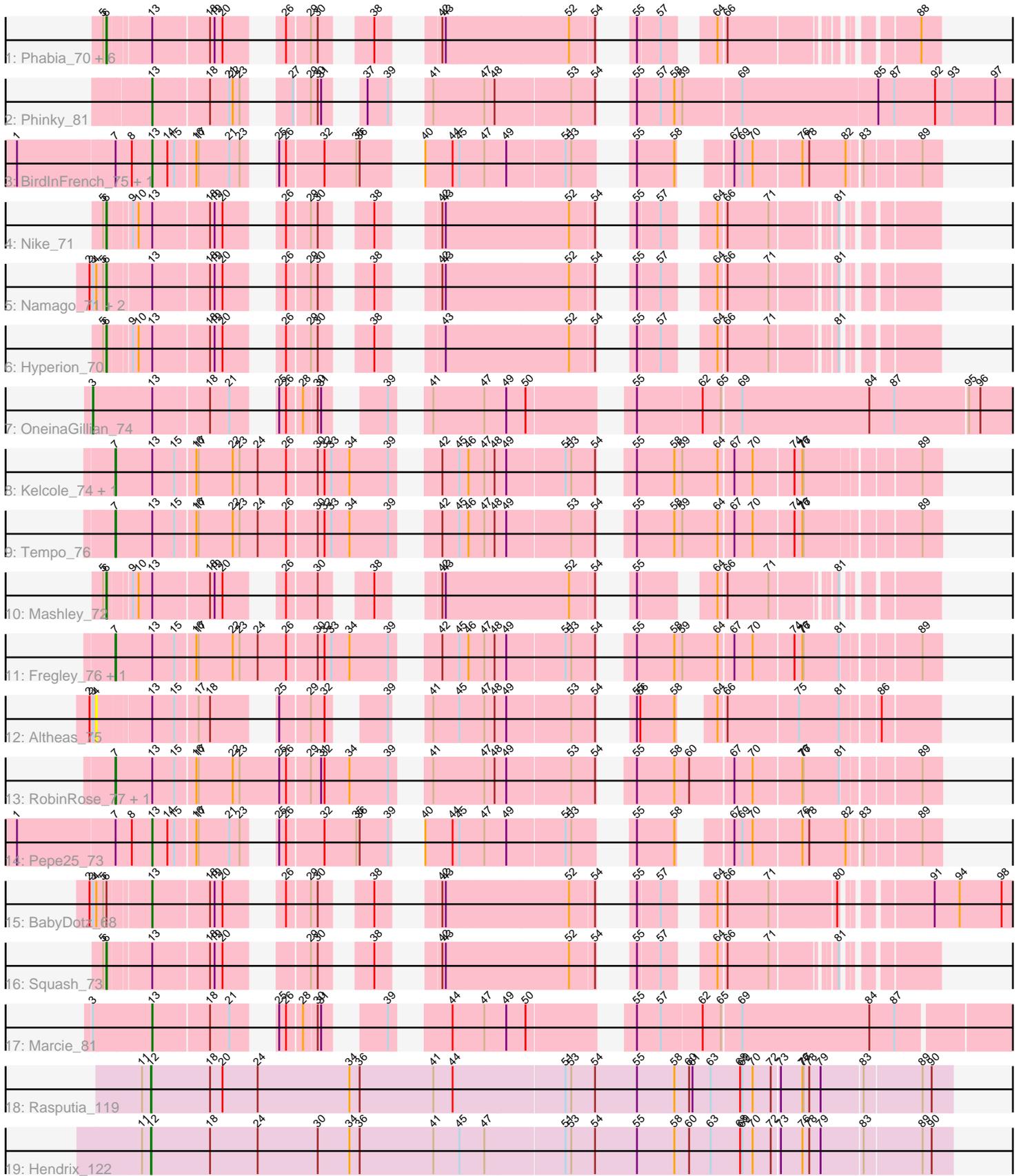# Pham 284056

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 284056 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284056 has 31 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Phabia_70, Wayne3_72, Casend_71, Quammi_69, Teehee_71, Jehoshaphat_72, Rudy_68
• Track 2 : Phinky_81
• Track 3 : BirdInFrench_75, Wilca_75
• Track 4 : Nike_71
• Track 5 : Namago_71, Blab_68, StrawberryJamm_75
• Track 6 : Hyperion_70
• Track 7 : OneinaGillian_74
• Track 8 : Kelcole_74, KillerQueen_78
• Track 9 : Tempo_76
• Track 10 : Mashley_72
• Track 11 : Fregley_76, CandC_73
• Track 12 : Altheas_75
• Track 13 : RobinRose_77, Romm_77
• Track 14 : Pepe25_73
• Track 15 : BabyDotz_68
• Track 16 : Squash_73
• Track 17 : Marcie_81
• Track 18 : Rasputia_119
• Track 19 : Hendrix_122

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 14 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Blab_68, Casend_71, Hyperion_70, Jehoshaphat_72, Mashley_72, Namago_71, Nike_71, Phabia_70, Quammi_69, Rudy_68, Squash_73, StrawberryJamm_75, Teehee_71, Wayne3_72,

Genes that have the "Most Annotated" start but do not call it:
• BabyDotz_68,

Genes that do not have the "Most Annotated" start:
• Altheas_75, BirdInFrench_75, CandC_73, Fregley_76, Hendrix_122, Kelcole_74, KillerQueen_78, Marcie_81, OneinaGillian_74, Pepe25_73, Phinky_81, Rasputia_119, RobinRose_77, Romm_77, Tempo_76, Wilca_75,

Summary by start number:

Start 3:
• Found in 7 of 31 (22.6%) of genes in pham
• Manual Annotations of this start: 1 of 29
• Called 14.3% of time when present
• Phage (with cluster) where this start called: OneinaGillian_74 (EG),

Start 4:
• Found in 5 of 31 (16.1%) of genes in pham
• No Manual Annotations of this start.
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Altheas_75 (EG),

Start 6:
• Found in 15 of 31 (48.4%) of genes in pham
• Manual Annotations of this start: 14 of 29
• Called 93.3% of time when present
• Phage (with cluster) where this start called: Blab_68 (EG), Casend_71 (EG), Hyperion_70 (EG), Jehoshaphat_72 (EG), Mashley_72 (EG), Namago_71 (EG), Nike_71 (EG), Phabia_70 (EG), Quammi_69 (EG), Rudy_68 (EG), Squash_73 (EG), StrawberryJamm_75 (EG), Teehee_71 (EG), Wayne3_72 (EG),

Start 7:
• Found in 10 of 31 (32.3%) of genes in pham
• Manual Annotations of this start: 6 of 29
• Called 70.0% of time when present
• Phage (with cluster) where this start called: CandC_73 (EG), Fregley_76 (EG), Kelcole_74 (EG), KillerQueen_78 (EG), RobinRose_77 (EG), Romm_77 (EG), Tempo_76 (EG),

Start 12:
• Found in 2 of 31 (6.5%) of genes in pham
• Manual Annotations of this start: 2 of 29
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hendrix_122 (GC), Rasputia_119 (GC),

Start 13:
• Found in 29 of 31 (93.5%) of genes in pham
• Manual Annotations of this start: 6 of 29
• Called 20.7% of time when present
• Phage (with cluster) where this start called: BabyDotz_68 (EG), BirdInFrench_75 (EG), Marcie_81 (EG), Pepe25_73 (EG), Phinky_81 (EG), Wilca_75 (EG),

Summary by clusters:

There are 2 clusters represented in this pham: EG, GC,

Info for manual annotations of cluster EG:
•Start number 3 was manually annotated 1 time for cluster EG.
•Start number 6 was manually annotated 14 times for cluster EG.
•Start number 7 was manually annotated 6 times for cluster EG.
•Start number 13 was manually annotated 6 times for cluster EG.

Info for manual annotations of cluster GC:
•Start number 12 was manually annotated 2 times for cluster GC.

Gene Information:

Gene: Altheas_75 Start: 50727, Stop: 49027, Start Num: 4
Candidate Starts for Altheas_75:
(2, 50745), (Start: 3 @50736 has 1 MA's), (4, 50727), (Start: 13 @50604 has 6 MA's), (15, 50547), (17, 50496), (18, 50466), (25, 50358), (29, 50283), (32, 50247), (39, 50154), (41, 50124), (45, 50055), (47, 49989), (48, 49965), (49, 49935), (53, 49770), (54, 49707), (55, 49686), (56, 49677), (58, 49587), (64, 49548), (66, 49530), (75, 49350), (81, 49251), (86, 49167),

Gene: BabyDotz_68 Start: 50440, Stop: 48572, Start Num: 13
Candidate Starts for BabyDotz_68:
(2, 50581), (Start: 3 @50572 has 1 MA's), (4, 50563), (5, 50545), (Start: 6 @50536 has 14 MA's), (Start: 13 @50440 has 6 MA's), (18, 50302), (19, 50290), (20, 50269), (26, 50176), (29, 50119), (30, 50101), (38, 50017), (42, 49942), (43, 49933), (52, 49618), (54, 49555), (55, 49537), (57, 49480), (64, 49396), (66, 49378), (71, 49270), (80, 49111), (91, 48934), (94, 48868), (98, 48757),

Gene: BirdInFrench_75 Start: 49965, Stop: 48313, Start Num: 13
Candidate Starts for BirdInFrench_75:
(1, 50307), (Start: 7 @50055 has 6 MA's), (8, 50016), (Start: 13 @49965 has 6 MA's), (14, 49926), (15, 49908), (16, 49866), (17, 49860), (21, 49779), (23, 49752), (25, 49722), (26, 49704), (32, 49611), (35, 49527), (36, 49518), (40, 49434), (44, 49362), (45, 49344), (47, 49278), (49, 49224), (51, 49074), (53, 49059), (55, 48975), (58, 48876), (67, 48801), (69, 48780), (70, 48753), (76, 48630), (78, 48612), (82, 48519), (83, 48489), (89, 48360),

Gene: Blab_68 Start: 49597, Stop: 48008, Start Num: 6
Candidate Starts for Blab_68:
(2, 49642), (Start: 3 @49633 has 1 MA's), (4, 49624), (5, 49606), (Start: 6 @49597 has 14 MA's), (Start: 13 @49501 has 6 MA's), (18, 49363), (19, 49351), (20, 49330), (26, 49237), (29, 49180), (30, 49162), (38, 49078), (42, 49003), (43, 48994), (52, 48679), (54, 48616), (55, 48598), (57, 48541), (64, 48457), (66, 48439), (71, 48331), (81, 48193),

Gene: CandC_73 Start: 49420, Stop: 47504, Start Num: 7
Candidate Starts for CandC_73:
(Start: 7 @49420 has 6 MA's), (Start: 13 @49330 has 6 MA's), (15, 49273), (16, 49231), (17, 49225), (22, 49135), (23, 49117), (24, 49069), (26, 48994), (30, 48919), (32, 48901), (33, 48883), (34, 48835), (39, 48733), (42, 48664), (45, 48619), (46, 48595), (47, 48553), (48, 48529), (49, 48499), (51, 48349), (53, 48334), (54, 48271), (55, 48235), (58, 48136), (59, 48115), (64, 48022), (67, 47986), (70, 47938), (74, 47836), (76, 47815), (77, 47812), (81, 47722), (89, 47551),

Gene: Casend_71 Start: 50094, Stop: 48505, Start Num: 6
Candidate Starts for Casend_71:

(5, 50103), (Start: 6 @50094 has 14 MA's), (Start: 13 @49998 has 6 MA's), (18, 49860), (19, 49848), (20, 49827), (26, 49734), (29, 49677), (30, 49659), (38, 49575), (42, 49500), (43, 49491), (52, 49176), (54, 49113), (55, 49095), (57, 49038), (64, 48954), (66, 48936), (88, 48552),

Gene: Fregley_76 Start: 49769, Stop: 47853, Start Num: 7
Candidate Starts for Fregley_76:
(Start: 7 @49769 has 6 MA's), (Start: 13 @49679 has 6 MA's), (15, 49622), (16, 49580), (17, 49574), (22, 49484), (23, 49466), (24, 49418), (26, 49343), (30, 49268), (32, 49250), (33, 49232), (34, 49184), (39, 49082), (42, 49013), (45, 48968), (46, 48944), (47, 48902), (48, 48878), (49, 48848), (51, 48698), (53, 48683), (54, 48620), (55, 48584), (58, 48485), (59, 48464), (64, 48371), (67, 48335), (70, 48287), (74, 48185), (76, 48164), (77, 48161), (81, 48071), (89, 47900),

Gene: Hendrix_122 Start: 77168, Stop: 79243, Start Num: 12
Candidate Starts for Hendrix_122:
(11, 77144), (Start: 12 @77168 has 2 MA's), (18, 77324), (24, 77450), (30, 77609), (34, 77693), (36, 77720), (41, 77915), (45, 77984), (47, 78050), (51, 78254), (53, 78269), (54, 78332), (55, 78443), (58, 78542), (60, 78581), (63, 78638), (68, 78716), (69, 78722), (70, 78749), (72, 78797), (73, 78815), (76, 78872), (78, 78890), (79, 78917), (83, 79022), (89, 79166), (90, 79190),

Gene: Hyperion_70 Start: 49788, Stop: 48196, Start Num: 6
Candidate Starts for Hyperion_70:
(5, 49797), (Start: 6 @49788 has 14 MA's), (9, 49737), (10, 49722), (Start: 13 @49689 has 6 MA's), (18, 49551), (19, 49539), (20, 49518), (26, 49425), (29, 49368), (30, 49350), (38, 49266), (43, 49182), (52, 48867), (54, 48804), (55, 48786), (57, 48729), (64, 48645), (66, 48627), (71, 48519), (81, 48381),

Gene: Jehoshaphat_72 Start: 50362, Stop: 48773, Start Num: 6
Candidate Starts for Jehoshaphat_72:
(5, 50371), (Start: 6 @50362 has 14 MA's), (Start: 13 @50266 has 6 MA's), (18, 50128), (19, 50116), (20, 50095), (26, 50002), (29, 49945), (30, 49927), (38, 49843), (42, 49768), (43, 49759), (52, 49444), (54, 49381), (55, 49363), (57, 49306), (64, 49222), (66, 49204), (88, 48820),

Gene: Kelcole_74 Start: 49992, Stop: 48076, Start Num: 7
Candidate Starts for Kelcole_74:
(Start: 7 @49992 has 6 MA's), (Start: 13 @49902 has 6 MA's), (15, 49845), (16, 49803), (17, 49797), (22, 49707), (23, 49689), (24, 49641), (26, 49566), (30, 49491), (32, 49473), (33, 49455), (34, 49407), (39, 49305), (42, 49236), (45, 49191), (46, 49167), (47, 49125), (48, 49101), (49, 49071), (51, 48921), (53, 48906), (54, 48843), (55, 48807), (58, 48708), (59, 48687), (64, 48594), (67, 48558), (70, 48510), (74, 48408), (76, 48387), (77, 48384), (89, 48123),

Gene: KillerQueen_78 Start: 50227, Stop: 48311, Start Num: 7
Candidate Starts for KillerQueen_78:
(Start: 7 @50227 has 6 MA's), (Start: 13 @50137 has 6 MA's), (15, 50080), (16, 50038), (17, 50032), (22, 49942), (23, 49924), (24, 49876), (26, 49801), (30, 49726), (32, 49708), (33, 49690), (34, 49642), (39, 49540), (42, 49471), (45, 49426), (46, 49402), (47, 49360), (48, 49336), (49, 49306), (51, 49156), (53, 49141), (54, 49078), (55, 49042), (58, 48943), (59, 48922), (64, 48829), (67, 48793), (70, 48745), (74, 48643), (76, 48622), (77, 48619), (89, 48358),

Gene: Marcie_81 Start: 50907, Stop: 48991, Start Num: 13
Candidate Starts for Marcie_81:
(Start: 3 @51054 has 1 MA's), (Start: 13 @50907 has 6 MA's), (18, 50769), (21, 50718), (25, 50661), (26, 50643), (28, 50607), (30, 50574), (31, 50565), (39, 50463), (44, 50367), (47, 50283), (49, 50229), (50, 50178), (55, 49965), (57, 49902), (62, 49797), (65, 49749), (69, 49701), (84, 49365), (87, 49299),

Gene: Mashley_72 Start: 50310, Stop: 48718, Start Num: 6
Candidate Starts for Mashley_72:
(5, 50319), (Start: 6 @50310 has 14 MA's), (9, 50259), (10, 50244), (Start: 13 @50211 has 6 MA's),
(18, 50073), (19, 50061), (20, 50040), (26, 49947), (30, 49872), (38, 49788), (42, 49713), (43, 49704),
(52, 49389), (54, 49326), (55, 49308), (64, 49167), (66, 49149), (71, 49041), (81, 48903),

Gene: Namago_71 Start: 49201, Stop: 47612, Start Num: 6
Candidate Starts for Namago_71:
(2, 49246), (Start: 3 @49237 has 1 MA's), (4, 49228), (5, 49210), (Start: 6 @49201 has 14 MA's),
(Start: 13 @49105 has 6 MA's), (18, 48967), (19, 48955), (20, 48934), (26, 48841), (29, 48784), (30,
48766), (38, 48682), (42, 48607), (43, 48598), (52, 48283), (54, 48220), (55, 48202), (57, 48145), (64,
48061), (66, 48043), (71, 47935), (81, 47797),

Gene: Nike_71 Start: 50502, Stop: 48910, Start Num: 6
Candidate Starts for Nike_71:
(5, 50511), (Start: 6 @50502 has 14 MA's), (9, 50451), (10, 50436), (Start: 13 @50403 has 6 MA's),
(18, 50265), (19, 50253), (20, 50232), (26, 50139), (29, 50082), (30, 50064), (38, 49980), (42, 49905),
(43, 49896), (52, 49581), (54, 49518), (55, 49500), (57, 49443), (64, 49359), (66, 49341), (71, 49233),
(81, 49095),

Gene: OneinaGillian_74 Start: 49692, Stop: 47611, Start Num: 3
Candidate Starts for OneinaGillian_74:
(Start: 3 @49692 has 1 MA's), (Start: 13 @49545 has 6 MA's), (18, 49407), (21, 49356), (25, 49299),
(26, 49281), (28, 49245), (30, 49212), (31, 49203), (39, 49101), (41, 49056), (47, 48921), (49, 48867),
(50, 48816), (55, 48603), (62, 48435), (65, 48387), (69, 48339), (84, 48003), (87, 47937), (95, 47754),
(96, 47724),

Gene: Pepe25_73 Start: 48884, Stop: 47232, Start Num: 13
Candidate Starts for Pepe25_73:
(1, 49226), (Start: 7 @48974 has 6 MA's), (8, 48935), (Start: 13 @48884 has 6 MA's), (14, 48845), (15,
48827), (16, 48785), (17, 48779), (21, 48698), (23, 48671), (25, 48641), (26, 48623), (32, 48530), (35,
48446), (36, 48437), (39, 48362), (40, 48353), (44, 48281), (45, 48263), (47, 48197), (49, 48143), (51,
47993), (53, 47978), (55, 47894), (58, 47795), (67, 47720), (69, 47699), (70, 47672), (76, 47549), (78,
47531), (82, 47438), (83, 47408), (89, 47279),

Gene: Phabia_70 Start: 49553, Stop: 47964, Start Num: 6
Candidate Starts for Phabia_70:
(5, 49562), (Start: 6 @49553 has 14 MA's), (Start: 13 @49457 has 6 MA's), (18, 49319), (19, 49307),
(20, 49286), (26, 49193), (29, 49136), (30, 49118), (38, 49034), (42, 48959), (43, 48950), (52, 48635),
(54, 48572), (55, 48554), (57, 48497), (64, 48413), (66, 48395), (88, 48011),

Gene: Phinky_81 Start: 52756, Stop: 50837, Start Num: 13
Candidate Starts for Phinky_81:
(Start: 13 @52756 has 6 MA's), (18, 52618), (21, 52567), (22, 52558), (23, 52540), (27, 52474), (29,
52435), (30, 52417), (31, 52408), (37, 52360), (39, 52306), (41, 52276), (47, 52141), (48, 52117), (53,
51922), (54, 51859), (55, 51838), (57, 51775), (58, 51739), (59, 51718), (69, 51568), (85, 51217), (87,
51175), (92, 51067), (93, 51022), (97, 50908),

Gene: Quammi_69 Start: 49253, Stop: 47664, Start Num: 6
Candidate Starts for Quammi_69:
(5, 49262), (Start: 6 @49253 has 14 MA's), (Start: 13 @49157 has 6 MA's), (18, 49019), (19, 49007),
(20, 48986), (26, 48893), (29, 48836), (30, 48818), (38, 48734), (42, 48659), (43, 48650), (52, 48335),
(54, 48272), (55, 48254), (57, 48197), (64, 48113), (66, 48095), (88, 47711),

Gene: Rasputia_119 Start: 74845, Stop: 76920, Start Num: 12
Candidate Starts for Rasputia_119:
(11, 74821), (Start: 12 @74845 has 2 MA's), (18, 75001), (20, 75034), (24, 75127), (34, 75370), (36, 75397), (41, 75592), (44, 75643), (51, 75931), (53, 75946), (54, 76009), (55, 76120), (58, 76219), (60, 76258), (61, 76267), (63, 76315), (68, 76393), (69, 76399), (70, 76426), (72, 76474), (73, 76492), (76, 76549), (77, 76552), (78, 76567), (79, 76594), (83, 76699), (89, 76843), (90, 76867),

Gene: RobinRose_77 Start: 50176, Stop: 48260, Start Num: 7
Candidate Starts for RobinRose_77:
(Start: 7 @50176 has 6 MA's), (Start: 13 @50086 has 6 MA's), (15, 50029), (16, 49987), (17, 49981), (22, 49891), (23, 49873), (25, 49768), (26, 49750), (29, 49693), (31, 49666), (32, 49657), (34, 49591), (39, 49489), (41, 49444), (47, 49309), (48, 49285), (49, 49255), (53, 49090), (54, 49027), (55, 48991), (58, 48892), (60, 48853), (67, 48742), (70, 48694), (76, 48571), (77, 48568), (81, 48478), (89, 48307),

Gene: Romm_77 Start: 50173, Stop: 48257, Start Num: 7
Candidate Starts for Romm_77:
(Start: 7 @50173 has 6 MA's), (Start: 13 @50083 has 6 MA's), (15, 50026), (16, 49984), (17, 49978), (22, 49888), (23, 49870), (25, 49765), (26, 49747), (29, 49690), (31, 49663), (32, 49654), (34, 49588), (39, 49486), (41, 49441), (47, 49306), (48, 49282), (49, 49252), (53, 49087), (54, 49024), (55, 48988), (58, 48889), (60, 48850), (67, 48739), (70, 48691), (76, 48568), (77, 48565), (81, 48475), (89, 48304),

Gene: Rudy_68 Start: 49289, Stop: 47700, Start Num: 6
Candidate Starts for Rudy_68:
(5, 49298), (Start: 6 @49289 has 14 MA's), (Start: 13 @49193 has 6 MA's), (18, 49055), (19, 49043), (20, 49022), (26, 48929), (29, 48872), (30, 48854), (38, 48770), (42, 48695), (43, 48686), (52, 48371), (54, 48308), (55, 48290), (57, 48233), (64, 48149), (66, 48131), (88, 47747),

Gene: Squash_73 Start: 50224, Stop: 48638, Start Num: 6
Candidate Starts for Squash_73:
(5, 50233), (Start: 6 @50224 has 14 MA's), (Start: 13 @50128 has 6 MA's), (18, 49993), (19, 49981), (20, 49960), (29, 49810), (30, 49792), (38, 49708), (42, 49633), (43, 49624), (52, 49309), (54, 49246), (55, 49228), (57, 49171), (64, 49087), (66, 49069), (71, 48961), (81, 48823),

Gene: StrawberryJamm_75 Start: 49393, Stop: 47804, Start Num: 6
Candidate Starts for StrawberryJamm_75:
(2, 49438), (Start: 3 @49429 has 1 MA's), (4, 49420), (5, 49402), (Start: 6 @49393 has 14 MA's), (Start: 13 @49297 has 6 MA's), (18, 49159), (19, 49147), (20, 49126), (26, 49033), (29, 48976), (30, 48958), (38, 48874), (42, 48799), (43, 48790), (52, 48475), (54, 48412), (55, 48394), (57, 48337), (64, 48253), (66, 48235), (71, 48127), (81, 47989),

Gene: Teehee_71 Start: 50359, Stop: 48770, Start Num: 6
Candidate Starts for Teehee_71:
(5, 50368), (Start: 6 @50359 has 14 MA's), (Start: 13 @50263 has 6 MA's), (18, 50125), (19, 50113), (20, 50092), (26, 49999), (29, 49942), (30, 49924), (38, 49840), (42, 49765), (43, 49756), (52, 49441), (54, 49378), (55, 49360), (57, 49303), (64, 49219), (66, 49201), (88, 48817),

Gene: Tempo_76 Start: 50116, Stop: 48200, Start Num: 7
Candidate Starts for Tempo_76:
(Start: 7 @50116 has 6 MA's), (Start: 13 @50026 has 6 MA's), (15, 49969), (16, 49927), (17, 49921), (22, 49831), (23, 49813), (24, 49765), (26, 49690), (30, 49615), (32, 49597), (33, 49579), (34, 49531), (39, 49429), (42, 49360), (45, 49315), (46, 49291), (47, 49249), (48, 49225), (49, 49195), (53, 49030), (54, 48967), (55, 48931), (58, 48832), (59, 48811), (64, 48718), (67, 48682), (70, 48634), (74, 48532),

(76, 48511), (77, 48508), (89, 48247),

Gene: Wayne3_72 Start: 50122, Stop: 48533, Start Num: 6
Candidate Starts for Wayne3_72:
(5, 50131), (Start: 6 @50122 has 14 MA's), (Start: 13 @50026 has 6 MA's), (18, 49888), (19, 49876), (20, 49855), (26, 49762), (29, 49705), (30, 49687), (38, 49603), (42, 49528), (43, 49519), (52, 49204), (54, 49141), (55, 49123), (57, 49066), (64, 48982), (66, 48964), (88, 48580),

Gene: Wilca_75 Start: 49965, Stop: 48313, Start Num: 13
Candidate Starts for Wilca_75:
(1, 50307), (Start: 7 @50055 has 6 MA's), (8, 50016), (Start: 13 @49965 has 6 MA's), (14, 49926), (15, 49908), (16, 49866), (17, 49860), (21, 49779), (23, 49752), (25, 49722), (26, 49704), (32, 49611), (35, 49527), (36, 49518), (40, 49434), (44, 49362), (45, 49344), (47, 49278), (49, 49224), (51, 49074), (53, 49059), (55, 48975), (58, 48876), (67, 48801), (69, 48780), (70, 48753), (76, 48630), (78, 48612), (82, 48519), (83, 48489), (89, 48360),