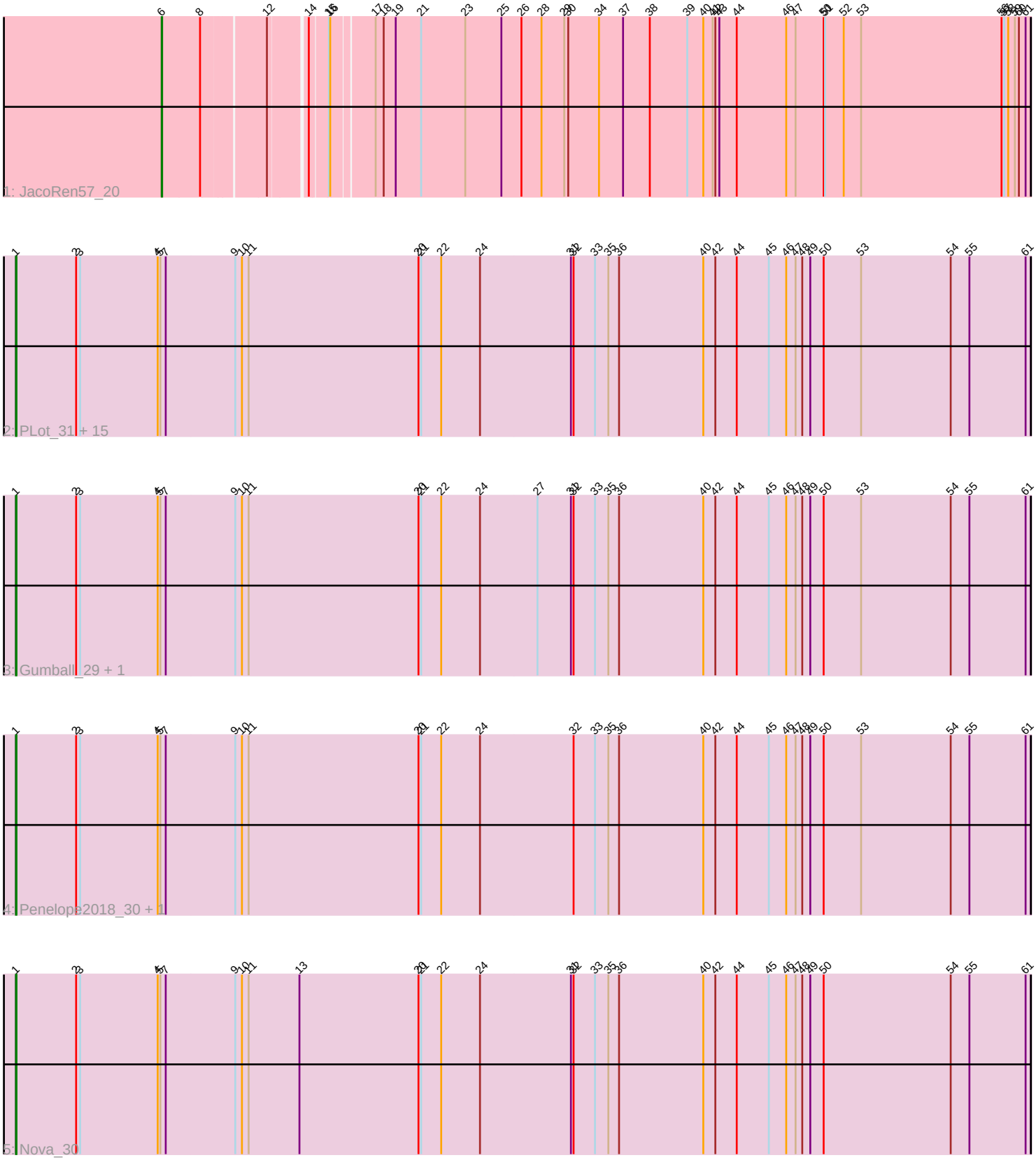
Pham 163918


1: JacoRen57_20
2: PLot_31 + 15
3: Gumball_29 + 1
4: Penelope2018_30 + 1
5: Nova_30

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 163918 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163918 has 22 members, 1 are drafts.

Phages represented in each track:
• Track 1 : JacoRen57_20
• Track 2 : PLot_31, Giuseppe_30, Adjutor_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, Helpful_31
• Track 5 : 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 20 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adjutor_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, Prager_30, SirHarley_29, 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 21 of 22 (95.5%) of genes in pham
• Manual Annotations of this start: 20 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adjutor_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), Prager_30 (D1), SirHarley_29 (D1), Thoth_30 (D1), Troll4_30 (D1), Visconti_30 (D1), WaldoWhy_31 (D1),

Start 6:
• Found in 1 of 22 (4.5%) of genes in pham
• Manual Annotations of this start: 1 of 21
• 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 6 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster D1:
•Start number 1 was manually annotated 20 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 20 MA's), (2, 24391), (3, 24400), (4, 24574), (5, 24580), (7, 24592), (9, 24745), (10, 24760), (11, 24775), (20, 25156), (21, 25162), (22, 25207), (24, 25294), (31, 25495), (32, 25501), (33, 25549), (35, 25579), (36, 25603), (40, 25792), (42, 25819), (44, 25867), (45, 25939), (46, 25978), (47, 25999), (48, 26014), (49, 26032), (50, 26062), (53, 26146), (54, 26347), (55, 26389), (61, 26515),

Gene: BigMama_28 Start: 24332, Stop: 26602, Start Num: 1
Candidate Starts for BigMama_28:
(Start: 1 @24332 has 20 MA's), (2, 24467), (3, 24476), (4, 24650), (5, 24656), (7, 24668), (9, 24821), (10, 24836), (11, 24851), (20, 25232), (21, 25238), (22, 25283), (24, 25370), (31, 25571), (32, 25577), (33, 25625), (35, 25655), (36, 25679), (40, 25868), (42, 25895), (44, 25943), (45, 26015), (46, 26054), (47, 26075), (48, 26090), (49, 26108), (50, 26138), (53, 26222), (54, 26423), (55, 26465), (61, 26591),

Gene: Butterscotch_30 Start: 24316, Stop: 26586, Start Num: 1
Candidate Starts for Butterscotch_30:
(Start: 1 @24316 has 20 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (7, 24652), (9, 24805), (10, 24820), (11, 24835), (20, 25216), (21, 25222), (22, 25267), (24, 25354), (31, 25555), (32, 25561), (33, 25609), (35, 25639), (36, 25663), (40, 25852), (42, 25879), (44, 25927), (45, 25999), (46, 26038), (47, 26059), (48, 26074), (49, 26092), (50, 26122), (53, 26206), (54, 26407), (55, 26449), (61, 26575),

Gene: Chill_31 Start: 24322, Stop: 26592, Start Num: 1
Candidate Starts for Chill_31:
(Start: 1 @24322 has 20 MA's), (2, 24457), (3, 24466), (4, 24640), (5, 24646), (7, 24658), (9, 24811), (10, 24826), (11, 24841), (20, 25222), (21, 25228), (22, 25273), (24, 25360), (31, 25561), (32, 25567), (33, 25615), (35, 25645), (36, 25669), (40, 25858), (42, 25885), (44, 25933), (45, 26005), (46, 26044), (47, 26065), (48, 26080), (49, 26098), (50, 26128), (53, 26212), (54, 26413), (55, 26455), (61, 26581),

Gene: Delton_30 Start: 24328, Stop: 26598, Start Num: 1

Candidate Starts for Delton_30:
(Start: 1 @24328 has 20 MA's), (2, 24463), (3, 24472), (4, 24646), (5, 24652), (7, 24664), (9, 24817), (10, 24832), (11, 24847), (20, 25228), (21, 25234), (22, 25279), (24, 25366), (31, 25567), (32, 25573), (33, 25621), (35, 25651), (36, 25675), (40, 25864), (42, 25891), (44, 25939), (45, 26011), (46, 26050), (47, 26071), (48, 26086), (49, 26104), (50, 26134), (53, 26218), (54, 26419), (55, 26461), (61, 26587),

Gene: Erk16_30 Start: 24319, Stop: 26589, Start Num: 1
Candidate Starts for Erk16_30:
(Start: 1 @24319 has 20 MA's), (2, 24454), (3, 24463), (4, 24637), (5, 24643), (7, 24655), (9, 24808), (10, 24823), (11, 24838), (20, 25219), (21, 25225), (22, 25270), (24, 25357), (31, 25558), (32, 25564), (33, 25612), (35, 25642), (36, 25666), (40, 25855), (42, 25882), (44, 25930), (45, 26002), (46, 26041), (47, 26062), (48, 26077), (49, 26095), (50, 26125), (53, 26209), (54, 26410), (55, 26452), (61, 26578),

Gene: Giuseppe_30 Start: 24308, Stop: 26578, Start Num: 1
Candidate Starts for Giuseppe_30:
(Start: 1 @24308 has 20 MA's), (2, 24443), (3, 24452), (4, 24626), (5, 24632), (7, 24644), (9, 24797), (10, 24812), (11, 24827), (20, 25208), (21, 25214), (22, 25259), (24, 25346), (31, 25547), (32, 25553), (33, 25601), (35, 25631), (36, 25655), (40, 25844), (42, 25871), (44, 25919), (45, 25991), (46, 26030), (47, 26051), (48, 26066), (49, 26084), (50, 26114), (53, 26198), (54, 26399), (55, 26441), (61, 26567),

Gene: Gumball_29 Start: 24266, Stop: 26536, Start Num: 1
Candidate Starts for Gumball_29:
(Start: 1 @24266 has 20 MA's), (2, 24401), (3, 24410), (4, 24584), (5, 24590), (7, 24602), (9, 24755), (10, 24770), (11, 24785), (20, 25166), (21, 25172), (22, 25217), (24, 25304), (27, 25430), (31, 25505), (32, 25511), (33, 25559), (35, 25589), (36, 25613), (40, 25802), (42, 25829), (44, 25877), (45, 25949), (46, 25988), (47, 26009), (48, 26024), (49, 26042), (50, 26072), (53, 26156), (54, 26357), (55, 26399), (61, 26525),

Gene: Helpful_31 Start: 24316, Stop: 26586, Start Num: 1
Candidate Starts for Helpful_31:
(Start: 1 @24316 has 20 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (7, 24652), (9, 24805), (10, 24820), (11, 24835), (20, 25216), (21, 25222), (22, 25267), (24, 25354), (32, 25561), (33, 25609), (35, 25639), (36, 25663), (40, 25852), (42, 25879), (44, 25927), (45, 25999), (46, 26038), (47, 26059), (48, 26074), (49, 26092), (50, 26122), (53, 26206), (54, 26407), (55, 26449), (61, 26575),

Gene: JacoRen57_20 Start: 18844, Stop: 20730, Start Num: 6
Candidate Starts for JacoRen57_20:
(Start: 6 @18844 has 1 MA's), (8, 18928), (12, 19060), (14, 19135), (15, 19171), (16, 19174), (17, 19261), (18, 19279), (19, 19306), (21, 19363), (23, 19462), (25, 19543), (26, 19588), (28, 19633), (29, 19684), (30, 19693), (34, 19762), (37, 19816), (38, 19876), (39, 19960), (40, 19996), (41, 20017), (42, 20023), (43, 20032), (44, 20071), (46, 20182), (47, 20203), (50, 20266), (51, 20269), (52, 20311), (53, 20350), (56, 20665), (57, 20671), (58, 20680), (59, 20695), (60, 20704), (61, 20719),

Gene: KandZ_30 Start: 24416, Stop: 26686, Start Num: 1
Candidate Starts for KandZ_30:
(Start: 1 @24416 has 20 MA's), (2, 24551), (3, 24560), (4, 24734), (5, 24740), (7, 24752), (9, 24905), (10, 24920), (11, 24935), (20, 25316), (21, 25322), (22, 25367), (24, 25454), (31, 25655), (32, 25661), (33, 25709), (35, 25739), (36, 25763), (40, 25952), (42, 25979), (44, 26027), (45, 26099), (46, 26138), (47, 26159), (48, 26174), (49, 26192), (50, 26222), (53, 26306), (54, 26507), (55, 26549), (61, 26675),

Gene: Mopey_30 Start: 24316, Stop: 26586, Start Num: 1
Candidate Starts for Mopey_30:

(Start: 1 @24316 has 20 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (7, 24652), (9, 24805), (10, 24820), (11, 24835), (20, 25216), (21, 25222), (22, 25267), (24, 25354), (31, 25555), (32, 25561), (33, 25609), (35, 25639), (36, 25663), (40, 25852), (42, 25879), (44, 25927), (45, 25999), (46, 26038), (47, 26059), (48, 26074), (49, 26092), (50, 26122), (53, 26206), (54, 26407), (55, 26449), (61, 26575),

Gene: Nova_30 Start: 24743, Stop: 27013, Start Num: 1
Candidate Starts for Nova_30:
(Start: 1 @24743 has 20 MA's), (2, 24878), (3, 24887), (4, 25061), (5, 25067), (7, 25079), (9, 25232), (10, 25247), (11, 25262), (13, 25376), (20, 25643), (21, 25649), (22, 25694), (24, 25781), (31, 25982), (32, 25988), (33, 26036), (35, 26066), (36, 26090), (40, 26279), (42, 26306), (44, 26354), (45, 26426), (46, 26465), (47, 26486), (48, 26501), (49, 26519), (50, 26549), (54, 26834), (55, 26876), (61, 27002),

Gene: PBI1_30 Start: 24247, Stop: 26517, Start Num: 1
Candidate Starts for PBI1_30:
(Start: 1 @24247 has 20 MA's), (2, 24382), (3, 24391), (4, 24565), (5, 24571), (7, 24583), (9, 24736), (10, 24751), (11, 24766), (20, 25147), (21, 25153), (22, 25198), (24, 25285), (31, 25486), (32, 25492), (33, 25540), (35, 25570), (36, 25594), (40, 25783), (42, 25810), (44, 25858), (45, 25930), (46, 25969), (47, 25990), (48, 26005), (49, 26023), (50, 26053), (53, 26137), (54, 26338), (55, 26380), (61, 26506),

Gene: PLot_31 Start: 24319, Stop: 26589, Start Num: 1
Candidate Starts for PLot_31:
(Start: 1 @24319 has 20 MA's), (2, 24454), (3, 24463), (4, 24637), (5, 24643), (7, 24655), (9, 24808), (10, 24823), (11, 24838), (20, 25219), (21, 25225), (22, 25270), (24, 25357), (31, 25558), (32, 25564), (33, 25612), (35, 25642), (36, 25666), (40, 25855), (42, 25882), (44, 25930), (45, 26002), (46, 26041), (47, 26062), (48, 26077), (49, 26095), (50, 26125), (53, 26209), (54, 26410), (55, 26452), (61, 26578),

Gene: Penelope2018_30 Start: 24316, Stop: 26586, Start Num: 1
Candidate Starts for Penelope2018_30:
(Start: 1 @24316 has 20 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (7, 24652), (9, 24805), (10, 24820), (11, 24835), (20, 25216), (21, 25222), (22, 25267), (24, 25354), (32, 25561), (33, 25609), (35, 25639), (36, 25663), (40, 25852), (42, 25879), (44, 25927), (45, 25999), (46, 26038), (47, 26059), (48, 26074), (49, 26092), (50, 26122), (53, 26206), (54, 26407), (55, 26449), (61, 26575),

Gene: Prager_30 Start: 24328, Stop: 26598, Start Num: 1
Candidate Starts for Prager_30:
(Start: 1 @24328 has 20 MA's), (2, 24463), (3, 24472), (4, 24646), (5, 24652), (7, 24664), (9, 24817), (10, 24832), (11, 24847), (20, 25228), (21, 25234), (22, 25279), (24, 25366), (31, 25567), (32, 25573), (33, 25621), (35, 25651), (36, 25675), (40, 25864), (42, 25891), (44, 25939), (45, 26011), (46, 26050), (47, 26071), (48, 26086), (49, 26104), (50, 26134), (53, 26218), (54, 26419), (55, 26461), (61, 26587),

Gene: SirHarley_29 Start: 24248, Stop: 26518, Start Num: 1
Candidate Starts for SirHarley_29:
(Start: 1 @24248 has 20 MA's), (2, 24383), (3, 24392), (4, 24566), (5, 24572), (7, 24584), (9, 24737), (10, 24752), (11, 24767), (20, 25148), (21, 25154), (22, 25199), (24, 25286), (27, 25412), (31, 25487), (32, 25493), (33, 25541), (35, 25571), (36, 25595), (40, 25784), (42, 25811), (44, 25859), (45, 25931), (46, 25970), (47, 25991), (48, 26006), (49, 26024), (50, 26054), (53, 26138), (54, 26339), (55, 26381), (61, 26507),

Gene: Thoth_30 Start: 24313, Stop: 26583, Start Num: 1
Candidate Starts for Thoth_30:
(Start: 1 @24313 has 20 MA's), (2, 24448), (3, 24457), (4, 24631), (5, 24637), (7, 24649), (9, 24802), (10, 24817), (11, 24832), (20, 25213), (21, 25219), (22, 25264), (24, 25351), (31, 25552), (32, 25558), (33, 25606), (35, 25636), (36, 25660), (40, 25849), (42, 25876), (44, 25924), (45, 25996), (46, 26035),

(47, 26056), (48, 26071), (49, 26089), (50, 26119), (53, 26203), (54, 26404), (55, 26446), (61, 26572),

Gene: Troll4_30 Start: 24317, Stop: 26587, Start Num: 1
Candidate Starts for Troll4_30:
(Start: 1 @24317 has 20 MA's), (2, 24452), (3, 24461), (4, 24635), (5, 24641), (7, 24653), (9, 24806), (10, 24821), (11, 24836), (20, 25217), (21, 25223), (22, 25268), (24, 25355), (31, 25556), (32, 25562), (33, 25610), (35, 25640), (36, 25664), (40, 25853), (42, 25880), (44, 25928), (45, 26000), (46, 26039), (47, 26060), (48, 26075), (49, 26093), (50, 26123), (53, 26207), (54, 26408), (55, 26450), (61, 26576),

Gene: Visconti_30 Start: 24326, Stop: 26596, Start Num: 1
Candidate Starts for Visconti_30:
(Start: 1 @24326 has 20 MA's), (2, 24461), (3, 24470), (4, 24644), (5, 24650), (7, 24662), (9, 24815), (10, 24830), (11, 24845), (20, 25226), (21, 25232), (22, 25277), (24, 25364), (31, 25565), (32, 25571), (33, 25619), (35, 25649), (36, 25673), (40, 25862), (42, 25889), (44, 25937), (45, 26009), (46, 26048), (47, 26069), (48, 26084), (49, 26102), (50, 26132), (53, 26216), (54, 26417), (55, 26459), (61, 26585),

Gene: WaldoWhy_31 Start: 24322, Stop: 26592, Start Num: 1
Candidate Starts for WaldoWhy_31:
(Start: 1 @24322 has 20 MA's), (2, 24457), (3, 24466), (4, 24640), (5, 24646), (7, 24658), (9, 24811), (10, 24826), (11, 24841), (20, 25222), (21, 25228), (22, 25273), (24, 25360), (31, 25561), (32, 25567), (33, 25615), (35, 25645), (36, 25669), (40, 25858), (42, 25885), (44, 25933), (45, 26005), (46, 26044), (47, 26065), (48, 26080), (49, 26098), (50, 26128), (53, 26212), (54, 26413), (55, 26455), (61, 26581),