

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 308370 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308370 has 103 members, 14 are drafts.

Phages represented in each track:

- Track 1 : BeatusComedenti_73
- Track 2 : DanielleIgnace_78
- Track 3 : Kitkat_74
- Track 4 : Kellezio_72
- Track 5 : Reynauld_47
- Track 6 : Srilaccoli3_43
- Track 7 : GMA7_35
- Track 8 : Austin_45
- Track 9 : GTE7_33
- Track 10 : Amore2_45
- Track 11 : HayZem_44
- Track 12 : FelixAlejandro_45, Jellybones_44
- Track 13 : Kelzog_42, Exiguo_40, Beaver_44, Squibbles_40, Ekhein_41, Hotorobo_40, Breezic_40, Sam12_40, GourdThymes_40, Monty_39
- Track 14 : Poland_45, Msay19_45
- Track 15 : BigShaq_40, Crete_41, BenoitCattle_40, Dakiti_40
- Track 16 : Adgers_41, Butterball_44, Boneham_44
- Track 17 : PierreThree_40
- Track 18 : CinnamonToast_46, BillyBobJr_46
- Track 19 : RemRem_41
- Track 20 : John316_44
- Track 21 : Gorko_40, Flakey_40, Lizzo_40, CathyBurgh_40
- Track 22 : SteveFrench_40
- Track 23 : RoyalG_41
- Track 24 : PokyPuppy_39
- Track 25 : Eggsie_40, Diabla_43
- Track 26 : Worcestershire_41
- Track 27 : Linetti_41
- Track 28 : Sombrero_40
- Track 29 : BirksAndSocks_44
- Track 30 : Chelms_40
- Track 31 : Barbochs_40
- Track 32 : Jams_41, Neoevie_41, Anamika_41, Berries_41, Charianelly_41, Jormungandr_41, Shelley_41, GalacticEye_41, MrWormie_41, Harambe_41, Luker_42, Kaseim_41, Newt_42, Damp_41, Nimi13_41, Sticker17_41, Teal_41, Woes_41, Hello_41, Lahirium_41, Hail2Pitt_41, Lidong_41, Minos_42, Bianmat_41, Guillaume_41

- Track 33 : Katyusha_38, Benczkowski14_38
- Track 34 : ASerpRocky_39
- Track 35 : Hollow_39
- Track 36 : Teech_39, Tredge_39, Teatealatte_39, Niagara_38
- Track 37 : Demosthenes_38
- Track 38 : Philon9_41, Vitaenoi_41
- Track 39 : Kvothe_38
- Track 40 : PatrickStar_42, Orchid_41, Kampe_42
- Track 41 : RobinSparkles_44
- Track 42 : Gibbles_40
- Track 43 : Gmala1_43
- Track 44 : GordTnk2_43
- Track 45 : GordDuk1_43
- Track 46 : GMA3_44
- Track 47 : Jumbo_45
- Track 48 : Camerico_49
- Track 49 : DocB7_033
- Track 50 : Mbo2_36
- Track 51 : Trogglehumper_63

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

The start number called the most often in the published annotations is 12, it was called in 83 of the 89 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASerpRocky_39, Adgers_41, Amore2_45, Anamika_41, Austin_45, Barbochs_40, Beaver_44, Benczkowski14_38, BenoitCattle_40, Berries_41, Bianmat_41, BigShaq_40, BillyBobJr_46, BirksAndSocks_44, Boneham_44, Breezic_40, Butterball_44, Camerico_49, CathyBurgh_40, Charianelly_41, CinnamonToast_46, Crete_41, Dakiti_40, Damp_41, Demosthenes_38, Diabla_43, Eggsie_40, Ekhein_41, Exiguo_40, FelixAlejandro_45, Flakey_40, GMA3_44, GMA7_35, GTE7_33, GalacticEye_41, Gibbles_40, Gmala1_43, GordDuk1_43, GordTnk2_43, Gorko_40, GourdThymes_40, Guillaume_41, Hail2Pitt_41, Harambe_41, HayZem_44, Hello_41, Hollow_39, Hotorobo_40, Jams_41, Jellybones_44, Jormungandr_41, Jumbo_45, Kampe_42, Kaseim_41, Katyusha_38, Kelzog_42, Kvothe_38, Lahirium_41, Lidong_41, Linetti_41, Lizzo_40, Luker_42, Mbo2_36, Minos_42, Monty_39, MrWormie_41, Msay19_45, Neoevie_41, Newt_42, Niagara_38, Nimi13_41, Orchid_41, PatrickStar_42, Philon9_41, PierreThree_40, PokyPuppy_39, Poland_45, RemRem_41, Reynauld_47, RobinSparkles_44, RoyalG_41, Sam12_40, Shelley_41, Sombrero_40, Squibbles_40, SteveFrench_40, Sticker17_41, Teal_41, Teatealatte_39, Teech_39, Tredge_39, Trogglehumper_63, Vitaenoi_41, Woes_41, Worcestershire_41,

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

- Chelms_40, John316_44, Srilaccoli3_43,

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

- BeatusComedenti_73, DaniellEgnace_78, DocB7_033, KellEzio_72, Kitkat_74,

Summary by start number:

Start 1:

- Found in 9 of 103 (8.7%) of genes in pham
- Manual Annotations of this start: 1 of 89
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Chelms_40 (CS2),

Start 7:

- Found in 32 of 103 (31.1%) of genes in pham
- Manual Annotations of this start: 1 of 89
- Called 3.1% of time when present
- Phage (with cluster) where this start called: John316_44 (CS2),

Start 9:

- Found in 1 of 103 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 89
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DanielleIgnace_78 (AT),

Start 11:

- Found in 4 of 103 (3.9%) of genes in pham
- Manual Annotations of this start: 3 of 89
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BeatusComedenti_73 (AT), DocB7_033 (singleton), Kellezio_72 (AT), Kitkat_74 (AT),

Start 12:

- Found in 98 of 103 (95.1%) of genes in pham
- Manual Annotations of this start: 83 of 89
- Called 96.9% of time when present
- Phage (with cluster) where this start called: ASerpRocky_39 (CS4), Adgers_41 (CS2), Amore2_45 (CS1), Anamika_41 (CS3), Austin_45 (CS1), Barbochs_40 (CS2), Beaver_44 (CS2), Benczkowski14_38 (CS4), BenoitCattle_40 (CS2), Berries_41 (CS3), Bianmat_41 (CS3), BigShaq_40 (CS2), BillyBobJr_46 (CS2), BirksAndSocks_44 (CS2), Boneham_44 (CS2), Breezic_40 (CS2), Butterball_44 (CS2), Camerico_49 (DF4), CathyBurgh_40 (CS2), Charianelly_41 (CS3), CinnamonToast_46 (CS2), Crete_41 (CS2), Dakiti_40 (CS2), Damp_41 (CS3), Demosthenes_38 (CS4), Diabla_43 (CS2), Eggsie_40 (CS2), Ekhein_41 (CS2), Exiguo_40 (CS2), FelixAlejandro_45 (CS2), Flakey_40 (CS2), GMA3_44 (DF2), GMA7_35 (CS1), GTE7_33 (CS1), GalacticEye_41 (CS3), Gibbles_40 (CX), Gmala1_43 (DF1), GordDuk1_43 (DF1), GordTnk2_43 (DF1), Gorko_40 (CS2), GourdThymes_40 (CS2), Guillaume_41 (CS3), Hail2Pitt_41 (CS3), Harambe_41 (CS3), HayZem_44 (CS1), Hello_41 (CS3), Hollow_39 (CS4), Hotorobo_40 (CS2), Jams_41 (CS3), Jellybones_44 (CS2), Jormungandr_41 (CS3), Jumbo_45 (DF3), Kampe_42 (CX), Kaseim_41 (CS3), Katyusha_38 (CS4), Kelzog_42 (CS2), Kvothe_38 (CS4), Lahirium_41 (CS3), Lidong_41 (CS3), Linetti_41 (CS2), Lizzo_40 (CS2), Luker_42 (CS3), Mbo2_36 (singleton), Minos_42 (CS3), Monty_39 (CS2), MrWormie_41 (CS3), Msay19_45 (CS2), Neoevie_41 (CS3), Newt_42 (CS3), Niagara_38 (CS4), Nimi13_41 (CS3), Orchid_41 (CX), PatrickStar_42 (CX), Philon9_41 (CS4), PierreThree_40 (CS2), PokyPuppy_39 (CS2), Poland_45 (CS2), RemRem_41 (CS2), Reynauld_47 (CH), RobinSparkles_44 (CX), RoyalG_41 (CS2), Sam12_40 (CS2), Shelley_41 (CS3), Sombrero_40 (CS2), Squibbles_40 (CS2),

SteveFrench_40 (CS2), Sticker17_41 (CS3), Teal_41 (CS3), Teatealatte_39 (CS4), Teech_39 (CS4), Tredge_39 (CS4), Trogglehumper_63 (singleton), Vitaenoi_41 (CS4), Woes_41 (CS3), Worcestershire_41 (CS2),

Start 13:

- Found in 5 of 103 (4.9%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Srilaccoli3_43 (CH),

Summary by clusters:

There are 12 clusters represented in this pham: singleton, CH, DF4, DF1, DF3, DF2, CX, AT, CS4, CS1, CS3, CS2,

Info for manual annotations of cluster AT:

- Start number 9 was manually annotated 1 time for cluster AT.
- Start number 11 was manually annotated 3 times for cluster AT.

Info for manual annotations of cluster CH:

- Start number 12 was manually annotated 1 time for cluster CH.

Info for manual annotations of cluster CS1:

- Start number 12 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:

- Start number 1 was manually annotated 1 time for cluster CS2.
- Start number 7 was manually annotated 1 time for cluster CS2.
- Start number 12 was manually annotated 34 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 12 was manually annotated 25 times for cluster CS3.

Info for manual annotations of cluster CS4:

- Start number 12 was manually annotated 12 times for cluster CS4.

Info for manual annotations of cluster CX:

- Start number 12 was manually annotated 5 times for cluster CX.

Info for manual annotations of cluster DF3:

- Start number 12 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster DF4:

- Start number 12 was manually annotated 1 time for cluster DF4.

Gene Information:

Gene: ASerpRocky_39 Start: 44037, Stop: 42832, Start Num: 12

Candidate Starts for ASerpRocky_39:

(Start: 12 @44037 has 83 MA's), (20, 43953), (21, 43944), (23, 43917), (29, 43872), (37, 43833), (45, 43788), (47, 43779), (51, 43746), (57, 43698), (59, 43689), (63, 43671), (66, 43665), (67, 43662), (72, 43632), (80, 43572), (82, 43554), (86, 43524), (91, 43503), (93, 43494), (104, 43446), (123, 43299), (129, 43236), (141, 43176), (150, 43134), (151, 43119), (157, 43071), (163, 43032), (173, 42960), (176, 42942), (188, 42873), (193, 42843),

Gene: Adgers_41 Start: 42650, Stop: 41445, Start Num: 12

Candidate Starts for Adgers_41:

(4, 42728), (Start: 7 @42686 has 1 MA's), (Start: 12 @42650 has 83 MA's), (16, 42614), (18, 42578), (25, 42518), (41, 42416), (43, 42404), (51, 42356), (58, 42311), (60, 42305), (70, 42257), (76, 42224), (80, 42191), (81, 42188), (85, 42146), (95, 42104), (104, 42041), (109, 42005), (116, 41954), (124, 41882), (129, 41831), (134, 41804), (138, 41789), (147, 41741), (148, 41738), (151, 41714), (156, 41669), (163, 41627), (174, 41555), (189, 41468),

Gene: Amore2_45 Start: 43326, Stop: 42124, Start Num: 12

Candidate Starts for Amore2_45:

(Start: 12 @43326 has 83 MA's), (20, 43242), (25, 43194), (28, 43170), (37, 43122), (41, 43095), (45, 43077), (51, 43035), (58, 42990), (60, 42984), (66, 42963), (76, 42903), (83, 42843), (85, 42825), (93, 42792), (129, 42510), (134, 42483), (138, 42468), (150, 42408), (151, 42393), (156, 42348), (163, 42306), (168, 42270), (175, 42222), (178, 42213), (191, 42138),

Gene: Anamika_41 Start: 45030, Stop: 43828, Start Num: 12

Candidate Starts for Anamika_41:

(Start: 12 @45030 has 83 MA's), (16, 44994), (18, 44958), (20, 44946), (33, 44841), (38, 44823), (41, 44799), (45, 44781), (51, 44739), (58, 44694), (60, 44688), (66, 44667), (81, 44571), (93, 44496), (95, 44487), (109, 44388), (129, 44214), (130, 44211), (134, 44187), (163, 44010), (168, 43974), (176, 43923), (180, 43899), (188, 43854), (189, 43851),

Gene: Austin_45 Start: 43326, Stop: 42124, Start Num: 12

Candidate Starts for Austin_45:

(Start: 12 @43326 has 83 MA's), (20, 43242), (25, 43194), (28, 43170), (37, 43122), (41, 43095), (45, 43077), (51, 43035), (60, 42984), (66, 42963), (76, 42903), (83, 42843), (85, 42825), (93, 42792), (104, 42720), (129, 42510), (134, 42483), (138, 42468), (150, 42408), (151, 42393), (156, 42348), (163, 42306), (168, 42270), (178, 42213), (191, 42138),

Gene: Barbochs_40 Start: 42489, Stop: 41284, Start Num: 12

Candidate Starts for Barbochs_40:

(4, 42567), (Start: 7 @42525 has 1 MA's), (Start: 12 @42489 has 83 MA's), (16, 42453), (18, 42417), (25, 42357), (41, 42255), (43, 42243), (51, 42195), (58, 42150), (60, 42144), (70, 42096), (76, 42063), (80, 42030), (81, 42027), (95, 41943), (104, 41880), (109, 41844), (116, 41793), (119, 41766), (124, 41721), (129, 41670), (134, 41643), (138, 41628), (147, 41580), (148, 41577), (151, 41553), (156, 41508), (163, 41466), (174, 41394), (189, 41307),

Gene: BeatusComedenti_73 Start: 44665, Stop: 45843, Start Num: 11

Candidate Starts for BeatusComedenti_73:

(Start: 11 @44665 has 3 MA's), (13, 44686), (34, 44863), (35, 44866), (47, 44920), (49, 44932), (52, 44968), (56, 44989), (61, 45013), (69, 45052), (72, 45070), (88, 45184), (103, 45256), (107, 45277), (115, 45343), (117, 45349), (124, 45418), (129, 45472), (137, 45502), (149, 45562), (154, 45613), (169, 45718), (185, 45808),

Gene: Beaver_44 Start: 44536, Stop: 43331, Start Num: 12

Candidate Starts for Beaver_44:

(4, 44614), (Start: 7 @44572 has 1 MA's), (Start: 12 @44536 has 83 MA's), (16, 44500), (18, 44464), (25, 44404), (29, 44371), (41, 44302), (43, 44290), (51, 44242), (58, 44197), (60, 44191), (76, 44110), (80, 44077), (81, 44074), (95, 43990), (104, 43927), (109, 43891), (116, 43840), (124, 43768), (129, 43717), (134, 43690), (138, 43675), (147, 43627), (148, 43624), (151, 43600), (156, 43555), (163, 43513), (174, 43441), (189, 43354),

Gene: Benczkowski14_38 Start: 44070, Stop: 42865, Start Num: 12

Candidate Starts for Benczkowski14_38:

(Start: 12 @44070 has 83 MA's), (20, 43986), (21, 43977), (29, 43905), (37, 43866), (41, 43839), (45, 43821), (47, 43812), (51, 43779), (57, 43731), (59, 43722), (63, 43704), (66, 43698), (67, 43695), (72, 43665), (80, 43605), (82, 43587), (86, 43557), (91, 43536), (93, 43527), (104, 43479), (123, 43332), (129, 43269), (141, 43209), (150, 43167), (151, 43152), (157, 43104), (163, 43065), (173, 42993), (188, 42906), (193, 42876),

Gene: BenoitCattle_40 Start: 42594, Stop: 41389, Start Num: 12

Candidate Starts for BenoitCattle_40:

(Start: 1 @42699 has 1 MA's), (4, 42672), (Start: 12 @42594 has 83 MA's), (16, 42558), (18, 42522), (25, 42462), (29, 42429), (41, 42360), (43, 42348), (49, 42321), (51, 42300), (57, 42261), (58, 42255), (60, 42249), (70, 42201), (76, 42168), (95, 42048), (109, 41949), (112, 41925), (114, 41907), (116, 41898), (124, 41826), (129, 41775), (134, 41748), (147, 41685), (148, 41682), (151, 41658), (156, 41613), (189, 41412),

Gene: Berries_41 Start: 45001, Stop: 43799, Start Num: 12

Candidate Starts for Berries_41:

(Start: 12 @45001 has 83 MA's), (16, 44965), (18, 44929), (20, 44917), (33, 44812), (38, 44794), (41, 44770), (45, 44752), (51, 44710), (58, 44665), (60, 44659), (66, 44638), (81, 44542), (93, 44467), (95, 44458), (109, 44359), (129, 44185), (130, 44182), (134, 44158), (163, 43981), (168, 43945), (176, 43894), (180, 43870), (188, 43825), (189, 43822),

Gene: Bianmat_41 Start: 45041, Stop: 43839, Start Num: 12

Candidate Starts for Bianmat_41:

(Start: 12 @45041 has 83 MA's), (16, 45005), (18, 44969), (20, 44957), (33, 44852), (38, 44834), (41, 44810), (45, 44792), (51, 44750), (58, 44705), (60, 44699), (66, 44678), (81, 44582), (93, 44507), (95, 44498), (109, 44399), (129, 44225), (130, 44222), (134, 44198), (163, 44021), (168, 43985), (176, 43934), (180, 43910), (188, 43865), (189, 43862),

Gene: BigShaq_40 Start: 42599, Stop: 41394, Start Num: 12

Candidate Starts for BigShaq_40:

(Start: 1 @42704 has 1 MA's), (4, 42677), (Start: 12 @42599 has 83 MA's), (16, 42563), (18, 42527), (25, 42467), (29, 42434), (41, 42365), (43, 42353), (49, 42326), (51, 42305), (57, 42266), (58, 42260), (60, 42254), (70, 42206), (76, 42173), (95, 42053), (109, 41954), (112, 41930), (114, 41912), (116, 41903), (124, 41831), (129, 41780), (134, 41753), (147, 41690), (148, 41687), (151, 41663), (156, 41618), (189, 41417),

Gene: BillyBobJr_46 Start: 44567, Stop: 43362, Start Num: 12

Candidate Starts for BillyBobJr_46:

(Start: 7 @44603 has 1 MA's), (Start: 12 @44567 has 83 MA's), (16, 44531), (18, 44495), (25, 44435), (41, 44333), (43, 44321), (51, 44273), (58, 44228), (60, 44222), (70, 44174), (76, 44141), (80, 44108), (81, 44105), (85, 44063), (95, 44021), (104, 43958), (109, 43922), (116, 43871), (119, 43844), (124, 43799), (129, 43748), (134, 43721), (138, 43706), (147, 43658), (148, 43655), (151, 43631), (156, 43586), (163, 43544), (174, 43472), (189, 43385),

Gene: BirksAndSocks_44 Start: 44514, Stop: 43309, Start Num: 12

Candidate Starts for BirksAndSocks_44:

(4, 44592), (Start: 7 @44550 has 1 MA's), (Start: 12 @44514 has 83 MA's), (16, 44478), (18, 44442), (25, 44382), (41, 44280), (43, 44268), (51, 44220), (58, 44175), (60, 44169), (70, 44121), (76, 44088), (80, 44055), (81, 44052), (85, 44010), (95, 43968), (104, 43905), (109, 43869), (116, 43818), (119, 43791), (124, 43746), (129, 43695), (134, 43668), (138, 43653), (147, 43605), (148, 43602), (151, 43578), (156, 43533), (163, 43491), (174, 43419), (189, 43332),

Gene: Boneham_44 Start: 44513, Stop: 43308, Start Num: 12

Candidate Starts for Boneham_44:

(4, 44591), (Start: 7 @44549 has 1 MA's), (Start: 12 @44513 has 83 MA's), (16, 44477), (18, 44441), (25, 44381), (41, 44279), (43, 44267), (51, 44219), (58, 44174), (60, 44168), (70, 44120), (76, 44087), (80, 44054), (81, 44051), (85, 44009), (95, 43967), (104, 43904), (109, 43868), (116, 43817), (124, 43745), (129, 43694), (134, 43667), (138, 43652), (147, 43604), (148, 43601), (151, 43577), (156, 43532), (163, 43490), (174, 43418), (189, 43331),

Gene: Breezic_40 Start: 42502, Stop: 41297, Start Num: 12

Candidate Starts for Breezic_40:

(4, 42580), (Start: 7 @42538 has 1 MA's), (Start: 12 @42502 has 83 MA's), (16, 42466), (18, 42430), (25, 42370), (29, 42337), (41, 42268), (43, 42256), (51, 42208), (58, 42163), (60, 42157), (76, 42076), (80, 42043), (81, 42040), (95, 41956), (104, 41893), (109, 41857), (116, 41806), (124, 41734), (129, 41683), (134, 41656), (138, 41641), (147, 41593), (148, 41590), (151, 41566), (156, 41521), (163, 41479), (174, 41407), (189, 41320),

Gene: Butterball_44 Start: 44513, Stop: 43308, Start Num: 12

Candidate Starts for Butterball_44:

(4, 44591), (Start: 7 @44549 has 1 MA's), (Start: 12 @44513 has 83 MA's), (16, 44477), (18, 44441), (25, 44381), (41, 44279), (43, 44267), (51, 44219), (58, 44174), (60, 44168), (70, 44120), (76, 44087), (80, 44054), (81, 44051), (85, 44009), (95, 43967), (104, 43904), (109, 43868), (116, 43817), (124, 43745), (129, 43694), (134, 43667), (138, 43652), (147, 43604), (148, 43601), (151, 43577), (156, 43532), (163, 43490), (174, 43418), (189, 43331),

Gene: Camerico_49 Start: 48209, Stop: 47019, Start Num: 12

Candidate Starts for Camerico_49:

(Start: 12 @48209 has 83 MA's), (13, 48188), (15, 48170), (22, 48089), (26, 48062), (38, 47996), (55, 47885), (68, 47834), (69, 47831), (97, 47666), (101, 47648), (106, 47615), (117, 47534), (125, 47441), (127, 47429), (139, 47366), (166, 47168), (174, 47120), (177, 47105), (183, 47072),

Gene: CathyBurgh_40 Start: 43356, Stop: 42151, Start Num: 12

Candidate Starts for CathyBurgh_40:

(4, 43434), (Start: 7 @43392 has 1 MA's), (Start: 12 @43356 has 83 MA's), (16, 43320), (18, 43284), (25, 43224), (29, 43191), (41, 43122), (43, 43110), (51, 43062), (58, 43017), (60, 43011), (76, 42930), (80, 42897), (81, 42894), (95, 42810), (100, 42780), (104, 42747), (109, 42711), (116, 42660), (124, 42588), (129, 42537), (134, 42510), (138, 42495), (147, 42447), (148, 42444), (151, 42420), (156, 42375), (163, 42333), (174, 42261), (189, 42174),

Gene: Charianelly_41 Start: 44751, Stop: 43549, Start Num: 12

Candidate Starts for Charianelly_41:

(Start: 12 @44751 has 83 MA's), (16, 44715), (18, 44679), (20, 44667), (33, 44562), (38, 44544), (41, 44520), (45, 44502), (51, 44460), (58, 44415), (60, 44409), (66, 44388), (81, 44292), (93, 44217), (95, 44208), (109, 44109), (129, 43935), (130, 43932), (134, 43908), (163, 43731), (168, 43695), (176, 43644), (180, 43620), (188, 43575), (189, 43572),

Gene: Chelms_40 Start: 42707, Stop: 41397, Start Num: 1

Candidate Starts for Chelms_40:

(Start: 1 @42707 has 1 MA's), (4, 42680), (Start: 12 @42602 has 83 MA's), (16, 42566), (18, 42530), (25, 42470), (29, 42437), (41, 42368), (43, 42356), (49, 42329), (51, 42308), (57, 42269), (58, 42263), (60, 42257), (70, 42209), (76, 42176), (95, 42056), (109, 41957), (112, 41933), (114, 41915), (116, 41906), (124, 41834), (129, 41783), (134, 41756), (147, 41693), (148, 41690), (151, 41666), (156, 41621), (189, 41420),

Gene: CinnamonToast_46 Start: 44567, Stop: 43362, Start Num: 12

Candidate Starts for CinnamonToast_46:

(Start: 7 @44603 has 1 MA's), (Start: 12 @44567 has 83 MA's), (16, 44531), (18, 44495), (25, 44435), (41, 44333), (43, 44321), (51, 44273), (58, 44228), (60, 44222), (70, 44174), (76, 44141), (80, 44108), (81, 44105), (85, 44063), (95, 44021), (104, 43958), (109, 43922), (116, 43871), (119, 43844), (124, 43799), (129, 43748), (134, 43721), (138, 43706), (147, 43658), (148, 43655), (151, 43631), (156, 43586), (163, 43544), (174, 43472), (189, 43385),

Gene: Crete_41 Start: 42865, Stop: 41660, Start Num: 12

Candidate Starts for Crete_41:

(Start: 1 @42970 has 1 MA's), (4, 42943), (Start: 12 @42865 has 83 MA's), (16, 42829), (18, 42793), (25, 42733), (29, 42700), (41, 42631), (43, 42619), (49, 42592), (51, 42571), (57, 42532), (58, 42526), (60, 42520), (70, 42472), (76, 42439), (95, 42319), (109, 42220), (112, 42196), (114, 42178), (116, 42169), (124, 42097), (129, 42046), (134, 42019), (147, 41956), (148, 41953), (151, 41929), (156, 41884), (189, 41683),

Gene: Dakiti_40 Start: 43470, Stop: 42265, Start Num: 12

Candidate Starts for Dakiti_40:

(Start: 1 @43575 has 1 MA's), (4, 43548), (Start: 12 @43470 has 83 MA's), (16, 43434), (18, 43398), (25, 43338), (29, 43305), (41, 43236), (43, 43224), (49, 43197), (51, 43176), (57, 43137), (58, 43131), (60, 43125), (70, 43077), (76, 43044), (95, 42924), (109, 42825), (112, 42801), (114, 42783), (116, 42774), (124, 42702), (129, 42651), (134, 42624), (147, 42561), (148, 42558), (151, 42534), (156, 42489), (189, 42288),

Gene: Damp_41 Start: 43915, Stop: 42713, Start Num: 12

Candidate Starts for Damp_41:

(Start: 12 @43915 has 83 MA's), (16, 43879), (18, 43843), (20, 43831), (33, 43726), (38, 43708), (41, 43684), (45, 43666), (51, 43624), (58, 43579), (60, 43573), (66, 43552), (81, 43456), (93, 43381), (95, 43372), (109, 43273), (129, 43099), (130, 43096), (134, 43072), (163, 42895), (168, 42859), (176, 42808), (180, 42784), (188, 42739), (189, 42736),

Gene: DanielleIgnace_78 Start: 47828, Stop: 49039, Start Num: 9

Candidate Starts for DanielleIgnace_78:

(Start: 9 @47828 has 1 MA's), (30, 48017), (32, 48032), (34, 48041), (40, 48074), (47, 48098), (49, 48110), (61, 48191), (62, 48197), (73, 48260), (78, 48290), (81, 48308), (88, 48362), (89, 48368), (99, 48410), (107, 48455), (108, 48470), (115, 48521), (117, 48527), (122, 48578), (131, 48656), (142, 48725), (145, 48734), (146, 48737), (149, 48749), (161, 48848), (168, 48899), (170, 48908), (172, 48923), (181, 48971), (186, 48995), (190, 49022),

Gene: Demosthenes_38 Start: 44010, Stop: 42805, Start Num: 12

Candidate Starts for Demosthenes_38:

(Start: 12 @44010 has 83 MA's), (20, 43926), (21, 43917), (29, 43845), (37, 43806), (45, 43761), (47, 43752), (51, 43719), (57, 43671), (59, 43662), (63, 43644), (66, 43638), (67, 43635), (72, 43605), (80, 43545), (82, 43527), (86, 43497), (91, 43476), (93, 43467), (104, 43419), (123, 43272), (129, 43209), (141, 43149), (150, 43107), (151, 43092), (157, 43044), (163, 43005), (173, 42933), (176, 42915), (188, 42846), (193, 42816),

Gene: Diabla_43 Start: 44348, Stop: 43146, Start Num: 12

Candidate Starts for Diabla_43:

(Start: 12 @44348 has 83 MA's), (16, 44312), (18, 44276), (25, 44216), (33, 44159), (41, 44117), (43, 44105), (51, 44057), (57, 44018), (58, 44012), (60, 44006), (76, 43925), (80, 43892), (81, 43889), (95, 43805), (104, 43742), (109, 43706), (116, 43655), (124, 43583), (126, 43559), (129, 43532), (134, 43505), (144, 43451), (147, 43442), (148, 43439), (150, 43430), (151, 43415), (189, 43169),

Gene: DocB7_033 Start: 36212, Stop: 35001, Start Num: 11

Candidate Starts for DocB7_033:

(Start: 11 @36212 has 3 MA's), (28, 36059), (29, 36050), (42, 35978), (50, 35933), (51, 35927), (67, 35849), (92, 35669), (96, 35645), (98, 35636), (105, 35585), (106, 35576), (118, 35480), (120, 35465), (152, 35255), (166, 35150), (167, 35147), (171, 35123), (183, 35054), (184, 35045),

Gene: Eggsie_40 Start: 42617, Stop: 41415, Start Num: 12

Candidate Starts for Eggsie_40:

(Start: 12 @42617 has 83 MA's), (16, 42581), (18, 42545), (25, 42485), (33, 42428), (41, 42386), (43, 42374), (51, 42326), (57, 42287), (58, 42281), (60, 42275), (76, 42194), (80, 42161), (81, 42158), (95, 42074), (104, 42011), (109, 41975), (116, 41924), (124, 41852), (126, 41828), (129, 41801), (134, 41774), (144, 41720), (147, 41711), (148, 41708), (150, 41699), (151, 41684), (189, 41438),

Gene: Ekhein_41 Start: 42484, Stop: 41279, Start Num: 12

Candidate Starts for Ekhein_41:

(4, 42562), (Start: 7 @42520 has 1 MA's), (Start: 12 @42484 has 83 MA's), (16, 42448), (18, 42412), (25, 42352), (29, 42319), (41, 42250), (43, 42238), (51, 42190), (58, 42145), (60, 42139), (76, 42058), (80, 42025), (81, 42022), (95, 41938), (104, 41875), (109, 41839), (116, 41788), (124, 41716), (129, 41665), (134, 41638), (138, 41623), (147, 41575), (148, 41572), (151, 41548), (156, 41503), (163, 41461), (174, 41389), (189, 41302),

Gene: Exiguo_40 Start: 42496, Stop: 41291, Start Num: 12

Candidate Starts for Exiguo_40:

(4, 42574), (Start: 7 @42532 has 1 MA's), (Start: 12 @42496 has 83 MA's), (16, 42460), (18, 42424), (25, 42364), (29, 42331), (41, 42262), (43, 42250), (51, 42202), (58, 42157), (60, 42151), (76, 42070), (80, 42037), (81, 42034), (95, 41950), (104, 41887), (109, 41851), (116, 41800), (124, 41728), (129, 41677), (134, 41650), (138, 41635), (147, 41587), (148, 41584), (151, 41560), (156, 41515), (163, 41473), (174, 41401), (189, 41314),

Gene: FelixAlejandro_45 Start: 44711, Stop: 43506, Start Num: 12

Candidate Starts for FelixAlejandro_45:

(4, 44789), (Start: 7 @44747 has 1 MA's), (Start: 12 @44711 has 83 MA's), (16, 44675), (18, 44639), (25, 44579), (41, 44477), (43, 44465), (51, 44417), (58, 44372), (60, 44366), (70, 44318), (76, 44285), (80, 44252), (81, 44249), (95, 44165), (104, 44102), (109, 44066), (116, 44015), (124, 43943), (129, 43892), (134, 43865), (138, 43850), (147, 43802), (148, 43799), (151, 43775), (156, 43730), (163, 43688), (174, 43616), (189, 43529),

Gene: Flakey_40 Start: 43360, Stop: 42155, Start Num: 12

Candidate Starts for Flakey_40:

(4, 43438), (Start: 7 @43396 has 1 MA's), (Start: 12 @43360 has 83 MA's), (16, 43324), (18, 43288), (25, 43228), (29, 43195), (41, 43126), (43, 43114), (51, 43066), (58, 43021), (60, 43015), (76, 42934), (80, 42901), (81, 42898), (95, 42814), (100, 42784), (104, 42751), (109, 42715), (116, 42664), (124, 42592), (129, 42541), (134, 42514), (138, 42499), (147, 42451), (148, 42448), (151, 42424), (156, 42379), (163, 42337), (174, 42265), (189, 42178),

Gene: GMA3_44 Start: 44399, Stop: 43209, Start Num: 12

Candidate Starts for GMA3_44:

(Start: 12 @44399 has 83 MA's), (15, 44360), (16, 44357), (28, 44240), (29, 44231), (44, 44147), (48, 44132), (81, 43940), (84, 43907), (93, 43865), (97, 43856), (104, 43817), (118, 43706), (133, 43592), (136, 43568), (144, 43523), (149, 43505), (160, 43400), (171, 43331), (183, 43262),

Gene: GMA7_35 Start: 37540, Stop: 36338, Start Num: 12

Candidate Starts for GMA7_35:

(Start: 12 @37540 has 83 MA's), (20, 37456), (25, 37408), (28, 37384), (37, 37336), (41, 37309), (45, 37291), (51, 37249), (60, 37198), (76, 37117), (83, 37057), (85, 37039), (93, 37006), (129, 36724), (134, 36697), (138, 36682), (150, 36622), (151, 36607), (156, 36562), (163, 36520), (168, 36484), (175, 36436), (178, 36427), (191, 36352),

Gene: GTE7_33 Start: 37571, Stop: 36369, Start Num: 12

Candidate Starts for GTE7_33:

(Start: 12 @37571 has 83 MA's), (20, 37487), (25, 37439), (28, 37415), (37, 37367), (41, 37340), (45, 37322), (51, 37280), (60, 37229), (66, 37208), (76, 37148), (83, 37088), (85, 37070), (93, 37037), (129, 36755), (134, 36728), (138, 36713), (150, 36653), (151, 36638), (156, 36593), (163, 36551), (168, 36515), (175, 36467), (178, 36458), (191, 36383),

Gene: GalacticEye_41 Start: 44713, Stop: 43511, Start Num: 12

Candidate Starts for GalacticEye_41:

(Start: 12 @44713 has 83 MA's), (16, 44677), (18, 44641), (20, 44629), (33, 44524), (38, 44506), (41, 44482), (45, 44464), (51, 44422), (58, 44377), (60, 44371), (66, 44350), (81, 44254), (93, 44179), (95, 44170), (109, 44071), (129, 43897), (130, 43894), (134, 43870), (163, 43693), (168, 43657), (176, 43606), (180, 43582), (188, 43537), (189, 43534),

Gene: Gibbles_40 Start: 43238, Stop: 42009, Start Num: 12

Candidate Starts for Gibbles_40:

(2, 43331), (Start: 12 @43238 has 83 MA's), (14, 43202), (25, 43103), (27, 43085), (30, 43067), (53, 42920), (54, 42905), (61, 42875), (74, 42797), (85, 42710), (90, 42692), (93, 42677), (97, 42668), (110, 42587), (114, 42548), (132, 42407), (143, 42341), (163, 42200), (167, 42173), (171, 42149), (172, 42140), (176, 42113), (187, 42050),

Gene: Gmala1_43 Start: 42723, Stop: 41533, Start Num: 12

Candidate Starts for Gmala1_43:

(10, 42741), (Start: 12 @42723 has 83 MA's), (19, 42642), (29, 42555), (47, 42462), (57, 42390), (74, 42309), (79, 42273), (85, 42222), (88, 42210), (97, 42180), (101, 42162), (105, 42138), (106, 42129), (108, 42108), (113, 42063), (127, 41943), (128, 41928), (143, 41850), (176, 41619), (183, 41586),

Gene: GordDuk1_43 Start: 42666, Stop: 41476, Start Num: 12

Candidate Starts for GordDuk1_43:

(5, 42726), (8, 42699), (10, 42684), (Start: 12 @42666 has 83 MA's), (19, 42585), (47, 42405), (57, 42333), (74, 42252), (79, 42216), (82, 42192), (85, 42165), (88, 42153), (97, 42123), (101, 42105), (105, 42081), (106, 42072), (108, 42051), (113, 42006), (127, 41886), (128, 41871), (143, 41793), (176, 41562), (183, 41529),

Gene: GordTnk2_43 Start: 42632, Stop: 41442, Start Num: 12

Candidate Starts for GordTnk2_43:

(5, 42692), (8, 42665), (10, 42650), (Start: 12 @42632 has 83 MA's), (19, 42551), (47, 42371), (57, 42299), (74, 42218), (79, 42182), (82, 42158), (85, 42131), (88, 42119), (97, 42089), (101, 42071), (105, 42047), (106, 42038), (108, 42017), (113, 41972), (127, 41852), (128, 41837), (143, 41759), (164, 41606), (176, 41528), (183, 41495),

Gene: Gorko_40 Start: 42488, Stop: 41283, Start Num: 12

Candidate Starts for Gorko_40:

(4, 42566), (Start: 7 @42524 has 1 MA's), (Start: 12 @42488 has 83 MA's), (16, 42452), (18, 42416), (25, 42356), (29, 42323), (41, 42254), (43, 42242), (51, 42194), (58, 42149), (60, 42143), (76, 42062), (80, 42029), (81, 42026), (95, 41942), (100, 41912), (104, 41879), (109, 41843), (116, 41792), (124, 41720), (129, 41669), (134, 41642), (138, 41627), (147, 41579), (148, 41576), (151, 41552), (156, 41507), (163, 41465), (174, 41393), (189, 41306),

Gene: GourdThymes_40 Start: 43362, Stop: 42157, Start Num: 12

Candidate Starts for GourdThymes_40:

(4, 43440), (Start: 7 @43398 has 1 MA's), (Start: 12 @43362 has 83 MA's), (16, 43326), (18, 43290), (25, 43230), (29, 43197), (41, 43128), (43, 43116), (51, 43068), (58, 43023), (60, 43017), (76, 42936), (80, 42903), (81, 42900), (95, 42816), (104, 42753), (109, 42717), (116, 42666), (124, 42594), (129, 42543), (134, 42516), (138, 42501), (147, 42453), (148, 42450), (151, 42426), (156, 42381), (163, 42339), (174, 42267), (189, 42180),

Gene: Guillaume_41 Start: 44763, Stop: 43561, Start Num: 12

Candidate Starts for Guillaume_41:

(Start: 12 @44763 has 83 MA's), (16, 44727), (18, 44691), (20, 44679), (33, 44574), (38, 44556), (41, 44532), (45, 44514), (51, 44472), (58, 44427), (60, 44421), (66, 44400), (81, 44304), (93, 44229), (95, 44220), (109, 44121), (129, 43947), (130, 43944), (134, 43920), (163, 43743), (168, 43707), (176, 43656), (180, 43632), (188, 43587), (189, 43584),

Gene: Hail2Pitt_41 Start: 45239, Stop: 44037, Start Num: 12

Candidate Starts for Hail2Pitt_41:

(Start: 12 @45239 has 83 MA's), (16, 45203), (18, 45167), (20, 45155), (33, 45050), (38, 45032), (41, 45008), (45, 44990), (51, 44948), (58, 44903), (60, 44897), (66, 44876), (81, 44780), (93, 44705), (95, 44696), (109, 44597), (129, 44423), (130, 44420), (134, 44396), (163, 44219), (168, 44183), (176, 44132), (180, 44108), (188, 44063), (189, 44060),

Gene: Harambe_41 Start: 45030, Stop: 43828, Start Num: 12

Candidate Starts for Harambe_41:

(Start: 12 @45030 has 83 MA's), (16, 44994), (18, 44958), (20, 44946), (33, 44841), (38, 44823), (41, 44799), (45, 44781), (51, 44739), (58, 44694), (60, 44688), (66, 44667), (81, 44571), (93, 44496), (95, 44487), (109, 44388), (129, 44214), (130, 44211), (134, 44187), (163, 44010), (168, 43974), (176, 43923), (180, 43899), (188, 43854), (189, 43851),

Gene: HayZem_44 Start: 43323, Stop: 42121, Start Num: 12

Candidate Starts for HayZem_44:

(Start: 12 @43323 has 83 MA's), (20, 43239), (25, 43191), (37, 43119), (41, 43092), (45, 43074), (51, 43032), (60, 42981), (66, 42960), (76, 42900), (83, 42840), (85, 42822), (93, 42789), (129, 42507), (134, 42480), (138, 42465), (150, 42405), (151, 42390), (156, 42345), (163, 42303), (168, 42267), (175, 42219), (178, 42210), (191, 42135),

Gene: Hello_41 Start: 44992, Stop: 43790, Start Num: 12

Candidate Starts for Hello_41:

(Start: 12 @44992 has 83 MA's), (16, 44956), (18, 44920), (20, 44908), (33, 44803), (38, 44785), (41, 44761), (45, 44743), (51, 44701), (58, 44656), (60, 44650), (66, 44629), (81, 44533), (93, 44458), (95, 44449), (109, 44350), (129, 44176), (130, 44173), (134, 44149), (163, 43972), (168, 43936), (176, 43885), (180, 43861), (188, 43816), (189, 43813),

Gene: Hollow_39 Start: 44416, Stop: 43211, Start Num: 12

Candidate Starts for Hollow_39:

(Start: 12 @44416 has 83 MA's), (20, 44332), (21, 44323), (29, 44251), (37, 44212), (41, 44185), (45, 44167), (47, 44158), (51, 44125), (57, 44077), (59, 44068), (63, 44050), (66, 44044), (67, 44041), (72, 44011), (80, 43951), (82, 43933), (86, 43903), (91, 43882), (93, 43873), (104, 43825), (123, 43678), (129, 43615), (141, 43555), (150, 43513), (151, 43498), (157, 43450), (163, 43411), (173, 43339), (176, 43321), (188, 43252), (193, 43222),

Gene: Hotorobo_40 Start: 43367, Stop: 42162, Start Num: 12

Candidate Starts for Hotorobo_40:

(4, 43445), (Start: 7 @43403 has 1 MA's), (Start: 12 @43367 has 83 MA's), (16, 43331), (18, 43295), (25, 43235), (29, 43202), (41, 43133), (43, 43121), (51, 43073), (58, 43028), (60, 43022), (76, 42941), (80, 42908), (81, 42905), (95, 42821), (104, 42758), (109, 42722), (116, 42671), (124, 42599), (129, 42548), (134, 42521), (138, 42506), (147, 42458), (148, 42455), (151, 42431), (156, 42386), (163, 42344), (174, 42272), (189, 42185),

Gene: Jams_41 Start: 44201, Stop: 42999, Start Num: 12

Candidate Starts for Jams_41:

(Start: 12 @44201 has 83 MA's), (16, 44165), (18, 44129), (20, 44117), (33, 44012), (38, 43994), (41, 43970), (45, 43952), (51, 43910), (58, 43865), (60, 43859), (66, 43838), (81, 43742), (93, 43667), (95, 43658), (109, 43559), (129, 43385), (130, 43382), (134, 43358), (163, 43181), (168, 43145), (176, 43094), (180, 43070), (188, 43025), (189, 43022),

Gene: Jellybones_44 Start: 44572, Stop: 43367, Start Num: 12

Candidate Starts for Jellybones_44:

(4, 44650), (Start: 7 @44608 has 1 MA's), (Start: 12 @44572 has 83 MA's), (16, 44536), (18, 44500), (25, 44440), (41, 44338), (43, 44326), (51, 44278), (58, 44233), (60, 44227), (70, 44179), (76, 44146), (80, 44113), (81, 44110), (95, 44026), (104, 43963), (109, 43927), (116, 43876), (124, 43804), (129, 43753), (134, 43726), (138, 43711), (147, 43663), (148, 43660), (151, 43636), (156, 43591), (163, 43549), (174, 43477), (189, 43390),

Gene: John316_44 Start: 44561, Stop: 43320, Start Num: 7

Candidate Starts for John316_44:

(4, 44603), (Start: 7 @44561 has 1 MA's), (Start: 12 @44525 has 83 MA's), (16, 44489), (18, 44453), (25, 44393), (29, 44360), (41, 44291), (43, 44279), (51, 44231), (58, 44186), (60, 44180), (76, 44099), (80, 44066), (81, 44063), (95, 43979), (100, 43949), (104, 43916), (109, 43880), (116, 43829), (124, 43757), (129, 43706), (134, 43679), (138, 43664), (147, 43616), (148, 43613), (151, 43589), (156, 43544), (163, 43502), (174, 43430), (189, 43343),

Gene: Jormungandr_41 Start: 44745, Stop: 43543, Start Num: 12

Candidate Starts for Jormungandr_41:

(Start: 12 @44745 has 83 MA's), (16, 44709), (18, 44673), (20, 44661), (33, 44556), (38, 44538), (41, 44514), (45, 44496), (51, 44454), (58, 44409), (60, 44403), (66, 44382), (81, 44286), (93, 44211), (95, 44202), (109, 44103), (129, 43929), (130, 43926), (134, 43902), (163, 43725), (168, 43689), (176, 43638), (180, 43614), (188, 43569), (189, 43566),

Gene: Jumbo_45 Start: 47585, Stop: 46392, Start Num: 12

Candidate Starts for Jumbo_45:

(Start: 12 @47585 has 83 MA's), (15, 47546), (16, 47543), (22, 47465), (24, 47453), (29, 47417), (39, 47366), (41, 47348), (71, 47195), (72, 47192), (80, 47129), (82, 47111), (85, 47084), (93, 47051), (101, 47024), (106, 46991), (114, 46922), (143, 46712), (158, 46604), (171, 46514),

Gene: Kampe_42 Start: 43221, Stop: 41992, Start Num: 12

Candidate Starts for Kampe_42:

(2, 43314), (Start: 12 @43221 has 83 MA's), (14, 43185), (25, 43086), (27, 43068), (30, 43050), (47, 42960), (53, 42903), (54, 42888), (74, 42780), (81, 42735), (85, 42693), (90, 42675), (97, 42651), (110, 42570), (114, 42531), (167, 42156), (171, 42132), (187, 42033),

Gene: Kaseim_41 Start: 44186, Stop: 42984, Start Num: 12

Candidate Starts for Kaseim_41:

(Start: 12 @44186 has 83 MA's), (16, 44150), (18, 44114), (20, 44102), (33, 43997), (38, 43979), (41, 43955), (45, 43937), (51, 43895), (58, 43850), (60, 43844), (66, 43823), (81, 43727), (93, 43652), (95, 43643), (109, 43544), (129, 43370), (130, 43367), (134, 43343), (163, 43166), (168, 43130), (176, 43079), (180, 43055), (188, 43010), (189, 43007),

Gene: Katyusha_38 Start: 44070, Stop: 42865, Start Num: 12

Candidate Starts for Katyusha_38:

(Start: 12 @44070 has 83 MA's), (20, 43986), (21, 43977), (29, 43905), (37, 43866), (41, 43839), (45, 43821), (47, 43812), (51, 43779), (57, 43731), (59, 43722), (63, 43704), (66, 43698), (67, 43695), (72, 43665), (80, 43605), (82, 43587), (86, 43557), (91, 43536), (93, 43527), (104, 43479), (123, 43332), (129, 43269), (141, 43209), (150, 43167), (151, 43152), (157, 43104), (163, 43065), (173, 42993), (188, 42906), (193, 42876),

Gene: KellEzio_72 Start: 44441, Stop: 45619, Start Num: 11

Candidate Starts for KellEzio_72:

(Start: 11 @44441 has 3 MA's), (13, 44462), (34, 44639), (47, 44696), (49, 44708), (52, 44744), (56, 44765), (61, 44789), (69, 44828), (72, 44846), (88, 44960), (93, 44984), (103, 45032), (107, 45053), (115, 45119), (124, 45194), (129, 45248), (137, 45278), (149, 45338), (159, 45431), (169, 45494), (185, 45584),

Gene: Kelzog_42 Start: 43374, Stop: 42169, Start Num: 12

Candidate Starts for Kelzog_42:

(4, 43452), (Start: 7 @43410 has 1 MA's), (Start: 12 @43374 has 83 MA's), (16, 43338), (18, 43302), (25, 43242), (29, 43209), (41, 43140), (43, 43128), (51, 43080), (58, 43035), (60, 43029), (76, 42948), (80, 42915), (81, 42912), (95, 42828), (104, 42765), (109, 42729), (116, 42678), (124, 42606), (129, 42555), (134, 42528), (138, 42513), (147, 42465), (148, 42462), (151, 42438), (156, 42393), (163, 42351), (174, 42279), (189, 42192),

Gene: Kitkat_74 Start: 44760, Stop: 45938, Start Num: 11

Candidate Starts for Kitkat_74:

(3, 44682), (Start: 11 @44760 has 3 MA's), (13, 44781), (34, 44958), (47, 45015), (49, 45027), (52, 45063), (56, 45084), (61, 45108), (69, 45147), (72, 45165), (88, 45279), (93, 45303), (103, 45351), (107, 45372), (115, 45438), (124, 45513), (129, 45567), (137, 45597), (149, 45657), (159, 45750), (169, 45813), (185, 45903),

Gene: Kvothe_38 Start: 43969, Stop: 42764, Start Num: 12

Candidate Starts for Kvothe_38:

(Start: 12 @43969 has 83 MA's), (20, 43885), (21, 43876), (23, 43849), (37, 43765), (41, 43738), (45, 43720), (47, 43711), (51, 43678), (57, 43630), (59, 43621), (63, 43603), (66, 43597), (67, 43594), (72, 43564), (80, 43504), (82, 43486), (86, 43456), (91, 43435), (93, 43426), (104, 43378), (123, 43231), (129, 43168), (141, 43108), (150, 43066), (151, 43051), (157, 43003), (163, 42964), (173, 42892), (188, 42805), (193, 42775),

Gene: Lahirium_41 Start: 45267, Stop: 44065, Start Num: 12

Candidate Starts for Lahirium_41:

(Start: 12 @45267 has 83 MA's), (16, 45231), (18, 45195), (20, 45183), (33, 45078), (38, 45060), (41, 45036), (45, 45018), (51, 44976), (58, 44931), (60, 44925), (66, 44904), (81, 44808), (93, 44733), (95,

44724), (109, 44625), (129, 44451), (130, 44448), (134, 44424), (163, 44247), (168, 44211), (176, 44160), (180, 44136), (188, 44091), (189, 44088),

Gene: Lidong_41 Start: 45001, Stop: 43799, Start Num: 12

Candidate Starts for Lidong_41:

(Start: 12 @45001 has 83 MA's), (16, 44965), (18, 44929), (20, 44917), (33, 44812), (38, 44794), (41, 44770), (45, 44752), (51, 44710), (58, 44665), (60, 44659), (66, 44638), (81, 44542), (93, 44467), (95, 44458), (109, 44359), (129, 44185), (130, 44182), (134, 44158), (163, 43981), (168, 43945), (176, 43894), (180, 43870), (188, 43825), (189, 43822),

Gene: Linetti_41 Start: 43596, Stop: 42391, Start Num: 12

Candidate Starts for Linetti_41:

(Start: 1 @43701 has 1 MA's), (4, 43674), (Start: 12 @43596 has 83 MA's), (16, 43560), (18, 43524), (25, 43464), (29, 43431), (41, 43362), (43, 43350), (49, 43323), (58, 43257), (60, 43251), (70, 43203), (76, 43170), (95, 43050), (109, 42951), (112, 42927), (116, 42900), (124, 42828), (129, 42777), (134, 42750), (147, 42687), (148, 42684), (151, 42660), (156, 42615), (189, 42414),

Gene: Lizzo_40 Start: 43356, Stop: 42151, Start Num: 12

Candidate Starts for Lizzo_40:

(4, 43434), (Start: 7 @43392 has 1 MA's), (Start: 12 @43356 has 83 MA's), (16, 43320), (18, 43284), (25, 43224), (29, 43191), (41, 43122), (43, 43110), (51, 43062), (58, 43017), (60, 43011), (76, 42930), (80, 42897), (81, 42894), (95, 42810), (100, 42780), (104, 42747), (109, 42711), (116, 42660), (124, 42588), (129, 42537), (134, 42510), (138, 42495), (147, 42447), (148, 42444), (151, 42420), (156, 42375), (163, 42333), (174, 42261), (189, 42174),

Gene: Luker_42 Start: 45220, Stop: 44018, Start Num: 12

Candidate Starts for Luker_42:

(Start: 12 @45220 has 83 MA's), (16, 45184), (18, 45148), (20, 45136), (33, 45031), (38, 45013), (41, 44989), (45, 44971), (51, 44929), (58, 44884), (60, 44878), (66, 44857), (81, 44761), (93, 44686), (95, 44677), (109, 44578), (129, 44404), (130, 44401), (134, 44377), (163, 44200), (168, 44164), (176, 44113), (180, 44089), (188, 44044), (189, 44041),

Gene: Mbo2_36 Start: 35666, Stop: 34491, Start Num: 12

Candidate Starts for Mbo2_36:

(Start: 12 @35666 has 83 MA's), (28, 35513), (31, 35498), (46, 35417), (61, 35324), (74, 35258), (80, 35216), (85, 35171), (106, 35078), (111, 35048), (116, 35003), (129, 34880), (135, 34850), (136, 34844), (142, 34805), (143, 34802), (167, 34649), (172, 34616), (175, 34592),

Gene: Minos_42 Start: 44743, Stop: 43541, Start Num: 12

Candidate Starts for Minos_42:

(Start: 12 @44743 has 83 MA's), (16, 44707), (18, 44671), (20, 44659), (33, 44554), (38, 44536), (41, 44512), (45, 44494), (51, 44452), (58, 44407), (60, 44401), (66, 44380), (81, 44284), (93, 44209), (95, 44200), (109, 44101), (129, 43927), (130, 43924), (134, 43900), (163, 43723), (168, 43687), (176, 43636), (180, 43612), (188, 43567), (189, 43564),

Gene: Monty_39 Start: 42506, Stop: 41301, Start Num: 12

Candidate Starts for Monty_39:

(4, 42584), (Start: 7 @42542 has 1 MA's), (Start: 12 @42506 has 83 MA's), (16, 42470), (18, 42434), (25, 42374), (29, 42341), (41, 42272), (43, 42260), (51, 42212), (58, 42167), (60, 42161), (76, 42080), (80, 42047), (81, 42044), (95, 41960), (104, 41897), (109, 41861), (116, 41810), (124, 41738), (129, 41687), (134, 41660), (138, 41645), (147, 41597), (148, 41594), (151, 41570), (156, 41525), (163, 41483), (174, 41411), (189, 41324),

Gene: MrWormie_41 Start: 43904, Stop: 42702, Start Num: 12

Candidate Starts for MrWormie_41:

(Start: 12 @43904 has 83 MA's), (16, 43868), (18, 43832), (20, 43820), (33, 43715), (38, 43697), (41, 43673), (45, 43655), (51, 43613), (58, 43568), (60, 43562), (66, 43541), (81, 43445), (93, 43370), (95, 43361), (109, 43262), (129, 43088), (130, 43085), (134, 43061), (163, 42884), (168, 42848), (176, 42797), (180, 42773), (188, 42728), (189, 42725),

Gene: Msay19_45 Start: 44702, Stop: 43497, Start Num: 12

Candidate Starts for Msay19_45:

(4, 44780), (Start: 7 @44738 has 1 MA's), (Start: 12 @44702 has 83 MA's), (16, 44666), (18, 44630), (25, 44570), (29, 44537), (41, 44468), (43, 44456), (51, 44408), (58, 44363), (60, 44357), (70, 44309), (76, 44276), (80, 44243), (81, 44240), (85, 44198), (95, 44156), (104, 44093), (109, 44057), (116, 44006), (124, 43934), (129, 43883), (134, 43856), (138, 43841), (147, 43793), (148, 43790), (151, 43766), (156, 43721), (163, 43679), (174, 43607), (189, 43520),

Gene: Neoevie_41 Start: 45006, Stop: 43804, Start Num: 12

Candidate Starts for Neoevie_41:

(Start: 12 @45006 has 83 MA's), (16, 44970), (18, 44934), (20, 44922), (33, 44817), (38, 44799), (41, 44775), (45, 44757), (51, 44715), (58, 44670), (60, 44664), (66, 44643), (81, 44547), (93, 44472), (95, 44463), (109, 44364), (129, 44190), (130, 44187), (134, 44163), (163, 43986), (168, 43950), (176, 43899), (180, 43875), (188, 43830), (189, 43827),

Gene: Newt_42 Start: 45234, Stop: 44032, Start Num: 12

Candidate Starts for Newt_42:

(Start: 12 @45234 has 83 MA's), (16, 45198), (18, 45162), (20, 45150), (33, 45045), (38, 45027), (41, 45003), (45, 44985), (51, 44943), (58, 44898), (60, 44892), (66, 44871), (81, 44775), (93, 44700), (95, 44691), (109, 44592), (129, 44418), (130, 44415), (134, 44391), (163, 44214), (168, 44178), (176, 44127), (180, 44103), (188, 44058), (189, 44055),

Gene: Niagara_38 Start: 44027, Stop: 42822, Start Num: 12

Candidate Starts for Niagara_38:

(Start: 12 @44027 has 83 MA's), (20, 43943), (21, 43934), (23, 43907), (29, 43862), (37, 43823), (41, 43796), (45, 43778), (47, 43769), (51, 43736), (57, 43688), (59, 43679), (63, 43661), (66, 43655), (67, 43652), (72, 43622), (80, 43562), (82, 43544), (86, 43514), (91, 43493), (93, 43484), (104, 43436), (123, 43289), (129, 43226), (141, 43166), (150, 43124), (151, 43109), (157, 43061), (163, 43022), (173, 42950), (188, 42863), (193, 42833),

Gene: Nimi13_41 Start: 44752, Stop: 43550, Start Num: 12

Candidate Starts for Nimi13_41:

(Start: 12 @44752 has 83 MA's), (16, 44716), (18, 44680), (20, 44668), (33, 44563), (38, 44545), (41, 44521), (45, 44503), (51, 44461), (58, 44416), (60, 44410), (66, 44389), (81, 44293), (93, 44218), (95, 44209), (109, 44110), (129, 43936), (130, 43933), (134, 43909), (163, 43732), (168, 43696), (176, 43645), (180, 43621), (188, 43576), (189, 43573),

Gene: Orchid_41 Start: 43222, Stop: 41993, Start Num: 12

Candidate Starts for Orchid_41:

(2, 43315), (Start: 12 @43222 has 83 MA's), (14, 43186), (25, 43087), (27, 43069), (30, 43051), (47, 42961), (53, 42904), (54, 42889), (74, 42781), (81, 42736), (85, 42694), (90, 42676), (97, 42652), (110, 42571), (114, 42532), (167, 42157), (171, 42133), (187, 42034),

Gene: PatrickStar_42 Start: 43221, Stop: 41992, Start Num: 12

Candidate Starts for PatrickStar_42:

(2, 43314), (Start: 12 @43221 has 83 MA's), (14, 43185), (25, 43086), (27, 43068), (30, 43050), (47, 42960), (53, 42903), (54, 42888), (74, 42780), (81, 42735), (85, 42693), (90, 42675), (97, 42651), (110, 42570), (114, 42531), (167, 42156), (171, 42132), (187, 42033),

Gene: Philon9_41 Start: 45218, Stop: 44028, Start Num: 12

Candidate Starts for Philon9_41:

(6, 45278), (Start: 12 @45218 has 83 MA's), (14, 45188), (29, 45053), (37, 45014), (41, 44987), (45, 44969), (47, 44960), (51, 44927), (63, 44858), (66, 44852), (72, 44819), (80, 44759), (85, 44714), (86, 44711), (91, 44690), (93, 44681), (104, 44633), (112, 44573), (123, 44486), (129, 44423), (140, 44375), (141, 44363), (150, 44321), (165, 44207), (179, 44120), (184, 44087),

Gene: PierreThree_40 Start: 43467, Stop: 42262, Start Num: 12

Candidate Starts for PierreThree_40:

(Start: 1 @43572 has 1 MA's), (4, 43545), (Start: 12 @43467 has 83 MA's), (16, 43431), (18, 43395), (25, 43335), (41, 43233), (43, 43221), (49, 43194), (51, 43173), (57, 43134), (58, 43128), (60, 43122), (70, 43074), (76, 43041), (95, 42921), (109, 42822), (112, 42798), (114, 42780), (116, 42771), (124, 42699), (129, 42648), (134, 42621), (147, 42558), (148, 42555), (151, 42531), (156, 42486), (189, 42285),

Gene: PokyPuppy_39 Start: 43407, Stop: 42205, Start Num: 12

Candidate Starts for PokyPuppy_39:

(Start: 1 @43512 has 1 MA's), (4, 43485), (Start: 7 @43443 has 1 MA's), (Start: 12 @43407 has 83 MA's), (16, 43371), (18, 43335), (25, 43275), (29, 43242), (33, 43218), (41, 43176), (43, 43164), (51, 43116), (58, 43071), (60, 43065), (70, 43017), (76, 42984), (93, 42873), (95, 42864), (114, 42723), (129, 42591), (134, 42564), (147, 42501), (148, 42498), (150, 42489), (151, 42474), (156, 42429), (189, 42228),

Gene: Poland_45 Start: 44681, Stop: 43476, Start Num: 12

Candidate Starts for Poland_45:

(4, 44759), (Start: 7 @44717 has 1 MA's), (Start: 12 @44681 has 83 MA's), (16, 44645), (18, 44609), (25, 44549), (29, 44516), (41, 44447), (43, 44435), (51, 44387), (58, 44342), (60, 44336), (70, 44288), (76, 44255), (80, 44222), (81, 44219), (85, 44177), (95, 44135), (104, 44072), (109, 44036), (116, 43985), (124, 43913), (129, 43862), (134, 43835), (138, 43820), (147, 43772), (148, 43769), (151, 43745), (156, 43700), (163, 43658), (174, 43586), (189, 43499),

Gene: RemRem_41 Start: 42496, Stop: 41291, Start Num: 12

Candidate Starts for RemRem_41:

(4, 42574), (Start: 7 @42532 has 1 MA's), (Start: 12 @42496 has 83 MA's), (16, 42460), (18, 42424), (25, 42364), (29, 42331), (41, 42262), (43, 42250), (51, 42202), (58, 42157), (60, 42151), (76, 42070), (80, 42037), (95, 41950), (104, 41887), (109, 41851), (116, 41800), (124, 41728), (129, 41677), (134, 41650), (138, 41635), (147, 41587), (148, 41584), (151, 41560), (156, 41515), (163, 41473), (174, 41401), (189, 41314),

Gene: Reynauld_47 Start: 45130, Stop: 43943, Start Num: 12

Candidate Starts for Reynauld_47:

(Start: 12 @45130 has 83 MA's), (25, 45001), (31, 44962), (74, 44722), (75, 44719), (87, 44626), (90, 44617), (91, 44611), (94, 44599), (104, 44554), (155, 44185), (167, 44110), (173, 44068), (175, 44053), (188, 43981), (192, 43963),

Gene: RobinSparkles_44 Start: 43774, Stop: 42545, Start Num: 12

Candidate Starts for RobinSparkles_44:

(2, 43867), (Start: 12 @43774 has 83 MA's), (14, 43738), (25, 43639), (27, 43621), (30, 43603), (53, 43456), (54, 43441), (74, 43333), (81, 43288), (85, 43246), (90, 43228), (97, 43204), (110, 43123),

(114, 43084), (149, 42856), (167, 42709), (171, 42685), (187, 42586),

Gene: RoyalG_41 Start: 42960, Stop: 41758, Start Num: 12

Candidate Starts for RoyalG_41:

(Start: 7 @42996 has 1 MA's), (Start: 12 @42960 has 83 MA's), (16, 42924), (18, 42888), (25, 42828), (33, 42771), (41, 42729), (43, 42717), (51, 42669), (57, 42630), (58, 42624), (60, 42618), (66, 42597), (76, 42537), (81, 42501), (95, 42417), (104, 42354), (109, 42318), (116, 42267), (124, 42195), (126, 42171), (129, 42144), (134, 42117), (144, 42063), (147, 42054), (148, 42051), (151, 42027), (189, 41781),

Gene: Sam12_40 Start: 42496, Stop: 41291, Start Num: 12

Candidate Starts for Sam12_40:

(4, 42574), (Start: 7 @42532 has 1 MA's), (Start: 12 @42496 has 83 MA's), (16, 42460), (18, 42424), (25, 42364), (29, 42331), (41, 42262), (43, 42250), (51, 42202), (58, 42157), (60, 42151), (76, 42070), (80, 42037), (81, 42034), (95, 41950), (104, 41887), (109, 41851), (116, 41800), (124, 41728), (129, 41677), (134, 41650), (138, 41635), (147, 41587), (148, 41584), (151, 41560), (156, 41515), (163, 41473), (174, 41401), (189, 41314),

Gene: Shelley_41 Start: 44228, Stop: 43026, Start Num: 12

Candidate Starts for Shelley_41:

(Start: 12 @44228 has 83 MA's), (16, 44192), (18, 44156), (20, 44144), (33, 44039), (38, 44021), (41, 43997), (45, 43979), (51, 43937), (58, 43892), (60, 43886), (66, 43865), (81, 43769), (93, 43694), (95, 43685), (109, 43586), (129, 43412), (130, 43409), (134, 43385), (163, 43208), (168, 43172), (176, 43121), (180, 43097), (188, 43052), (189, 43049),

Gene: Sombrero_40 Start: 42498, Stop: 41293, Start Num: 12

Candidate Starts for Sombrero_40:

(Start: 7 @42534 has 1 MA's), (Start: 12 @42498 has 83 MA's), (16, 42462), (18, 42426), (25, 42366), (41, 42264), (43, 42252), (51, 42204), (58, 42159), (60, 42153), (70, 42105), (76, 42072), (80, 42039), (81, 42036), (95, 41952), (104, 41889), (109, 41853), (116, 41802), (124, 41730), (129, 41679), (134, 41652), (138, 41637), (147, 41589), (148, 41586), (151, 41562), (156, 41517), (163, 41475), (174, 41403), (189, 41316),

Gene: Squibbles_40 Start: 43359, Stop: 42154, Start Num: 12

Candidate Starts for Squibbles_40:

(4, 43437), (Start: 7 @43395 has 1 MA's), (Start: 12 @43359 has 83 MA's), (16, 43323), (18, 43287), (25, 43227), (29, 43194), (41, 43125), (43, 43113), (51, 43065), (58, 43020), (60, 43014), (76, 42933), (80, 42900), (81, 42897), (95, 42813), (104, 42750), (109, 42714), (116, 42663), (124, 42591), (129, 42540), (134, 42513), (138, 42498), (147, 42450), (148, 42447), (151, 42423), (156, 42378), (163, 42336), (174, 42264), (189, 42177),

Gene: Srilaccoli3_43 Start: 43954, Stop: 42782, Start Num: 13

Candidate Starts for Srilaccoli3_43:

(Start: 12 @43969 has 83 MA's), (13, 43954), (25, 43840), (36, 43774), (38, 43762), (74, 43561), (75, 43558), (87, 43465), (90, 43456), (91, 43450), (94, 43438), (104, 43393), (144, 43102), (155, 43024), (167, 42949), (175, 42892), (188, 42820),

Gene: SteveFrench_40 Start: 43200, Stop: 41998, Start Num: 12

Candidate Starts for SteveFrench_40:

(Start: 7 @43236 has 1 MA's), (Start: 12 @43200 has 83 MA's), (16, 43164), (18, 43128), (25, 43068), (33, 43011), (41, 42969), (43, 42957), (51, 42909), (57, 42870), (58, 42864), (60, 42858), (66, 42837), (76, 42777), (81, 42741), (95, 42657), (104, 42594), (109, 42558), (124, 42435), (126, 42411), (129, 42384), (134, 42357), (144, 42303), (147, 42294), (148, 42291), (150, 42282), (151, 42267), (189,

42021),

Gene: Sticker17_41 Start: 44743, Stop: 43541, Start Num: 12

Candidate Starts for Sticker17_41:

(Start: 12 @44743 has 83 MA's), (16, 44707), (18, 44671), (20, 44659), (33, 44554), (38, 44536), (41, 44512), (45, 44494), (51, 44452), (58, 44407), (60, 44401), (66, 44380), (81, 44284), (93, 44209), (95, 44200), (109, 44101), (129, 43927), (130, 43924), (134, 43900), (163, 43723), (168, 43687), (176, 43636), (180, 43612), (188, 43567), (189, 43564),

Gene: Teal_41 Start: 45211, Stop: 44009, Start Num: 12

Candidate Starts for Teal_41:

(Start: 12 @45211 has 83 MA's), (16, 45175), (18, 45139), (20, 45127), (33, 45022), (38, 45004), (41, 44980), (45, 44962), (51, 44920), (58, 44875), (60, 44869), (66, 44848), (81, 44752), (93, 44677), (95, 44668), (109, 44569), (129, 44395), (130, 44392), (134, 44368), (163, 44191), (168, 44155), (176, 44104), (180, 44080), (188, 44035), (189, 44032),

Gene: Teatealatte_39 Start: 43972, Stop: 42767, Start Num: 12

Candidate Starts for Teatealatte_39:

(Start: 12 @43972 has 83 MA's), (20, 43888), (21, 43879), (23, 43852), (29, 43807), (37, 43768), (41, 43741), (45, 43723), (47, 43714), (51, 43681), (57, 43633), (59, 43624), (63, 43606), (66, 43600), (67, 43597), (72, 43567), (80, 43507), (82, 43489), (86, 43459), (91, 43438), (93, 43429), (104, 43381), (123, 43234), (129, 43171), (141, 43111), (150, 43069), (151, 43054), (157, 43006), (163, 42967), (173, 42895), (188, 42808), (193, 42778),

Gene: Teech_39 Start: 43773, Stop: 42568, Start Num: 12

Candidate Starts for Teech_39:

(Start: 12 @43773 has 83 MA's), (20, 43689), (21, 43680), (23, 43653), (29, 43608), (37, 43569), (41, 43542), (45, 43524), (47, 43515), (51, 43482), (57, 43434), (59, 43425), (63, 43407), (66, 43401), (67, 43398), (72, 43368), (80, 43308), (82, 43290), (86, 43260), (91, 43239), (93, 43230), (104, 43182), (123, 43035), (129, 42972), (141, 42912), (150, 42870), (151, 42855), (157, 42807), (163, 42768), (173, 42696), (188, 42609), (193, 42579),

Gene: Tredge_39 Start: 43972, Stop: 42767, Start Num: 12

Candidate Starts for Tredge_39:

(Start: 12 @43972 has 83 MA's), (20, 43888), (21, 43879), (23, 43852), (29, 43807), (37, 43768), (41, 43741), (45, 43723), (47, 43714), (51, 43681), (57, 43633), (59, 43624), (63, 43606), (66, 43600), (67, 43597), (72, 43567), (80, 43507), (82, 43489), (86, 43459), (91, 43438), (93, 43429), (104, 43381), (123, 43234), (129, 43171), (141, 43111), (150, 43069), (151, 43054), (157, 43006), (163, 42967), (173, 42895), (188, 42808), (193, 42778),

Gene: Trogglehumper_63 Start: 53438, Stop: 52206, Start Num: 12

Candidate Starts for Trogglehumper_63:

(Start: 12 @53438 has 83 MA's), (17, 53387), (23, 53321), (36, 53243), (38, 53231), (41, 53207), (64, 53072), (65, 53033), (77, 52964), (93, 52853), (97, 52844), (102, 52814), (106, 52793), (112, 52745), (114, 52727), (121, 52679), (129, 52586), (141, 52532), (142, 52517), (143, 52514), (149, 52493), (153, 52463), (157, 52427), (162, 52388), (170, 52343), (171, 52337), (174, 52316), (180, 52274), (182, 52268), (187, 52235),

Gene: Vitaenoi_41 Start: 45217, Stop: 44027, Start Num: 12

Candidate Starts for Vitaenoi_41:

(6, 45277), (Start: 12 @45217 has 83 MA's), (14, 45187), (29, 45052), (37, 45013), (41, 44986), (45, 44968), (47, 44959), (51, 44926), (63, 44857), (66, 44851), (72, 44818), (80, 44758), (85, 44713), (86, 44710), (91, 44689), (93, 44680), (104, 44632), (112, 44572), (123, 44485), (129, 44422), (140,

44374), (141, 44362), (150, 44320), (165, 44206), (179, 44119), (184, 44086),

Gene: Woes_41 Start: 45262, Stop: 44060, Start Num: 12

Candidate Starts for Woes_41:

(Start: 12 @45262 has 83 MA's), (16, 45226), (18, 45190), (20, 45178), (33, 45073), (38, 45055), (41, 45031), (45, 45013), (51, 44971), (58, 44926), (60, 44920), (66, 44899), (81, 44803), (93, 44728), (95, 44719), (109, 44620), (129, 44446), (130, 44443), (134, 44419), (163, 44242), (168, 44206), (176, 44155), (180, 44131), (188, 44086), (189, 44083),

Gene: Worcestershire_41 Start: 42498, Stop: 41293, Start Num: 12

Candidate Starts for Worcestershire_41:

(Start: 1 @42603 has 1 MA's), (4, 42576), (Start: 7 @42534 has 1 MA's), (Start: 12 @42498 has 83 MA's), (16, 42462), (18, 42426), (25, 42366), (29, 42333), (41, 42264), (43, 42252), (51, 42204), (58, 42159), (60, 42153), (76, 42072), (80, 42039), (81, 42036), (95, 41952), (104, 41889), (109, 41853), (116, 41802), (124, 41730), (129, 41679), (134, 41652), (138, 41637), (147, 41589), (148, 41586), (151, 41562), (156, 41517), (163, 41475), (174, 41403), (189, 41316),