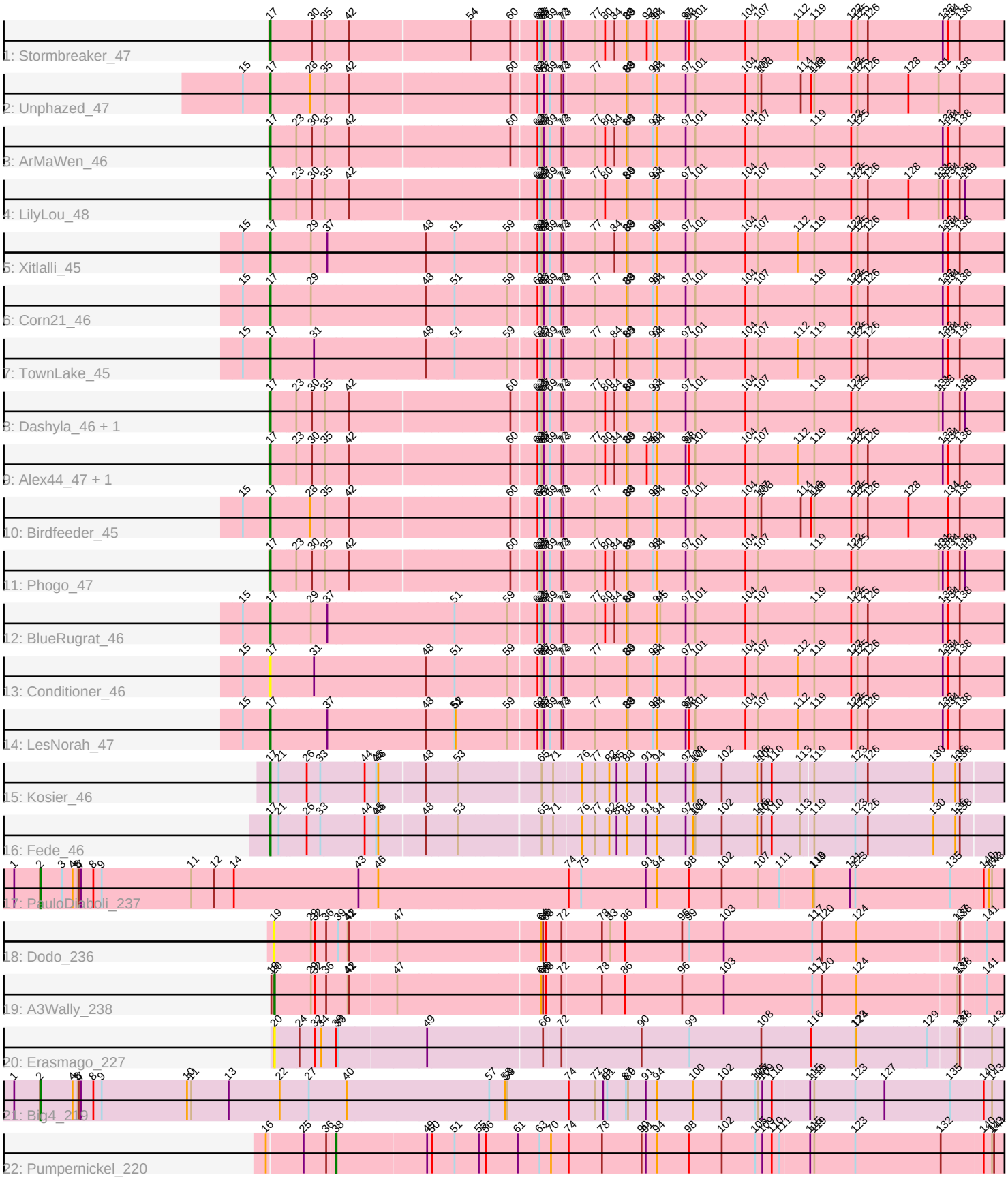
Pham 295038


1: Stormbreaker_47
2: Unphazed_47
3: ArMaWen_46
4: LilyLou_48
5: Xitlalli_45
6: Corn21_46
7: TownLake_45
8: Dashyla_46 + 1
9: Alex44_47 + 1
10: Birdfeeder_45
11: Phogo_47
12: BlueRugrat_46
13: Conditioner_46
14: LesNorah_47
15: Kosier_46
16: Fede_46
17: PauloDiaboli_237
18: Dodo_236
19: A3Wally_238
20: Erasmago_227
21: Big4_219
22: Pumpernickel_220

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 295038 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295038 has 24 members, 3 are drafts.

Phages represented in each track:
- Track 1 : Stormbreaker_47
- Track 2 : Unphazed_47
- Track 3 : ArMaWen_46
- Track 4 : LilyLou_48
- Track 5 : Xitlalli_45
- Track 6 : Corn21_46
- Track 7 : TownLake_45
- Track 8 : Dashyla_46, SwissCheezer_46
- Track 9 : Alex44_47, DumpQuist_46
- Track 10 : Birdfeeder_45
- Track 11 : Phogo_47
- Track 12 : BlueRugrat_46
- Track 13 : Conditioner_46
- Track 14 : LesNorah_47
- Track 15 : Kosier_46
- Track 16 : Fede_46
- Track 17 : PauloDiaboli_237
- Track 18 : Dodo_236
- Track 19 : A3Wally_238
- Track 20 : Erasmago_227
- Track 21 : Big4_219
- Track 22 : Pumpernickel_220

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

The start number called the most often in the published annotations is 17, it was called in 17 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Alex44_47, ArMaWen_46, Birdfeeder_45, BlueRugrat_46, Conditioner_46, Corn21_46, Dashyla_46, DumpQuist_46, Fede_46, Kosier_46, LesNorah_47, LilyLou_48, Phogo_47, Stormbreaker_47, SwissCheezer_46, TownLake_45, Unphazed_47, Xitlalli_45,

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

Genes that do not have the "Most Annotated" start:
• A3Wally_238, Big4_219, Dodo_236, Erasmago_227, PauloDiaboli_237, Pumpernickel_220,

Summary by start number:

Start 2:
• Found in 2 of 24 (8.3%) of genes in pham
• Manual Annotations of this start: 2 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Big4_219 (GD2), PauloDiaboli_237 (GD1),

Start 17:
• Found in 18 of 24 (75.0%) of genes in pham
• Manual Annotations of this start: 17 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alex44_47 (EK1), ArMaWen_46 (EK1), Birdfeeder_45 (EK1), BlueRugrat_46 (EK1), Conditioner_46 (EK1), Corn21_46 (EK1), Dashyla_46 (EK1), DumpQuist_46 (EK1), Fede_46 (EK2), Kosier_46 (EK2), LesNorah_47 (EK1), LilyLou_48 (EK1), Phogo_47 (EK1), Stormbreaker_47 (EK1), SwissCheezer_46 (EK1), TownLake_45 (EK1), Unphazed_47 (EK1), Xitlalli_45 (EK1),

Start 19:
• Found in 1 of 24 (4.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dodo_236 (GD1),

Start 20:
• Found in 2 of 24 (8.3%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A3Wally_238 (GD1), Erasmago_227 (GD2),

Start 38:
• Found in 2 of 24 (8.3%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Pumpernickel_220 (GD4),

Summary by clusters:

There are 5 clusters represented in this pham: GD1, GD2, GD4, EK2, EK1,

Info for manual annotations of cluster EK1:
•Start number 17 was manually annotated 15 times for cluster EK1.

Info for manual annotations of cluster EK2:
•Start number 17 was manually annotated 2 times for cluster EK2.

Info for manual annotations of cluster GD1:
•Start number 2 was manually annotated 1 time for cluster GD1.
•Start number 20 was manually annotated 1 time for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 2 was manually annotated 1 time for cluster GD2.

Info for manual annotations of cluster GD4:
•Start number 38 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_238 Start: 128961, Stop: 130955, Start Num: 20
Candidate Starts for A3Wally_238:
(18, 128952), (Start: 20 @128961 has 1 MA's), (29, 129060), (32, 129069), (36, 129099), (41, 129156), (42, 129159), (47, 129291), (64, 129684), (66, 129690), (68, 129699), (72, 129738), (78, 129849), (86, 129912), (96, 130074), (103, 130194), (117, 130446), (120, 130473), (124, 130569), (137, 130842), (138, 130848), (141, 130908),

Gene: Alex44_47 Start: 46450, Stop: 48459, Start Num: 17
Candidate Starts for Alex44_47:
(Start: 17 @46450 has 17 MA's), (23, 46519), (30, 46564), (35, 46600), (42, 46669), (60, 47095), (62, 47164), (63, 47170), (65, 47176), (67, 47182), (69, 47200), (72, 47233), (73, 47239), (77, 47320), (80, 47350), (84, 47377), (88, 47410), (89, 47413), (92, 47467), (93, 47485), (94, 47497), (97, 47578), (98, 47587), (101, 47605), (104, 47734), (107, 47770), (112, 47881), (119, 47923), (122, 48028), (125, 48046), (126, 48076), (133, 48286), (134, 48301), (138, 48334),

Gene: ArMaWen_46 Start: 45993, Stop: 48002, Start Num: 17
Candidate Starts for ArMaWen_46:
(Start: 17 @45993 has 17 MA's), (23, 46062), (30, 46107), (35, 46143), (42, 46212), (60, 46638), (62, 46707), (63, 46713), (65, 46719), (67, 46725), (69, 46743), (72, 46776), (73, 46782), (77, 46863), (80, 46893), (84, 46920), (88, 46953), (89, 46956), (93, 47028), (94, 47040), (97, 47121), (101, 47148), (104, 47277), (107, 47313), (119, 47466), (122, 47571), (125, 47589), (133, 47829), (134, 47844), (138, 47877),

Gene: Big4_219 Start: 122421, Stop: 125168, Start Num: 2
Candidate Starts for Big4_219:
(1, 122346), (Start: 2 @122421 has 2 MA's), (4, 122514), (5, 122529), (6, 122532), (7, 122538), (8, 122574), (9, 122598), (10, 122844), (11, 122856), (13, 122964), (22, 123111), (27, 123195), (40, 123300), (57, 123684), (58, 123729), (59, 123735), (74, 123912), (77, 123984), (79, 124008), (81, 124020), (87, 124074), (89, 124080), (91, 124131), (94, 124164), (100, 124266), (102, 124341), (105, 124431), (107, 124440), (109, 124452), (110, 124479), (115, 124584), (119, 124596), (123, 124713), (127, 124794), (135, 124983), (140, 125070), (143, 125094),

Gene: Birdfeeder_45 Start: 46199, Stop: 48208, Start Num: 17
Candidate Starts for Birdfeeder_45:
(15, 46121), (Start: 17 @46199 has 17 MA's), (28, 46307), (35, 46349), (42, 46418), (60, 46844), (62, 46913), (63, 46919), (67, 46931), (69, 46949), (72, 46982), (73, 46988), (77, 47069), (88, 47159), (89,

47162), (93, 47234), (94, 47246), (97, 47327), (101, 47354), (104, 47483), (107, 47519), (108, 47528), (114, 47639), (116, 47663), (119, 47672), (122, 47777), (125, 47795), (126, 47825), (128, 47939), (134, 48050), (138, 48083),

Gene: BlueRugrat_46 Start: 46423, Stop: 48441, Start Num: 17
Candidate Starts for BlueRugrat_46:
(15, 46345), (Start: 17 @46423 has 17 MA's), (29, 46528), (37, 46570), (51, 46924), (59, 47071), (62, 47146), (63, 47152), (65, 47158), (67, 47164), (69, 47182), (72, 47215), (73, 47221), (77, 47302), (80, 47332), (84, 47359), (88, 47392), (89, 47395), (94, 47479), (95, 47488), (97, 47560), (101, 47587), (104, 47716), (107, 47752), (119, 47905), (122, 48010), (125, 48028), (126, 48058), (133, 48268), (134, 48283), (138, 48316),

Gene: Conditioner_46 Start: 46496, Stop: 48514, Start Num: 17
Candidate Starts for Conditioner_46:
(15, 46418), (Start: 17 @46496 has 17 MA's), (31, 46607), (48, 46922), (51, 46997), (59, 47144), (62, 47219), (65, 47231), (67, 47237), (69, 47255), (72, 47288), (73, 47294), (77, 47375), (88, 47465), (89, 47468), (93, 47540), (94, 47552), (97, 47633), (101, 47660), (104, 47789), (107, 47825), (112, 47936), (119, 47978), (122, 48083), (125, 48101), (126, 48131), (133, 48341), (134, 48356), (138, 48389),

Gene: Corn21_46 Start: 46501, Stop: 48519, Start Num: 17
Candidate Starts for Corn21_46:
(15, 46423), (Start: 17 @46501 has 17 MA's), (29, 46606), (48, 46927), (51, 47002), (59, 47149), (62, 47224), (65, 47236), (67, 47242), (69, 47260), (72, 47293), (73, 47299), (77, 47380), (88, 47470), (89, 47473), (93, 47545), (94, 47557), (97, 47638), (101, 47665), (104, 47794), (107, 47830), (119, 47983), (122, 48088), (125, 48106), (126, 48136), (133, 48346), (134, 48361), (138, 48394),

Gene: Dashyla_46 Start: 46124, Stop: 48133, Start Num: 17
Candidate Starts for Dashyla_46:
(Start: 17 @46124 has 17 MA's), (23, 46193), (30, 46238), (35, 46274), (42, 46343), (60, 46769), (62, 46838), (63, 46844), (65, 46850), (67, 46856), (69, 46874), (72, 46907), (73, 46913), (77, 46994), (80, 47024), (84, 47051), (88, 47084), (89, 47087), (93, 47159), (94, 47171), (97, 47252), (101, 47279), (104, 47408), (107, 47444), (119, 47597), (122, 47702), (125, 47720), (131, 47948), (133, 47960), (138, 48008), (139, 48023),

Gene: Dodo_236 Start: 128645, Stop: 130639, Start Num: 19
Candidate Starts for Dodo_236:
(19, 128645), (29, 128744), (32, 128753), (36, 128783), (39, 128813), (41, 128840), (42, 128843), (47, 128975), (64, 129368), (66, 129374), (68, 129383), (72, 129422), (78, 129533), (83, 129557), (86, 129596), (96, 129758), (99, 129779), (103, 129878), (117, 130130), (120, 130157), (124, 130253), (137, 130526), (138, 130532), (141, 130592),

Gene: DumpQuist_46 Start: 45978, Stop: 47987, Start Num: 17
Candidate Starts for DumpQuist_46:
(Start: 17 @45978 has 17 MA's), (23, 46047), (30, 46092), (35, 46128), (42, 46197), (60, 46623), (62, 46692), (63, 46698), (65, 46704), (67, 46710), (69, 46728), (72, 46761), (73, 46767), (77, 46848), (80, 46878), (84, 46905), (88, 46938), (89, 46941), (92, 46995), (93, 47013), (94, 47025), (97, 47106), (98, 47115), (101, 47133), (104, 47262), (107, 47298), (112, 47409), (119, 47451), (122, 47556), (125, 47574), (126, 47604), (133, 47814), (134, 47829), (138, 47862),

Gene: Erasmago_227 Start: 123403, Stop: 125394, Start Num: 20
Candidate Starts for Erasmago_227:
(Start: 20 @123403 has 1 MA's), (24, 123466), (32, 123508), (34, 123526), (Start: 38 @123562 has 1 MA's), (39, 123568), (49, 123811), (66, 124129), (72, 124177), (90, 124396), (99, 124534), (108,

124741), (116, 124882), (123, 125005), (124, 125008), (129, 125203), (137, 125281), (138, 125287), (143, 125362),

Gene: Fede_46 Start: 46938, Stop: 48926, Start Num: 17
Candidate Starts for Fede_46:
(Start: 17 @46938 has 17 MA's), (21, 46959), (26, 47034), (33, 47073), (44, 47196), (45, 47229), (46, 47235), (48, 47358), (53, 47439), (65, 47655), (71, 47688), (76, 47763), (77, 47799), (82, 47841), (85, 47862), (88, 47889), (91, 47943), (94, 47976), (97, 48057), (100, 48078), (101, 48084), (102, 48153), (106, 48246), (108, 48258), (110, 48288), (113, 48369), (119, 48399), (123, 48516), (126, 48552), (130, 48735), (136, 48798), (138, 48810),

Gene: Kosier_46 Start: 46882, Stop: 48870, Start Num: 17
Candidate Starts for Kosier_46:
(Start: 17 @46882 has 17 MA's), (21, 46903), (26, 46978), (33, 47017), (44, 47140), (45, 47173), (46, 47179), (48, 47302), (53, 47383), (65, 47599), (71, 47632), (76, 47707), (77, 47743), (82, 47785), (85, 47806), (88, 47833), (91, 47887), (94, 47920), (97, 48001), (100, 48022), (101, 48028), (102, 48097), (106, 48190), (108, 48202), (110, 48232), (113, 48313), (119, 48343), (123, 48460), (126, 48496), (130, 48679), (136, 48742), (138, 48754),

Gene: LesNorah_47 Start: 46820, Stop: 48838, Start Num: 17
Candidate Starts for LesNorah_47:
(15, 46742), (Start: 17 @46820 has 17 MA's), (37, 46967), (48, 47246), (51, 47321), (52, 47324), (59, 47468), (62, 47543), (65, 47555), (67, 47561), (69, 47579), (72, 47612), (73, 47618), (77, 47699), (88, 47789), (89, 47792), (93, 47864), (94, 47876), (97, 47957), (98, 47966), (101, 47984), (104, 48113), (107, 48149), (112, 48260), (119, 48302), (122, 48407), (125, 48425), (126, 48455), (133, 48665), (134, 48680), (138, 48713),

Gene: LilyLou_48 Start: 46442, Stop: 48451, Start Num: 17
Candidate Starts for LilyLou_48:
(Start: 17 @46442 has 17 MA's), (23, 46511), (30, 46556), (35, 46592), (42, 46661), (62, 47156), (63, 47162), (65, 47168), (67, 47174), (69, 47192), (72, 47225), (73, 47231), (77, 47312), (80, 47342), (88, 47402), (89, 47405), (93, 47477), (94, 47489), (97, 47570), (101, 47597), (104, 47726), (107, 47762), (119, 47915), (122, 48020), (125, 48038), (126, 48068), (128, 48182), (131, 48266), (133, 48278), (134, 48293), (138, 48326), (139, 48341),

Gene: PauloDiaboli_237 Start: 125216, Stop: 127957, Start Num: 2
Candidate Starts for PauloDiaboli_237:
(1, 125141), (Start: 2 @125216 has 2 MA's), (3, 125279), (4, 125309), (5, 125324), (6, 125327), (7, 125333), (8, 125369), (9, 125393), (11, 125651), (12, 125717), (14, 125774), (43, 126125), (46, 126179), (74, 126704), (75, 126737), (91, 126923), (94, 126956), (98, 127046), (102, 127133), (107, 127229), (111, 127289), (118, 127382), (119, 127385), (121, 127487), (123, 127502), (135, 127772), (140, 127859), (142, 127874), (143, 127883),

Gene: Phogo_47 Start: 46270, Stop: 48279, Start Num: 17
Candidate Starts for Phogo_47:
(Start: 17 @46270 has 17 MA's), (23, 46339), (30, 46384), (35, 46420), (42, 46489), (60, 46915), (62, 46984), (63, 46990), (65, 46996), (67, 47002), (69, 47020), (72, 47053), (73, 47059), (77, 47140), (80, 47170), (84, 47197), (88, 47230), (89, 47233), (93, 47305), (94, 47317), (97, 47398), (101, 47425), (104, 47554), (107, 47590), (119, 47743), (122, 47848), (125, 47866), (131, 48094), (133, 48106), (134, 48121), (138, 48154), (139, 48169),

Gene: Pumpernickel_220 Start: 126461, Stop: 128344, Start Num: 38
Candidate Starts for Pumpernickel_220:

(16, 126284), (25, 126377), (36, 126437), (Start: 38 @126461 has 1 MA's), (49, 126707), (50, 126719), (51, 126776), (55, 126842), (56, 126860), (61, 126947), (63, 127007), (70, 127040), (74, 127091), (78, 127184), (90, 127298), (91, 127310), (94, 127343), (98, 127433), (102, 127520), (105, 127610), (109, 127631), (110, 127658), (111, 127679), (115, 127763), (119, 127775), (123, 127892), (132, 128132), (140, 128246), (143, 128270), (144, 128276),

Gene: Stormbreaker_47 Start: 46358, Stop: 48367, Start Num: 17
Candidate Starts for Stormbreaker_47:
(Start: 17 @46358 has 17 MA's), (30, 46472), (35, 46508), (42, 46577), (54, 46895), (60, 47003), (62, 47072), (63, 47078), (65, 47084), (67, 47090), (69, 47108), (72, 47141), (73, 47147), (77, 47228), (80, 47258), (84, 47285), (88, 47318), (89, 47321), (92, 47375), (93, 47393), (94, 47405), (97, 47486), (98, 47495), (101, 47513), (104, 47642), (107, 47678), (112, 47789), (119, 47831), (122, 47936), (125, 47954), (126, 47984), (133, 48194), (134, 48209), (138, 48242),

Gene: SwissCheezer_46 Start: 46010, Stop: 48019, Start Num: 17
Candidate Starts for SwissCheezer_46:
(Start: 17 @46010 has 17 MA's), (23, 46079), (30, 46124), (35, 46160), (42, 46229), (60, 46655), (62, 46724), (63, 46730), (65, 46736), (67, 46742), (69, 46760), (72, 46793), (73, 46799), (77, 46880), (80, 46910), (84, 46937), (88, 46970), (89, 46973), (93, 47045), (94, 47057), (97, 47138), (101, 47165), (104, 47294), (107, 47330), (119, 47483), (122, 47588), (125, 47606), (131, 47834), (133, 47846), (138, 47894), (139, 47909),

Gene: TownLake_45 Start: 46110, Stop: 48128, Start Num: 17
Candidate Starts for TownLake_45:
(15, 46032), (Start: 17 @46110 has 17 MA's), (31, 46221), (48, 46536), (51, 46611), (59, 46758), (62, 46833), (65, 46845), (67, 46851), (69, 46869), (72, 46902), (73, 46908), (77, 46989), (84, 47046), (88, 47079), (89, 47082), (93, 47154), (94, 47166), (97, 47247), (101, 47274), (104, 47403), (107, 47439), (112, 47550), (119, 47592), (122, 47697), (125, 47715), (126, 47745), (133, 47955), (134, 47970), (138, 48003),

Gene: Unphazed_47 Start: 46227, Stop: 48236, Start Num: 17
Candidate Starts for Unphazed_47:
(15, 46149), (Start: 17 @46227 has 17 MA's), (28, 46335), (35, 46377), (42, 46446), (60, 46872), (62, 46941), (63, 46947), (67, 46959), (69, 46977), (72, 47010), (73, 47016), (77, 47097), (88, 47187), (89, 47190), (93, 47262), (94, 47274), (97, 47355), (101, 47382), (104, 47511), (107, 47547), (108, 47556), (114, 47667), (116, 47691), (119, 47700), (122, 47805), (125, 47823), (126, 47853), (128, 47967), (131, 48051), (138, 48111),

Gene: Xitlalli_45 Start: 46228, Stop: 48246, Start Num: 17
Candidate Starts for Xitlalli_45:
(15, 46150), (Start: 17 @46228 has 17 MA's), (29, 46333), (37, 46375), (48, 46654), (51, 46729), (59, 46876), (62, 46951), (63, 46957), (65, 46963), (67, 46969), (69, 46987), (72, 47020), (73, 47026), (77, 47107), (84, 47164), (88, 47197), (89, 47200), (93, 47272), (94, 47284), (97, 47365), (101, 47392), (104, 47521), (107, 47557), (112, 47668), (119, 47710), (122, 47815), (125, 47833), (126, 47863), (133, 48073), (134, 48088), (138, 48121),