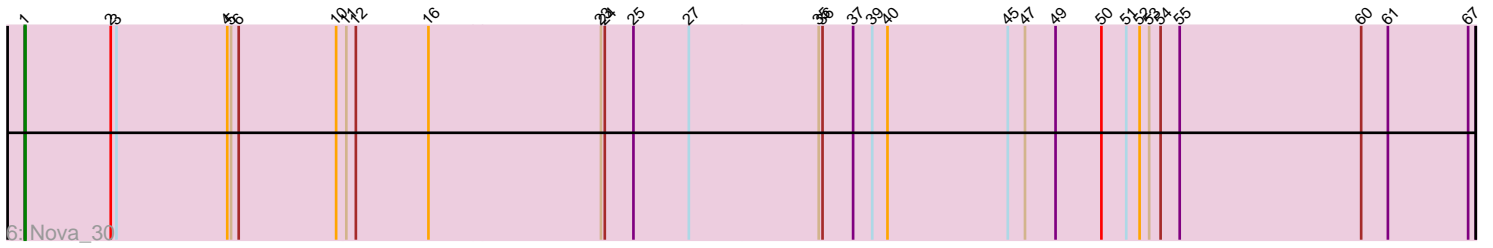
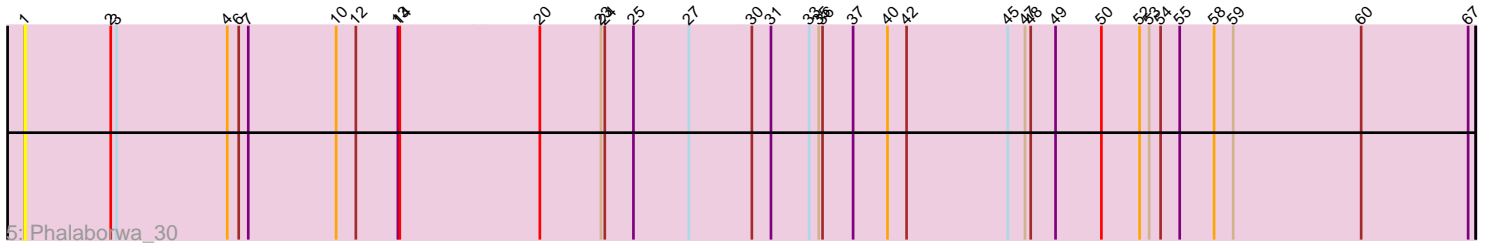
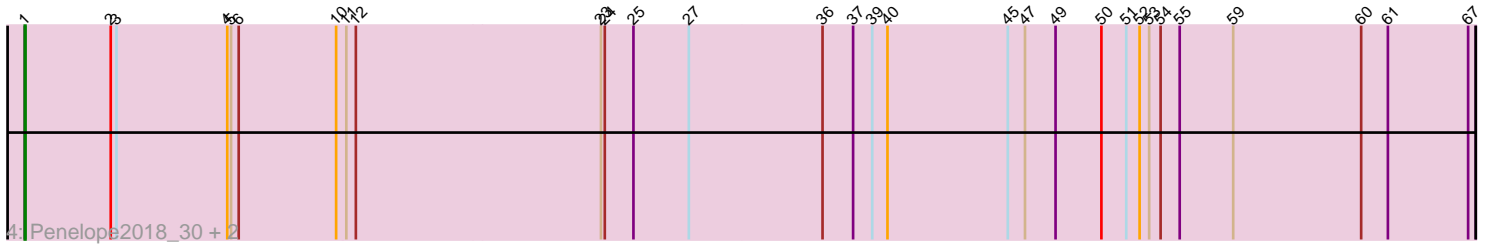
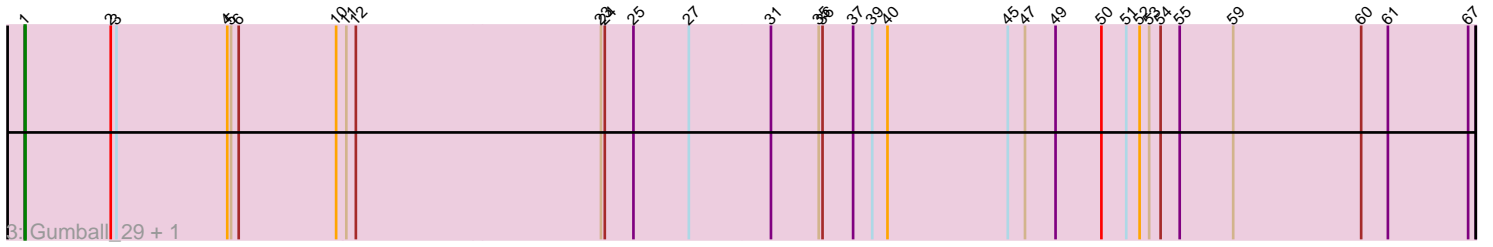
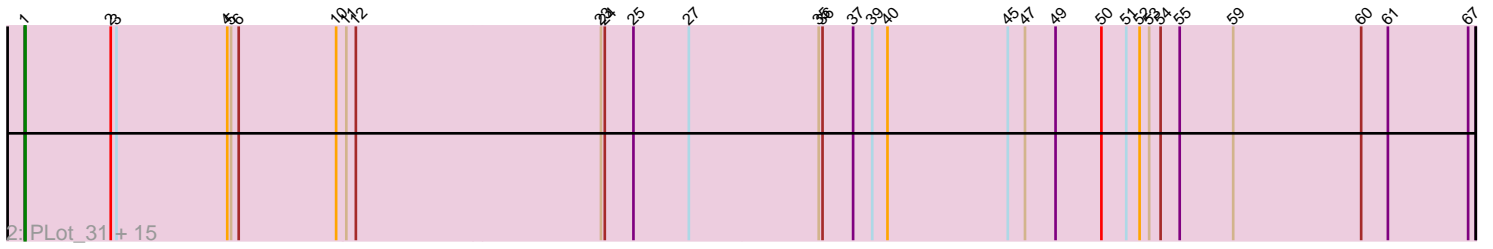
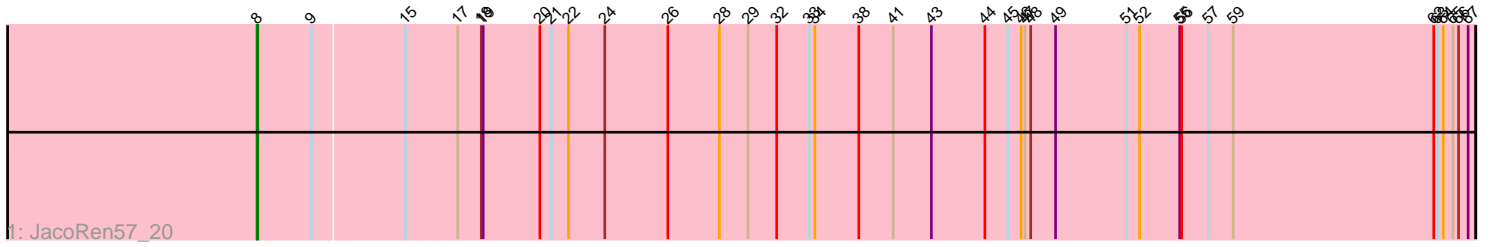


# Pham 296898



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 296898 Report

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

Pham number 296898 has 24 members, 1 are drafts.

Phages represented in each track:

- Track 1 : JacoRen57\_20
- Track 2 : PLOT\_31, Giuseppe\_30, Adjuator\_31, Delton\_30, Mopey\_30, PBI1\_30, Thoth\_30, Visconti\_30, Prager\_30, KandZ\_30, Chill\_31, WaldoWhy\_31, BigMama\_28, Butterscotch\_30, Troll4\_30, Erk16\_30
- Track 3 : Gumball\_29, SirHarley\_29
- Track 4 : Penelope2018\_30, SuperheroCarly\_30, Helpful\_31
- Track 5 : Phalaborwa\_30
- Track 6 : Nova\_30

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

The start number called the most often in the published annotations is 1, it was called in 22 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adjuator\_31, BigMama\_28, Butterscotch\_30, Chill\_31, Delton\_30, Erk16\_30, Giuseppe\_30, Gumball\_29, Helpful\_31, KandZ\_30, Mopey\_30, Nova\_30, PBI1\_30, PLOT\_31, Penelope2018\_30, Phalaborwa\_30, Prager\_30, SirHarley\_29, SuperheroCarly\_30, Thoth\_30, Troll4\_30, Visconti\_30, WaldoWhy\_31,

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

- 

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

- JacoRen57\_20,

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

Start 1:

- Found in 23 of 24 ( 95.8% ) of genes in pham
- Manual Annotations of this start: 22 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adjuator\_31 (D1), BigMama\_28 (D1), Butterscotch\_30 (D1), Chill\_31 (D1), Delton\_30 (D1), Erk16\_30 (D1), Giuseppe\_30

(D1), Gumball\_29 (D1), Helpful\_31 (D1), KandZ\_30 (D1), Mopey\_30 (D1), Nova\_30 (D1), PBI1\_30 (D1), PLOT\_31 (D1), Penelope2018\_30 (D1), Phalaborwa\_30 (D1), Prager\_30 (D1), SirHarley\_29 (D1), SuperheroCarly\_30 (D1), Thoth\_30 (D1), Troll4\_30 (D1), Visconti\_30 (D1), WaldoWhy\_31 (D1),

Start 8:

- Found in 1 of 24 ( 4.2% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JacoRen57\_20 (AB),

### Summary by clusters:

There are 2 clusters represented in this pham: AB, D1,

Info for manual annotations of cluster AB:

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

Info for manual annotations of cluster D1:

- Start number 1 was manually annotated 22 times for cluster D1.

### Gene Information:

Gene: Adjutor\_31 Start: 24256, Stop: 26526, Start Num: 1

Candidate Starts for Adjutor\_31:

(Start: 1 @24256 has 22 MA's), (2, 24391), (3, 24400), (4, 24574), (5, 24580), (6, 24592), (10, 24745), (11, 24760), (12, 24775), (23, 25156), (24, 25162), (25, 25207), (27, 25294), (35, 25495), (36, 25501), (37, 25549), (39, 25579), (40, 25603), (45, 25792), (47, 25819), (49, 25867), (50, 25939), (51, 25978), (52, 25999), (53, 26014), (54, 26032), (55, 26062), (59, 26146), (60, 26347), (61, 26389), (67, 26515),

Gene: BigMama\_28 Start: 24332, Stop: 26602, Start Num: 1

Candidate Starts for BigMama\_28:

(Start: 1 @24332 has 22 MA's), (2, 24467), (3, 24476), (4, 24650), (5, 24656), (6, 24668), (10, 24821), (11, 24836), (12, 24851), (23, 25232), (24, 25238), (25, 25283), (27, 25370), (35, 25571), (36, 25577), (37, 25625), (39, 25655), (40, 25679), (45, 25868), (47, 25895), (49, 25943), (50, 26015), (51, 26054), (52, 26075), (53, 26090), (54, 26108), (55, 26138), (59, 26222), (60, 26423), (61, 26465), (67, 26591),

Gene: Butterscotch\_30 Start: 24316, Stop: 26586, Start Num: 1

Candidate Starts for Butterscotch\_30:

(Start: 1 @24316 has 22 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (6, 24652), (10, 24805), (11, 24820), (12, 24835), (23, 25216), (24, 25222), (25, 25267), (27, 25354), (35, 25555), (36, 25561), (37, 25609), (39, 25639), (40, 25663), (45, 25852), (47, 25879), (49, 25927), (50, 25999), (51, 26038), (52, 26059), (53, 26074), (54, 26092), (55, 26122), (59, 26206), (60, 26407), (61, 26449), (67, 26575),

Gene: Chill\_31 Start: 24322, Stop: 26592, Start Num: 1

Candidate Starts for Chill\_31:

(Start: 1 @24322 has 22 MA's), (2, 24457), (3, 24466), (4, 24640), (5, 24646), (6, 24658), (10, 24811), (11, 24826), (12, 24841), (23, 25222), (24, 25228), (25, 25273), (27, 25360), (35, 25561), (36, 25567), (37, 25615), (39, 25645), (40, 25669), (45, 25858), (47, 25885), (49, 25933), (50, 26005), (51, 26044), (52, 26065), (53, 26080), (54, 26098), (55, 26128), (59, 26212), (60, 26413), (61, 26455), (67, 26581),

Gene: Delton\_30 Start: 24328, Stop: 26598, Start Num: 1

Candidate Starts for Delton\_30:

(Start: 1 @24328 has 22 MA's), (2, 24463), (3, 24472), (4, 24646), (5, 24652), (6, 24664), (10, 24817), (11, 24832), (12, 24847), (23, 25228), (24, 25234), (25, 25279), (27, 25366), (35, 25567), (36, 25573), (37, 25621), (39, 25651), (40, 25675), (45, 25864), (47, 25891), (49, 25939), (50, 26011), (51, 26050), (52, 26071), (53, 26086), (54, 26104), (55, 26134), (59, 26218), (60, 26419), (61, 26461), (67, 26587),

Gene: Erk16\_30 Start: 24319, Stop: 26589, Start Num: 1

Candidate Starts for Erk16\_30:

(Start: 1 @24319 has 22 MA's), (2, 24454), (3, 24463), (4, 24637), (5, 24643), (6, 24655), (10, 24808), (11, 24823), (12, 24838), (23, 25219), (24, 25225), (25, 25270), (27, 25357), (35, 25558), (36, 25564), (37, 25612), (39, 25642), (40, 25666), (45, 25855), (47, 25882), (49, 25930), (50, 26002), (51, 26041), (52, 26062), (53, 26077), (54, 26095), (55, 26125), (59, 26209), (60, 26410), (61, 26452), (67, 26578),

Gene: Giuseppe\_30 Start: 24308, Stop: 26578, Start Num: 1

Candidate Starts for Giuseppe\_30:

(Start: 1 @24308 has 22 MA's), (2, 24443), (3, 24452), (4, 24626), (5, 24632), (6, 24644), (10, 24797), (11, 24812), (12, 24827), (23, 25208), (24, 25214), (25, 25259), (27, 25346), (35, 25547), (36, 25553), (37, 25601), (39, 25631), (40, 25655), (45, 25844), (47, 25871), (49, 25919), (50, 25991), (51, 26030), (52, 26051), (53, 26066), (54, 26084), (55, 26114), (59, 26198), (60, 26399), (61, 26441), (67, 26567),

Gene: Gumball\_29 Start: 24266, Stop: 26536, Start Num: 1

Candidate Starts for Gumball\_29:

(Start: 1 @24266 has 22 MA's), (2, 24401), (3, 24410), (4, 24584), (5, 24590), (6, 24602), (10, 24755), (11, 24770), (12, 24785), (23, 25166), (24, 25172), (25, 25217), (27, 25304), (31, 25430), (35, 25505), (36, 25511), (37, 25559), (39, 25589), (40, 25613), (45, 25802), (47, 25829), (49, 25877), (50, 25949), (51, 25988), (52, 26009), (53, 26024), (54, 26042), (55, 26072), (59, 26156), (60, 26357), (61, 26399), (67, 26525),

Gene: Helpful\_31 Start: 24316, Stop: 26586, Start Num: 1

Candidate Starts for Helpful\_31:

(Start: 1 @24316 has 22 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (6, 24652), (10, 24805), (11, 24820), (12, 24835), (23, 25216), (24, 25222), (25, 25267), (27, 25354), (36, 25561), (37, 25609), (39, 25639), (40, 25663), (45, 25852), (47, 25879), (49, 25927), (50, 25999), (51, 26038), (52, 26059), (53, 26074), (54, 26092), (55, 26122), (59, 26206), (60, 26407), (61, 26449), (67, 26575),

Gene: JacoRen57\_20 Start: 18844, Stop: 20730, Start Num: 8

Candidate Starts for JacoRen57\_20:

(Start: 8 @18844 has 1 MA's), (9, 18928), (15, 19060), (17, 19135), (18, 19171), (19, 19174), (20, 19261), (21, 19279), (22, 19306), (24, 19363), (26, 19462), (28, 19543), (29, 19588), (32, 19633), (33, 19684), (34, 19693), (38, 19762), (41, 19816), (43, 19876), (44, 19960), (45, 19996), (46, 20017), (47, 20023), (48, 20032), (49, 20071), (51, 20182), (52, 20203), (55, 20266), (56, 20269), (57, 20311), (59, 20350), (62, 20665), (63, 20671), (64, 20680), (65, 20695), (66, 20704), (67, 20719),

Gene: KandZ\_30 Start: 24416, Stop: 26686, Start Num: 1

Candidate Starts for KandZ\_30:

(Start: 1 @24416 has 22 MA's), (2, 24551), (3, 24560), (4, 24734), (5, 24740), (6, 24752), (10, 24905), (11, 24920), (12, 24935), (23, 25316), (24, 25322), (25, 25367), (27, 25454), (35, 25655), (36, 25661), (37, 25709), (39, 25739), (40, 25763), (45, 25952), (47, 25979), (49, 26027), (50, 26099), (51, 26138), (52, 26159), (53, 26174), (54, 26192), (55, 26222), (59, 26306), (60, 26507), (61, 26549), (67, 26675),

Gene: Mopey\_30 Start: 24316, Stop: 26586, Start Num: 1

Candidate Starts for Mopey\_30:

(Start: 1 @24316 has 22 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (6, 24652), (10, 24805), (11, 24820), (12, 24835), (23, 25216), (24, 25222), (25, 25267), (27, 25354), (35, 25555), (36, 25561), (37, 25609), (39, 25639), (40, 25663), (45, 25852), (47, 25879), (49, 25927), (50, 25999), (51, 26038), (52, 26059), (53, 26074), (54, 26092), (55, 26122), (59, 26206), (60, 26407), (61, 26449), (67, 26575),

Gene: Nova\_30 Start: 24743, Stop: 27013, Start Num: 1

Candidate Starts for Nova\_30:

(Start: 1 @24743 has 22 MA's), (2, 24878), (3, 24887), (4, 25061), (5, 25067), (6, 25079), (10, 25232), (11, 25247), (12, 25262), (16, 25376), (23, 25643), (24, 25649), (25, 25694), (27, 25781), (35, 25982), (36, 25988), (37, 26036), (39, 26066), (40, 26090), (45, 26279), (47, 26306), (49, 26354), (50, 26426), (51, 26465), (52, 26486), (53, 26501), (54, 26519), (55, 26549), (60, 26834), (61, 26876), (67, 27002),

Gene: PBI1\_30 Start: 24247, Stop: 26517, Start Num: 1

Candidate Starts for PBI1\_30:

(Start: 1 @24247 has 22 MA's), (2, 24382), (3, 24391), (4, 24565), (5, 24571), (6, 24583), (10, 24736), (11, 24751), (12, 24766), (23, 25147), (24, 25153), (25, 25198), (27, 25285), (35, 25486), (36, 25492), (37, 25540), (39, 25570), (40, 25594), (45, 25783), (47, 25810), (49, 25858), (50, 25930), (51, 25969), (52, 25990), (53, 26005), (54, 26023), (55, 26053), (59, 26137), (60, 26338), (61, 26380), (67, 26506),

Gene: PLOT\_31 Start: 24319, Stop: 26589, Start Num: 1

Candidate Starts for PLOT\_31:

(Start: 1 @24319 has 22 MA's), (2, 24454), (3, 24463), (4, 24637), (5, 24643), (6, 24655), (10, 24808), (11, 24823), (12, 24838), (23, 25219), (24, 25225), (25, 25270), (27, 25357), (35, 25558), (36, 25564), (37, 25612), (39, 25642), (40, 25666), (45, 25855), (47, 25882), (49, 25930), (50, 26002), (51, 26041), (52, 26062), (53, 26077), (54, 26095), (55, 26125), (59, 26209), (60, 26410), (61, 26452), (67, 26578),

Gene: Penelope2018\_30 Start: 24316, Stop: 26586, Start Num: 1

Candidate Starts for Penelope2018\_30:

(Start: 1 @24316 has 22 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (6, 24652), (10, 24805), (11, 24820), (12, 24835), (23, 25216), (24, 25222), (25, 25267), (27, 25354), (36, 25561), (37, 25609), (39, 25639), (40, 25663), (45, 25852), (47, 25879), (49, 25927), (50, 25999), (51, 26038), (52, 26059), (53, 26074), (54, 26092), (55, 26122), (59, 26206), (60, 26407), (61, 26449), (67, 26575),

Gene: Phalaborwa\_30 Start: 24343, Stop: 26613, Start Num: 1

Candidate Starts for Phalaborwa\_30:

(Start: 1 @24343 has 22 MA's), (2, 24478), (3, 24487), (4, 24661), (6, 24679), (7, 24694), (10, 24832), (12, 24862), (13, 24928), (14, 24931), (20, 25147), (23, 25243), (24, 25249), (25, 25294), (27, 25381), (30, 25477), (31, 25507), (33, 25567), (35, 25582), (36, 25588), (37, 25636), (40, 25690), (42, 25720), (45, 25879), (47, 25906), (48, 25915), (49, 25954), (50, 26026), (52, 26086), (53, 26101), (54, 26119), (55, 26149), (58, 26203), (59, 26233), (60, 26434), (67, 26602),

Gene: Prager\_30 Start: 24328, Stop: 26598, Start Num: 1

Candidate Starts for Prager\_30:

(Start: 1 @24328 has 22 MA's), (2, 24463), (3, 24472), (4, 24646), (5, 24652), (6, 24664), (10, 24817), (11, 24832), (12, 24847), (23, 25228), (24, 25234), (25, 25279), (27, 25366), (35, 25567), (36, 25573), (37, 25621), (39, 25651), (40, 25675), (45, 25864), (47, 25891), (49, 25939), (50, 26011), (51, 26050), (52, 26071), (53, 26086), (54, 26104), (55, 26134), (59, 26218), (60, 26419), (61, 26461), (67, 26587),

Gene: SirHarley\_29 Start: 24248, Stop: 26518, Start Num: 1

Candidate Starts for SirHarley\_29:

(Start: 1 @24248 has 22 MA's), (2, 24383), (3, 24392), (4, 24566), (5, 24572), (6, 24584), (10, 24737), (11, 24752), (12, 24767), (23, 25148), (24, 25154), (25, 25199), (27, 25286), (31, 25412), (35, 25487), (36, 25493), (37, 25541), (39, 25571), (40, 25595), (45, 25784), (47, 25811), (49, 25859), (50, 25931),

(51, 25970), (52, 25991), (53, 26006), (54, 26024), (55, 26054), (59, 26138), (60, 26339), (61, 26381), (67, 26507),

Gene: SuperheroCarly\_30 Start: 24178, Stop: 26448, Start Num: 1

Candidate Starts for SuperheroCarly\_30:

(Start: 1 @24178 has 22 MA's), (2, 24313), (3, 24322), (4, 24496), (5, 24502), (6, 24514), (10, 24667), (11, 24682), (12, 24697), (23, 25078), (24, 25084), (25, 25129), (27, 25216), (36, 25423), (37, 25471), (39, 25501), (40, 25525), (45, 25714), (47, 25741), (49, 25789), (50, 25861), (51, 25900), (52, 25921), (53, 25936), (54, 25954), (55, 25984), (59, 26068), (60, 26269), (61, 26311), (67, 26437),

Gene: Thoth\_30 Start: 24313, Stop: 26583, Start Num: 1

Candidate Starts for Thoth\_30:

(Start: 1 @24313 has 22 MA's), (2, 24448), (3, 24457), (4, 24631), (5, 24637), (6, 24649), (10, 24802), (11, 24817), (12, 24832), (23, 25213), (24, 25219), (25, 25264), (27, 25351), (35, 25552), (36, 25558), (37, 25606), (39, 25636), (40, 25660), (45, 25849), (47, 25876), (49, 25924), (50, 25996), (51, 26035), (52, 26056), (53, 26071), (54, 26089), (55, 26119), (59, 26203), (60, 26404), (61, 26446), (67, 26572),

Gene: Troll4\_30 Start: 24317, Stop: 26587, Start Num: 1

Candidate Starts for Troll4\_30:

(Start: 1 @24317 has 22 MA's), (2, 24452), (3, 24461), (4, 24635), (5, 24641), (6, 24653), (10, 24806), (11, 24821), (12, 24836), (23, 25217), (24, 25223), (25, 25268), (27, 25355), (35, 25556), (36, 25562), (37, 25610), (39, 25640), (40, 25664), (45, 25853), (47, 25880), (49, 25928), (50, 26000), (51, 26039), (52, 26060), (53, 26075), (54, 26093), (55, 26123), (59, 26207), (60, 26408), (61, 26450), (67, 26576),

Gene: Visconti\_30 Start: 24326, Stop: 26596, Start Num: 1

Candidate Starts for Visconti\_30:

(Start: 1 @24326 has 22 MA's), (2, 24461), (3, 24470), (4, 24644), (5, 24650), (6, 24662), (10, 24815), (11, 24830), (12, 24845), (23, 25226), (24, 25232), (25, 25277), (27, 25364), (35, 25565), (36, 25571), (37, 25619), (39, 25649), (40, 25673), (45, 25862), (47, 25889), (49, 25937), (50, 26009), (51, 26048), (52, 26069), (53, 26084), (54, 26102), (55, 26132), (59, 26216), (60, 26417), (61, 26459), (67, 26585),

Gene: WaldoWhy\_31 Start: 24322, Stop: 26592, Start Num: 1

Candidate Starts for WaldoWhy\_31:

(Start: 1 @24322 has 22 MA's), (2, 24457), (3, 24466), (4, 24640), (5, 24646), (6, 24658), (10, 24811), (11, 24826), (12, 24841), (23, 25222), (24, 25228), (25, 25273), (27, 25360), (35, 25561), (36, 25567), (37, 25615), (39, 25645), (40, 25669), (45, 25858), (47, 25885), (49, 25933), (50, 26005), (51, 26044), (52, 26065), (53, 26080), (54, 26098), (55, 26128), (59, 26212), (60, 26413), (61, 26455), (67, 26581),