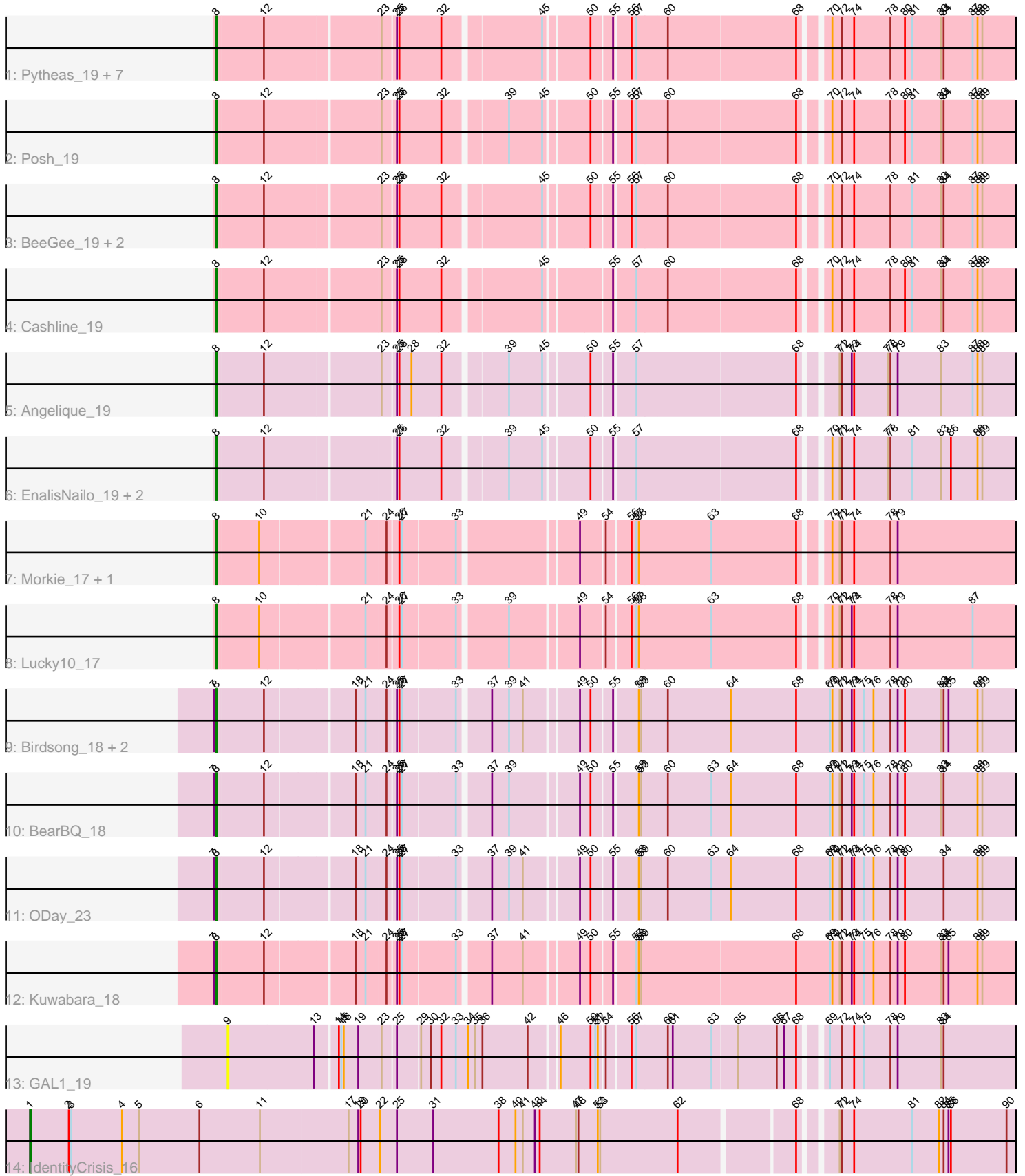


Pham 198290



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 198290 Report

This analysis was run 01/18/25 on database version 583.

Pham number 198290 has 28 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Pytheas\_19, BritBrat\_19, Wrigley\_19, Floral\_19, EMSquaredA\_19, Marteena\_19, Pollux\_19, Jablanski\_19
- Track 2 : Posh\_19
- Track 3 : BeeGee\_19, Confidence\_19, LonelyBoi\_19
- Track 4 : Cashline\_19
- Track 5 : Angelique\_19
- Track 6 : EnalisNailo\_19, Lilas\_19, Bradissa\_19
- Track 7 : Morkie\_17, PhorbesPhlower\_17
- Track 8 : Lucky10\_17
- Track 9 : Birdsong\_18, Ecliptus\_23, MortyNRick\_18
- Track 10 : BearBQ\_18
- Track 11 : ODay\_23
- Track 12 : Kuwabara\_18
- Track 13 : GAL1\_19
- Track 14 : IdentityCrisis\_16

### ***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 25 of the 26 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, 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,

## Summary by start number:

### Start 1:

- Found in 1 of 28 ( 3.6% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: IdentityCrisis\_16 (singleton),

### Start 8:

- Found in 26 of 28 ( 92.9% ) of genes in pham
- Manual Annotations of this start: 25 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique\_19 (CY1), BearBQ\_18 (DN), BeeGee\_19 (CY), Birdsong\_18 (DN), Bradissa\_19 (CY1), BritBrat\_19 (CY2), Cashline\_19 (CY), Confidence\_19 (CY1), EMSquaredA\_19 (CY1), Ecliptus\_23 (DN), EnalisNailo\_19 (CY1), Floral\_19 (CY1), Jablanski\_19 (CY), Kuwabara\_18 (DN4), Lilas\_19 (CY1), LonelyBoi\_19 (CY), Lucky10\_17 (DH), Marteena\_19 (CY1), Morkie\_17 (DH), MortyNRick\_18 (DN), ODay\_23 (DN), PhorbesPhlower\_17 (DH), Pollux\_19 (CY1), Posh\_19 (CY), Pytheas\_19 (CY), Wrigley\_19 (CY),

### Start 9:

- Found in 1 of 28 ( 3.6% ) 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),

## Summary by clusters:

There are 7 clusters represented in this pham: DN, CY2, singleton, DH, CY1, DN4, CY,

### Info for manual annotations of cluster CY:

- Start number 8 was manually annotated 7 times for cluster CY.

### 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 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 4 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 25 MA's), (12, 16862), (23, 16997), (25, 17012), (26, 17015), (28, 17030), (32, 17066), (39, 17135), (45, 17174), (50, 17222), (55, 17246), (57, 17270), (68, 17462), (71, 17498), (72, 17501), (73, 17513), (74, 17516), (77, 17558), (78, 17561), (79, 17570), (83, 17624), (87, 17663), (88, 17669), (89, 17675),

Gene: BearBQ\_18 Start: 16477, Stop: 17403, Start Num: 8

Candidate Starts for BearBQ\_18:

(7, 16474), (Start: 8 @16477 has 25 MA's), (12, 16534), (18, 16636), (21, 16648), (24, 16672), (25, 16681), (26, 16684), (27, 16687), (33, 16750), (37, 16783), (39, 16804), (49, 16879), (50, 16891), (55, 16915), (58, 16942), (59, 16945), (60, 16975), (63, 17029), (64, 17053), (68, 17134), (69, 17176), (70, 17179), (71, 17188), (72, 17191), (73, 17203), (74, 17206), (75, 17218), (76, 17230), (78, 17251), (79, 17260), (80, 17269), (83, 17314), (84, 17317), (88, 17359), (89, 17365),

Gene: BeeGee\_19 Start: 16625, Stop: 17533, Start Num: 8

Candidate Starts for BeeGee\_19:

(Start: 8 @16625 has 25 MA's), (12, 16682), (23, 16817), (25, 16832), (26, 16835), (32, 16886), (45, 16994), (50, 17042), (55, 17066), (56, 17084), (57, 17090), (60, 17126), (68, 17282), (70, 17309), (72, 17321), (74, 17336), (78, 17381), (81, 17408), (83, 17444), (84, 17447), (87, 17483), (88, 17489), (89, 17495),

Gene: Birdsong\_18 Start: 15370, Stop: 16296, Start Num: 8

Candidate Starts for Birdsong\_18:

(7, 15367), (Start: 8 @15370 has 25 MA's), (12, 15427), (18, 15529), (21, 15541), (24, 15565), (25, 15574), (26, 15577), (27, 15580), (33, 15643), (37, 15676), (39, 15697), (41, 15712), (49, 15772), (50, 15784), (55, 15808), (58, 15835), (59, 15838), (60, 15868), (64, 15946), (68, 16027), (69, 16069), (70, 16072), (71, 16081), (72, 16084), (73, 16096), (74, 16099), (75, 16111), (76, 16123), (78, 16144), (79, 16153), (80, 16162), (83, 16207), (84, 16210), (85, 16216), (88, 16252), (89, 16258),

Gene: Bradissa\_19 Start: 16808, Stop: 17716, Start Num: 8

Candidate Starts for Bradissa\_19:

(Start: 8 @16808 has 25 MA's), (12, 16865), (25, 17015), (26, 17018), (32, 17069), (39, 17138), (45, 17177), (50, 17225), (55, 17249), (57, 17273), (68, 17465), (70, 17492), (71, 17501), (72, 17504), (74, 17519), (77, 17561), (78, 17564), (81, 17591), (83, 17627), (86, 17639), (88, 17672), (89, 17678),

Gene: BritBrat\_19 Start: 16661, Stop: 17569, Start Num: 8

Candidate Starts for BritBrat\_19:

(Start: 8 @16661 has 25 MA's), (12, 16718), (23, 16853), (25, 16868), (26, 16871), (32, 16922), (45, 17030), (50, 17078), (55, 17102), (56, 17120), (57, 17126), (60, 17162), (68, 17318), (70, 17345), (72, 17357), (74, 17372), (78, 17417), (80, 17435), (81, 17444), (83, 17480), (84, 17483), (87, 17519), (88, 17525), (89, 17531),

Gene: Cashline\_19 Start: 16485, Stop: 17393, Start Num: 8

Candidate Starts for Cashline\_19:

(Start: 8 @16485 has 25 MA's), (12, 16542), (23, 16677), (25, 16692), (26, 16695), (32, 16746), (45, 16854), (55, 16926), (57, 16950), (60, 16986), (68, 17142), (70, 17169), (72, 17181), (74, 17196), (78, 17241), (80, 17259), (81, 17268), (83, 17304), (84, 17307), (87, 17343), (88, 17349), (89, 17355),

Gene: Confidence\_19 Start: 16655, Stop: 17563, Start Num: 8

Candidate Starts for Confidence\_19:

(Start: 8 @16655 has 25 MA's), (12, 16712), (23, 16847), (25, 16862), (26, 16865), (32, 16916), (45, 17024), (50, 17072), (55, 17096), (56, 17114), (57, 17120), (60, 17156), (68, 17312), (70, 17339), (72,

17351), (74, 17366), (78, 17411), (81, 17438), (83, 17474), (84, 17477), (87, 17513), (88, 17519), (89, 17525),

Gene: EMSquaredA\_19 Start: 16661, Stop: 17569, Start Num: 8

Candidate Starts for EMSquaredA\_19:

(Start: 8 @16661 has 25 MA's), (12, 16718), (23, 16853), (25, 16868), (26, 16871), (32, 16922), (45, 17030), (50, 17078), (55, 17102), (56, 17120), (57, 17126), (60, 17162), (68, 17318), (70, 17345), (72, 17357), (74, 17372), (78, 17417), (80, 17435), (81, 17444), (83, 17480), (84, 17483), (87, 17519), (88, 17525), (89, 17531),

Gene: Ecliptus\_23 Start: 17506, Stop: 18432, Start Num: 8

Candidate Starts for Ecliptus\_23:

(7, 17503), (Start: 8 @17506 has 25 MA's), (12, 17563), (18, 17665), (21, 17677), (24, 17701), (25, 17710), (26, 17713), (27, 17716), (33, 17779), (37, 17812), (39, 17833), (41, 17848), (49, 17908), (50, 17920), (55, 17944), (58, 17971), (59, 17974), (60, 18004), (64, 18082), (68, 18163), (69, 18205), (70, 18208), (71, 18217), (72, 18220), (73, 18232), (74, 18235), (75, 18247), (76, 18259), (78, 18280), (79, 18289), (80, 18298), (83, 18343), (84, 18346), (85, 18352), (88, 18388), (89, 18394),

Gene: EnalisNailo\_19 Start: 16810, Stop: 17718, Start Num: 8

Candidate Starts for EnalisNailo\_19:

(Start: 8 @16810 has 25 MA's), (12, 16867), (25, 17017), (26, 17020), (32, 17071), (39, 17140), (45, 17179), (50, 17227), (55, 17251), (57, 17275), (68, 17467), (70, 17494), (71, 17503), (72, 17506), (74, 17521), (77, 17563), (78, 17566), (81, 17593), (83, 17629), (86, 17641), (88, 17674), (89, 17680),

Gene: Floral\_19 Start: 16661, Stop: 17569, Start Num: 8

Candidate Starts for Floral\_19:

(Start: 8 @16661 has 25 MA's), (12, 16718), (23, 16853), (25, 16868), (26, 16871), (32, 16922), (45, 17030), (50, 17078), (55, 17102), (56, 17120), (57, 17126), (60, 17162), (68, 17318), (70, 17345), (72, 17357), (74, 17372), (78, 17417), (80, 17435), (81, 17444), (83, 17480), (84, 17483), (87, 17519), (88, 17525), (89, 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), (23, 16248), (25, 16263), (29, 16290), (30, 16302), (32, 16314), (33, 16332), (34, 16347), (35, 16356), (36, 16365), (42, 16419), (46, 16449), (50, 16485), (51, 16491), (52, 16494), (54, 16500), (56, 16527), (57, 16533), (60, 16569), (61, 16575), (63, 16623), (65, 16653), (66, 16701), (67, 16710), (68, 16725), (69, 16749), (72, 16764), (74, 16779), (75, 16791), (78, 16824), (79, 16833), (83, 16887), (84, 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), (22, 13352), (25, 13373), (31, 13418), (38, 13499), (40, 13520), (41, 13529), (43, 13544), (44, 13550), (47, 13595), (48, 13598), (52, 13622), (53, 13625), (62, 13721), (68, 13853), (71, 13889), (72, 13892), (74, 13907), (81, 13979), (82, 14012), (84, 14018), (85, 14024), (86, 14027), (90, 14096),

Gene: Jablanski\_19 Start: 16772, Stop: 17680, Start Num: 8

Candidate Starts for Jablanski\_19:

(Start: 8 @16772 has 25 MA's), (12, 16829), (23, 16964), (25, 16979), (26, 16982), (32, 17033), (45, 17141), (50, 17189), (55, 17213), (56, 17231), (57, 17237), (60, 17273), (68, 17429), (70, 17456), (72, 17468), (74, 17483), (78, 17528), (80, 17546), (81, 17555), (83, 17591), (84, 17594), (87, 17630), (88, 17636), (89, 17642),

Gene: Kuwabara\_18 Start: 15067, Stop: 15990, Start Num: 8

Candidate Starts for Kuwabara\_18:

(7, 15064), (Start: 8 @15067 has 25 MA's), (12, 15124), (18, 15226), (21, 15238), (24, 15262), (25, 15271), (26, 15274), (27, 15277), (33, 15340), (37, 15373), (41, 15409), (49, 15469), (50, 15481), (55, 15505), (57, 15529), (58, 15532), (59, 15535), (68, 15721), (69, 15763), (70, 15766), (71, 15775), (72, 15778), (73, 15790), (74, 15793), (75, 15805), (76, 15817), (78, 15838), (79, 15847), (80, 15856), (83, 15901), (84, 15904), (85, 15910), (88, 15946), (89, 15952),

Gene: Lilas\_19 Start: 16810, Stop: 17718, Start Num: 8

Candidate Starts for Lilas\_19:

(Start: 8 @16810 has 25 MA's), (12, 16867), (25, 17017), (26, 17020), (32, 17071), (39, 17140), (45, 17179), (50, 17227), (55, 17251), (57, 17275), (68, 17467), (70, 17494), (71, 17503), (72, 17506), (74, 17521), (77, 17563), (78, 17566), (81, 17593), (83, 17629), (86, 17641), (88, 17674), (89, 17680),

Gene: LonelyBoi\_19 Start: 16813, Stop: 17721, Start Num: 8

Candidate Starts for LonelyBoi\_19:

(Start: 8 @16813 has 25 MA's), (12, 16870), (23, 17005), (25, 17020), (26, 17023), (32, 17074), (45, 17182), (50, 17230), (55, 17254), (56, 17272), (57, 17278), (60, 17314), (68, 17470), (70, 17497), (72, 17509), (74, 17524), (78, 17569), (81, 17596), (83, 17632), (84, 17635), (87, 17671), (88, 17677), (89, 17683),

Gene: Lucky10\_17 Start: 14280, Stop: 15188, Start Num: 8

Candidate Starts for Lucky10\_17:

(Start: 8 @14280 has 25 MA's), (10, 14331), (21, 14451), (24, 14475), (26, 14487), (27, 14490), (33, 14553), (39, 14607), (49, 14682), (54, 14709), (56, 14736), (57, 14742), (58, 14745), (63, 14832), (68, 14937), (70, 14964), (71, 14973), (72, 14976), (73, 14988), (74, 14991), (78, 15036), (79, 15045), (87, 15138),

Gene: Marteena\_19 Start: 16661, Stop: 17569, Start Num: 8

Candidate Starts for Marteena\_19:

(Start: 8 @16661 has 25 MA's), (12, 16718), (23, 16853), (25, 16868), (26, 16871), (32, 16922), (45, 17030), (50, 17078), (55, 17102), (56, 17120), (57, 17126), (60, 17162), (68, 17318), (70, 17345), (72, 17357), (74, 17372), (78, 17417), (80, 17435), (81, 17444), (83, 17480), (84, 17483), (87, 17519), (88, 17525), (89, 17531),

Gene: Morkie\_17 Start: 14248, Stop: 15156, Start Num: 8

Candidate Starts for Morkie\_17:

(Start: 8 @14248 has 25 MA's), (10, 14299), (21, 14419), (24, 14443), (26, 14455), (27, 14458), (33, 14521), (49, 14650), (54, 14677), (56, 14704), (57, 14710), (58, 14713), (63, 14800), (68, 14905), (70, 14932), (71, 14941), (72, 14944), (74, 14959), (78, 15004), (79, 15013),

Gene: MortyNRick\_18 Start: 15370, Stop: 16296, Start Num: 8

Candidate Starts for MortyNRick\_18:

(7, 15367), (Start: 8 @15370 has 25 MA's), (12, 15427), (18, 15529), (21, 15541), (24, 15565), (25, 15574), (26, 15577), (27, 15580), (33, 15643), (37, 15676), (39, 15697), (41, 15712), (49, 15772), (50, 15784), (55, 15808), (58, 15835), (59, 15838), (60, 15868), (64, 15946), (68, 16027), (69, 16069), (70, 16072), (71, 16081), (72, 16084), (73, 16096), (74, 16099), (75, 16111), (76, 16123), (78, 16144), (79, 16153), (80, 16162), (83, 16207), (84, 16210), (85, 16216), (88, 16252), (89, 16258),

Gene: ODay\_23 Start: 17611, Stop: 18537, Start Num: 8

Candidate Starts for ODay\_23:

(7, 17608), (Start: 8 @17611 has 25 MA's), (12, 17668), (18, 17770), (21, 17782), (24, 17806), (25, 17815), (26, 17818), (27, 17821), (33, 17884), (37, 17917), (39, 17938), (41, 17953), (49, 18013), (50, 18025), (55, 18049), (58, 18076), (59, 18079), (60, 18109), (63, 18163), (64, 18187), (68, 18268), (69, 18310), (70, 18313), (71, 18322), (72, 18325), (73, 18337), (74, 18340), (75, 18352), (76, 18364), (78, 18385), (79, 18394), (80, 18403), (84, 18451), (88, 18493), (89, 18499),

Gene: PhorbesPhlower\_17 Start: 14248, Stop: 15156, Start Num: 8

Candidate Starts for PhorbesPhlower\_17:

(Start: 8 @14248 has 25 MA's), (10, 14299), (21, 14419), (24, 14443), (26, 14455), (27, 14458), (33, 14521), (49, 14650), (54, 14677), (56, 14704), (57, 14710), (58, 14713), (63, 14800), (68, 14905), (70, 14932), (71, 14941), (72, 14944), (74, 14959), (78, 15004), (79, 15013),

Gene: Pollux\_19 Start: 16661, Stop: 17569, Start Num: 8

Candidate Starts for Pollux\_19:

(Start: 8 @16661 has 25 MA's), (12, 16718), (23, 16853), (25, 16868), (26, 16871), (32, 16922), (45, 17030), (50, 17078), (55, 17102), (56, 17120), (57, 17126), (60, 17162), (68, 17318), (70, 17345), (72, 17357), (74, 17372), (78, 17417), (80, 17435), (81, 17444), (83, 17480), (84, 17483), (87, 17519), (88, 17525), (89, 17531),

Gene: Posh\_19 Start: 16625, Stop: 17533, Start Num: 8

Candidate Starts for Posh\_19:

(Start: 8 @16625 has 25 MA's), (12, 16682), (23, 16817), (25, 16832), (26, 16835), (32, 16886), (39, 16955), (45, 16994), (50, 17042), (55, 17066), (56, 17084), (57, 17090), (60, 17126), (68, 17282), (70, 17309), (72, 17321), (74, 17336), (78, 17381), (80, 17399), (81, 17408), (83, 17444), (84, 17447), (87, 17483), (88, 17489), (89, 17495),

Gene: Pytheas\_19 Start: 16771, Stop: 17679, Start Num: 8

Candidate Starts for Pytheas\_19:

(Start: 8 @16771 has 25 MA's), (12, 16828), (23, 16963), (25, 16978), (26, 16981), (32, 17032), (45, 17140), (50, 17188), (55, 17212), (56, 17230), (57, 17236), (60, 17272), (68, 17428), (70, 17455), (72, 17467), (74, 17482), (78, 17527), (80, 17545), (81, 17554), (83, 17590), (84, 17593), (87, 17629), (88, 17635), (89, 17641),

Gene: Wrigley\_19 Start: 16522, Stop: 17430, Start Num: 8

Candidate Starts for Wrigley\_19:

(Start: 8 @16522 has 25 MA's), (12, 16579), (23, 16714), (25, 16729), (26, 16732), (32, 16783), (45, 16891), (50, 16939), (55, 16963), (56, 16981), (57, 16987), (60, 17023), (68, 17179), (70, 17206), (72, 17218), (74, 17233), (78, 17278), (80, 17296), (81, 17305), (83, 17341), (84, 17344), (87, 17380), (88, 17386), (89, 17392),