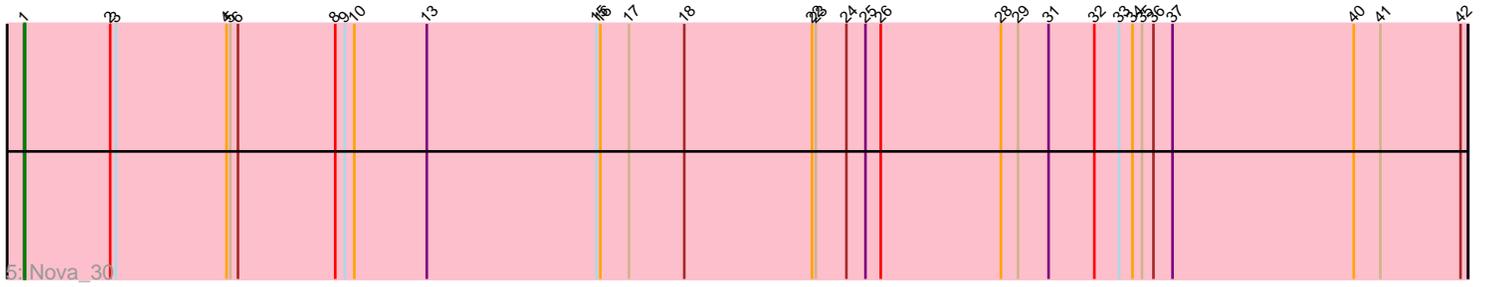
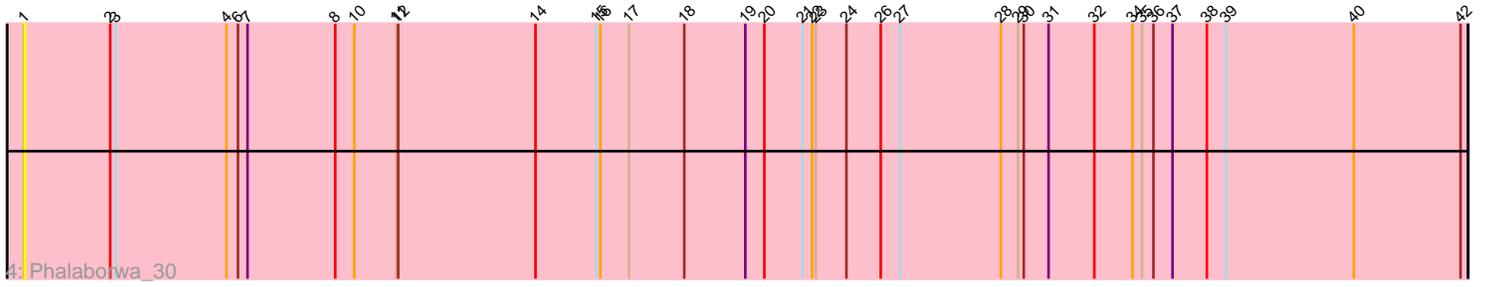
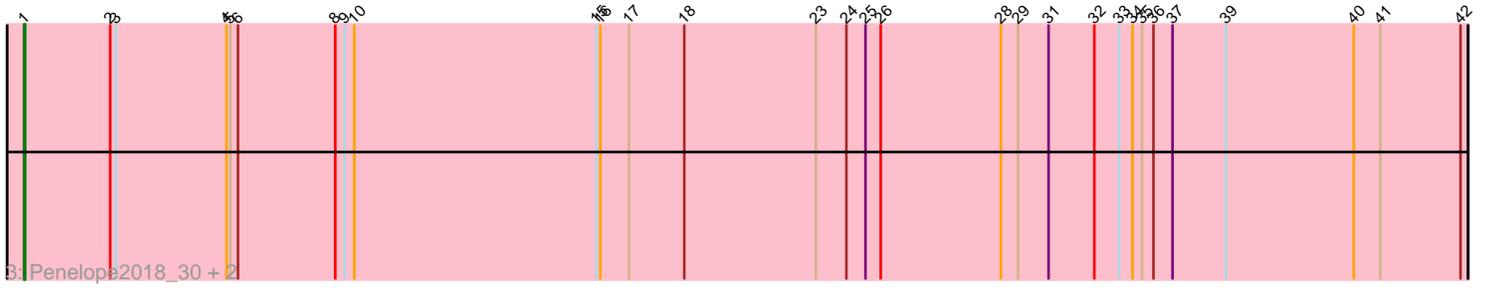
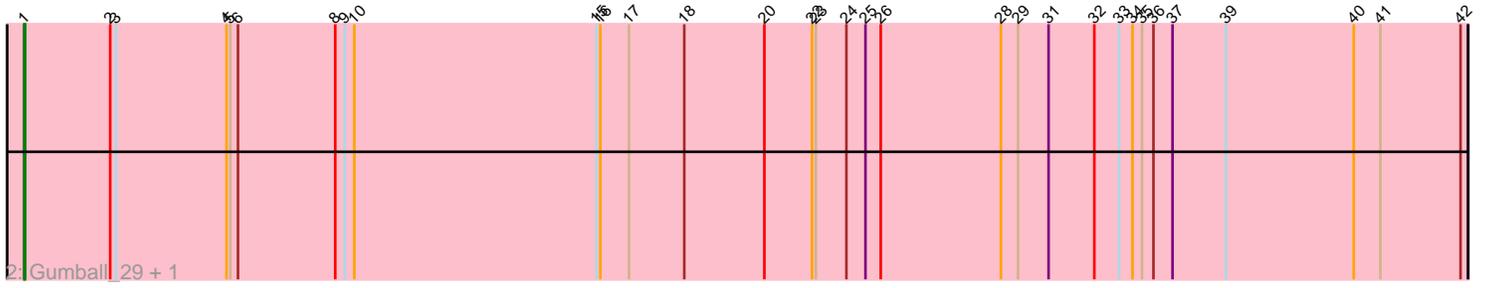
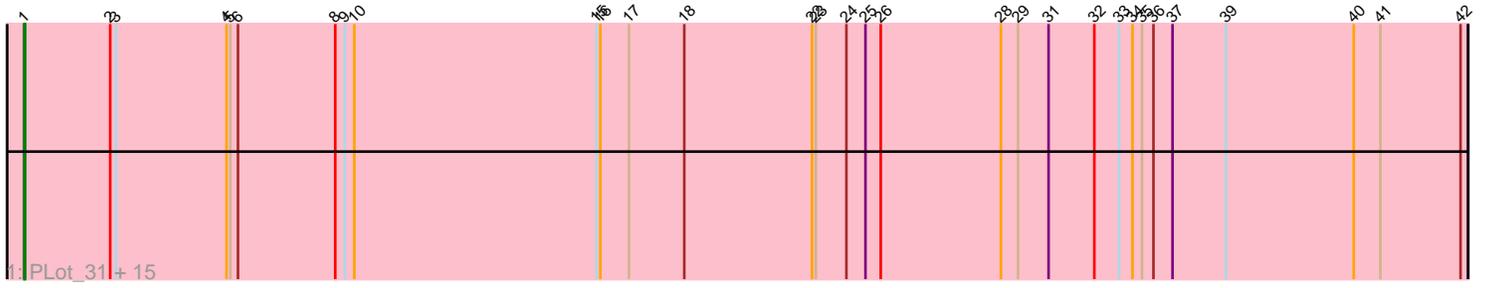


Pham 289734



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 289734 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289734 has 23 members, 2 are drafts.

Phages represented in each track:

- Track 1 : 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 2 : Gumball_29, SirHarley_29
- Track 3 : Penelope2018_30, SuperheroCarly_31, Helpful_31
- Track 4 : Phalaborwa_30
- 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 21 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, Phalaborwa_30, Prager_30, SirHarley_29, SuperheroCarly_31, 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:

-

Summary by start number:

Start 1:

- Found in 23 of 23 (100.0%) of genes in pham
- Manual Annotations of this start: 21 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), Phalaborwa_30 (D1), Prager_30 (D1), SirHarley_29 (D1), SuperheroCarly_31 (D1), Thoth_30 (D1), Troll4_30 (D1), Visconti_30 (D1), WaldoWhy_31 (D1),

Summary by clusters:

There is one cluster represented in this pham: D1

Info for manual annotations of cluster D1:

•Start number 1 was manually annotated 21 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 21 MA's), (2, 24391), (3, 24400), (4, 24574), (5, 24580), (6, 24592), (8, 24745), (9, 24760), (10, 24775), (15, 25156), (16, 25162), (17, 25207), (18, 25294), (22, 25495), (23, 25501), (24, 25549), (25, 25579), (26, 25603), (28, 25792), (29, 25819), (31, 25867), (32, 25939), (33, 25978), (34, 25999), (35, 26014), (36, 26032), (37, 26062), (39, 26146), (40, 26347), (41, 26389), (42, 26515),

Gene: BigMama_28 Start: 24332, Stop: 26602, Start Num: 1

Candidate Starts for BigMama_28:

(Start: 1 @24332 has 21 MA's), (2, 24467), (3, 24476), (4, 24650), (5, 24656), (6, 24668), (8, 24821), (9, 24836), (10, 24851), (15, 25232), (16, 25238), (17, 25283), (18, 25370), (22, 25571), (23, 25577), (24, 25625), (25, 25655), (26, 25679), (28, 25868), (29, 25895), (31, 25943), (32, 26015), (33, 26054), (34, 26075), (35, 26090), (36, 26108), (37, 26138), (39, 26222), (40, 26423), (41, 26465), (42, 26591),

Gene: Butterscotch_30 Start: 24316, Stop: 26586, Start Num: 1

Candidate Starts for Butterscotch_30:

(Start: 1 @24316 has 21 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (6, 24652), (8, 24805), (9, 24820), (10, 24835), (15, 25216), (16, 25222), (17, 25267), (18, 25354), (22, 25555), (23, 25561), (24, 25609), (25, 25639), (26, 25663), (28, 25852), (29, 25879), (31, 25927), (32, 25999), (33, 26038), (34, 26059), (35, 26074), (36, 26092), (37, 26122), (39, 26206), (40, 26407), (41, 26449), (42, 26575),

Gene: Chill_31 Start: 24322, Stop: 26592, Start Num: 1

Candidate Starts for Chill_31:

(Start: 1 @24322 has 21 MA's), (2, 24457), (3, 24466), (4, 24640), (5, 24646), (6, 24658), (8, 24811), (9, 24826), (10, 24841), (15, 25222), (16, 25228), (17, 25273), (18, 25360), (22, 25561), (23, 25567), (24, 25615), (25, 25645), (26, 25669), (28, 25858), (29, 25885), (31, 25933), (32, 26005), (33, 26044), (34, 26065), (35, 26080), (36, 26098), (37, 26128), (39, 26212), (40, 26413), (41, 26455), (42, 26581),

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

Candidate Starts for Delton_30:

(Start: 1 @24328 has 21 MA's), (2, 24463), (3, 24472), (4, 24646), (5, 24652), (6, 24664), (8, 24817), (9, 24832), (10, 24847), (15, 25228), (16, 25234), (17, 25279), (18, 25366), (22, 25567), (23, 25573), (24, 25621), (25, 25651), (26, 25675), (28, 25864), (29, 25891), (31, 25939), (32, 26011), (33, 26050), (34, 26071), (35, 26086), (36, 26104), (37, 26134), (39, 26218), (40, 26419), (41, 26461), (42, 26587),

Gene: Erk16_30 Start: 24319, Stop: 26589, Start Num: 1

Candidate Starts for Erk16_30:

(Start: 1 @24319 has 21 MA's), (2, 24454), (3, 24463), (4, 24637), (5, 24643), (6, 24655), (8, 24808), (9, 24823), (10, 24838), (15, 25219), (16, 25225), (17, 25270), (18, 25357), (22, 25558), (23, 25564), (24, 25612), (25, 25642), (26, 25666), (28, 25855), (29, 25882), (31, 25930), (32, 26002), (33, 26041), (34, 26062), (35, 26077), (36, 26095), (37, 26125), (39, 26209), (40, 26410), (41, 26452), (42, 26578),

Gene: Giuseppe_30 Start: 24308, Stop: 26578, Start Num: 1

Candidate Starts for Giuseppe_30:

(Start: 1 @24308 has 21 MA's), (2, 24443), (3, 24452), (4, 24626), (5, 24632), (6, 24644), (8, 24797), (9, 24812), (10, 24827), (15, 25208), (16, 25214), (17, 25259), (18, 25346), (22, 25547), (23, 25553), (24, 25601), (25, 25631), (26, 25655), (28, 25844), (29, 25871), (31, 25919), (32, 25991), (33, 26030), (34, 26051), (35, 26066), (36, 26084), (37, 26114), (39, 26198), (40, 26399), (41, 26441), (42, 26567),

Gene: Gumball_29 Start: 24266, Stop: 26536, Start Num: 1

Candidate Starts for Gumball_29:

(Start: 1 @24266 has 21 MA's), (2, 24401), (3, 24410), (4, 24584), (5, 24590), (6, 24602), (8, 24755), (9, 24770), (10, 24785), (15, 25166), (16, 25172), (17, 25217), (18, 25304), (20, 25430), (22, 25505), (23, 25511), (24, 25559), (25, 25589), (26, 25613), (28, 25802), (29, 25829), (31, 25877), (32, 25949), (33, 25988), (34, 26009), (35, 26024), (36, 26042), (37, 26072), (39, 26156), (40, 26357), (41, 26399), (42, 26525),

Gene: Helpful_31 Start: 24316, Stop: 26586, Start Num: 1

Candidate Starts for Helpful_31:

(Start: 1 @24316 has 21 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (6, 24652), (8, 24805), (9, 24820), (10, 24835), (15, 25216), (16, 25222), (17, 25267), (18, 25354), (23, 25561), (24, 25609), (25, 25639), (26, 25663), (28, 25852), (29, 25879), (31, 25927), (32, 25999), (33, 26038), (34, 26059), (35, 26074), (36, 26092), (37, 26122), (39, 26206), (40, 26407), (41, 26449), (42, 26575),

Gene: KandZ_30 Start: 24416, Stop: 26686, Start Num: 1

Candidate Starts for KandZ_30:

(Start: 1 @24416 has 21 MA's), (2, 24551), (3, 24560), (4, 24734), (5, 24740), (6, 24752), (8, 24905), (9, 24920), (10, 24935), (15, 25316), (16, 25322), (17, 25367), (18, 25454), (22, 25655), (23, 25661), (24, 25709), (25, 25739), (26, 25763), (28, 25952), (29, 25979), (31, 26027), (32, 26099), (33, 26138), (34, 26159), (35, 26174), (36, 26192), (37, 26222), (39, 26306), (40, 26507), (41, 26549), (42, 26675),

Gene: Mopey_30 Start: 24316, Stop: 26586, Start Num: 1

Candidate Starts for Mopey_30:

(Start: 1 @24316 has 21 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (6, 24652), (8, 24805), (9, 24820), (10, 24835), (15, 25216), (16, 25222), (17, 25267), (18, 25354), (22, 25555), (23, 25561), (24, 25609), (25, 25639), (26, 25663), (28, 25852), (29, 25879), (31, 25927), (32, 25999), (33, 26038), (34, 26059), (35, 26074), (36, 26092), (37, 26122), (39, 26206), (40, 26407), (41, 26449), (42, 26575),

Gene: Nova_30 Start: 24743, Stop: 27013, Start Num: 1

Candidate Starts for Nova_30:

(Start: 1 @24743 has 21 MA's), (2, 24878), (3, 24887), (4, 25061), (5, 25067), (6, 25079), (8, 25232), (9, 25247), (10, 25262), (13, 25376), (15, 25643), (16, 25649), (17, 25694), (18, 25781), (22, 25982), (23, 25988), (24, 26036), (25, 26066), (26, 26090), (28, 26279), (29, 26306), (31, 26354), (32, 26426), (33, 26465), (34, 26486), (35, 26501), (36, 26519), (37, 26549), (40, 26834), (41, 26876), (42, 27002),

Gene: PBI1_30 Start: 24247, Stop: 26517, Start Num: 1

Candidate Starts for PBI1_30:

(Start: 1 @24247 has 21 MA's), (2, 24382), (3, 24391), (4, 24565), (5, 24571), (6, 24583), (8, 24736), (9, 24751), (10, 24766), (15, 25147), (16, 25153), (17, 25198), (18, 25285), (22, 25486), (23, 25492), (24, 25540), (25, 25570), (26, 25594), (28, 25783), (29, 25810), (31, 25858), (32, 25930), (33, 25969),

(34, 25990), (35, 26005), (36, 26023), (37, 26053), (39, 26137), (40, 26338), (41, 26380), (42, 26506),

Gene: PLOT_31 Start: 24319, Stop: 26589, Start Num: 1

Candidate Starts for PLOT_31:

(Start: 1 @24319 has 21 MA's), (2, 24454), (3, 24463), (4, 24637), (5, 24643), (6, 24655), (8, 24808), (9, 24823), (10, 24838), (15, 25219), (16, 25225), (17, 25270), (18, 25357), (22, 25558), (23, 25564), (24, 25612), (25, 25642), (26, 25666), (28, 25855), (29, 25882), (31, 25930), (32, 26002), (33, 26041), (34, 26062), (35, 26077), (36, 26095), (37, 26125), (39, 26209), (40, 26410), (41, 26452), (42, 26578),

Gene: Penelope2018_30 Start: 24316, Stop: 26586, Start Num: 1

Candidate Starts for Penelope2018_30:

(Start: 1 @24316 has 21 MA's), (2, 24451), (3, 24460), (4, 24634), (5, 24640), (6, 24652), (8, 24805), (9, 24820), (10, 24835), (15, 25216), (16, 25222), (17, 25267), (18, 25354), (23, 25561), (24, 25609), (25, 25639), (26, 25663), (28, 25852), (29, 25879), (31, 25927), (32, 25999), (33, 26038), (34, 26059), (35, 26074), (36, 26092), (37, 26122), (39, 26206), (40, 26407), (41, 26449), (42, 26575),

Gene: Phalaborwa_30 Start: 24343, Stop: 26613, Start Num: 1

Candidate Starts for Phalaborwa_30:

(Start: 1 @24343 has 21 MA's), (2, 24478), (3, 24487), (4, 24661), (6, 24679), (7, 24694), (8, 24832), (10, 24862), (11, 24928), (12, 24931), (14, 25147), (15, 25243), (16, 25249), (17, 25294), (18, 25381), (19, 25477), (20, 25507), (21, 25567), (22, 25582), (23, 25588), (24, 25636), (26, 25690), (27, 25720), (28, 25879), (29, 25906), (30, 25915), (31, 25954), (32, 26026), (34, 26086), (35, 26101), (36, 26119), (37, 26149), (38, 26203), (39, 26233), (40, 26434), (42, 26602),

Gene: Prager_30 Start: 24328, Stop: 26598, Start Num: 1

Candidate Starts for Prager_30:

(Start: 1 @24328 has 21 MA's), (2, 24463), (3, 24472), (4, 24646), (5, 24652), (6, 24664), (8, 24817), (9, 24832), (10, 24847), (15, 25228), (16, 25234), (17, 25279), (18, 25366), (22, 25567), (23, 25573), (24, 25621), (25, 25651), (26, 25675), (28, 25864), (29, 25891), (31, 25939), (32, 26011), (33, 26050), (34, 26071), (35, 26086), (36, 26104), (37, 26134), (39, 26218), (40, 26419), (41, 26461), (42, 26587),

Gene: SirHarley_29 Start: 24248, Stop: 26518, Start Num: 1

Candidate Starts for SirHarley_29:

(Start: 1 @24248 has 21 MA's), (2, 24383), (3, 24392), (4, 24566), (5, 24572), (6, 24584), (8, 24737), (9, 24752), (10, 24767), (15, 25148), (16, 25154), (17, 25199), (18, 25286), (20, 25412), (22, 25487), (23, 25493), (24, 25541), (25, 25571), (26, 25595), (28, 25784), (29, 25811), (31, 25859), (32, 25931), (33, 25970), (34, 25991), (35, 26006), (36, 26024), (37, 26054), (39, 26138), (40, 26339), (41, 26381), (42, 26507),

Gene: SuperheroCarly_31 Start: 24178, Stop: 26448, Start Num: 1

Candidate Starts for SuperheroCarly_31:

(Start: 1 @24178 has 21 MA's), (2, 24313), (3, 24322), (4, 24496), (5, 24502), (6, 24514), (8, 24667), (9, 24682), (10, 24697), (15, 25078), (16, 25084), (17, 25129), (18, 25216), (23, 25423), (24, 25471), (25, 25501), (26, 25525), (28, 25714), (29, 25741), (31, 25789), (32, 25861), (33, 25900), (34, 25921), (35, 25936), (36, 25954), (37, 25984), (39, 26068), (40, 26269), (41, 26311), (42, 26437),

Gene: Thoth_30 Start: 24313, Stop: 26583, Start Num: 1

Candidate Starts for Thoth_30:

(Start: 1 @24313 has 21 MA's), (2, 24448), (3, 24457), (4, 24631), (5, 24637), (6, 24649), (8, 24802), (9, 24817), (10, 24832), (15, 25213), (16, 25219), (17, 25264), (18, 25351), (22, 25552), (23, 25558), (24, 25606), (25, 25636), (26, 25660), (28, 25849), (29, 25876), (31, 25924), (32, 25996), (33, 26035), (34, 26056), (35, 26071), (36, 26089), (37, 26119), (39, 26203), (40, 26404), (41, 26446), (42, 26572),

Gene: Troll4_30 Start: 24317, Stop: 26587, Start Num: 1

Candidate Starts for Troll4_30:

(Start: 1 @24317 has 21 MA's), (2, 24452), (3, 24461), (4, 24635), (5, 24641), (6, 24653), (8, 24806), (9, 24821), (10, 24836), (15, 25217), (16, 25223), (17, 25268), (18, 25355), (22, 25556), (23, 25562), (24, 25610), (25, 25640), (26, 25664), (28, 25853), (29, 25880), (31, 25928), (32, 26000), (33, 26039), (34, 26060), (35, 26075), (36, 26093), (37, 26123), (39, 26207), (40, 26408), (41, 26450), (42, 26576),

Gene: Visconti_30 Start: 24326, Stop: 26596, Start Num: 1

Candidate Starts for Visconti_30:

(Start: 1 @24326 has 21 MA's), (2, 24461), (3, 24470), (4, 24644), (5, 24650), (6, 24662), (8, 24815), (9, 24830), (10, 24845), (15, 25226), (16, 25232), (17, 25277), (18, 25364), (22, 25565), (23, 25571), (24, 25619), (25, 25649), (26, 25673), (28, 25862), (29, 25889), (31, 25937), (32, 26009), (33, 26048), (34, 26069), (35, 26084), (36, 26102), (37, 26132), (39, 26216), (40, 26417), (41, 26459), (42, 26585),

Gene: WaldoWhy_31 Start: 24322, Stop: 26592, Start Num: 1

Candidate Starts for WaldoWhy_31:

(Start: 1 @24322 has 21 MA's), (2, 24457), (3, 24466), (4, 24640), (5, 24646), (6, 24658), (8, 24811), (9, 24826), (10, 24841), (15, 25222), (16, 25228), (17, 25273), (18, 25360), (22, 25561), (23, 25567), (24, 25615), (25, 25645), (26, 25669), (28, 25858), (29, 25885), (31, 25933), (32, 26005), (33, 26044), (34, 26065), (35, 26080), (36, 26098), (37, 26128), (39, 26212), (40, 26413), (41, 26455), (42, 26581),