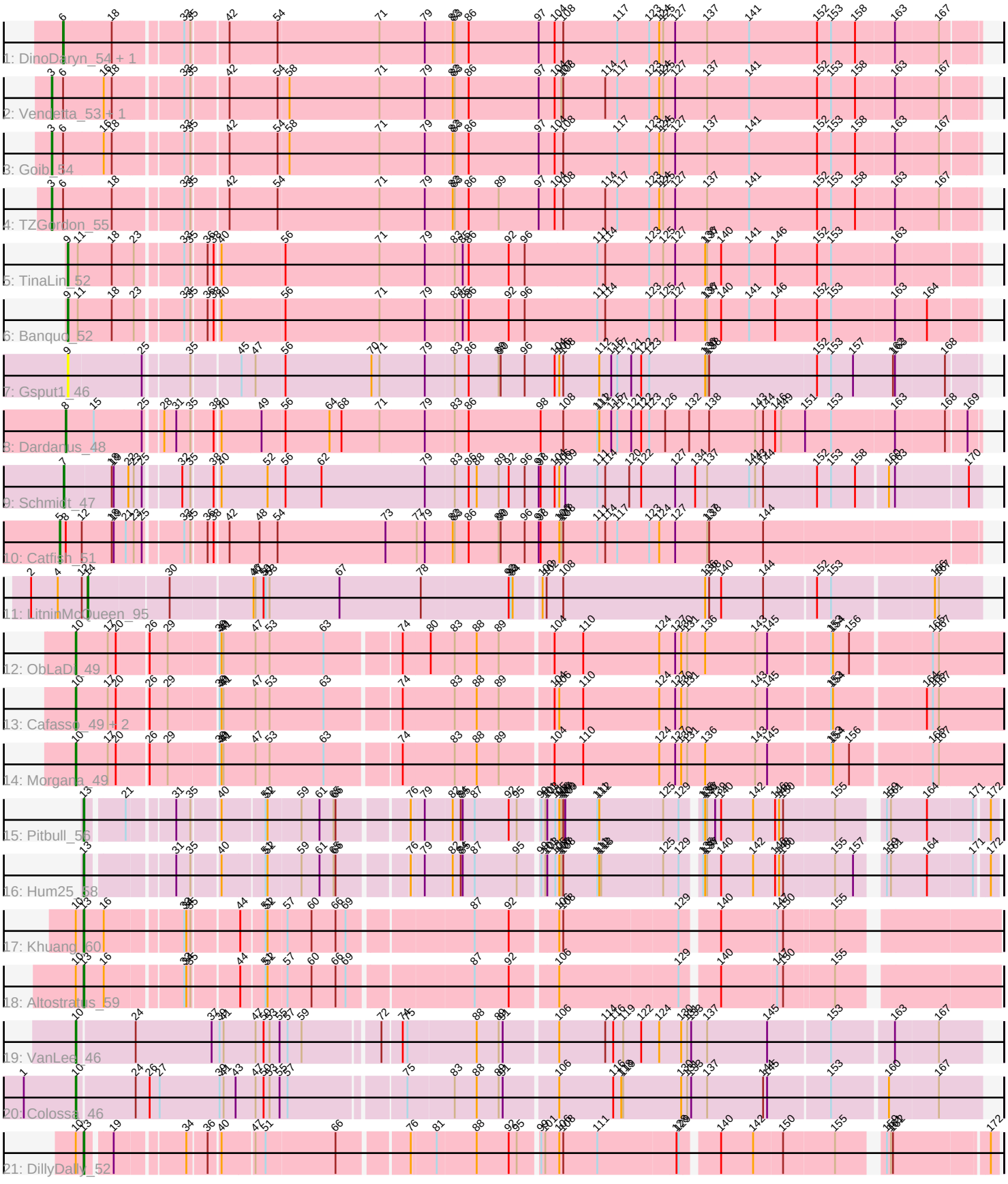
Pham 344313


1: DinoDaryn_54 + 1
2: Vendetta_53 + 1
3: Goibl_54
4: TZGordon_55
5: TinaLin_52
6: Banquo_52
7: Gsput1_46
8: Dardanus_48
9: Schmidt_47
10: Catfish_51
11: LitnimMoQueen_95
12: ObLaDi_49
13: Cafasso_49 + 2
14: Morgana_49
15: Pitbull_56
16: Hum25_58
17: Khuang_60
18: Altostratus_59
19: VanLeeg_46
20: Colossa_46
21: DillyDally_52

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 344313 Report

This analysis was run 11/14/26 on database version 672.

Pham number 344313 has 25 members, 1 are drafts.

Phages represented in each track:
- Track 1 : DinoDaryn_54, Huffy_54
- Track 2 : Vendetta_53, Splinter_53
- Track 3 : Goib_54
- Track 4 : TZGordon_55
- Track 5 : TinaLin_52
- Track 6 : Banquo_52
- Track 7 : Gsput1_46
- Track 8 : Dardanus_48
- Track 9 : Schmidt_47
- Track 10 : Catfish_51
- Track 11 : LitninMcQueen_95
- Track 12 : ObLaDi_49
- Track 13 : Cafasso_49, ModicumRichard_49, Aleemily_48
- Track 14 : Morgana_49
- Track 15 : Pitbull_56
- Track 16 : Hum25_58
- Track 17 : Khuang_60
- Track 18 : Altostratus_59
- Track 19 : VanLee_46
- Track 20 : Colossa_46
- Track 21 : DillyDally_52

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

The start number called the most often in the published annotations is 10, it was called in 7 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Aleemily_48, Cafasso_49, Colossa_46, ModicumRichard_49, Morgana_49, ObLaDi_49, VanLee_46,

Genes that have the "Most Annotated" start but do not call it:
- Altostratus_59, DillyDally_52, Khuang_60,

Genes that do not have the "Most Annotated" start:
• Banquo_52, Catfish_51, Dardanus_48, DinoDaryn_54, Goib_54, Gsput1_46, Huffy_54, Hum25_58, LitninMcQueen_95, Pitbull_56, Schmidt_47, Splinter_53, TZGordon_55, TinaLin_52, Vendetta_53,

Summary by start number:

Start 3:
• Found in 4 of 25 (16.0%) of genes in pham
• Manual Annotations of this start: 4 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Goib_54 (CU1), Splinter_53 (CU1), TZGordon_55 (CU1), Vendetta_53 (CU1),

Start 5:
• Found in 1 of 25 (4.0%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Catfish_51 (CU5),

Start 6:
• Found in 6 of 25 (24.0%) of genes in pham
• Manual Annotations of this start: 2 of 24
• Called 33.3% of time when present
• Phage (with cluster) where this start called: DinoDaryn_54 (CU1), Huffy_54 (CU1),

Start 7:
• Found in 1 of 25 (4.0%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Schmidt_47 (CU4),

Start 8:
• Found in 2 of 25 (8.0%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Dardanus_48 (CU3),

Start 9:
• Found in 3 of 25 (12.0%) of genes in pham
• Manual Annotations of this start: 2 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Banquo_52 (CU1), Gsput1_46 (CU2), TinaLin_52 (CU1),

Start 10:
• Found in 10 of 25 (40.0%) of genes in pham
• Manual Annotations of this start: 7 of 24
• Called 70.0% of time when present
• Phage (with cluster) where this start called: Aleemily_48 (DZ), Cafasso_49 (DZ), Colossa_46 (KA), ModicumRichard_49 (DZ), Morgana_49 (DZ), ObLaDi_49 (DZ), VanLee_46 (KA),

Start 13:
• Found in 5 of 25 (20.0%) of genes in pham
• Manual Annotations of this start: 5 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Altostratus_59 (FS), DillyDally_52 (singleton), Hum25_58 (FQ1), Khuang_60 (FS), Pitbull_56 (FQ1),

Start 14:
• Found in 1 of 25 (4.0%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LitninMcQueen_95 (DN1),

Summary by clusters:

There are 11 clusters represented in this pham: KA, FS, CU3, CU2, CU1, CU5, CU4, DN1, DZ, singleton, FQ1,

Info for manual annotations of cluster CU1:
•Start number 3 was manually annotated 4 times for cluster CU1.
•Start number 6 was manually annotated 2 times for cluster CU1.
•Start number 9 was manually annotated 2 times for cluster CU1.

Info for manual annotations of cluster CU3:
•Start number 8 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:
•Start number 7 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:
•Start number 5 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster DN1:
•Start number 14 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DZ:
•Start number 10 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster FQ1:
•Start number 13 was manually annotated 2 times for cluster FQ1.

Info for manual annotations of cluster FS:
•Start number 13 was manually annotated 2 times for cluster FS.

Info for manual annotations of cluster KA:
•Start number 10 was manually annotated 2 times for cluster KA.

Gene Information:

Gene: Aleemily_48 Start: 36948, Stop: 38267, Start Num: 10

Candidate Starts for Aleemily_48:
(Start: 10 @36948 has 7 MA's), (17, 36996), (20, 37008), (26, 37050), (29, 37074), (39, 37143), (40, 37146), (41, 37149), (47, 37197), (53, 37218), (63, 37299), (74, 37404), (83, 37479), (88, 37512), (89, 37545), (104, 37617), (106, 37623), (110, 37659), (124, 37773), (127, 37797), (130, 37806), (131, 37815), (143, 37917), (145, 37935), (153, 38025), (154, 38028), (164, 38157), (165, 38166), (167, 38175),

Gene: Altostratus_59 Start: 34297, Stop: 35538, Start Num: 13
Candidate Starts for Altostratus_59:
(Start: 10 @34285 has 7 MA's), (Start: 13 @34297 has 5 MA's), (16, 34327), (33, 34432), (34, 34435), (35, 34441), (44, 34504), (51, 34537), (52, 34540), (57, 34567), (60, 34603), (66, 34639), (69, 34654), (87, 34825), (92, 34876), (106, 34939), (129, 35110), (140, 35158), (147, 35239), (150, 35248), (155, 35320),

Gene: Banquo_52 Start: 33740, Stop: 35056, Start Num: 9
Candidate Starts for Banquo_52:
(Start: 9 @33740 has 2 MA's), (11, 33755), (18, 33806), (23, 33836), (33, 33899), (35, 33908), (36, 33929), (38, 33938), (40, 33944), (56, 34034), (71, 34175), (79, 34241), (83, 34283), (85, 34295), (86, 34304), (92, 34364), (96, 34388), (111, 34496), (114, 34508), (123, 34574), (125, 34595), (127, 34613), (136, 34658), (137, 34661), (140, 34682), (141, 34724), (146, 34763), (152, 34826), (153, 34847), (163, 34940), (164, 34985),

Gene: Cafasso_49 Start: 37522, Stop: 38841, Start Num: 10
Candidate Starts for Cafasso_49:
(Start: 10 @37522 has 7 MA's), (17, 37570), (20, 37582), (26, 37624), (29, 37648), (39, 37717), (40, 37720), (41, 37723), (47, 37771), (53, 37792), (63, 37873), (74, 37978), (83, 38053), (88, 38086), (89, 38119), (104, 38191), (106, 38197), (110, 38233), (124, 38347), (127, 38371), (130, 38380), (131, 38389), (143, 38491), (145, 38509), (153, 38599), (154, 38602), (164, 38731), (165, 38740), (167, 38749),

Gene: Catfish_51 Start: 35142, Stop: 36470, Start Num: 5
Candidate Starts for Catfish_51:
(Start: 5 @35142 has 1 MA's), (Start: 8 @35151 has 1 MA's), (12, 35175), (18, 35220), (19, 35223), (21, 35241), (23, 35250), (25, 35262), (33, 35313), (35, 35322), (36, 35343), (38, 35352), (42, 35370), (48, 35412), (54, 35439), (73, 35601), (77, 35646), (79, 35658), (82, 35697), (83, 35700), (86, 35721), (89, 35766), (90, 35769), (96, 35805), (97, 35826), (98, 35829), (106, 35856), (107, 35859), (108, 35862), (111, 35913), (114, 35925), (117, 35943), (123, 35991), (124, 36006), (127, 36030), (137, 36078), (138, 36081), (144, 36162),

Gene: Colossa_46 Start: 34604, Stop: 35902, Start Num: 10
Candidate Starts for Colossa_46:
(1, 34526), (Start: 10 @34604 has 7 MA's), (24, 34688), (26, 34709), (27, 34724), (39, 34814), (41, 34820), (43, 34838), (47, 34868), (50, 34880), (53, 34889), (55, 34904), (57, 34916), (75, 35075), (83, 35141), (88, 35174), (89, 35207), (91, 35213), (106, 35288), (116, 35369), (118, 35381), (119, 35384), (130, 35471), (131, 35480), (133, 35486), (137, 35510), (144, 35594), (145, 35600), (153, 35690), (160, 35768), (167, 35840),

Gene: Dardanus_48 Start: 32399, Stop: 33715, Start Num: 8
Candidate Starts for Dardanus_48:
(Start: 8 @32399 has 1 MA's), (15, 32441), (25, 32510), (28, 32531), (31, 32549), (35, 32570), (38, 32600), (40, 32606), (49, 32663), (56, 32696), (64, 32762), (68, 32780), (71, 32837), (79, 32903), (83, 32945), (86, 32966), (98, 33074), (108, 33107), (111, 33158), (112, 33161), (115, 33179), (117, 33188), (121, 33209), (122, 33224), (123, 33236), (126, 33260), (132, 33296), (138, 33326), (143,

33395), (144, 33407), (146, 33425), (149, 33434), (151, 33467), (153, 33506), (163, 33599), (168, 33671), (169, 33698),

Gene: DillyDally_52 Start: 33855, Stop: 35078, Start Num: 13
Candidate Starts for DillyDally_52:
(Start: 10 @33843 has 7 MA's), (Start: 13 @33855 has 5 MA's), (19, 33888), (34, 33981), (36, 34008), (40, 34023), (47, 34068), (51, 34083), (66, 34185), (76, 34281), (81, 34314), (88, 34371), (92, 34419), (95, 34431), (99, 34458), (101, 34464), (106, 34485), (108, 34491), (111, 34542), (128, 34656), (129, 34659), (140, 34707), (142, 34755), (150, 34797), (155, 34872), (159, 34926), (161, 34932), (162, 34935), (172, 35067),

Gene: DinoDaryn_54 Start: 34269, Stop: 35591, Start Num: 6
Candidate Starts for DinoDaryn_54:
(Start: 6 @34269 has 2 MA's), (18, 34341), (33, 34434), (35, 34443), (42, 34491), (54, 34560), (71, 34710), (79, 34776), (82, 34815), (83, 34818), (86, 34839), (97, 34944), (104, 34968), (108, 34980), (117, 35061), (123, 35109), (124, 35124), (125, 35130), (127, 35148), (137, 35196), (141, 35259), (152, 35361), (153, 35382), (158, 35418), (163, 35475), (167, 35538),

Gene: Goib_54 Start: 34792, Stop: 36129, Start Num: 3
Candidate Starts for Goib_54:
(Start: 3 @34792 has 4 MA's), (Start: 6 @34807 has 2 MA's), (16, 34867), (18, 34879), (33, 34972), (35, 34981), (42, 35029), (54, 35098), (58, 35113), (71, 35248), (79, 35314), (82, 35353), (83, 35356), (86, 35377), (97, 35482), (104, 35506), (108, 35518), (117, 35599), (123, 35647), (124, 35662), (125, 35668), (127, 35686), (137, 35734), (141, 35797), (152, 35899), (153, 35920), (158, 35956), (163, 36013), (167, 36076),

Gene: Gsput1_46 Start: 33194, Stop: 34504, Start Num: 9
Candidate Starts for Gsput1_46:
(Start: 9 @33194 has 2 MA's), (25, 33299), (35, 33359), (45, 33422), (47, 33440), (56, 33482), (70, 33611), (71, 33623), (79, 33689), (83, 33731), (86, 33752), (89, 33797), (90, 33800), (96, 33836), (104, 33881), (106, 33887), (108, 33893), (112, 33947), (115, 33965), (117, 33974), (121, 33995), (122, 34010), (123, 34022), (136, 34106), (137, 34109), (138, 34112), (152, 34271), (153, 34292), (157, 34325), (162, 34385), (163, 34388), (168, 34460),

Gene: Huffy_54 Start: 34269, Stop: 35591, Start Num: 6
Candidate Starts for Huffy_54:
(Start: 6 @34269 has 2 MA's), (18, 34341), (33, 34434), (35, 34443), (42, 34491), (54, 34560), (71, 34710), (79, 34776), (82, 34815), (83, 34818), (86, 34839), (97, 34944), (104, 34968), (108, 34980), (117, 35061), (123, 35109), (124, 35124), (125, 35130), (127, 35148), (137, 35196), (141, 35259), (152, 35361), (153, 35382), (158, 35418), (163, 35475), (167, 35538),

Gene: Hum25_58 Start: 33333, Stop: 34556, Start Num: 13
Candidate Starts for Hum25_58:
(Start: 13 @33333 has 5 MA's), (31, 33444), (35, 33465), (40, 33501), (51, 33561), (52, 33564), (59, 33612), (61, 33639), (65, 33660), (66, 33663), (76, 33756), (79, 33771), (82, 33810), (84, 33822), (85, 33825), (87, 33843), (95, 33906), (99, 33933), (101, 33939), (103, 33942), (105, 33954), (106, 33960), (107, 33963), (108, 33966), (111, 34017), (112, 34020), (113, 34023), (125, 34113), (129, 34134), (135, 34155), (136, 34158), (137, 34161), (140, 34182), (142, 34230), (146, 34260), (148, 34266), (150, 34272), (155, 34347), (157, 34374), (159, 34401), (161, 34407), (164, 34461), (171, 34527), (172, 34545),

Gene: Khuang_60 Start: 34884, Stop: 36125, Start Num: 13
Candidate Starts for Khuang_60:

(Start: 10 @34872 has 7 MA's), (Start: 13 @34884 has 5 MA's), (16, 34914), (33, 35019), (34, 35022), (35, 35028), (44, 35091), (51, 35124), (52, 35127), (57, 35154), (60, 35190), (66, 35226), (69, 35241), (87, 35412), (92, 35463), (106, 35526), (108, 35532), (129, 35697), (140, 35745), (147, 35826), (150, 35835), (155, 35907),

Gene: LitninMcQueen_95 Start: 50145, Stop: 51434, Start Num: 14
Candidate Starts for LitninMcQueen_95:
(2, 50061), (4, 50100), (12, 50136), (Start: 14 @50145 has 1 MA's), (30, 50259), (46, 50376), (47, 50379), (50, 50391), (51, 50394), (53, 50400), (67, 50505), (78, 50625), (92, 50754), (93, 50757), (94, 50760), (100, 50796), (102, 50802), (108, 50826), (136, 51039), (138, 51045), (140, 51063), (144, 51126), (152, 51201), (153, 51222), (166, 51366), (167, 51372),

Gene: ModicumRichard_49 Start: 37521, Stop: 38840, Start Num: 10
Candidate Starts for ModicumRichard_49:
(Start: 10 @37521 has 7 MA's), (17, 37569), (20, 37581), (26, 37623), (29, 37647), (39, 37716), (40, 37719), (41, 37722), (47, 37770), (53, 37791), (63, 37872), (74, 37977), (83, 38052), (88, 38085), (89, 38118), (104, 38190), (106, 38196), (110, 38232), (124, 38346), (127, 38370), (130, 38379), (131, 38388), (143, 38490), (145, 38508), (153, 38598), (154, 38601), (164, 38730), (165, 38739), (167, 38748),

Gene: Morgana_49 Start: 37475, Stop: 38794, Start Num: 10
Candidate Starts for Morgana_49:
(Start: 10 @37475 has 7 MA's), (17, 37523), (20, 37535), (26, 37577), (29, 37601), (39, 37670), (40, 37673), (41, 37676), (47, 37724), (53, 37745), (63, 37826), (74, 37931), (83, 38006), (88, 38039), (89, 38072), (104, 38144), (110, 38186), (124, 38300), (127, 38324), (130, 38333), (131, 38342), (136, 38369), (143, 38444), (145, 38462), (153, 38552), (154, 38555), (156, 38579), (165, 38693), (167, 38702),

Gene: ObLaDi_49 Start: 37512, Stop: 38831, Start Num: 10
Candidate Starts for ObLaDi_49:
(Start: 10 @37512 has 7 MA's), (17, 37560), (20, 37572), (26, 37614), (29, 37638), (39, 37707), (40, 37710), (41, 37713), (47, 37761), (53, 37782), (63, 37863), (74, 37968), (80, 38007), (83, 38043), (88, 38076), (89, 38109), (104, 38181), (110, 38223), (124, 38337), (127, 38361), (130, 38370), (131, 38379), (136, 38406), (143, 38481), (145, 38499), (153, 38589), (154, 38592), (156, 38616), (165, 38730), (167, 38739),

Gene: Pitbull_56 Start: 31929, Stop: 33152, Start Num: 13
Candidate Starts for Pitbull_56:
(Start: 13 @31929 has 5 MA's), (21, 31980), (31, 32040), (35, 32061), (40, 32097), (51, 32157), (52, 32160), (59, 32208), (61, 32235), (65, 32256), (66, 32259), (76, 32352), (79, 32367), (82, 32406), (84, 32418), (85, 32421), (87, 32439), (92, 32490), (95, 32502), (99, 32529), (101, 32535), (103, 32538), (105, 32550), (106, 32556), (107, 32559), (108, 32562), (109, 32565), (111, 32613), (112, 32616), (125, 32709), (129, 32730), (135, 32751), (136, 32754), (137, 32757), (139, 32769), (140, 32778), (142, 32826), (146, 32856), (148, 32862), (150, 32868), (155, 32943), (159, 32997), (161, 33003), (164, 33057), (171, 33123), (172, 33141),

Gene: Schmidt_47 Start: 31454, Stop: 32767, Start Num: 7
Candidate Starts for Schmidt_47:
(Start: 7 @31454 has 1 MA's), (18, 31523), (19, 31526), (22, 31547), (23, 31553), (25, 31565), (32, 31613), (35, 31625), (38, 31655), (40, 31661), (52, 31727), (56, 31751), (62, 31805), (79, 31958), (83, 32000), (86, 32021), (88, 32033), (89, 32066), (92, 32081), (96, 32105), (97, 32126), (98, 32129), (104, 32150), (106, 32156), (109, 32165), (111, 32213), (114, 32225), (120, 32261), (122, 32279), (127, 32330), (134, 32360), (137, 32378), (141, 32441), (143, 32450), (144, 32462), (152, 32540), (153,

32561), (158, 32597), (160, 32639), (163, 32648), (170, 32750),

Gene: Splinter_53 Start: 34815, Stop: 36152, Start Num: 3
Candidate Starts for Splinter_53:
(Start: 3 @34815 has 4 MA's), (Start: 6 @34830 has 2 MA's), (16, 34890), (18, 34902), (33, 34995), (35, 35004), (42, 35052), (54, 35121), (58, 35136), (71, 35271), (79, 35337), (82, 35376), (83, 35379), (86, 35400), (97, 35505), (104, 35529), (107, 35538), (108, 35541), (114, 35604), (117, 35622), (123, 35670), (124, 35685), (125, 35691), (127, 35709), (137, 35757), (141, 35820), (152, 35922), (153, 35943), (158, 35979), (163, 36036), (167, 36099),

Gene: TZGordon_55 Start: 34161, Stop: 35498, Start Num: 3
Candidate Starts for TZGordon_55:
(Start: 3 @34161 has 4 MA's), (Start: 6 @34176 has 2 MA's), (18, 34248), (33, 34341), (35, 34350), (42, 34398), (54, 34467), (71, 34617), (79, 34683), (82, 34722), (83, 34725), (86, 34746), (89, 34791), (97, 34851), (104, 34875), (108, 34887), (114, 34950), (117, 34968), (123, 35016), (124, 35031), (125, 35037), (127, 35055), (137, 35103), (141, 35166), (152, 35268), (153, 35289), (158, 35325), (163, 35382), (167, 35445),

Gene: TinaLin_52 Start: 33634, Stop: 34950, Start Num: 9
Candidate Starts for TinaLin_52:
(Start: 9 @33634 has 2 MA's), (11, 33649), (18, 33700), (23, 33730), (33, 33793), (35, 33802), (36, 33823), (38, 33832), (40, 33838), (56, 33928), (71, 34069), (79, 34135), (83, 34177), (85, 34189), (86, 34198), (92, 34258), (96, 34282), (111, 34390), (114, 34402), (123, 34468), (125, 34489), (127, 34507), (136, 34552), (137, 34555), (140, 34576), (141, 34618), (146, 34657), (152, 34720), (153, 34741), (163, 34834),

Gene: VanLee_46 Start: 34753, Stop: 36051, Start Num: 10
Candidate Starts for VanLee_46:
(Start: 10 @34753 has 7 MA's), (24, 34837), (37, 34951), (39, 34963), (41, 34969), (47, 35017), (50, 35029), (53, 35038), (55, 35053), (57, 35065), (59, 35086), (72, 35191), (74, 35218), (75, 35224), (88, 35323), (89, 35356), (91, 35362), (106, 35437), (114, 35506), (116, 35518), (119, 35533), (122, 35560), (124, 35587), (130, 35620), (131, 35629), (133, 35635), (137, 35659), (145, 35749), (153, 35839), (163, 35926), (167, 35989),

Gene: Vendetta_53 Start: 34815, Stop: 36152, Start Num: 3
Candidate Starts for Vendetta_53:
(Start: 3 @34815 has 4 MA's), (Start: 6 @34830 has 2 MA's), (16, 34890), (18, 34902), (33, 34995), (35, 35004), (42, 35052), (54, 35121), (58, 35136), (71, 35271), (79, 35337), (82, 35376), (83, 35379), (86, 35400), (97, 35505), (104, 35529), (107, 35538), (108, 35541), (114, 35604), (117, 35622), (123, 35670), (124, 35685), (125, 35691), (127, 35709), (137, 35757), (141, 35820), (152, 35922), (153, 35943), (158, 35979), (163, 36036), (167, 36099),