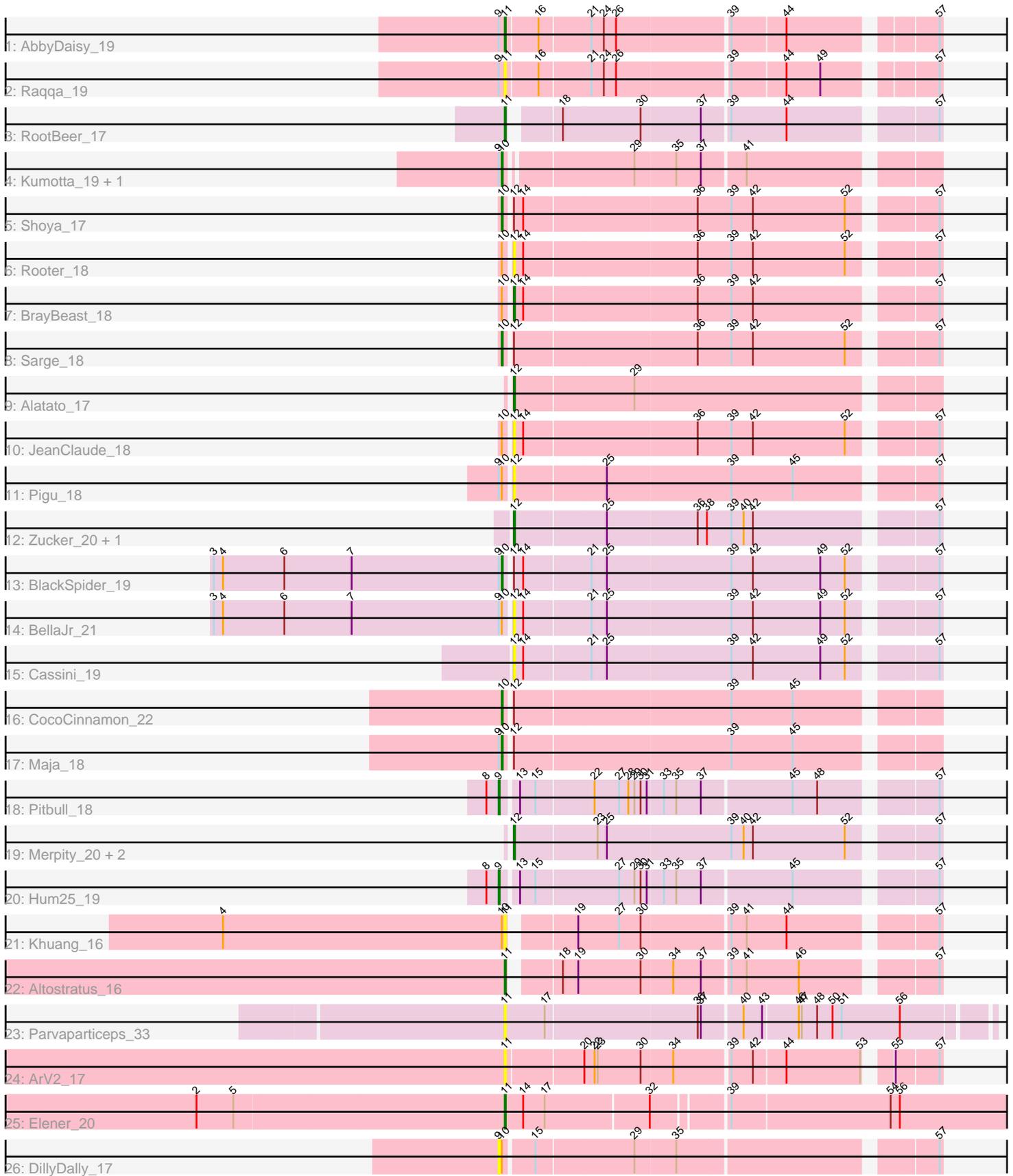


Zoomed Pham 284058



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 284058 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284058 has 30 members, 11 are drafts.

Phages represented in each track:

- Track 1 : AbbyDaisy_19
- Track 2 : Raqqa_19
- Track 3 : RootBeer_17
- Track 4 : Kumotta_19, MargaretKali_19
- Track 5 : Shoya_17
- Track 6 : Rooter_18
- Track 7 : BrayBeast_18
- Track 8 : Sarge_18
- Track 9 : Alatato_17
- Track 10 : JeanClaude_18
- Track 11 : Pigu_18
- Track 12 : Zucker_20, Bauer_21
- Track 13 : BlackSpider_19
- Track 14 : BellaJr_21
- Track 15 : Cassini_19
- Track 16 : CocoCinnamon_22
- Track 17 : Maja_18
- Track 18 : Pitbull_18
- Track 19 : Merpity_20, MrSmee_18, Skitty_18
- Track 20 : Hum25_19
- Track 21 : Khuang_16
- Track 22 : Altostratus_16
- Track 23 : Parvarticeps_33
- Track 24 : ArV2_17
- Track 25 : Elener_20
- Track 26 : DillyDally_17

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 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BlackSpider_19, CocoCinnamon_22, Kumotta_19, Maja_18, MargaretKali_19, Sarge_18, Shoya_17,

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

- BellaJr_21, BrayBeast_18, DillyDally_17, JeanClaude_18, Khuang_16, Pigu_18, Rooter_18,

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

- AbbyDaisy_19, Alatato_17, Altostratus_16, ArV2_17, Bauer_21, Cassini_19, Elener_20, Hum25_19, Merpity_20, MrSmee_18, Parvapaticeps_33, Pitbull_18, Raqqa_19, RootBeer_17, Skitty_18, Zucker_20,

Summary by start number:

Start 9:

- Found in 11 of 30 (36.7%) of genes in pham
- Manual Annotations of this start: 2 of 19
- Called 27.3% of time when present
- Phage (with cluster) where this start called: DillyDally_17 (singleton), Hum25_19 (FQ), Pitbull_18 (FQ),

Start 10:

- Found in 14 of 30 (46.7%) of genes in pham
- Manual Annotations of this start: 7 of 19
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BlackSpider_19 (FN), CocoCinnamon_22 (FO), Kumotta_19 (FB), Maja_18 (FO), MargaretKali_19 (FB), Sarge_18 (FB), Shoya_17 (FB),

Start 11:

- Found in 8 of 30 (26.7%) of genes in pham
- Manual Annotations of this start: 4 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_19 (AY), Altostratus_16 (FS), ArV2_17 (singleton), Elener_20 (singleton), Khuang_16 (FS), Parvapaticeps_33 (UNK), Raqqa_19 (AY), RootBeer_17 (FA),

Start 12:

- Found in 17 of 30 (56.7%) of genes in pham
- Manual Annotations of this start: 6 of 19
- Called 70.6% of time when present
- Phage (with cluster) where this start called: Alatato_17 (FB), Bauer_21 (FN), BellaJr_21 (FN), BrayBeast_18 (FB), Cassini_19 (FN), JeanClaude_18 (FB), Merpity_20 (FQ), MrSmee_18 (FQ), Pigu_18 (FB), Rooter_18 (FB), Skitty_18 (FQ), Zucker_20 (FN),

Summary by clusters:

There are 9 clusters represented in this pham: FQ, singleton, FS, FA, FB, AY, UNK, FN, FO,

Info for manual annotations of cluster AY:

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

Info for manual annotations of cluster FA:

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

Info for manual annotations of cluster FB:

- Start number 10 was manually annotated 4 times for cluster FB.
- Start number 12 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FN:

- Start number 10 was manually annotated 1 time for cluster FN.
- Start number 12 was manually annotated 2 times for cluster FN.

Info for manual annotations of cluster FO:

- Start number 10 was manually annotated 2 times for cluster FO.

Info for manual annotations of cluster FQ:

- Start number 9 was manually annotated 2 times for cluster FQ.
- Start number 12 was manually annotated 2 times for cluster FQ.

Info for manual annotations of cluster FS:

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

Gene Information:

Gene: AbbyDaisy_19 Start: 15422, Stop: 16528, Start Num: 11

Candidate Starts for AbbyDaisy_19:

(Start: 9 @15416 has 2 MA's), (Start: 11 @15422 has 4 MA's), (16, 15452), (21, 15500), (24, 15512), (26, 15524), (39, 15629), (44, 15680), (57, 15806), (59, 15818), (70, 15887), (77, 15959), (115, 16334), (124, 16394), (133, 16493),

Gene: Alatato_17 Start: 13394, Stop: 14512, Start Num: 12

Candidate Starts for Alatato_17:

(Start: 12 @13394 has 6 MA's), (29, 13508), (58, 13793), (59, 13796), (67, 13838), (72, 13892), (75, 13913), (76, 13925), (86, 14012), (93, 14117), (103, 14234), (109, 14270), (116, 14327), (117, 14333), (129, 14420), (137, 14498), (139, 14504),

Gene: Altostratus_16 Start: 13849, Stop: 14961, Start Num: 11

Candidate Starts for Altostratus_16:

(Start: 11 @13849 has 4 MA's), (18, 13888), (19, 13903), (30, 13963), (34, 13993), (37, 14020), (39, 14044), (41, 14059), (46, 14110), (57, 14227), (63, 14275), (66, 14278), (72, 14329), (82, 14416), (97, 14611), (108, 14701), (123, 14815), (125, 14824), (126, 14830), (132, 14905),

Gene: ArV2_17 Start: 13763, Stop: 14869, Start Num: 11

Candidate Starts for ArV2_17:

(Start: 11 @13763 has 4 MA's), (20, 13835), (22, 13844), (23, 13847), (30, 13889), (34, 13919), (39, 13970), (42, 13991), (44, 14021), (53, 14093), (55, 14108), (57, 14147), (59, 14159), (63, 14192), (69, 14225), (72, 14246), (75, 14267), (76, 14279), (77, 14300), (78, 14306), (92, 14462), (100, 14564), (107, 14609), (109, 14624), (118, 14699), (131, 14807), (136, 14849), (138, 14858),

Gene: Bauer_21 Start: 16040, Stop: 17158, Start Num: 12

Candidate Starts for Bauer_21:

(Start: 12 @16040 has 6 MA's), (25, 16127), (36, 16214), (38, 16223), (39, 16247), (40, 16259), (42, 16268), (57, 16430), (58, 16439), (59, 16442), (71, 16526), (72, 16538), (76, 16571), (81, 16622), (85, 16652), (90, 16730), (103, 16880), (109, 16916), (110, 16922), (119, 16994), (120, 17003), (139, 17150),

Gene: BellaJr_21 Start: 16838, Stop: 17956, Start Num: 12

Candidate Starts for BellaJr_21:

(3, 16550), (4, 16559), (6, 16619), (7, 16685), (Start: 9 @16829 has 2 MA's), (Start: 10 @16832 has 7 MA's), (Start: 12 @16838 has 6 MA's), (14, 16847), (21, 16910), (25, 16925), (39, 17045), (42, 17066), (49, 17132), (52, 17156), (57, 17228), (58, 17237), (59, 17240), (67, 17282), (72, 17336), (75, 17357), (76, 17369), (77, 17390), (86, 17456), (103, 17678), (122, 17807), (128, 17855), (129, 17864), (132, 17903), (137, 17942),

Gene: BlackSpider_19 Start: 15678, Stop: 16802, Start Num: 10

Candidate Starts for BlackSpider_19:

(3, 15396), (4, 15405), (6, 15465), (7, 15531), (Start: 9 @15675 has 2 MA's), (Start: 10 @15678 has 7 MA's), (Start: 12 @15684 has 6 MA's), (14, 15693), (21, 15756), (25, 15771), (39, 15891), (42, 15912), (49, 15978), (52, 16002), (57, 16074), (58, 16083), (59, 16086), (67, 16128), (72, 16182), (75, 16203), (76, 16215), (77, 16236), (86, 16302), (103, 16524), (122, 16653), (128, 16701), (129, 16710), (132, 16749), (137, 16788),

Gene: BrayBeast_18 Start: 14080, Stop: 15198, Start Num: 12

Candidate Starts for BrayBeast_18:

(Start: 10 @14074 has 7 MA's), (Start: 12 @14080 has 6 MA's), (14, 14089), (36, 14254), (39, 14287), (42, 14308), (57, 14470), (58, 14479), (67, 14524), (71, 14566), (72, 14578), (76, 14611), (116, 15013), (122, 15049), (132, 15145), (137, 15184), (139, 15190),

Gene: Cassini_19 Start: 15921, Stop: 17039, Start Num: 12

Candidate Starts for Cassini_19:

(Start: 12 @15921 has 6 MA's), (14, 15930), (21, 15993), (25, 16008), (39, 16128), (42, 16149), (49, 16215), (52, 16239), (57, 16311), (58, 16320), (59, 16323), (61, 16347), (67, 16365), (72, 16419), (75, 16440), (76, 16452), (77, 16473), (86, 16539), (89, 16608), (103, 16761), (114, 16842), (122, 16890), (128, 16938), (129, 16947), (132, 16986), (137, 17025),

Gene: CocoCinnamon_22 Start: 15713, Stop: 16837, Start Num: 10

Candidate Starts for CocoCinnamon_22:

(Start: 10 @15713 has 7 MA's), (Start: 12 @15719 has 6 MA's), (39, 15926), (45, 15986), (58, 16118), (71, 16205), (72, 16217), (76, 16250), (77, 16271), (90, 16409), (103, 16559), (104, 16562), (109, 16595), (116, 16652), (117, 16658), (119, 16673), (139, 16829),

Gene: DillyDally_17 Start: 14366, Stop: 15832, Start Num: 9

Candidate Starts for DillyDally_17:

(Start: 9 @14366 has 2 MA's), (Start: 10 @14369 has 7 MA's), (15, 14396), (29, 14489), (35, 14528), (57, 14759), (60, 14786), (72, 14870), (75, 14891), (76, 14903), (83, 14981), (88, 15047), (91, 15083), (96, 15158), (97, 15170), (98, 15176), (130, 15419), (144, 15524), (147, 15575), (150, 15710), (151, 15731), (152, 15743), (153, 15752),

Gene: Elener_20 Start: 16464, Stop: 17870, Start Num: 11

Candidate Starts for Elener_20:

(1, 15846), (2, 16167), (5, 16203), (Start: 11 @16464 has 4 MA's), (14, 16482), (17, 16503), (32, 16602), (39, 16668), (54, 16821), (56, 16830), (80, 17175), (97, 17415), (99, 17442), (111, 17529), (113, 17544), (115, 17559), (130, 17673), (141, 17766), (146, 17826),

Gene: Hum25_19 Start: 13554, Stop: 15002, Start Num: 9

Candidate Starts for Hum25_19:

(8, 13542), (Start: 9 @13554 has 2 MA's), (13, 13569), (15, 13584), (27, 13662), (29, 13677), (30, 13683), (31, 13689), (33, 13704), (35, 13716), (37, 13740), (45, 13824), (57, 13947), (60, 13974), (62, 13989), (71, 14046), (74, 14076), (76, 14091), (82, 14145), (83, 14151), (87, 14202), (88, 14217), (90, 14250), (95, 14316), (96, 14328), (106, 14415), (110, 14436), (112, 14457), (127, 14556), (131, 14610), (135, 14649), (136, 14652), (144, 14694), (148, 14820), (149, 14853), (151, 14901),

Gene: JeanClaude_18 Start: 13987, Stop: 15105, Start Num: 12

Candidate Starts for JeanClaude_18:

(Start: 10 @13981 has 7 MA's), (Start: 12 @13987 has 6 MA's), (14, 13996), (36, 14161), (39, 14194), (42, 14215), (52, 14305), (57, 14377), (58, 14386), (67, 14431), (71, 14473), (72, 14485), (76, 14518), (116, 14920), (132, 15052), (137, 15091), (139, 15097),

Gene: Khuang_16 Start: 13963, Stop: 15075, Start Num: 11

Candidate Starts for Khuang_16:

(4, 13687), (Start: 10 @13960 has 7 MA's), (Start: 11 @13963 has 4 MA's), (19, 14017), (27, 14056), (30, 14077), (39, 14158), (41, 14173), (44, 14212), (57, 14341), (63, 14389), (66, 14392), (72, 14443), (79, 14512), (82, 14530), (90, 14635), (108, 14815), (113, 14857), (123, 14929), (126, 14944), (137, 15058),

Gene: Kumotta_19 Start: 15048, Stop: 16172, Start Num: 10

Candidate Starts for Kumotta_19:

(Start: 9 @15045 has 2 MA's), (Start: 10 @15048 has 7 MA's), (29, 15162), (35, 15201), (37, 15225), (41, 15264), (67, 15489), (68, 15501), (71, 15531), (72, 15543), (73, 15555), (75, 15564), (96, 15813), (100, 15861), (101, 15864),

Gene: Maja_18 Start: 14689, Stop: 15813, Start Num: 10

Candidate Starts for Maja_18:

(Start: 9 @14686 has 2 MA's), (Start: 10 @14689 has 7 MA's), (Start: 12 @14695 has 6 MA's), (39, 14902), (45, 14962), (58, 15094), (61, 15121), (71, 15181), (72, 15193), (76, 15226), (77, 15247), (90, 15385), (103, 15535), (116, 15628), (117, 15634), (119, 15649), (139, 15805),

Gene: MargaretKali_19 Start: 14683, Stop: 15807, Start Num: 10

Candidate Starts for MargaretKali_19:

(Start: 9 @14680 has 2 MA's), (Start: 10 @14683 has 7 MA's), (29, 14797), (35, 14836), (37, 14860), (41, 14899), (67, 15124), (68, 15136), (71, 15166), (72, 15178), (73, 15190), (75, 15199), (96, 15448), (100, 15496), (101, 15499),

Gene: Merpity_20 Start: 13774, Stop: 14892, Start Num: 12

Candidate Starts for Merpity_20:

(Start: 12 @13774 has 6 MA's), (23, 13852), (25, 13861), (39, 13981), (40, 13993), (42, 14002), (52, 14092), (57, 14164), (58, 14173), (59, 14176), (67, 14218), (72, 14272), (76, 14305), (81, 14356), (94, 14524), (103, 14614), (114, 14695), (122, 14743), (128, 14791), (129, 14800), (132, 14839), (137, 14878),

Gene: MrSmee_18 Start: 13774, Stop: 14892, Start Num: 12

Candidate Starts for MrSmee_18:

(Start: 12 @13774 has 6 MA's), (23, 13852), (25, 13861), (39, 13981), (40, 13993), (42, 14002), (52, 14092), (57, 14164), (58, 14173), (59, 14176), (67, 14218), (72, 14272), (76, 14305), (81, 14356), (94, 14524), (103, 14614), (114, 14695), (122, 14743), (128, 14791), (129, 14800), (132, 14839), (137, 14878),

Gene: Parvarticeps_33 Start: 23477, Stop: 22143, Start Num: 11

Candidate Starts for Parvarticeps_33:

(Start: 11 @23477 has 4 MA's), (17, 23438), (36, 23294), (37, 23291), (40, 23255), (43, 23237), (46, 23204), (47, 23201), (48, 23186), (50, 23171), (51, 23162), (56, 23105), (64, 22967), (65, 22955), (72, 22895), (75, 22874), (81, 22793), (83, 22784), (84, 22781), (85, 22763), (87, 22733), (89, 22688), (90, 22685), (97, 22592), (102, 22547), (103, 22535), (105, 22529), (111, 22478), (113, 22463), (120, 22406), (121, 22403), (128, 22352), (129, 22343), (130, 22334), (134, 22280), (140, 22250), (141, 22244), (142, 22241), (143, 22232), (145, 22190),

Gene: Pigu_18 Start: 13784, Stop: 14902, Start Num: 12

Candidate Starts for Pigu_18:

(Start: 9 @13775 has 2 MA's), (Start: 10 @13778 has 7 MA's), (Start: 12 @13784 has 6 MA's), (25, 13871), (39, 13991), (45, 14051), (57, 14174), (58, 14183), (59, 14186), (61, 14210), (71, 14270), (72, 14282), (75, 14303), (76, 14315), (78, 14342), (103, 14624), (116, 14717), (117, 14723), (119, 14738), (122, 14753), (128, 14801), (139, 14894),

Gene: Pitbull_18 Start: 13184, Stop: 14632, Start Num: 9

Candidate Starts for Pitbull_18:

(8, 13172), (Start: 9 @13184 has 2 MA's), (13, 13199), (15, 13214), (22, 13268), (27, 13292), (28, 13301), (29, 13307), (30, 13313), (31, 13319), (33, 13334), (35, 13346), (37, 13370), (45, 13454), (48, 13478), (57, 13577), (60, 13604), (62, 13619), (71, 13676), (74, 13706), (76, 13721), (82, 13775), (83, 13781), (87, 13832), (88, 13847), (90, 13880), (95, 13946), (96, 13958), (106, 14045), (110, 14066), (112, 14087), (127, 14186), (131, 14240), (135, 14279), (144, 14324), (148, 14450), (149, 14483), (151, 14531),

Gene: Raqqa_19 Start: 15720, Stop: 16826, Start Num: 11

Candidate Starts for Raqqa_19:

(Start: 9 @15714 has 2 MA's), (Start: 11 @15720 has 4 MA's), (16, 15750), (21, 15798), (24, 15810), (26, 15822), (39, 15927), (44, 15978), (49, 16011), (57, 16104), (59, 16116), (70, 16185), (77, 16257), (100, 16521), (115, 16632), (133, 16791),

Gene: RootBeer_17 Start: 14184, Stop: 15296, Start Num: 11

Candidate Starts for RootBeer_17:

(Start: 11 @14184 has 4 MA's), (18, 14223), (30, 14298), (37, 14355), (39, 14379), (44, 14433), (57, 14562), (59, 14574), (63, 14610), (72, 14664), (77, 14718), (126, 15165),

Gene: Rooter_18 Start: 13624, Stop: 14742, Start Num: 12

Candidate Starts for Rooter_18:

(Start: 10 @13618 has 7 MA's), (Start: 12 @13624 has 6 MA's), (14, 13633), (36, 13798), (39, 13831), (42, 13852), (52, 13942), (57, 14014), (58, 14023), (67, 14068), (71, 14110), (72, 14122), (76, 14155), (109, 14500), (116, 14557), (132, 14689), (137, 14728), (139, 14734),

Gene: Sarge_18 Start: 13985, Stop: 15109, Start Num: 10

Candidate Starts for Sarge_18:

(Start: 10 @13985 has 7 MA's), (Start: 12 @13991 has 6 MA's), (36, 14165), (39, 14198), (42, 14219), (52, 14309), (57, 14381), (58, 14390), (59, 14393), (72, 14489), (76, 14522), (109, 14867), (116, 14924), (119, 14945), (132, 15056), (137, 15095), (139, 15101),

Gene: Shoya_17 Start: 13621, Stop: 14745, Start Num: 10

Candidate Starts for Shoya_17:

(Start: 10 @13621 has 7 MA's), (Start: 12 @13627 has 6 MA's), (14, 13636), (36, 13801), (39, 13834), (42, 13855), (52, 13945), (57, 14017), (58, 14026), (67, 14071), (71, 14113), (72, 14125), (76, 14158),

(116, 14560), (122, 14596), (132, 14692), (137, 14731), (139, 14737),

Gene: Skitty_18 Start: 13774, Stop: 14892, Start Num: 12

Candidate Starts for Skitty_18:

(Start: 12 @13774 has 6 MA's), (23, 13852), (25, 13861), (39, 13981), (40, 13993), (42, 14002), (52, 14092), (57, 14164), (58, 14173), (59, 14176), (67, 14218), (72, 14272), (76, 14305), (81, 14356), (94, 14524), (103, 14614), (114, 14695), (122, 14743), (128, 14791), (129, 14800), (132, 14839), (137, 14878),

Gene: Zucker_20 Start: 15353, Stop: 16471, Start Num: 12

Candidate Starts for Zucker_20:

(Start: 12 @15353 has 6 MA's), (25, 15440), (36, 15527), (38, 15536), (39, 15560), (40, 15572), (42, 15581), (57, 15743), (58, 15752), (59, 15755), (71, 15839), (72, 15851), (76, 15884), (81, 15935), (85, 15965), (90, 16043), (103, 16193), (109, 16229), (110, 16235), (119, 16307), (120, 16316), (139, 16463),