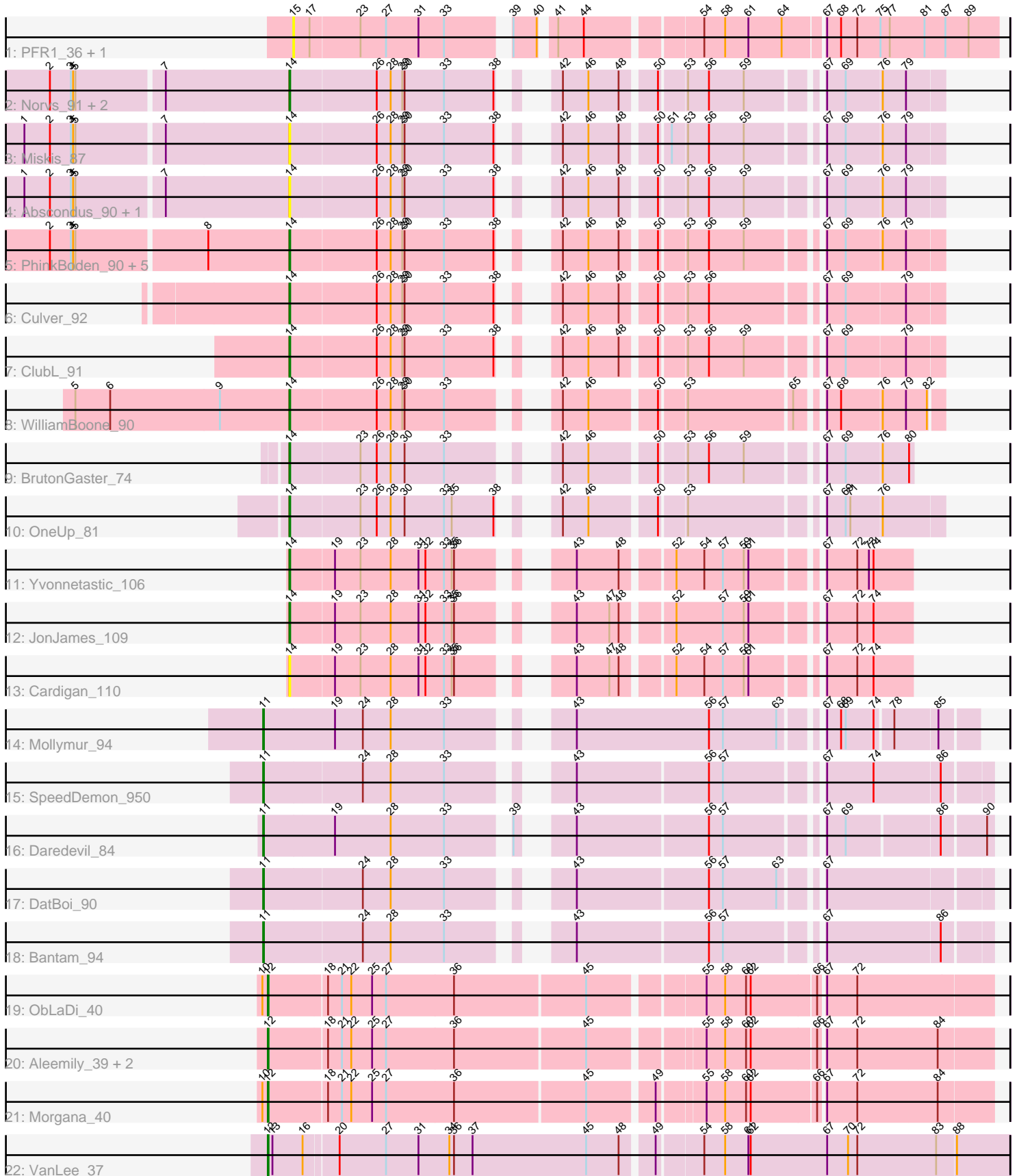


Pham 163805



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 163805 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163805 has 33 members, 7 are drafts.

Phages represented in each track:

- Track 1 : PFR1_36, PFR2_38
- Track 2 : Norvs_91, Aphelion_90, Toniann_91
- Track 3 : Miskis_87
- Track 4 : Abscondus_90, Dusty_87
- Track 5 : PhinkBoden_90, Engineer_92, Smoothie_92, Lozinak_91, Cucurbita_92, Bachita_93
- Track 6 : Culver_92
- Track 7 : ClubL_91
- Track 8 : WilliamBoone_90
- Track 9 : BrutonGaster_74
- Track 10 : OneUp_81
- Track 11 : Yvonnetastic_106
- Track 12 : JonJames_109
- Track 13 : Cardigan_110
- Track 14 : Mollymur_94
- Track 15 : SpeedDemon_950
- Track 16 : Daredevil_84
- Track 17 : DatBoi_90
- Track 18 : Bantam_94
- Track 19 : ObLaDi_40
- Track 20 : Aleemily_39, Cafasso_40, ModicumRichard_40
- Track 21 : Morgana_40
- Track 22 : VanLee_37

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

The start number called the most often in the published annotations is 14, it was called in 16 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus_90, Aphelion_90, Bachita_93, BrutonGaster_74, Cardigan_110, ClubL_91, Cucurbita_92, Culver_92, Dusty_87, Engineer_92, JonJames_109, Lozinak_91, Miskis_87, Norvs_91, OneUp_81, PhinkBoden_90, Smoothie_92, Toniann_91, WilliamBoone_90, Yvonnetastic_106,

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

-

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

- Aleemily_39, Bantam_94, Cafasso_40, Daredevil_84, DatBoi_90, ModicumRichard_40, Mollymur_94, Morgana_40, ObLaDi_40, PFR1_36, PFR2_38, SpeedDemon_950, VanLee_37,

Summary by start number:

Start 11:

- Found in 5 of 33 (15.2%) of genes in pham
- Manual Annotations of this start: 5 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam_94 (DL), Daredevil_84 (DL), DatBoi_90 (DL), Mollymur_94 (DL), SpeedDemon_950 (DL),

Start 12:

- Found in 6 of 33 (18.2%) of genes in pham
- Manual Annotations of this start: 5 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aleemily_39 (DZ), Cafasso_40 (DZ), ModicumRichard_40 (DZ), Morgana_40 (DZ), ObLaDi_40 (DZ), VanLee_37 (singleton),

Start 14:

- Found in 20 of 33 (60.6%) of genes in pham
- Manual Annotations of this start: 16 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus_90 (CQ), Aphelion_90 (CQ1), Bachita_93 (CQ1), BrutonGaster_74 (CQ2), Cardigan_110 (DD), ClubL_91 (CQ1), Cucurbita_92 (CQ1), Culver_92 (CQ1), Dusty_87 (CQ), Engineer_92 (CQ1), JonJames_109 (DD), Lozinak_91 (CQ1), Miskis_87 (CQ), Norvs_91 (CQ), OneUp_81 (CQ2), PhinkBoden_90 (CQ1), Smoothie_92 (CQ1), Toniann_91 (CQ1), WilliamBoone_90 (CQ1), Yvonnetastic_106 (DD),

Start 15:

- Found in 2 of 33 (6.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PFR1_36 (BX), PFR2_38 (BX),

Summary by clusters:

There are 8 clusters represented in this pham: DL, DD, singleton, DZ, CQ2, CQ1, BX, CQ,

Info for manual annotations of cluster CQ:

- Start number 14 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- Start number 14 was manually annotated 11 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 14 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 14 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 11 was manually annotated 5 times for cluster DL.

Info for manual annotations of cluster DZ:

- Start number 12 was manually annotated 4 times for cluster DZ.

Gene Information:

Gene: Abscondus_90 Start: 55792, Stop: 56517, Start Num: 14

Candidate Starts for Abscondus_90:

(1, 55459), (2, 55492), (3, 55519), (4, 55522), (5, 55525), (7, 55633), (Start: 14 @55792 has 16 MA's), (26, 55900), (28, 55918), (29, 55933), (30, 55936), (33, 55987), (38, 56050), (42, 56077), (46, 56110), (48, 56149), (50, 56188), (53, 56218), (56, 56245), (59, 56290), (67, 56371), (69, 56395), (76, 56440), (79, 56470),

Gene: Aleemily_39 Start: 32837, Stop: 33721, Start Num: 12

Candidate Starts for Aleemily_39:

(Start: 12 @32837 has 5 MA's), (18, 32909), (21, 32927), (22, 32939), (25, 32966), (27, 32984), (36, 33071), (45, 33236), (55, 33368), (58, 33392), (60, 33419), (62, 33425), (66, 33506), (67, 33512), (72, 33551), (84, 33653),

Gene: Aphelion_90 Start: 56388, Stop: 57113, Start Num: 14

Candidate Starts for Aphelion_90:

(2, 56088), (3, 56115), (4, 56118), (5, 56121), (7, 56229), (Start: 14 @56388 has 16 MA's), (26, 56496), (28, 56514), (29, 56529), (30, 56532), (33, 56583), (38, 56646), (42, 56673), (46, 56706), (48, 56745), (50, 56784), (53, 56814), (56, 56841), (59, 56886), (67, 56967), (69, 56991), (76, 57036), (79, 57066),

Gene: Bachita_93 Start: 56837, Stop: 57562, Start Num: 14

Candidate Starts for Bachita_93:

(2, 56537), (3, 56564), (4, 56567), (5, 56570), (8, 56732), (Start: 14 @56837 has 16 MA's), (26, 56945), (28, 56963), (29, 56978), (30, 56981), (33, 57032), (38, 57095), (42, 57122), (46, 57155), (48, 57194), (50, 57233), (53, 57263), (56, 57290), (59, 57335), (67, 57416), (69, 57440), (76, 57485), (79, 57515),

Gene: Bantam_94 Start: 63033, Stop: 62203, Start Num: 11

Candidate Starts for Bantam_94:

(Start: 11 @63033 has 5 MA's), (24, 62910), (28, 62874), (33, 62805), (43, 62697), (56, 62532), (57, 62514), (67, 62406), (86, 62262),

Gene: BrutonGaster_74 Start: 51893, Stop: 52576, Start Num: 14

Candidate Starts for BrutonGaster_74:

(Start: 14 @51893 has 16 MA's), (23, 51980), (26, 52001), (28, 52019), (30, 52037), (33, 52088), (42, 52178), (46, 52211), (50, 52289), (53, 52319), (56, 52346), (59, 52391), (67, 52472), (69, 52496), (76, 52541), (80, 52571),

Gene: Cafasso_40 Start: 33411, Stop: 34295, Start Num: 12

Candidate Starts for Cafasso_40:

(Start: 12 @33411 has 5 MA's), (18, 33483), (21, 33501), (22, 33513), (25, 33540), (27, 33558), (36, 33645), (45, 33810), (55, 33942), (58, 33966), (60, 33993), (62, 33999), (66, 34080), (67, 34086), (72, 34125), (84, 34227),

Gene: Cardigan_110 Start: 63451, Stop: 64143, Start Num: 14

Candidate Starts for Cardigan_110:

(Start: 14 @63451 has 16 MA's), (19, 63505), (23, 63538), (28, 63577), (31, 63613), (32, 63622), (33, 63646), (35, 63655), (36, 63658), (43, 63754), (47, 63796), (48, 63808), (52, 63865), (54, 63901), (57, 63925), (59, 63952), (61, 63958), (67, 64033), (72, 64072), (74, 64093),

Gene: ClubL_91 Start: 55523, Stop: 56248, Start Num: 14

Candidate Starts for ClubL_91:

(Start: 14 @55523 has 16 MA's), (26, 55631), (28, 55649), (29, 55664), (30, 55667), (33, 55718), (38, 55781), (42, 55808), (46, 55841), (48, 55880), (50, 55919), (53, 55949), (56, 55976), (59, 56021), (67, 56102), (69, 56126), (79, 56201),

Gene: Cucurbita_92 Start: 57344, Stop: 58069, Start Num: 14

Candidate Starts for Cucurbita_92:

(2, 57044), (3, 57071), (4, 57074), (5, 57077), (8, 57239), (Start: 14 @57344 has 16 MA's), (26, 57452), (28, 57470), (29, 57485), (30, 57488), (33, 57539), (38, 57602), (42, 57629), (46, 57662), (48, 57701), (50, 57740), (53, 57770), (56, 57797), (59, 57842), (67, 57923), (69, 57947), (76, 57992), (79, 58022),

Gene: Culver_92 Start: 55420, Stop: 56145, Start Num: 14

Candidate Starts for Culver_92:

(Start: 14 @55420 has 16 MA's), (26, 55528), (28, 55546), (29, 55561), (30, 55564), (33, 55615), (38, 55678), (42, 55705), (46, 55738), (48, 55777), (50, 55816), (53, 55846), (56, 55873), (67, 55999), (69, 56023), (79, 56098),

Gene: Daredevil_84 Start: 58699, Stop: 57869, Start Num: 11

Candidate Starts for Daredevil_84:

(Start: 11 @58699 has 5 MA's), (19, 58609), (28, 58537), (33, 58468), (39, 58402), (43, 58360), (56, 58195), (57, 58177), (67, 58069), (69, 58045), (86, 57931), (90, 57877),

Gene: DatBoi_90 Start: 62181, Stop: 61351, Start Num: 11

Candidate Starts for DatBoi_90:

(Start: 11 @62181 has 5 MA's), (24, 62058), (28, 62022), (33, 61953), (43, 61845), (56, 61680), (57, 61662), (63, 61593), (67, 61554),

Gene: Dusty_87 Start: 55039, Stop: 55764, Start Num: 14

Candidate Starts for Dusty_87:

(1, 54706), (2, 54739), (3, 54766), (4, 54769), (5, 54772), (7, 54880), (Start: 14 @55039 has 16 MA's), (26, 55147), (28, 55165), (29, 55180), (30, 55183), (33, 55234), (38, 55297), (42, 55324), (46, 55357), (48, 55396), (50, 55435), (53, 55465), (56, 55492), (59, 55537), (67, 55618), (69, 55642), (76, 55687), (79, 55717),

Gene: Engineer_92 Start: 56810, Stop: 57535, Start Num: 14

Candidate Starts for Engineer_92:

(2, 56510), (3, 56537), (4, 56540), (5, 56543), (8, 56705), (Start: 14 @56810 has 16 MA's), (26, 56918), (28, 56936), (29, 56951), (30, 56954), (33, 57005), (38, 57068), (42, 57095), (46, 57128), (48, 57167), (50, 57206), (53, 57236), (56, 57263), (59, 57308), (67, 57389), (69, 57413), (76, 57458), (79, 57488),

Gene: JonJames_109 Start: 63983, Stop: 64675, Start Num: 14

Candidate Starts for JonJames_109:

(Start: 14 @63983 has 16 MA's), (19, 64037), (23, 64070), (28, 64109), (31, 64145), (32, 64154), (33, 64178), (35, 64187), (36, 64190), (43, 64286), (47, 64328), (48, 64340), (52, 64397), (57, 64457), (59, 64484), (61, 64490), (67, 64565), (72, 64604), (74, 64625),

Gene: Lozinak_91 Start: 56648, Stop: 57373, Start Num: 14

Candidate Starts for Lozinak_91:

(2, 56348), (3, 56375), (4, 56378), (5, 56381), (8, 56543), (Start: 14 @56648 has 16 MA's), (26, 56756), (28, 56774), (29, 56789), (30, 56792), (33, 56843), (38, 56906), (42, 56933), (46, 56966), (48, 57005), (50, 57044), (53, 57074), (56, 57101), (59, 57146), (67, 57227), (69, 57251), (76, 57296), (79, 57326),

Gene: Miskis_87 Start: 54557, Stop: 55282, Start Num: 14

Candidate Starts for Miskis_87:

(1, 54224), (2, 54257), (3, 54284), (4, 54287), (5, 54290), (7, 54398), (Start: 14 @54557 has 16 MA's), (26, 54665), (28, 54683), (29, 54698), (30, 54701), (33, 54752), (38, 54815), (42, 54842), (46, 54875), (48, 54914), (50, 54953), (51, 54965), (53, 54983), (56, 55010), (59, 55055), (67, 55136), (69, 55160), (76, 55205), (79, 55235),

Gene: ModicumRichard_40 Start: 33410, Stop: 34294, Start Num: 12

Candidate Starts for ModicumRichard_40:

(Start: 12 @33410 has 5 MA's), (18, 33482), (21, 33500), (22, 33512), (25, 33539), (27, 33557), (36, 33644), (45, 33809), (55, 33941), (58, 33965), (60, 33992), (62, 33998), (66, 34079), (67, 34085), (72, 34124), (84, 34226),

Gene: Mollymur_94 Start: 63842, Stop: 63024, Start Num: 11

Candidate Starts for Mollymur_94:

(Start: 11 @63842 has 5 MA's), (19, 63752), (24, 63716), (28, 63680), (33, 63611), (43, 63503), (56, 63332), (57, 63314), (63, 63245), (67, 63206), (68, 63188), (69, 63182), (74, 63146), (78, 63125), (85, 63071),

Gene: Morgana_40 Start: 33361, Stop: 34245, Start Num: 12

Candidate Starts for Morgana_40:

(10, 33355), (Start: 12 @33361 has 5 MA's), (18, 33433), (21, 33451), (22, 33463), (25, 33490), (27, 33508), (36, 33595), (45, 33760), (49, 33838), (55, 33892), (58, 33916), (60, 33943), (62, 33949), (66, 34030), (67, 34036), (72, 34075), (84, 34177),

Gene: Norvs_91 Start: 56033, Stop: 56758, Start Num: 14

Candidate Starts for Norvs_91:

(2, 55733), (3, 55760), (4, 55763), (5, 55766), (7, 55874), (Start: 14 @56033 has 16 MA's), (26, 56141), (28, 56159), (29, 56174), (30, 56177), (33, 56228), (38, 56291), (42, 56318), (46, 56351), (48, 56390), (50, 56429), (53, 56459), (56, 56486), (59, 56531), (67, 56612), (69, 56636), (76, 56681), (79, 56711),

Gene: ObLaDi_40 Start: 33395, Stop: 34282, Start Num: 12

Candidate Starts for ObLaDi_40:

(10, 33389), (Start: 12 @33395 has 5 MA's), (18, 33467), (21, 33485), (22, 33497), (25, 33524), (27, 33542), (36, 33629), (45, 33794), (55, 33929), (58, 33953), (60, 33980), (62, 33986), (66, 34067), (67, 34073), (72, 34112),

Gene: OneUp_81 Start: 54043, Stop: 54768, Start Num: 14

Candidate Starts for OneUp_81:

(Start: 14 @54043 has 16 MA's), (23, 54130), (26, 54151), (28, 54169), (30, 54187), (33, 54238), (35, 54247), (38, 54301), (42, 54328), (46, 54361), (50, 54439), (53, 54469), (67, 54622), (69, 54646), (71, 54652), (76, 54691),

Gene: PFR1_36 Start: 27536, Stop: 28372, Start Num: 15

Candidate Starts for PFR1_36:

(15, 27536), (17, 27557), (23, 27620), (27, 27653), (31, 27695), (33, 27728), (39, 27794), (40, 27824), (41, 27836), (44, 27869), (54, 28004), (58, 28031), (61, 28061), (64, 28103), (67, 28151), (68, 28169), (72, 28190), (75, 28220), (77, 28232), (81, 28277), (87, 28304), (89, 28334),

Gene: PFR2_38 Start: 29105, Stop: 29941, Start Num: 15

Candidate Starts for PFR2_38:

(15, 29105), (17, 29126), (23, 29189), (27, 29222), (31, 29264), (33, 29297), (39, 29363), (40, 29393), (41, 29405), (44, 29438), (54, 29573), (58, 29600), (61, 29630), (64, 29672), (67, 29720), (68, 29738), (72, 29759), (75, 29789), (77, 29801), (81, 29846), (87, 29873), (89, 29903),

Gene: PhinkBoden_90 Start: 56438, Stop: 57163, Start Num: 14

Candidate Starts for PhinkBoden_90:

(2, 56138), (3, 56165), (4, 56168), (5, 56171), (8, 56333), (Start: 14 @56438 has 16 MA's), (26, 56546), (28, 56564), (29, 56579), (30, 56582), (33, 56633), (38, 56696), (42, 56723), (46, 56756), (48, 56795), (50, 56834), (53, 56864), (56, 56891), (59, 56936), (67, 57017), (69, 57041), (76, 57086), (79, 57116),

Gene: Smoothie_92 Start: 56648, Stop: 57373, Start Num: 14

Candidate Starts for Smoothie_92:

(2, 56348), (3, 56375), (4, 56378), (5, 56381), (8, 56543), (Start: 14 @56648 has 16 MA's), (26, 56756), (28, 56774), (29, 56789), (30, 56792), (33, 56843), (38, 56906), (42, 56933), (46, 56966), (48, 57005), (50, 57044), (53, 57074), (56, 57101), (59, 57146), (67, 57227), (69, 57251), (76, 57296), (79, 57326),

Gene: SpeedDemon_950 Start: 64954, Stop: 64124, Start Num: 11

Candidate Starts for SpeedDemon_950:

(Start: 11 @64954 has 5 MA's), (24, 64831), (28, 64795), (33, 64726), (43, 64618), (56, 64453), (57, 64435), (67, 64327), (74, 64267), (86, 64183),

Gene: Toniann_91 Start: 55976, Stop: 56701, Start Num: 14

Candidate Starts for Toniann_91:

(2, 55676), (3, 55703), (4, 55706), (5, 55709), (7, 55817), (Start: 14 @55976 has 16 MA's), (26, 56084), (28, 56102), (29, 56117), (30, 56120), (33, 56171), (38, 56234), (42, 56261), (46, 56294), (48, 56333), (50, 56372), (53, 56402), (56, 56429), (59, 56474), (67, 56555), (69, 56579), (76, 56624), (79, 56654),

Gene: VanLee_37 Start: 30355, Stop: 31278, Start Num: 12

Candidate Starts for VanLee_37:

(Start: 12 @30355 has 5 MA's), (13, 30361), (16, 30400), (20, 30439), (27, 30499), (31, 30541), (34, 30580), (36, 30586), (37, 30610), (45, 30757), (48, 30799), (49, 30835), (54, 30889), (58, 30916), (61, 30946), (62, 30949), (67, 31048), (70, 31075), (72, 31087), (83, 31186), (88, 31210),

Gene: WilliamBoone_90 Start: 54745, Stop: 55467, Start Num: 14

Candidate Starts for WilliamBoone_90:

(5, 54469), (6, 54514), (9, 54655), (Start: 14 @54745 has 16 MA's), (26, 54853), (28, 54871), (29, 54886), (30, 54889), (33, 54940), (42, 55030), (46, 55063), (50, 55141), (53, 55171), (65, 55300), (67, 55324), (68, 55342), (76, 55393), (79, 55423), (82, 55450),

Gene: Yvonnetastic_106 Start: 61147, Stop: 61839, Start Num: 14

Candidate Starts for Yvonnetastic_106:

(Start: 14 @61147 has 16 MA's), (19, 61201), (23, 61234), (28, 61273), (31, 61309), (32, 61318), (33, 61342), (35, 61351), (36, 61354), (43, 61450), (48, 61504), (52, 61561), (54, 61597), (57, 61621), (59, 61648), (61, 61654), (67, 61729), (72, 61768), (73, 61783), (74, 61789),