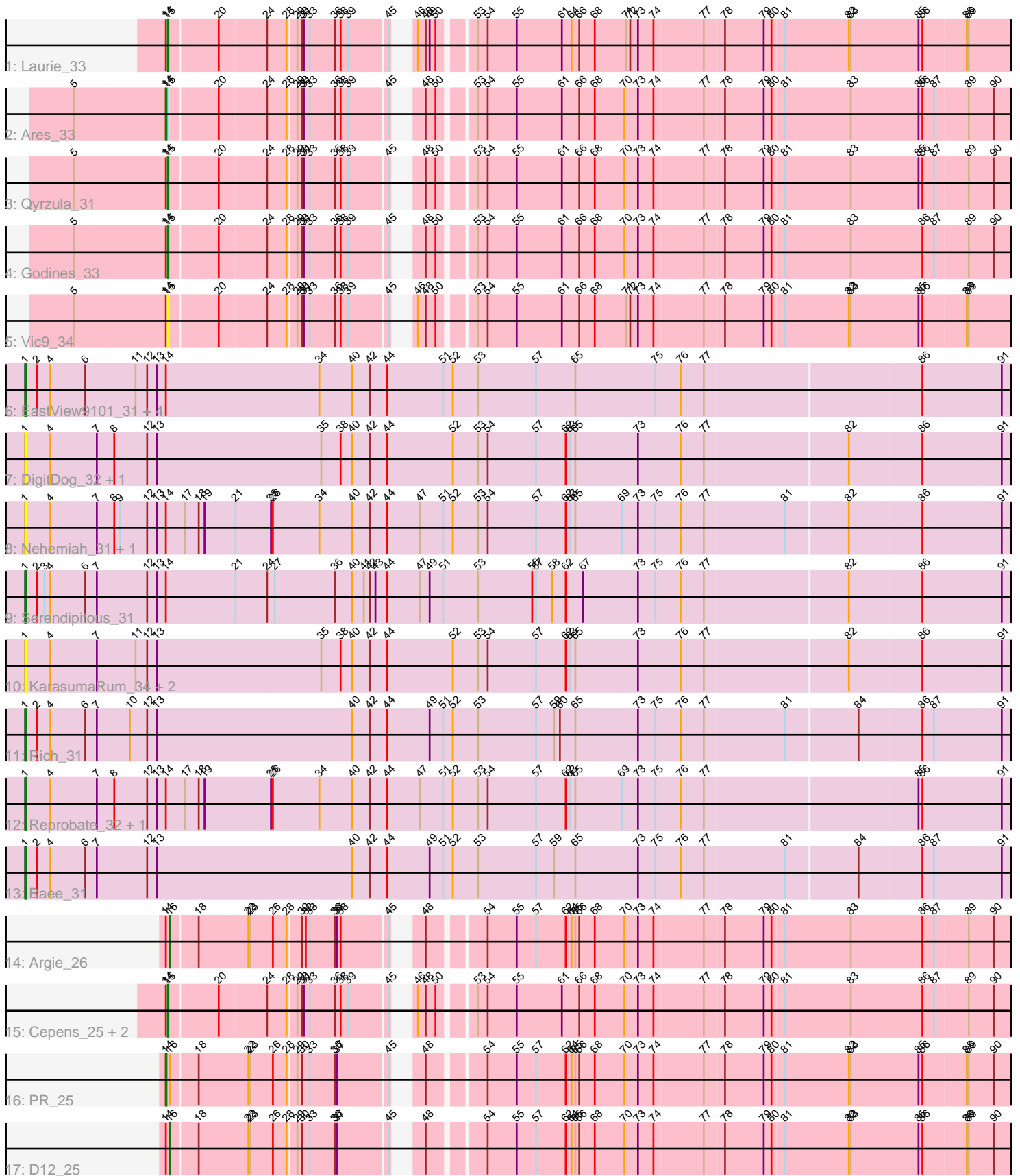


Pham 194260



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 194260 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194260 has 28 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Laurie_33
- Track 2 : Ares_33
- Track 3 : Qyrzula_31
- Track 4 : Godines_33
- Track 5 : Vic9_34
- Track 6 : EastView9101_31, Donny_32, Suigeneris_32, Acadian_32, SirJeffery_32
- Track 7 : DigitDog_32, Nangang_32
- Track 8 : Nehemiah_31, Mysterious_33
- Track 9 : Serendipitous_31
- Track 10 : KarasumaRum_34, Shenyu_32, StinkyVeggy_34
- Track 11 : Rich_31
- Track 12 : Reprobate_32, Phelemich_32
- Track 13 : Bae_31
- Track 14 : Argie_26
- Track 15 : Cepens_25, Taptic_25, Megabear_25
- Track 16 : PR_25
- Track 17 : D12_25

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 9 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acadian_32, Bae_31, DigitDog_32, Donny_32, EastView9101_31, KarasumaRum_34, Mysterious_33, Nangang_32, Nehemiah_31, Phelemich_32, Reprobate_32, Rich_31, Serendipitous_31, Shenyu_32, SirJeffery_32, StinkyVeggy_34, Suigeneris_32,

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

-

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

- Ares_33, Argie_26, Cepens_25, D12_25, Godines_33, Laurie_33, Megabear_25, PR_25, Qyrzula_31, Taptic_25, Vic9_34,

Summary by start number:

Start 1:

- Found in 17 of 28 (60.7%) of genes in pham
- Manual Annotations of this start: 9 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acadian_32 (B5), Bae_31 (B5), DigitDog_32 (B5), Donny_32 (B5), EastView9101_31 (B5), KarasumaRum_34 (B5), Mysterious_33 (B5), Nangang_32 (B5), Nehemiah_31 (B5), Phelemich_32 (B5), Reprobate_32 (B5), Rich_31 (B5), Serendipitous_31 (B5), Shenyu_32 (B5), SirJeffery_32 (B5), StinkyVeggy_34 (B5), Suigeneris_32 (B5),

Start 14:

- Found in 21 of 28 (75.0%) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 9.5% of time when present
- Phage (with cluster) where this start called: Ares_33 (B2), PR_25 (W),

Start 15:

- Found in 8 of 28 (28.6%) of genes in pham
- Manual Annotations of this start: 6 of 19
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Cepens_25 (W), Godines_33 (B2), Laurie_33 (B2), Megabear_25 (W), Qyrzula_31 (B2), Taptic_25 (W), Vic9_34 (B2),

Start 16:

- Found in 3 of 28 (10.7%) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Argie_26 (W), D12_25 (W),

Summary by clusters:

There are 3 clusters represented in this pham: B5, B2, W,

Info for manual annotations of cluster B2:

- Start number 14 was manually annotated 1 time for cluster B2.
- Start number 15 was manually annotated 3 times for cluster B2.

Info for manual annotations of cluster B5:

- Start number 1 was manually annotated 9 times for cluster B5.

Info for manual annotations of cluster W:

- Start number 14 was manually annotated 1 time for cluster W.
- Start number 15 was manually annotated 3 times for cluster W.
- Start number 16 was manually annotated 2 times for cluster W.

Gene Information:

Gene: Acadian_32 Start: 32586, Stop: 34091, Start Num: 1

Candidate Starts for Acadian_32:

(Start: 1 @32586 has 9 MA's), (2, 32604), (4, 32625), (6, 32679), (11, 32757), (12, 32775), (13, 32790), (Start: 14 @32802 has 2 MA's), (34, 33039), (40, 33090), (42, 33117), (44, 33144), (51, 33231), (52, 33246), (53, 33285), (57, 33375), (65, 33435), (75, 33558), (76, 33597), (77, 33633), (86, 33957), (91, 34077),

Gene: Ares_33 Start: 32688, Stop: 33896, Start Num: 14

Candidate Starts for Ares_33:

(5, 32547), (Start: 14 @32688 has 2 MA's), (Start: 15 @32691 has 6 MA's), (20, 32760), (24, 32829), (28, 32859), (29, 32871), (30, 32877), (31, 32880), (33, 32889), (36, 32928), (38, 32937), (39, 32949), (45, 33006), (48, 33027), (50, 33042), (53, 33087), (54, 33102), (55, 33147), (61, 33216), (66, 33243), (68, 33267), (70, 33312), (73, 33333), (74, 33357), (77, 33432), (78, 33462), (79, 33522), (80, 33534), (81, 33552), (83, 33654), (85, 33759), (86, 33765), (87, 33783), (89, 33834), (90, 33870),

Gene: Argie_26 Start: 29663, Stop: 30871, Start Num: 16

Candidate Starts for Argie_26:

(Start: 14 @29657 has 2 MA's), (Start: 16 @29663 has 2 MA's), (18, 29702), (22, 29777), (23, 29780), (26, 29813), (28, 29834), (30, 29852), (32, 29858), (33, 29864), (36, 29903), (37, 29906), (38, 29912), (45, 29981), (48, 30002), (54, 30077), (55, 30122), (57, 30152), (62, 30197), (64, 30206), (65, 30212), (66, 30218), (68, 30242), (70, 30287), (73, 30308), (74, 30332), (77, 30407), (78, 30437), (79, 30497), (80, 30509), (81, 30527), (83, 30629), (86, 30740), (87, 30758), (89, 30809), (90, 30845),

Gene: Bae_31 Start: 32397, Stop: 33902, Start Num: 1

Candidate Starts for Bae_31:

(Start: 1 @32397 has 9 MA's), (2, 32415), (4, 32436), (6, 32490), (7, 32508), (12, 32586), (13, 32601), (40, 32901), (42, 32928), (44, 32955), (49, 33021), (51, 33042), (52, 33057), (53, 33096), (57, 33186), (59, 33213), (65, 33246), (73, 33342), (75, 33369), (76, 33408), (77, 33444), (81, 33567), (84, 33672), (86, 33768), (87, 33786), (91, 33888),

Gene: Cepens_25 Start: 29381, Stop: 30586, Start Num: 15

Candidate Starts for Cepens_25:

(Start: 14 @29378 has 2 MA's), (Start: 15 @29381 has 6 MA's), (20, 29450), (24, 29519), (28, 29549), (29, 29561), (30, 29567), (31, 29570), (33, 29579), (36, 29618), (38, 29627), (39, 29639), (45, 29696), (46, 29705), (48, 29717), (50, 29732), (53, 29777), (54, 29792), (55, 29837), (61, 29906), (66, 29933), (68, 29957), (70, 30002), (73, 30023), (74, 30047), (77, 30122), (78, 30152), (79, 30212), (80, 30224), (81, 30242), (83, 30344), (86, 30455), (87, 30473), (89, 30524), (90, 30560),

Gene: D12_25 Start: 29948, Stop: 31156, Start Num: 16

Candidate Starts for D12_25:

(Start: 14 @29942 has 2 MA's), (Start: 16 @29948 has 2 MA's), (18, 29987), (22, 30062), (23, 30065), (26, 30098), (28, 30119), (29, 30131), (30, 30137), (33, 30149), (36, 30188), (37, 30191), (45, 30266), (48, 30287), (54, 30362), (55, 30407), (57, 30437), (62, 30482), (64, 30491), (65, 30497), (66, 30503), (68, 30527), (70, 30572), (73, 30593), (74, 30617), (77, 30692), (78, 30722), (79, 30782), (80, 30794), (81, 30812), (82, 30911), (83, 30914), (85, 31019), (86, 31025), (88, 31091), (89, 31094), (90, 31130),

Gene: DigitDog_32 Start: 32179, Stop: 33684, Start Num: 1

Candidate Starts for DigitDog_32:

(Start: 1 @32179 has 9 MA's), (4, 32218), (7, 32290), (8, 32317), (12, 32368), (13, 32383), (35, 32635), (38, 32665), (40, 32683), (42, 32710), (44, 32737), (52, 32839), (53, 32878), (54, 32893), (57, 32968), (62, 33013), (63, 33019), (65, 33028), (73, 33124), (76, 33190), (77, 33226), (82, 33439), (86, 33550), (91, 33670),

Gene: Donny_32 Start: 32591, Stop: 34096, Start Num: 1

Candidate Starts for Donny_32:

(Start: 1 @32591 has 9 MA's), (2, 32609), (4, 32630), (6, 32684), (11, 32762), (12, 32780), (13, 32795), (Start: 14 @32807 has 2 MA's), (34, 33044), (40, 33095), (42, 33122), (44, 33149), (51, 33236), (52, 33251), (53, 33290), (57, 33380), (65, 33440), (75, 33563), (76, 33602), (77, 33638), (86, 33962), (91, 34082),

Gene: EastView9101_31 Start: 32241, Stop: 33746, Start Num: 1

Candidate Starts for EastView9101_31:

(Start: 1 @32241 has 9 MA's), (2, 32259), (4, 32280), (6, 32334), (11, 32412), (12, 32430), (13, 32445), (Start: 14 @32457 has 2 MA's), (34, 32694), (40, 32745), (42, 32772), (44, 32799), (51, 32886), (52, 32901), (53, 32940), (57, 33030), (65, 33090), (75, 33213), (76, 33252), (77, 33288), (86, 33612), (91, 33732),

Gene: Godines_33 Start: 32691, Stop: 33896, Start Num: 15

Candidate Starts for Godines_33:

(5, 32547), (Start: 14 @32688 has 2 MA's), (Start: 15 @32691 has 6 MA's), (20, 32760), (24, 32829), (28, 32859), (29, 32871), (30, 32877), (31, 32880), (33, 32889), (36, 32928), (38, 32937), (39, 32949), (45, 33006), (48, 33027), (50, 33042), (53, 33087), (54, 33102), (55, 33147), (61, 33216), (66, 33243), (68, 33267), (70, 33312), (73, 33333), (74, 33357), (77, 33432), (78, 33462), (79, 33522), (80, 33534), (81, 33552), (83, 33654), (86, 33765), (87, 33783), (89, 33834), (90, 33870),

Gene: KarasumaRum_34 Start: 32734, Stop: 34239, Start Num: 1

Candidate Starts for KarasumaRum_34:

(Start: 1 @32734 has 9 MA's), (4, 32773), (7, 32845), (11, 32905), (12, 32923), (13, 32938), (35, 33190), (38, 33220), (40, 33238), (42, 33265), (44, 33292), (52, 33394), (53, 33433), (54, 33448), (57, 33523), (62, 33568), (63, 33574), (65, 33583), (73, 33679), (76, 33745), (77, 33781), (82, 33994), (86, 34105), (91, 34225),

Gene: Laurie_33 Start: 32132, Stop: 33340, Start Num: 15

Candidate Starts for Laurie_33:

(Start: 14 @32129 has 2 MA's), (Start: 15 @32132 has 6 MA's), (20, 32201), (24, 32270), (28, 32300), (29, 32312), (30, 32318), (31, 32321), (33, 32330), (36, 32369), (38, 32378), (39, 32390), (45, 32447), (46, 32456), (48, 32468), (49, 32474), (50, 32483), (53, 32528), (54, 32543), (55, 32588), (61, 32657), (64, 32672), (66, 32684), (68, 32708), (71, 32756), (72, 32762), (73, 32774), (74, 32798), (77, 32873), (78, 32903), (79, 32963), (80, 32975), (81, 32993), (82, 33092), (83, 33095), (85, 33200), (86, 33206), (88, 33272), (89, 33275),

Gene: Megabear_25 Start: 29324, Stop: 30529, Start Num: 15

Candidate Starts for Megabear_25:

(Start: 14 @29321 has 2 MA's), (Start: 15 @29324 has 6 MA's), (20, 29393), (24, 29462), (28, 29492), (29, 29504), (30, 29510), (31, 29513), (33, 29522), (36, 29561), (38, 29570), (39, 29582), (45, 29639), (46, 29648), (48, 29660), (50, 29675), (53, 29720), (54, 29735), (55, 29780), (61, 29849), (66, 29876), (68, 29900), (70, 29945), (73, 29966), (74, 29990), (77, 30065), (78, 30095), (79, 30155), (80, 30167), (81, 30185), (83, 30287), (86, 30398), (87, 30416), (89, 30467), (90, 30503),

Gene: Mysterious_33 Start: 32854, Stop: 34362, Start Num: 1

Candidate Starts for Mysterious_33:

(Start: 1 @32854 has 9 MA's), (4, 32893), (7, 32965), (8, 32992), (9, 33001), (12, 33043), (13, 33058), (Start: 14 @33070 has 2 MA's), (17, 33100), (18, 33121), (19, 33130), (21, 33178), (25, 33232), (26, 33235), (34, 33307), (40, 33358), (42, 33385), (44, 33412), (47, 33463), (51, 33499), (52, 33514), (53, 33553), (54, 33568), (57, 33643), (62, 33688), (63, 33694), (65, 33703), (69, 33775), (73, 33799), (75, 33826), (76, 33865), (77, 33901), (81, 34027), (82, 34117), (86, 34228), (91, 34348),

Gene: Nangang_32 Start: 32544, Stop: 34049, Start Num: 1

Candidate Starts for Nangang_32:

(Start: 1 @32544 has 9 MA's), (4, 32583), (7, 32655), (8, 32682), (12, 32733), (13, 32748), (35, 33000), (38, 33030), (40, 33048), (42, 33075), (44, 33102), (52, 33204), (53, 33243), (54, 33258), (57, 33333), (62, 33378), (63, 33384), (65, 33393), (73, 33489), (76, 33555), (77, 33591), (82, 33804), (86, 33915), (91, 34035),

Gene: Nehemiah_31 Start: 32857, Stop: 34362, Start Num: 1

Candidate Starts for Nehemiah_31:

(Start: 1 @32857 has 9 MA's), (4, 32896), (7, 32968), (8, 32995), (9, 33004), (12, 33046), (13, 33061), (Start: 14 @33073 has 2 MA's), (17, 33103), (18, 33124), (19, 33133), (21, 33181), (25, 33235), (26, 33238), (34, 33310), (40, 33361), (42, 33388), (44, 33415), (47, 33466), (51, 33502), (52, 33517), (53, 33556), (54, 33571), (57, 33646), (62, 33691), (63, 33697), (65, 33706), (69, 33778), (73, 33802), (75, 33829), (76, 33868), (77, 33904), (81, 34027), (82, 34117), (86, 34228), (91, 34348),

Gene: PR_25 Start: 29919, Stop: 31133, Start Num: 14

Candidate Starts for PR_25:

(Start: 14 @29919 has 2 MA's), (Start: 16 @29925 has 2 MA's), (18, 29964), (22, 30039), (23, 30042), (26, 30075), (28, 30096), (29, 30108), (30, 30114), (33, 30126), (36, 30165), (37, 30168), (45, 30243), (48, 30264), (54, 30339), (55, 30384), (57, 30414), (62, 30459), (64, 30468), (65, 30474), (66, 30480), (68, 30504), (70, 30549), (73, 30570), (74, 30594), (77, 30669), (78, 30699), (79, 30759), (80, 30771), (81, 30789), (82, 30888), (83, 30891), (85, 30996), (86, 31002), (88, 31068), (89, 31071), (90, 31107),

Gene: Phelemich_32 Start: 32856, Stop: 34361, Start Num: 1

Candidate Starts for Phelemich_32:

(Start: 1 @32856 has 9 MA's), (4, 32895), (7, 32967), (8, 32994), (12, 33045), (13, 33060), (Start: 14 @33072 has 2 MA's), (17, 33102), (18, 33123), (19, 33132), (25, 33234), (26, 33237), (34, 33309), (40, 33360), (42, 33387), (44, 33414), (47, 33465), (51, 33501), (52, 33516), (53, 33555), (54, 33570), (57, 33645), (62, 33690), (63, 33696), (65, 33705), (69, 33777), (73, 33801), (75, 33828), (76, 33867), (77, 33903), (85, 34221), (86, 34227), (91, 34347),

Gene: Qyrzula_31 Start: 32776, Stop: 33981, Start Num: 15

Candidate Starts for Qyrzula_31:

(5, 32632), (Start: 14 @32773 has 2 MA's), (Start: 15 @32776 has 6 MA's), (20, 32845), (24, 32914), (28, 32944), (29, 32956), (30, 32962), (31, 32965), (33, 32974), (36, 33013), (38, 33022), (39, 33034), (45, 33091), (48, 33112), (50, 33127), (53, 33172), (54, 33187), (55, 33232), (61, 33301), (66, 33328), (68, 33352), (70, 33397), (73, 33418), (74, 33442), (77, 33517), (78, 33547), (79, 33607), (80, 33619), (81, 33637), (83, 33739), (85, 33844), (86, 33850), (87, 33868), (89, 33919), (90, 33955),

Gene: Reprobate_32 Start: 32861, Stop: 34366, Start Num: 1

Candidate Starts for Reprobate_32:

(Start: 1 @32861 has 9 MA's), (4, 32900), (7, 32972), (8, 32999), (12, 33050), (13, 33065), (Start: 14 @33077 has 2 MA's), (17, 33107), (18, 33128), (19, 33137), (25, 33239), (26, 33242), (34, 33314), (40, 33365), (42, 33392), (44, 33419), (47, 33470), (51, 33506), (52, 33521), (53, 33560), (54, 33575), (57, 33650), (62, 33695), (63, 33701), (65, 33710), (69, 33782), (73, 33806), (75, 33833), (76, 33872), (77, 33908), (85, 34226), (86, 34232), (91, 34352),

Gene: Rich_31 Start: 32367, Stop: 33872, Start Num: 1

Candidate Starts for Rich_31:

(Start: 1 @32367 has 9 MA's), (2, 32385), (4, 32406), (6, 32460), (7, 32478), (10, 32529), (12, 32556), (13, 32571), (40, 32871), (42, 32898), (44, 32925), (49, 32991), (51, 33012), (52, 33027), (53, 33066), (57, 33156), (59, 33183), (60, 33192), (65, 33216), (73, 33312), (75, 33339), (76, 33378), (77, 33414),

(81, 33537), (84, 33642), (86, 33738), (87, 33756), (91, 33858),

Gene: Serendipitous_31 Start: 32443, Stop: 33945, Start Num: 1

Candidate Starts for Serendipitous_31:

(Start: 1 @32443 has 9 MA's), (2, 32461), (3, 32473), (4, 32482), (6, 32536), (7, 32554), (12, 32632), (13, 32647), (Start: 14 @32659 has 2 MA's), (21, 32767), (24, 32815), (27, 32827), (36, 32920), (40, 32947), (41, 32965), (42, 32974), (43, 32983), (44, 33001), (47, 33052), (49, 33067), (51, 33088), (53, 33139), (56, 33223), (57, 33229), (58, 33253), (62, 33274), (67, 33301), (73, 33385), (75, 33412), (76, 33451), (77, 33487), (82, 33700), (86, 33811), (91, 33931),

Gene: Shenyu_32 Start: 32544, Stop: 34049, Start Num: 1

Candidate Starts for Shenyu_32:

(Start: 1 @32544 has 9 MA's), (4, 32583), (7, 32655), (11, 32715), (12, 32733), (13, 32748), (35, 33000), (38, 33030), (40, 33048), (42, 33075), (44, 33102), (52, 33204), (53, 33243), (54, 33258), (57, 33333), (62, 33378), (63, 33384), (65, 33393), (73, 33489), (76, 33555), (77, 33591), (82, 33804), (86, 33915), (91, 34035),

Gene: SirJeffery_32 Start: 32588, Stop: 34093, Start Num: 1

Candidate Starts for SirJeffery_32:

(Start: 1 @32588 has 9 MA's), (2, 32606), (4, 32627), (6, 32681), (11, 32759), (12, 32777), (13, 32792), (Start: 14 @32804 has 2 MA's), (34, 33041), (40, 33092), (42, 33119), (44, 33146), (51, 33233), (52, 33248), (53, 33287), (57, 33377), (65, 33437), (75, 33560), (76, 33599), (77, 33635), (86, 33959), (91, 34079),

Gene: StinkyVeggy_34 Start: 32734, Stop: 34239, Start Num: 1

Candidate Starts for StinkyVeggy_34:

(Start: 1 @32734 has 9 MA's), (4, 32773), (7, 32845), (11, 32905), (12, 32923), (13, 32938), (35, 33190), (38, 33220), (40, 33238), (42, 33265), (44, 33292), (52, 33394), (53, 33433), (54, 33448), (57, 33523), (62, 33568), (63, 33574), (65, 33583), (73, 33679), (76, 33745), (77, 33781), (82, 33994), (86, 34105), (91, 34225),

Gene: Suigeneris_32 Start: 32591, Stop: 34096, Start Num: 1

Candidate Starts for Suigeneris_32:

(Start: 1 @32591 has 9 MA's), (2, 32609), (4, 32630), (6, 32684), (11, 32762), (12, 32780), (13, 32795), (Start: 14 @32807 has 2 MA's), (34, 33044), (40, 33095), (42, 33122), (44, 33149), (51, 33236), (52, 33251), (53, 33290), (57, 33380), (65, 33440), (75, 33563), (76, 33602), (77, 33638), (86, 33962), (91, 34082),

Gene: Taptic_25 Start: 29324, Stop: 30529, Start Num: 15

Candidate Starts for Taptic_25:

(Start: 14 @29321 has 2 MA's), (Start: 15 @29324 has 6 MA's), (20, 29393), (24, 29462), (28, 29492), (29, 29504), (30, 29510), (31, 29513), (33, 29522), (36, 29561), (38, 29570), (39, 29582), (45, 29639), (46, 29648), (48, 29660), (50, 29675), (53, 29720), (54, 29735), (55, 29780), (61, 29849), (66, 29876), (68, 29900), (70, 29945), (73, 29966), (74, 29990), (77, 30065), (78, 30095), (79, 30155), (80, 30167), (81, 30185), (83, 30287), (86, 30398), (87, 30416), (89, 30467), (90, 30503),

Gene: Vic9_34 Start: 33132, Stop: 34337, Start Num: 15

Candidate Starts for Vic9_34:

(5, 32988), (Start: 14 @33129 has 2 MA's), (Start: 15 @33132 has 6 MA's), (20, 33201), (24, 33270), (28, 33300), (29, 33312), (30, 33318), (31, 33321), (33, 33330), (36, 33369), (38, 33378), (39, 33390), (45, 33447), (46, 33456), (48, 33468), (50, 33483), (53, 33528), (54, 33543), (55, 33588), (61, 33657), (66, 33684), (68, 33708), (71, 33756), (72, 33762), (73, 33774), (74, 33798), (77, 33873), (78, 33903), (79, 33963), (80, 33975), (81, 33993), (82, 34092), (83, 34095), (85, 34200), (86, 34206), (88, 34272),

(89, 34275),