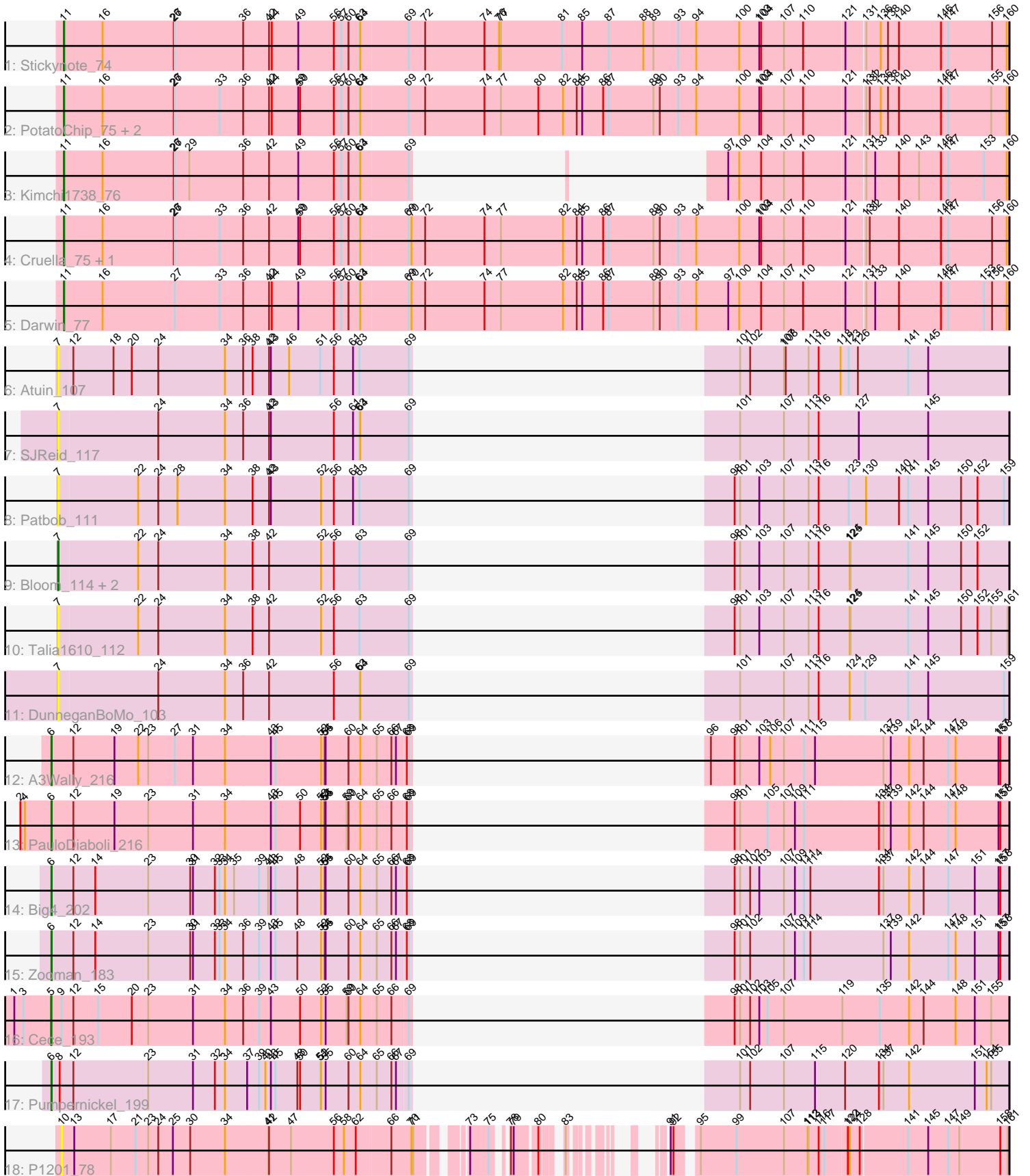


Pham 160716



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 160716 Report

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

Pham number 160716 has 23 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Stickynote_74
- Track 2 : PotatoChip_75, Zion_75, PeteyPab_74
- Track 3 : Kimchi1738_76
- Track 4 : Cruella_75, C3PO_75
- Track 5 : Darwin_77
- Track 6 : Atuin_107
- Track 7 : SJReid_117
- Track 8 : Patbob_111
- Track 9 : Bloom_114, Racecar_111, Mimi_116
- Track 10 : Talia1610_112
- Track 11 : DunneganBoMo_103
- Track 12 : A3Wally_216
- Track 13 : PauloDiaboli_216
- Track 14 : Big4_202
- Track 15 : Zooman_183
- Track 16 : Cece_193
- Track 17 : Pumpernickel_199
- Track 18 : P1201_78

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

The start number called the most often in the published annotations is 11, it was called in 8 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- C3PO_75, Cruella_75, Darwin_77, Kimchi1738_76, PeteyPab_74, PotatoChip_75, Stickynote_74, Zion_75,

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

-

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

- A3Wally_216, Atuin_107, Big4_202, Bloom_114, Cece_193, DunneganBoMo_103, Mimi_116, P1201_78, Patbob_111, PauloDiaboli_216, Pumpernickel_199,

Racecar_111, SJReid_117, Talia1610_112, Zooman_183,

Summary by start number:

Start 5:

- Found in 1 of 23 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cece_193 (GD3),

Start 6:

- Found in 5 of 23 (21.7%) of genes in pham
- Manual Annotations of this start: 5 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally_216 (GD1), Big4_202 (GD2), PauloDiaboli_216 (GD1), Pumpnickel_199 (GD4), Zooman_183 (GD2),

Start 7:

- Found in 8 of 23 (34.8%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin_107 (FC), Bloom_114 (FC), DunneganBoMo_103 (FC), Mimi_116 (FC), Patbob_111 (FC), Racecar_111 (FC), SJReid_117 (FC), Talia1610_112 (FC),

Start 10:

- Found in 1 of 23 (4.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: P1201_78 (singleton),

Start 11:

- Found in 8 of 23 (34.8%) of genes in pham
- Manual Annotations of this start: 8 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: C3PO_75 (EN), Cruella_75 (EN), Darwin_77 (EN), Kimchi1738_76 (EN), PeteyPab_74 (EN), PotatoChip_75 (EN), Sticknote_74 (EN), Zion_75 (EN),

Summary by clusters:

There are 7 clusters represented in this pham: GD1, GD2, EN, GD4, singleton, FC, GD3,

Info for manual annotations of cluster EN:

- Start number 11 was manually annotated 8 times for cluster EN.

Info for manual annotations of cluster FC:

- Start number 7 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster GD1:

- Start number 6 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 6 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 5 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

- Start number 6 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_216 Start: 117654, Stop: 115501, Start Num: 6

Candidate Starts for A3Wally_216:

(Start: 6 @117654 has 5 MA's), (12, 117582), (19, 117447), (22, 117372), (23, 117339), (27, 117252), (31, 117192), (34, 117087), (43, 116937), (45, 116922), (52, 116772), (54, 116760), (55, 116757), (60, 116682), (64, 116643), (65, 116595), (66, 116547), (67, 116532), (68, 116502), (69, 116496), (96, 116466), (98, 116388), (101, 116370), (103, 116313), (106, 116277), (107, 116232), (111, 116166), (115, 116130), (137, 115914), (139, 115890), (142, 115830), (144, 115782), (147, 115701), (148, 115677), (157, 115536), (158, 115530),

Gene: Atuin_107 Start: 87692, Stop: 89833, Start Num: 7

Candidate Starts for Atuin_107:

(Start: 7 @87692 has 1 MA's), (12, 87734), (18, 87866), (20, 87923), (24, 88010), (34, 88229), (36, 88289), (38, 88319), (42, 88373), (43, 88379), (46, 88439), (51, 88541), (56, 88586), (61, 88649), (63, 88670), (69, 88832), (101, 88958), (102, 88985), (107, 89096), (108, 89102), (113, 89177), (116, 89210), (118, 89282), (123, 89309), (126, 89336), (141, 89501), (145, 89567),

Gene: Big4_202 Start: 114062, Stop: 111909, Start Num: 6

Candidate Starts for Big4_202:

(Start: 6 @114062 has 5 MA's), (12, 113990), (14, 113918), (23, 113747), (30, 113609), (31, 113600), (32, 113528), (33, 113513), (34, 113495), (35, 113465), (39, 113384), (41, 113354), (43, 113345), (45, 113330), (48, 113258), (52, 113180), (54, 113168), (55, 113165), (60, 113090), (64, 113051), (65, 113003), (66, 112955), (67, 112940), (68, 112910), (69, 112904), (98, 112796), (101, 112778), (102, 112751), (103, 112721), (107, 112640), (109, 112604), (111, 112574), (114, 112553), (134, 112337), (137, 112322), (142, 112238), (144, 112190), (147, 112109), (151, 112022), (157, 111944), (158, 111938),

Gene: Bloom_114 Start: 87765, Stop: 89903, Start Num: 7

Candidate Starts for Bloom_114:

(Start: 7 @87765 has 1 MA's), (22, 88017), (24, 88083), (34, 88302), (38, 88392), (42, 88446), (52, 88617), (56, 88659), (63, 88743), (69, 88905), (98, 89013), (101, 89031), (103, 89088), (107, 89169), (113, 89250), (116, 89283), (124, 89385), (125, 89388), (141, 89571), (145, 89637), (150, 89745), (152, 89799),

Gene: C3PO_75 Start: 57202, Stop: 54134, Start Num: 11

Candidate Starts for C3PO_75:

(Start: 11 @57202 has 8 MA's), (16, 57079), (26, 56848), (27, 56845), (33, 56701), (36, 56623), (42, 56539), (49, 56443), (50, 56437), (56, 56326), (57, 56302), (60, 56278), (63, 56242), (64, 56239), (69, 56086), (70, 56077), (72, 56032), (74, 55837), (77, 55783), (82, 55579), (84, 55534), (85, 55516), (86, 55447), (87, 55429), (89, 55282), (90, 55261), (93, 55201), (94, 55141), (100, 55000), (103, 54934), (104, 54928), (107, 54853), (110, 54790), (121, 54658), (131, 54601), (132, 54592), (140, 54496),

(146, 54358), (147, 54334), (156, 54190), (160, 54142),

Gene: Cece_193 Start: 118582, Stop: 116429, Start Num: 5

Candidate Starts for Cece_193:

(1, 118702), (3, 118672), (Start: 5 @118582 has 1 MA's), (9, 118549), (12, 118510), (15, 118429), (20, 118321), (23, 118267), (31, 118120), (34, 118015), (36, 117955), (39, 117904), (43, 117865), (50, 117769), (52, 117700), (55, 117685), (59, 117616), (60, 117610), (64, 117571), (65, 117523), (66, 117475), (69, 117424), (98, 117316), (101, 117298), (102, 117271), (103, 117241), (105, 117214), (107, 117160), (119, 116971), (135, 116854), (142, 116758), (144, 116710), (148, 116605), (151, 116542), (155, 116488),

Gene: Cruella_75 Start: 57202, Stop: 54134, Start Num: 11

Candidate Starts for Cruella_75:

(Start: 11 @57202 has 8 MA's), (16, 57079), (26, 56848), (27, 56845), (33, 56701), (36, 56623), (42, 56539), (49, 56443), (50, 56437), (56, 56326), (57, 56302), (60, 56278), (63, 56242), (64, 56239), (69, 56086), (70, 56077), (72, 56032), (74, 55837), (77, 55783), (82, 55579), (84, 55534), (85, 55516), (86, 55447), (87, 55429), (89, 55282), (90, 55261), (93, 55201), (94, 55141), (100, 55000), (103, 54934), (104, 54928), (107, 54853), (110, 54790), (121, 54658), (131, 54601), (132, 54592), (140, 54496), (146, 54358), (147, 54334), (156, 54190), (160, 54142),

Gene: Darwin_77 Start: 57975, Stop: 54907, Start Num: 11

Candidate Starts for Darwin_77:

(Start: 11 @57975 has 8 MA's), (16, 57852), (27, 57618), (33, 57474), (36, 57396), (42, 57312), (44, 57303), (49, 57216), (56, 57099), (57, 57075), (60, 57051), (63, 57015), (64, 57012), (69, 56859), (70, 56850), (72, 56805), (74, 56610), (77, 56556), (82, 56352), (84, 56307), (85, 56289), (86, 56220), (87, 56202), (89, 56055), (90, 56034), (93, 55974), (94, 55914), (97, 55809), (100, 55773), (104, 55701), (107, 55626), (110, 55563), (121, 55431), (131, 55374), (133, 55347), (140, 55269), (146, 55131), (147, 55107), (153, 54990), (156, 54963), (160, 54915),

Gene: DunneganBoMo_103 Start: 83562, Stop: 85703, Start Num: 7

Candidate Starts for DunneganBoMo_103:

(Start: 7 @83562 has 1 MA's), (24, 83880), (34, 84099), (36, 84159), (42, 84243), (56, 84456), (63, 84540), (64, 84543), (69, 84702), (101, 84828), (107, 84966), (113, 85047), (116, 85080), (124, 85182), (129, 85230), (141, 85371), (145, 85437), (159, 85686),

Gene: Kimchi1738_76 Start: 56215, Stop: 54110, Start Num: 11

Candidate Starts for Kimchi1738_76:

(Start: 11 @56215 has 8 MA's), (16, 56092), (26, 55861), (27, 55858), (29, 55813), (36, 55636), (42, 55552), (49, 55456), (56, 55339), (57, 55315), (60, 55291), (63, 55255), (64, 55252), (69, 55099), (97, 55012), (100, 54976), (104, 54904), (107, 54829), (110, 54766), (121, 54634), (131, 54577), (133, 54550), (140, 54472), (143, 54406), (146, 54334), (147, 54310), (153, 54193), (160, 54118),

Gene: Mimi_116 Start: 87112, Stop: 89250, Start Num: 7

Candidate Starts for Mimi_116:

(Start: 7 @87112 has 1 MA's), (22, 87364), (24, 87430), (34, 87649), (38, 87739), (42, 87793), (52, 87964), (56, 88006), (63, 88090), (69, 88252), (98, 88360), (101, 88378), (103, 88435), (107, 88516), (113, 88597), (116, 88630), (124, 88732), (125, 88735), (141, 88918), (145, 88984), (150, 89092), (152, 89146),

Gene: P1201_78 Start: 60988, Stop: 58391, Start Num: 10

Candidate Starts for P1201_78:

(10, 60988), (13, 60952), (17, 60832), (21, 60751), (23, 60709), (24, 60676), (25, 60628), (30, 60574), (34, 60460), (41, 60319), (42, 60316), (47, 60244), (56, 60103), (58, 60070), (62, 60031), (66, 59920),

(70, 59854), (71, 59848), (73, 59740), (75, 59695), (78, 59668), (79, 59659), (80, 59605), (83, 59563), (91, 59446), (92, 59437), (95, 59389), (99, 59272), (107, 59116), (112, 59038), (113, 59035), (116, 59002), (117, 58984), (122, 58912), (124, 58906), (128, 58873), (141, 58723), (145, 58657), (147, 58591), (149, 58555), (158, 58420), (161, 58396),

Gene: Patbob_111 Start: 87847, Stop: 89985, Start Num: 7

Candidate Starts for Patbob_111:

(Start: 7 @87847 has 1 MA's), (22, 88099), (24, 88165), (28, 88228), (34, 88384), (38, 88474), (42, 88528), (43, 88534), (52, 88699), (56, 88741), (61, 88804), (63, 88825), (69, 88987), (98, 89095), (101, 89113), (103, 89170), (107, 89251), (113, 89332), (116, 89365), (123, 89464), (130, 89515), (140, 89623), (141, 89653), (145, 89719), (150, 89827), (152, 89881), (159, 89968),

Gene: PauloDiaboli_216 Start: 115867, Stop: 113714, Start Num: 6

Candidate Starts for PauloDiaboli_216:

(2, 115969), (4, 115954), (Start: 6 @115867 has 5 MA's), (12, 115795), (19, 115660), (23, 115552), (31, 115405), (34, 115300), (43, 115150), (45, 115135), (50, 115054), (52, 114985), (53, 114976), (54, 114973), (55, 114970), (59, 114901), (60, 114895), (64, 114856), (65, 114808), (66, 114760), (68, 114715), (69, 114709), (98, 114601), (101, 114583), (105, 114499), (107, 114445), (109, 114409), (111, 114379), (134, 114142), (137, 114127), (139, 114103), (142, 114043), (144, 113995), (147, 113914), (148, 113890), (157, 113749), (158, 113743),

Gene: PeteyPab_74 Start: 56997, Stop: 53929, Start Num: 11

Candidate Starts for PeteyPab_74:

(Start: 11 @56997 has 8 MA's), (16, 56874), (26, 56643), (27, 56640), (33, 56496), (36, 56418), (42, 56334), (44, 56325), (49, 56238), (50, 56232), (56, 56121), (57, 56097), (60, 56073), (63, 56037), (64, 56034), (69, 55881), (72, 55827), (74, 55632), (77, 55578), (80, 55455), (82, 55374), (84, 55329), (85, 55311), (86, 55242), (87, 55224), (89, 55077), (90, 55056), (93, 54996), (94, 54936), (100, 54795), (103, 54729), (104, 54723), (107, 54648), (110, 54585), (121, 54453), (131, 54396), (132, 54387), (136, 54351), (138, 54327), (140, 54291), (146, 54153), (147, 54129), (155, 53988), (160, 53937),

Gene: PotatoChip_75 Start: 56999, Stop: 53931, Start Num: 11

Candidate Starts for PotatoChip_75:

(Start: 11 @56999 has 8 MA's), (16, 56876), (26, 56645), (27, 56642), (33, 56498), (36, 56420), (42, 56336), (44, 56327), (49, 56240), (50, 56234), (56, 56123), (57, 56099), (60, 56075), (63, 56039), (64, 56036), (69, 55883), (72, 55829), (74, 55634), (77, 55580), (80, 55457), (82, 55376), (84, 55331), (85, 55313), (86, 55244), (87, 55226), (89, 55079), (90, 55058), (93, 54998), (94, 54938), (100, 54797), (103, 54731), (104, 54725), (107, 54650), (110, 54587), (121, 54455), (131, 54398), (132, 54389), (136, 54353), (138, 54329), (140, 54293), (146, 54155), (147, 54131), (155, 53990), (160, 53939),

Gene: Pumpernickel_199 Start: 115229, Stop: 113079, Start Num: 6

Candidate Starts for Pumpernickel_199:

(Start: 6 @115229 has 5 MA's), (8, 115205), (12, 115160), (23, 114917), (31, 114770), (32, 114698), (34, 114665), (37, 114593), (39, 114554), (40, 114533), (43, 114515), (45, 114500), (48, 114428), (50, 114419), (51, 114353), (52, 114350), (55, 114335), (60, 114260), (64, 114221), (65, 114173), (66, 114125), (67, 114110), (69, 114074), (101, 113948), (102, 113921), (107, 113810), (115, 113708), (120, 113612), (134, 113507), (137, 113492), (142, 113408), (151, 113192), (154, 113153), (155, 113138),

Gene: Racecar_111 Start: 87765, Stop: 89903, Start Num: 7

Candidate Starts for Racecar_111:

(Start: 7 @87765 has 1 MA's), (22, 88017), (24, 88083), (34, 88302), (38, 88392), (42, 88446), (52, 88617), (56, 88659), (63, 88743), (69, 88905), (98, 89013), (101, 89031), (103, 89088), (107, 89169), (113, 89250), (116, 89283), (124, 89385), (125, 89388), (141, 89571), (145, 89637), (150, 89745),

(152, 89799),

Gene: SJReid_117 Start: 80008, Stop: 82146, Start Num: 7

Candidate Starts for SJReid_117:

(Start: 7 @80008 has 1 MA's), (24, 80326), (34, 80545), (36, 80605), (42, 80689), (43, 80695), (56, 80902), (61, 80965), (63, 80986), (64, 80989), (69, 81148), (101, 81274), (107, 81412), (113, 81493), (116, 81526), (127, 81655), (145, 81880),

Gene: Stickynote_74 Start: 57205, Stop: 54137, Start Num: 11

Candidate Starts for Stickynote_74:

(Start: 11 @57205 has 8 MA's), (16, 57082), (26, 56851), (27, 56848), (36, 56626), (42, 56542), (44, 56533), (49, 56446), (56, 56329), (57, 56305), (60, 56281), (63, 56245), (64, 56242), (69, 56089), (72, 56035), (74, 55840), (76, 55792), (77, 55786), (81, 55585), (85, 55519), (87, 55432), (88, 55318), (89, 55285), (93, 55204), (94, 55144), (100, 55003), (103, 54937), (104, 54931), (107, 54856), (110, 54793), (121, 54661), (131, 54604), (136, 54559), (138, 54535), (140, 54499), (146, 54361), (147, 54337), (156, 54193), (160, 54145),

Gene: Talia1610_112 Start: 87131, Stop: 89269, Start Num: 7

Candidate Starts for Talia1610_112:

(Start: 7 @87131 has 1 MA's), (22, 87383), (24, 87449), (34, 87668), (38, 87758), (42, 87812), (52, 87983), (56, 88025), (63, 88109), (69, 88271), (98, 88379), (101, 88397), (103, 88454), (107, 88535), (113, 88616), (116, 88649), (124, 88751), (125, 88754), (141, 88937), (145, 89003), (150, 89111), (152, 89165), (155, 89210), (161, 89264),

Gene: Zion_75 Start: 56997, Stop: 53929, Start Num: 11

Candidate Starts for Zion_75:

(Start: 11 @56997 has 8 MA's), (16, 56874), (26, 56643), (27, 56640), (33, 56496), (36, 56418), (42, 56334), (44, 56325), (49, 56238), (50, 56232), (56, 56121), (57, 56097), (60, 56073), (63, 56037), (64, 56034), (69, 55881), (72, 55827), (74, 55632), (77, 55578), (80, 55455), (82, 55374), (84, 55329), (85, 55311), (86, 55242), (87, 55224), (89, 55077), (90, 55056), (93, 54996), (94, 54936), (100, 54795), (103, 54729), (104, 54723), (107, 54648), (110, 54585), (121, 54453), (131, 54396), (132, 54387), (136, 54351), (138, 54327), (140, 54291), (146, 54153), (147, 54129), (155, 53988), (160, 53937),

Gene: Zooman_183 Start: 110285, Stop: 108132, Start Num: 6

Candidate Starts for Zooman_183:

(Start: 6 @110285 has 5 MA's), (12, 110213), (14, 110141), (23, 109970), (30, 109832), (31, 109823), (32, 109751), (33, 109736), (34, 109718), (36, 109658), (39, 109607), (43, 109568), (45, 109553), (48, 109481), (52, 109403), (54, 109391), (55, 109388), (60, 109313), (64, 109274), (65, 109226), (66, 109178), (67, 109163), (68, 109133), (69, 109127), (98, 109019), (101, 109001), (102, 108974), (107, 108863), (109, 108827), (111, 108797), (114, 108776), (137, 108545), (139, 108521), (142, 108461), (147, 108332), (148, 108308), (151, 108245), (157, 108167), (158, 108161),