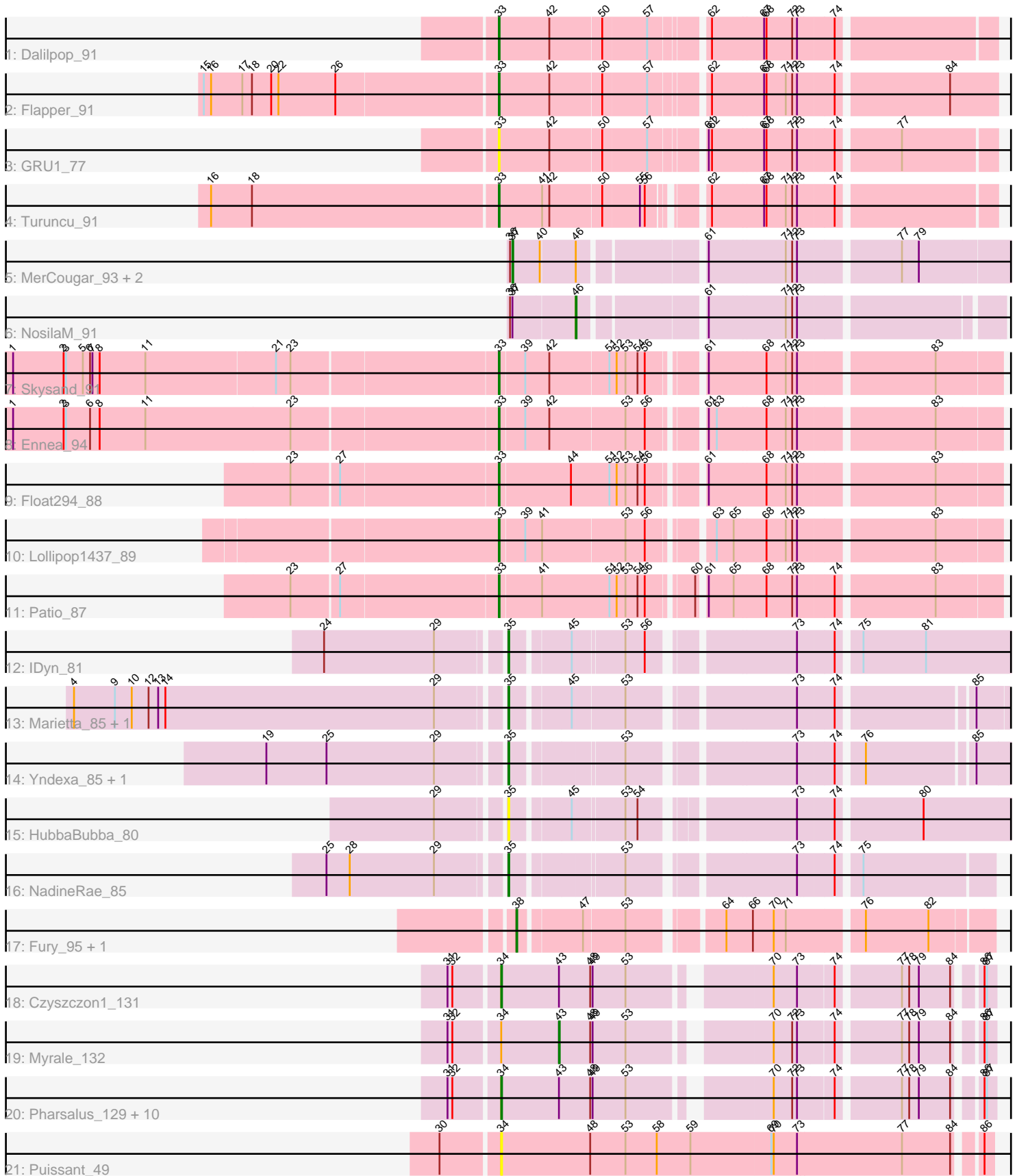


# Pham 192747



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 192747 Report

This analysis was run 11/02/24 on database version 579.

Pham number 192747 has 36 members, 3 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 : Patio\_87
- Track 12 : IDyn\_81
- Track 13 : Marietta\_85, WhoseManz\_85
- Track 14 : Yndexa\_85, Sukkupi\_85
- Track 15 : HubbaBubba\_80
- Track 16 : NadineRae\_85
- Track 17 : Fury\_95, Pleakley\_95
- Track 18 : Czyszczon1\_131
- Track 19 : Myrale\_132
- Track 20 : Pharsalus\_129, xkcd\_135, HanKaySha\_131, Miniwave\_125, Quallification\_132, ShereKhan\_131, Paperbeatsrock\_130, Buck\_132, Kanye\_128, BigBubba\_134, StellaBean\_129
- Track 21 : 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 33 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, Quallification\_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\_80, IDyn\_81, Lollipop1437\_89, Marietta\_85, MerCougar\_93, NadineRae\_85, NosilaM\_91, Outis\_91, Patio\_87, Pleakley\_95, Skysand\_91, StarStruck\_91, Sukkupi\_85, Turuncu\_91, WhoseManz\_85, Yndexa\_85,

### Summary by start number:

Start 33:

- Found in 9 of 36 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 8 of 33
- 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), Skysand\_91 (CR3), Turuncu\_91 (CR1),

Start 34:

- Found in 14 of 36 ( 38.9% ) of genes in pham
- Manual Annotations of this start: 12 of 33
- 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 7 of 36 ( 19.4% ) of genes in pham
- Manual Annotations of this start: 6 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HubbaBubba\_80 (CR4), IDyn\_81 (CR4), Marietta\_85 (CR4), NadineRae\_85 (CR4), Sukkupi\_85 (CR4), WhoseManz\_85 (CR4), Yndexa\_85 (CR4),

Start 37:

- Found in 4 of 36 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 3 of 33
- Called 75.0% of time when present
- Phage (with cluster) where this start called: MerCougar\_93 (CR2), Outis\_91 (CR2), StarStruck\_91 (CR2),

Start 38:

- Found in 2 of 36 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 2 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fury\_95 (CR5), Pleakley\_95 (CR5),

Start 43:

- Found in 13 of 36 ( 36.1% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 7.7% of time when present

- Phage (with cluster) where this start called: Myrale\_132 (E),

Start 46:

- Found in 4 of 36 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 25.0% 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 33 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 37 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 33 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 35 was manually annotated 6 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 38 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:

(31, 70360), (32, 70354), (Start: 34 @70303 has 12 MA's), (Start: 43 @70231 has 1 MA's), (48, 70192), (49, 70189), (53, 70150), (70, 70000), (72, 69979), (73, 69973), (74, 69931), (77, 69859), (78, 69850), (79, 69838), (84, 69799), (86, 69775), (87, 69772),

Gene: Buck\_132 Start: 71751, Stop: 71209, Start Num: 34

Candidate Starts for Buck\_132:

(31, 71808), (32, 71802), (Start: 34 @71751 has 12 MA's), (Start: 43 @71679 has 1 MA's), (48, 71640), (49, 71637), (53, 71598), (70, 71448), (72, 71427), (73, 71421), (74, 71379), (77, 71307), (78, 71298), (79, 71286), (84, 71247), (86, 71223), (87, 71220),

Gene: Czyszczone1\_131 Start: 70290, Stop: 69748, Start Num: 34

Candidate Starts for Czyszczone1\_131:

(31, 70347), (32, 70341), (Start: 34 @70290 has 12 MA's), (Start: 43 @70218 has 1 MA's), (48, 70179), (49, 70176), (53, 70137), (70, 69987), (73, 69960), (74, 69918), (77, 69846), (78, 69837), (79,

69825), (84, 69786), (86, 69762), (87, 69759),

Gene: Dalilpop\_91 Start: 64399, Stop: 64968, Start Num: 33

Candidate Starts for Dalilpop\_91:

(Start: 33 @64399 has 8 MA's), (42, 64462), (50, 64525), (57, 64579), (62, 64639), (67, 64702), (68, 64705), (72, 64735), (73, 64741), (74, 64783),

Gene: Ennea\_94 Start: 64628, Stop: 65194, Start Num: 33

Candidate Starts for Ennea\_94:

(1, 64034), (2, 64097), (3, 64100), (6, 64130), (8, 64142), (11, 64199), (23, 64379), (Start: 33 @64628 has 8 MA's), (39, 64658), (42, 64688), (53, 64778), (56, 64802), (61, 64856), (63, 64865), (68, 64925), (71, 64949), (72, 64955), (73, 64961), (83, 65117),

Gene: Flapper\_91 Start: 64268, Stop: 64843, Start Num: 33

Candidate Starts for Flapper\_91:

(15, 63911), (16, 63920), (17, 63959), (18, 63971), (20, 63995), (22, 64004), (26, 64073), (Start: 33 @64268 has 8 MA's), (42, 64331), (50, 64394), (57, 64448), (62, 64508), (67, 64571), (68, 64574), (71, 64598), (72, 64604), (73, 64610), (74, 64652), (84, 64784),

Gene: Float294\_88 Start: 64522, Stop: 65091, Start Num: 33

Candidate Starts for Float294\_88:

(23, 64273), (27, 64330), (Start: 33 @64522 has 8 MA's), (44, 64609), (51, 64657), (52, 64666), (53, 64675), (54, 64690), (56, 64699), (61, 64753), (68, 64822), (71, 64846), (72, 64852), (73, 64858), (83, 65014),

Gene: Fury\_95 Start: 62225, Stop: 62755, Start Num: 38

Candidate Starts for Fury\_95:

(Start: 38 @62225 has 2 MA's), (47, 62297), (53, 62345), (64, 62444), (66, 62477), (70, 62501), (71, 62516), (76, 62603), (82, 62681),

Gene: GRU1\_77 Start: 55846, Stop: 56415, Start Num: 33

Candidate Starts for GRU1\_77:

(Start: 33 @55846 has 8 MA's), (42, 55909), (50, 55972), (57, 56026), (61, 56083), (62, 56086), (67, 56149), (68, 56152), (72, 56182), (73, 56188), (74, 56230), (77, 56302),

Gene: HanKaySha\_131 Start: 70747, Stop: 70205, Start Num: 34

Candidate Starts for HanKaySha\_131:

(31, 70804), (32, 70798), (Start: 34 @70747 has 12 MA's), (Start: 43 @70675 has 1 MA's), (48, 70636), (49, 70633), (53, 70594), (70, 70444), (72, 70423), (73, 70417), (74, 70375), (77, 70303), (78, 70294), (79, 70282), (84, 70243), (86, 70219), (87, 70216),

Gene: HubbaBubba\_80 Start: 58420, Stop: 59040, Start Num: 35

Candidate Starts for HubbaBubba\_80:

(29, 58348), (Start: 35 @58420 has 6 MA's), (45, 58486), (53, 58543), (54, 58558), (73, 58720), (74, 58762), (80, 58861),

Gene: IDyn\_81 Start: 59074, Stop: 59697, Start Num: 35

Candidate Starts for IDyn\_81:

(24, 58867), (29, 59002), (Start: 35 @59074 has 6 MA's), (45, 59140), (53, 59197), (56, 59221), (73, 59377), (74, 59419), (75, 59443), (81, 59521),

Gene: Kanye\_128 Start: 70808, Stop: 70266, Start Num: 34

Candidate Starts for Kanye\_128:

(31, 70865), (32, 70859), (Start: 34 @70808 has 12 MA's), (Start: 43 @70736 has 1 MA's), (48, 70697), (49, 70694), (53, 70655), (70, 70505), (72, 70484), (73, 70478), (74, 70436), (77, 70364), (78, 70355), (79, 70343), (84, 70304), (86, 70280), (87, 70277),

Gene: Lollipop1437\_89 Start: 64307, Stop: 64873, Start Num: 33

Candidate Starts for Lollipop1437\_89:

(Start: 33 @64307 has 8 MA's), (39, 64337), (41, 64358), (53, 64457), (56, 64481), (63, 64544), (65, 64565), (68, 64604), (71, 64628), (72, 64634), (73, 64640), (83, 64796),

Gene: Marietta\_85 Start: 59747, Stop: 60280, Start Num: 35

Candidate Starts for Marietta\_85:

(4, 59228), (9, 59279), (10, 59300), (12, 59321), (13, 59333), (14, 59342), (29, 59675), (Start: 35 @59747 has 6 MA's), (45, 59813), (53, 59873), (73, 60053), (74, 60095), (85, 60245),

Gene: MerCougar\_93 Start: 67221, Stop: 67787, Start Num: 37

Candidate Starts for MerCougar\_93:

(36, 67218), (Start: 37 @67221 has 3 MA's), (40, 67254), (Start: 46 @67296 has 1 MA's), (61, 67428), (71, 67521), (72, 67527), (73, 67533), (77, 67647), (79, 67668),

Gene: Miniwave\_125 Start: 70331, Stop: 69789, Start Num: 34

Candidate Starts for Miniwave\_125:

(31, 70388), (32, 70382), (Start: 34 @70331 has 12 MA's), (Start: 43 @70259 has 1 MA's), (48, 70220), (49, 70217), (53, 70178), (70, 70028), (72, 70007), (73, 70001), (74, 69959), (77, 69887), (78, 69878), (79, 69866), (84, 69827), (86, 69803), (87, 69800),

Gene: Myrale\_132 Start: 71502, Stop: 71032, Start Num: 43

Candidate Starts for Myrale\_132:

(31, 71631), (32, 71625), (Start: 34 @71574 has 12 MA's), (Start: 43 @71502 has 1 MA's), (48, 71463), (49, 71460), (53, 71421), (70, 71271), (72, 71250), (73, 71244), (74, 71202), (77, 71130), (78, 71121), (79, 71109), (84, 71070), (86, 71046), (87, 71043),

Gene: NadineRae\_85 Start: 59593, Stop: 60120, Start Num: 35

Candidate Starts for NadineRae\_85:

(25, 59389), (28, 59416), (29, 59521), (Start: 35 @59593 has 6 MA's), (53, 59716), (73, 59896), (74, 59938), (75, 59962),

Gene: NosilaM\_91 Start: 66138, Stop: 66605, Start Num: 46

Candidate Starts for NosilaM\_91:

(36, 66060), (Start: 37 @66063 has 3 MA's), (Start: 46 @66138 has 1 MA's), (61, 66273), (71, 66366), (72, 66372), (73, 66378),

Gene: Outis\_91 Start: 66496, Stop: 67062, Start Num: 37

Candidate Starts for Outis\_91:

(36, 66493), (Start: 37 @66496 has 3 MA's), (40, 66529), (Start: 46 @66571 has 1 MA's), (61, 66703), (71, 66796), (72, 66802), (73, 66808), (77, 66922), (79, 66943),

Gene: Paperbeatsrock\_130 Start: 71009, Stop: 70467, Start Num: 34

Candidate Starts for Paperbeatsrock\_130:

(31, 71066), (32, 71060), (Start: 34 @71009 has 12 MA's), (Start: 43 @70937 has 1 MA's), (48, 70898), (49, 70895), (53, 70856), (70, 70706), (72, 70685), (73, 70679), (74, 70637), (77, 70565), (78, 70556), (79, 70544), (84, 70505), (86, 70481), (87, 70478),

Gene: Patio\_87 Start: 63521, Stop: 64090, Start Num: 33

Candidate Starts for Patio\_87:

(23, 63272), (27, 63329), (Start: 33 @63521 has 8 MA's), (41, 63572), (51, 63656), (52, 63665), (53, 63674), (54, 63689), (56, 63698), (60, 63746), (61, 63752), (65, 63782), (68, 63821), (72, 63851), (73, 63857), (74, 63899), (83, 64013),

Gene: Pharsalus\_129 Start: 71149, Stop: 70607, Start Num: 34

Candidate Starts for Pharsalus\_129:

(31, 71206), (32, 71200), (Start: 34 @71149 has 12 MA's), (Start: 43 @71077 has 1 MA's), (48, 71038), (49, 71035), (53, 70996), (70, 70846), (72, 70825), (73, 70819), (74, 70777), (77, 70705), (78, 70696), (79, 70684), (84, 70645), (86, 70621), (87, 70618),

Gene: Pleakley\_95 Start: 62226, Stop: 62756, Start Num: 38

Candidate Starts for Pleakley\_95:

(Start: 38 @62226 has 2 MA's), (47, 62298), (53, 62346), (64, 62445), (66, 62478), (70, 62502), (71, 62517), (76, 62604), (82, 62682),

Gene: Puissant\_49 Start: 40211, Stop: 40798, Start Num: 34

Candidate Starts for Puissant\_49:

(30, 40142), (Start: 34 @40211 has 12 MA's), (48, 40322), (53, 40364), (58, 40403), (59, 40445), (69, 40544), (70, 40547), (73, 40574), (77, 40703), (84, 40763), (86, 40787),

Gene: Quallification\_132 Start: 71487, Stop: 70945, Start Num: 34

Candidate Starts for Quallification\_132:

(31, 71544), (32, 71538), (Start: 34 @71487 has 12 MA's), (Start: 43 @71415 has 1 MA's), (48, 71376), (49, 71373), (53, 71334), (70, 71184), (72, 71163), (73, 71157), (74, 71115), (77, 71043), (78, 71034), (79, 71022), (84, 70983), (86, 70959), (87, 70956),

Gene: ShereKhan\_131 Start: 71733, Stop: 71191, Start Num: 34

Candidate Starts for ShereKhan\_131:

(31, 71790), (32, 71784), (Start: 34 @71733 has 12 MA's), (Start: 43 @71661 has 1 MA's), (48, 71622), (49, 71619), (53, 71580), (70, 71430), (72, 71409), (73, 71403), (74, 71361), (77, 71289), (78, 71280), (79, 71268), (84, 71229), (86, 71205), (87, 71202),

Gene: Skysand\_91 Start: 64471, Stop: 65037, Start Num: 33

Candidate Starts for Skysand\_91:

(1, 63880), (2, 63943), (3, 63946), (5, 63967), (6, 63976), (7, 63979), (8, 63988), (11, 64045), (21, 64204), (23, 64222), (Start: 33 @64471 has 8 MA's), (39, 64501), (42, 64531), (51, 64603), (52, 64612), (53, 64621), (54, 64636), (56, 64645), (61, 64699), (68, 64768), (71, 64792), (72, 64798), (73, 64804), (83, 64960),

Gene: StarStruck\_91 Start: 66496, Stop: 67062, Start Num: 37

Candidate Starts for StarStruck\_91:

(36, 66493), (Start: 37 @66496 has 3 MA's), (40, 66529), (Start: 46 @66571 has 1 MA's), (61, 66703), (71, 66796), (72, 66802), (73, 66808), (77, 66922), (79, 66943),

Gene: StellaBean\_129 Start: 71091, Stop: 70549, Start Num: 34

Candidate Starts for StellaBean\_129:

(31, 71148), (32, 71142), (Start: 34 @71091 has 12 MA's), (Start: 43 @71019 has 1 MA's), (48, 70980), (49, 70977), (53, 70938), (70, 70788), (72, 70767), (73, 70761), (74, 70719), (77, 70647), (78, 70638), (79, 70626), (84, 70587), (86, 70563), (87, 70560),

Gene: Sukkupi\_85 Start: 61461, Stop: 62021, Start Num: 35

Candidate Starts for Sukkupi\_85:

(19, 61182), (25, 61257), (29, 61389), (Start: 35 @61461 has 6 MA's), (53, 61584), (73, 61764), (74, 61806), (76, 61833), (85, 61956),

Gene: Turuncu\_91 Start: 63897, Stop: 64454, Start Num: 33

Candidate Starts for Turuncu\_91:

(16, 63546), (18, 63597), (Start: 33 @63897 has 8 MA's), (41, 63951), (42, 63960), (50, 64023), (55, 64068), (56, 64074), (62, 64125), (67, 64188), (68, 64191), (71, 64215), (72, 64221), (73, 64227), (74, 64269),

Gene: WhoseManz\_85 Start: 59407, Stop: 59943, Start Num: 35

Candidate Starts for WhoseManz\_85:

(4, 58888), (9, 58939), (10, 58960), (12, 58981), (13, 58993), (14, 59002), (29, 59335), (Start: 35 @59407 has 6 MA's), (45, 59473), (53, 59533), (73, 59713), (74, 59755), (85, 59905),

Gene: Yndexa\_85 Start: 61461, Stop: 62021, Start Num: 35

Candidate Starts for Yndexa\_85:

(19, 61182), (25, 61257), (29, 61389), (Start: 35 @61461 has 6 MA's), (53, 61584), (73, 61764), (74, 61806), (76, 61833), (85, 61956),

Gene: xkcd\_135 Start: 71614, Stop: 71072, Start Num: 34

Candidate Starts for xkcd\_135:

(31, 71671), (32, 71665), (Start: 34 @71614 has 12 MA's), (Start: 43 @71542 has 1 MA's), (48, 71503), (49, 71500), (53, 71461), (70, 71311), (72, 71290), (73, 71284), (74, 71242), (77, 71170), (78, 71161), (79, 71149), (84, 71110), (86, 71086), (87, 71083),