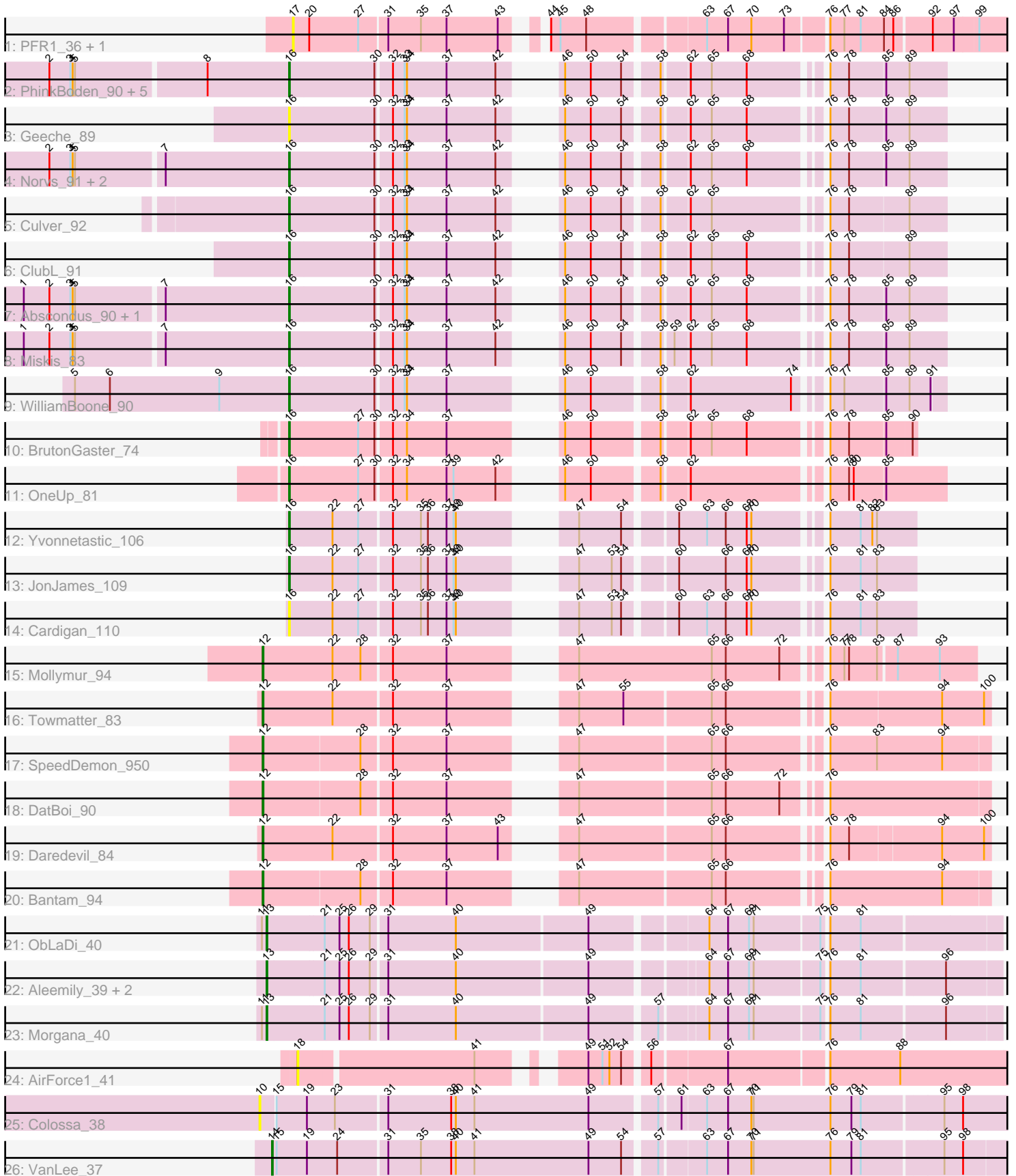


Pham 296745



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 296745 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296745 has 37 members, 6 are drafts.

Phages represented in each track:

- Track 1 : PFR1_36, PFR2_38
- Track 2 : PhinkBoden_90, Engineer_92, Smoothie_92, Cucurbita_92, Lozinak_91, Bachita_93
- Track 3 : Geeche_89
- Track 4 : Norvs_91, Aphelion_90, Toniann_91
- Track 5 : Culver_92
- Track 6 : ClubL_91
- Track 7 : Abscondus_90, Dusty_88
- Track 8 : Miskis_83
- Track 9 : WilliamBoone_90
- Track 10 : BrutonGaster_74
- Track 11 : OneUp_81
- Track 12 : Yvonnetastic_106
- Track 13 : JonJames_109
- Track 14 : Cardigan_110
- Track 15 : Mollymur_94
- Track 16 : Towmatter_83
- Track 17 : SpeedDemon_950
- Track 18 : DatBoi_90
- Track 19 : Daredevil_84
- Track 20 : Bantam_94
- Track 21 : ObLaDi_40
- Track 22 : Aleemily_39, Cafasso_40, ModicumRichard_40
- Track 23 : Morgana_40
- Track 24 : AirForce1_41
- Track 25 : Colossa_38
- Track 26 : 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 16, it was called in 19 of the 31 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_88, Engineer_92, Geeche_89, JonJames_109, Lozinak_91, Miskis_83, 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:

- AirForce1_41, Aleemily_39, Bantam_94, Cafasso_40, Colossa_38, Daredevil_84, DatBoi_90, ModicumRichard_40, Mollymur_94, Morgana_40, ObLaDi_40, PFR1_36, PFR2_38, SpeedDemon_950, Towmatter_83, VanLee_37,

Summary by start number:

Start 10:

- Found in 1 of 37 (2.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colossa_38 (KA),

Start 12:

- Found in 6 of 37 (16.2%) of genes in pham
- Manual Annotations of this start: 6 of 31
- 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), Towmatter_83 (DL),

Start 13:

- Found in 5 of 37 (13.5%) of genes in pham
- Manual Annotations of this start: 5 of 31
- 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),

Start 14:

- Found in 1 of 37 (2.7%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: VanLee_37 (KA),

Start 16:

- Found in 21 of 37 (56.8%) of genes in pham
- Manual Annotations of this start: 19 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus_90 (CQ1), Aphelion_90 (CQ1), Bachita_93 (CQ1), BrutonGaster_74 (CQ2), Cardigan_110 (DD), ClubL_91 (CQ1), Cucurbita_92 (CQ1), Culver_92 (CQ1), Dusty_88 (CQ1), Engineer_92 (CQ1), Geeche_89 (CQ1), JonJames_109 (DD), Lozinak_91 (CQ1), Miskis_83 (CQ1), Norvs_91 (CQ1), OneUp_81 (CQ2), PhinkBoden_90 (CQ1), Smoothie_92 (CQ1), Toniann_91 (CQ1), WilliamBoone_90 (CQ1), Yvonnetastic_106 (DD),

Start 17:

- Found in 2 of 37 (5.4%) 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),

Start 18:

- Found in 1 of 37 (2.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AirForce1_41 (FL),

Summary by clusters:

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

Info for manual annotations of cluster CQ1:

- Start number 16 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 16 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 16 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 12 was manually annotated 6 times for cluster DL.

Info for manual annotations of cluster DZ:

- Start number 13 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster KA:

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

Gene Information:

Gene: Abscondus_90 Start: 55792, Stop: 56517, Start Num: 16

Candidate Starts for Abscondus_90:

(1, 55459), (2, 55492), (3, 55519), (4, 55522), (5, 55525), (7, 55633), (Start: 16 @55792 has 19 MA's), (30, 55900), (32, 55918), (33, 55933), (34, 55936), (37, 55987), (42, 56050), (46, 56077), (50, 56110), (54, 56149), (58, 56188), (62, 56218), (65, 56245), (68, 56290), (76, 56371), (78, 56395), (85, 56440), (89, 56470),

Gene: AirForce1_41 Start: 31193, Stop: 32080, Start Num: 18

Candidate Starts for AirForce1_41:

(18, 31193), (41, 31409), (49, 31502), (51, 31520), (52, 31529), (54, 31544), (56, 31571), (67, 31661), (76, 31781), (88, 31871),

Gene: Aleemily_39 Start: 32837, Stop: 33721, Start Num: 13

Candidate Starts for Aleemily_39:

(Start: 13 @32837 has 5 MA's), (21, 32909), (25, 32927), (26, 32939), (29, 32966), (31, 32984), (40, 33071), (49, 33236), (64, 33368), (67, 33392), (69, 33419), (71, 33425), (75, 33506), (76, 33512), (81, 33551), (96, 33653),

Gene: Aphelion_90 Start: 56388, Stop: 57113, Start Num: 16

Candidate Starts for Aphelion_90:

(2, 56088), (3, 56115), (4, 56118), (5, 56121), (7, 56229), (Start: 16 @56388 has 19 MA's), (30, 56496), (32, 56514), (33, 56529), (34, 56532), (37, 56583), (42, 56646), (46, 56673), (50, 56706), (54, 56745), (58, 56784), (62, 56814), (65, 56841), (68, 56886), (76, 56967), (78, 56991), (85, 57036), (89, 57066),

Gene: Bachita_93 Start: 56837, Stop: 57562, Start Num: 16

Candidate Starts for Bachita_93:

(2, 56537), (3, 56564), (4, 56567), (5, 56570), (8, 56732), (Start: 16 @56837 has 19 MA's), (30, 56945), (32, 56963), (33, 56978), (34, 56981), (37, 57032), (42, 57095), (46, 57122), (50, 57155), (54, 57194), (58, 57233), (62, 57263), (65, 57290), (68, 57335), (76, 57416), (78, 57440), (85, 57485), (89, 57515),

Gene: Bantam_94 Start: 63033, Stop: 62203, Start Num: 12

Candidate Starts for Bantam_94:

(Start: 12 @63033 has 6 MA's), (28, 62910), (32, 62874), (37, 62805), (47, 62697), (65, 62532), (66, 62514), (76, 62406), (94, 62262),

Gene: BrutonGaster_74 Start: 51893, Stop: 52576, Start Num: 16

Candidate Starts for BrutonGaster_74:

(Start: 16 @51893 has 19 MA's), (27, 51980), (30, 52001), (32, 52019), (34, 52037), (37, 52088), (46, 52178), (50, 52211), (58, 52289), (62, 52319), (65, 52346), (68, 52391), (76, 52472), (78, 52496), (85, 52541), (90, 52571),

Gene: Cafasso_40 Start: 33411, Stop: 34295, Start Num: 13

Candidate Starts for Cafasso_40:

(Start: 13 @33411 has 5 MA's), (21, 33483), (25, 33501), (26, 33513), (29, 33540), (31, 33558), (40, 33645), (49, 33810), (64, 33942), (67, 33966), (69, 33993), (71, 33999), (75, 34080), (76, 34086), (81, 34125), (96, 34227),

Gene: Cardigan_110 Start: 63451, Stop: 64143, Start Num: 16

Candidate Starts for Cardigan_110:

(Start: 16 @63451 has 19 MA's), (22, 63505), (27, 63538), (32, 63577), (35, 63613), (36, 63622), (37, 63646), (39, 63655), (40, 63658), (47, 63754), (53, 63796), (54, 63808), (60, 63865), (63, 63901), (66, 63925), (68, 63952), (70, 63958), (76, 64033), (81, 64072), (83, 64093),

Gene: ClubL_91 Start: 55523, Stop: 56248, Start Num: 16

Candidate Starts for ClubL_91:

(Start: 16 @55523 has 19 MA's), (30, 55631), (32, 55649), (33, 55664), (34, 55667), (37, 55718), (42, 55781), (46, 55808), (50, 55841), (54, 55880), (58, 55919), (62, 55949), (65, 55976), (68, 56021), (76, 56102), (78, 56126), (89, 56201),

Gene: Colossa_38 Start: 30320, Stop: 31258, Start Num: 10

Candidate Starts for Colossa_38:

(10, 30320), (15, 30338), (19, 30377), (23, 30413), (31, 30476), (38, 30557), (40, 30563), (41, 30587), (49, 30734), (57, 30812), (61, 30836), (63, 30866), (67, 30893), (70, 30923), (71, 30926), (76, 31025), (79, 31052), (81, 31064), (95, 31163), (98, 31187),

Gene: Cucurbita_92 Start: 57344, Stop: 58069, Start Num: 16

Candidate Starts for Cucurbita_92:

(2, 57044), (3, 57071), (4, 57074), (5, 57077), (8, 57239), (Start: 16 @57344 has 19 MA's), (30, 57452), (32, 57470), (33, 57485), (34, 57488), (37, 57539), (42, 57602), (46, 57629), (50, 57662), (54, 57701), (58, 57740), (62, 57770), (65, 57797), (68, 57842), (76, 57923), (78, 57947), (85, 57992), (89, 58022),

Gene: Culver_92 Start: 55420, Stop: 56145, Start Num: 16

Candidate Starts for Culver_92:

(Start: 16 @55420 has 19 MA's), (30, 55528), (32, 55546), (33, 55561), (34, 55564), (37, 55615), (42, 55678), (46, 55705), (50, 55738), (54, 55777), (58, 55816), (62, 55846), (65, 55873), (76, 55999), (78, 56023), (89, 56098),

Gene: Daredevil_84 Start: 58699, Stop: 57869, Start Num: 12

Candidate Starts for Daredevil_84:

(Start: 12 @58699 has 6 MA's), (22, 58609), (32, 58537), (37, 58468), (43, 58402), (47, 58360), (65, 58195), (66, 58177), (76, 58069), (78, 58045), (94, 57931), (100, 57877),

Gene: DatBoi_90 Start: 62181, Stop: 61351, Start Num: 12

Candidate Starts for DatBoi_90:

(Start: 12 @62181 has 6 MA's), (28, 62058), (32, 62022), (37, 61953), (47, 61845), (65, 61680), (66, 61662), (72, 61593), (76, 61554),

Gene: Dusty_88 Start: 55039, Stop: 55764, Start Num: 16

Candidate Starts for Dusty_88:

(1, 54706), (2, 54739), (3, 54766), (4, 54769), (5, 54772), (7, 54880), (Start: 16 @55039 has 19 MA's), (30, 55147), (32, 55165), (33, 55180), (34, 55183), (37, 55234), (42, 55297), (46, 55324), (50, 55357), (54, 55396), (58, 55435), (62, 55465), (65, 55492), (68, 55537), (76, 55618), (78, 55642), (85, 55687), (89, 55717),

Gene: Engineer_92 Start: 56810, Stop: 57535, Start Num: 16

Candidate Starts for Engineer_92:

(2, 56510), (3, 56537), (4, 56540), (5, 56543), (8, 56705), (Start: 16 @56810 has 19 MA's), (30, 56918), (32, 56936), (33, 56951), (34, 56954), (37, 57005), (42, 57068), (46, 57095), (50, 57128), (54, 57167), (58, 57206), (62, 57236), (65, 57263), (68, 57308), (76, 57389), (78, 57413), (85, 57458), (89, 57488),

Gene: Geeche_89 Start: 55875, Stop: 56600, Start Num: 16

Candidate Starts for Geeche_89:

(Start: 16 @55875 has 19 MA's), (30, 55983), (32, 56001), (33, 56016), (34, 56019), (37, 56070), (42, 56133), (46, 56160), (50, 56193), (54, 56232), (58, 56271), (62, 56301), (65, 56328), (68, 56373), (76, 56454), (78, 56478), (85, 56523), (89, 56553),

Gene: JonJames_109 Start: 63983, Stop: 64675, Start Num: 16

Candidate Starts for JonJames_109:

(Start: 16 @63983 has 19 MA's), (22, 64037), (27, 64070), (32, 64109), (35, 64145), (36, 64154), (37, 64178), (39, 64187), (40, 64190), (47, 64286), (53, 64328), (54, 64340), (60, 64397), (66, 64457), (68, 64484), (70, 64490), (76, 64565), (81, 64604), (83, 64625),

Gene: Lozinak_91 Start: 56648, Stop: 57373, Start Num: 16

Candidate Starts for Lozinak_91:

(2, 56348), (3, 56375), (4, 56378), (5, 56381), (8, 56543), (Start: 16 @56648 has 19 MA's), (30, 56756), (32, 56774), (33, 56789), (34, 56792), (37, 56843), (42, 56906), (46, 56933), (50, 56966), (54, 57005), (58, 57044), (62, 57074), (65, 57101), (68, 57146), (76, 57227), (78, 57251), (85, 57296), (89, 57326),

Gene: Miskis_83 Start: 54557, Stop: 55282, Start Num: 16

Candidate Starts for Miskis_83:

(1, 54224), (2, 54257), (3, 54284), (4, 54287), (5, 54290), (7, 54398), (Start: 16 @54557 has 19 MA's), (30, 54665), (32, 54683), (33, 54698), (34, 54701), (37, 54752), (42, 54815), (46, 54842), (50, 54875), (54, 54914), (58, 54953), (59, 54965), (62, 54983), (65, 55010), (68, 55055), (76, 55136), (78, 55160), (85, 55205), (89, 55235),

Gene: ModicumRichard_40 Start: 33410, Stop: 34294, Start Num: 13

Candidate Starts for ModicumRichard_40:

(Start: 13 @33410 has 5 MA's), (21, 33482), (25, 33500), (26, 33512), (29, 33539), (31, 33557), (40, 33644), (49, 33809), (64, 33941), (67, 33965), (69, 33992), (71, 33998), (75, 34079), (76, 34085), (81, 34124), (96, 34226),

Gene: Mollymur_94 Start: 63842, Stop: 63024, Start Num: 12

Candidate Starts for Mollymur_94:

(Start: 12 @63842 has 6 MA's), (22, 63752), (28, 63716), (32, 63680), (37, 63611), (47, 63503), (65, 63332), (66, 63314), (72, 63245), (76, 63206), (77, 63188), (78, 63182), (83, 63146), (87, 63125), (93, 63071),

Gene: Morgana_40 Start: 33361, Stop: 34245, Start Num: 13

Candidate Starts for Morgana_40:

(11, 33355), (Start: 13 @33361 has 5 MA's), (21, 33433), (25, 33451), (26, 33463), (29, 33490), (31, 33508), (40, 33595), (49, 33760), (57, 33838), (64, 33892), (67, 33916), (69, 33943), (71, 33949), (75, 34030), (76, 34036), (81, 34075), (96, 34177),

Gene: Norvs_91 Start: 56033, Stop: 56758, Start Num: 16

Candidate Starts for Norvs_91:

(2, 55733), (3, 55760), (4, 55763), (5, 55766), (7, 55874), (Start: 16 @56033 has 19 MA's), (30, 56141), (32, 56159), (33, 56174), (34, 56177), (37, 56228), (42, 56291), (46, 56318), (50, 56351), (54, 56390), (58, 56429), (62, 56459), (65, 56486), (68, 56531), (76, 56612), (78, 56636), (85, 56681), (89, 56711),

Gene: ObLaDi_40 Start: 33395, Stop: 34282, Start Num: 13

Candidate Starts for ObLaDi_40:

(11, 33389), (Start: 13 @33395 has 5 MA's), (21, 33467), (25, 33485), (26, 33497), (29, 33524), (31, 33542), (40, 33629), (49, 33794), (64, 33929), (67, 33953), (69, 33980), (71, 33986), (75, 34067), (76, 34073), (81, 34112),

Gene: OneUp_81 Start: 54043, Stop: 54768, Start Num: 16

Candidate Starts for OneUp_81:

(Start: 16 @54043 has 19 MA's), (27, 54130), (30, 54151), (32, 54169), (34, 54187), (37, 54238), (39, 54247), (42, 54301), (46, 54328), (50, 54361), (58, 54439), (62, 54469), (76, 54622), (78, 54646), (80, 54652), (85, 54691),

Gene: PFR1_36 Start: 27536, Stop: 28372, Start Num: 17

Candidate Starts for PFR1_36:

(17, 27536), (20, 27557), (27, 27620), (31, 27653), (35, 27695), (37, 27728), (43, 27794), (44, 27824), (45, 27836), (48, 27869), (63, 28004), (67, 28031), (70, 28061), (73, 28103), (76, 28151), (77, 28169), (81, 28190), (84, 28220), (86, 28232), (92, 28277), (97, 28304), (99, 28334),

Gene: PFR2_38 Start: 29105, Stop: 29941, Start Num: 17

Candidate Starts for PFR2_38:

(17, 29105), (20, 29126), (27, 29189), (31, 29222), (35, 29264), (37, 29297), (43, 29363), (44, 29393), (45, 29405), (48, 29438), (63, 29573), (67, 29600), (70, 29630), (73, 29672), (76, 29720), (77, 29738), (81, 29759), (84, 29789), (86, 29801), (92, 29846), (97, 29873), (99, 29903),

Gene: PhinkBoden_90 Start: 56438, Stop: 57163, Start Num: 16

Candidate Starts for PhinkBoden_90:

(2, 56138), (3, 56165), (4, 56168), (5, 56171), (8, 56333), (Start: 16 @56438 has 19 MA's), (30, 56546), (32, 56564), (33, 56579), (34, 56582), (37, 56633), (42, 56696), (46, 56723), (50, 56756), (54, 56795), (58, 56834), (62, 56864), (65, 56891), (68, 56936), (76, 57017), (78, 57041), (85, 57086), (89, 57116),

Gene: Smoothie_92 Start: 56648, Stop: 57373, Start Num: 16

Candidate Starts for Smoothie_92:

(2, 56348), (3, 56375), (4, 56378), (5, 56381), (8, 56543), (Start: 16 @56648 has 19 MA's), (30, 56756), (32, 56774), (33, 56789), (34, 56792), (37, 56843), (42, 56906), (46, 56933), (50, 56966), (54, 57005), (58, 57044), (62, 57074), (65, 57101), (68, 57146), (76, 57227), (78, 57251), (85, 57296), (89, 57326),

Gene: SpeedDemon_950 Start: 64954, Stop: 64124, Start Num: 12

Candidate Starts for SpeedDemon_950:

(Start: 12 @64954 has 6 MA's), (28, 64831), (32, 64795), (37, 64726), (47, 64618), (65, 64453), (66, 64435), (76, 64327), (83, 64267), (94, 64183),

Gene: Toniann_91 Start: 55976, Stop: 56701, Start Num: 16

Candidate Starts for Toniann_91:

(2, 55676), (3, 55703), (4, 55706), (5, 55709), (7, 55817), (Start: 16 @55976 has 19 MA's), (30, 56084), (32, 56102), (33, 56117), (34, 56120), (37, 56171), (42, 56234), (46, 56261), (50, 56294), (54, 56333), (58, 56372), (62, 56402), (65, 56429), (68, 56474), (76, 56555), (78, 56579), (85, 56624), (89, 56654),

Gene: Towmatter_83 Start: 58781, Stop: 57948, Start Num: 12

Candidate Starts for Towmatter_83:

(Start: 12 @58781 has 6 MA's), (22, 58691), (32, 58619), (37, 58550), (47, 58442), (55, 58385), (65, 58277), (66, 58259), (76, 58151), (94, 58010), (100, 57956),

Gene: VanLee_37 Start: 30355, Stop: 31278, Start Num: 14

Candidate Starts for VanLee_37:

(Start: 14 @30355 has 1 MA's), (15, 30361), (19, 30400), (24, 30439), (31, 30499), (35, 30541), (38, 30580), (40, 30586), (41, 30610), (49, 30757), (54, 30799), (57, 30835), (63, 30889), (67, 30916), (70, 30946), (71, 30949), (76, 31048), (79, 31075), (81, 31087), (95, 31186), (98, 31210),

Gene: WilliamBoone_90 Start: 54745, Stop: 55467, Start Num: 16

Candidate Starts for WilliamBoone_90:

(5, 54469), (6, 54514), (9, 54655), (Start: 16 @54745 has 19 MA's), (30, 54853), (32, 54871), (33, 54886), (34, 54889), (37, 54940), (46, 55030), (50, 55063), (58, 55141), (62, 55171), (74, 55300), (76, 55324), (77, 55342), (85, 55393), (89, 55423), (91, 55450),

Gene: Yvonnetastic_106 Start: 61147, Stop: 61839, Start Num: 16

Candidate Starts for Yvonnetastic_106:

(Start: 16 @61147 has 19 MA's), (22, 61201), (27, 61234), (32, 61273), (35, 61309), (36, 61318), (37, 61342), (39, 61351), (40, 61354), (47, 61450), (54, 61504), (60, 61561), (63, 61597), (66, 61621), (68, 61648), (70, 61654), (76, 61729), (81, 61768), (82, 61783), (83, 61789),