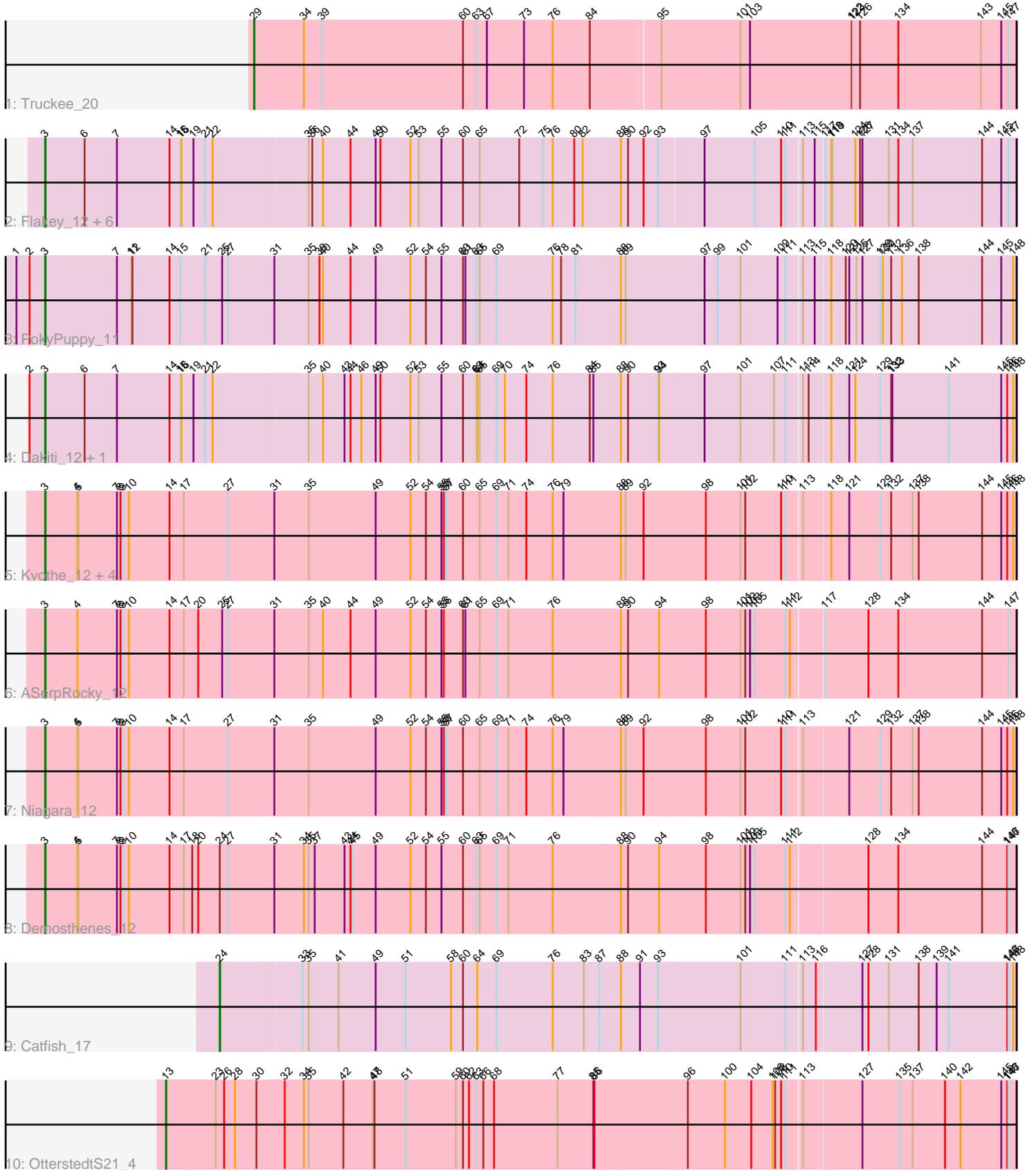


Pham 3932



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 3932 Report

This analysis was run 04/05/24 on database version 557.

Pham number 3932 has 21 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Truckee_20
- Track 2 : Flakey_12, Linetti_13, CathyBurgh_12, Lizzo_12, GourdThymes_12, Squibbles_12, Hotorobo_12
- Track 3 : PokyPuppy_11
- Track 4 : Dakiti_12, PierreThree_12
- Track 5 : Kvothe_12, Katyusha_12, Benczkowski14_12, Tredge_12, Teatealatte_12
- Track 6 : ASerpRocky_12
- Track 7 : Niagara_12
- Track 8 : Demosthenes_12
- Track 9 : Catfish_17
- Track 10 : OtterstedtS21_4

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

The start number called the most often in the published annotations is 3, it was called in 16 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASerpRocky_12, Benczkowski14_12, CathyBurgh_12, Dakiti_12, Demosthenes_12, Flakey_12, GourdThymes_12, Hotorobo_12, Katyusha_12, Kvothe_12, Linetti_13, Lizzo_12, Niagara_12, PierreThree_12, PokyPuppy_11, Squibbles_12, Teatealatte_12, Tredge_12,

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

-

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

- Catfish_17, OtterstedtS21_4, Truckee_20,

Summary by start number:

Start 3:

- Found in 18 of 21 (85.7%) of genes in pham
- Manual Annotations of this start: 16 of 19

- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_12 (CS4), Benczkowski14_12 (CS4), CathyBurgh_12 (CS2), Dakiti_12 (CS2), Demosthenes_12 (CS4), Flakey_12 (CS2), GourdThymes_12 (CS2), Hotorobo_12 (CS2), Katyusha_12 (CS4), Kvothe_12 (CS4), Linetti_13 (CS2), Lizzo_12 (CS2), Niagara_12 (CS4), PierreThree_12 (CS2), PokyPuppy_11 (CS2), Squibbles_12 (CS2), Teatealatte_12 (CS4), Tredge_12 (CS4),

Start 13:

- Found in 1 of 21 (4.8%) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: OtterstedtS21_4 (DV),

Start 24:

- Found in 2 of 21 (9.5%) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Catfish_17 (CU5),

Start 29:

- Found in 1 of 21 (4.8%) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Truckee_20 (AU5),

Summary by clusters:

There are 5 clusters represented in this pham: DV, CS4, CU5, AU5, CS2,

Info for manual annotations of cluster AU5:

- Start number 29 was manually annotated 1 time for cluster AU5.

Info for manual annotations of cluster CS2:

- Start number 3 was manually annotated 8 times for cluster CS2.

Info for manual annotations of cluster CS4:

- Start number 3 was manually annotated 8 times for cluster CS4.

Info for manual annotations of cluster CU5:

- Start number 24 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster DV:

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

Gene Information:

Gene: ASerpRocky_12 Start: 12542, Stop: 14935, Start Num: 3

Candidate Starts for ASerpRocky_12:

(Start: 3 @12542 has 16 MA's), (4, 12623), (7, 12722), (8, 12731), (9, 12737), (10, 12752), (14, 12854), (17, 12890), (20, 12926), (25, 12986), (27, 12998), (31, 13115), (35, 13190), (40, 13226), (44,

13295), (49, 13358), (52, 13442), (54, 13481), (55, 13520), (56, 13526), (60, 13574), (61, 13580), (65, 13616), (69, 13658), (71, 13688), (76, 13799), (88, 13967), (90, 13985), (94, 14063), (98, 14177), (101, 14264), (102, 14276), (103, 14288), (105, 14300), (111, 14375), (112, 14387), (117, 14459), (128, 14564), (134, 14639), (144, 14849), (147, 14915),

Gene: Benczkowski14_12 Start: 12604, Stop: 14997, Start Num: 3

Candidate Starts for Benczkowski14_12:

(Start: 3 @12604 has 16 MA's), (4, 12685), (5, 12688), (7, 12784), (8, 12793), (9, 12799), (10, 12814), (14, 12916), (17, 12952), (27, 13060), (31, 13177), (35, 13252), (49, 13420), (52, 13504), (54, 13543), (55, 13582), (56, 13588), (57, 13594), (60, 13636), (65, 13678), (69, 13720), (71, 13750), (74, 13795), (76, 13861), (79, 13888), (88, 14029), (89, 14041), (92, 14086), (98, 14239), (101, 14326), (102, 14338), (110, 14428), (111, 14437), (113, 14473), (118, 14533), (121, 14578), (129, 14656), (132, 14683), (137, 14737), (138, 14752), (144, 14911), (145, 14959), (146, 14974), (148, 14989),

Gene: Catfish_17 Start: 10490, Stop: 12445, Start Num: 24

Candidate Starts for Catfish_17:

(Start: 24 @10490 has 1 MA's), (33, 10682), (35, 10697), (41, 10772), (49, 10865), (51, 10940), (58, 11054), (60, 11084), (64, 11120), (69, 11168), (76, 11309), (83, 11387), (87, 11426), (88, 11477), (91, 11525), (93, 11570), (101, 11774), (111, 11885), (113, 11921), (116, 11951), (127, 12059), (128, 12074), (131, 12125), (138, 12200), (139, 12245), (141, 12275), (146, 12422), (147, 12425), (148, 12437),

Gene: CathyBurgh_12 Start: 10879, Stop: 13269, Start Num: 3

Candidate Starts for CathyBurgh_12:

(Start: 3 @10879 has 16 MA's), (6, 10978), (7, 11059), (14, 11191), (15, 11218), (16, 11221), (19, 11251), (21, 11281), (22, 11299), (35, 11527), (36, 11536), (40, 11563), (44, 11632), (49, 11695), (50, 11707), (52, 11779), (53, 11800), (55, 11857), (60, 11911), (65, 11953), (72, 12052), (75, 12112), (76, 12136), (80, 12190), (82, 12211), (88, 12304), (90, 12322), (92, 12361), (93, 12397), (97, 12508), (105, 12634), (110, 12700), (111, 12709), (113, 12745), (115, 12772), (117, 12793), (118, 12805), (119, 12808), (124, 12865), (126, 12877), (127, 12883), (131, 12949), (134, 12973), (137, 13009), (144, 13183), (145, 13231), (147, 13249),

Gene: Dakiti_12 Start: 10877, Stop: 13270, Start Num: 3

Candidate Starts for Dakiti_12:

(2, 10838), (Start: 3 @10877 has 16 MA's), (6, 10976), (7, 11057), (14, 11189), (15, 11216), (16, 11219), (19, 11249), (21, 11279), (22, 11297), (35, 11525), (40, 11561), (43, 11615), (44, 11630), (46, 11657), (49, 11693), (50, 11705), (52, 11777), (53, 11798), (55, 11855), (60, 11909), (63, 11942), (64, 11945), (65, 11951), (69, 11993), (70, 12014), (74, 12068), (76, 12134), (84, 12227), (85, 12236), (88, 12302), (90, 12320), (93, 12395), (94, 12398), (97, 12509), (101, 12599), (107, 12683), (111, 12710), (113, 12746), (114, 12758), (118, 12806), (121, 12851), (124, 12866), (129, 12929), (132, 12956), (133, 12959), (141, 13100), (145, 13232), (146, 13247), (148, 13262),

Gene: Demosthenes_12 Start: 12512, Stop: 14905, Start Num: 3

Candidate Starts for Demosthenes_12:

(Start: 3 @12512 has 16 MA's), (4, 12593), (5, 12596), (7, 12692), (8, 12701), (9, 12707), (10, 12722), (14, 12824), (17, 12860), (18, 12881), (20, 12896), (Start: 24 @12950 has 1 MA's), (27, 12968), (31, 13085), (34, 13148), (35, 13160), (37, 13175), (43, 13250), (44, 13265), (45, 13271), (49, 13328), (52, 13412), (54, 13451), (55, 13490), (60, 13544), (63, 13577), (65, 13586), (69, 13628), (71, 13658), (76, 13769), (88, 13937), (90, 13955), (94, 14033), (98, 14147), (101, 14234), (102, 14246), (103, 14258), (105, 14270), (111, 14345), (112, 14357), (128, 14534), (134, 14609), (144, 14819), (146, 14882), (147, 14885),

Gene: Flakey_12 Start: 10880, Stop: 13270, Start Num: 3

Candidate Starts for Flakey_12:

(Start: 3 @10880 has 16 MA's), (6, 10979), (7, 11060), (14, 11192), (15, 11219), (16, 11222), (19, 11252), (21, 11282), (22, 11300), (35, 11528), (36, 11537), (40, 11564), (44, 11633), (49, 11696), (50, 11708), (52, 11780), (53, 11801), (55, 11858), (60, 11912), (65, 11954), (72, 12053), (75, 12113), (76, 12137), (80, 12191), (82, 12212), (88, 12305), (90, 12323), (92, 12362), (93, 12398), (97, 12509), (105, 12635), (110, 12701), (111, 12710), (113, 12746), (115, 12773), (117, 12794), (118, 12806), (119, 12809), (124, 12866), (126, 12878), (127, 12884), (131, 12950), (134, 12974), (137, 13010), (144, 13184), (145, 13232), (147, 13250),

Gene: GourdThymes_12 Start: 10879, Stop: 13269, Start Num: 3

Candidate Starts for GourdThymes_12:

(Start: 3 @10879 has 16 MA's), (6, 10978), (7, 11059), (14, 11191), (15, 11218), (16, 11221), (19, 11251), (21, 11281), (22, 11299), (35, 11527), (36, 11536), (40, 11563), (44, 11632), (49, 11695), (50, 11707), (52, 11779), (53, 11800), (55, 11857), (60, 11911), (65, 11953), (72, 12052), (75, 12112), (76, 12136), (80, 12190), (82, 12211), (88, 12304), (90, 12322), (92, 12361), (93, 12397), (97, 12508), (105, 12634), (110, 12700), (111, 12709), (113, 12745), (115, 12772), (117, 12793), (118, 12805), (119, 12808), (124, 12865), (126, 12877), (127, 12883), (131, 12949), (134, 12973), (137, 13009), (144, 13183), (145, 13231), (147, 13249),

Gene: Hotorobo_12 Start: 10890, Stop: 13280, Start Num: 3

Candidate Starts for Hotorobo_12:

(Start: 3 @10890 has 16 MA's), (6, 10989), (7, 11070), (14, 11202), (15, 11229), (16, 11232), (19, 11262), (21, 11292), (22, 11310), (35, 11538), (36, 11547), (40, 11574), (44, 11643), (49, 11706), (50, 11718), (52, 11790), (53, 11811), (55, 11868), (60, 11922), (65, 11964), (72, 12063), (75, 12123), (76, 12147), (80, 12201), (82, 12222), (88, 12315), (90, 12333), (92, 12372), (93, 12408), (97, 12519), (105, 12645), (110, 12711), (111, 12720), (113, 12756), (115, 12783), (117, 12804), (118, 12816), (119, 12819), (124, 12876), (126, 12888), (127, 12894), (131, 12960), (134, 12984), (137, 13020), (144, 13194), (145, 13242), (147, 13260),

Gene: Katyusha_12 Start: 12604, Stop: 14997, Start Num: 3

Candidate Starts for Katyusha_12:

(Start: 3 @12604 has 16 MA's), (4, 12685), (5, 12688), (7, 12784), (8, 12793), (9, 12799), (10, 12814), (14, 12916), (17, 12952), (27, 13060), (31, 13177), (35, 13252), (49, 13420), (52, 13504), (54, 13543), (55, 13582), (56, 13588), (57, 13594), (60, 13636), (65, 13678), (69, 13720), (71, 13750), (74, 13795), (76, 13861), (79, 13888), (88, 14029), (89, 14041), (92, 14086), (98, 14239), (101, 14326), (102, 14338), (110, 14428), (111, 14437), (113, 14473), (118, 14533), (121, 14578), (129, 14656), (132, 14683), (137, 14737), (138, 14752), (144, 14911), (145, 14959), (146, 14974), (148, 14989),

Gene: Kvothe_12 Start: 12541, Stop: 14934, Start Num: 3

Candidate Starts for Kvothe_12:

(Start: 3 @12541 has 16 MA's), (4, 12622), (5, 12625), (7, 12721), (8, 12730), (9, 12736), (10, 12751), (14, 12853), (17, 12889), (27, 12997), (31, 13114), (35, 13189), (49, 13357), (52, 13441), (54, 13480), (55, 13519), (56, 13525), (57, 13531), (60, 13573), (65, 13615), (69, 13657), (71, 13687), (74, 13732), (76, 13798), (79, 13825), (88, 13966), (89, 13978), (92, 14023), (98, 14176), (101, 14263), (102, 14275), (110, 14365), (111, 14374), (113, 14410), (118, 14470), (121, 14515), (129, 14593), (132, 14620), (137, 14674), (138, 14689), (144, 14848), (145, 14896), (146, 14911), (148, 14926),

Gene: Linetti_13 Start: 11030, Stop: 13420, Start Num: 3

Candidate Starts for Linetti_13:

(Start: 3 @11030 has 16 MA's), (6, 11129), (7, 11210), (14, 11342), (15, 11369), (16, 11372), (19, 11402), (21, 11432), (22, 11450), (35, 11678), (36, 11687), (40, 11714), (44, 11783), (49, 11846), (50, 11858), (52, 11930), (53, 11951), (55, 12008), (60, 12062), (65, 12104), (72, 12203), (75, 12263), (76, 12287), (80, 12341), (82, 12362), (88, 12455), (90, 12473), (92, 12512), (93, 12548), (97, 12659),

(105, 12785), (110, 12851), (111, 12860), (113, 12896), (115, 12923), (117, 12944), (118, 12956), (119, 12959), (124, 13016), (126, 13028), (127, 13034), (131, 13100), (134, 13124), (137, 13160), (144, 13334), (145, 13382), (147, 13400),

Gene: Lizzo_12 Start: 10879, Stop: 13269, Start Num: 3

Candidate Starts for Lizzo_12:

(Start: 3 @10879 has 16 MA's), (6, 10978), (7, 11059), (14, 11191), (15, 11218), (16, 11221), (19, 11251), (21, 11281), (22, 11299), (35, 11527), (36, 11536), (40, 11563), (44, 11632), (49, 11695), (50, 11707), (52, 11779), (53, 11800), (55, 11857), (60, 11911), (65, 11953), (72, 12052), (75, 12112), (76, 12136), (80, 12190), (82, 12211), (88, 12304), (90, 12322), (92, 12361), (93, 12397), (97, 12508), (105, 12634), (110, 12700), (111, 12709), (113, 12745), (115, 12772), (117, 12793), (118, 12805), (119, 12808), (124, 12865), (126, 12877), (127, 12883), (131, 12949), (134, 12973), (137, 13009), (144, 13183), (145, 13231), (147, 13249),

Gene: Niagara_12 Start: 12561, Stop: 14954, Start Num: 3

Candidate Starts for Niagara_12:

(Start: 3 @12561 has 16 MA's), (4, 12642), (5, 12645), (7, 12741), (8, 12750), (9, 12756), (10, 12771), (14, 12873), (17, 12909), (27, 13017), (31, 13134), (35, 13209), (49, 13377), (52, 13461), (54, 13500), (55, 13539), (56, 13545), (57, 13551), (60, 13593), (65, 13635), (69, 13677), (71, 13707), (74, 13752), (76, 13818), (79, 13845), (88, 13986), (89, 13998), (92, 14043), (98, 14196), (101, 14283), (102, 14295), (110, 14385), (111, 14394), (113, 14430), (121, 14535), (129, 14613), (132, 14640), (137, 14694), (138, 14709), (144, 14868), (145, 14916), (146, 14931), (148, 14946),

Gene: OtterstedtS21_4 Start: 3410, Stop: 5503, Start Num: 13

Candidate Starts for OtterstedtS21_4:

(Start: 13 @3410 has 1 MA's), (23, 3530), (26, 3551), (28, 3578), (30, 3632), (32, 3701), (34, 3749), (35, 3761), (42, 3848), (47, 3923), (48, 3926), (51, 4004), (59, 4130), (60, 4148), (62, 4163), (63, 4181), (66, 4199), (68, 4226), (77, 4385), (85, 4475), (86, 4478), (96, 4700), (100, 4793), (104, 4859), (106, 4913), (108, 4919), (110, 4934), (111, 4943), (113, 4979), (127, 5117), (135, 5210), (137, 5243), (140, 5324), (142, 5363), (145, 5465), (146, 5480), (147, 5483),

Gene: PierreThree_12 Start: 10877, Stop: 13270, Start Num: 3

Candidate Starts for PierreThree_12:

(2, 10838), (Start: 3 @10877 has 16 MA's), (6, 10976), (7, 11057), (14, 11189), (15, 11216), (16, 11219), (19, 11249), (21, 11279), (22, 11297), (35, 11525), (40, 11561), (43, 11615), (44, 11630), (46, 11657), (49, 11693), (50, 11705), (52, 11777), (53, 11798), (55, 11855), (60, 11909), (63, 11942), (64, 11945), (65, 11951), (69, 11993), (70, 12014), (74, 12068), (76, 12134), (84, 12227), (85, 12236), (88, 12302), (90, 12320), (93, 12395), (94, 12398), (97, 12509), (101, 12599), (107, 12683), (111, 12710), (113, 12746), (114, 12758), (118, 12806), (121, 12851), (124, 12866), (129, 12929), (132, 12956), (133, 12959), (141, 13100), (145, 13232), (146, 13247), (148, 13262),

Gene: PokyPuppy_11 Start: 10772, Stop: 13162, Start Num: 3

Candidate Starts for PokyPuppy_11:

(1, 10700), (2, 10733), (Start: 3 @10772 has 16 MA's), (7, 10952), (11, 10988), (12, 10991), (14, 11084), (15, 11111), (21, 11174), (25, 11216), (27, 11228), (31, 11345), (35, 11420), (38, 11447), (40, 11456), (44, 11525), (49, 11588), (52, 11672), (54, 11711), (55, 11750), (60, 11804), (61, 11810), (63, 11837), (65, 11846), (69, 11888), (76, 12029), (78, 12050), (81, 12086), (88, 12197), (89, 12209), (97, 12404), (99, 12437), (101, 12494), (109, 12587), (111, 12605), (113, 12641), (115, 12668), (118, 12701), (120, 12737), (121, 12746), (125, 12764), (127, 12779), (129, 12821), (130, 12827), (132, 12848), (136, 12875), (138, 12917), (144, 13076), (145, 13124), (148, 13154),

Gene: Squibbles_12 Start: 10879, Stop: 13269, Start Num: 3

Candidate Starts for Squibbles_12:

(Start: 3 @10879 has 16 MA's), (6, 10978), (7, 11059), (14, 11191), (15, 11218), (16, 11221), (19, 11251), (21, 11281), (22, 11299), (35, 11527), (36, 11536), (40, 11563), (44, 11632), (49, 11695), (50, 11707), (52, 11779), (53, 11800), (55, 11857), (60, 11911), (65, 11953), (72, 12052), (75, 12112), (76, 12136), (80, 12190), (82, 12211), (88, 12304), (90, 12322), (92, 12361), (93, 12397), (97, 12508), (105, 12634), (110, 12700), (111, 12709), (113, 12745), (115, 12772), (117, 12793), (118, 12805), (119, 12808), (124, 12865), (126, 12877), (127, 12883), (131, 12949), (134, 12973), (137, 13009), (144, 13183), (145, 13231), (147, 13249),

Gene: Teatealatte_12 Start: 12524, Stop: 14917, Start Num: 3

Candidate Starts for Teatealatte_12:

(Start: 3 @12524 has 16 MA's), (4, 12605), (5, 12608), (7, 12704), (8, 12713), (9, 12719), (10, 12734), (14, 12836), (17, 12872), (27, 12980), (31, 13097), (35, 13172), (49, 13340), (52, 13424), (54, 13463), (55, 13502), (56, 13508), (57, 13514), (60, 13556), (65, 13598), (69, 13640), (71, 13670), (74, 13715), (76, 13781), (79, 13808), (88, 13949), (89, 13961), (92, 14006), (98, 14159), (101, 14246), (102, 14258), (110, 14348), (111, 14357), (113, 14393), (118, 14453), (121, 14498), (129, 14576), (132, 14603), (137, 14657), (138, 14672), (144, 14831), (145, 14879), (146, 14894), (148, 14909),

Gene: Tredge_12 Start: 12524, Stop: 14917, Start Num: 3

Candidate Starts for Tredge_12:

(Start: 3 @12524 has 16 MA's), (4, 12605), (5, 12608), (7, 12704), (8, 12713), (9, 12719), (10, 12734), (14, 12836), (17, 12872), (27, 12980), (31, 13097), (35, 13172), (49, 13340), (52, 13424), (54, 13463), (55, 13502), (56, 13508), (57, 13514), (60, 13556), (65, 13598), (69, 13640), (71, 13670), (74, 13715), (76, 13781), (79, 13808), (88, 13949), (89, 13961), (92, 14006), (98, 14159), (101, 14246), (102, 14258), (110, 14348), (111, 14357), (113, 14393), (118, 14453), (121, 14498), (129, 14576), (132, 14603), (137, 14657), (138, 14672), (144, 14831), (145, 14879), (146, 14894), (148, 14909),

Gene: Truckee_20 Start: 15773, Stop: 17650, Start Num: 29

Candidate Starts for Truckee_20:

(Start: 29 @15773 has 1 MA's), (34, 15896), (39, 15941), (60, 16295), (63, 16328), (67, 16355), (73, 16448), (76, 16520), (84, 16613), (95, 16775), (101, 16970), (103, 16994), (122, 17246), (123, 17249), (126, 17267), (134, 17363), (143, 17561), (145, 17612), (147, 17630),