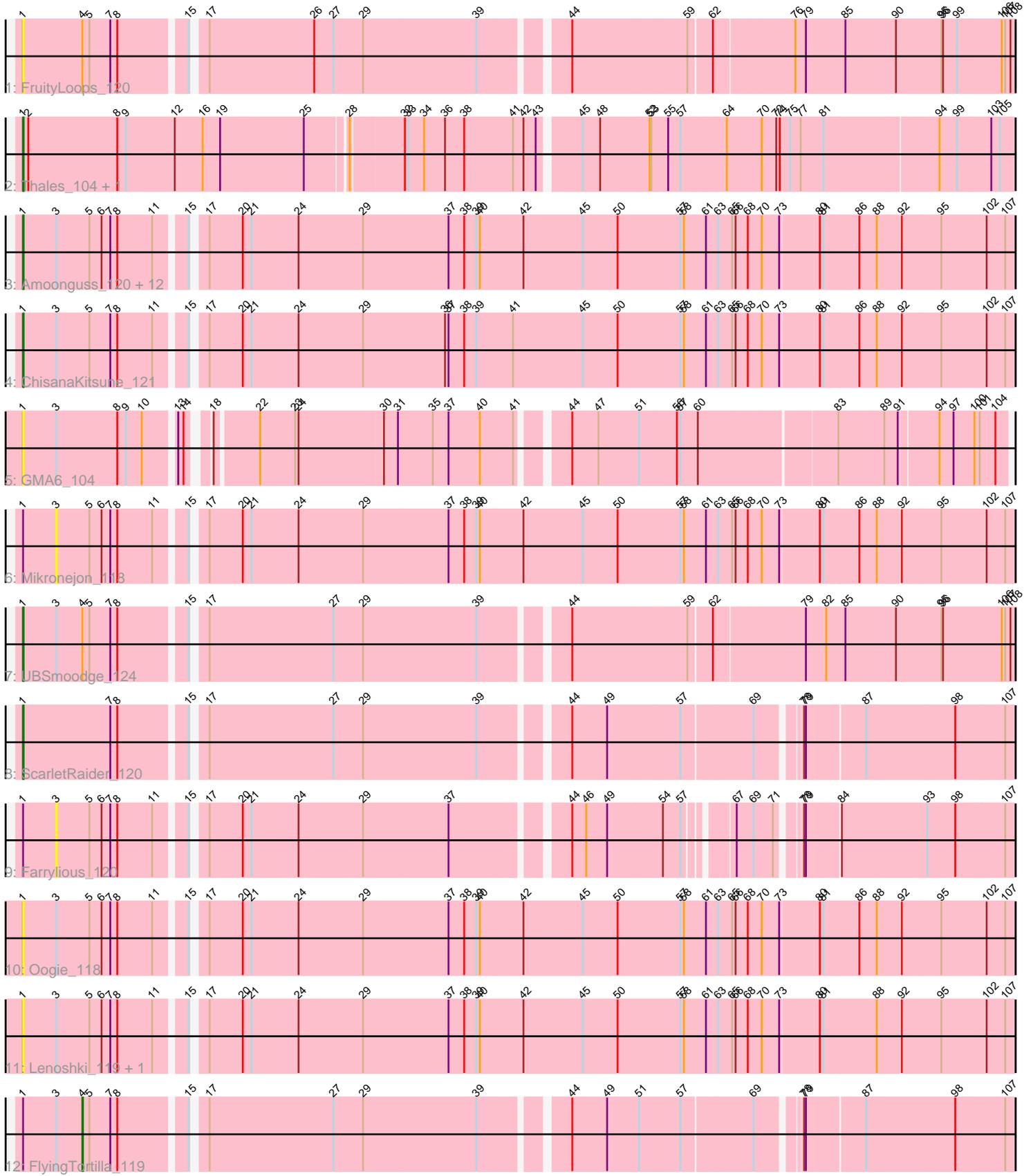# Pham 289685

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 289685 Report

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

Pham number 289685 has 26 members, 16 are drafts.

Phages represented in each track:
• Track 1 : FruityLoops_120
• Track 2 : Thales_104, DalanDe_106
• Track 3 : Amoonguss_120, MintFritos_119, Chidiebere_123, Pakusa_116, Hanem_121, Argena_121, Toneprano_119, Schomber_121, Kabocha_124, Gray_119, Twin_117, Aloki_114, EmoNemo_115
• Track 4 : ChisanaKitsune_121
• Track 5 : GMA6_104
• Track 6 : Mikronejon_118
• Track 7 : UBSmoodge_124
• Track 8 : ScarletRaider_120
• Track 9 : Farrylious_120
• Track 10 : Oogie_118
• Track 11 : Lenoshki_119, Beted_119
• Track 12 : FlyingTortilla_119

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 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aloki_114, Amoonguss_120, Argena_121, Beted_119, Chidiebere_123, ChisanaKitsune_121, DalanDe_106, EmoNemo_115, FruityLoops_120, GMA6_104, Gray_119, Hanem_121, Kabocha_124, Lenoshki_119, MintFritos_119, Oogie_118, Pakusa_116, ScarletRaider_120, Schomber_121, Thales_104, Toneprano_119, Twin_117, UBSmoodge_124,

Genes that have the "Most Annotated" start but do not call it:
• Farrylious_120, FlyingTortilla_119, Mikronejon_118,

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

Summary by start number:

Start 1:
• Found in 26 of 26 (100.0%) of genes in pham
• Manual Annotations of this start: 9 of 10
• Called 88.5% of time when present
• Phage (with cluster) where this start called: Aloki_114 (DQ), Amoonguss_120 (DQ), Argena_121 (DQ), Beted_119 (DQ), Chidiebere_123 (DQ), ChisanaKitsune_121 (DQ), DalanDe_106 (DQ), EmoNemo_115 (DQ), FruityLoops_120 (DQ), GMA6_104 (DQ), Gray_119 (DQ), Hanem_121 (DQ), Kabocha_124 (DQ), Lenoshki_119 (DQ), MintFritos_119 (DQ), Oogie_118 (DQ), Pakusa_116 (DQ), ScarletRaider_120 (DQ), Schomber_121 (DQ), Thales_104 (DQ), Toneprano_119 (DQ), Twin_117 (DQ), UBSmoodge_124 (DQ),

Start 3:
• Found in 22 of 26 (84.6%) of genes in pham
• No Manual Annotations of this start.
• Called 9.1% of time when present
• Phage (with cluster) where this start called: Farrylious_120 (DQ), Mikronejon_118 (DQ),

Start 4:
• Found in 3 of 26 (11.5%) of genes in pham
• Manual Annotations of this start: 1 of 10
• Called 33.3% of time when present
• Phage (with cluster) where this start called: FlyingTortilla_119 (DQ),

Summary by clusters:

There is one cluster represented in this pham: DQ

Info for manual annotations of cluster DQ:
•Start number 1 was manually annotated 9 times for cluster DQ.
•Start number 4 was manually annotated 1 time for cluster DQ.

Gene Information:

Gene: Aloki_114 Start: 84783, Stop: 86426, Start Num: 1
Candidate Starts for Aloki_114:
(Start: 1 @84783 has 9 MA's), (3, 84840), (5, 84897), (6, 84918), (7, 84933), (8, 84945), (11, 85005), (15, 85053), (17, 85071), (20, 85128), (21, 85143), (24, 85224), (29, 85335), (37, 85479), (38, 85506), (39, 85527), (40, 85533), (42, 85605), (45, 85707), (50, 85767), (57, 85875), (58, 85881), (61, 85917), (63, 85935), (65, 85959), (66, 85965), (68, 85986), (70, 86010), (73, 86040), (80, 86106), (81, 86112), (86, 86172), (88, 86202), (92, 86238), (95, 86304), (102, 86382), (107, 86412),

Gene: Amoonguss_120 Start: 85416, Stop: 87059, Start Num: 1
Candidate Starts for Amoonguss_120:
(Start: 1 @85416 has 9 MA's), (3, 85473), (5, 85530), (6, 85551), (7, 85566), (8, 85578), (11, 85638), (15, 85686), (17, 85704), (20, 85761), (21, 85776), (24, 85857), (29, 85968), (37, 86112), (38, 86139), (39, 86160), (40, 86166), (42, 86238), (45, 86340), (50, 86400), (57, 86508), (58, 86514), (61, 86550), (63, 86568), (65, 86592), (66, 86598), (68, 86619), (70, 86643), (73, 86673), (80, 86739), (81, 86745), (86, 86805), (88, 86835), (92, 86871), (95, 86937), (102, 87015), (107, 87045),

Gene: Argena_121 Start: 85832, Stop: 87475, Start Num: 1
Candidate Starts for Argena_121:
(Start: 1 @85832 has 9 MA's), (3, 85889), (5, 85946), (6, 85967), (7, 85982), (8, 85994), (11, 86054),
(15, 86102), (17, 86120), (20, 86177), (21, 86192), (24, 86273), (29, 86384), (37, 86528), (38, 86555),
(39, 86576), (40, 86582), (42, 86654), (45, 86756), (50, 86816), (57, 86924), (58, 86930), (61, 86966),
(63, 86984), (65, 87008), (66, 87014), (68, 87035), (70, 87059), (73, 87089), (80, 87155), (81, 87161),
(86, 87221), (88, 87251), (92, 87287), (95, 87353), (102, 87431), (107, 87461),

Gene: Beted_119 Start: 87157, Stop: 88800, Start Num: 1
Candidate Starts for Beted_119:
(Start: 1 @87157 has 9 MA's), (3, 87214), (5, 87271), (6, 87292), (7, 87307), (8, 87319), (11, 87379),
(15, 87427), (17, 87445), (20, 87502), (21, 87517), (24, 87598), (29, 87709), (37, 87853), (38, 87880),
(39, 87901), (40, 87907), (42, 87979), (45, 88081), (50, 88141), (57, 88249), (58, 88255), (61, 88291),
(63, 88309), (65, 88333), (66, 88339), (68, 88360), (70, 88384), (73, 88414), (80, 88480), (81, 88486),
(88, 88576), (92, 88612), (95, 88678), (102, 88756), (107, 88786),

Gene: Chidiebere_123 Start: 86686, Stop: 88329, Start Num: 1
Candidate Starts for Chidiebere_123:
(Start: 1 @86686 has 9 MA's), (3, 86743), (5, 86800), (6, 86821), (7, 86836), (8, 86848), (11, 86908),
(15, 86956), (17, 86974), (20, 87031), (21, 87046), (24, 87127), (29, 87238), (37, 87382), (38, 87409),
(39, 87430), (40, 87436), (42, 87508), (45, 87610), (50, 87670), (57, 87778), (58, 87784), (61, 87820),
(63, 87838), (65, 87862), (66, 87868), (68, 87889), (70, 87913), (73, 87943), (80, 88009), (81, 88015),
(86, 88075), (88, 88105), (92, 88141), (95, 88207), (102, 88285), (107, 88315),

Gene: ChisanaKitsune_121 Start: 84929, Stop: 86572, Start Num: 1
Candidate Starts for ChisanaKitsune_121:
(Start: 1 @84929 has 9 MA's), (3, 84986), (5, 85043), (7, 85079), (8, 85091), (11, 85151), (15, 85199),
(17, 85217), (20, 85274), (21, 85289), (24, 85370), (29, 85481), (36, 85619), (37, 85625), (38, 85652),
(39, 85673), (41, 85733), (45, 85853), (50, 85913), (57, 86021), (58, 86027), (61, 86063), (63, 86081),
(65, 86105), (66, 86111), (68, 86132), (70, 86156), (73, 86186), (80, 86252), (81, 86258), (86, 86318),
(88, 86348), (92, 86384), (95, 86450), (102, 86528), (107, 86558),

Gene: DalanDe_106 Start: 82821, Stop: 84455, Start Num: 1
Candidate Starts for DalanDe_106:
(Start: 1 @82821 has 9 MA's), (2, 82830), (8, 82983), (9, 82998), (12, 83082), (16, 83130), (19, 83160),
(25, 83301), (28, 83367), (32, 83454), (33, 83460), (34, 83487), (36, 83523), (38, 83556), (41, 83637),
(42, 83655), (43, 83676), (45, 83739), (48, 83769), (52, 83853), (53, 83856), (55, 83883), (57, 83904),
(64, 83979), (70, 84039), (72, 84063), (74, 84069), (75, 84084), (77, 84102), (81, 84141), (94, 84330),
(99, 84360), (103, 84417), (105, 84432),

Gene: EmoNemo_115 Start: 84985, Stop: 86628, Start Num: 1
Candidate Starts for EmoNemo_115:
(Start: 1 @84985 has 9 MA's), (3, 85042), (5, 85099), (6, 85120), (7, 85135), (8, 85147), (11, 85207),
(15, 85255), (17, 85273), (20, 85330), (21, 85345), (24, 85426), (29, 85537), (37, 85681), (38, 85708),
(39, 85729), (40, 85735), (42, 85807), (45, 85909), (50, 85969), (57, 86077), (58, 86083), (61, 86119),
(63, 86137), (65, 86161), (66, 86167), (68, 86188), (70, 86212), (73, 86242), (80, 86308), (81, 86314),
(86, 86374), (88, 86404), (92, 86440), (95, 86506), (102, 86584), (107, 86614),

Gene: Farrylious_120 Start: 85628, Stop: 87115, Start Num: 3
Candidate Starts for Farrylious_120:
(Start: 1 @85571 has 9 MA's), (3, 85628), (5, 85685), (6, 85706), (7, 85721), (8, 85733), (11, 85793),
(15, 85841), (17, 85859), (20, 85916), (21, 85931), (24, 86012), (29, 86123), (37, 86267), (44, 86444),

(46, 86468), (49, 86504), (54, 86597), (57, 86627), (67, 86690), (69, 86717), (71, 86750), (78, 86780), (79, 86783), (84, 86834), (93, 86978), (98, 87023), (107, 87101),

Gene: FlyingTortilla_119 Start: 88841, Stop: 90307, Start Num: 4
Candidate Starts for FlyingTortilla_119:
(Start: 1 @88739 has 9 MA's), (3, 88796), (Start: 4 @88841 has 1 MA's), (5, 88853), (7, 88889), (8, 88901), (15, 89009), (17, 89027), (27, 89240), (29, 89291), (39, 89483), (44, 89612), (49, 89672), (51, 89726), (57, 89795), (69, 89906), (78, 89969), (79, 89972), (87, 90065), (98, 90212), (107, 90293),

Gene: FruityLoops_120 Start: 88248, Stop: 89852, Start Num: 1
Candidate Starts for FruityLoops_120:
(Start: 1 @88248 has 9 MA's), (Start: 4 @88350 has 1 MA's), (5, 88362), (7, 88398), (8, 88410), (15, 88518), (17, 88536), (26, 88716), (27, 88749), (29, 88800), (39, 88992), (44, 89121), (59, 89316), (62, 89352), (76, 89484), (79, 89502), (85, 89568), (90, 89655), (95, 89730), (96, 89733), (99, 89757), (106, 89829), (107, 89835), (108, 89844),

Gene: GMA6_104 Start: 76794, Stop: 78356, Start Num: 1
Candidate Starts for GMA6_104:
(Start: 1 @76794 has 9 MA's), (3, 76851), (8, 76956), (9, 76971), (10, 76998), (13, 77046), (14, 77055), (18, 77079), (22, 77148), (23, 77208), (24, 77214), (30, 77358), (31, 77382), (35, 77439), (37, 77466), (40, 77520), (41, 77577), (44, 77646), (47, 77691), (51, 77760), (56, 77823), (57, 77829), (60, 77859), (83, 78084), (89, 78162), (91, 78183), (94, 78243), (97, 78267), (100, 78303), (101, 78312), (104, 78336),

Gene: Gray_119 Start: 85242, Stop: 86885, Start Num: 1
Candidate Starts for Gray_119:
(Start: 1 @85242 has 9 MA's), (3, 85299), (5, 85356), (6, 85377), (7, 85392), (8, 85404), (11, 85464), (15, 85512), (17, 85530), (20, 85587), (21, 85602), (24, 85683), (29, 85794), (37, 85938), (38, 85965), (39, 85986), (40, 85992), (42, 86064), (45, 86166), (50, 86226), (57, 86334), (58, 86340), (61, 86376), (63, 86394), (65, 86418), (66, 86424), (68, 86445), (70, 86469), (73, 86499), (80, 86565), (81, 86571), (86, 86631), (88, 86661), (92, 86697), (95, 86763), (102, 86841), (107, 86871),

Gene: Hanem_121 Start: 84783, Stop: 86426, Start Num: 1
Candidate Starts for Hanem_121:
(Start: 1 @84783 has 9 MA's), (3, 84840), (5, 84897), (6, 84918), (7, 84933), (8, 84945), (11, 85005), (15, 85053), (17, 85071), (20, 85128), (21, 85143), (24, 85224), (29, 85335), (37, 85479), (38, 85506), (39, 85527), (40, 85533), (42, 85605), (45, 85707), (50, 85767), (57, 85875), (58, 85881), (61, 85917), (63, 85935), (65, 85959), (66, 85965), (68, 85986), (70, 86010), (73, 86040), (80, 86106), (81, 86112), (86, 86172), (88, 86202), (92, 86238), (95, 86304), (102, 86382), (107, 86412),

Gene: Kabocha_124 Start: 87499, Stop: 89142, Start Num: 1
Candidate Starts for Kabocha_124:
(Start: 1 @87499 has 9 MA's), (3, 87556), (5, 87613), (6, 87634), (7, 87649), (8, 87661), (11, 87721), (15, 87769), (17, 87787), (20, 87844), (21, 87859), (24, 87940), (29, 88051), (37, 88195), (38, 88222), (39, 88243), (40, 88249), (42, 88321), (45, 88423), (50, 88483), (57, 88591), (58, 88597), (61, 88633), (63, 88651), (65, 88675), (66, 88681), (68, 88702), (70, 88726), (73, 88756), (80, 88822), (81, 88828), (86, 88888), (88, 88918), (92, 88954), (95, 89020), (102, 89098), (107, 89128),

Gene: Lenoshki_119 Start: 87157, Stop: 88800, Start Num: 1
Candidate Starts for Lenoshki_119:
(Start: 1 @87157 has 9 MA's), (3, 87214), (5, 87271), (6, 87292), (7, 87307), (8, 87319), (11, 87379), (15, 87427), (17, 87445), (20, 87502), (21, 87517), (24, 87598), (29, 87709), (37, 87853), (38, 87880), (39, 87901), (40, 87907), (42, 87979), (45, 88081), (50, 88141), (57, 88249), (58, 88255), (61, 88291),

(63, 88309), (65, 88333), (66, 88339), (68, 88360), (70, 88384), (73, 88414), (80, 88480), (81, 88486),
(88, 88576), (92, 88612), (95, 88678), (102, 88756), (107, 88786),

Gene: Mikronejon_118 Start: 86093, Stop: 87679, Start Num: 3
Candidate Starts for Mikronejon_118:
(Start: 1 @86036 has 9 MA's), (3, 86093), (5, 86150), (6, 86171), (7, 86186), (8, 86198), (11, 86258),
(15, 86306), (17, 86324), (20, 86381), (21, 86396), (24, 86477), (29, 86588), (37, 86732), (38, 86759),
(39, 86780), (40, 86786), (42, 86858), (45, 86960), (50, 87020), (57, 87128), (58, 87134), (61, 87170),
(63, 87188), (65, 87212), (66, 87218), (68, 87239), (70, 87263), (73, 87293), (80, 87359), (81, 87365),
(86, 87425), (88, 87455), (92, 87491), (95, 87557), (102, 87635), (107, 87665),

Gene: MintFritos_119 Start: 85737, Stop: 87380, Start Num: 1
Candidate Starts for MintFritos_119:
(Start: 1 @85737 has 9 MA's), (3, 85794), (5, 85851), (6, 85872), (7, 85887), (8, 85899), (11, 85959),
(15, 86007), (17, 86025), (20, 86082), (21, 86097), (24, 86178), (29, 86289), (37, 86433), (38, 86460),
(39, 86481), (40, 86487), (42, 86559), (45, 86661), (50, 86721), (57, 86829), (58, 86835), (61, 86871),
(63, 86889), (65, 86913), (66, 86919), (68, 86940), (70, 86964), (73, 86994), (80, 87060), (81, 87066),
(86, 87126), (88, 87156), (92, 87192), (95, 87258), (102, 87336), (107, 87366),

Gene: Oogie_118 Start: 87207, Stop: 88850, Start Num: 1
Candidate Starts for Oogie_118:
(Start: 1 @87207 has 9 MA's), (3, 87264), (5, 87321), (6, 87342), (7, 87357), (8, 87369), (11, 87429),
(15, 87477), (17, 87495), (20, 87552), (21, 87567), (24, 87648), (29, 87759), (37, 87903), (38, 87930),
(39, 87951), (40, 87957), (42, 88029), (45, 88131), (50, 88191), (57, 88299), (58, 88305), (61, 88341),
(63, 88359), (65, 88383), (66, 88389), (68, 88410), (70, 88434), (73, 88464), (80, 88530), (81, 88536),
(86, 88596), (88, 88626), (92, 88662), (95, 88728), (102, 88806), (107, 88836),

Gene: Pakusa_116 Start: 84711, Stop: 86354, Start Num: 1
Candidate Starts for Pakusa_116:
(Start: 1 @84711 has 9 MA's), (3, 84768), (5, 84825), (6, 84846), (7, 84861), (8, 84873), (11, 84933),
(15, 84981), (17, 84999), (20, 85056), (21, 85071), (24, 85152), (29, 85263), (37, 85407), (38, 85434),
(39, 85455), (40, 85461), (42, 85533), (45, 85635), (50, 85695), (57, 85803), (58, 85809), (61, 85845),
(63, 85863), (65, 85887), (66, 85893), (68, 85914), (70, 85938), (73, 85968), (80, 86034), (81, 86040),
(86, 86100), (88, 86130), (92, 86166), (95, 86232), (102, 86310), (107, 86340),

Gene: ScarletRaider_120 Start: 87956, Stop: 89524, Start Num: 1
Candidate Starts for ScarletRaider_120:
(Start: 1 @87956 has 9 MA's), (7, 88106), (8, 88118), (15, 88226), (17, 88244), (27, 88457), (29,
88508), (39, 88700), (44, 88829), (49, 88889), (57, 89012), (69, 89123), (78, 89186), (79, 89189), (87,
89282), (98, 89429), (107, 89510),

Gene: Schomber_121 Start: 85887, Stop: 87530, Start Num: 1
Candidate Starts for Schomber_121:
(Start: 1 @85887 has 9 MA's), (3, 85944), (5, 86001), (6, 86022), (7, 86037), (8, 86049), (11, 86109),
(15, 86157), (17, 86175), (20, 86232), (21, 86247), (24, 86328), (29, 86439), (37, 86583), (38, 86610),
(39, 86631), (40, 86637), (42, 86709), (45, 86811), (50, 86871), (57, 86979), (58, 86985), (61, 87021),
(63, 87039), (65, 87063), (66, 87069), (68, 87090), (70, 87114), (73, 87144), (80, 87210), (81, 87216),
(86, 87276), (88, 87306), (92, 87342), (95, 87408), (102, 87486), (107, 87516),

Gene: Thales_104 Start: 81443, Stop: 83077, Start Num: 1
Candidate Starts for Thales_104:
(Start: 1 @81443 has 9 MA's), (2, 81452), (8, 81605), (9, 81620), (12, 81704), (16, 81752), (19, 81782),
(25, 81923), (28, 81989), (32, 82076), (33, 82082), (34, 82109), (36, 82145), (38, 82178), (41, 82259),

(42, 82277), (43, 82298), (45, 82361), (48, 82391), (52, 82475), (53, 82478), (55, 82505), (57, 82526), (64, 82601), (70, 82661), (72, 82685), (74, 82691), (75, 82706), (77, 82724), (81, 82763), (94, 82952), (99, 82982), (103, 83039), (105, 83054),

Gene: Toneprano_119 Start: 85430, Stop: 87073, Start Num: 1
Candidate Starts for Toneprano_119:
(Start: 1 @85430 has 9 MA's), (3, 85487), (5, 85544), (6, 85565), (7, 85580), (8, 85592), (11, 85652), (15, 85700), (17, 85718), (20, 85775), (21, 85790), (24, 85871), (29, 85982), (37, 86126), (38, 86153), (39, 86174), (40, 86180), (42, 86252), (45, 86354), (50, 86414), (57, 86522), (58, 86528), (61, 86564), (63, 86582), (65, 86606), (66, 86612), (68, 86633), (70, 86657), (73, 86687), (80, 86753), (81, 86759), (86, 86819), (88, 86849), (92, 86885), (95, 86951), (102, 87029), (107, 87059),

Gene: Twin_117 Start: 85460, Stop: 87103, Start Num: 1
Candidate Starts for Twin_117:
(Start: 1 @85460 has 9 MA's), (3, 85517), (5, 85574), (6, 85595), (7, 85610), (8, 85622), (11, 85682), (15, 85730), (17, 85748), (20, 85805), (21, 85820), (24, 85901), (29, 86012), (37, 86156), (38, 86183), (39, 86204), (40, 86210), (42, 86282), (45, 86384), (50, 86444), (57, 86552), (58, 86558), (61, 86594), (63, 86612), (65, 86636), (66, 86642), (68, 86663), (70, 86687), (73, 86717), (80, 86783), (81, 86789), (86, 86849), (88, 86879), (92, 86915), (95, 86981), (102, 87059), (107, 87089),

Gene: UBSmoodge_124 Start: 88529, Stop: 90133, Start Num: 1
Candidate Starts for UBSmoodge_124:
(Start: 1 @88529 has 9 MA's), (3, 88586), (Start: 4 @88631 has 1 MA's), (5, 88643), (7, 88679), (8, 88691), (15, 88799), (17, 88817), (27, 89030), (29, 89081), (39, 89273), (44, 89402), (59, 89597), (62, 89633), (79, 89783), (82, 89816), (85, 89849), (90, 89936), (95, 90011), (96, 90014), (106, 90110), (107, 90116), (108, 90125),