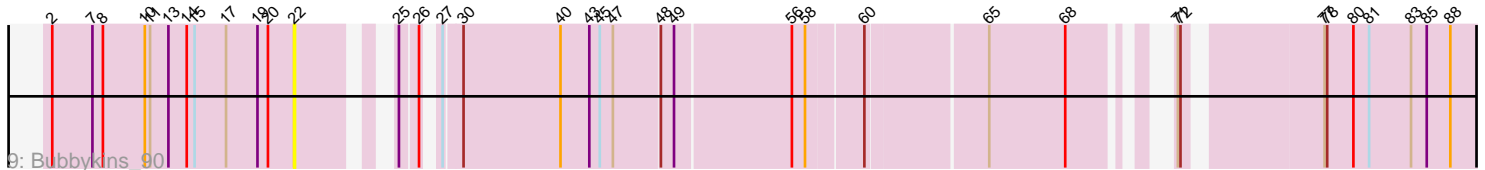
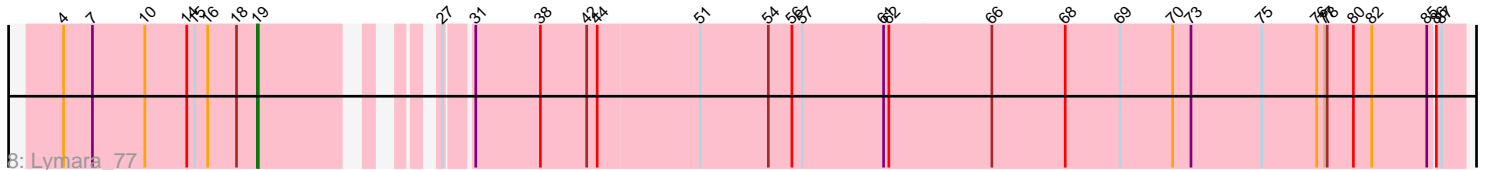
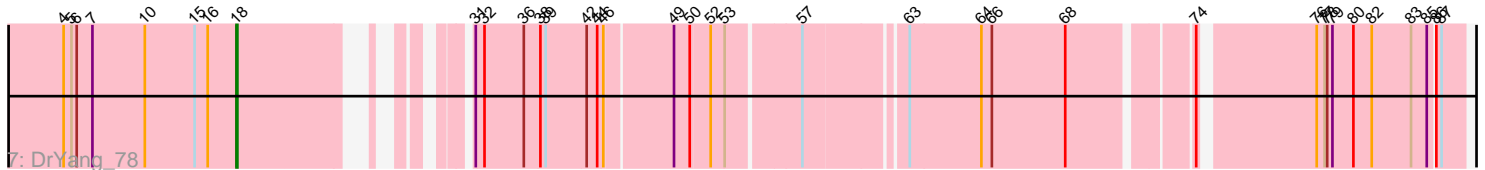
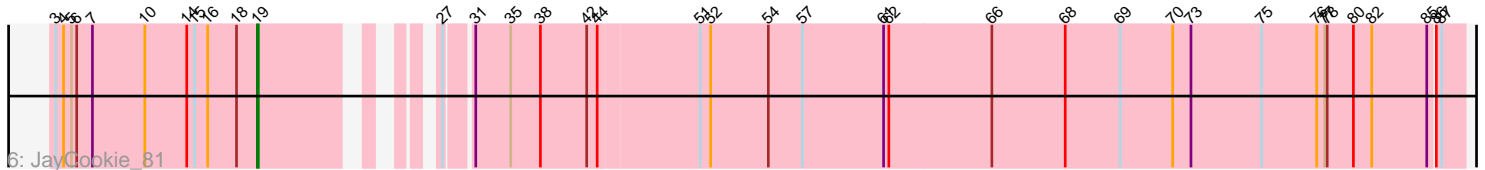
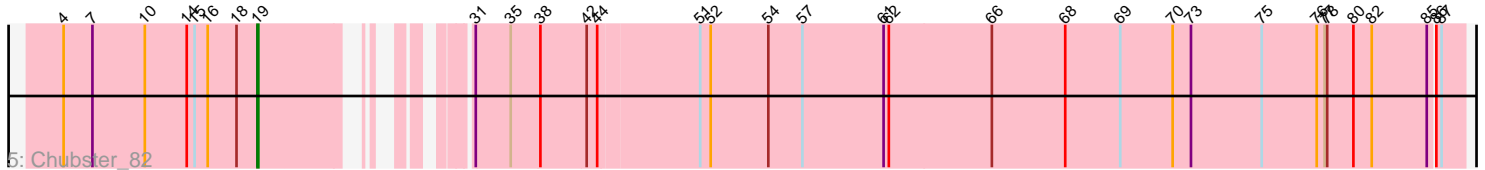
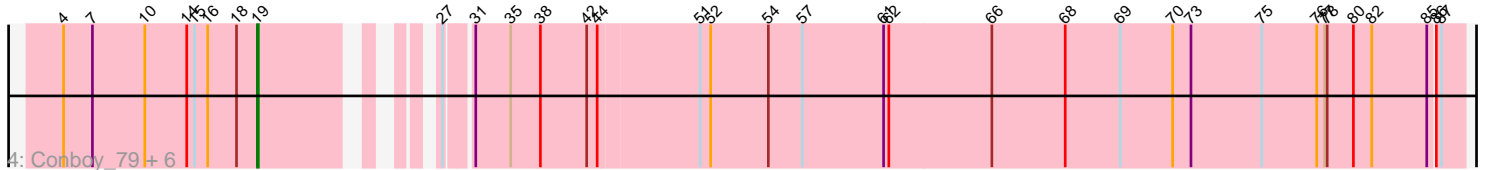
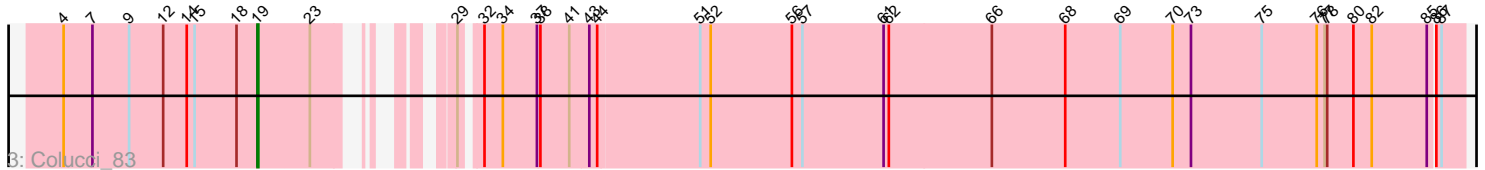
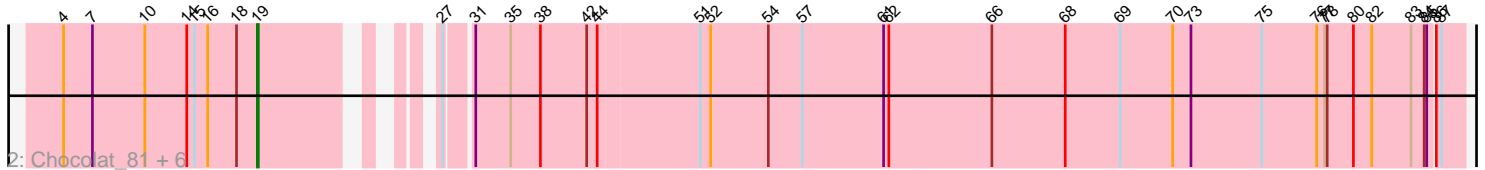
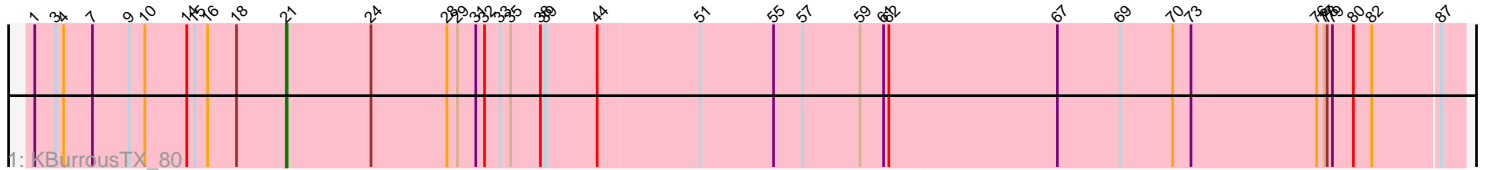


# Pham 306861



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 306861 Report

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

Pham number 306861 has 21 members, 2 are drafts.

Phages represented in each track:

- Track 1 : KBurrousTX\_80
- Track 2 : Chocolat\_81, Scavito\_82, Kabreeze\_81, JaNo\_80, Chipper1996\_820, Tophat\_82, Mordred\_81
- Track 3 : Colucci\_83
- Track 4 : Conboy\_79, HumptyDumpty\_81, MoyaNatalis\_80, EdgarPoe\_80, PrincessTrina\_82, RosiePosie\_81, Linus\_81
- Track 5 : Chubster\_82
- Track 6 : JayCookie\_81
- Track 7 : DrYang\_78
- Track 8 : Lymara\_77
- Track 9 : Bubbykins\_90

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

The start number called the most often in the published annotations is 19, it was called in 17 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Chipper1996\_820, Chocolat\_81, Chubster\_82, Colucci\_83, Conboy\_79, EdgarPoe\_80, HumptyDumpty\_81, JaNo\_80, JayCookie\_81, Kabreeze\_81, Linus\_81, Lymara\_77, Mordred\_81, MoyaNatalis\_80, PrincessTrina\_82, RosiePosie\_81, Scavito\_82, Tophat\_82,

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

- Bubbykins\_90,

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

- DrYang\_78, KBurrousTX\_80,

### **Summary by start number:**

Start 18:

- Found in 20 of 21 ( 95.2% ) of genes in pham
- Manual Annotations of this start: 1 of 19

- Called 5.0% of time when present
- Phage (with cluster) where this start called: DrYang\_78 (AR),

Start 19:

- Found in 19 of 21 ( 90.5% ) of genes in pham
- Manual Annotations of this start: 17 of 19
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Chipper1996\_820 (AR), Chocolat\_81 (AR), Chubster\_82 (AR), Colucci\_83 (AR), Conboy\_79 (AR), EdgarPoe\_80 (AR), HumptyDumpty\_81 (AR), JaNo\_80 (AR), JayCookie\_81 (AR), Kabreeze\_81 (AR), Linus\_81 (AR), Lymara\_77 (AR), Mordred\_81 (AR), MoyaNatalis\_80 (AR), PrincessTrina\_82 (AR), RosiePosie\_81 (AR), Scavito\_82 (AR), Tophat\_82 (AR),

Start 21:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KBurrousTX\_80 (AR),

Start 22:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bubbykins\_90 (UNK),

### Summary by clusters:

There are 2 clusters represented in this pham: UNK, AR,

Info for manual annotations of cluster AR:

- Start number 18 was manually annotated 1 time for cluster AR.
- Start number 19 was manually annotated 17 times for cluster AR.
- Start number 21 was manually annotated 1 time for cluster AR.

### Gene Information:

Gene: Bubbykins\_90 Start: 55572, Stop: 56735, Start Num: 22

Candidate Starts for Bubbykins\_90:

(2, 55296), (7, 55341), (8, 55353), (10, 55401), (11, 55407), (13, 55428), (14, 55449), (15, 55458), (17, 55494), (Start: 19 @55530 has 17 MA's), (20, 55542), (22, 55572), (25, 55647), (26, 55665), (27, 55674), (30, 55692), (40, 55803), (43, 55836), (45, 55848), (47, 55863), (48, 55914), (49, 55929), (56, 56058), (58, 56073), (60, 56133), (65, 56262), (68, 56349), (71, 56418), (72, 56421), (77, 56559), (78, 56562), (80, 56592), (81, 56610), (83, 56658), (85, 56676), (88, 56703),

Gene: Chipper1996\_820 Start: 52852, Stop: 54129, Start Num: 19

Candidate Starts for Chipper1996\_820:

(4, 52630), (7, 52663), (10, 52723), (14, 52771), (15, 52780), (16, 52795), (Start: 18 @52828 has 1 MA's), (Start: 19 @52852 has 17 MA's), (27, 52990), (31, 53014), (35, 53053), (38, 53086), (42, 53137), (44, 53149), (51, 53260), (52, 53272), (54, 53338), (57, 53377), (61, 53470), (62, 53476), (66, 53593), (68, 53677), (69, 53740), (70, 53800), (73, 53821), (75, 53902), (76, 53965), (77, 53974), (78,

53977), (80, 54007), (82, 54028), (83, 54073), (84, 54088), (85, 54091), (86, 54097), (87, 54103),

Gene: Chocolat\_81 Start: 52559, Stop: 53836, Start Num: 19

Candidate Starts for Chocolat\_81:

(4, 52337), (7, 52370), (10, 52430), (14, 52478), (15, 52487), (16, 52502), (Start: 18 @52535 has 1 MA's), (Start: 19 @52559 has 17 MA's), (27, 52697), (31, 52721), (35, 52760), (38, 52793), (42, 52844), (44, 52856), (51, 52967), (52, 52979), (54, 53045), (57, 53084), (61, 53177), (62, 53183), (66, 53300), (68, 53384), (69, 53447), (70, 53507), (73, 53528), (75, 53609), (76, 53672), (77, 53681), (78, 53684), (80, 53714), (82, 53735), (83, 53780), (84, 53795), (85, 53798), (86, 53804), (87, 53810),

Gene: Chubster\_82 Start: 53253, Stop: 54518, Start Num: 19

Candidate Starts for Chubster\_82:

(4, 53031), (7, 53064), (10, 53124), (14, 53172), (15, 53181), (16, 53196), (Start: 18 @53229 has 1 MA's), (Start: 19 @53253 has 17 MA's), (31, 53403), (35, 53442), (38, 53475), (42, 53526), (44, 53538), (51, 53649), (52, 53661), (54, 53727), (57, 53766), (61, 53859), (62, 53865), (66, 53982), (68, 54066), (69, 54129), (70, 54189), (73, 54210), (75, 54291), (76, 54354), (77, 54363), (78, 54366), (80, 54396), (82, 54417), (85, 54480), (86, 54486), (87, 54492),

Gene: Colucci\_83 Start: 53289, Stop: 54554, Start Num: 19

Candidate Starts for Colucci\_83:

(4, 53067), (7, 53100), (9, 53142), (12, 53181), (14, 53208), (15, 53217), (Start: 18 @53265 has 1 MA's), (Start: 19 @53289 has 17 MA's), (23, 53346), (29, 53427), (32, 53445), (34, 53466), (37, 53505), (38, 53508), (41, 53541), (43, 53562), (44, 53571), (51, 53685), (52, 53697), (56, 53790), (57, 53802), (61, 53895), (62, 53901), (66, 54018), (68, 54102), (69, 54165), (70, 54225), (73, 54246), (75, 54327), (76, 54390), (77, 54399), (78, 54402), (80, 54432), (82, 54453), (85, 54516), (86, 54522), (87, 54528),

Gene: Conboy\_79 Start: 52341, Stop: 53618, Start Num: 19

Candidate Starts for Conboy\_79:

(4, 52119), (7, 52152), (10, 52212), (14, 52260), (15, 52269), (16, 52284), (Start: 18 @52317 has 1 MA's), (Start: 19 @52341 has 17 MA's), (27, 52479), (31, 52503), (35, 52542), (38, 52575), (42, 52626), (44, 52638), (51, 52749), (52, 52761), (54, 52827), (57, 52866), (61, 52959), (62, 52965), (66, 53082), (68, 53166), (69, 53229), (70, 53289), (73, 53310), (75, 53391), (76, 53454), (77, 53463), (78, 53466), (80, 53496), (82, 53517), (85, 53580), (86, 53586), (87, 53592),

Gene: DrYang\_78 Start: 53011, Stop: 54216, Start Num: 18

Candidate Starts for DrYang\_78:

(4, 52813), (5, 52822), (6, 52828), (7, 52846), (10, 52906), (15, 52963), (16, 52978), (Start: 18 @53011 has 1 MA's), (31, 53182), (32, 53191), (36, 53236), (38, 53254), (39, 53260), (42, 53305), (44, 53317), (46, 53323), (49, 53395), (50, 53413), (52, 53434), (53, 53449), (57, 53527), (63, 53632), (64, 53713), (66, 53725), (68, 53809), (74, 53932), (76, 54052), (77, 54061), (78, 54064), (79, 54070), (80, 54094), (82, 54115), (83, 54160), (85, 54178), (86, 54184), (87, 54190),

Gene: EdgarPoe\_80 Start: 52716, Stop: 53993, Start Num: 19

Candidate Starts for EdgarPoe\_80:

(4, 52494), (7, 52527), (10, 52587), (14, 52635), (15, 52644), (16, 52659), (Start: 18 @52692 has 1 MA's), (Start: 19 @52716 has 17 MA's), (27, 52854), (31, 52878), (35, 52917), (38, 52950), (42, 53001), (44, 53013), (51, 53124), (52, 53136), (54, 53202), (57, 53241), (61, 53334), (62, 53340), (66, 53457), (68, 53541), (69, 53604), (70, 53664), (73, 53685), (75, 53766), (76, 53829), (77, 53838), (78, 53841), (80, 53871), (82, 53892), (85, 53955), (86, 53961), (87, 53967),

Gene: HumptyDumpty\_81 Start: 52519, Stop: 53796, Start Num: 19

Candidate Starts for HumptyDumpty\_81:

(4, 52297), (7, 52330), (10, 52390), (14, 52438), (15, 52447), (16, 52462), (Start: 18 @52495 has 1 MA's), (Start: 19 @52519 has 17 MA's), (27, 52657), (31, 52681), (35, 52720), (38, 52753), (42, 52804), (44, 52816), (51, 52927), (52, 52939), (54, 53005), (57, 53044), (61, 53137), (62, 53143), (66, 53260), (68, 53344), (69, 53407), (70, 53467), (73, 53488), (75, 53569), (76, 53632), (77, 53641), (78, 53644), (80, 53674), (82, 53695), (85, 53758), (86, 53764), (87, 53770),

Gene: JaNo\_80 Start: 52490, Stop: 53767, Start Num: 19

Candidate Starts for JaNo\_80:

(4, 52268), (7, 52301), (10, 52361), (14, 52409), (15, 52418), (16, 52433), (Start: 18 @52466 has 1 MA's), (Start: 19 @52490 has 17 MA's), (27, 52628), (31, 52652), (35, 52691), (38, 52724), (42, 52775), (44, 52787), (51, 52898), (52, 52910), (54, 52976), (57, 53015), (61, 53108), (62, 53114), (66, 53231), (68, 53315), (69, 53378), (70, 53438), (73, 53459), (75, 53540), (76, 53603), (77, 53612), (78, 53615), (80, 53645), (82, 53666), (83, 53711), (84, 53726), (85, 53729), (86, 53735), (87, 53741),

Gene: JayCookie\_81 Start: 53052, Stop: 54329, Start Num: 19

Candidate Starts for JayCookie\_81:

(3, 52821), (4, 52830), (5, 52839), (6, 52845), (7, 52863), (10, 52923), (14, 52971), (15, 52980), (16, 52995), (Start: 18 @53028 has 1 MA's), (Start: 19 @53052 has 17 MA's), (27, 53190), (31, 53214), (35, 53253), (38, 53286), (42, 53337), (44, 53349), (51, 53460), (52, 53472), (54, 53538), (57, 53577), (61, 53670), (62, 53676), (66, 53793), (68, 53877), (69, 53940), (70, 54000), (73, 54021), (75, 54102), (76, 54165), (77, 54174), (78, 54177), (80, 54207), (82, 54228), (85, 54291), (86, 54297), (87, 54303),

Gene: KBurrousTX\_80 Start: 54664, Stop: 55992, Start Num: 21

Candidate Starts for KBurrousTX\_80:

(1, 54379), (3, 54403), (4, 54412), (7, 54445), (9, 54487), (10, 54505), (14, 54553), (15, 54562), (16, 54577), (Start: 18 @54610 has 1 MA's), (Start: 21 @54664 has 1 MA's), (24, 54760), (28, 54847), (29, 54859), (31, 54880), (32, 54889), (33, 54907), (35, 54919), (38, 54952), (39, 54958), (44, 55015), (51, 55126), (55, 55210), (57, 55243), (59, 55309), (61, 55336), (62, 55342), (67, 55534), (69, 55606), (70, 55666), (73, 55687), (76, 55828), (77, 55837), (78, 55840), (79, 55846), (80, 55870), (82, 55891), (87, 55966),

Gene: Kabreeze\_81 Start: 52576, Stop: 53853, Start Num: 19

Candidate Starts for Kabreeze\_81:

(4, 52354), (7, 52387), (10, 52447), (14, 52495), (15, 52504), (16, 52519), (Start: 18 @52552 has 1 MA's), (Start: 19 @52576 has 17 MA's), (27, 52714), (31, 52738), (35, 52777), (38, 52810), (42, 52861), (44, 52873), (51, 52984), (52, 52996), (54, 53062), (57, 53101), (61, 53194), (62, 53200), (66, 53317), (68, 53401), (69, 53464), (70, 53524), (73, 53545), (75, 53626), (76, 53689), (77, 53698), (78, 53701), (80, 53731), (82, 53752), (83, 53797), (84, 53812), (85, 53815), (86, 53821), (87, 53827),

Gene: Linus\_81 Start: 53024, Stop: 54301, Start Num: 19

Candidate Starts for Linus\_81:

(4, 52802), (7, 52835), (10, 52895), (14, 52943), (15, 52952), (16, 52967), (Start: 18 @53000 has 1 MA's), (Start: 19 @53024 has 17 MA's), (27, 53162), (31, 53186), (35, 53225), (38, 53258), (42, 53309), (44, 53321), (51, 53432), (52, 53444), (54, 53510), (57, 53549), (61, 53642), (62, 53648), (66, 53765), (68, 53849), (69, 53912), (70, 53972), (73, 53993), (75, 54074), (76, 54137), (77, 54146), (78, 54149), (80, 54179), (82, 54200), (85, 54263), (86, 54269), (87, 54275),

Gene: Lymara\_77 Start: 51381, Stop: 52658, Start Num: 19

Candidate Starts for Lymara\_77:

(4, 51159), (7, 51192), (10, 51252), (14, 51300), (15, 51309), (16, 51324), (Start: 18 @51357 has 1 MA's), (Start: 19 @51381 has 17 MA's), (27, 51519), (31, 51543), (38, 51615), (42, 51666), (44, 51678), (51, 51789), (54, 51867), (56, 51894), (57, 51906), (61, 51999), (62, 52005), (66, 52122), (68, 52206), (69, 52269), (70, 52329), (73, 52350), (75, 52431), (76, 52494), (77, 52503), (78, 52506), (80,

52536), (82, 52557), (85, 52620), (86, 52626), (87, 52632),

Gene: Mordred\_81 Start: 52615, Stop: 53892, Start Num: 19

Candidate Starts for Mordred\_81:

(4, 52393), (7, 52426), (10, 52486), (14, 52534), (15, 52543), (16, 52558), (Start: 18 @52591 has 1 MA's), (Start: 19 @52615 has 17 MA's), (27, 52753), (31, 52777), (35, 52816), (38, 52849), (42, 52900), (44, 52912), (51, 53023), (52, 53035), (54, 53101), (57, 53140), (61, 53233), (62, 53239), (66, 53356), (68, 53440), (69, 53503), (70, 53563), (73, 53584), (75, 53665), (76, 53728), (77, 53737), (78, 53740), (80, 53770), (82, 53791), (83, 53836), (84, 53851), (85, 53854), (86, 53860), (87, 53866),

Gene: MoyaNatalis\_80 Start: 52498, Stop: 53775, Start Num: 19

Candidate Starts for MoyaNatalis\_80:

(4, 52276), (7, 52309), (10, 52369), (14, 52417), (15, 52426), (16, 52441), (Start: 18 @52474 has 1 MA's), (Start: 19 @52498 has 17 MA's), (27, 52636), (31, 52660), (35, 52699), (38, 52732), (42, 52783), (44, 52795), (51, 52906), (52, 52918), (54, 52984), (57, 53023), (61, 53116), (62, 53122), (66, 53239), (68, 53323), (69, 53386), (70, 53446), (73, 53467), (75, 53548), (76, 53611), (77, 53620), (78, 53623), (80, 53653), (82, 53674), (85, 53737), (86, 53743), (87, 53749),

Gene: PrincessTrina\_82 Start: 52920, Stop: 54197, Start Num: 19

Candidate Starts for PrincessTrina\_82:

(4, 52698), (7, 52731), (10, 52791), (14, 52839), (15, 52848), (16, 52863), (Start: 18 @52896 has 1 MA's), (Start: 19 @52920 has 17 MA's), (27, 53058), (31, 53082), (35, 53121), (38, 53154), (42, 53205), (44, 53217), (51, 53328), (52, 53340), (54, 53406), (57, 53445), (61, 53538), (62, 53544), (66, 53661), (68, 53745), (69, 53808), (70, 53868), (73, 53889), (75, 53970), (76, 54033), (77, 54042), (78, 54045), (80, 54075), (82, 54096), (85, 54159), (86, 54165), (87, 54171),

Gene: RosiePosie\_81 Start: 52704, Stop: 53981, Start Num: 19

Candidate Starts for RosiePosie\_81:

(4, 52482), (7, 52515), (10, 52575), (14, 52623), (15, 52632), (16, 52647), (Start: 18 @52680 has 1 MA's), (Start: 19 @52704 has 17 MA's), (27, 52842), (31, 52866), (35, 52905), (38, 52938), (42, 52989), (44, 53001), (51, 53112), (52, 53124), (54, 53190), (57, 53229), (61, 53322), (62, 53328), (66, 53445), (68, 53529), (69, 53592), (70, 53652), (73, 53673), (75, 53754), (76, 53817), (77, 53826), (78, 53829), (80, 53859), (82, 53880), (85, 53943), (86, 53949), (87, 53955),

Gene: Scavito\_82 Start: 52664, Stop: 53941, Start Num: 19

Candidate Starts for Scavito\_82:

(4, 52442), (7, 52475), (10, 52535), (14, 52583), (15, 52592), (16, 52607), (Start: 18 @52640 has 1 MA's), (Start: 19 @52664 has 17 MA's), (27, 52802), (31, 52826), (35, 52865), (38, 52898), (42, 52949), (44, 52961), (51, 53072), (52, 53084), (54, 53150), (57, 53189), (61, 53282), (62, 53288), (66, 53405), (68, 53489), (69, 53552), (70, 53612), (73, 53633), (75, 53714), (76, 53777), (77, 53786), (78, 53789), (80, 53819), (82, 53840), (83, 53885), (84, 53900), (85, 53903), (86, 53909), (87, 53915),

Gene: Tophat\_82 Start: 52853, Stop: 54130, Start Num: 19

Candidate Starts for Tophat\_82:

(4, 52631), (7, 52664), (10, 52724), (14, 52772), (15, 52781), (16, 52796), (Start: 18 @52829 has 1 MA's), (Start: 19 @52853 has 17 MA's), (27, 52991), (31, 53015), (35, 53054), (38, 53087), (42, 53138), (44, 53150), (51, 53261), (52, 53273), (54, 53339), (57, 53378), (61, 53471), (62, 53477), (66, 53594), (68, 53678), (69, 53741), (70, 53801), (73, 53822), (75, 53903), (76, 53966), (77, 53975), (78, 53978), (80, 54008), (82, 54029), (83, 54074), (84, 54089), (85, 54092), (86, 54098), (87, 54104),