliptus_23 Start: 17506, Stop: 18432, Start Num: 8

Candidate Starts for Ecliptus_23:

(7, 17503), (Start: 8 @17506 has 26 MA's), (12, 17563), (18, 17665), (21, 17677), (25, 17701), (26, 17710), (27, 17713), (28, 17716), (34, 17779), (39, 17812), (41, 17833), (43, 17848), (51, 17908), (52, 17920), (58, 17944), (61, 17971), (62, 17974), (63, 18004), (67, 18082), (72, 18163), (73, 18205), (74, 18208), (75, 18217), (76, 18220), (77, 18232), (78, 18235), (79, 18247), (80, 18259), (82, 18280), (83, 18289), (84, 18298), (87, 18343), (88, 18346), (89, 18352), (92, 18388), (93, 18394),

Gene: EnalisNailo_19 Start: 16810, Stop: 17718, Start Num: 8

Candidate Starts for EnalisNailo_19:

(Start: 8 @16810 has 26 MA's), (12, 16867), (26, 17017), (27, 17020), (33, 17071), (41, 17140), (47, 17179), (52, 17227), (58, 17251), (60, 17275), (72, 17467), (74, 17494), (75, 17503), (76, 17506), (78, 17521), (81, 17563), (82, 17566), (85, 17593), (87, 17629), (90, 17641), (92, 17674), (93, 17680),

Gene: Floral_19 Start: 16661, Stop: 17569, Start Num: 8

Candidate Starts for Floral_19:

(Start: 8 @16661 has 26 MA's), (12, 16718), (24, 16853), (26, 16868), (27, 16871), (33, 16922), (47, 17030), (52, 17078), (58, 17102), (59, 17120), (60, 17126), (63, 17162), (72, 17318), (74, 17345), (76, 17357), (78, 17372), (82, 17417), (84, 17435), (85, 17444), (87, 17480), (88, 17483), (91, 17519), (92, 17525), (93, 17531),

Gene: GAL1_19 Start: 16068, Stop: 16979, Start Num: 9

Candidate Starts for GAL1_19:

(9, 16068), (13, 16173), (14, 16197), (15, 16200), (16, 16203), (19, 16221), (24, 16248), (26, 16263), (30, 16290), (31, 16302), (33, 16314), (34, 16332), (35, 16347), (36, 16356), (37, 16365), (45, 16419), (48, 16449), (52, 16485), (53, 16491), (55, 16494), (57, 16500), (59, 16527), (60, 16533), (63, 16569), (64, 16575), (66, 16623), (68, 16653), (69, 16701), (71, 16710), (72, 16725), (73, 16749), (76, 16764), (78, 16779), (79, 16791), (82, 16824), (83, 16833), (87, 16887), (88, 16890),

Gene: IdentityCrisis_16 Start: 12920, Stop: 14107, Start Num: 1

Candidate Starts for IdentityCrisis_16:

(Start: 1 @12920 has 1 MA's), (2, 12968), (3, 12971), (4, 13034), (5, 13055), (6, 13130), (11, 13205), (17, 13313), (19, 13325), (20, 13328), (23, 13352), (26, 13373), (32, 13418), (38, 13499), (40, 13520), (42, 13529), (44, 13544), (46, 13550), (49, 13595), (50, 13598), (54, 13622), (56, 13625), (65, 13721), (72, 13853), (75, 13889), (76, 13892), (78, 13907), (85, 13979), (86, 14012), (88, 14018), (89, 14024), (90, 14027), (94, 14096),

Gene: InLimbo_18 Start: 14248, Stop: 15156, Start Num: 8

Candidate Starts for InLimbo_18:

(Start: 8 @14248 has 26 MA's), (10, 14299), (21, 14419), (25, 14443), (27, 14455), (28, 14458), (34, 14521), (51, 14650), (57, 14677), (59, 14704), (60, 14710), (61, 14713), (66, 14800), (72, 14905), (74, 14932), (75, 14941), (76, 14944), (78, 14959), (82, 15004), (83, 15013),

Gene: Jablanski_19 Start: 16772, Stop: 17680, Start Num: 8

Candidate Starts for Jablanski_19:

(Start: 8 @16772 has 26 MA's), (12, 16829), (24, 16964), (26, 16979), (27, 16982), (33, 17033), (47, 17141), (52, 17189), (58, 17213), (59, 17231), (60, 17237), (63, 17273), (72, 17429), (74, 17456), (76, 17468), (78, 17483), (82, 17528), (84, 17546), (85, 17555), (87, 17591), (88, 17594), (91, 17630), (92, 17636), (93, 17642),

Gene: Kuwabara_18 Start: 15067, Stop: 15990, Start Num: 8

Candidate Starts for Kuwabara_18:

(7, 15064), (Start: 8 @15067 has 26 MA's), (12, 15124), (18, 15226), (21, 15238), (25, 15262), (26, 15271), (27, 15274), (28, 15277), (34, 15340), (39, 15373), (43, 15409), (51, 15469), (52, 15481), (58, 15505), (60, 15529), (61, 15532), (62, 15535), (72, 15721), (73, 15763), (74, 15766), (75, 15775), (76, 15778), (77, 15790), (78, 15793), (79, 15805), (80, 15817), (82, 15838), (83, 15847), (84, 15856), (87, 15901), (88, 15904), (89, 15910), (92, 15946), (93, 15952),

Gene: Lilas_19 Start: 16810, Stop: 17718, Start Num: 8

Candidate Starts for Lilas_19:

(Start: 8 @16810 has 26 MA's), (12, 16867), (26, 17017), (27, 17020), (33, 17071), (41, 17140), (47, 17179), (52, 17227), (58, 17251), (60, 17275), (72, 17467), (74, 17494), (75, 17503), (76, 17506), (78, 17521), (81, 17563), (82, 17566), (85, 17593), (87, 17629), (90, 17641), (92, 17674), (93, 17680),

Gene: LonelyBoi_19 Start: 16813, Stop: 17721, Start Num: 8

Candidate Starts for LonelyBoi_19:

(Start: 8 @16813 has 26 MA's), (12, 16870), (24, 17005), (26, 17020), (27, 17023), (33, 17074), (47, 17182), (52, 17230), (58, 17254), (59, 17272), (60, 17278), (63, 17314), (72, 17470), (74, 17497), (76, 17509), (78, 17524), (82, 17569), (85, 17596), (87, 17632), (88, 17635), (91, 17671), (92, 17677), (93, 17683),

Gene: Lucky10_17 Start: 14280, Stop: 15188, Start Num: 8

Candidate Starts for Lucky10_17:

(Start: 8 @14280 has 26 MA's), (10, 14331), (21, 14451), (25, 14475), (27, 14487), (28, 14490), (34, 14553), (41, 14607), (51, 14682), (57, 14709), (59, 14736), (60, 14742), (61, 14745), (66, 14832), (72,

14937), (74, 14964), (75, 14973), (76, 14976), (77, 14988), (78, 14991), (82, 15036), (83, 15045), (91, 15138),

Gene: Marteena_19 Start: 16661, Stop: 17569, Start Num: 8

Candidate Starts for Marteena_19:

(Start: 8 @16661 has 26 MA's), (12, 16718), (24, 16853), (26, 16868), (27, 16871), (33, 16922), (47, 17030), (52, 17078), (58, 17102), (59, 17120), (60, 17126), (63, 17162), (72, 17318), (74, 17345), (76, 17357), (78, 17372), (82, 17417), (84, 17435), (85, 17444), (87, 17480), (88, 17483), (91, 17519), (92, 17525), (93, 17531),

Gene: Morkie_17 Start: 14248, Stop: 15156, Start Num: 8

Candidate Starts for Morkie_17:

(Start: 8 @14248 has 26 MA's), (10, 14299), (21, 14419), (25, 14443), (27, 14455), (28, 14458), (34, 14521), (51, 14650), (57, 14677), (59, 14704), (60, 14710), (61, 14713), (66, 14800), (72, 14905), (74, 14932), (75, 14941), (76, 14944), (78, 14959), (82, 15004), (83, 15013),

Gene: MortyNRick_18 Start: 15370, Stop: 16296, Start Num: 8

Candidate Starts for MortyNRick_18:

(7, 15367), (Start: 8 @15370 has 26 MA's), (12, 15427), (18, 15529), (21, 15541), (25, 15565), (26, 15574), (27, 15577), (28, 15580), (34, 15643), (39, 15676), (41, 15697), (43, 15712), (51, 15772), (52, 15784), (58, 15808), (61, 15835), (62, 15838), (63, 15868), (67, 15946), (72, 16027), (73, 16069), (74, 16072), (75, 16081), (76, 16084), (77, 16096), (78, 16099), (79, 16111), (80, 16123), (82, 16144), (83, 16153), (84, 16162), (87, 16207), (88, 16210), (89, 16216), (92, 16252), (93, 16258),

Gene: ODay_23 Start: 17611, Stop: 18537, Start Num: 8

Candidate Starts for ODay_23:

(7, 17608), (Start: 8 @17611 has 26 MA's), (12, 17668), (18, 17770), (21, 17782), (25, 17806), (26, 17815), (27, 17818), (28, 17821), (34, 17884), (39, 17917), (41, 17938), (43, 17953), (51, 18013), (52, 18025), (58, 18049), (61, 18076), (62, 18079), (63, 18109), (66, 18163), (67, 18187), (72, 18268), (73, 18310), (74, 18313), (75, 18322), (76, 18325), (77, 18337), (78, 18340), (79, 18352), (80, 18364), (82, 18385), (83, 18394), (84, 18403), (88, 18451), (92, 18493), (93, 18499),

Gene: PhaoMing_16 Start: 14700, Stop: 15611, Start Num: 9

Candidate Starts for PhaoMing_16:

(9, 14700), (13, 14805), (14, 14829), (15, 14832), (16, 14835), (19, 14853), (22, 14865), (24, 14880), (26, 14895), (30, 14922), (31, 14934), (33, 14946), (34, 14964), (35, 14979), (36, 14988), (37, 14997), (45, 15051), (48, 15081), (52, 15117), (53, 15123), (55, 15126), (57, 15132), (59, 15159), (60, 15165), (63, 15201), (64, 15207), (66, 15255), (68, 15285), (69, 15333), (71, 15342), (72, 15357), (74, 15384), (76, 15396), (78, 15411), (82, 15456), (83, 15465), (87, 15519),

Gene: PhorbesPhlower_17 Start: 14248, Stop: 15156, Start Num: 8

Candidate Starts for PhorbesPhlower_17:

(Start: 8 @14248 has 26 MA's), (10, 14299), (21, 14419), (25, 14443), (27, 14455), (28, 14458), (34, 14521), (51, 14650), (57, 14677), (59, 14704), (60, 14710), (61, 14713), (66, 14800), (72, 14905), (74, 14932), (75, 14941), (76, 14944), (78, 14959), (82, 15004), (83, 15013),

Gene: Pollux_19 Start: 16661, Stop: 17569, Start Num: 8

Candidate Starts for Pollux_19:

(Start: 8 @16661 has 26 MA's), (12, 16718), (24, 16853), (26, 16868), (27, 16871), (33, 16922), (47, 17030), (52, 17078), (58, 17102), (59, 17120), (60, 17126), (63, 17162), (72, 17318), (74, 17345), (76, 17357), (78, 17372), (82, 17417), (84, 17435), (85, 17444), (87, 17480), (88, 17483), (91, 17519), (92, 17525), (93, 17531),

Gene: Posh_19 Start: 16625, Stop: 17533, Start Num: 8

Candidate Starts for Posh_19:

(Start: 8 @16625 has 26 MA's), (12, 16682), (24, 16817), (26, 16832), (27, 16835), (33, 16886), (41, 16955), (47, 16994), (52, 17042), (58, 17066), (59, 17084), (60, 17090), (63, 17126), (72, 17282), (74, 17309), (76, 17321), (78, 17336), (82, 17381), (84, 17399), (85, 17408), (87, 17444), (88, 17447), (91, 17483), (92, 17489), (93, 17495),

Gene: Pytheas_19 Start: 16771, Stop: 17679, Start Num: 8

Candidate Starts for Pytheas_19:

(Start: 8 @16771 has 26 MA's), (12, 16828), (24, 16963), (26, 16978), (27, 16981), (33, 17032), (47, 17140), (52, 17188), (58, 17212), (59, 17230), (60, 17236), (63, 17272), (72, 17428), (74, 17455), (76, 17467), (78, 17482), (82, 17527), (84, 17545), (85, 17554), (87, 17590), (88, 17593), (91, 17629), (92, 17635), (93, 17641),

Gene: WST1_16 Start: 12938, Stop: 14128, Start Num: 1

Candidate Starts for WST1_16:

(Start: 1 @12938 has 1 MA's), (2, 12986), (3, 12989), (4, 13052), (5, 13073), (6, 13148), (11, 13223), (17, 13331), (19, 13343), (20, 13346), (23, 13370), (26, 13391), (32, 13436), (38, 13517), (40, 13538), (42, 13547), (44, 13562), (46, 13568), (49, 13613), (50, 13616), (54, 13640), (56, 13643), (65, 13739), (70, 13850), (72, 13871), (76, 13910), (78, 13925), (80, 13949), (85, 13997), (86, 14030), (88, 14036), (89, 14042), (90, 14045), (94, 14114),

Gene: Wrigley_19 Start: 16522, Stop: 17430, Start Num: 8

Candidate Starts for Wrigley_19:

(Start: 8 @16522 has 26 MA's), (12, 16579), (24, 16714), (26, 16729), (27, 16732), (33, 16783), (47, 16891), (52, 16939), (58, 16963), (59, 16981), (60, 16987), (63, 17023), (72, 17179), (74, 17206), (76, 17218), (78, 17233), (82, 17278), (84, 17296), (85, 17305), (87, 17341), (88, 17344), (91, 17380), (92, 17386), (93, 17392),