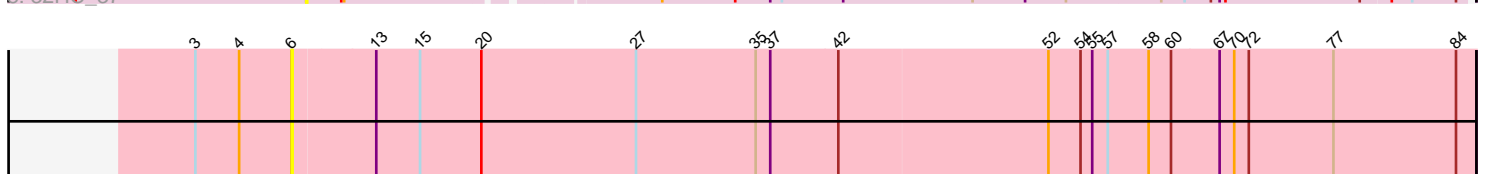
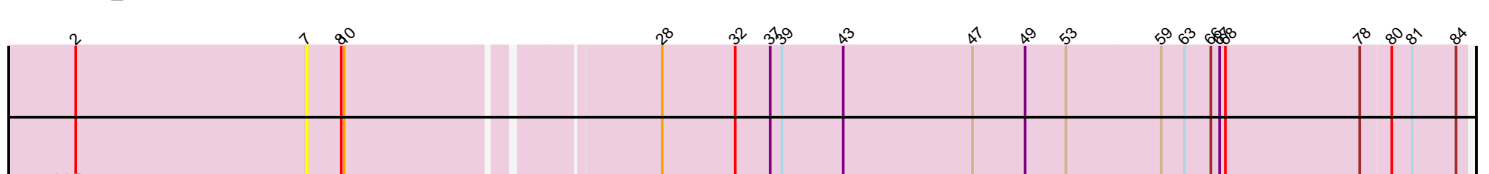
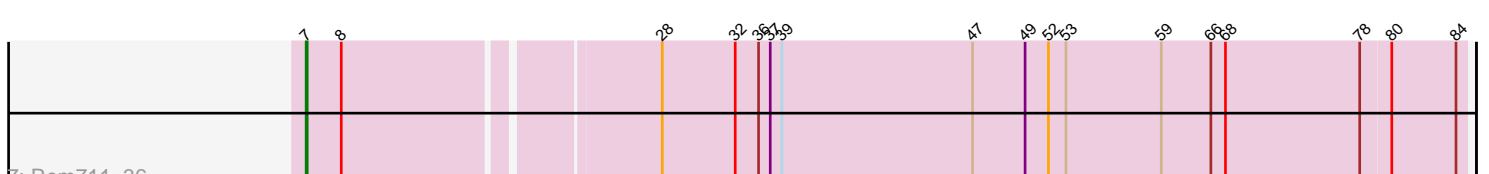
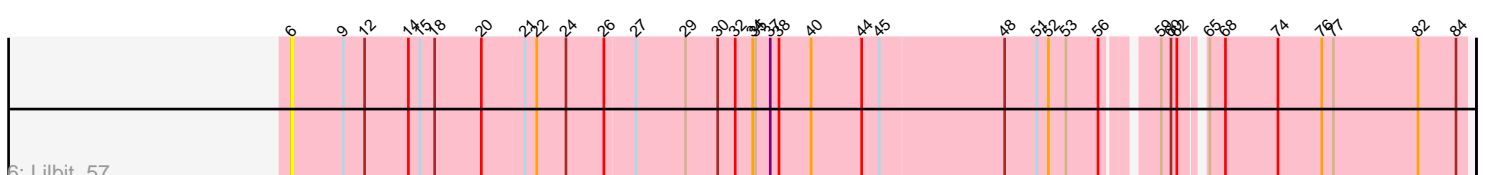
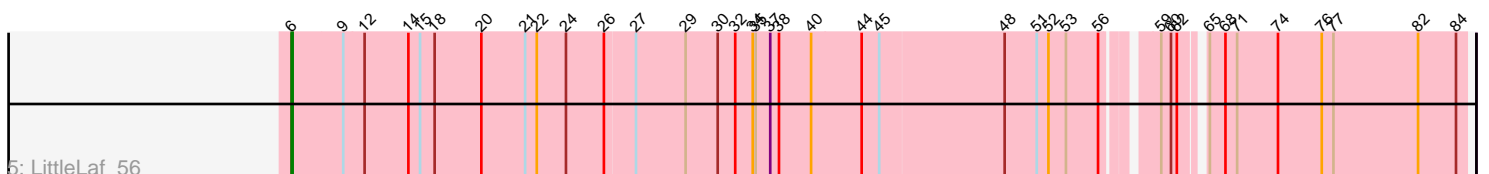
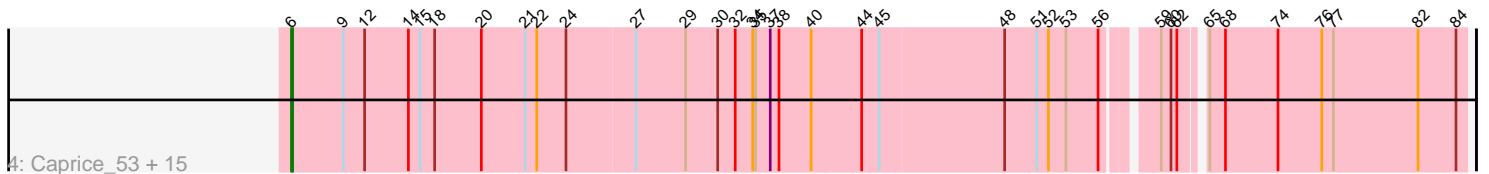
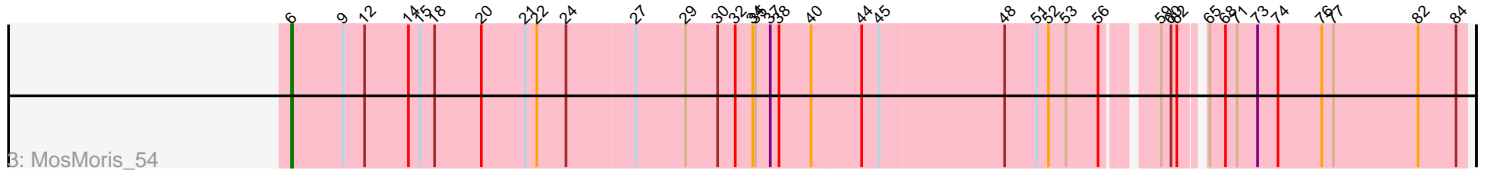
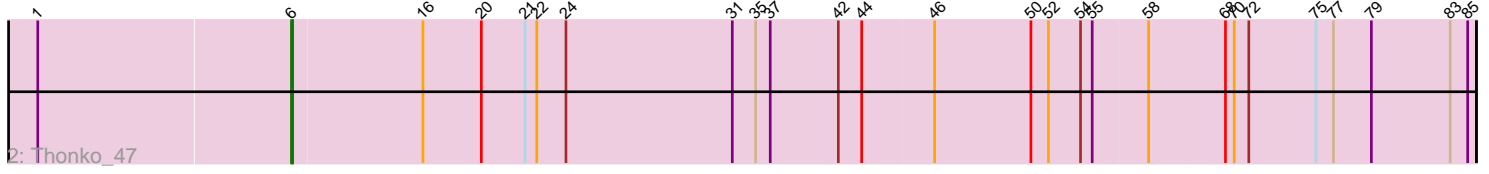
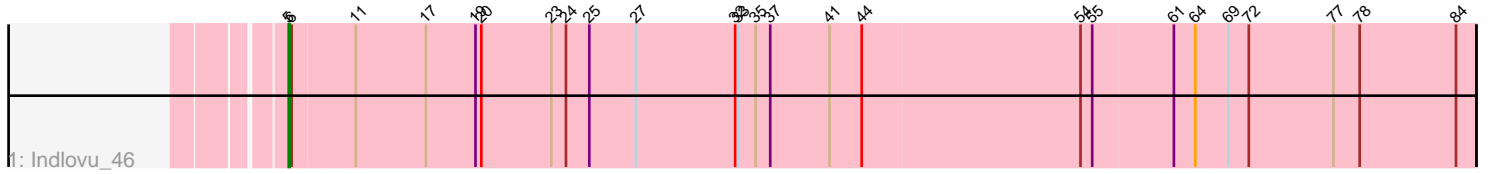


Pham 192848



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 192848 Report

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

Pham number 192848 has 24 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Indlovu_46
- Track 2 : Thonko_47
- Track 3 : MosMoris_54
- Track 4 : Caprice_53, Marvin_53, Raela_56, FeliMaine_56, Tesla_54, JoieB_57, Poise_56, RedRaider77_55, Corazon_54, Clarkson_57, Pringar_56, Blackbeetle_56, Huphlepuuff_58, Beelzebub_60, VasuNzinga_56, Gattaca_55
- Track 5 : LittleLaf_56
- Track 6 : Lilbit_57
- Track 7 : Rem711_36
- Track 8 : 32HC_37
- Track 9 : StAugustine_57

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

The start number called the most often in the published annotations is 6, it was called in 17 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beelzebub_60, Blackbeetle_56, Caprice_53, Clarkson_57, Corazon_54, FeliMaine_56, Gattaca_55, Huphlepuuff_58, JoieB_57, Lilbit_57, LittleLaf_56, Marvin_53, MosMoris_54, Poise_56, Pringar_56, Raela_56, RedRaider77_55, StAugustine_57, Tesla_54, Thonko_47, VasuNzinga_56,

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

- Indlovu_46,

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

- 32HC_37, Rem711_36,

Summary by start number:

Start 5:

- Found in 1 of 24 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 19

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Indlovu_46 (B11),

Start 6:

- Found in 22 of 24 (91.7%) of genes in pham
- Manual Annotations of this start: 17 of 19
- Called 95.5% of time when present
- Phage (with cluster) where this start called: Beelzebub_60 (S), Blackbeetle_56 (S), Caprice_53 (S), Clarkson_57 (S), Corazon_54 (S), FeliMaine_56 (S), Gattaca_55 (S), Huphlepuuff_58 (S), JoieB_57 (S), Lilbit_57 (S), LittleLaf_56 (S), Marvin_53 (S), MosMoris_54 (S), Poise_56 (S), Pringar_56 (S), Raela_56 (S), RedRaider77_55 (S), StAugustine_57 (singleton), Tesla_54 (S), Thonko_47 (B8), VasuNzinga_56 (S),

Start 7:

- Found in 2 of 24 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 32HC_37 (Z), Rem711_36 (Z),

Summary by clusters:

There are 5 clusters represented in this pham: S, Z, B8, singleton, B11,

Info for manual annotations of cluster B11:

- Start number 5 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B8:

- Start number 6 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster S:

- Start number 6 was manually annotated 16 times for cluster S.

Info for manual annotations of cluster Z:

- Start number 7 was manually annotated 1 time for cluster Z.

Gene Information:

Gene: 32HC_37 Start: 28787, Stop: 29938, Start Num: 7

Candidate Starts for 32HC_37:

(2, 28550), (Start: 7 @28787 has 1 MA's), (8, 28823), (10, 28826), (28, 29120), (32, 29195), (37, 29231), (39, 29243), (43, 29306), (47, 29438), (49, 29492), (53, 29534), (59, 29630), (63, 29654), (66, 29681), (67, 29690), (68, 29696), (78, 29834), (80, 29864), (81, 29885), (84, 29930),

Gene: Beelzebub_60 Start: 32626, Stop: 33780, Start Num: 6

Candidate Starts for Beelzebub_60:

(Start: 6 @32626 has 17 MA's), (9, 32677), (12, 32698), (14, 32743), (15, 32755), (18, 32770), (20, 32818), (21, 32863), (22, 32875), (24, 32905), (27, 32974), (29, 33025), (30, 33058), (32, 33076), (34, 33094), (35, 33097), (37, 33112), (38, 33121), (40, 33154), (44, 33205), (45, 33223), (48, 33349), (51, 33382), (52, 33394), (53, 33412), (56, 33445), (59, 33487), (60, 33496), (62, 33502), (65, 33520), (68, 33535), (74, 33589), (76, 33634), (77, 33646), (82, 33733), (84, 33772),

Gene: Blackbeetle_56 Start: 31672, Stop: 32826, Start Num: 6

Candidate Starts for Blackbeetle_56:

(Start: 6 @31672 has 17 MA's), (9, 31723), (12, 31744), (14, 31789), (15, 31801), (18, 31816), (20, 31864), (21, 31909), (22, 31921), (24, 31951), (27, 32020), (29, 32071), (30, 32104), (32, 32122), (34, 32140), (35, 32143), (37, 32158), (38, 32167), (40, 32200), (44, 32251), (45, 32269), (48, 32395), (51, 32428), (52, 32440), (53, 32458), (56, 32491), (59, 32533), (60, 32542), (62, 32548), (65, 32566), (68, 32581), (74, 32635), (76, 32680), (77, 32692), (82, 32779), (84, 32818),

Gene: Caprice_53 Start: 31985, Stop: 33139, Start Num: 6

Candidate Starts for Caprice_53:

(Start: 6 @31985 has 17 MA's), (9, 32036), (12, 32057), (14, 32102), (15, 32114), (18, 32129), (20, 32177), (21, 32222), (22, 32234), (24, 32264), (27, 32333), (29, 32384), (30, 32417), (32, 32435), (34, 32453), (35, 32456), (37, 32471), (38, 32480), (40, 32513), (44, 32564), (45, 32582), (48, 32708), (51, 32741), (52, 32753), (53, 32771), (56, 32804), (59, 32846), (60, 32855), (62, 32861), (65, 32879), (68, 32894), (74, 32948), (76, 32993), (77, 33005), (82, 33092), (84, 33131),

Gene: Clarkson_57 Start: 32354, Stop: 33508, Start Num: 6

Candidate Starts for Clarkson_57:

(Start: 6 @32354 has 17 MA's), (9, 32405), (12, 32426), (14, 32471), (15, 32483), (18, 32498), (20, 32546), (21, 32591), (22, 32603), (24, 32633), (27, 32702), (29, 32753), (30, 32786), (32, 32804), (34, 32822), (35, 32825), (37, 32840), (38, 32849), (40, 32882), (44, 32933), (45, 32951), (48, 33077), (51, 33110), (52, 33122), (53, 33140), (56, 33173), (59, 33215), (60, 33224), (62, 33230), (65, 33248), (68, 33263), (74, 33317), (76, 33362), (77, 33374), (82, 33461), (84, 33500),

Gene: Corazon_54 Start: 32548, Stop: 33702, Start Num: 6

Candidate Starts for Corazon_54:

(Start: 6 @32548 has 17 MA's), (9, 32599), (12, 32620), (14, 32665), (15, 32677), (18, 32692), (20, 32740), (21, 32785), (22, 32797), (24, 32827), (27, 32896), (29, 32947), (30, 32980), (32, 32998), (34, 33016), (35, 33019), (37, 33034), (38, 33043), (40, 33076), (44, 33127), (45, 33145), (48, 33271), (51, 33304), (52, 33316), (53, 33334), (56, 33367), (59, 33409), (60, 33418), (62, 33424), (65, 33442), (68, 33457), (74, 33511), (76, 33556), (77, 33568), (82, 33655), (84, 33694),

Gene: FeliMaine_56 Start: 32596, Stop: 33750, Start Num: 6

Candidate Starts for FeliMaine_56:

(Start: 6 @32596 has 17 MA's), (9, 32647), (12, 32668), (14, 32713), (15, 32725), (18, 32740), (20, 32788), (21, 32833), (22, 32845), (24, 32875), (27, 32944), (29, 32995), (30, 33028), (32, 33046), (34, 33064), (35, 33067), (37, 33082), (38, 33091), (40, 33124), (44, 33175), (45, 33193), (48, 33319), (51, 33352), (52, 33364), (53, 33382), (56, 33415), (59, 33457), (60, 33466), (62, 33472), (65, 33490), (68, 33505), (74, 33559), (76, 33604), (77, 33616), (82, 33703), (84, 33742),

Gene: Gattaca_55 Start: 31775, Stop: 32929, Start Num: 6

Candidate Starts for Gattaca_55:

(Start: 6 @31775 has 17 MA's), (9, 31826), (12, 31847), (14, 31892), (15, 31904), (18, 31919), (20, 31967), (21, 32012), (22, 32024), (24, 32054), (27, 32123), (29, 32174), (30, 32207), (32, 32225), (34, 32243), (35, 32246), (37, 32261), (38, 32270), (40, 32303), (44, 32354), (45, 32372), (48, 32498), (51, 32531), (52, 32543), (53, 32561), (56, 32594), (59, 32636), (60, 32645), (62, 32651), (65, 32669), (68, 32684), (74, 32738), (76, 32783), (77, 32795), (82, 32882), (84, 32921),

Gene: Huphlebuff_58 Start: 32159, Stop: 33313, Start Num: 6

Candidate Starts for Huphlebuff_58:

(Start: 6 @32159 has 17 MA's), (9, 32210), (12, 32231), (14, 32276), (15, 32288), (18, 32303), (20, 32351), (21, 32396), (22, 32408), (24, 32438), (27, 32507), (29, 32558), (30, 32591), (32, 32609), (34, 32627), (35, 32630), (37, 32645), (38, 32654), (40, 32687), (44, 32738), (45, 32756), (48, 32882), (51,

32915), (52, 32927), (53, 32945), (56, 32978), (59, 33020), (60, 33029), (62, 33035), (65, 33053), (68, 33068), (74, 33122), (76, 33167), (77, 33179), (82, 33266), (84, 33305),

Gene: Indlovu_46 Start: 41496, Stop: 42698, Start Num: 5

Candidate Starts for Indlovu_46:

(Start: 5 @41496 has 1 MA's), (Start: 6 @41499 has 17 MA's), (11, 41559), (17, 41631), (19, 41682), (20, 41688), (23, 41760), (24, 41775), (25, 41799), (27, 41847), (32, 41949), (33, 41952), (35, 41970), (37, 41985), (41, 42045), (44, 42078), (54, 42300), (55, 42312), (61, 42390), (64, 42411), (69, 42444), (72, 42465), (77, 42552), (78, 42579), (84, 42678),

Gene: JoieB_57 Start: 32592, Stop: 33746, Start Num: 6

Candidate Starts for JoieB_57:

(Start: 6 @32592 has 17 MA's), (9, 32643), (12, 32664), (14, 32709), (15, 32721), (18, 32736), (20, 32784), (21, 32829), (22, 32841), (24, 32871), (27, 32940), (29, 32991), (30, 33024), (32, 33042), (34, 33060), (35, 33063), (37, 33078), (38, 33087), (40, 33120), (44, 33171), (45, 33189), (48, 33315), (51, 33348), (52, 33360), (53, 33378), (56, 33411), (59, 33453), (60, 33462), (62, 33468), (65, 33486), (68, 33501), (74, 33555), (76, 33600), (77, 33612), (82, 33699), (84, 33738),

Gene: Lilbit_57 Start: 32355, Stop: 33509, Start Num: 6

Candidate Starts for Lilbit_57:

(Start: 6 @32355 has 17 MA's), (9, 32406), (12, 32427), (14, 32472), (15, 32484), (18, 32499), (20, 32547), (21, 32592), (22, 32604), (24, 32634), (26, 32673), (27, 32703), (29, 32754), (30, 32787), (32, 32805), (34, 32823), (35, 32826), (37, 32841), (38, 32850), (40, 32883), (44, 32934), (45, 32952), (48, 33078), (51, 33111), (52, 33123), (53, 33141), (56, 33174), (59, 33216), (60, 33225), (62, 33231), (65, 33249), (68, 33264), (74, 33318), (76, 33363), (77, 33375), (82, 33462), (84, 33501),

Gene: LittleLaf_56 Start: 32084, Stop: 33238, Start Num: 6

Candidate Starts for LittleLaf_56:

(Start: 6 @32084 has 17 MA's), (9, 32135), (12, 32156), (14, 32201), (15, 32213), (18, 32228), (20, 32276), (21, 32321), (22, 32333), (24, 32363), (26, 32402), (27, 32432), (29, 32483), (30, 32516), (32, 32534), (34, 32552), (35, 32555), (37, 32570), (38, 32579), (40, 32612), (44, 32663), (45, 32681), (48, 32807), (51, 32840), (52, 32852), (53, 32870), (56, 32903), (59, 32945), (60, 32954), (62, 32960), (65, 32978), (68, 32993), (71, 33005), (74, 33047), (76, 33092), (77, 33104), (82, 33191), (84, 33230),

Gene: Marvin_53 Start: 31842, Stop: 32996, Start Num: 6

Candidate Starts for Marvin_53:

(Start: 6 @31842 has 17 MA's), (9, 31893), (12, 31914), (14, 31959), (15, 31971), (18, 31986), (20, 32034), (21, 32079), (22, 32091), (24, 32121), (27, 32190), (29, 32241), (30, 32274), (32, 32292), (34, 32310), (35, 32313), (37, 32328), (38, 32337), (40, 32370), (44, 32421), (45, 32439), (48, 32565), (51, 32598), (52, 32610), (53, 32628), (56, 32661), (59, 32703), (60, 32712), (62, 32718), (65, 32736), (68, 32751), (74, 32805), (76, 32850), (77, 32862), (82, 32949), (84, 32988),

Gene: MosMoris_54 Start: 31775, Stop: 32929, Start Num: 6

Candidate Starts for MosMoris_54:

(Start: 6 @31775 has 17 MA's), (9, 31826), (12, 31847), (14, 31892), (15, 31904), (18, 31919), (20, 31967), (21, 32012), (22, 32024), (24, 32054), (27, 32123), (29, 32174), (30, 32207), (32, 32225), (34, 32243), (35, 32246), (37, 32261), (38, 32270), (40, 32303), (44, 32354), (45, 32372), (48, 32498), (51, 32531), (52, 32543), (53, 32561), (56, 32594), (59, 32636), (60, 32645), (62, 32651), (65, 32669), (68, 32684), (71, 32696), (73, 32717), (74, 32738), (76, 32783), (77, 32795), (82, 32882), (84, 32921),

Gene: Poise_56 Start: 31672, Stop: 32826, Start Num: 6

Candidate Starts for Poise_56:

(Start: 6 @31672 has 17 MA's), (9, 31723), (12, 31744), (14, 31789), (15, 31801), (18, 31816), (20, 31864), (21, 31909), (22, 31921), (24, 31951), (27, 32020), (29, 32071), (30, 32104), (32, 32122), (34, 32140), (35, 32143), (37, 32158), (38, 32167), (40, 32200), (44, 32251), (45, 32269), (48, 32395), (51, 32428), (52, 32440), (53, 32458), (56, 32491), (59, 32533), (60, 32542), (62, 32548), (65, 32566), (68, 32581), (74, 32635), (76, 32680), (77, 32692), (82, 32779), (84, 32818),

Gene: Pringar_56 Start: 31960, Stop: 33114, Start Num: 6

Candidate Starts for Pringar_56:

(Start: 6 @31960 has 17 MA's), (9, 32011), (12, 32032), (14, 32077), (15, 32089), (18, 32104), (20, 32152), (21, 32197), (22, 32209), (24, 32239), (27, 32308), (29, 32359), (30, 32392), (32, 32410), (34, 32428), (35, 32431), (37, 32446), (38, 32455), (40, 32488), (44, 32539), (45, 32557), (48, 32683), (51, 32716), (52, 32728), (53, 32746), (56, 32779), (59, 32821), (60, 32830), (62, 32836), (65, 32854), (68, 32869), (74, 32923), (76, 32968), (77, 32980), (82, 33067), (84, 33106),

Gene: Raela_56 Start: 32227, Stop: 33381, Start Num: 6

Candidate Starts for Raela_56:

(Start: 6 @32227 has 17 MA's), (9, 32278), (12, 32299), (14, 32344), (15, 32356), (18, 32371), (20, 32419), (21, 32464), (22, 32476), (24, 32506), (27, 32575), (29, 32626), (30, 32659), (32, 32677), (34, 32695), (35, 32698), (37, 32713), (38, 32722), (40, 32755), (44, 32806), (45, 32824), (48, 32950), (51, 32983), (52, 32995), (53, 33013), (56, 33046), (59, 33088), (60, 33097), (62, 33103), (65, 33121), (68, 33136), (74, 33190), (76, 33235), (77, 33247), (82, 33334), (84, 33373),

Gene: RedRaider77_55 Start: 31616, Stop: 32770, Start Num: 6

Candidate Starts for RedRaider77_55:

(Start: 6 @31616 has 17 MA's), (9, 31667), (12, 31688), (14, 31733), (15, 31745), (18, 31760), (20, 31808), (21, 31853), (22, 31865), (24, 31895), (27, 31964), (29, 32015), (30, 32048), (32, 32066), (34, 32084), (35, 32087), (37, 32102), (38, 32111), (40, 32144), (44, 32195), (45, 32213), (48, 32339), (51, 32372), (52, 32384), (53, 32402), (56, 32435), (59, 32477), (60, 32486), (62, 32492), (65, 32510), (68, 32525), (74, 32579), (76, 32624), (77, 32636), (82, 32723), (84, 32762),

Gene: Rem711_36 Start: 28771, Stop: 29922, Start Num: 7

Candidate Starts for Rem711_36:

(Start: 7 @28771 has 1 MA's), (8, 28807), (28, 29104), (32, 29179), (36, 29203), (37, 29215), (39, 29227), (47, 29422), (49, 29476), (52, 29500), (53, 29518), (59, 29614), (66, 29665), (68, 29680), (78, 29818), (80, 29848), (84, 29914),

Gene: StAugustine_57 Start: 45980, Stop: 47182, Start Num: 6

Candidate Starts for StAugustine_57:

(3, 45881), (4, 45926), (Start: 6 @45980 has 17 MA's), (13, 46061), (15, 46106), (20, 46169), (27, 46328), (35, 46451), (37, 46466), (42, 46535), (52, 46748), (54, 46781), (55, 46793), (57, 46808), (58, 46850), (60, 46871), (67, 46919), (70, 46934), (72, 46949), (77, 47036), (84, 47162),

Gene: Tesla_54 Start: 31465, Stop: 32619, Start Num: 6

Candidate Starts for Tesla_54:

(Start: 6 @31465 has 17 MA's), (9, 31516), (12, 31537), (14, 31582), (15, 31594), (18, 31609), (20, 31657), (21, 31702), (22, 31714), (24, 31744), (27, 31813), (29, 31864), (30, 31897), (32, 31915), (34, 31933), (35, 31936), (37, 31951), (38, 31960), (40, 31993), (44, 32044), (45, 32062), (48, 32188), (51, 32221), (52, 32233), (53, 32251), (56, 32284), (59, 32326), (60, 32335), (62, 32341), (65, 32359), (68, 32374), (74, 32428), (76, 32473), (77, 32485), (82, 32572), (84, 32611),

Gene: Thonko_47 Start: 39899, Stop: 41098, Start Num: 6

Candidate Starts for Thonko_47:

(1, 39644), (Start: 6 @39899 has 17 MA's), (16, 40028), (20, 40088), (21, 40133), (22, 40145), (24, 40175), (31, 40346), (35, 40370), (37, 40385), (42, 40454), (44, 40478), (46, 40550), (50, 40649), (52, 40667), (54, 40700), (55, 40712), (58, 40766), (68, 40841), (70, 40850), (72, 40865), (75, 40934), (77, 40952), (79, 40991), (83, 41072), (85, 41090),

Gene: VasuNzinga_56 Start: 31534, Stop: 32688, Start Num: 6

Candidate Starts for VasuNzinga_56:

(Start: 6 @31534 has 17 MA's), (9, 31585), (12, 31606), (14, 31651), (15, 31663), (18, 31678), (20, 31726), (21, 31771), (22, 31783), (24, 31813), (27, 31882), (29, 31933), (30, 31966), (32, 31984), (34, 32002), (35, 32005), (37, 32020), (38, 32029), (40, 32062), (44, 32113), (45, 32131), (48, 32257), (51, 32290), (52, 32302), (53, 32320), (56, 32353), (59, 32395), (60, 32404), (62, 32410), (65, 32428), (68, 32443), (74, 32497), (76, 32542), (77, 32554), (82, 32641), (84, 32680),