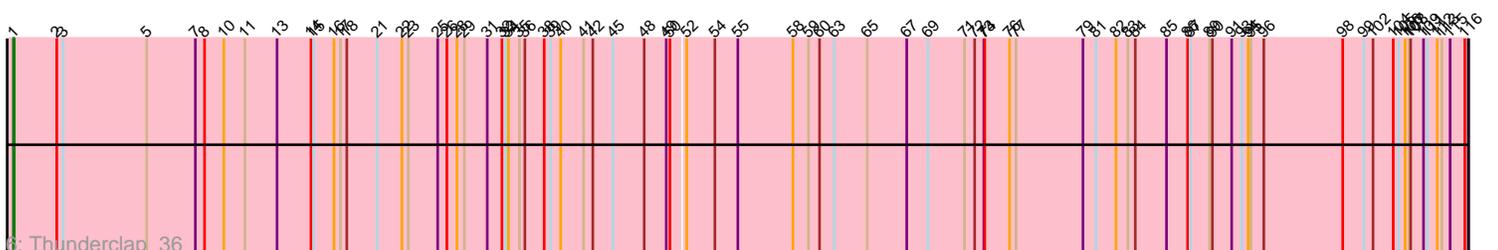
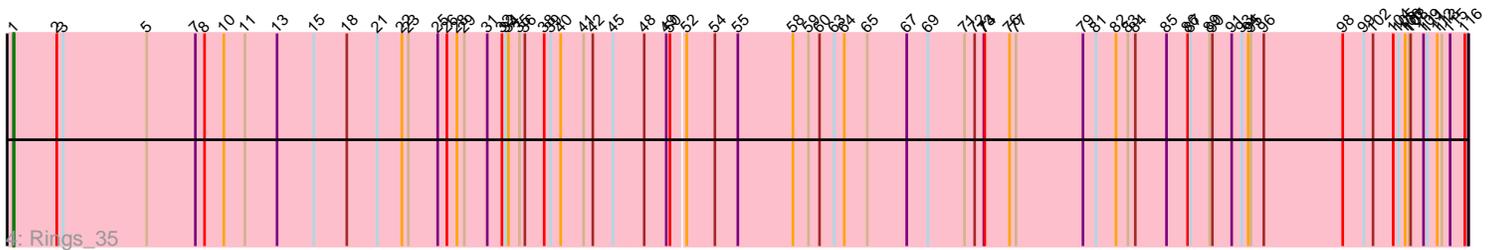
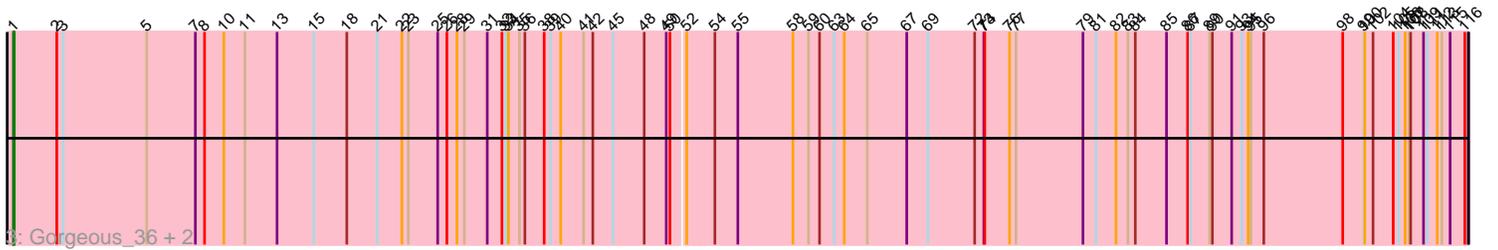
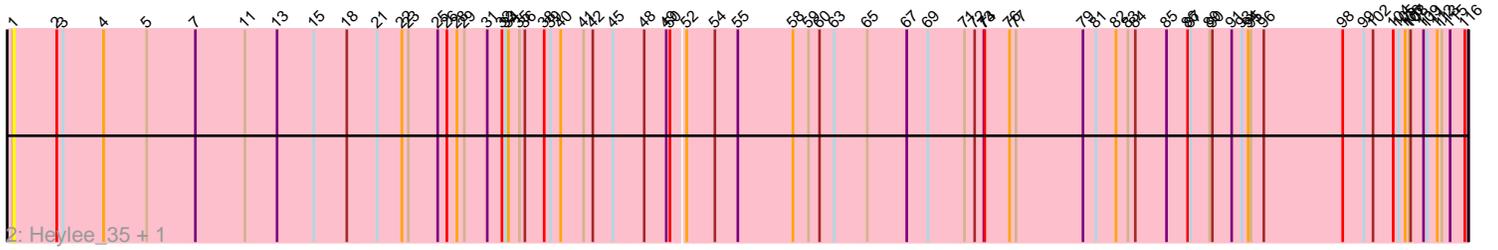
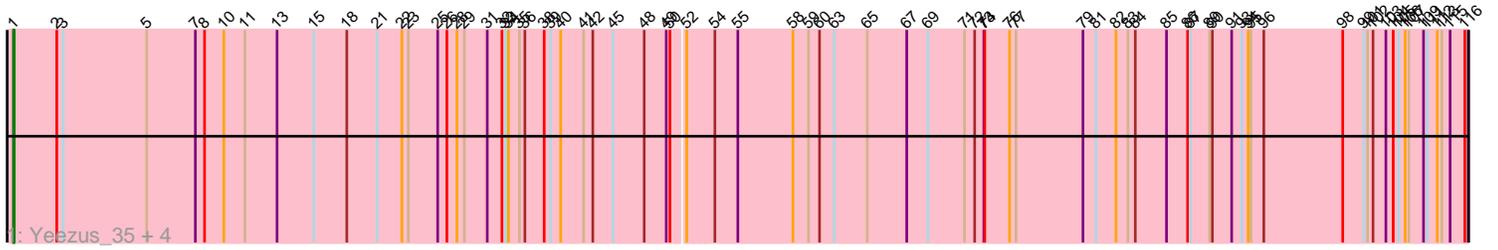


Pham 5410



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 5410 Report

This analysis was run 03/30/24 on database version 556.

Pham number 5410 has 13 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Yeezus_35, Boersma_37, Amigo_36, Jaek_35, Ichor_35
- Track 2 : Heylee_35, Amavida_35
- Track 3 : Gorgeous_36, Anansi_36, SorJuana_36
- Track 4 : Rings_35
- Track 5 : Molivia_40
- Track 6 : Thunderclap_36

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 11 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amavida_35, Amigo_36, Anansi_36, Boersma_37, Gorgeous_36, Heylee_35, Ichor_35, Jaek_35, Molivia_40, Rings_35, SorJuana_36, Thunderclap_36, Yeezus_35,

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 13 of 13 (100.0%) of genes in pham
- Manual Annotations of this start: 11 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amavida_35 (AQ), Amigo_36 (AQ), Anansi_36 (AQ), Boersma_37 (AQ), Gorgeous_36 (AQ), Heylee_35 (AQ), Ichor_35 (AQ), Jaek_35 (AQ), Molivia_40 (AQ), Rings_35 (AQ), SorJuana_36 (AQ), Thunderclap_36 (AQ), Yeezus_35 (AQ),

Summary by clusters:

There is one cluster represented in this pham: AQ

Info for manual annotations of cluster AQ:

•Start number 1 was manually annotated 11 times for cluster AQ.

Gene Information:

Gene: Amavida_35 Start: 19025, Stop: 23734, Start Num: 1

Candidate Starts for Amavida_35:

(Start: 1 @19025 has 11 MA's), (2, 19166), (3, 19187), (4, 19319), (5, 19460), (7, 19619), (11, 19781), (13, 19886), (15, 20006), (18, 20114), (21, 20204), (22, 20285), (23, 20306), (25, 20402), (26, 20432), (28, 20465), (29, 20489), (31, 20564), (32, 20612), (33, 20624), (34, 20633), (35, 20669), (36, 20687), (38, 20750), (39, 20771), (40, 20804), (41, 20879), (42, 20909), (45, 20975), (48, 21074), (49, 21146), (50, 21158), (52, 21197), (54, 21284), (55, 21359), (58, 21536), (59, 21587), (60, 21623), (63, 21671), (65, 21779), (67, 21908), (69, 21977), (71, 22094), (72, 22127), (73, 22157), (74, 22160), (76, 22241), (77, 22262), (79, 22481), (81, 22523), (82, 22589), (83, 22628), (84, 22652), (85, 22754), (86, 22823), (87, 22832), (89, 22895), (90, 22904), (91, 22967), (93, 23000), (94, 23021), (95, 23030), (96, 23072), (98, 23330), (99, 23399), (102, 23429), (104, 23495), (105, 23513), (106, 23534), (107, 23546), (108, 23552), (109, 23591), (111, 23603), (112, 23636), (113, 23651), (115, 23678), (116, 23726),

Gene: Amigo_36 Start: 18899, Stop: 23608, Start Num: 1

Candidate Starts for Amigo_36:

(Start: 1 @18899 has 11 MA's), (2, 19040), (3, 19061), (5, 19334), (7, 19493), (8, 19523), (10, 19586), (11, 19655), (13, 19760), (15, 19880), (18, 19988), (21, 20078), (22, 20159), (23, 20180), (25, 20276), (26, 20306), (28, 20339), (29, 20363), (31, 20438), (32, 20486), (33, 20498), (34, 20507), (35, 20543), (36, 20561), (38, 20624), (39, 20645), (40, 20678), (41, 20753), (42, 20783), (45, 20849), (48, 20948), (49, 21020), (50, 21032), (52, 21071), (54, 21158), (55, 21233), (58, 21410), (59, 21461), (60, 21497), (63, 21545), (65, 21653), (67, 21782), (69, 21851), (71, 21968), (72, 22001), (73, 22031), (74, 22034), (76, 22115), (77, 22136), (79, 22355), (81, 22397), (82, 22463), (83, 22502), (84, 22526), (85, 22628), (86, 22697), (87, 22706), (89, 22769), (90, 22778), (91, 22841), (93, 22874), (94, 22895), (95, 22904), (96, 22946), (98, 23204), (99, 23273), (101, 23285), (102, 23303), (103, 23345), (104, 23369), (105, 23387), (106, 23408), (107, 23420), (109, 23465), (111, 23477), (112, 23510), (113, 23525), (115, 23552), (116, 23600),

Gene: Anansi_36 Start: 18908, Stop: 23617, Start Num: 1

Candidate Starts for Anansi_36:

(Start: 1 @18908 has 11 MA's), (2, 19049), (3, 19070), (5, 19343), (7, 19502), (8, 19532), (10, 19595), (11, 19664), (13, 19769), (15, 19889), (18, 19997), (21, 20087), (22, 20168), (23, 20189), (25, 20285), (26, 20315), (28, 20348), (29, 20372), (31, 20447), (32, 20495), (33, 20507), (34, 20516), (35, 20552), (36, 20570), (38, 20633), (39, 20654), (40, 20687), (41, 20762), (42, 20792), (45, 20858), (48, 20957), (49, 21029), (50, 21041), (52, 21080), (54, 21167), (55, 21242), (58, 21419), (59, 21470), (60, 21506), (63, 21554), (64, 21587), (65, 21662), (67, 21791), (69, 21860), (72, 22010), (73, 22040), (74, 22043), (76, 22124), (77, 22145), (79, 22364), (81, 22406), (82, 22472), (83, 22511), (84, 22535), (85, 22637), (86, 22706), (87, 22715), (89, 22778), (90, 22787), (91, 22850), (93, 22883), (94, 22904), (95, 22913), (96, 22955), (98, 23213), (99, 23282), (100, 23285), (102, 23312), (104, 23378), (105, 23396), (106, 23417), (107, 23429), (108, 23435), (109, 23474), (111, 23486), (112, 23519), (113, 23534), (115, 23561), (116, 23609),

Gene: Boersma_37 Start: 18899, Stop: 23608, Start Num: 1

Candidate Starts for Boersma_37:

(Start: 1 @18899 has 11 MA's), (2, 19040), (3, 19061), (5, 19334), (7, 19493), (8, 19523), (10, 19586), (11, 19655), (13, 19760), (15, 19880), (18, 19988), (21, 20078), (22, 20159), (23, 20180), (25, 20276), (26, 20306), (28, 20339), (29, 20363), (31, 20438), (32, 20486), (33, 20498), (34, 20507), (35, 20543), (36, 20561), (38, 20624), (39, 20645), (40, 20678), (41, 20753), (42, 20783), (45, 20849), (48, 20948), (49, 21020), (50, 21032), (52, 21071), (54, 21158), (55, 21233), (58, 21410), (59, 21461), (60, 21497), (63, 21545), (65, 21653), (67, 21782), (69, 21851), (71, 21968), (72, 22001), (73, 22031), (74, 22034), (76, 22115), (77, 22136), (79, 22355), (81, 22397), (82, 22463), (83, 22502), (84, 22526), (85, 22628), (86, 22697), (87, 22706), (89, 22769), (90, 22778), (91, 22841), (93, 22874), (94, 22895), (95, 22904), (96, 22946), (98, 23204), (99, 23273), (101, 23285), (102, 23303), (103, 23345), (104, 23369), (105, 23387), (106, 23408), (107, 23420), (109, 23465), (111, 23477), (112, 23510), (113, 23525), (115, 23552), (116, 23600),

Gene: Gorgeous_36 Start: 18908, Stop: 23617, Start Num: 1

Candidate Starts for Gorgeous_36:

(Start: 1 @18908 has 11 MA's), (2, 19049), (3, 19070), (5, 19343), (7, 19502), (8, 19532), (10, 19595), (11, 19664), (13, 19769), (15, 19889), (18, 19997), (21, 20087), (22, 20168), (23, 20189), (25, 20285), (26, 20315), (28, 20348), (29, 20372), (31, 20447), (32, 20495), (33, 20507), (34, 20516), (35, 20552), (36, 20570), (38, 20633), (39, 20654), (40, 20687), (41, 20762), (42, 20792), (45, 20858), (48, 20957), (49, 21029), (50, 21041), (52, 21080), (54, 21167), (55, 21242), (58, 21419), (59, 21470), (60, 21506), (63, 21554), (64, 21587), (65, 21662), (67, 21791), (69, 21860), (72, 22010), (73, 22040), (74, 22043), (76, 22124), (77, 22145), (79, 22364), (81, 22406), (82, 22472), (83, 22511), (84, 22535), (85, 22637), (86, 22706), (87, 22715), (89, 22778), (90, 22787), (91, 22850), (93, 22883), (94, 22904), (95, 22913), (96, 22955), (98, 23213), (99, 23282), (100, 23285), (102, 23312), (104, 23378), (105, 23396), (106, 23417), (107, 23429), (108, 23435), (109, 23474), (111, 23486), (112, 23519), (113, 23534), (115, 23561), (116, 23609),

Gene: Heylee_35 Start: 19025, Stop: 23734, Start Num: 1

Candidate Starts for Heylee_35:

(Start: 1 @19025 has 11 MA's), (2, 19166), (3, 19187), (4, 19319), (5, 19460), (7, 19619), (11, 19781), (13, 19886), (15, 20006), (18, 20114), (21, 20204), (22, 20285), (23, 20306), (25, 20402), (26, 20432), (28, 20465), (29, 20489), (31, 20564), (32, 20612), (33, 20624), (34, 20633), (35, 20669), (36, 20687), (38, 20750), (39, 20771), (40, 20804), (41, 20879), (42, 20909), (45, 20975), (48, 21074), (49, 21146), (50, 21158), (52, 21197), (54, 21284), (55, 21359), (58, 21536), (59, 21587), (60, 21623), (63, 21671), (65, 21779), (67, 21908), (69, 21977), (71, 22094), (72, 22127), (73, 22157), (74, 22160), (76, 22241), (77, 22262), (79, 22481), (81, 22523), (82, 22589), (83, 22628), (84, 22652), (85, 22754), (86, 22823), (87, 22832), (89, 22895), (90, 22904), (91, 22967), (93, 23000), (94, 23021), (95, 23030), (96, 23072), (98, 23330), (99, 23399), (102, 23429), (104, 23495), (105, 23513), (106, 23534), (107, 23546), (108, 23552), (109, 23591), (111, 23603), (112, 23636), (113, 23651), (115, 23678), (116, 23726),

Gene: Ichor_35 Start: 18899, Stop: 23608, Start Num: 1

Candidate Starts for Ichor_35:

(Start: 1 @18899 has 11 MA's), (2, 19040), (3, 19061), (5, 19334), (7, 19493), (8, 19523), (10, 19586), (11, 19655), (13, 19760), (15, 19880), (18, 19988), (21, 20078), (22, 20159), (23, 20180), (25, 20276), (26, 20306), (28, 20339), (29, 20363), (31, 20438), (32, 20486), (33, 20498), (34, 20507), (35, 20543), (36, 20561), (38, 20624), (39, 20645), (40, 20678), (41, 20753), (42, 20783), (45, 20849), (48, 20948), (49, 21020), (50, 21032), (52, 21071), (54, 21158), (55, 21233), (58, 21410), (59, 21461), (60, 21497), (63, 21545), (65, 21653), (67, 21782), (69, 21851), (71, 21968), (72, 22001), (73, 22031), (74, 22034), (76, 22115), (77, 22136), (79, 22355), (81, 22397), (82, 22463), (83, 22502), (84, 22526), (85, 22628), (86, 22697), (87, 22706), (89, 22769), (90, 22778), (91, 22841), (93, 22874), (94, 22895), (95, 22904), (96, 22946), (98, 23204), (99, 23273), (101, 23285), (102, 23303), (103, 23345), (104, 23369), (105, 23387), (106, 23408), (107, 23420), (109, 23465), (111, 23477), (112, 23510), (113, 23525), (115, 23552), (116, 23600),

Gene: Jaek_35 Start: 18899, Stop: 23608, Start Num: 1

Candidate Starts for Jaek_35:

(Start: 1 @18899 has 11 MA's), (2, 19040), (3, 19061), (5, 19334), (7, 19493), (8, 19523), (10, 19586), (11, 19655), (13, 19760), (15, 19880), (18, 19988), (21, 20078), (22, 20159), (23, 20180), (25, 20276), (26, 20306), (28, 20339), (29, 20363), (31, 20438), (32, 20486), (33, 20498), (34, 20507), (35, 20543), (36, 20561), (38, 20624), (39, 20645), (40, 20678), (41, 20753), (42, 20783), (45, 20849), (48, 20948), (49, 21020), (50, 21032), (52, 21071), (54, 21158), (55, 21233), (58, 21410), (59, 21461), (60, 21497), (63, 21545), (65, 21653), (67, 21782), (69, 21851), (71, 21968), (72, 22001), (73, 22031), (74, 22034), (76, 22115), (77, 22136), (79, 22355), (81, 22397), (82, 22463), (83, 22502), (84, 22526), (85, 22628), (86, 22697), (87, 22706), (89, 22769), (90, 22778), (91, 22841), (93, 22874), (94, 22895), (95, 22904), (96, 22946), (98, 23204), (99, 23273), (101, 23285), (102, 23303), (103, 23345), (104, 23369), (105, 23387), (106, 23408), (107, 23420), (109, 23465), (111, 23477), (112, 23510), (113, 23525), (115, 23552), (116, 23600),

Gene: Molivia_40 Start: 19152, Stop: 23894, Start Num: 1

Candidate Starts for Molivia_40:

(Start: 1 @19152 has 11 MA's), (3, 19314), (5, 19587), (6, 19728), (7, 19746), (9, 19809), (11, 19908), (12, 19962), (13, 20013), (15, 20133), (17, 20220), (18, 20241), (19, 20262), (20, 20271), (21, 20340), (22, 20421), (24, 20514), (25, 20538), (27, 20580), (29, 20625), (30, 20694), (31, 20700), (32, 20748), (33, 20760), (34, 20769), (36, 20823), (37, 20862), (38, 20886), (39, 20907), (40, 20940), (41, 21015), (43, 21066), (44, 21075), (46, 21135), (47, 21195), (49, 21285), (51, 21336), (53, 21381), (55, 21519), (56, 21552), (57, 21648), (58, 21699), (61, 21792), (62, 21819), (65, 21942), (66, 21966), (68, 22119), (69, 22140), (70, 22200), (73, 22323), (75, 22368), (77, 22425), (78, 22506), (79, 22644), (80, 22656), (81, 22686), (83, 22791), (84, 22815), (86, 22986), (88, 23037), (89, 23058), (90, 23067), (91, 23130), (92, 23154), (93, 23163), (97, 23445), (99, 23553), (102, 23583), (104, 23649), (105, 23667), (106, 23688), (107, 23700), (108, 23706), (110, 23751), (111, 23760), (112, 23793), (114, 23814),

Gene: Rings_35 Start: 19030, Stop: 23739, Start Num: 1

Candidate Starts for Rings_35:

(Start: 1 @19030 has 11 MA's), (2, 19171), (3, 19192), (5, 19465), (7, 19624), (8, 19654), (10, 19717), (11, 19786), (13, 19891), (15, 20011), (18, 20119), (21, 20209), (22, 20290), (23, 20311), (25, 20407), (26, 20437), (28, 20470), (29, 20494), (31, 20569), (32, 20617), (33, 20629), (34, 20638), (35, 20674), (36, 20692), (38, 20755), (39, 20776), (40, 20809), (41, 20884), (42, 20914), (45, 20980), (48, 21079), (49, 21151), (50, 21163), (52, 21202), (54, 21289), (55, 21364), (58, 21541), (59, 21592), (60, 21628), (63, 21676), (64, 21709), (65, 21784), (67, 21913), (69, 21982), (71, 22099), (72, 22132), (73, 22162), (74, 22165), (76, 22246), (77, 22267), (79, 22486), (81, 22528), (82, 22594), (83, 22633), (84, 22657), (85, 22759), (86, 22828), (87, 22837), (89, 22900), (90, 22909), (91, 22972), (93, 23005), (94, 23026), (95, 23035), (96, 23077), (98, 23335), (99, 23404), (102, 23434), (104, 23500), (105, 23518), (106, 23539), (107, 23551), (108, 23557), (109, 23596), (111, 23608), (112, 23641), (113, 23656), (115, 23683), (116, 23731),

Gene: SorJuana_36 Start: 18908, Stop: 23617, Start Num: 1

Candidate Starts for SorJuana_36:

(Start: 1 @18908 has 11 MA's), (2, 19049), (3, 19070), (5, 19343), (7, 19502), (8, 19532), (10, 19595), (11, 19664), (13, 19769), (15, 19889), (18, 19997), (21, 20087), (22, 20168), (23, 20189), (25, 20285), (26, 20315), (28, 20348), (29, 20372), (31, 20447), (32, 20495), (33, 20507), (34, 20516), (35, 20552), (36, 20570), (38, 20633), (39, 20654), (40, 20687), (41, 20762), (42, 20792), (45, 20858), (48, 20957), (49, 21029), (50, 21041), (52, 21080), (54, 21167), (55, 21242), (58, 21419), (59, 21470), (60, 21506), (63, 21554), (64, 21587), (65, 21662), (67, 21791), (69, 21860), (72, 22010), (73, 22040), (74, 22043), (76, 22124), (77, 22145), (79, 22364), (81, 22406), (82, 22472), (83, 22511), (84, 22535), (85, 22637), (86, 22706), (87, 22715), (89, 22778), (90, 22787), (91, 22850), (93, 22883), (94, 22904), (95, 22913), (96, 22955), (98, 23213), (99, 23282), (100, 23285), (102, 23312), (104, 23378), (105, 23396), (106,

23417), (107, 23429), (108, 23435), (109, 23474), (111, 23486), (112, 23519), (113, 23534), (115, 23561), (116, 23609),

Gene: Thunderclap_36 Start: 18928, Stop: 23637, Start Num: 1

Candidate Starts for Thunderclap_36:

(Start: 1 @18928 has 11 MA's), (2, 19069), (3, 19090), (5, 19363), (7, 19522), (8, 19552), (10, 19615), (11, 19684), (13, 19789), (14, 19900), (15, 19909), (16, 19975), (17, 19996), (18, 20017), (21, 20107), (22, 20188), (23, 20209), (25, 20305), (26, 20335), (28, 20368), (29, 20392), (31, 20467), (32, 20515), (33, 20527), (34, 20536), (35, 20572), (36, 20590), (38, 20653), (39, 20674), (40, 20707), (41, 20782), (42, 20812), (45, 20878), (48, 20977), (49, 21049), (50, 21061), (52, 21100), (54, 21187), (55, 21262), (58, 21439), (59, 21490), (60, 21526), (63, 21574), (65, 21682), (67, 21811), (69, 21880), (71, 21997), (72, 22030), (73, 22060), (74, 22063), (76, 22144), (77, 22165), (79, 22384), (81, 22426), (82, 22492), (83, 22531), (84, 22555), (85, 22657), (86, 22726), (87, 22735), (89, 22798), (90, 22807), (91, 22870), (93, 22903), (94, 22924), (95, 22933), (96, 22975), (98, 23233), (99, 23302), (102, 23332), (104, 23398), (105, 23416), (106, 23437), (107, 23449), (108, 23455), (109, 23494), (111, 23506), (112, 23539), (113, 23554), (115, 23581), (116, 23629),

Gene: Yeezus_35 Start: 18898, Stop: 23607, Start Num: 1

Candidate Starts for Yeezus_35:

(Start: 1 @18898 has 11 MA's), (2, 19039), (3, 19060), (5, 19333), (7, 19492), (8, 19522), (10, 19585), (11, 19654), (13, 19759), (15, 19879), (18, 19987), (21, 20077), (22, 20158), (23, 20179), (25, 20275), (26, 20305), (28, 20338), (29, 20362), (31, 20437), (32, 20485), (33, 20497), (34, 20506), (35, 20542), (36, 20560), (38, 20623), (39, 20644), (40, 20677), (41, 20752), (42, 20782), (45, 20848), (48, 20947), (49, 21019), (50, 21031), (52, 21070), (54, 21157), (55, 21232), (58, 21409), (59, 21460), (60, 21496), (63, 21544), (65, 21652), (67, 21781), (69, 21850), (71, 21967), (72, 22000), (73, 22030), (74, 22033), (76, 22114), (77, 22135), (79, 22354), (81, 22396), (82, 22462), (83, 22501), (84, 22525), (85, 22627), (86, 22696), (87, 22705), (89, 22768), (90, 22777), (91, 22840), (93, 22873), (94, 22894), (95, 22903), (96, 22945), (98, 23203), (99, 23272), (101, 23284), (102, 23302), (103, 23344), (104, 23368), (105, 23386), (106, 23407), (107, 23419), (109, 23464), (111, 23476), (112, 23509), (113, 23524), (115, 23551), (116, 23599),