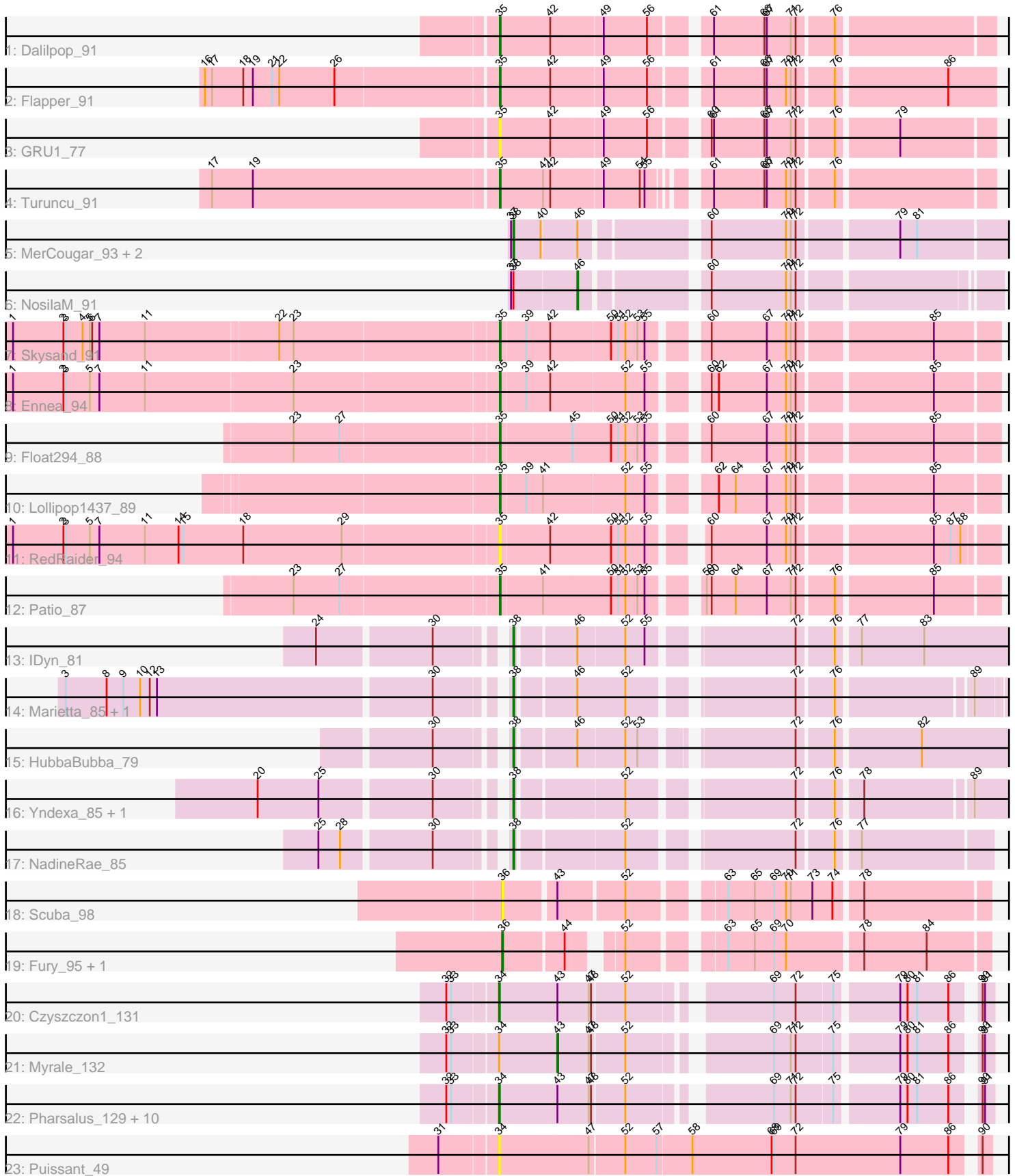


Pham 212794



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 212794 Report

This analysis was run 02/22/25 on database version 588.

Pham number 212794 has 38 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Dalilpop_91
- Track 2 : Flapper_91
- Track 3 : GRU1_77
- Track 4 : Turuncu_91
- Track 5 : MerCougar_93, Outis_91, StarStruck_91
- Track 6 : NosilaM_91
- Track 7 : Skysand_91
- Track 8 : Ennea_94
- Track 9 : Float294_88
- Track 10 : Lollipop1437_89
- Track 11 : RedRaider_94
- Track 12 : Patio_87
- Track 13 : IDyn_81
- Track 14 : Marietta_85, WhoseManz_85
- Track 15 : HubbaBubba_79
- Track 16 : Yndexa_85, Sukkupi_85
- Track 17 : NadineRae_85
- Track 18 : Scuba_98
- Track 19 : Fury_95, Pleakley_95
- Track 20 : Czyszczon1_131
- Track 21 : Myrale_132
- Track 22 : Pharsalus_129, xkcd_135, HanKaySha_131, Miniwave_125, Quallification_132, ShereKhan_131, Paperbeatsrock_130, Buck_132, Kanye_128, BigBubba_134, StellaBean_129
- Track 23 : Puissant_49

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

The start number called the most often in the published annotations is 34, it was called in 12 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BigBubba_134, Buck_132, Czyszczon1_131, HanKaySha_131, Kanye_128, Miniwave_125, Paperbeatsrock_130, Pharsalus_129, Puissant_49,

Qualification_132, ShereKhan_131, StellaBean_129, xkcd_135,

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

- Myrale_132,

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

- Dalilpop_91, Ennea_94, Flapper_91, Float294_88, Fury_95, GRU1_77, HubbaBubba_79, IDyn_81, Lollipop1437_89, Marietta_85, MerCougar_93, NadineRae_85, NosilaM_91, Outis_91, Patio_87, Pleakley_95, RedRaider_94, Scuba_98, Skysand_91, StarStruck_91, Sukkupi_85, Turuncu_91, WhoseManz_85, Yndexa_85,

Summary by start number:

Start 34:

- Found in 14 of 38 (36.8%) of genes in pham
- Manual Annotations of this start: 12 of 34
- Called 92.9% of time when present
- Phage (with cluster) where this start called: BigBubba_134 (E), Buck_132 (E), Czystczon1_131 (E), HanKaySha_131 (E), Kanye_128 (E), Miniwave_125 (E), Paperbeatsrock_130 (E), Pharsalus_129 (E), Puissant_49 (H1), Qualification_132 (E), ShereKhan_131 (E), StellaBean_129 (E), xkcd_135 (E),

Start 35:

- Found in 10 of 38 (26.3%) of genes in pham
- Manual Annotations of this start: 8 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dalilpop_91 (CR1), Ennea_94 (CR3), Flapper_91 (CR1), Float294_88 (CR3), GRU1_77 (CR1), Lollipop1437_89 (CR3), Patio_87 (CR3), RedRaider_94 (CR3), Skysand_91 (CR3), Turuncu_91 (CR1),

Start 36:

- Found in 3 of 38 (7.9%) of genes in pham
- Manual Annotations of this start: 2 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fury_95 (CR5), Pleakley_95 (CR5), Scuba_98 (CR5),

Start 38:

- Found in 11 of 38 (28.9%) of genes in pham
- Manual Annotations of this start: 10 of 34
- Called 90.9% of time when present
- Phage (with cluster) where this start called: HubbaBubba_79 (CR4), IDyn_81 (CR4), Marietta_85 (CR4), MerCougar_93 (CR2), NadineRae_85 (CR4), Outis_91 (CR2), StarStruck_91 (CR2), Sukkupi_85 (CR4), WhoseManz_85 (CR4), Yndexa_85 (CR4),

Start 43:

- Found in 14 of 38 (36.8%) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Myrale_132 (E),

Start 46:

- Found in 8 of 38 (21.1%) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 12.5% of time when present
- Phage (with cluster) where this start called: NosilaM_91 (CR2),

Summary by clusters:

There are 7 clusters represented in this pham: CR2, CR3, CR1, E, CR4, CR5, H1,

Info for manual annotations of cluster CR1:

- Start number 35 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 38 was manually annotated 3 times for cluster CR2.
- Start number 46 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 35 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 38 was manually annotated 7 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 36 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster E:

- Start number 34 was manually annotated 12 times for cluster E.
- Start number 43 was manually annotated 1 time for cluster E.

Gene Information:

Gene: BigBubba_134 Start: 70303, Stop: 69761, Start Num: 34

Candidate Starts for BigBubba_134:

(32, 70360), (33, 70354), (Start: 34 @70303 has 12 MA's), (Start: 43 @70231 has 1 MA's), (47, 70192), (48, 70189), (52, 70150), (69, 70000), (71, 69979), (72, 69973), (75, 69931), (79, 69859), (80, 69850), (81, 69838), (86, 69799), (90, 69775), (91, 69772),

Gene: Buck_132 Start: 71751, Stop: 71209, Start Num: 34

Candidate Starts for Buck_132:

(32, 71808), (33, 71802), (Start: 34 @71751 has 12 MA's), (Start: 43 @71679 has 1 MA's), (47, 71640), (48, 71637), (52, 71598), (69, 71448), (71, 71427), (72, 71421), (75, 71379), (79, 71307), (80, 71298), (81, 71286), (86, 71247), (90, 71223), (91, 71220),

Gene: Czyszczonek1_131 Start: 70290, Stop: 69748, Start Num: 34

Candidate Starts for Czyszczonek1_131:

(32, 70347), (33, 70341), (Start: 34 @70290 has 12 MA's), (Start: 43 @70218 has 1 MA's), (47, 70179), (48, 70176), (52, 70137), (69, 69987), (72, 69960), (75, 69918), (79, 69846), (80, 69837), (81, 69825), (86, 69786), (90, 69762), (91, 69759),

Gene: Dalilpop_91 Start: 64399, Stop: 64968, Start Num: 35

Candidate Starts for Dalilpop_91:

(Start: 35 @64399 has 8 MA's), (42, 64462), (49, 64525), (56, 64579), (61, 64639), (66, 64702), (67, 64705), (71, 64735), (72, 64741), (76, 64783),

Gene: Ennea_94 Start: 64628, Stop: 65194, Start Num: 35

Candidate Starts for Ennea_94:

(1, 64034), (2, 64097), (3, 64100), (5, 64130), (7, 64142), (11, 64199), (23, 64379), (Start: 35 @64628 has 8 MA's), (39, 64658), (42, 64688), (52, 64778), (55, 64802), (60, 64856), (62, 64865), (67, 64925), (70, 64949), (71, 64955), (72, 64961), (85, 65117),

Gene: Flapper_91 Start: 64268, Stop: 64843, Start Num: 35

Candidate Starts for Flapper_91:

(16, 63911), (17, 63920), (18, 63959), (19, 63971), (21, 63995), (22, 64004), (26, 64073), (Start: 35 @64268 has 8 MA's), (42, 64331), (49, 64394), (56, 64448), (61, 64508), (66, 64571), (67, 64574), (70, 64598), (71, 64604), (72, 64610), (76, 64652), (86, 64784),

Gene: Float294_88 Start: 64522, Stop: 65091, Start Num: 35

Candidate Starts for Float294_88:

(23, 64273), (27, 64330), (Start: 35 @64522 has 8 MA's), (45, 64609), (50, 64657), (51, 64666), (52, 64675), (53, 64690), (55, 64699), (60, 64753), (67, 64822), (70, 64846), (71, 64852), (72, 64858), (85, 65014),

Gene: Fury_95 Start: 62225, Stop: 62755, Start Num: 36

Candidate Starts for Fury_95:

(Start: 36 @62225 has 2 MA's), (44, 62297), (52, 62345), (63, 62444), (65, 62477), (69, 62501), (70, 62516), (78, 62603), (84, 62681),

Gene: GRU1_77 Start: 55846, Stop: 56415, Start Num: 35

Candidate Starts for GRU1_77:

(Start: 35 @55846 has 8 MA's), (42, 55909), (49, 55972), (56, 56026), (60, 56083), (61, 56086), (66, 56149), (67, 56152), (71, 56182), (72, 56188), (76, 56230), (79, 56302),

Gene: HanKaySha_131 Start: 70747, Stop: 70205, Start Num: 34

Candidate Starts for HanKaySha_131:

(32, 70804), (33, 70798), (Start: 34 @70747 has 12 MA's), (Start: 43 @70675 has 1 MA's), (47, 70636), (48, 70633), (52, 70594), (69, 70444), (71, 70423), (72, 70417), (75, 70375), (79, 70303), (80, 70294), (81, 70282), (86, 70243), (90, 70219), (91, 70216),

Gene: HubbaBubba_79 Start: 58420, Stop: 59040, Start Num: 38

Candidate Starts for HubbaBubba_79:

(30, 58348), (Start: 38 @58420 has 10 MA's), (Start: 46 @58486 has 1 MA's), (52, 58543), (53, 58558), (72, 58720), (76, 58762), (82, 58861),

Gene: IDyn_81 Start: 59074, Stop: 59697, Start Num: 38

Candidate Starts for IDyn_81:

(24, 58867), (30, 59002), (Start: 38 @59074 has 10 MA's), (Start: 46 @59140 has 1 MA's), (52, 59197), (55, 59221), (72, 59377), (76, 59419), (77, 59443), (83, 59521),

Gene: Kanye_128 Start: 70808, Stop: 70266, Start Num: 34

Candidate Starts for Kanye_128:

(32, 70865), (33, 70859), (Start: 34 @70808 has 12 MA's), (Start: 43 @70736 has 1 MA's), (47, 70697), (48, 70694), (52, 70655), (69, 70505), (71, 70484), (72, 70478), (75, 70436), (79, 70364), (80, 70355), (81, 70343), (86, 70304), (90, 70280), (91, 70277),

Gene: Lollipop1437_89 Start: 64307, Stop: 64873, Start Num: 35

Candidate Starts for Lollipop1437_89:

(Start: 35 @64307 has 8 MA's), (39, 64337), (41, 64358), (52, 64457), (55, 64481), (62, 64544), (64, 64565), (67, 64604), (70, 64628), (71, 64634), (72, 64640), (85, 64796),

Gene: Marietta_85 Start: 59747, Stop: 60280, Start Num: 38

Candidate Starts for Marietta_85:

(3, 59228), (8, 59279), (9, 59300), (10, 59321), (12, 59333), (13, 59342), (30, 59675), (Start: 38 @59747 has 10 MA's), (Start: 46 @59813 has 1 MA's), (52, 59873), (72, 60053), (76, 60095), (89, 60245),

Gene: MerCougar_93 Start: 67221, Stop: 67787, Start Num: 38

Candidate Starts for MerCougar_93:

(37, 67218), (Start: 38 @67221 has 10 MA's), (40, 67254), (Start: 46 @67296 has 1 MA's), (60, 67428), (70, 67521), (71, 67527), (72, 67533), (79, 67647), (81, 67668),

Gene: Miniwave_125 Start: 70331, Stop: 69789, Start Num: 34

Candidate Starts for Miniwave_125:

(32, 70388), (33, 70382), (Start: 34 @70331 has 12 MA's), (Start: 43 @70259 has 1 MA's), (47, 70220), (48, 70217), (52, 70178), (69, 70028), (71, 70007), (72, 70001), (75, 69959), (79, 69887), (80, 69878), (81, 69866), (86, 69827), (90, 69803), (91, 69800),

Gene: Myrale_132 Start: 71502, Stop: 71032, Start Num: 43

Candidate Starts for Myrale_132:

(32, 71631), (33, 71625), (Start: 34 @71574 has 12 MA's), (Start: 43 @71502 has 1 MA's), (47, 71463), (48, 71460), (52, 71421), (69, 71271), (71, 71250), (72, 71244), (75, 71202), (79, 71130), (80, 71121), (81, 71109), (86, 71070), (90, 71046), (91, 71043),

Gene: NadineRae_85 Start: 59593, Stop: 60120, Start Num: 38

Candidate Starts for NadineRae_85:

(25, 59389), (28, 59416), (30, 59521), (Start: 38 @59593 has 10 MA's), (52, 59716), (72, 59896), (76, 59938), (77, 59962),

Gene: NosilaM_91 Start: 66138, Stop: 66605, Start Num: 46

Candidate Starts for NosilaM_91:

(37, 66060), (Start: 38 @66063 has 10 MA's), (Start: 46 @66138 has 1 MA's), (60, 66273), (70, 66366), (71, 66372), (72, 66378),

Gene: Outis_91 Start: 66496, Stop: 67062, Start Num: 38

Candidate Starts for Outis_91:

(37, 66493), (Start: 38 @66496 has 10 MA's), (40, 66529), (Start: 46 @66571 has 1 MA's), (60, 66703), (70, 66796), (71, 66802), (72, 66808), (79, 66922), (81, 66943),

Gene: Paperbeatsrock_130 Start: 71009, Stop: 70467, Start Num: 34

Candidate Starts for Paperbeatsrock_130:

(32, 71066), (33, 71060), (Start: 34 @71009 has 12 MA's), (Start: 43 @70937 has 1 MA's), (47, 70898), (48, 70895), (52, 70856), (69, 70706), (71, 70685), (72, 70679), (75, 70637), (79, 70565), (80, 70556), (81, 70544), (86, 70505), (90, 70481), (91, 70478),

Gene: Patio_87 Start: 63521, Stop: 64090, Start Num: 35

Candidate Starts for Patio_87:

(23, 63272), (27, 63329), (Start: 35 @63521 has 8 MA's), (41, 63572), (50, 63656), (51, 63665), (52, 63674), (53, 63689), (55, 63698), (59, 63746), (60, 63752), (64, 63782), (67, 63821), (71, 63851), (72, 63857), (76, 63899), (85, 64013),

Gene: Pharsalus_129 Start: 71149, Stop: 70607, Start Num: 34

Candidate Starts for Pharsalus_129:

(32, 71206), (33, 71200), (Start: 34 @71149 has 12 MA's), (Start: 43 @71077 has 1 MA's), (47, 71038), (48, 71035), (52, 70996), (69, 70846), (71, 70825), (72, 70819), (75, 70777), (79, 70705), (80, 70696), (81, 70684), (86, 70645), (90, 70621), (91, 70618),

Gene: Pleakley_95 Start: 62226, Stop: 62756, Start Num: 36

Candidate Starts for Pleakley_95:

(Start: 36 @62226 has 2 MA's), (44, 62298), (52, 62346), (63, 62445), (65, 62478), (69, 62502), (70, 62517), (78, 62604), (84, 62682),

Gene: Puissant_49 Start: 40211, Stop: 40798, Start Num: 34

Candidate Starts for Puissant_49:

(31, 40142), (Start: 34 @40211 has 12 MA's), (47, 40322), (52, 40364), (57, 40403), (58, 40445), (68, 40544), (69, 40547), (72, 40574), (79, 40703), (86, 40763), (90, 40787),

Gene: Quallification_132 Start: 71487, Stop: 70945, Start Num: 34

Candidate Starts for Quallification_132:

(32, 71544), (33, 71538), (Start: 34 @71487 has 12 MA's), (Start: 43 @71415 has 1 MA's), (47, 71376), (48, 71373), (52, 71334), (69, 71184), (71, 71163), (72, 71157), (75, 71115), (79, 71043), (80, 71034), (81, 71022), (86, 70983), (90, 70959), (91, 70956),

Gene: RedRaider_94 Start: 65733, Stop: 66293, Start Num: 35

Candidate Starts for RedRaider_94:

(1, 65133), (2, 65196), (3, 65199), (5, 65229), (7, 65241), (11, 65298), (14, 65340), (15, 65346), (18, 65421), (29, 65544), (Start: 35 @65733 has 8 MA's), (42, 65793), (50, 65868), (51, 65877), (52, 65886), (55, 65910), (60, 65958), (67, 66027), (70, 66051), (71, 66057), (72, 66063), (85, 66219), (87, 66240), (88, 66252),

Gene: Scuba_98 Start: 62555, Stop: 63103, Start Num: 36

Candidate Starts for Scuba_98:

(Start: 36 @62555 has 2 MA's), (Start: 43 @62615 has 1 MA's), (52, 62693), (63, 62792), (65, 62825), (69, 62849), (70, 62864), (71, 62870), (73, 62897), (74, 62921), (78, 62951),

Gene: ShereKhan_131 Start: 71733, Stop: 71191, Start Num: 34

Candidate Starts for ShereKhan_131:

(32, 71790), (33, 71784), (Start: 34 @71733 has 12 MA's), (Start: 43 @71661 has 1 MA's), (47, 71622), (48, 71619), (52, 71580), (69, 71430), (71, 71409), (72, 71403), (75, 71361), (79, 71289), (80, 71280), (81, 71268), (86, 71229), (90, 71205), (91, 71202),

Gene: Skysand_91 Start: 64471, Stop: 65037, Start Num: 35

Candidate Starts for Skysand_91:

(1, 63880), (2, 63943), (3, 63946), (4, 63967), (5, 63976), (6, 63979), (7, 63988), (11, 64045), (22, 64204), (23, 64222), (Start: 35 @64471 has 8 MA's), (39, 64501), (42, 64531), (50, 64603), (51, 64612), (52, 64621), (53, 64636), (55, 64645), (60, 64699), (67, 64768), (70, 64792), (71, 64798), (72, 64804), (85, 64960),

Gene: StarStruck_91 Start: 66496, Stop: 67062, Start Num: 38

Candidate Starts for StarStruck_91:

(37, 66493), (Start: 38 @66496 has 10 MA's), (40, 66529), (Start: 46 @66571 has 1 MA's), (60, 66703), (70, 66796), (71, 66802), (72, 66808), (79, 66922), (81, 66943),

Gene: StellaBean_129 Start: 71091, Stop: 70549, Start Num: 34

Candidate Starts for StellaBean_129:

(32, 71148), (33, 71142), (Start: 34 @71091 has 12 MA's), (Start: 43 @71019 has 1 MA's), (47, 70980), (48, 70977), (52, 70938), (69, 70788), (71, 70767), (72, 70761), (75, 70719), (79, 70647), (80, 70638), (81, 70626), (86, 70587), (90, 70563), (91, 70560),

Gene: Sukkupi_85 Start: 61461, Stop: 62021, Start Num: 38

Candidate Starts for Sukkupi_85:

(20, 61182), (25, 61257), (30, 61389), (Start: 38 @61461 has 10 MA's), (52, 61584), (72, 61764), (76, 61806), (78, 61833), (89, 61956),

Gene: Turuncu_91 Start: 63897, Stop: 64454, Start Num: 35

Candidate Starts for Turuncu_91:

(17, 63546), (19, 63597), (Start: 35 @63897 has 8 MA's), (41, 63951), (42, 63960), (49, 64023), (54, 64068), (55, 64074), (61, 64125), (66, 64188), (67, 64191), (70, 64215), (71, 64221), (72, 64227), (76, 64269),

Gene: WhoseManz_85 Start: 59407, Stop: 59943, Start Num: 38

Candidate Starts for WhoseManz_85:

(3, 58888), (8, 58939), (9, 58960), (10, 58981), (12, 58993), (13, 59002), (30, 59335), (Start: 38 @59407 has 10 MA's), (Start: 46 @59473 has 1 MA's), (52, 59533), (72, 59713), (76, 59755), (89, 59905),

Gene: Yndexa_85 Start: 61461, Stop: 62021, Start Num: 38

Candidate Starts for Yndexa_85:

(20, 61182), (25, 61257), (30, 61389), (Start: 38 @61461 has 10 MA's), (52, 61584), (72, 61764), (76, 61806), (78, 61833), (89, 61956),

Gene: xkcd_135 Start: 71614, Stop: 71072, Start Num: 34

Candidate Starts for xkcd_135:

(32, 71671), (33, 71665), (Start: 34 @71614 has 12 MA's), (Start: 43 @71542 has 1 MA's), (47, 71503), (48, 71500), (52, 71461), (69, 71311), (71, 71290), (72, 71284), (75, 71242), (79, 71170), (80, 71161), (81, 71149), (86, 71110), (90, 71086), (91, 71083),