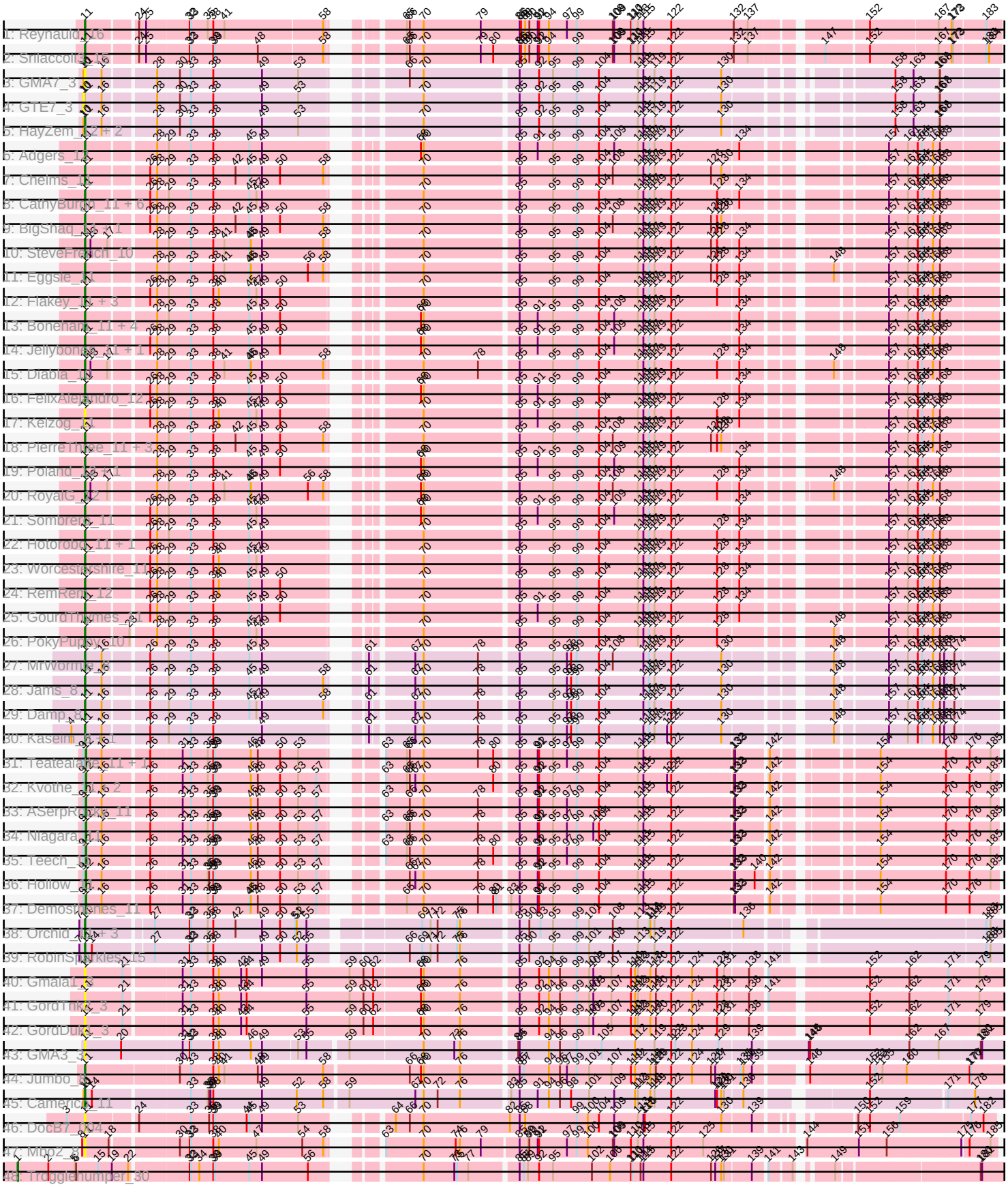
Pham 345666



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 345666 Report

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

Pham number 345666 has 77 members, 11 are drafts.

Phages represented in each track:
- Track 1 : Reynauld_16
- Track 2 : Srilaccoli3_15
- Track 3 : GMA7_3
- Track 4 : GTE7_3
- Track 5 : HayZem_12, Austin_12, Amore2_12
- Track 6 : Adgers_12
- Track 7 : Chelms_11
- Track 8 : CathyBurgh_11, Exiguo_11, Sam12_11, Ekhein_11, Lizzo_11, Squibbles_11, Beaver_11
- Track 9 : BigShaq_11, Crete_12
- Track 10 : SteveFrench_10
- Track 11 : Eggsie_11
- Track 12 : Flakey_11, Barbochs_11, Breezic_11, Gorko_11
- Track 13 : Boneham_11, Butterball_11, CinnamonToast_12, BirksAndSocks_11, BillyBobJr_12
- Track 14 : Jellybones_11, John316_11
- Track 15 : Diabla_10
- Track 16 : FelixAlejandro_12
- Track 17 : Kelzog_11
- Track 18 : PierreThree_11, BenoitCattle_11, Linetti_12, Dakiti_11
- Track 19 : Poland_12, Msay19_12
- Track 20 : RoyalG_12
- Track 21 : Sombrero_11
- Track 22 : Hotorobo_11, Monty_10
- Track 23 : Worcestershire_11
- Track 24 : RemRem_12
- Track 25 : GourdThymes_11
- Track 26 : PokyPuppy_10
- Track 27 : MrWormie_8
- Track 28 : Jams_8
- Track 29 : Damp_8
- Track 30 : Kaseim_8, Shelley_8
- Track 31 : Teatealatte_11, Tredge_11
- Track 32 : Kvothe_11, Benczkowski14_11, Katyusha_11
- Track 33 : ASerpRocky_11
- Track 34 : Niagara_11
- Track 35 : Teech_11

• Track 36 : Hollow_11
• Track 37 : Demosthenes_11
• Track 38 : Orchid_11, Kampe_11, Gibbles_10, PatrickStar_11
• Track 39 : RobinSparkles_15
• Track 40 : Gmala1_3
• Track 41 : GordTnk2_3
• Track 42 : GordDuk1_3
• Track 43 : GMA3_3
• Track 44 : Jumbo_8
• Track 45 : Camerico_11
• Track 46 : DocB7_004
• Track 47 : Mbo2_8
• Track 48 : Trogglehumper_30

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

The start number called the most often in the published annotations is 11, it was called in 55 of the 66 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adgers_12, Amore2_12, Austin_12, Barbochs_11, Beaver_11, BenoitCattle_11, BigShaq_11, BillyBobJr_12, BirksAndSocks_11, Boneham_11, Breezic_11, Butterball_11, Camerico_11, CathyBurgh_11, Chelms_11, CinnamonToast_12, Crete_12, Dakiti_11, Damp_8, Diabla_10, DocB7_004, Eggsie_11, Ekhein_11, Exiguo_11, FelixAlejandro_12, Flakey_11, GMA3_3, GMA7_3, Gibbles_10, Gmala1_3, GordDuk1_3, GordTnk2_3, Gorko_11, GourdThymes_11, HayZem_12, Hotorobo_11, Jams_8, Jellybones_11, John316_11, Jumbo_8, Kampe_11, Kaseim_8, Kelzog_11, Linetti_12, Lizzo_11, Mbo2_8, Monty_10, MrWormie_8, Msay19_12, Orchid_11, PatrickStar_11, PierreThree_11, PokyPuppy_10, Poland_12, RemRem_12, Reynauld_16, RobinSparkles_15, RoyalG_12, Sam12_11, Shelley_8, Sombrero_11, Squibbles_11, Srilaccoli3_15, SteveFrench_10, Worcestershire_11,

Genes that have the "Most Annotated" start but do not call it:
• GTE7_3,

Genes that do not have the "Most Annotated" start:
• ASerpRocky_11, Benczkowski14_11, Demosthenes_11, Hollow_11, Katyusha_11, Kvothe_11, Niagara_11, Teatealatte_11, Teech_11, Tredge_11, Trogglehumper_30,

Summary by start number:

Start 1:
• Found in 1 of 77 (1.3%) of genes in pham
• Manual Annotations of this start: 1 of 66
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Trogglehumper_30 (singleton),

Start 10:
• Found in 6 of 77 (7.8%) of genes in pham
• No Manual Annotations of this start.

• Called 16.7% of time when present
• Phage (with cluster) where this start called: GTE7_3 (CS1),

Start 11:
• Found in 66 of 77 (85.7%) of genes in pham
• Manual Annotations of this start: 55 of 66
• Called 98.5% of time when present
• Phage (with cluster) where this start called: Adgers_12 (CS2), Amore2_12 (CS1), Austin_12 (CS1), Barbochs_11 (CS2), Beaver_11 (CS2), BenoitCattle_11 (CS2), BigShaq_11 (CS2), BillyBobJr_12 (CS2), BirksAndSocks_11 (CS2), Boneham_11 (CS2), Breezic_11 (CS2), Butterball_11 (CS2), Camerico_11 (DF4), CathyBurgh_11 (CS2), Chelms_11 (CS2), CinnamonToast_12 (CS2), Crete_12 (CS2), Dakiti_11 (CS2), Damp_8 (CS3), Diabla_10 (CS2), DocB7_004 (singleton), Eggsie_11 (CS2), Ekhein_11 (CS2), Exiguo_11 (CS2), FelixAlejandro_12 (CS2), Flakey_11 (CS2), GMA3_3 (DF2), GMA7_3 (CS1), Gibbles_10 (CX), Gmala1_3 (DF1), GordDuk1_3 (DF1), GordTnk2_3 (DF1), Gorko_11 (CS2), GourdThymes_11 (CS2), HayZem_12 (CS1), Hotorobo_11 (CS2), Jams_8 (CS3), Jellybones_11 (CS2), John316_11 (CS2), Jumbo_8 (DF3), Kampe_11 (CX), Kaseim_8 (CS3), Kelzog_11 (CS2), Linetti_12 (CS2), Lizzo_11 (CS2), Mbo2_8 (singleton), Monty_10 (CS2), MrWormie_8 (CS3), Msay19_12 (CS2), Orchid_11 (CX), PatrickStar_11 (CX), PierreThree_11 (CS2), PokyPuppy_10 (CS2), Poland_12 (CS2), RemRem_12 (CS2), Reynauld_16 (CH), RobinSparkles_15 (CX), RoyalG_12 (CS2), Sam12_11 (CS2), Shelley_8 (CS3), Sombrero_11 (CS2), Squibbles_11 (CS2), Srilaccoli3_15 (CH), SteveFrench_10 (CS2), Worcestershire_11 (CS2),

Start 12:
• Found in 10 of 77 (13.0%) of genes in pham
• Manual Annotations of this start: 10 of 66
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ASerpRocky_11 (CS4), Benczkowski14_11 (CS4), Demosthenes_11 (CS4), Hollow_11 (CS4), Katyusha_11 (CS4), Kvothe_11 (CS4), Niagara_11 (CS4), Teatealatte_11 (CS4), Teech_11 (CS4), Tredge_11 (CS4),

Summary by clusters:

There are 11 clusters represented in this pham: singleton, CH, DF4, DF1, DF3, DF2, CX, CS4, CS1, CS3, CS2,

Info for manual annotations of cluster CH:
•Start number 11 was manually annotated 2 times for cluster CH.

Info for manual annotations of cluster CS1:
•Start number 11 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:
•Start number 11 was manually annotated 38 times for cluster CS2.

Info for manual annotations of cluster CS3:
•Start number 11 was manually annotated 5 times for cluster CS3.

Info for manual annotations of cluster CS4:
•Start number 12 was manually annotated 10 times for cluster CS4.

Info for manual annotations of cluster CX:
•Start number 11 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster DF3:
•Start number 11 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster DF4:
•Start number 11 was manually annotated 1 time for cluster DF4.

Gene Information:

Gene: ASerpRocky_11 Start: 10816, Stop: 12555, Start Num: 12
Candidate Starts for ASerpRocky_11:
(9, 10810), (Start: 12 @10816 has 10 MA's), (16, 10849), (26, 10939), (31, 11005), (33, 11023), (35, 11059), (38, 11071), (39, 11074), (46, 11149), (48, 11164), (50, 11212), (53, 11251), (57, 11290), (63, 11353), (66, 11404), (70, 11434), (78, 11551), (85, 11623), (91, 11662), (92, 11665), (95, 11695), (97, 11725), (99, 11746), (104, 11794), (113, 11878), (115, 11890), (122, 11950), (132, 12070), (133, 12073), (142, 12136), (154, 12304), (170, 12442), (176, 12493), (185, 12538),

Gene: Adgers_12 Start: 9331, Stop: 11055, Start Num: 11
Candidate Starts for Adgers_12:
(Start: 11 @9331 has 55 MA's), (28, 9463), (29, 9484), (33, 9532), (38, 9580), (45, 9655), (49, 9682), (68, 9934), (70, 9940), (85, 10129), (91, 10168), (95, 10201), (99, 10252), (104, 10300), (109, 10333), (113, 10384), (115, 10396), (117, 10408), (119, 10420), (122, 10456), (134, 10588), (157, 10831), (161, 10870), (164, 10891), (165, 10900), (166, 10924), (168, 10939),

Gene: Amore2_12 Start: 9385, Stop: 11100, Start Num: 11
Candidate Starts for Amore2_12:
(10, 9382), (Start: 11 @9385 has 55 MA's), (16, 9418), (28, 9514), (30, 9559), (33, 9583), (38, 9631), (49, 9733), (53, 9811), (70, 9997), (85, 10186), (92, 10228), (95, 10258), (99, 10309), (104, 10357), (113, 10441), (115, 10453), (119, 10477), (122, 10513), (130, 10615), (158, 10885), (163, 10924), (167, 10978), (168, 10981),

Gene: Austin_12 Start: 9385, Stop: 11100, Start Num: 11
Candidate Starts for Austin_12:
(10, 9382), (Start: 11 @9385 has 55 MA's), (16, 9418), (28, 9514), (30, 9559), (33, 9583), (38, 9631), (49, 9733), (53, 9811), (70, 9997), (85, 10186), (92, 10228), (95, 10258), (99, 10309), (104, 10357), (113, 10441), (115, 10453), (119, 10477), (122, 10513), (130, 10615), (158, 10885), (163, 10924), (167, 10978), (168, 10981),

Gene: Barbochs_11 Start: 9166, Stop: 10893, Start Num: 11
Candidate Starts for Barbochs_11:
(Start: 11 @9166 has 55 MA's), (26, 9283), (28, 9298), (29, 9319), (33, 9367), (38, 9415), (40, 9427), (45, 9490), (47, 9505), (49, 9517), (50, 9556), (70, 9775), (85, 9964), (95, 10036), (99, 10087), (104, 10135), (113, 10219), (115, 10231), (117, 10243), (119, 10255), (122, 10291), (128, 10384), (134, 10423), (157, 10669), (161, 10708), (164, 10729), (165, 10738), (166, 10762), (168, 10777),

Gene: Beaver_11 Start: 9177, Stop: 10901, Start Num: 11

Candidate Starts for Beaver_11:
(Start: 11 @9177 has 55 MA's), (26, 9294), (28, 9309), (29, 9330), (33, 9378), (38, 9426), (45, 9501), (47, 9516), (49, 9528), (70, 9786), (85, 9975), (95, 10047), (99, 10098), (104, 10146), (113, 10230), (115, 10242), (117, 10254), (119, 10266), (122, 10302), (128, 10395), (134, 10434), (157, 10677), (161, 10716), (164, 10737), (165, 10746), (166, 10770), (168, 10785),

Gene: Benczkowski14_11 Start: 10878, Stop: 12617, Start Num: 12
Candidate Starts for Benczkowski14_11:
(9, 10872), (Start: 12 @10878 has 10 MA's), (16, 10911), (26, 11001), (31, 11067), (33, 11085), (35, 11121), (38, 11133), (39, 11136), (46, 11211), (48, 11226), (50, 11274), (53, 11313), (57, 11352), (63, 11415), (65, 11460), (66, 11466), (67, 11478), (70, 11496), (80, 11646), (85, 11685), (91, 11724), (92, 11727), (95, 11757), (99, 11808), (104, 11856), (113, 11940), (115, 11952), (121, 12003), (122, 12012), (132, 12132), (133, 12135), (142, 12198), (154, 12366), (170, 12504), (176, 12555), (185, 12600),

Gene: BenoitCattle_11 Start: 9161, Stop: 10888, Start Num: 11
Candidate Starts for BenoitCattle_11:
(Start: 11 @9161 has 55 MA's), (28, 9293), (29, 9314), (33, 9362), (38, 9410), (42, 9455), (45, 9485), (49, 9512), (50, 9551), (58, 9644), (70, 9770), (85, 9959), (95, 10031), (99, 10082), (104, 10130), (108, 10160), (113, 10214), (115, 10226), (117, 10238), (119, 10250), (122, 10286), (126, 10367), (128, 10379), (130, 10388), (157, 10664), (161, 10703), (164, 10724), (165, 10733), (166, 10757), (168, 10772),

Gene: BigShaq_11 Start: 9163, Stop: 10890, Start Num: 11
Candidate Starts for BigShaq_11:
(Start: 11 @9163 has 55 MA's), (26, 9280), (28, 9295), (29, 9316), (33, 9364), (38, 9412), (42, 9457), (45, 9487), (49, 9514), (50, 9553), (58, 9646), (70, 9772), (85, 9961), (95, 10033), (99, 10084), (104, 10132), (108, 10162), (113, 10216), (115, 10228), (117, 10240), (119, 10252), (122, 10288), (126, 10369), (128, 10381), (130, 10390), (157, 10666), (161, 10705), (164, 10726), (165, 10735), (166, 10759), (168, 10774),

Gene: BillyBobJr_12 Start: 9201, Stop: 10925, Start Num: 11
Candidate Starts for BillyBobJr_12:
(Start: 11 @9201 has 55 MA's), (28, 9333), (29, 9354), (33, 9402), (38, 9450), (45, 9525), (49, 9552), (50, 9591), (68, 9804), (70, 9810), (85, 9999), (91, 10038), (95, 10071), (99, 10122), (104, 10170), (109, 10203), (113, 10254), (115, 10266), (117, 10278), (119, 10290), (122, 10326), (134, 10458), (157, 10701), (161, 10740), (164, 10761), (165, 10770), (166, 10794), (168, 10809),

Gene: BirksAndSocks_11 Start: 9166, Stop: 10890, Start Num: 11
Candidate Starts for BirksAndSocks_11:
(Start: 11 @9166 has 55 MA's), (28, 9298), (29, 9319), (33, 9367), (38, 9415), (45, 9490), (49, 9517), (50, 9556), (68, 9769), (70, 9775), (85, 9964), (91, 10003), (95, 10036), (99, 10087), (104, 10135), (109, 10168), (113, 10219), (115, 10231), (117, 10243), (119, 10255), (122, 10291), (134, 10423), (157, 10666), (161, 10705), (164, 10726), (165, 10735), (166, 10759), (168, 10774),

Gene: Boneham_11 Start: 9165, Stop: 10889, Start Num: 11
Candidate Starts for Boneham_11:
(Start: 11 @9165 has 55 MA's), (28, 9297), (29, 9318), (33, 9366), (38, 9414), (45, 9489), (49, 9516), (50, 9555), (68, 9768), (70, 9774), (85, 9963), (91, 10002), (95, 10035), (99, 10086), (104, 10134), (109, 10167), (113, 10218), (115, 10230), (117, 10242), (119, 10254), (122, 10290), (134, 10422), (157, 10665), (161, 10704), (164, 10725), (165, 10734), (166, 10758), (168, 10773),

Gene: Breezic_11 Start: 9177, Stop: 10904, Start Num: 11

Candidate Starts for Breezic_11:
(Start: 11 @9177 has 55 MA's), (26, 9294), (28, 9309), (29, 9330), (33, 9378), (38, 9426), (40, 9438), (45, 9501), (47, 9516), (49, 9528), (50, 9567), (70, 9786), (85, 9975), (95, 10047), (99, 10098), (104, 10146), (113, 10230), (115, 10242), (117, 10254), (119, 10266), (122, 10302), (128, 10395), (134, 10434), (157, 10680), (161, 10719), (164, 10740), (165, 10749), (166, 10773), (168, 10788),

Gene: Butterball_11 Start: 9165, Stop: 10889, Start Num: 11
Candidate Starts for Butterball_11:
(Start: 11 @9165 has 55 MA's), (28, 9297), (29, 9318), (33, 9366), (38, 9414), (45, 9489), (49, 9516), (50, 9555), (68, 9768), (70, 9774), (85, 9963), (91, 10002), (95, 10035), (99, 10086), (104, 10134), (109, 10167), (113, 10218), (115, 10230), (117, 10242), (119, 10254), (122, 10290), (134, 10422), (157, 10665), (161, 10704), (164, 10725), (165, 10734), (166, 10758), (168, 10773),

Gene: Camerico_11 Start: 10289, Stop: 12118, Start Num: 11
Candidate Starts for Camerico_11:
(10, 10286), (Start: 11 @10289 has 55 MA's), (14, 10301), (33, 10493), (35, 10529), (36, 10532), (37, 10535), (38, 10541), (49, 10646), (52, 10721), (58, 10778), (59, 10823), (67, 10961), (70, 10979), (72, 11009), (76, 11057), (83, 11150), (85, 11168), (91, 11207), (94, 11231), (96, 11255), (98, 11279), (101, 11318), (109, 11372), (112, 11417), (113, 11423), (118, 11450), (119, 11459), (122, 11495), (127, 11585), (128, 11588), (130, 11597), (131, 11600), (136, 11636), (152, 11849), (171, 12002), (178, 12053),

Gene: CathyBurgh_11 Start: 9165, Stop: 10892, Start Num: 11
Candidate Starts for CathyBurgh_11:
(Start: 11 @9165 has 55 MA's), (26, 9282), (28, 9297), (29, 9318), (33, 9366), (38, 9414), (45, 9489), (47, 9504), (49, 9516), (70, 9774), (85, 9963), (95, 10035), (99, 10086), (104, 10134), (113, 10218), (115, 10230), (117, 10242), (119, 10254), (122, 10290), (128, 10383), (134, 10422), (157, 10668), (161, 10707), (164, 10728), (165, 10737), (166, 10761), (168, 10776),

Gene: Chelms_11 Start: 9163, Stop: 10890, Start Num: 11
Candidate Starts for Chelms_11:
(Start: 11 @9163 has 55 MA's), (26, 9280), (28, 9295), (29, 9316), (33, 9364), (38, 9412), (42, 9457), (45, 9487), (49, 9514), (50, 9553), (58, 9646), (70, 9772), (85, 9961), (95, 10033), (99, 10084), (104, 10132), (108, 10162), (113, 10216), (115, 10228), (117, 10240), (119, 10252), (122, 10288), (126, 10369), (130, 10390), (157, 10666), (161, 10705), (164, 10726), (165, 10735), (166, 10759), (168, 10774),

Gene: CinnamonToast_12 Start: 9201, Stop: 10925, Start Num: 11
Candidate Starts for CinnamonToast_12:
(Start: 11 @9201 has 55 MA's), (28, 9333), (29, 9354), (33, 9402), (38, 9450), (45, 9525), (49, 9552), (50, 9591), (68, 9804), (70, 9810), (85, 9999), (91, 10038), (95, 10071), (99, 10122), (104, 10170), (109, 10203), (113, 10254), (115, 10266), (117, 10278), (119, 10290), (122, 10326), (134, 10458), (157, 10701), (161, 10740), (164, 10761), (165, 10770), (166, 10794), (168, 10809),

Gene: Crete_12 Start: 9414, Stop: 11141, Start Num: 11
Candidate Starts for Crete_12:
(Start: 11 @9414 has 55 MA's), (26, 9531), (28, 9546), (29, 9567), (33, 9615), (38, 9663), (42, 9708), (45, 9738), (49, 9765), (50, 9804), (58, 9897), (70, 10023), (85, 10212), (95, 10284), (99, 10335), (104, 10383), (108, 10413), (113, 10467), (115, 10479), (117, 10491), (119, 10503), (122, 10539), (126, 10620), (128, 10632), (130, 10641), (157, 10917), (161, 10956), (164, 10977), (165, 10986), (166, 11010), (168, 11025),

Gene: Dakiti_11 Start: 9163, Stop: 10890, Start Num: 11

Candidate Starts for Dakiti_11:
(Start: 11 @9163 has 55 MA's), (28, 9295), (29, 9316), (33, 9364), (38, 9412), (42, 9457), (45, 9487), (49, 9514), (50, 9553), (58, 9646), (70, 9772), (85, 9961), (95, 10033), (99, 10084), (104, 10132), (108, 10162), (113, 10216), (115, 10228), (117, 10240), (119, 10252), (122, 10288), (126, 10369), (128, 10381), (130, 10390), (157, 10666), (161, 10705), (164, 10726), (165, 10735), (166, 10759), (168, 10774),

Gene: Damp_8 Start: 8384, Stop: 10111, Start Num: 11
Candidate Starts for Damp_8:
(Start: 11 @8384 has 55 MA's), (16, 8420), (26, 8501), (29, 8537), (33, 8585), (38, 8633), (45, 8708), (47, 8723), (49, 8735), (58, 8867), (61, 8897), (67, 8975), (70, 8993), (78, 9110), (85, 9182), (95, 9254), (97, 9284), (98, 9293), (99, 9305), (104, 9353), (115, 9449), (117, 9461), (119, 9473), (122, 9509), (130, 9611), (148, 9791), (157, 9887), (161, 9926), (164, 9947), (165, 9956), (166, 9980), (168, 9995), (169, 10004), (174, 10025),

Gene: Demosthenes_11 Start: 10786, Stop: 12525, Start Num: 12
Candidate Starts for Demosthenes_11:
(9, 10780), (Start: 12 @10786 has 10 MA's), (16, 10819), (26, 10909), (31, 10975), (33, 10993), (35, 11029), (38, 11041), (39, 11044), (45, 11116), (46, 11119), (48, 11134), (50, 11182), (53, 11221), (57, 11260), (65, 11368), (70, 11404), (78, 11521), (80, 11554), (81, 11560), (83, 11575), (85, 11593), (91, 11632), (92, 11635), (95, 11665), (99, 11716), (104, 11764), (113, 11848), (115, 11860), (122, 11920), (132, 12040), (133, 12043), (142, 12106), (154, 12274), (170, 12412), (176, 12463),

Gene: Diabla_10 Start: 8971, Stop: 10701, Start Num: 11
Candidate Starts for Diabla_10:
(Start: 11 @8971 has 55 MA's), (13, 8983), (17, 9019), (28, 9103), (29, 9124), (33, 9172), (38, 9220), (41, 9244), (45, 9295), (46, 9298), (49, 9322), (58, 9454), (70, 9580), (78, 9697), (85, 9769), (95, 9841), (99, 9892), (104, 9940), (113, 10024), (115, 10036), (117, 10048), (119, 10060), (122, 10096), (128, 10189), (134, 10228), (148, 10381), (157, 10477), (161, 10516), (164, 10537), (165, 10546), (166, 10570), (168, 10585),

Gene: DocB7_004 Start: 3689, Stop: 5428, Start Num: 11
Candidate Starts for DocB7_004:
(3, 3650), (Start: 11 @3689 has 55 MA's), (24, 3785), (33, 3890), (36, 3929), (38, 3938), (39, 3941), (44, 4007), (45, 4013), (49, 4040), (53, 4118), (64, 4250), (66, 4277), (70, 4307), (82, 4487), (85, 4508), (88, 4520), (99, 4631), (100, 4655), (104, 4679), (109, 4712), (113, 4763), (115, 4775), (116, 4778), (122, 4835), (130, 4937), (139, 4994), (150, 5141), (152, 5165), (159, 5228), (177, 5375), (182, 5402),

Gene: Eggsie_11 Start: 9171, Stop: 10901, Start Num: 11
Candidate Starts for Eggsie_11:
(Start: 11 @9171 has 55 MA's), (28, 9303), (29, 9324), (33, 9372), (38, 9420), (41, 9444), (45, 9495), (46, 9498), (49, 9522), (56, 9621), (58, 9654), (70, 9780), (85, 9969), (95, 10041), (99, 10092), (104, 10140), (113, 10224), (115, 10236), (117, 10248), (119, 10260), (122, 10296), (126, 10377), (128, 10389), (134, 10428), (148, 10581), (157, 10677), (161, 10716), (164, 10737), (165, 10746), (166, 10770), (168, 10785),

Gene: Ekhein_11 Start: 9165, Stop: 10889, Start Num: 11
Candidate Starts for Ekhein_11:
(Start: 11 @9165 has 55 MA's), (26, 9282), (28, 9297), (29, 9318), (33, 9366), (38, 9414), (45, 9489), (47, 9504), (49, 9516), (70, 9774), (85, 9963), (95, 10035), (99, 10086), (104, 10134), (113, 10218), (115, 10230), (117, 10242), (119, 10254), (122, 10290), (128, 10383), (134, 10422), (157, 10665), (161, 10704), (164, 10725), (165, 10734), (166, 10758), (168, 10773),

Gene: Exiguo_11 Start: 9177, Stop: 10901, Start Num: 11
Candidate Starts for Exiguo_11:
(Start: 11 @9177 has 55 MA's), (26, 9294), (28, 9309), (29, 9330), (33, 9378), (38, 9426), (45, 9501), (47, 9516), (49, 9528), (70, 9786), (85, 9975), (95, 10047), (99, 10098), (104, 10146), (113, 10230), (115, 10242), (117, 10254), (119, 10266), (122, 10302), (128, 10395), (134, 10434), (157, 10677), (161, 10716), (164, 10737), (165, 10746), (166, 10770), (168, 10785),

Gene: FelixAlejandro_12 Start: 9363, Stop: 11087, Start Num: 11
Candidate Starts for FelixAlejandro_12:
(Start: 11 @9363 has 55 MA's), (26, 9480), (28, 9495), (29, 9516), (33, 9564), (38, 9612), (45, 9687), (49, 9714), (50, 9753), (68, 9966), (70, 9972), (85, 10161), (91, 10200), (95, 10233), (99, 10284), (104, 10332), (113, 10416), (115, 10428), (117, 10440), (119, 10452), (122, 10488), (134, 10620), (157, 10863), (161, 10902), (164, 10923), (165, 10932), (168, 10971),

Gene: Flakey_11 Start: 9166, Stop: 10893, Start Num: 11
Candidate Starts for Flakey_11:
(Start: 11 @9166 has 55 MA's), (26, 9283), (28, 9298), (29, 9319), (33, 9367), (38, 9415), (40, 9427), (45, 9490), (47, 9505), (49, 9517), (50, 9556), (70, 9775), (85, 9964), (95, 10036), (99, 10087), (104, 10135), (113, 10219), (115, 10231), (117, 10243), (119, 10255), (122, 10291), (128, 10384), (134, 10423), (157, 10669), (161, 10708), (164, 10729), (165, 10738), (166, 10762), (168, 10777),

Gene: GMA3_3 Start: 4995, Stop: 6896, Start Num: 11
Candidate Starts for GMA3_3:
(Start: 11 @4995 has 55 MA's), (20, 5061), (31, 5190), (32, 5205), (33, 5208), (38, 5256), (40, 5268), (46, 5334), (49, 5358), (53, 5430), (55, 5448), (59, 5526), (70, 5676), (73, 5742), (76, 5754), (84, 5862), (85, 5865), (94, 5928), (96, 5952), (99, 5988), (105, 6042), (112, 6114), (119, 6156), (122, 6192), (123, 6201), (124, 6234), (129, 6288), (139, 6351), (145, 6462), (146, 6465), (162, 6678), (167, 6735), (180, 6822), (181, 6825),

Gene: GMA7_3 Start: 3574, Stop: 5289, Start Num: 11
Candidate Starts for GMA7_3:
(10, 3571), (Start: 11 @3574 has 55 MA's), (16, 3607), (28, 3703), (30, 3748), (33, 3772), (38, 3820), (49, 3922), (53, 4000), (66, 4156), (70, 4186), (85, 4375), (92, 4417), (95, 4447), (99, 4498), (104, 4546), (113, 4630), (115, 4642), (119, 4666), (122, 4702), (130, 4804), (158, 5074), (163, 5113), (167, 5167), (168, 5170),

Gene: GTE7_3 Start: 3556, Stop: 5274, Start Num: 10
Candidate Starts for GTE7_3:
(10, 3556), (Start: 11 @3559 has 55 MA's), (16, 3592), (28, 3688), (30, 3733), (33, 3757), (38, 3805), (49, 3907), (53, 3985), (70, 4171), (85, 4360), (92, 4402), (95, 4432), (99, 4483), (104, 4531), (113, 4615), (115, 4627), (119, 4651), (122, 4687), (130, 4789), (158, 5059), (163, 5098), (167, 5152), (168, 5155),

Gene: Gibbles_10 Start: 8889, Stop: 10658, Start Num: 11
Candidate Starts for Gibbles_10:
(7, 8877), (Start: 11 @8889 has 55 MA's), (27, 9009), (32, 9084), (33, 9087), (35, 9123), (38, 9135), (42, 9180), (49, 9237), (50, 9276), (51, 9309), (52, 9312), (55, 9333), (69, 9528), (71, 9546), (72, 9561), (75, 9603), (76, 9609), (85, 9720), (90, 9741), (93, 9765), (95, 9792), (99, 9843), (101, 9870), (108, 9921), (113, 9975), (117, 9999), (118, 10002), (119, 10011), (122, 10047), (136, 10188), (183, 10626), (185, 10635),

Gene: Gmala1_3 Start: 5276, Stop: 7147, Start Num: 11
Candidate Starts for Gmala1_3:

(Start: 11 @5276 has 55 MA's), (21, 5348), (31, 5462), (33, 5480), (38, 5528), (40, 5540), (43, 5585), (44, 5597), (49, 5630), (55, 5726), (59, 5819), (60, 5849), (62, 5870), (68, 5963), (70, 5969), (76, 6047), (85, 6158), (92, 6200), (94, 6221), (96, 6245), (99, 6281), (101, 6308), (103, 6317), (107, 6356), (110, 6398), (112, 6407), (113, 6413), (118, 6440), (120, 6452), (122, 6485), (124, 6527), (128, 6578), (131, 6590), (138, 6638), (141, 6668), (152, 6851), (162, 6935), (171, 7013), (179, 7079),

Gene: GordDuk1_3 Start: 5216, Stop: 7087, Start Num: 11
Candidate Starts for GordDuk1_3:
(Start: 11 @5216 has 55 MA's), (21, 5288), (31, 5402), (33, 5420), (38, 5468), (40, 5480), (43, 5525), (44, 5537), (55, 5666), (59, 5759), (60, 5789), (62, 5810), (68, 5903), (70, 5909), (76, 5987), (85, 6098), (92, 6140), (94, 6161), (96, 6185), (99, 6221), (101, 6248), (103, 6257), (107, 6296), (110, 6338), (112, 6347), (113, 6353), (118, 6380), (120, 6392), (122, 6425), (124, 6467), (128, 6518), (131, 6530), (138, 6578), (152, 6791), (162, 6875), (171, 6953), (179, 7019),

Gene: GordTnk2_3 Start: 5183, Stop: 7054, Start Num: 11
Candidate Starts for GordTnk2_3:
(Start: 11 @5183 has 55 MA's), (21, 5255), (31, 5369), (33, 5387), (38, 5435), (40, 5447), (43, 5492), (44, 5504), (55, 5633), (59, 5726), (60, 5756), (62, 5777), (68, 5870), (70, 5876), (76, 5954), (85, 6065), (92, 6107), (94, 6128), (96, 6152), (99, 6188), (101, 6215), (103, 6224), (107, 6263), (110, 6305), (112, 6314), (113, 6320), (118, 6347), (120, 6359), (122, 6392), (124, 6434), (128, 6485), (131, 6497), (138, 6545), (141, 6575), (152, 6758), (162, 6842), (171, 6920), (179, 6986),

Gene: Gorko_11 Start: 9166, Stop: 10893, Start Num: 11
Candidate Starts for Gorko_11:
(Start: 11 @9166 has 55 MA's), (26, 9283), (28, 9298), (29, 9319), (33, 9367), (38, 9415), (40, 9427), (45, 9490), (47, 9505), (49, 9517), (50, 9556), (70, 9775), (85, 9964), (95, 10036), (99, 10087), (104, 10135), (113, 10219), (115, 10231), (117, 10243), (119, 10255), (122, 10291), (128, 10384), (134, 10423), (157, 10669), (161, 10708), (164, 10729), (165, 10738), (166, 10762), (168, 10777),

Gene: GourdThymes_11 Start: 9165, Stop: 10892, Start Num: 11
Candidate Starts for GourdThymes_11:
(Start: 11 @9165 has 55 MA's), (26, 9282), (28, 9297), (29, 9318), (33, 9366), (38, 9414), (45, 9489), (49, 9516), (50, 9555), (70, 9774), (85, 9963), (91, 10002), (95, 10035), (99, 10086), (104, 10134), (113, 10218), (115, 10230), (117, 10242), (119, 10254), (122, 10290), (128, 10383), (134, 10422), (157, 10668), (161, 10707), (164, 10728), (165, 10737), (166, 10761), (168, 10776),

Gene: HayZem_12 Start: 9385, Stop: 11100, Start Num: 11
Candidate Starts for HayZem_12:
(10, 9382), (Start: 11 @9385 has 55 MA's), (16, 9418), (28, 9514), (30, 9559), (33, 9583), (38, 9631), (49, 9733), (53, 9811), (70, 9997), (85, 10186), (92, 10228), (95, 10258), (99, 10309), (104, 10357), (113, 10441), (115, 10453), (119, 10477), (122, 10513), (130, 10615), (158, 10885), (163, 10924), (167, 10978), (168, 10981),

Gene: Hollow_11 Start: 10813, Stop: 12552, Start Num: 12
Candidate Starts for Hollow_11:
(9, 10807), (Start: 12 @10813 has 10 MA's), (16, 10846), (26, 10936), (31, 11002), (33, 11020), (35, 11056), (36, 11059), (38, 11068), (39, 11071), (46, 11146), (48, 11161), (50, 11209), (53, 11248), (57, 11287), (66, 11401), (67, 11413), (70, 11431), (78, 11548), (85, 11620), (91, 11659), (92, 11662), (95, 11692), (99, 11743), (104, 11791), (113, 11875), (115, 11887), (122, 11947), (132, 12067), (133, 12070), (140, 12112), (142, 12133), (154, 12301), (170, 12439), (176, 12490), (185, 12535),

Gene: Hotorobo_11 Start: 9176, Stop: 10903, Start Num: 11
Candidate Starts for Hotorobo_11:

(Start: 11 @9176 has 55 MA's), (26, 9293), (28, 9308), (29, 9329), (33, 9377), (38, 9425), (45, 9500), (49, 9527), (70, 9785), (85, 9974), (95, 10046), (99, 10097), (104, 10145), (113, 10229), (115, 10241), (117, 10253), (119, 10265), (122, 10301), (128, 10394), (134, 10433), (157, 10679), (161, 10718), (164, 10739), (165, 10748), (166, 10772), (168, 10787),

Gene: Jams_8 Start: 8404, Stop: 10131, Start Num: 11
Candidate Starts for Jams_8:
(Start: 11 @8404 has 55 MA's), (16, 8440), (26, 8521), (29, 8557), (33, 8605), (38, 8653), (45, 8728), (49, 8755), (58, 8887), (61, 8917), (67, 8995), (70, 9013), (78, 9130), (85, 9202), (95, 9274), (97, 9304), (98, 9313), (99, 9325), (104, 9373), (115, 9469), (117, 9481), (119, 9493), (122, 9529), (130, 9631), (148, 9811), (157, 9907), (161, 9946), (164, 9967), (165, 9976), (166, 10000), (168, 10015), (169, 10024), (174, 10045),

Gene: Jellybones_11 Start: 9200, Stop: 10924, Start Num: 11
Candidate Starts for Jellybones_11:
(Start: 11 @9200 has 55 MA's), (26, 9317), (28, 9332), (29, 9353), (33, 9401), (38, 9449), (45, 9524), (49, 9551), (50, 9590), (68, 9803), (70, 9809), (85, 9998), (91, 10037), (95, 10070), (99, 10121), (104, 10169), (109, 10202), (113, 10253), (115, 10265), (117, 10277), (119, 10289), (122, 10325), (134, 10457), (157, 10700), (161, 10739), (164, 10760), (165, 10769), (166, 10793), (168, 10808),

Gene: John316_11 Start: 9165, Stop: 10889, Start Num: 11
Candidate Starts for John316_11:
(Start: 11 @9165 has 55 MA's), (26, 9282), (28, 9297), (29, 9318), (33, 9366), (38, 9414), (45, 9489), (49, 9516), (50, 9555), (68, 9768), (70, 9774), (85, 9963), (91, 10002), (95, 10035), (99, 10086), (104, 10134), (109, 10167), (113, 10218), (115, 10230), (117, 10242), (119, 10254), (122, 10290), (134, 10422), (157, 10665), (161, 10704), (164, 10725), (165, 10734), (166, 10758), (168, 10773),

Gene: Jumbo_8 Start: 10158, Stop: 12023, Start Num: 11
Candidate Starts for Jumbo_8:
(Start: 11 @10158 has 55 MA's), (30, 10344), (33, 10368), (38, 10416), (40, 10428), (41, 10440), (48, 10509), (49, 10518), (58, 10650), (66, 10818), (68, 10842), (70, 10848), (76, 10926), (85, 11037), (87, 11046), (94, 11100), (96, 11124), (97, 11139), (99, 11160), (101, 11187), (107, 11235), (110, 11277), (112, 11286), (118, 11319), (119, 11328), (120, 11331), (122, 11364), (124, 11409), (126, 11448), (127, 11457), (135, 11502), (136, 11508), (139, 11526), (146, 11613), (152, 11736), (153, 11748), (155, 11763), (160, 11814), (176, 11940), (177, 11943),

Gene: Kampe_11 Start: 8747, Stop: 10516, Start Num: 11
Candidate Starts for Kampe_11:
(7, 8735), (Start: 11 @8747 has 55 MA's), (27, 8867), (32, 8942), (33, 8945), (35, 8981), (38, 8993), (42, 9038), (49, 9095), (50, 9134), (51, 9167), (52, 9170), (55, 9191), (69, 9386), (71, 9404), (72, 9419), (75, 9461), (76, 9467), (85, 9578), (90, 9599), (93, 9623), (95, 9650), (99, 9701), (101, 9728), (108, 9779), (113, 9833), (117, 9857), (118, 9860), (119, 9869), (122, 9905), (136, 10046), (183, 10484), (185, 10493),

Gene: Kaseim_8 Start: 8395, Stop: 10122, Start Num: 11
Candidate Starts for Kaseim_8:
(4, 8368), (Start: 11 @8395 has 55 MA's), (16, 8431), (26, 8512), (29, 8548), (33, 8596), (38, 8644), (49, 8746), (61, 8908), (67, 8986), (70, 9004), (78, 9121), (85, 9193), (95, 9265), (97, 9295), (98, 9304), (99, 9316), (104, 9364), (115, 9460), (117, 9472), (119, 9484), (121, 9511), (122, 9520), (130, 9622), (148, 9802), (157, 9898), (161, 9937), (164, 9958), (165, 9967), (166, 9991), (168, 10006), (169, 10015), (174, 10036),

Gene: Katyusha_11 Start: 10878, Stop: 12617, Start Num: 12

Candidate Starts for Katyusha_11:
(9, 10872), (Start: 12 @10878 has 10 MA's), (16, 10911), (26, 11001), (31, 11067), (33, 11085), (35, 11121), (38, 11133), (39, 11136), (46, 11211), (48, 11226), (50, 11274), (53, 11313), (57, 11352), (63, 11415), (65, 11460), (66, 11466), (67, 11478), (70, 11496), (80, 11646), (85, 11685), (91, 11724), (92, 11727), (95, 11757), (99, 11808), (104, 11856), (113, 11940), (115, 11952), (121, 12003), (122, 12012), (132, 12132), (133, 12135), (142, 12198), (154, 12366), (170, 12504), (176, 12555), (185, 12600),

Gene: Kelzog_11 Start: 9177, Stop: 10904, Start Num: 11
Candidate Starts for Kelzog_11:
(Start: 11 @9177 has 55 MA's), (26, 9294), (28, 9309), (29, 9330), (33, 9378), (38, 9426), (40, 9438), (45, 9501), (47, 9516), (49, 9528), (50, 9567), (70, 9786), (85, 9975), (91, 10014), (95, 10047), (99, 10098), (104, 10146), (113, 10230), (115, 10242), (117, 10254), (119, 10266), (122, 10302), (128, 10395), (134, 10434), (157, 10680), (161, 10719), (164, 10740), (165, 10749), (166, 10773), (168, 10788),

Gene: Kvothe_11 Start: 10815, Stop: 12554, Start Num: 12
Candidate Starts for Kvothe_11:
(9, 10809), (Start: 12 @10815 has 10 MA's), (16, 10848), (26, 10938), (31, 11004), (33, 11022), (35, 11058), (38, 11070), (39, 11073), (46, 11148), (48, 11163), (50, 11211), (53, 11250), (57, 11289), (63, 11352), (65, 11397), (66, 11403), (67, 11415), (70, 11433), (80, 11583), (85, 11622), (91, 11661), (92, 11664), (95, 11694), (99, 11745), (104, 11793), (113, 11877), (115, 11889), (121, 11940), (122, 11949), (132, 12069), (133, 12072), (142, 12135), (154, 12303), (170, 12441), (176, 12492), (185, 12537),

Gene: Linetti_12 Start: 9316, Stop: 11043, Start Num: 11
Candidate Starts for Linetti_12:
(Start: 11 @9316 has 55 MA's), (28, 9448), (29, 9469), (33, 9517), (38, 9565), (42, 9610), (45, 9640), (49, 9667), (50, 9706), (58, 9799), (70, 9925), (85, 10114), (95, 10186), (99, 10237), (104, 10285), (108, 10315), (113, 10369), (115, 10381), (117, 10393), (119, 10405), (122, 10441), (126, 10522), (128, 10534), (130, 10543), (157, 10819), (161, 10858), (164, 10879), (165, 10888), (166, 10912), (168, 10927),

Gene: Lizzo_11 Start: 9165, Stop: 10892, Start Num: 11
Candidate Starts for Lizzo_11:
(Start: 11 @9165 has 55 MA's), (26, 9282), (28, 9297), (29, 9318), (33, 9366), (38, 9414), (45, 9489), (47, 9504), (49, 9516), (70, 9774), (85, 9963), (95, 10035), (99, 10086), (104, 10134), (113, 10218), (115, 10230), (117, 10242), (119, 10254), (122, 10290), (128, 10383), (134, 10422), (157, 10668), (161, 10707), (164, 10728), (165, 10737), (166, 10761), (168, 10776),

Gene: Mbo2_8 Start: 4883, Stop: 6661, Start Num: 11
Candidate Starts for Mbo2_8:
(8, 4877), (Start: 11 @4883 has 55 MA's), (18, 4925), (30, 5051), (32, 5072), (33, 5075), (38, 5123), (40, 5135), (47, 5213), (54, 5312), (58, 5357), (63, 5408), (70, 5486), (74, 5555), (76, 5564), (79, 5609), (85, 5678), (89, 5696), (90, 5699), (91, 5717), (92, 5720), (97, 5780), (99, 5801), (100, 5825), (108, 5879), (109, 5882), (110, 5918), (113, 5933), (115, 5945), (122, 6005), (125, 6071), (144, 6269), (151, 6380), (156, 6440), (175, 6590), (176, 6602), (185, 6647),

Gene: Monty_10 Start: 9178, Stop: 10905, Start Num: 11
Candidate Starts for Monty_10:
(Start: 11 @9178 has 55 MA's), (26, 9295), (28, 9310), (29, 9331), (33, 9379), (38, 9427), (45, 9502), (49, 9529), (70, 9787), (85, 9976), (95, 10048), (99, 10099), (104, 10147), (113, 10231), (115, 10243), (117, 10255), (119, 10267), (122, 10303), (128, 10396), (134, 10435), (157, 10681), (161, 10720),

(164, 10741), (165, 10750), (166, 10774), (168, 10789),

Gene: MrWormie_8 Start: 8373, Stop: 10100, Start Num: 11
Candidate Starts for MrWormie_8:
(Start: 11 @8373 has 55 MA's), (16, 8409), (26, 8490), (29, 8526), (33, 8574), (38, 8622), (45, 8697), (49, 8724), (61, 8886), (67, 8964), (70, 8982), (78, 9099), (85, 9171), (95, 9243), (97, 9273), (98, 9282), (99, 9294), (104, 9342), (108, 9372), (115, 9438), (117, 9450), (119, 9462), (122, 9498), (130, 9600), (148, 9780), (157, 9876), (161, 9915), (164, 9936), (165, 9945), (166, 9969), (168, 9984), (169, 9993), (174, 10014),

Gene: Msay19_12 Start: 9355, Stop: 11079, Start Num: 11
Candidate Starts for Msay19_12:
(Start: 11 @9355 has 55 MA's), (28, 9487), (29, 9508), (33, 9556), (38, 9604), (45, 9679), (49, 9706), (50, 9745), (68, 9958), (70, 9964), (85, 10153), (91, 10192), (95, 10225), (99, 10276), (104, 10324), (109, 10357), (113, 10408), (115, 10420), (117, 10432), (119, 10444), (122, 10480), (134, 10612), (157, 10855), (161, 10894), (164, 10915), (165, 10924), (168, 10963),

Gene: Niagara_11 Start: 10835, Stop: 12574, Start Num: 12
Candidate Starts for Niagara_11:
(9, 10829), (Start: 12 @10835 has 10 MA's), (16, 10868), (26, 10958), (31, 11024), (33, 11042), (35, 11078), (38, 11090), (39, 11093), (46, 11168), (48, 11183), (50, 11231), (53, 11270), (57, 11309), (63, 11372), (65, 11417), (66, 11423), (70, 11453), (78, 11570), (85, 11642), (91, 11681), (92, 11684), (95, 11714), (97, 11744), (99, 11765), (103, 11801), (104, 11813), (113, 11897), (115, 11909), (122, 11969), (132, 12089), (133, 12092), (142, 12155), (154, 12323), (170, 12461), (176, 12512), (185, 12557),

Gene: Orchid_11 Start: 8747, Stop: 10516, Start Num: 11
Candidate Starts for Orchid_11:
(7, 8735), (Start: 11 @8747 has 55 MA's), (27, 8867), (32, 8942), (33, 8945), (35, 8981), (38, 8993), (42, 9038), (49, 9095), (50, 9134), (51, 9167), (52, 9170), (55, 9191), (69, 9386), (71, 9404), (72, 9419), (75, 9461), (76, 9467), (85, 9578), (90, 9599), (93, 9623), (95, 9650), (99, 9701), (101, 9728), (108, 9779), (113, 9833), (117, 9857), (118, 9860), (119, 9869), (122, 9905), (136, 10046), (183, 10484), (185, 10493),

Gene: PatrickStar_11 Start: 8747, Stop: 10516, Start Num: 11
Candidate Starts for PatrickStar_11:
(7, 8735), (Start: 11 @8747 has 55 MA's), (27, 8867), (32, 8942), (33, 8945), (35, 8981), (38, 8993), (42, 9038), (49, 9095), (50, 9134), (51, 9167), (52, 9170), (55, 9191), (69, 9386), (71, 9404), (72, 9419), (75, 9461), (76, 9467), (85, 9578), (90, 9599), (93, 9623), (95, 9650), (99, 9701), (101, 9728), (108, 9779), (113, 9833), (117, 9857), (118, 9860), (119, 9869), (122, 9905), (136, 10046), (183, 10484), (185, 10493),

Gene: PierreThree_11 Start: 9163, Stop: 10890, Start Num: 11
Candidate Starts for PierreThree_11:
(Start: 11 @9163 has 55 MA's), (28, 9295), (29, 9316), (33, 9364), (38, 9412), (42, 9457), (45, 9487), (49, 9514), (50, 9553), (58, 9646), (70, 9772), (85, 9961), (95, 10033), (99, 10084), (104, 10132), (108, 10162), (113, 10216), (115, 10228), (117, 10240), (119, 10252), (122, 10288), (126, 10369), (128, 10381), (130, 10390), (157, 10666), (161, 10705), (164, 10726), (165, 10735), (166, 10759), (168, 10774),

Gene: PokyPuppy_10 Start: 9058, Stop: 10785, Start Num: 11
Candidate Starts for PokyPuppy_10:

(Start: 11 @9058 has 55 MA's), (23, 9145), (28, 9190), (29, 9211), (33, 9259), (38, 9307), (45, 9382), (47, 9397), (49, 9409), (70, 9667), (85, 9856), (95, 9928), (99, 9979), (104, 10027), (113, 10111), (115, 10123), (117, 10135), (119, 10147), (122, 10183), (128, 10276), (148, 10465), (157, 10561), (161, 10600), (164, 10621), (165, 10630), (166, 10654), (168, 10669),

Gene: Poland_12 Start: 9331, Stop: 11055, Start Num: 11
Candidate Starts for Poland_12:
(Start: 11 @9331 has 55 MA's), (28, 9463), (29, 9484), (33, 9532), (38, 9580), (45, 9655), (49, 9682), (50, 9721), (68, 9934), (70, 9940), (85, 10129), (91, 10168), (95, 10201), (99, 10252), (104, 10300), (109, 10333), (113, 10384), (115, 10396), (117, 10408), (119, 10420), (122, 10456), (134, 10588), (157, 10831), (161, 10870), (164, 10891), (165, 10900), (168, 10939),

Gene: RemRem_12 Start: 9177, Stop: 10901, Start Num: 11
Candidate Starts for RemRem_12:
(Start: 11 @9177 has 55 MA's), (26, 9294), (28, 9309), (29, 9330), (33, 9378), (38, 9426), (40, 9438), (45, 9501), (49, 9528), (50, 9567), (70, 9786), (85, 9975), (95, 10047), (99, 10098), (104, 10146), (113, 10230), (115, 10242), (117, 10254), (119, 10266), (122, 10302), (128, 10395), (134, 10434), (157, 10677), (161, 10716), (164, 10737), (165, 10746), (166, 10770), (168, 10785),

Gene: Reynauld_16 Start: 11632, Stop: 13386, Start Num: 11
Candidate Starts for Reynauld_16:
(Start: 11 @11632 has 55 MA's), (24, 11719), (25, 11734), (32, 11824), (33, 11827), (35, 11863), (38, 11875), (41, 11899), (58, 12103), (65, 12193), (66, 12199), (70, 12229), (79, 12352), (85, 12436), (86, 12439), (88, 12448), (90, 12457), (91, 12475), (92, 12478), (94, 12499), (97, 12538), (99, 12559), (108, 12637), (109, 12640), (110, 12676), (111, 12679), (113, 12691), (115, 12703), (122, 12763), (132, 12895), (137, 12925), (152, 13126), (167, 13264), (172, 13288), (173, 13291), (183, 13357),

Gene: RobinSparkles_15 Start: 9340, Stop: 11109, Start Num: 11
Candidate Starts for RobinSparkles_15:
(7, 9328), (Start: 11 @9340 has 55 MA's), (14, 9352), (27, 9460), (32, 9535), (33, 9538), (35, 9574), (38, 9586), (49, 9688), (50, 9727), (52, 9763), (55, 9784), (66, 9952), (69, 9979), (71, 9997), (72, 10012), (75, 10054), (76, 10060), (85, 10171), (90, 10192), (95, 10243), (99, 10294), (101, 10321), (108, 10372), (113, 10426), (119, 10462), (122, 10498), (183, 11077), (185, 11086),

Gene: RoyalG_12 Start: 9366, Stop: 11090, Start Num: 11
Candidate Starts for RoyalG_12:
(Start: 11 @9366 has 55 MA's), (13, 9378), (17, 9414), (28, 9498), (29, 9519), (33, 9567), (38, 9615), (41, 9639), (45, 9690), (46, 9693), (49, 9717), (56, 9816), (58, 9849), (68, 9969), (70, 9975), (85, 10164), (95, 10236), (99, 10287), (104, 10335), (108, 10365), (113, 10419), (115, 10431), (117, 10443), (119, 10455), (122, 10491), (128, 10584), (134, 10623), (148, 10770), (157, 10866), (161, 10905), (164, 10926), (165, 10935), (166, 10959), (168, 10974),

Gene: Sam12_11 Start: 9177, Stop: 10901, Start Num: 11
Candidate Starts for Sam12_11:
(Start: 11 @9177 has 55 MA's), (26, 9294), (28, 9309), (29, 9330), (33, 9378), (38, 9426), (45, 9501), (47, 9516), (49, 9528), (70, 9786), (85, 9975), (95, 10047), (99, 10098), (104, 10146), (113, 10230), (115, 10242), (117, 10254), (119, 10266), (122, 10302), (128, 10395), (134, 10434), (157, 10677), (161, 10716), (164, 10737), (165, 10746), (166, 10770), (168, 10785),

Gene: Shelley_8 Start: 8418, Stop: 10145, Start Num: 11
Candidate Starts for Shelley_8:
(4, 8391), (Start: 11 @8418 has 55 MA's), (16, 8454), (26, 8535), (29, 8571), (33, 8619), (38, 8667), (49, 8769), (61, 8931), (67, 9009), (70, 9027), (78, 9144), (85, 9216), (95, 9288), (97, 9318), (98, 9327),

(99, 9339), (104, 9387), (115, 9483), (117, 9495), (119, 9507), (121, 9534), (122, 9543), (130, 9645), (148, 9825), (157, 9921), (161, 9960), (164, 9981), (165, 9990), (166, 10014), (168, 10029), (169, 10038), (174, 10059),

Gene: Sombrero_11 Start: 9211, Stop: 10935, Start Num: 11
Candidate Starts for Sombrero_11:
(Start: 11 @9211 has 55 MA's), (26, 9328), (28, 9343), (29, 9364), (33, 9412), (38, 9460), (45, 9535), (47, 9550), (49, 9562), (68, 9814), (70, 9820), (85, 10009), (91, 10048), (95, 10081), (99, 10132), (104, 10180), (109, 10213), (113, 10264), (115, 10276), (117, 10288), (119, 10300), (122, 10336), (134, 10468), (157, 10711), (161, 10750), (164, 10771), (165, 10780), (168, 10819),

Gene: Squibbles_11 Start: 9165, Stop: 10892, Start Num: 11
Candidate Starts for Squibbles_11:
(Start: 11 @9165 has 55 MA's), (26, 9282), (28, 9297), (29, 9318), (33, 9366), (38, 9414), (45, 9489), (47, 9504), (49, 9516), (70, 9774), (85, 9963), (95, 10035), (99, 10086), (104, 10134), (113, 10218), (115, 10230), (117, 10242), (119, 10254), (122, 10290), (128, 10383), (134, 10422), (157, 10668), (161, 10707), (164, 10728), (165, 10737), (166, 10761), (168, 10776),

Gene: Srilaccoli3_15 Start: 11386, Stop: 13146, Start Num: 11
Candidate Starts for Srilaccoli3_15:
(Start: 11 @11386 has 55 MA's), (24, 11473), (25, 11488), (32, 11578), (33, 11581), (38, 11629), (39, 11632), (48, 11722), (58, 11857), (65, 11950), (66, 11956), (70, 11986), (79, 12109), (80, 12136), (85, 12193), (86, 12196), (88, 12205), (90, 12214), (91, 12232), (92, 12235), (94, 12256), (99, 12316), (108, 12394), (109, 12397), (110, 12433), (111, 12436), (113, 12448), (115, 12460), (122, 12520), (132, 12652), (137, 12682), (147, 12802), (152, 12886), (167, 13024), (172, 13048), (173, 13051), (183, 13117), (184, 13123),

Gene: SteveFrench_10 Start: 8960, Stop: 10684, Start Num: 11
Candidate Starts for SteveFrench_10:
(Start: 11 @8960 has 55 MA's), (13, 8972), (17, 9008), (28, 9092), (29, 9113), (33, 9161), (38, 9209), (41, 9233), (45, 9284), (46, 9287), (49, 9311), (58, 9443), (70, 9569), (85, 9758), (95, 9830), (99, 9881), (104, 9929), (113, 10013), (115, 10025), (117, 10037), (119, 10049), (122, 10085), (126, 10166), (128, 10178), (134, 10217), (157, 10460), (161, 10499), (164, 10520), (165, 10529), (166, 10553), (168, 10568),

Gene: Teatealatte_11 Start: 10798, Stop: 12537, Start Num: 12
Candidate Starts for Teatealatte_11:
(9, 10792), (Start: 12 @10798 has 10 MA's), (16, 10831), (26, 10921), (31, 10987), (33, 11005), (35, 11041), (38, 11053), (39, 11056), (46, 11131), (48, 11146), (50, 11194), (53, 11233), (63, 11335), (65, 11380), (66, 11386), (70, 11416), (78, 11533), (80, 11566), (85, 11605), (91, 11644), (92, 11647), (95, 11677), (97, 11707), (99, 11728), (104, 11776), (113, 11860), (115, 11872), (122, 11932), (132, 12052), (133, 12055), (142, 12118), (154, 12286), (170, 12424), (176, 12475), (185, 12520),

Gene: Teech_11 Start: 10870, Stop: 12609, Start Num: 12
Candidate Starts for Teech_11:
(9, 10864), (Start: 12 @10870 has 10 MA's), (16, 10903), (26, 10993), (31, 11059), (33, 11077), (35, 11113), (38, 11125), (39, 11128), (46, 11203), (48, 11218), (50, 11266), (53, 11305), (57, 11344), (63, 11407), (65, 11452), (66, 11458), (70, 11488), (78, 11605), (80, 11638), (85, 11677), (91, 11716), (92, 11719), (95, 11749), (97, 11779), (99, 11800), (104, 11848), (113, 11932), (115, 11944), (122, 12004), (132, 12124), (133, 12127), (142, 12190), (154, 12358), (170, 12496), (176, 12547), (185, 12592),

Gene: Tredge_11 Start: 10798, Stop: 12537, Start Num: 12
Candidate Starts for Tredge_11:

(9, 10792), (Start: 12 @10798 has 10 MA's), (16, 10831), (26, 10921), (31, 10987), (33, 11005), (35, 11041), (38, 11053), (39, 11056), (46, 11131), (48, 11146), (50, 11194), (53, 11233), (63, 11335), (65, 11380), (66, 11386), (70, 11416), (78, 11533), (80, 11566), (85, 11605), (91, 11644), (92, 11647), (95, 11677), (97, 11707), (99, 11728), (104, 11776), (113, 11860), (115, 11872), (122, 11932), (132, 12052), (133, 12055), (142, 12118), (154, 12286), (170, 12424), (176, 12475), (185, 12520),

Gene: Trogglehumper_30 Start: 17919, Stop: 19799, Start Num: 1
Candidate Starts for Trogglehumper_30:
(Start: 1 @17919 has 1 MA's), (2, 17985), (5, 18042), (6, 18045), (15, 18090), (19, 18120), (22, 18153), (32, 18267), (33, 18270), (34, 18288), (38, 18318), (39, 18321), (45, 18393), (49, 18420), (56, 18519), (70, 18684), (73, 18750), (75, 18756), (77, 18780), (85, 18873), (87, 18882), (89, 18891), (92, 18915), (95, 18945), (102, 19029), (106, 19068), (110, 19113), (111, 19116), (114, 19134), (115, 19140), (122, 19200), (126, 19281), (127, 19290), (130, 19302), (131, 19305), (139, 19359), (141, 19383), (143, 19416), (149, 19470), (180, 19752), (181, 19755),

Gene: Worcestershire_11 Start: 9176, Stop: 10903, Start Num: 11
Candidate Starts for Worcestershire_11:
(Start: 11 @9176 has 55 MA's), (26, 9293), (28, 9308), (29, 9329), (33, 9377), (38, 9425), (40, 9437), (45, 9500), (47, 9515), (49, 9527), (70, 9785), (85, 9974), (95, 10046), (99, 10097), (104, 10145), (113, 10229), (115, 10241), (117, 10253), (119, 10265), (122, 10301), (128, 10394), (134, 10433), (157, 10679), (161, 10718), (164, 10739), (165, 10748), (166, 10772), (168, 10787),