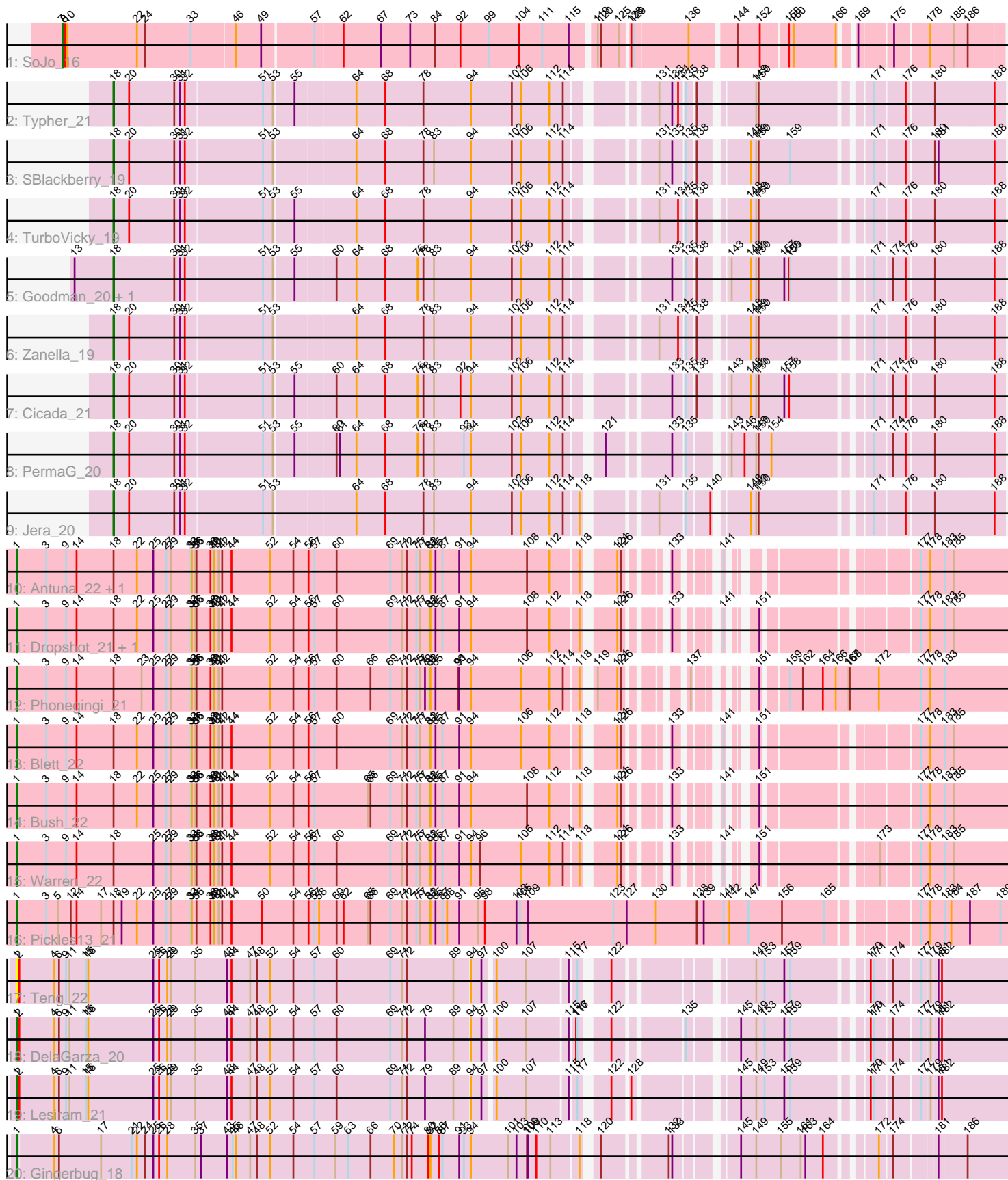


Pham 171744



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 171744 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171744 has 23 members, 2 are drafts.

Phages represented in each track:

- Track 1 : SoJo_16
- Track 2 : Typher_21
- Track 3 : SBlackberry_19
- Track 4 : TurboVicky_19
- Track 5 : Goodman_20, Johann_20
- Track 6 : Zanella_19
- Track 7 : Cicada_21
- Track 8 : PermaG_20
- Track 9 : Jera_20
- Track 10 : Antuna_22, MenE_25
- Track 11 : Dropshot_21, Appa_21
- Track 12 : Phonegingi_21
- Track 13 : Blett_22
- Track 14 : Bush_22
- Track 15 : Warren_22
- Track 16 : Pickles13_21
- Track 17 : Teng_22
- Track 18 : DelaGarza_20
- Track 19 : Lesiram_21
- Track 20 : Gingerbug_18

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

The start number called the most often in the published annotations is 1, it was called in 11 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antuna_22, Appa_21, Blett_22, Bush_22, DelaGarza_20, Dropshot_21, Gingerbug_18, Lesiram_21, MenE_25, Phonegingi_21, Pickles13_21, Teng_22, Warren_22,

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

-

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

• Cicada_21, Goodman_20, Jera_20, Johann_20, PermaG_20, SBlackberry_19, SoJo_16, TurboVicky_19, Typher_21, Zanella_19,

Summary by start number:

Start 1:

- Found in 13 of 23 (56.5%) of genes in pham
- Manual Annotations of this start: 11 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antuna_22 (GA), Appa_21 (GA), Blett_22 (GA), Bush_22 (GA), DelaGarza_20 (GF), Dropshot_21 (GA), Gingerbug_18 (GF), Lesiram_21 (GF), MenE_25 (GA), Phonegingi_21 (GA), Pickles13_21 (GA), Teng_22 (GF), Warren_22 (GA),

Start 7:

- Found in 1 of 23 (4.3%) 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: SoJo_16 (BC1),

Start 18:

- Found in 18 of 23 (78.3%) of genes in pham
- Manual Annotations of this start: 9 of 21
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Cicada_21 (EJ), Goodman_20 (EJ), Jera_20 (EJ), Johann_20 (EJ), PermaG_20 (EJ), SBlackberry_19 (EJ), TurboVicky_19 (EJ), Typher_21 (EJ), Zanella_19 (EJ),

Summary by clusters:

There are 4 clusters represented in this pham: GF, BC1, GA, EJ,

Info for manual annotations of cluster BC1:

- Start number 7 was manually annotated 1 time for cluster BC1.

Info for manual annotations of cluster EJ:

- Start number 18 was manually annotated 9 times for cluster EJ.

Info for manual annotations of cluster GA:

- Start number 1 was manually annotated 8 times for cluster GA.

Info for manual annotations of cluster GF:

- Start number 1 was manually annotated 3 times for cluster GF.

Gene Information:

Gene: Antuna_22 Start: 11505, Stop: 13703, Start Num: 1

Candidate Starts for Antuna_22:

(Start: 1 @11505 has 11 MA's), (3, 11580), (9, 11631), (14, 11658), (Start: 18 @11751 has 9 MA's), (22, 11808), (25, 11850), (27, 11883), (29, 11895), (33, 11946), (34, 11949), (35, 11958), (36, 11961),

(38, 11997), (39, 12003), (40, 12006), (41, 12018), (42, 12027), (44, 12051), (52, 12150), (54, 12210), (56, 12249), (57, 12264), (60, 12321), (69, 12459), (71, 12489), (72, 12501), (75, 12525), (77, 12534), (81, 12555), (82, 12558), (85, 12570), (87, 12588), (91, 12630), (94, 12660), (108, 12801), (112, 12858), (118, 12924), (124, 12984), (126, 12993), (133, 13056), (141, 13122), (177, 13473), (178, 13497), (183, 13536), (185, 13557),

Gene: Appa_21 Start: 11367, Stop: 13565, Start Num: 1

Candidate Starts for Appa_21:

(Start: 1 @11367 has 11 MA's), (3, 11442), (9, 11493), (14, 11520), (Start: 18 @11613 has 9 MA's), (22, 11670), (25, 11712), (27, 11745), (29, 11757), (33, 11808), (34, 11811), (35, 11820), (36, 11823), (38, 11859), (39, 11865), (40, 11868), (41, 11880), (42, 11889), (44, 11913), (52, 12012), (54, 12072), (56, 12111), (57, 12126), (60, 12183), (69, 12321), (71, 12351), (72, 12363), (75, 12387), (77, 12396), (81, 12417), (82, 12420), (85, 12432), (87, 12450), (91, 12492), (94, 12522), (108, 12663), (112, 12720), (118, 12786), (124, 12846), (126, 12855), (133, 12918), (141, 12984), (151, 13017), (177, 13335), (178, 13359), (183, 13398), (185, 13419),

Gene: Blett_22 Start: 11520, Stop: 13718, Start Num: 1

Candidate Starts for Blett_22:

(Start: 1 @11520 has 11 MA's), (3, 11595), (9, 11646), (14, 11673), (Start: 18 @11766 has 9 MA's), (22, 11823), (25, 11865), (27, 11898), (29, 11910), (33, 11961), (34, 11964), (35, 11973), (36, 11976), (38, 12012), (39, 12018), (40, 12021), (41, 12033), (42, 12042), (44, 12066), (52, 12165), (54, 12225), (56, 12264), (57, 12279), (60, 12336), (69, 12474), (71, 12504), (72, 12516), (75, 12540), (77, 12549), (81, 12570), (82, 12573), (85, 12585), (87, 12603), (91, 12645), (94, 12675), (106, 12804), (112, 12873), (118, 12939), (124, 12999), (126, 13008), (133, 13071), (141, 13137), (151, 13170), (177, 13488), (178, 13512), (183, 13551), (185, 13572),

Gene: Bush_22 Start: 11501, Stop: 13699, Start Num: 1

Candidate Starts for Bush_22:

(Start: 1 @11501 has 11 MA's), (3, 11576), (9, 11627), (14, 11654), (Start: 18 @11747 has 9 MA's), (22, 11804), (25, 11846), (27, 11879), (29, 11891), (33, 11942), (34, 11945), (35, 11954), (36, 11957), (38, 11993), (39, 11999), (40, 12002), (41, 12014), (42, 12023), (44, 12047), (52, 12146), (54, 12206), (56, 12245), (57, 12260), (65, 12398), (66, 12404), (69, 12455), (71, 12485), (72, 12497), (75, 12521), (77, 12530), (81, 12551), (82, 12554), (85, 12566), (87, 12584), (91, 12626), (94, 12656), (108, 12797), (112, 12854), (118, 12920), (124, 12980), (126, 12989), (133, 13052), (141, 13118), (151, 13151), (177, 13469), (178, 13493), (183, 13532), (185, 13553),

Gene: Cicada_21 Start: 13577, Stop: 15565, Start Num: 18

Candidate Starts for Cicada_21:

(Start: 18 @13577 has 9 MA's), (20, 13616), (30, 13727), (31, 13742), (32, 13754), (51, 13946), (53, 13970), (55, 14012), (60, 14102), (64, 14153), (68, 14219), (76, 14300), (78, 14315), (83, 14339), (92, 14402), (94, 14426), (102, 14528), (106, 14552), (112, 14621), (114, 14654), (133, 14852), (135, 14879), (138, 14897), (143, 14951), (148, 14999), (149, 15011), (150, 15017), (157, 15083), (158, 15095), (171, 15272), (174, 15308), (176, 15338), (180, 15398), (188, 15539),

Gene: DelaGarza_20 Start: 12031, Stop: 14265, Start Num: 1

Candidate Starts for DelaGarza_20:

(Start: 1 @12031 has 11 MA's), (2, 12037), (4, 12118), (6, 12130), (9, 12148), (11, 12157), (15, 12199), (16, 12205), (25, 12367), (26, 12382), (28, 12403), (29, 12412), (35, 12475), (43, 12556), (44, 12568), (47, 12616), (48, 12634), (52, 12667), (54, 12727), (57, 12781), (60, 12838), (69, 12976), (71, 13006), (72, 13018), (79, 13063), (89, 13132), (94, 13171), (97, 13195), (100, 13216), (107, 13282), (115, 13372), (116, 13381), (117, 13384), (122, 13435), (135, 13579), (145, 13675), (149, 13711), (153, 13732), (157, 13783), (159, 13798), (170, 13963), (171, 13972), (174, 14008), (177, 14065), (179, 14083), (181, 14098), (182, 14107),

Gene: Dropshot_21 Start: 11367, Stop: 13565, Start Num: 1

Candidate Starts for Dropshot_21:

(Start: 1 @11367 has 11 MA's), (3, 11442), (9, 11493), (14, 11520), (Start: 18 @11613 has 9 MA's), (22, 11670), (25, 11712), (27, 11745), (29, 11757), (33, 11808), (34, 11811), (35, 11820), (36, 11823), (38, 11859), (39, 11865), (40, 11868), (41, 11880), (42, 11889), (44, 11913), (52, 12012), (54, 12072), (56, 12111), (57, 12126), (60, 12183), (69, 12321), (71, 12351), (72, 12363), (75, 12387), (77, 12396), (81, 12417), (82, 12420), (85, 12432), (87, 12450), (91, 12492), (94, 12522), (108, 12663), (112, 12720), (118, 12786), (124, 12846), (126, 12855), (133, 12918), (141, 12984), (151, 13017), (177, 13335), (178, 13359), (183, 13398), (185, 13419),

Gene: Gingerbug_18 Start: 11192, Stop: 13474, Start Num: 1

Candidate Starts for Gingerbug_18:

(Start: 1 @11192 has 11 MA's), (4, 11273), (6, 11285), (17, 11393), (21, 11471), (22, 11480), (24, 11501), (25, 11522), (26, 11537), (28, 11558), (35, 11630), (37, 11645), (43, 11711), (45, 11726), (46, 11735), (47, 11771), (48, 11789), (52, 11822), (54, 11882), (57, 11936), (59, 11990), (63, 12023), (66, 12080), (70, 12140), (71, 12161), (72, 12173), (74, 12185), (80, 12224), (82, 12230), (86, 12251), (87, 12260), (91, 12302), (93, 12314), (94, 12332), (101, 12428), (103, 12449), (108, 12473), (109, 12476), (110, 12497), (113, 12533), (118, 12596), (120, 12620), (132, 12752), (133, 12761), (145, 12884), (149, 12920), (155, 12983), (161, 13034), (163, 13046), (164, 13091), (172, 13190), (174, 13217), (181, 13307), (186, 13376),

Gene: Goodman_20 Start: 13490, Stop: 15478, Start Num: 18

Candidate Starts for Goodman_20:

(13, 13391), (Start: 18 @13490 has 9 MA's), (30, 13640), (31, 13655), (32, 13667), (51, 13859), (53, 13883), (55, 13925), (60, 14015), (64, 14066), (68, 14132), (76, 14213), (78, 14228), (83, 14252), (94, 14339), (102, 14441), (106, 14465), (112, 14534), (114, 14567), (133, 14765), (135, 14792), (138, 14810), (143, 14864), (148, 14912), (149, 14924), (150, 14930), (157, 14996), (158, 15008), (159, 15011), (171, 15185), (174, 15221), (176, 15251), (180, 15311), (188, 15452),

Gene: Jera_20 Start: 12587, Stop: 14575, Start Num: 18

Candidate Starts for Jera_20:

(Start: 18 @12587 has 9 MA's), (20, 12626), (30, 12737), (31, 12752), (32, 12764), (51, 12956), (53, 12980), (64, 13163), (68, 13229), (78, 13325), (83, 13349), (94, 13436), (102, 13538), (106, 13562), (112, 13631), (114, 13664), (118, 13697), (131, 13829), (135, 13889), (140, 13940), (148, 14009), (149, 14021), (150, 14027), (171, 14282), (176, 14348), (180, 14408), (188, 14549),

Gene: Johann_20 Start: 13490, Stop: 15478, Start Num: 18

Candidate Starts for Johann_20:

(13, 13391), (Start: 18 @13490 has 9 MA's), (30, 13640), (31, 13655), (32, 13667), (51, 13859), (53, 13883), (55, 13925), (60, 14015), (64, 14066), (68, 14132), (76, 14213), (78, 14228), (83, 14252), (94, 14339), (102, 14441), (106, 14465), (112, 14534), (114, 14567), (133, 14765), (135, 14792), (138, 14810), (143, 14864), (148, 14912), (149, 14924), (150, 14930), (157, 14996), (158, 15008), (159, 15011), (171, 15185), (174, 15221), (176, 15251), (180, 15311), (188, 15452),

Gene: Lesiram_21 Start: 12001, Stop: 14235, Start Num: 1

Candidate Starts for Lesiram_21:

(Start: 1 @12001 has 11 MA's), (2, 12007), (4, 12088), (6, 12100), (9, 12118), (11, 12127), (15, 12169), (16, 12175), (25, 12337), (26, 12352), (28, 12373), (29, 12382), (35, 12445), (43, 12526), (44, 12538), (47, 12586), (48, 12604), (52, 12637), (54, 12697), (57, 12751), (60, 12808), (69, 12946), (71, 12976), (72, 12988), (79, 13033), (89, 13102), (94, 13141), (97, 13165), (100, 13186), (107, 13252), (115, 13342), (117, 13354), (122, 13405), (128, 13438), (145, 13645), (149, 13681), (153, 13702), (157, 13753), (159, 13768), (170, 13933), (171, 13942), (174, 13978), (177, 14035), (179, 14053),

(181, 14068), (182, 14077),

Gene: MenE_25 Start: 11635, Stop: 13833, Start Num: 1

Candidate Starts for MenE_25:

(Start: 1 @11635 has 11 MA's), (3, 11710), (9, 11761), (14, 11788), (Start: 18 @11881 has 9 MA's), (22, 11938), (25, 11980), (27, 12013), (29, 12025), (33, 12076), (34, 12079), (35, 12088), (36, 12091), (38, 12127), (39, 12133), (40, 12136), (41, 12148), (42, 12157), (44, 12181), (52, 12280), (54, 12340), (56, 12379), (57, 12394), (60, 12451), (69, 12589), (71, 12619), (72, 12631), (75, 12655), (77, 12664), (81, 12685), (82, 12688), (85, 12700), (87, 12718), (91, 12760), (94, 12790), (108, 12931), (112, 12988), (118, 13054), (124, 13114), (126, 13123), (133, 13186), (141, 13252), (177, 13603), (178, 13627), (183, 13666), (185, 13687),

Gene: PermaG_20 Start: 13551, Stop: 15539, Start Num: 18

Candidate Starts for PermaG_20:

(Start: 18 @13551 has 9 MA's), (20, 13590), (30, 13701), (31, 13716), (32, 13728), (51, 13920), (53, 13944), (55, 13986), (60, 14076), (61, 14085), (64, 14127), (68, 14193), (76, 14274), (78, 14289), (83, 14313), (93, 14385), (94, 14400), (102, 14502), (106, 14526), (112, 14595), (114, 14628), (121, 14694), (133, 14826), (135, 14853), (143, 14925), (146, 14958), (149, 14985), (150, 14991), (154, 15024), (171, 15246), (174, 15282), (176, 15312), (180, 15372), (188, 15513),

Gene: Phonegingi_21 Start: 11365, Stop: 13626, Start Num: 1

Candidate Starts for Phonegingi_21:

(Start: 1 @11365 has 11 MA's), (3, 11440), (9, 11491), (14, 11518), (Start: 18 @11611 has 9 MA's), (23, 11680), (25, 11710), (27, 11743), (29, 11755), (33, 11806), (34, 11809), (35, 11818), (36, 11821), (38, 11857), (39, 11863), (40, 11866), (41, 11878), (42, 11887), (52, 12010), (54, 12070), (56, 12109), (57, 12124), (60, 12181), (66, 12268), (69, 12319), (71, 12349), (72, 12361), (75, 12385), (77, 12394), (79, 12406), (81, 12415), (82, 12418), (85, 12430), (90, 12487), (91, 12490), (94, 12520), (106, 12649), (112, 12718), (114, 12751), (118, 12784), (119, 12799), (124, 12844), (126, 12853), (137, 12943), (151, 13015), (159, 13063), (162, 13096), (164, 13147), (166, 13180), (167, 13213), (168, 13216), (172, 13291), (177, 13396), (178, 13420), (183, 13459),

Gene: Pickles13_21 Start: 11528, Stop: 13990, Start Num: 1

Candidate Starts for Pickles13_21:

(Start: 1 @11528 has 11 MA's), (3, 11603), (5, 11633), (12, 11666), (14, 11681), (17, 11744), (Start: 18 @11774 has 9 MA's), (19, 11795), (22, 11831), (25, 11873), (27, 11906), (29, 11918), (33, 11969), (34, 11972), (36, 11984), (38, 12020), (39, 12026), (40, 12029), (41, 12041), (42, 12050), (44, 12074), (50, 12152), (54, 12233), (56, 12272), (57, 12287), (58, 12299), (60, 12344), (62, 12362), (65, 12425), (66, 12431), (69, 12482), (71, 12512), (72, 12524), (75, 12548), (77, 12557), (81, 12578), (82, 12581), (85, 12593), (87, 12611), (88, 12623), (91, 12653), (95, 12701), (98, 12719), (103, 12800), (105, 12809), (109, 12827), (123, 13043), (127, 13076), (130, 13151), (138, 13253), (139, 13271), (141, 13322), (142, 13337), (147, 13385), (156, 13469), (165, 13577), (177, 13760), (178, 13784), (183, 13823), (184, 13838), (187, 13886), (189, 13964),

Gene: SBlackberry_19 Start: 13346, Stop: 15334, Start Num: 18

Candidate Starts for SBlackberry_19:

(Start: 18 @13346 has 9 MA's), (20, 13385), (30, 13496), (31, 13511), (32, 13523), (51, 13715), (53, 13739), (64, 13922), (68, 13988), (78, 14084), (83, 14108), (94, 14195), (102, 14297), (106, 14321), (112, 14390), (114, 14423), (131, 14588), (133, 14621), (135, 14648), (138, 14666), (148, 14768), (149, 14780), (150, 14786), (159, 14867), (171, 15041), (176, 15107), (180, 15167), (181, 15176), (188, 15308),

Gene: SoJo_16 Start: 10050, Stop: 12278, Start Num: 7

Candidate Starts for SoJo_16:

(Start: 7 @10050 has 1 MA's), (8, 10056), (10, 10062), (22, 10239), (24, 10260), (33, 10377), (46, 10488), (49, 10548), (57, 10674), (62, 10743), (67, 10839), (73, 10914), (84, 10977), (92, 11043), (99, 11115), (104, 11193), (111, 11253), (115, 11319), (119, 11373), (120, 11382), (125, 11427), (128, 11445), (129, 11451), (136, 11586), (144, 11685), (152, 11742), (158, 11808), (160, 11820), (166, 11928), (169, 11952), (175, 12027), (178, 12108), (185, 12159), (186, 12189),

Gene: Teng_22 Start: 12028, Stop: 14262, Start Num: 1

Candidate Starts for Teng_22:

(Start: 1 @12028 has 11 MA's), (2, 12034), (4, 12115), (6, 12127), (9, 12145), (11, 12154), (15, 12196), (16, 12202), (25, 12364), (26, 12379), (28, 12400), (29, 12409), (35, 12472), (43, 12553), (44, 12565), (47, 12613), (48, 12631), (52, 12664), (54, 12724), (57, 12778), (60, 12835), (69, 12973), (71, 13003), (72, 13015), (89, 13129), (94, 13168), (97, 13192), (100, 13213), (107, 13279), (115, 13369), (117, 13381), (122, 13432), (149, 13708), (153, 13729), (157, 13780), (159, 13795), (170, 13960), (171, 13969), (174, 14005), (177, 14062), (179, 14080), (181, 14095), (182, 14104),

Gene: TurboVicky_19 Start: 13340, Stop: 15328, Start Num: 18

Candidate Starts for TurboVicky_19:

(Start: 18 @13340 has 9 MA's), (20, 13379), (30, 13490), (31, 13505), (32, 13517), (51, 13709), (53, 13733), (55, 13775), (64, 13916), (68, 13982), (78, 14078), (94, 14189), (102, 14291), (106, 14315), (112, 14384), (114, 14417), (131, 14582), (134, 14630), (135, 14642), (138, 14660), (148, 14762), (149, 14774), (150, 14780), (171, 15035), (176, 15101), (180, 15161), (188, 15302),

Gene: Typher_21 Start: 13470, Stop: 15458, Start Num: 18

Candidate Starts for Typher_21:

(Start: 18 @13470 has 9 MA's), (20, 13509), (30, 13620), (31, 13635), (32, 13647), (51, 13839), (53, 13863), (55, 13905), (64, 14046), (68, 14112), (78, 14208), (94, 14319), (102, 14421), (106, 14445), (112, 14514), (114, 14547), (131, 14712), (133, 14745), (134, 14760), (135, 14772), (138, 14790), (149, 14904), (150, 14910), (171, 15165), (176, 15231), (180, 15291), (188, 15432),

Gene: Warren_22 Start: 11565, Stop: 13763, Start Num: 1

Candidate Starts for Warren_22:

(Start: 1 @11565 has 11 MA's), (3, 11640), (9, 11691), (14, 11718), (Start: 18 @11811 has 9 MA's), (25, 11910), (27, 11943), (29, 11955), (33, 12006), (34, 12009), (35, 12018), (36, 12021), (38, 12057), (39, 12063), (40, 12066), (41, 12078), (42, 12087), (44, 12111), (52, 12210), (54, 12270), (56, 12309), (57, 12324), (60, 12381), (69, 12519), (71, 12549), (72, 12561), (75, 12585), (77, 12594), (81, 12615), (82, 12618), (85, 12630), (87, 12648), (91, 12690), (94, 12720), (96, 12744), (106, 12849), (112, 12918), (114, 12951), (118, 12984), (124, 13044), (126, 13053), (133, 13116), (141, 13182), (151, 13215), (173, 13452), (177, 13533), (178, 13557), (183, 13596), (185, 13617),

Gene: Zanella_19 Start: 13343, Stop: 15331, Start Num: 18

Candidate Starts for Zanella_19:

(Start: 18 @13343 has 9 MA's), (20, 13382), (30, 13493), (31, 13508), (32, 13520), (51, 13712), (53, 13736), (64, 13919), (68, 13985), (78, 14081), (83, 14105), (94, 14192), (102, 14294), (106, 14318), (112, 14387), (114, 14420), (131, 14585), (134, 14633), (135, 14645), (138, 14663), (148, 14765), (149, 14777), (150, 14783), (171, 15038), (176, 15104), (180, 15164), (188, 15305),