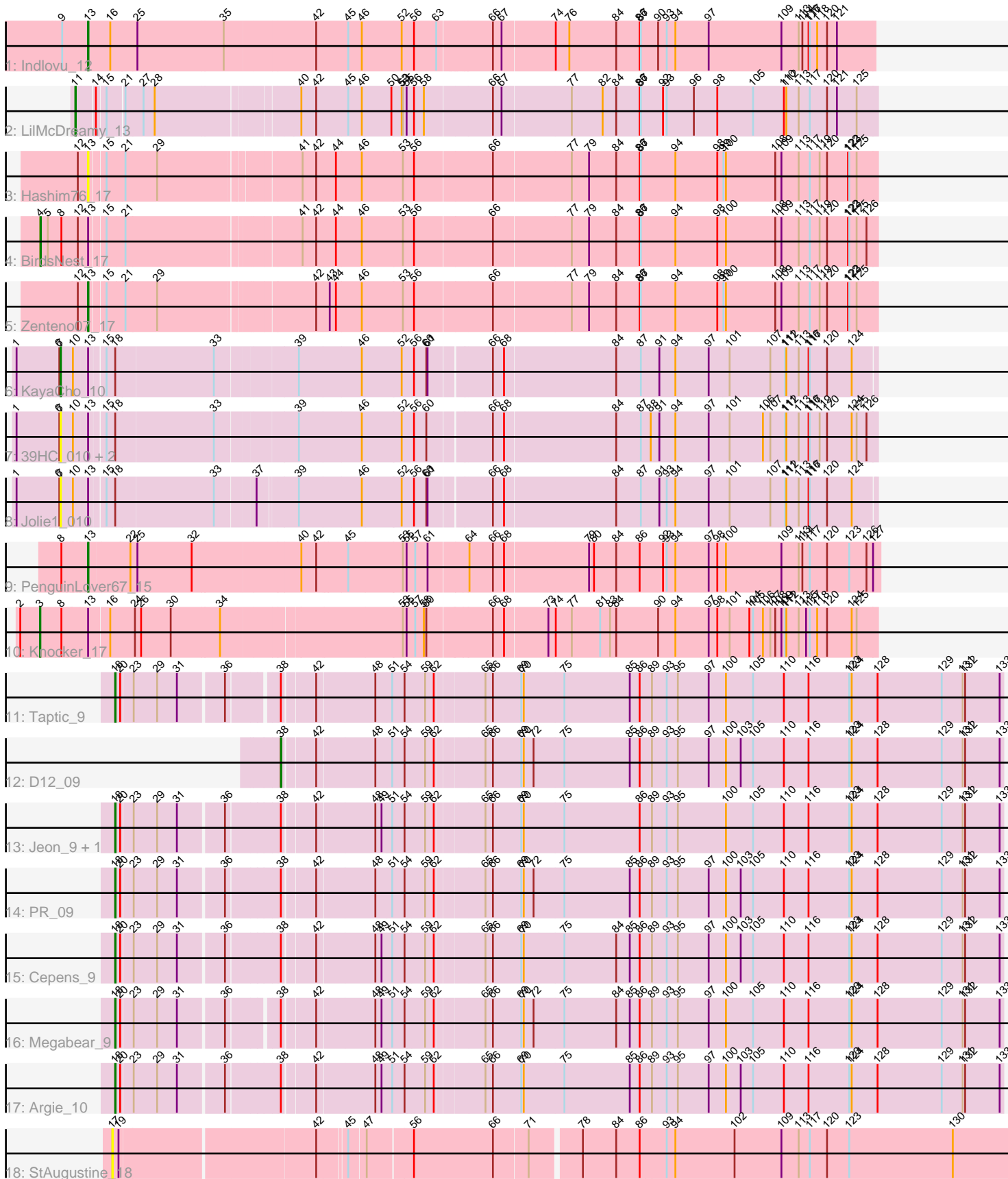


Pham 158180



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 158180 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158180 has 21 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Indlovu_12
- Track 2 : LilMcDreamy_13
- Track 3 : Hashim76_17
- Track 4 : BirdsNest_17
- Track 5 : Zenteno07_17
- Track 6 : KayaCho_10
- Track 7 : 39HC_010, 40BC_010, Hosp_08
- Track 8 : Jolie1_010
- Track 9 : PenguinLover67_15
- Track 10 : Knocker_17
- Track 11 : Taptic_9
- Track 12 : D12_09
- Track 13 : Jeon_9, GodPhather_10
- Track 14 : PR_09
- Track 15 : Cepens_9
- Track 16 : Megabear_9
- Track 17 : Argie_10
- Track 18 : StAugustine_18

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

The start number called the most often in the published annotations is 18, it was called in 7 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Argie_10, Cepens_9, GodPhather_10, Jeon_9, Megabear_9, PR_09, Taptic_9,

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

- 39HC_010, 40BC_010, Hosp_08, Jolie1_010, KayaCho_10,

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

- BirdsNest_17, D12_09, Hashim76_17, Indlovu_12, Knocker_17, LilMcDreamy_13, PenguinLover67_15, StAugustine_18, Zenteno07_17,

Summary by start number:

Start 3:

- Found in 1 of 21 (4.8%) 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: Knocker_17 (B9),

Start 4:

- Found in 1 of 21 (4.8%) 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: BirdsNest_17 (B13),

Start 7:

- Found in 5 of 21 (23.8%) 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: 39HC_010 (B6), 40BC_010 (B6), Hosp_08 (B6), Jolie1_010 (B6), KayaCho_10 (B6),

Start 11:

- Found in 1 of 21 (4.8%) 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: LilMcDreamy_13 (B12),

Start 13:

- Found in 11 of 21 (52.4%) of genes in pham
- Manual Annotations of this start: 3 of 15
- Called 36.4% of time when present
- Phage (with cluster) where this start called: Hashim76_17 (B13), Indlovu_12 (B11), PenguinLover67_15 (B9), Zenteno07_17 (B13),

Start 17:

- Found in 1 of 21 (4.8%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: StAugustine_18 (singleton),

Start 18:

- Found in 12 of 21 (57.1%) of genes in pham
- Manual Annotations of this start: 7 of 15
- Called 58.3% of time when present
- Phage (with cluster) where this start called: Argie_10 (W), Cepens_9 (W), GodPhather_10 (W), Jeon_9 (W), Megabear_9 (W), PR_09 (W), Taptic_9 (W),

Start 38:

- Found in 8 of 21 (38.1%) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 12.5% of time when present
- Phage (with cluster) where this start called: D12_09 (W),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, B6, B12, B13, W, B11, B9,

Info for manual annotations of cluster B11:

- Start number 13 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 11 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 4 was manually annotated 1 time for cluster B13.
- Start number 13 was manually annotated 1 time for cluster B13.

Info for manual annotations of cluster B6:

- Start number 7 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B9:

- Start number 3 was manually annotated 1 time for cluster B9.
- Start number 13 was manually annotated 1 time for cluster B9.

Info for manual annotations of cluster W:

- Start number 18 was manually annotated 7 times for cluster W.
- Start number 38 was manually annotated 1 time for cluster W.

Gene Information:

Gene: 39HC_010 Start: 9835, Stop: 11733, Start Num: 7

Candidate Starts for 39HC_010:

(1, 9730), (6, 9832), (Start: 7 @9835 has 1 MA's), (10, 9865), (Start: 13 @9898 has 3 MA's), (15, 9931), (Start: 18 @9952 has 7 MA's), (33, 10183), (39, 10366), (46, 10513), (52, 10606), (56, 10636), (60, 10666), (66, 10807), (68, 10834), (84, 11101), (87, 11161), (88, 11185), (91, 11206), (94, 11245), (97, 11326), (101, 11374), (106, 11455), (107, 11473), (111, 11509), (112, 11512), (113, 11542), (116, 11566), (117, 11569), (119, 11593), (120, 11611), (124, 11671), (125, 11683), (126, 11707),

Gene: 40BC_010 Start: 9835, Stop: 11733, Start Num: 7

Candidate Starts for 40BC_010:

(1, 9730), (6, 9832), (Start: 7 @9835 has 1 MA's), (10, 9865), (Start: 13 @9898 has 3 MA's), (15, 9931), (Start: 18 @9952 has 7 MA's), (33, 10183), (39, 10366), (46, 10513), (52, 10606), (56, 10636), (60, 10666), (66, 10807), (68, 10834), (84, 11101), (87, 11161), (88, 11185), (91, 11206), (94, 11245), (97, 11326), (101, 11374), (106, 11455), (107, 11473), (111, 11509), (112, 11512), (113, 11542), (116, 11566), (117, 11569), (119, 11593), (120, 11611), (124, 11671), (125, 11683), (126, 11707),

Gene: Argie_10 Start: 10843, Stop: 12906, Start Num: 18

Candidate Starts for Argie_10:

(Start: 18 @10843 has 7 MA's), (20, 10855), (23, 10882), (29, 10936), (31, 10984), (36, 11089), (Start: 38 @11206 has 1 MA's), (42, 11278), (48, 11413), (49, 11428), (51, 11452), (54, 11482), (59, 11527), (62, 11548), (65, 11656), (66, 11674), (69, 11743), (70, 11749), (75, 11842), (85, 12001), (86, 12025), (89, 12055), (93, 12091), (95, 12118), (97, 12193), (100, 12232), (103, 12268), (105, 12298), (110, 12373), (116, 12433), (123, 12532), (124, 12538), (128, 12601), (129, 12757), (131, 12808), (132, 12814), (133, 12898),

Gene: BirdsNest_17 Start: 10414, Stop: 12351, Start Num: 4

Candidate Starts for BirdsNest_17:

(Start: 4 @10414 has 1 MA's), (5, 10432), (8, 10465), (12, 10501), (Start: 13 @10525 has 3 MA's), (15, 10555), (21, 10597), (41, 10984), (42, 11017), (44, 11062), (46, 11122), (53, 11218), (56, 11245), (66, 11425), (77, 11608), (79, 11650), (84, 11716), (86, 11773), (87, 11776), (94, 11860), (98, 11962), (100, 11983), (108, 12103), (109, 12118), (113, 12160), (117, 12187), (119, 12211), (120, 12229), (122, 12280), (123, 12283), (125, 12301), (126, 12325),

Gene: Cepens_9 Start: 10582, Stop: 12645, Start Num: 18

Candidate Starts for Cepens_9:

(Start: 18 @10582 has 7 MA's), (20, 10594), (23, 10621), (29, 10675), (31, 10723), (36, 10828), (Start: 38 @10945 has 1 MA's), (42, 11017), (48, 11152), (49, 11167), (51, 11191), (54, 11221), (59, 11266), (62, 11287), (65, 11395), (66, 11413), (69, 11482), (70, 11488), (75, 11581), (84, 11707), (85, 11740), (86, 11764), (89, 11794), (93, 11830), (95, 11857), (97, 11932), (100, 11971), (103, 12007), (105, 12037), (110, 12112), (116, 12172), (123, 12271), (124, 12277), (128, 12340), (129, 12496), (131, 12547), (132, 12553), (133, 12637),

Gene: D12_09 Start: 10923, Stop: 12623, Start Num: 38

Candidate Starts for D12_09:

(Start: 38 @10923 has 1 MA's), (42, 10995), (48, 11130), (51, 11169), (54, 11199), (59, 11244), (62, 11265), (65, 11373), (66, 11391), (69, 11460), (70, 11466), (72, 11490), (75, 11559), (85, 11718), (86, 11742), (89, 11772), (93, 11808), (95, 11835), (97, 11910), (100, 11949), (103, 11985), (105, 12015), (110, 12090), (116, 12150), (123, 12249), (124, 12255), (128, 12318), (129, 12474), (131, 12525), (132, 12531), (133, 12615),

Gene: GodPhather_10 Start: 10840, Stop: 12903, Start Num: 18

Candidate Starts for GodPhather_10:

(Start: 18 @10840 has 7 MA's), (20, 10852), (23, 10879), (29, 10933), (31, 10981), (36, 11086), (Start: 38 @11203 has 1 MA's), (42, 11275), (48, 11410), (49, 11425), (51, 11449), (54, 11479), (59, 11524), (62, 11545), (65, 11653), (66, 11671), (69, 11740), (70, 11746), (75, 11839), (86, 12022), (89, 12052), (93, 12088), (95, 12115), (100, 12229), (105, 12295), (110, 12370), (116, 12430), (123, 12529), (124, 12535), (128, 12598), (129, 12754), (131, 12805), (132, 12811), (133, 12895),

Gene: Hashim76_17 Start: 10808, Stop: 12628, Start Num: 13

Candidate Starts for Hashim76_17:

(12, 10784), (Start: 13 @10808 has 3 MA's), (15, 10838), (21, 10880), (29, 10952), (41, 11261), (42, 11294), (44, 11339), (46, 11399), (53, 11495), (56, 11522), (66, 11702), (77, 11885), (79, 11927), (84, 11993), (86, 12050), (87, 12053), (94, 12137), (98, 12239), (99, 12254), (100, 12260), (108, 12380), (109, 12395), (113, 12437), (117, 12464), (119, 12488), (120, 12506), (122, 12557), (123, 12560), (125, 12578),

Gene: Hosp_08 Start: 8037, Stop: 9935, Start Num: 7

Candidate Starts for Hosp_08:

(1, 7932), (6, 8034), (Start: 7 @8037 has 1 MA's), (10, 8067), (Start: 13 @8100 has 3 MA's), (15, 8133), (Start: 18 @8154 has 7 MA's), (33, 8385), (39, 8568), (46, 8715), (52, 8808), (56, 8838), (60, 8868), (66, 9009), (68, 9036), (84, 9303), (87, 9363), (88, 9387), (91, 9408), (94, 9447), (97, 9528), (101, 9576), (106, 9657), (107, 9675), (111, 9711), (112, 9714), (113, 9744), (116, 9768), (117, 9771), (119, 9795), (120, 9813), (124, 9873), (125, 9885), (126, 9909),

Gene: Indlovu_12 Start: 11120, Stop: 12970, Start Num: 13

Candidate Starts for Indlovu_12:

(9, 11063), (Start: 13 @11120 has 3 MA's), (16, 11174), (25, 11234), (35, 11441), (42, 11651), (45, 11723), (46, 11756), (52, 11849), (56, 11879), (63, 11933), (66, 12050), (67, 12071), (74, 12197), (76, 12230), (84, 12344), (86, 12401), (87, 12404), (90, 12446), (93, 12467), (94, 12488), (97, 12569), (109, 12743), (113, 12785), (114, 12794), (116, 12809), (117, 12812), (118, 12830), (120, 12854), (121, 12878),

Gene: Jeon_9 Start: 10570, Stop: 12633, Start Num: 18

Candidate Starts for Jeon_9:

(Start: 18 @10570 has 7 MA's), (20, 10582), (23, 10609), (29, 10663), (31, 10711), (36, 10816), (Start: 38 @10933 has 1 MA's), (42, 11005), (48, 11140), (49, 11155), (51, 11179), (54, 11209), (59, 11254), (62, 11275), (65, 11383), (66, 11401), (69, 11470), (70, 11476), (75, 11569), (86, 11752), (89, 11782), (93, 11818), (95, 11845), (100, 11959), (105, 12025), (110, 12100), (116, 12160), (123, 12259), (124, 12265), (128, 12328), (129, 12484), (131, 12535), (132, 12541), (133, 12625),

Gene: Jolie1_010 Start: 9835, Stop: 11718, Start Num: 7

Candidate Starts for Jolie1_010:

(1, 9730), (6, 9832), (Start: 7 @9835 has 1 MA's), (10, 9865), (Start: 13 @9898 has 3 MA's), (15, 9931), (Start: 18 @9952 has 7 MA's), (33, 10183), (37, 10270), (39, 10360), (46, 10507), (52, 10600), (56, 10630), (60, 10660), (61, 10663), (66, 10801), (68, 10828), (84, 11095), (87, 11155), (91, 11200), (93, 11218), (94, 11239), (97, 11320), (101, 11368), (107, 11467), (111, 11503), (112, 11506), (113, 11536), (116, 11560), (117, 11563), (120, 11605), (124, 11665),

Gene: KayaCho_10 Start: 9838, Stop: 11730, Start Num: 7

Candidate Starts for KayaCho_10:

(1, 9733), (6, 9835), (Start: 7 @9838 has 1 MA's), (10, 9868), (Start: 13 @9901 has 3 MA's), (15, 9934), (Start: 18 @9955 has 7 MA's), (33, 10186), (39, 10369), (46, 10516), (52, 10609), (56, 10639), (60, 10669), (61, 10672), (66, 10810), (68, 10837), (84, 11104), (87, 11164), (91, 11209), (94, 11248), (97, 11329), (101, 11377), (107, 11476), (111, 11512), (112, 11515), (113, 11545), (116, 11569), (117, 11572), (120, 11614), (124, 11674),

Gene: Knocker_17 Start: 13813, Stop: 15774, Start Num: 3

Candidate Starts for Knocker_17:

(2, 13765), (Start: 3 @13813 has 1 MA's), (8, 13861), (Start: 13 @13918 has 3 MA's), (16, 13966), (24, 14026), (26, 14041), (30, 14113), (34, 14230), (53, 14641), (55, 14650), (57, 14671), (58, 14692), (60, 14698), (66, 14848), (68, 14875), (73, 14977), (74, 14995), (77, 15034), (81, 15103), (83, 15127), (84, 15142), (90, 15244), (94, 15286), (97, 15367), (98, 15388), (101, 15415), (104, 15463), (105, 15472), (106, 15496), (107, 15514), (108, 15526), (109, 15541), (111, 15550), (112, 15553), (113, 15583), (115, 15601), (117, 15610), (118, 15628), (120, 15652), (124, 15712), (125, 15724),

Gene: LilMcDreamy_13 Start: 12145, Stop: 13986, Start Num: 11

Candidate Starts for LilMcDreamy_13:

(Start: 11 @12145 has 1 MA's), (14, 12181), (15, 12199), (21, 12232), (27, 12271), (28, 12298), (40, 12613), (42, 12649), (45, 12724), (46, 12757), (50, 12826), (52, 12850), (53, 12853), (55, 12862), (56, 12880), (58, 12904), (66, 13063), (67, 13084), (77, 13246), (82, 13321), (84, 13354), (86, 13411), (87, 13414), (92, 13465), (93, 13474), (96, 13540), (98, 13597), (105, 13684), (110, 13759), (112, 13765), (113, 13795), (117, 13822), (120, 13864), (121, 13888), (125, 13936),

Gene: Megabear_9 Start: 10537, Stop: 12588, Start Num: 18

Candidate Starts for Megabear_9:

(Start: 18 @10537 has 7 MA's), (20, 10549), (23, 10576), (29, 10630), (31, 10678), (36, 10783), (Start: 38 @10888 has 1 MA's), (42, 10960), (48, 11095), (49, 11110), (51, 11134), (54, 11164), (59, 11209), (62, 11230), (65, 11338), (66, 11356), (69, 11425), (70, 11431), (72, 11455), (75, 11524), (84, 11650), (85, 11683), (86, 11707), (89, 11737), (93, 11773), (95, 11800), (97, 11875), (100, 11914), (105,

11980), (110, 12055), (116, 12115), (123, 12214), (124, 12220), (128, 12283), (129, 12439), (131, 12490), (132, 12496), (133, 12580),

Gene: PR_09 Start: 10537, Stop: 12600, Start Num: 18

Candidate Starts for PR_09:

(Start: 18 @10537 has 7 MA's), (20, 10549), (23, 10576), (29, 10630), (31, 10678), (36, 10783), (Start: 38 @10900 has 1 MA's), (42, 10972), (48, 11107), (51, 11146), (54, 11176), (59, 11221), (62, 11242), (65, 11350), (66, 11368), (69, 11437), (70, 11443), (72, 11467), (75, 11536), (85, 11695), (86, 11719), (89, 11749), (93, 11785), (95, 11812), (97, 11887), (100, 11926), (103, 11962), (105, 11992), (110, 12067), (116, 12127), (123, 12226), (124, 12232), (128, 12295), (129, 12451), (131, 12502), (132, 12508), (133, 12592),

Gene: PenguinLover67_15 Start: 12281, Stop: 14140, Start Num: 13

Candidate Starts for PenguinLover67_15:

(8, 12224), (Start: 13 @12281 has 3 MA's), (22, 12374), (25, 12386), (32, 12518), (40, 12770), (42, 12806), (45, 12875), (53, 13004), (55, 13013), (57, 13034), (61, 13064), (64, 13154), (66, 13211), (68, 13238), (79, 13436), (80, 13448), (84, 13502), (86, 13559), (92, 13616), (93, 13625), (94, 13646), (97, 13727), (98, 13748), (100, 13766), (109, 13901), (113, 13943), (114, 13952), (117, 13970), (120, 14012), (123, 14066), (126, 14108), (127, 14123),

Gene: StAugustine_18 Start: 13254, Stop: 15374, Start Num: 17

Candidate Starts for StAugustine_18:

(17, 13254), (19, 13269), (42, 13719), (45, 13782), (47, 13818), (56, 13920), (66, 14112), (71, 14193), (78, 14307), (84, 14388), (86, 14445), (93, 14508), (94, 14529), (102, 14673), (109, 14787), (113, 14829), (117, 14856), (120, 14898), (123, 14952), (130, 15204),

Gene: Taptic_9 Start: 10537, Stop: 12588, Start Num: 18

Candidate Starts for Taptic_9:

(Start: 18 @10537 has 7 MA's), (20, 10549), (23, 10576), (29, 10630), (31, 10678), (36, 10783), (Start: 38 @10888 has 1 MA's), (42, 10960), (48, 11095), (51, 11134), (54, 11164), (59, 11209), (62, 11230), (65, 11338), (66, 11356), (69, 11425), (70, 11431), (75, 11524), (85, 11683), (86, 11707), (89, 11737), (93, 11773), (95, 11800), (97, 11875), (100, 11914), (105, 11980), (110, 12055), (116, 12115), (123, 12214), (124, 12220), (128, 12283), (129, 12439), (131, 12490), (132, 12496), (133, 12580),

Gene: Zenteno07_17 Start: 10822, Stop: 12648, Start Num: 13

Candidate Starts for Zenteno07_17:

(12, 10798), (Start: 13 @10822 has 3 MA's), (15, 10852), (21, 10894), (29, 10966), (42, 11314), (43, 11344), (44, 11359), (46, 11419), (53, 11515), (56, 11542), (66, 11722), (77, 11905), (79, 11947), (84, 12013), (86, 12070), (87, 12073), (94, 12157), (98, 12259), (99, 12274), (100, 12280), (108, 12400), (109, 12415), (113, 12457), (117, 12484), (119, 12508), (120, 12526), (122, 12577), (123, 12580), (125, 12598),