

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 308301 Report

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

Pham number 308301 has 118 members, 30 are drafts.

Phages represented in each track:

- Track 1 : Vulpecula_17
- Track 2 : Jamun_17
- Track 3 : WileyE_16, Chickaboom_16
- Track 4 : TaylorSipht_17
- Track 5 : LittleTokyo_17
- Track 6 : OtsoOtso_17, Melons_18, Pineda_18, Bibble12_18, Jerole_18, Amelia_18, Cote_18, Polka_17, Bedetta_18, Lunar_18, PhirstandPhine_18, Daob_18, Damocles_18, Coral_17, Colusalem_17, Kepler_17, HannahPhantana_18, GramZayde_17
- Track 7 : Kuleana_17
- Track 8 : Zhuangyuan_18
- Track 9 : Amphitrite_16, HamCheese_16, Glotell_16, Camara_16, Oppalora_16, PhluffyCoco_16, KHumphrey_16, Laphuphu24k_15, DanHam62_16, AmiCi24_16, AdoptaAdorbs_16, Atlantica_16, RedFox_16
- Track 10 : Fingolfin_16, Juno112_16
- Track 11 : StuartMinion_16, AlexMinion_17
- Track 12 : Andrew_17
- Track 13 : Leona_16, Azaz_16, Rattail_16
- Track 14 : Renna12_17
- Track 15 : Babushka_16
- Track 16 : Aikyam_20, RadFad_20, Hillester_20
- Track 17 : CookieBear_20, JellyBread_20
- Track 18 : Tiff81_21
- Track 19 : Sporco_21, Auxilium_20, MUWow_19, Raphaella_20, Sakai_20, YoungHarleezy_20, Gorpy_20, AdaS_20
- Track 20 : Phrank15_19
- Track 21 : GumGum_20
- Track 22 : Vopal_21
- Track 23 : Lasker_20, BasketStar_20, BlueShadow_20, MidnightRain_20, BenchScraper_20
- Track 24 : LeBruni_20
- Track 25 : Richie_20
- Track 26 : Hestia_20, CosmicBrownie_20, Nyilah_19
- Track 27 : Mapleville_19, BillyTP_20, Lawnathon_20
- Track 28 : Persistence_19
- Track 29 : Bhageatrice_22
- Track 30 : Kabloowy_20

- Track 31 : Satrap_20, Shukran_20
- Track 32 : NewKitty_21
- Track 33 : Anekin_19, Crescenzo_20, DarwinJr_23
- Track 34 : SonDevVon_19
- Track 35 : Globfish_20
- Track 36 : Isolde_20
- Track 37 : ThayneTheZag_20
- Track 38 : Windest_21
- Track 39 : JakeTheSnake_20
- Track 40 : SpicyFrank_20
- Track 41 : Ding_20
- Track 42 : Seahorse_21
- Track 43 : MurphyJoseph_20
- Track 44 : MaterMagnus_20
- Track 45 : PeggyLeg03_19, Constance_19
- Track 46 : NikkiHotWheels_19
- Track 47 : KayMoney_19, ChuckDuck_19
- Track 48 : Pucara_19, Karkharias_19, HotPotato_19, Bridgette_19, GlobiWarming_19
- Track 49 : LittleRon_19
- Track 50 : Peas_19, Eileen_19
- Track 51 : Henrique_19
- Track 52 : FosterFrank_19
- Track 53 : LilyBell_19
- Track 54 : Judy_20
- Track 55 : NidoQ_19
- Track 56 : Footloose_19

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

The start number called the most often in the published annotations is 2, it was called in 87 of the 88 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AdaS_20, AdoptaAdorbs_16, Aikyam_20, AlexMinion_17, Amelia_18, AmiCi24_16, Amphitrite_16, Andrew_17, Anekin_19, Atlantica_16, Auxilium_20, Azaz_16, Babushka_16, BasketStar_20, Bedetta_18, BenchScraper_20, Bhageatrice_22, Bibble12_18, BillyTP_20, BlueShadow_20, Bridgette_19, Camara_16, Chickaboom_16, ChuckDuck_19, Colusalem_17, Constance_19, CookieBear_20, Coral_17, CosmicBrownie_20, Cote_18, Crescenzo_20, Damocles_18, DanHam62_16, Daob_18, DarwinJr_23, Ding_20, Eileen_19, Fingolfin_16, Footloose_19, FosterFrank_19, Globfish_20, GlobiWarming_19, Glotell_16, Gopy_20, GramZayde_17, GumGum_20, HamCheese_16, HannahPhantana_18, Henrique_19, Hestia_20, Hillester_20, HotPotato_19, Isolde_20, JakeTheSnake_20, Jamun_17, JellyBread_20, Jerole_18, Judy_20, Juno112_16, KHumphrey_16, Kabloowy_20, Karkharias_19, KayMoney_19, Kepler_17, Kuleana_17, Laphuphu24k_15, Lasker_20, Lawnathon_20, LeBruni_20, Leona_16, LilyBell_19, LittleRon_19, LittleTokyo_17, Lunar_18, MUWow_19, Mapleville_19, MaterMagnus_20, Melons_18, MidnightRain_20, NewKitty_21, NidoQ_19, NikkiHotWheels_19, Nyilah_19, Oppalora_16, OtsoOtso_17, Peas_19,

PeggyLeg03_19, Persistence_19, PhirstandPhine_18, PhluffyCoco_16, Phrank15_19, Pineda_18, Polka_17, Pucara_19, RadFad_20, Raphaella_20, Rattail_16, RedFox_16, Renna12_17, Richie_20, Sakai_20, Satrap_20, Seahorse_21, Shukran_20, SpicyFrank_20, Sporco_21, StuartMinion_16, ThayneTheZag_20, Tiff81_21, Vopal_21, Vulpecula_17, WileyE_16, Windest_21, YoungHarleezy_20, Zhuangyuan_18,

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

- MurphyJoseph_20, SonDevVon_19,

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

- TaylorSipt_17,

Summary by start number:

Start 2:

- Found in 117 of 118 (99.2%) of genes in pham
- Manual Annotations of this start: 87 of 88
- Called 98.3% of time when present
- Phage (with cluster) where this start called: AdaS_20 (AY), AdoptaAdorbs_16 (AS3), Aikyam_20 (AY), AlexMinion_17 (AS3), Amelia_18 (AS2), AmiCi24_16 (AS3), Amphitrite_16 (AS3), Andrew_17 (AS3), Anekin_19 (AY), Atlantica_16 (AS3), Auxilium_20 (AY), Azaz_16 (AS3), Babushka_16 (AS3), BasketStar_20 (AY), Bedetta_18 (AS2), BenchScraper_20 (AY), Bhageatrice_22 (AY), Bibble12_18 (AS2), BillyTP_20 (AY), BlueShadow_20 (AY), Bridgette_19 (FA), Camara_16 (AS3), Chickaboom_16 (AS1), ChuckDuck_19 (FA), Colusalem_17 (AS2), Constance_19 (FA), CookieBear_20 (AY), Coral_17 (AS2), CosmicBrownie_20 (AY), Cote_18 (AS2), Crescenzo_20 (AY), Damocles_18 (AS2), DanHam62_16 (AS3), Daob_18 (AS2), DarwinJr_23 (AY), Ding_20 (AY), Eileen_19 (FA), Fingolfin_16 (AS3), Footloose_19 (singleton), FosterFrank_19 (FA), Globfish_20 (AY), GlobiWarming_19 (FA), Glotell_16 (AS3), Gorpy_20 (AY), GramZayde_17 (AS2), GumGum_20 (AY), HamCheese_16 (AS3), HannahPhantana_18 (AS2), Henrique_19 (FA), Hestia_20 (AY), Hillester_20 (AY), HotPotato_19 (FA), Isolde_20 (AY), JakeTheSnake_20 (AY), Jamun_17 (AS1), JellyBread_20 (AY), Jerole_18 (AS2), Judy_20 (FA), Juno112_16 (AS3), KHumphrey_16 (AS3), Kabloowy_20 (AY), Karkharias_19 (FA), KayMoney_19 (FA), Kepler_17 (AS2), Kuleana_17 (AS2), Laphuphu24k_15 (AS3), Lasker_20 (AY), Lawnathon_20 (AY), LeBruni_20 (AY), Leona_16 (AS3), LilyBell_19 (FA), LittleRon_19 (FA), LittleTokyo_17 (AS2), Lunar_18 (AS2), MUWow_19 (AY), Mapleville_19 (AY), MaterMagnus_20 (AY), Melons_18 (AS2), MidnightRain_20 (AY), NewKitty_21 (AY), NidoQ_19 (FA), NikkiHotWheels_19 (FA), Nyilah_19 (AY), Oppalora_16 (AS3), OtsoOtso_17 (AS2), Peas_19 (FA), PeggyLeg03_19 (FA), Persistence_19 (AY), PhirstandPhine_18 (AS2), PhluffyCoco_16 (AS3), Phrank15_19 (AY), Pineda_18 (AS2), Polka_17 (AS2), Pucara_19 (FA), RadFad_20 (AY), Raphaella_20 (AY), Rattail_16 (AS3), RedFox_16 (AS3), Renna12_17 (AS3), Richie_20 (AY), Sakai_20 (AY), Satrap_20 (AY), Seahorse_21 (AY), Shukran_20 (AY), SpicyFrank_20 (AY), Sporco_21 (AY), StuartMinion_16 (AS3), ThayneTheZag_20 (AY), Tiff81_21 (AY), Vopal_21 (AY), Vulpecula_17 (AS1), WileyE_16 (AS1), Windest_21 (AY), YoungHarleezy_20 (AY), Zhuangyuan_18 (AS2),

Start 3:

- Found in 5 of 118 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 88
- Called 20.0% of time when present

- Phage (with cluster) where this start called: TaylorSipht_17 (AS1),

Start 9:

- Found in 94 of 118 (79.7%) of genes in pham
- No Manual Annotations of this start.
- Called 1.1% of time when present
- Phage (with cluster) where this start called: SonDevVon_19 (AY),

Start 23:

- Found in 2 of 118 (1.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: MurphyJoseph_20 (AY),

Summary by clusters:

There are 6 clusters represented in this pham: AS3, AS2, singleton, AS1, FA, AY,

Info for manual annotations of cluster AS1:

- Start number 2 was manually annotated 4 times for cluster AS1.
- Start number 3 was manually annotated 1 time for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 2 was manually annotated 16 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 2 was manually annotated 18 times for cluster AS3.

Info for manual annotations of cluster AY:

- Start number 2 was manually annotated 35 times for cluster AY.

Info for manual annotations of cluster FA:

- Start number 2 was manually annotated 13 times for cluster FA.

Gene Information:

Gene: AdaS_20 Start: 14784, Stop: 15611, Start Num: 2

Candidate Starts for AdaS_20:

(Start: 2 @14784 has 87 MA's), (9, 14832), (12, 14859), (14, 14871), (15, 14874), (16, 14880), (31, 14988), (33, 15000), (42, 15057), (45, 15081), (51, 15114), (58, 15189), (59, 15195), (63, 15207), (66, 15225), (69, 15246), (77, 15300), (82, 15321), (93, 15381), (97, 15402), (108, 15483),

Gene: AdoptaAdorbs_16 Start: 12076, Stop: 12921, Start Num: 2

Candidate Starts for AdoptaAdorbs_16:

(Start: 2 @12076 has 87 MA's), (9, 12118), (10, 12124), (11, 12130), (16, 12166), (18, 12193), (28, 12262), (31, 12274), (34, 12292), (35, 12295), (42, 12343), (48, 12388), (49, 12391), (53, 12433), (61, 12493), (71, 12550), (73, 12562), (80, 12604), (83, 12622), (92, 12673), (94, 12682), (95, 12688), (96, 12694), (97, 12697), (98, 12700), (105, 12766), (110, 12802), (112, 12814),

Gene: Aikyam_20 Start: 14785, Stop: 15612, Start Num: 2

Candidate Starts for Aikyam_20:

(Start: 2 @14785 has 87 MA's), (12, 14860), (14, 14872), (15, 14875), (16, 14881), (31, 14989), (33, 15001), (42, 15058), (45, 15082), (51, 15115), (58, 15190), (59, 15196), (63, 15208), (66, 15226), (69, 15247), (77, 15301), (82, 15322), (93, 15382), (97, 15403), (108, 15484),

Gene: AlexMinion_17 Start: 12108, Stop: 12959, Start Num: 2

Candidate Starts for AlexMinion_17:

(Start: 2 @12108 has 87 MA's), (18, 12231), (27, 12294), (28, 12300), (31, 12312), (34, 12330), (35, 12333), (42, 12381), (48, 12426), (49, 12429), (50, 12432), (51, 12438), (53, 12471), (61, 12531), (65, 12546), (71, 12588), (73, 12600), (80, 12642), (83, 12660), (85, 12666), (92, 12711), (94, 12720), (110, 12840), (112, 12852), (114, 12870),

Gene: Amelia_18 Start: 12510, Stop: 13364, Start Num: 2

Candidate Starts for Amelia_18:

(Start: 2 @12510 has 87 MA's), (9, 12552), (10, 12558), (14, 12591), (19, 12636), (25, 12678), (28, 12699), (30, 12708), (34, 12729), (38, 12759), (50, 12831), (51, 12837), (53, 12870), (57, 12900), (59, 12921), (63, 12933), (71, 12987), (73, 12999), (80, 13041), (81, 13044), (83, 13059), (85, 13065), (92, 13110), (94, 13119), (95, 13125), (97, 13134), (98, 13137), (105, 13209), (106, 13221), (110, 13245), (119, 13335),

Gene: AmiCi24_16 Start: 12074, Stop: 12919, Start Num: 2

Candidate Starts for AmiCi24_16:

(Start: 2 @12074 has 87 MA's), (9, 12116), (10, 12122), (11, 12128), (16, 12164), (18, 12191), (28, 12260), (31, 12272), (34, 12290), (35, 12293), (42, 12341), (48, 12386), (49, 12389), (53, 12431), (61, 12491), (71, 12548), (73, 12560), (80, 12602), (83, 12620), (92, 12671), (94, 12680), (95, 12686), (96, 12692), (97, 12695), (98, 12698), (105, 12764), (110, 12800), (112, 12812),

Gene: Amphitrite_16 Start: 12074, Stop: 12919, Start Num: 2

Candidate Starts for Amphitrite_16:

(Start: 2 @12074 has 87 MA's), (9, 12116), (10, 12122), (11, 12128), (16, 12164), (18, 12191), (28, 12260), (31, 12272), (34, 12290), (35, 12293), (42, 12341), (48, 12386), (49, 12389), (53, 12431), (61, 12491), (71, 12548), (73, 12560), (80, 12602), (83, 12620), (92, 12671), (94, 12680), (95, 12686), (96, 12692), (97, 12695), (98, 12698), (105, 12764), (110, 12800), (112, 12812),

Gene: Andrew_17 Start: 12529, Stop: 13380, Start Num: 2

Candidate Starts for Andrew_17:

(Start: 2 @12529 has 87 MA's), (10, 12577), (11, 12583), (18, 12649), (19, 12655), (28, 12718), (41, 12796), (48, 12844), (49, 12847), (51, 12856), (58, 12934), (61, 12949), (65, 12964), (66, 12970), (72, 13012), (73, 13018), (78, 13048), (80, 13060), (85, 13084), (92, 13129), (94, 13138), (95, 13144), (98, 13156), (100, 13168), (102, 13186), (105, 13225), (106, 13237), (110, 13261),

Gene: Anekin_19 Start: 14747, Stop: 15574, Start Num: 2

Candidate Starts for Anekin_19:

(Start: 2 @14747 has 87 MA's), (9, 14795), (16, 14843), (33, 14963), (42, 15020), (50, 15071), (52, 15080), (58, 15152), (63, 15170), (66, 15188), (67, 15194), (69, 15209), (71, 15224), (77, 15263), (89, 15320), (91, 15332), (93, 15344), (101, 15386), (117, 15524),

Gene: Atlantica_16 Start: 12076, Stop: 12921, Start Num: 2

Candidate Starts for Atlantica_16:

(Start: 2 @12076 has 87 MA's), (9, 12118), (10, 12124), (11, 12130), (16, 12166), (18, 12193), (28, 12262), (31, 12274), (34, 12292), (35, 12295), (42, 12343), (48, 12388), (49, 12391), (53, 12433), (61, 12493), (71, 12550), (73, 12562), (80, 12604), (83, 12622), (92, 12673), (94, 12682), (95, 12688), (96, 12694), (97, 12697), (98, 12700), (105, 12766), (110, 12802), (112, 12814),

Gene: Auxilium_20 Start: 14784, Stop: 15611, Start Num: 2

Candidate Starts for Auxilium_20:

(Start: 2 @14784 has 87 MA's), (9, 14832), (12, 14859), (14, 14871), (15, 14874), (16, 14880), (31, 14988), (33, 15000), (42, 15057), (45, 15081), (51, 15114), (58, 15189), (59, 15195), (63, 15207), (66, 15225), (69, 15246), (77, 15300), (82, 15321), (93, 15381), (97, 15402), (108, 15483),

Gene: Azaz_16 Start: 12127, Stop: 12972, Start Num: 2

Candidate Starts for Azaz_16:

(Start: 2 @12127 has 87 MA's), (9, 12169), (10, 12175), (11, 12181), (16, 12217), (18, 12244), (28, 12313), (31, 12325), (34, 12343), (35, 12346), (42, 12394), (48, 12439), (49, 12442), (53, 12484), (61, 12544), (71, 12601), (73, 12613), (80, 12655), (83, 12673), (92, 12724), (94, 12733), (95, 12739), (96, 12745), (97, 12748), (98, 12751), (105, 12817), (110, 12853),

Gene: Babushka_16 Start: 12125, Stop: 12973, Start Num: 2

Candidate Starts for Babushka_16:

(Start: 2 @12125 has 87 MA's), (9, 12167), (10, 12173), (16, 12215), (18, 12242), (28, 12311), (31, 12323), (34, 12341), (35, 12344), (42, 12392), (48, 12437), (49, 12440), (50, 12443), (53, 12482), (61, 12542), (71, 12599), (73, 12611), (80, 12653), (83, 12671), (85, 12677), (95, 12737), (96, 12743), (98, 12749), (103, 12785), (106, 12830), (110, 12854), (112, 12866),

Gene: BasketStar_20 Start: 14838, Stop: 15665, Start Num: 2

Candidate Starts for BasketStar_20:

(Start: 2 @14838 has 87 MA's), (9, 14886), (12, 14913), (15, 14928), (16, 14934), (31, 15042), (33, 15054), (42, 15111), (45, 15135), (51, 15168), (58, 15243), (59, 15249), (63, 15261), (66, 15279), (67, 15285), (69, 15300), (77, 15354), (82, 15375), (93, 15435), (97, 15456), (108, 15537),

Gene: Bedetta_18 Start: 12510, Stop: 13364, Start Num: 2

Candidate Starts for Bedetta_18:

(Start: 2 @12510 has 87 MA's), (9, 12552), (10, 12558), (14, 12591), (19, 12636), (25, 12678), (28, 12699), (30, 12708), (34, 12729), (38, 12759), (50, 12831), (51, 12837), (53, 12870), (57, 12900), (59, 12921), (63, 12933), (71, 12987), (73, 12999), (80, 13041), (81, 13044), (83, 13059), (85, 13065), (92, 13110), (94, 13119), (95, 13125), (97, 13134), (98, 13137), (105, 13209), (106, 13221), (110, 13245), (119, 13335),

Gene: BenchScraper_20 Start: 14799, Stop: 15626, Start Num: 2

Candidate Starts for BenchScraper_20:

(Start: 2 @14799 has 87 MA's), (9, 14847), (12, 14874), (15, 14889), (16, 14895), (31, 15003), (33, 15015), (42, 15072), (45, 15096), (51, 15129), (58, 15204), (59, 15210), (63, 15222), (66, 15240), (67, 15246), (69, 15261), (77, 15315), (82, 15336), (93, 15396), (97, 15417), (108, 15498),

Gene: Bhageatrice_22 Start: 16074, Stop: 16901, Start Num: 2

Candidate Starts for Bhageatrice_22:

(Start: 2 @16074 has 87 MA's), (7, 16098), (14, 16161), (15, 16164), (16, 16170), (31, 16278), (33, 16290), (42, 16347), (45, 16371), (50, 16398), (52, 16407), (58, 16479), (63, 16497), (66, 16515), (69, 16536), (73, 16563), (77, 16590), (93, 16671), (97, 16692),

Gene: Bible12_18 Start: 12513, Stop: 13367, Start Num: 2

Candidate Starts for Bible12_18:

(Start: 2 @12513 has 87 MA's), (9, 12555), (10, 12561), (14, 12594), (19, 12639), (25, 12681), (28, 12702), (30, 12711), (34, 12732), (38, 12762), (50, 12834), (51, 12840), (53, 12873), (57, 12903), (59, 12924), (63, 12936), (71, 12990), (73, 13002), (80, 13044), (81, 13047), (83, 13062), (85, 13068), (92, 13113), (94, 13122), (95, 13128), (97, 13137), (98, 13140), (105, 13212), (106, 13224), (110, 13248), (119, 13338),

Gene: BillyTP_20 Start: 14568, Stop: 15395, Start Num: 2

Candidate Starts for BillyTP_20:

(Start: 2 @14568 has 87 MA's), (7, 14592), (9, 14616), (12, 14643), (14, 14655), (15, 14658), (16, 14664), (31, 14772), (33, 14784), (42, 14841), (45, 14865), (51, 14898), (58, 14973), (59, 14979), (63, 14991), (66, 15009), (69, 15030), (77, 15084), (82, 15105), (93, 15165), (97, 15186), (108, 15267),

Gene: BlueShadow_20 Start: 14784, Stop: 15611, Start Num: 2

Candidate Starts for BlueShadow_20:

(Start: 2 @14784 has 87 MA's), (9, 14832), (12, 14859), (15, 14874), (16, 14880), (31, 14988), (33, 15000), (42, 15057), (45, 15081), (51, 15114), (58, 15189), (59, 15195), (63, 15207), (66, 15225), (67, 15231), (69, 15246), (77, 15300), (82, 15321), (93, 15381), (97, 15402), (108, 15483),

Gene: Bridgette_19 Start: 14845, Stop: 15672, Start Num: 2

Candidate Starts for Bridgette_19:

(Start: 2 @14845 has 87 MA's), (7, 14869), (9, 14893), (16, 14941), (33, 15061), (40, 15112), (42, 15118), (45, 15142), (58, 15250), (63, 15268), (66, 15286), (67, 15292), (69, 15307), (71, 15322), (82, 15382), (93, 15442), (98, 15466), (101, 15484),

Gene: Camara_16 Start: 12077, Stop: 12922, Start Num: 2

Candidate Starts for Camara_16:

(Start: 2 @12077 has 87 MA's), (9, 12119), (10, 12125), (11, 12131), (16, 12167), (18, 12194), (28, 12263), (31, 12275), (34, 12293), (35, 12296), (42, 12344), (48, 12389), (49, 12392), (53, 12434), (61, 12494), (71, 12551), (73, 12563), (80, 12605), (83, 12623), (92, 12674), (94, 12683), (95, 12689), (96, 12695), (97, 12698), (98, 12701), (105, 12767), (110, 12803), (112, 12815),

Gene: Chickaboom_16 Start: 12557, Stop: 13396, Start Num: 2

Candidate Starts for Chickaboom_16:

(Start: 2 @12557 has 87 MA's), (Start: 3 @12560 has 1 MA's), (10, 12605), (13, 12632), (14, 12638), (21, 12698), (25, 12722), (27, 12737), (31, 12755), (34, 12773), (37, 12800), (42, 12824), (49, 12872), (51, 12881), (54, 12923), (61, 12974), (70, 13019), (81, 13088), (92, 13154), (95, 13169), (110, 13277), (111, 13283), (120, 13376),

Gene: ChuckDuck_19 Start: 14687, Stop: 15514, Start Num: 2

Candidate Starts for ChuckDuck_19:

(Start: 2 @14687 has 87 MA's), (9, 14735), (12, 14762), (15, 14777), (16, 14783), (31, 14891), (45, 14984), (52, 15020), (58, 15092), (63, 15110), (66, 15128), (67, 15134), (69, 15149), (71, 15164), (82, 15224), (91, 15272), (93, 15284), (98, 15308),

Gene: Colusalem_17 Start: 12349, Stop: 13203, Start Num: 2

Candidate Starts for Colusalem_17:

(Start: 2 @12349 has 87 MA's), (9, 12391), (10, 12397), (14, 12430), (19, 12475), (25, 12517), (28, 12538), (30, 12547), (34, 12568), (38, 12598), (50, 12670), (51, 12676), (53, 12709), (57, 12739), (59, 12760), (63, 12772), (71, 12826), (73, 12838), (80, 12880), (81, 12883), (83, 12898), (85, 12904), (92, 12949), (94, 12958), (95, 12964), (97, 12973), (98, 12976), (105, 13048), (106, 13060), (110, 13084), (119, 13174),

Gene: Constance_19 Start: 14827, Stop: 15654, Start Num: 2

Candidate Starts for Constance_19:

(Start: 2 @14827 has 87 MA's), (7, 14851), (15, 14917), (16, 14923), (33, 15043), (42, 15100), (45, 15124), (51, 15157), (63, 15250), (66, 15268), (67, 15274), (69, 15289), (71, 15304), (82, 15364), (93, 15424), (98, 15448), (101, 15466), (108, 15526),

Gene: CookieBear_20 Start: 14784, Stop: 15611, Start Num: 2

Candidate Starts for CookieBear_20:

(Start: 2 @14784 has 87 MA's), (9, 14832), (12, 14859), (14, 14871), (15, 14874), (16, 14880), (31, 14988), (33, 15000), (42, 15057), (45, 15081), (51, 15114), (58, 15189), (59, 15195), (63, 15207), (66, 15225), (69, 15246), (77, 15300), (82, 15321), (93, 15381), (97, 15402),

Gene: Coral_17 Start: 12349, Stop: 13203, Start Num: 2

Candidate Starts for Coral_17:

(Start: 2 @12349 has 87 MA's), (9, 12391), (10, 12397), (14, 12430), (19, 12475), (25, 12517), (28, 12538), (30, 12547), (34, 12568), (38, 12598), (50, 12670), (51, 12676), (53, 12709), (57, 12739), (59, 12760), (63, 12772), (71, 12826), (73, 12838), (80, 12880), (81, 12883), (83, 12898), (85, 12904), (92, 12949), (94, 12958), (95, 12964), (97, 12973), (98, 12976), (105, 13048), (106, 13060), (110, 13084), (119, 13174),

Gene: CosmicBrownie_20 Start: 14742, Stop: 15569, Start Num: 2

Candidate Starts for CosmicBrownie_20:

(Start: 2 @14742 has 87 MA's), (7, 14766), (9, 14790), (14, 14829), (15, 14832), (16, 14838), (31, 14946), (33, 14958), (42, 15015), (45, 15039), (50, 15066), (52, 15075), (63, 15165), (66, 15183), (69, 15204), (73, 15231), (77, 15258), (91, 15327), (93, 15339), (97, 15360),

Gene: Cote_18 Start: 12510, Stop: 13364, Start Num: 2

Candidate Starts for Cote_18:

(Start: 2 @12510 has 87 MA's), (9, 12552), (10, 12558), (14, 12591), (19, 12636), (25, 12678), (28, 12699), (30, 12708), (34, 12729), (38, 12759), (50, 12831), (51, 12837), (53, 12870), (57, 12900), (59, 12921), (63, 12933), (71, 12987), (73, 12999), (80, 13041), (81, 13044), (83, 13059), (85, 13065), (92, 13110), (94, 13119), (95, 13125), (97, 13134), (98, 13137), (105, 13209), (106, 13221), (110, 13245), (119, 13335),

Gene: Crescenzo_20 Start: 14675, Stop: 15502, Start Num: 2

Candidate Starts for Crescenzo_20:

(Start: 2 @14675 has 87 MA's), (9, 14723), (16, 14771), (33, 14891), (42, 14948), (50, 14999), (52, 15008), (58, 15080), (63, 15098), (66, 15116), (67, 15122), (69, 15137), (71, 15152), (77, 15191), (89, 15248), (91, 15260), (93, 15272), (101, 15314), (117, 15452),

Gene: Damocles_18 Start: 12510, Stop: 13364, Start Num: 2

Candidate Starts for Damocles_18:

(Start: 2 @12510 has 87 MA's), (9, 12552), (10, 12558), (14, 12591), (19, 12636), (25, 12678), (28, 12699), (30, 12708), (34, 12729), (38, 12759), (50, 12831), (51, 12837), (53, 12870), (57, 12900), (59, 12921), (63, 12933), (71, 12987), (73, 12999), (80, 13041), (81, 13044), (83, 13059), (85, 13065), (92, 13110), (94, 13119), (95, 13125), (97, 13134), (98, 13137), (105, 13209), (106, 13221), (110, 13245), (119, 13335),

Gene: DanHam62_16 Start: 12076, Stop: 12921, Start Num: 2

Candidate Starts for DanHam62_16:

(Start: 2 @12076 has 87 MA's), (9, 12118), (10, 12124), (11, 12130), (16, 12166), (18, 12193), (28, 12262), (31, 12274), (34, 12292), (35, 12295), (42, 12343), (48, 12388), (49, 12391), (53, 12433), (61, 12493), (71, 12550), (73, 12562), (80, 12604), (83, 12622), (92, 12673), (94, 12682), (95, 12688), (96, 12694), (97, 12697), (98, 12700), (105, 12766), (110, 12802), (112, 12814),

Gene: Daob_18 Start: 12513, Stop: 13367, Start Num: 2

Candidate Starts for Daob_18:

(Start: 2 @12513 has 87 MA's), (9, 12555), (10, 12561), (14, 12594), (19, 12639), (25, 12681), (28, 12702), (30, 12711), (34, 12732), (38, 12762), (50, 12834), (51, 12840), (53, 12873), (57, 12903), (59,

12924), (63, 12936), (71, 12990), (73, 13002), (80, 13044), (81, 13047), (83, 13062), (85, 13068), (92, 13113), (94, 13122), (95, 13128), (97, 13137), (98, 13140), (105, 13212), (106, 13224), (110, 13248), (119, 13338),

Gene: DarwinJr_23 Start: 15979, Stop: 16806, Start Num: 2

Candidate Starts for DarwinJr_23:

(Start: 2 @15979 has 87 MA's), (9, 16027), (16, 16075), (33, 16195), (42, 16252), (50, 16303), (52, 16312), (58, 16384), (63, 16402), (66, 16420), (67, 16426), (69, 16441), (71, 16456), (77, 16495), (89, 16552), (91, 16564), (93, 16576), (101, 16618), (117, 16756),

Gene: Ding_20 Start: 14847, Stop: 15674, Start Num: 2

Candidate Starts for Ding_20:

(Start: 2 @14847 has 87 MA's), (9, 14895), (12, 14922), (14, 14934), (15, 14937), (16, 14943), (21, 14994), (33, 15063), (42, 15120), (44, 15141), (45, 15144), (50, 15171), (52, 15180), (58, 15252), (63, 15270), (66, 15288), (67, 15294), (69, 15309), (71, 15324), (72, 15330), (80, 15378), (89, 15420), (93, 15444), (100, 15480), (101, 15486), (120, 15654),

Gene: Eileen_19 Start: 14788, Stop: 15615, Start Num: 2

Candidate Starts for Eileen_19:

(Start: 2 @14788 has 87 MA's), (7, 14812), (9, 14836), (12, 14863), (15, 14878), (16, 14884), (33, 15004), (40, 15055), (42, 15061), (45, 15085), (58, 15193), (63, 15211), (66, 15229), (67, 15235), (69, 15250), (71, 15265), (82, 15325), (93, 15385), (98, 15409), (101, 15427),

Gene: Fingolfin_16 Start: 12077, Stop: 12922, Start Num: 2

Candidate Starts for Fingolfin_16:

(Start: 2 @12077 has 87 MA's), (9, 12119), (10, 12125), (11, 12131), (16, 12167), (18, 12194), (28, 12263), (31, 12275), (34, 12293), (35, 12296), (42, 12344), (48, 12389), (49, 12392), (51, 12401), (53, 12434), (61, 12494), (71, 12551), (73, 12563), (80, 12605), (83, 12623), (92, 12674), (94, 12683), (95, 12689), (96, 12695), (97, 12698), (98, 12701), (105, 12767), (110, 12803), (112, 12815),

Gene: Footloose_19 Start: 13039, Stop: 13860, Start Num: 2

Candidate Starts for Footloose_19:

(1, 12988), (Start: 2 @13039 has 87 MA's), (4, 13051), (5, 13054), (6, 13063), (10, 13087), (15, 13123), (16, 13129), (17, 13138), (19, 13162), (20, 13174), (27, 13219), (29, 13231), (31, 13237), (34, 13255), (36, 13279), (44, 13330), (46, 13342), (53, 13393), (60, 13450), (62, 13453), (64, 13456), (68, 13486), (69, 13492), (76, 13531), (78, 13540), (80, 13552), (82, 13558), (83, 13570), (87, 13582), (90, 13603), (93, 13621), (94, 13627), (110, 13732), (112, 13744), (113, 13747), (114, 13762), (118, 13810),

Gene: FosterFrank_19 Start: 14785, Stop: 15612, Start Num: 2

Candidate Starts for FosterFrank_19:

(Start: 2 @14785 has 87 MA's), (7, 14809), (9, 14833), (15, 14875), (16, 14881), (33, 15001), (42, 15058), (45, 15082), (51, 15115), (63, 15208), (66, 15226), (67, 15232), (69, 15247), (71, 15262), (82, 15322), (93, 15382), (98, 15406), (101, 15424), (108, 15484),

Gene: Globfish_20 Start: 14857, Stop: 15684, Start Num: 2

Candidate Starts for Globfish_20:

(Start: 2 @14857 has 87 MA's), (8, 14884), (9, 14905), (14, 14944), (15, 14947), (16, 14953), (33, 15073), (42, 15130), (45, 15154), (51, 15187), (58, 15262), (59, 15268), (63, 15280), (66, 15298), (69, 15319), (77, 15373), (82, 15394), (93, 15454), (101, 15496), (108, 15556), (115, 15601),

Gene: GlobiWarming_19 Start: 14781, Stop: 15608, Start Num: 2

Candidate Starts for GlobiWarming_19:

(Start: 2 @14781 has 87 MA's), (7, 14805), (9, 14829), (16, 14877), (33, 14997), (40, 15048), (42, 15054), (45, 15078), (58, 15186), (63, 15204), (66, 15222), (67, 15228), (69, 15243), (71, 15258), (82, 15318), (93, 15378), (98, 15402), (101, 15420),

Gene: Glotell_16 Start: 12074, Stop: 12919, Start Num: 2

Candidate Starts for Glotell_16:

(Start: 2 @12074 has 87 MA's), (9, 12116), (10, 12122), (11, 12128), (16, 12164), (18, 12191), (28, 12260), (31, 12272), (34, 12290), (35, 12293), (42, 12341), (48, 12386), (49, 12389), (53, 12431), (61, 12491), (71, 12548), (73, 12560), (80, 12602), (83, 12620), (92, 12671), (94, 12680), (95, 12686), (96, 12692), (97, 12695), (98, 12698), (105, 12764), (110, 12800), (112, 12812),

Gene: Gorpy_20 Start: 14793, Stop: 15620, Start Num: 2

Candidate Starts for Gorpy_20:

(Start: 2 @14793 has 87 MA's), (9, 14841), (12, 14868), (14, 14880), (15, 14883), (16, 14889), (31, 14997), (33, 15009), (42, 15066), (45, 15090), (51, 15123), (58, 15198), (59, 15204), (63, 15216), (66, 15234), (69, 15255), (77, 15309), (82, 15330), (93, 15390), (97, 15411), (108, 15492),

Gene: GramZayde_17 Start: 12349, Stop: 13203, Start Num: 2

Candidate Starts for GramZayde_17:

(Start: 2 @12349 has 87 MA's), (9, 12391), (10, 12397), (14, 12430), (19, 12475), (25, 12517), (28, 12538), (30, 12547), (34, 12568), (38, 12598), (50, 12670), (51, 12676), (53, 12709), (57, 12739), (59, 12760), (63, 12772), (71, 12826), (73, 12838), (80, 12880), (81, 12883), (83, 12898), (85, 12904), (92, 12949), (94, 12958), (95, 12964), (97, 12973), (98, 12976), (105, 13048), (106, 13060), (110, 13084), (119, 13174),

Gene: GumGum_20 Start: 14733, Stop: 15560, Start Num: 2

Candidate Starts for GumGum_20:

(Start: 2 @14733 has 87 MA's), (7, 14757), (9, 14781), (15, 14823), (16, 14829), (31, 14937), (33, 14949), (42, 15006), (45, 15030), (50, 15057), (52, 15066), (63, 15156), (66, 15174), (69, 15195), (73, 15222), (77, 15249), (91, 15318), (93, 15330), (97, 15351),

Gene: HamCheese_16 Start: 12076, Stop: 12921, Start Num: 2

Candidate Starts for HamCheese_16:

(Start: 2 @12076 has 87 MA's), (9, 12118), (10, 12124), (11, 12130), (16, 12166), (18, 12193), (28, 12262), (31, 12274), (34, 12292), (35, 12295), (42, 12343), (48, 12388), (49, 12391), (53, 12433), (61, 12493), (71, 12550), (73, 12562), (80, 12604), (83, 12622), (92, 12673), (94, 12682), (95, 12688), (96, 12694), (97, 12697), (98, 12700), (105, 12766), (110, 12802), (112, 12814),

Gene: HannahPhantana_18 Start: 12513, Stop: 13367, Start Num: 2

Candidate Starts for HannahPhantana_18:

(Start: 2 @12513 has 87 MA's), (9, 12555), (10, 12561), (14, 12594), (19, 12639), (25, 12681), (28, 12702), (30, 12711), (34, 12732), (38, 12762), (50, 12834), (51, 12840), (53, 12873), (57, 12903), (59, 12924), (63, 12936), (71, 12990), (73, 13002), (80, 13044), (81, 13047), (83, 13062), (85, 13068), (92, 13113), (94, 13122), (95, 13128), (97, 13137), (98, 13140), (105, 13212), (106, 13224), (110, 13248), (119, 13338),

Gene: Henrique_19 Start: 14806, Stop: 15633, Start Num: 2

Candidate Starts for Henrique_19:

(Start: 2 @14806 has 87 MA's), (7, 14830), (9, 14854), (15, 14896), (16, 14902), (33, 15022), (40, 15073), (42, 15079), (45, 15103), (58, 15211), (63, 15229), (66, 15247), (67, 15253), (69, 15268), (71, 15283), (82, 15343), (93, 15403), (98, 15427), (101, 15445),

Gene: Hestia_20 Start: 14962, Stop: 15789, Start Num: 2

Candidate Starts for Hestia_20:

(Start: 2 @14962 has 87 MA's), (7, 14986), (9, 15010), (14, 15049), (15, 15052), (16, 15058), (31, 15166), (33, 15178), (42, 15235), (45, 15259), (50, 15286), (52, 15295), (63, 15385), (66, 15403), (69, 15424), (73, 15451), (77, 15478), (91, 15547), (93, 15559), (97, 15580),

Gene: Hillester_20 Start: 14784, Stop: 15611, Start Num: 2

Candidate Starts for Hillester_20:

(Start: 2 @14784 has 87 MA's), (12, 14859), (14, 14871), (15, 14874), (16, 14880), (31, 14988), (33, 15000), (42, 15057), (45, 15081), (51, 15114), (58, 15189), (59, 15195), (63, 15207), (66, 15225), (69, 15246), (77, 15300), (82, 15321), (93, 15381), (97, 15402), (108, 15483),

Gene: HotPotato_19 Start: 14789, Stop: 15616, Start Num: 2

Candidate Starts for HotPotato_19:

(Start: 2 @14789 has 87 MA's), (7, 14813), (9, 14837), (16, 14885), (33, 15005), (40, 15056), (42, 15062), (45, 15086), (58, 15194), (63, 15212), (66, 15230), (67, 15236), (69, 15251), (71, 15266), (82, 15326), (93, 15386), (98, 15410), (101, 15428),

Gene: Isolde_20 Start: 14619, Stop: 15446, Start Num: 2

Candidate Starts for Isolde_20:

(Start: 2 @14619 has 87 MA's), (9, 14667), (12, 14694), (15, 14709), (16, 14715), (31, 14823), (33, 14835), (42, 14892), (45, 14916), (51, 14949), (58, 15024), (59, 15030), (63, 15042), (66, 15060), (67, 15066), (69, 15081), (77, 15135), (82, 15156), (93, 15216), (97, 15237), (108, 15318),

Gene: JakeTheSnake_20 Start: 14685, Stop: 15512, Start Num: 2

Candidate Starts for JakeTheSnake_20:

(Start: 2 @14685 has 87 MA's), (8, 14712), (9, 14733), (15, 14775), (16, 14781), (33, 14901), (42, 14958), (43, 14967), (50, 15009), (52, 15018), (58, 15090), (63, 15108), (66, 15126), (67, 15132), (69, 15147), (71, 15162), (77, 15201), (80, 15216), (82, 15222), (85, 15240), (93, 15282), (117, 15462),

Gene: Jamun_17 Start: 13224, Stop: 14063, Start Num: 2

Candidate Starts for Jamun_17:

(Start: 2 @13224 has 87 MA's), (Start: 3 @13227 has 1 MA's), (10, 13272), (14, 13305), (25, 13389), (31, 13422), (34, 13440), (37, 13467), (42, 13491), (49, 13539), (51, 13548), (61, 13641), (70, 13686), (81, 13755), (92, 13821), (95, 13836), (107, 13923), (110, 13944), (111, 13950), (120, 14043),

Gene: JellyBread_20 Start: 14777, Stop: 15604, Start Num: 2

Candidate Starts for JellyBread_20:

(Start: 2 @14777 has 87 MA's), (9, 14825), (12, 14852), (14, 14864), (15, 14867), (16, 14873), (31, 14981), (33, 14993), (42, 15050), (45, 15074), (51, 15107), (58, 15182), (59, 15188), (63, 15200), (66, 15218), (69, 15239), (77, 15293), (82, 15314), (93, 15374), (97, 15395),

Gene: Jerole_18 Start: 12510, Stop: 13364, Start Num: 2

Candidate Starts for Jerole_18:

(Start: 2 @12510 has 87 MA's), (9, 12552), (10, 12558), (14, 12591), (19, 12636), (25, 12678), (28, 12699), (30, 12708), (34, 12729), (38, 12759), (50, 12831), (51, 12837), (53, 12870), (57, 12900), (59, 12921), (63, 12933), (71, 12987), (73, 12999), (80, 13041), (81, 13044), (83, 13059), (85, 13065), (92, 13110), (94, 13119), (95, 13125), (97, 13134), (98, 13137), (105, 13209), (106, 13221), (110, 13245), (119, 13335),

Gene: Judy_20 Start: 15098, Stop: 15925, Start Num: 2

Candidate Starts for Judy_20:

(Start: 2 @15098 has 87 MA's), (7, 15122), (9, 15146), (10, 15152), (16, 15194), (33, 15314), (42, 15371), (45, 15395), (51, 15428), (63, 15521), (66, 15539), (67, 15545), (69, 15560), (71, 15575), (82,

15635), (93, 15695), (98, 15719), (101, 15737),

Gene: Juno112_16 Start: 12077, Stop: 12922, Start Num: 2

Candidate Starts for Juno112_16:

(Start: 2 @12077 has 87 MA's), (9, 12119), (10, 12125), (11, 12131), (16, 12167), (18, 12194), (28, 12263), (31, 12275), (34, 12293), (35, 12296), (42, 12344), (48, 12389), (49, 12392), (51, 12401), (53, 12434), (61, 12494), (71, 12551), (73, 12563), (80, 12605), (83, 12623), (92, 12674), (94, 12683), (95, 12689), (96, 12695), (97, 12698), (98, 12701), (105, 12767), (110, 12803), (112, 12815),

Gene: KHumphrey_16 Start: 12074, Stop: 12919, Start Num: 2

Candidate Starts for KHumphrey_16:

(Start: 2 @12074 has 87 MA's), (9, 12116), (10, 12122), (11, 12128), (16, 12164), (18, 12191), (28, 12260), (31, 12272), (34, 12290), (35, 12293), (42, 12341), (48, 12386), (49, 12389), (53, 12431), (61, 12491), (71, 12548), (73, 12560), (80, 12602), (83, 12620), (92, 12671), (94, 12680), (95, 12686), (96, 12692), (97, 12695), (98, 12698), (105, 12764), (110, 12800), (112, 12812),

Gene: Kabloowy_20 Start: 14973, Stop: 15800, Start Num: 2

Candidate Starts for Kabloowy_20:

(Start: 2 @14973 has 87 MA's), (7, 14997), (14, 15060), (15, 15063), (16, 15069), (33, 15189), (42, 15246), (45, 15270), (50, 15297), (52, 15306), (58, 15378), (63, 15396), (66, 15414), (69, 15435), (73, 15462), (77, 15489), (91, 15558), (93, 15570), (97, 15591), (109, 15675),

Gene: Karkharias_19 Start: 14785, Stop: 15612, Start Num: 2

Candidate Starts for Karkharias_19:

(Start: 2 @14785 has 87 MA's), (7, 14809), (9, 14833), (16, 14881), (33, 15001), (40, 15052), (42, 15058), (45, 15082), (58, 15190), (63, 15208), (66, 15226), (67, 15232), (69, 15247), (71, 15262), (82, 15322), (93, 15382), (98, 15406), (101, 15424),

Gene: KayMoney_19 Start: 14689, Stop: 15516, Start Num: 2

Candidate Starts for KayMoney_19:

(Start: 2 @14689 has 87 MA's), (9, 14737), (12, 14764), (15, 14779), (16, 14785), (31, 14893), (45, 14986), (52, 15022), (58, 15094), (63, 15112), (66, 15130), (67, 15136), (69, 15151), (71, 15166), (82, 15226), (91, 15274), (93, 15286), (98, 15310),

Gene: Kepler_17 Start: 12348, Stop: 13202, Start Num: 2

Candidate Starts for Kepler_17:

(Start: 2 @12348 has 87 MA's), (9, 12390), (10, 12396), (14, 12429), (19, 12474), (25, 12516), (28, 12537), (30, 12546), (34, 12567), (38, 12597), (50, 12669), (51, 12675), (53, 12708), (57, 12738), (59, 12759), (63, 12771), (71, 12825), (73, 12837), (80, 12879), (81, 12882), (83, 12897), (85, 12903), (92, 12948), (94, 12957), (95, 12963), (97, 12972), (98, 12975), (105, 13047), (106, 13059), (110, 13083), (119, 13173),

Gene: Kuleana_17 Start: 12536, Stop: 13384, Start Num: 2

Candidate Starts for Kuleana_17:

(Start: 2 @12536 has 87 MA's), (10, 12584), (16, 12626), (18, 12653), (19, 12659), (22, 12683), (25, 12701), (27, 12716), (28, 12722), (38, 12782), (46, 12836), (51, 12860), (53, 12893), (57, 12923), (58, 12938), (66, 12974), (71, 13010), (74, 13025), (80, 13064), (85, 13088), (92, 13133), (95, 13148), (105, 13229), (111, 13271), (120, 13364),

Gene: Laphuphu24k_15 Start: 12076, Stop: 12921, Start Num: 2

Candidate Starts for Laphuphu24k_15:

(Start: 2 @12076 has 87 MA's), (9, 12118), (10, 12124), (11, 12130), (16, 12166), (18, 12193), (28, 12262), (31, 12274), (34, 12292), (35, 12295), (42, 12343), (48, 12388), (49, 12391), (53, 12433), (61,

12493), (71, 12550), (73, 12562), (80, 12604), (83, 12622), (92, 12673), (94, 12682), (95, 12688), (96, 12694), (97, 12697), (98, 12700), (105, 12766), (110, 12802), (112, 12814),

Gene: Lasker_20 Start: 14792, Stop: 15619, Start Num: 2

Candidate Starts for Lasker_20:

(Start: 2 @14792 has 87 MA's), (9, 14840), (12, 14867), (15, 14882), (16, 14888), (31, 14996), (33, 15008), (42, 15065), (45, 15089), (51, 15122), (58, 15197), (59, 15203), (63, 15215), (66, 15233), (67, 15239), (69, 15254), (77, 15308), (82, 15329), (93, 15389), (97, 15410), (108, 15491),

Gene: Lawnathon_20 Start: 14713, Stop: 15540, Start Num: 2

Candidate Starts for Lawnathon_20:

(Start: 2 @14713 has 87 MA's), (7, 14737), (9, 14761), (12, 14788), (14, 14800), (15, 14803), (16, 14809), (31, 14917), (33, 14929), (42, 14986), (45, 15010), (51, 15043), (58, 15118), (59, 15124), (63, 15136), (66, 15154), (69, 15175), (77, 15229), (82, 15250), (93, 15310), (97, 15331), (108, 15412),

Gene: LeBruni_20 Start: 14581, Stop: 15411, Start Num: 2

Candidate Starts for LeBruni_20:

(Start: 2 @14581 has 87 MA's), (12, 14656), (15, 14671), (27, 14767), (33, 14797), (42, 14854), (45, 14878), (51, 14911), (56, 14971), (58, 14989), (63, 15007), (66, 15025), (67, 15031), (69, 15046), (71, 15061), (72, 15067), (77, 15100), (82, 15121), (93, 15181), (101, 15223),

Gene: Leona_16 Start: 12127, Stop: 12972, Start Num: 2

Candidate Starts for Leona_16:

(Start: 2 @12127 has 87 MA's), (9, 12169), (10, 12175), (11, 12181), (16, 12217), (18, 12244), (28, 12313), (31, 12325), (34, 12343), (35, 12346), (42, 12394), (48, 12439), (49, 12442), (53, 12484), (61, 12544), (71, 12601), (73, 12613), (80, 12655), (83, 12673), (92, 12724), (94, 12733), (95, 12739), (96, 12745), (97, 12748), (98, 12751), (105, 12817), (110, 12853),

Gene: LilyBell_19 Start: 14801, Stop: 15628, Start Num: 2

Candidate Starts for LilyBell_19:

(Start: 2 @14801 has 87 MA's), (7, 14825), (9, 14849), (10, 14855), (15, 14891), (16, 14897), (33, 15017), (42, 15074), (45, 15098), (51, 15131), (63, 15224), (66, 15242), (67, 15248), (69, 15263), (71, 15278), (82, 15338), (93, 15398), (98, 15422), (108, 15500),

Gene: LittleRon_19 Start: 14659, Stop: 15486, Start Num: 2

Candidate Starts for LittleRon_19:

(Start: 2 @14659 has 87 MA's), (9, 14707), (12, 14734), (15, 14749), (16, 14755), (31, 14863), (45, 14956), (52, 14992), (58, 15064), (63, 15082), (66, 15100), (67, 15106), (69, 15121), (71, 15136), (82, 15196), (91, 15244), (93, 15256), (98, 15280),

Gene: LittleTokyo_17 Start: 12486, Stop: 13334, Start Num: 2

Candidate Starts for LittleTokyo_17:

(Start: 2 @12486 has 87 MA's), (10, 12534), (11, 12540), (19, 12609), (24, 12648), (27, 12666), (28, 12672), (48, 12798), (53, 12843), (59, 12894), (66, 12924), (71, 12960), (80, 13014), (94, 13092), (95, 13098), (104, 13164), (105, 13179), (111, 13221), (120, 13314),

Gene: Lunar_18 Start: 12510, Stop: 13364, Start Num: 2

Candidate Starts for Lunar_18:

(Start: 2 @12510 has 87 MA's), (9, 12552), (10, 12558), (14, 12591), (19, 12636), (25, 12678), (28, 12699), (30, 12708), (34, 12729), (38, 12759), (50, 12831), (51, 12837), (53, 12870), (57, 12900), (59, 12921), (63, 12933), (71, 12987), (73, 12999), (80, 13041), (81, 13044), (83, 13059), (85, 13065), (92, 13110), (94, 13119), (95, 13125), (97, 13134), (98, 13137), (105, 13209), (106, 13221), (110, 13245), (119, 13335),

Gene: MUWow_19 Start: 14877, Stop: 15704, Start Num: 2

Candidate Starts for MUWow_19:

(Start: 2 @14877 has 87 MA's), (9, 14925), (12, 14952), (14, 14964), (15, 14967), (16, 14973), (31, 15081), (33, 15093), (42, 15150), (45, 15174), (51, 15207), (58, 15282), (59, 15288), (63, 15300), (66, 15318), (69, 15339), (77, 15393), (82, 15414), (93, 15474), (97, 15495), (108, 15576),

Gene: Mapleville_19 Start: 14783, Stop: 15610, Start Num: 2

Candidate Starts for Mapleville_19:

(Start: 2 @14783 has 87 MA's), (7, 14807), (9, 14831), (12, 14858), (14, 14870), (15, 14873), (16, 14879), (31, 14987), (33, 14999), (42, 15056), (45, 15080), (51, 15113), (58, 15188), (59, 15194), (63, 15206), (66, 15224), (69, 15245), (77, 15299), (82, 15320), (93, 15380), (97, 15401), (108, 15482),

Gene: MaterMagnus_20 Start: 14785, Stop: 15612, Start Num: 2

Candidate Starts for MaterMagnus_20:

(Start: 2 @14785 has 87 MA's), (12, 14860), (14, 14872), (15, 14875), (16, 14881), (31, 14989), (33, 15001), (42, 15058), (45, 15082), (51, 15115), (58, 15190), (59, 15196), (63, 15208), (66, 15226), (69, 15247), (77, 15301), (82, 15322), (93, 15382), (97, 15403),

Gene: Melons_18 Start: 12510, Stop: 13364, Start Num: 2

Candidate Starts for Melons_18:

(Start: 2 @12510 has 87 MA's), (9, 12552), (10, 12558), (14, 12591), (19, 12636), (25, 12678), (28, 12699), (30, 12708), (34, 12729), (38, 12759), (50, 12831), (51, 12837), (53, 12870), (57, 12900), (59, 12921), (63, 12933), (71, 12987), (73, 12999), (80, 13041), (81, 13044), (83, 13059), (85, 13065), (92, 13110), (94, 13119), (95, 13125), (97, 13134), (98, 13137), (105, 13209), (106, 13221), (110, 13245), (119, 13335),

Gene: MidnightRain_20 Start: 14783, Stop: 15610, Start Num: 2

Candidate Starts for MidnightRain_20:

(Start: 2 @14783 has 87 MA's), (9, 14831), (12, 14858), (15, 14873), (16, 14879), (31, 14987), (33, 14999), (42, 15056), (45, 15080), (51, 15113), (58, 15188), (59, 15194), (63, 15206), (66, 15224), (67, 15230), (69, 15245), (77, 15299), (82, 15320), (93, 15380), (97, 15401), (108, 15482),

Gene: MurphyJoseph_20 Start: 15024, Stop: 15695, Start Num: 23

Candidate Starts for MurphyJoseph_20:

(Start: 2 @14868 has 87 MA's), (4, 14880), (9, 14916), (12, 14943), (16, 14964), (23, 15024), (33, 15084), (42, 15141), (55, 15246), (58, 15273), (63, 15291), (66, 15309), (67, 15315), (69, 15330), (71, 15345), (75, 15369), (77, 15384), (82, 15405), (85, 15423), (93, 15465), (101, 15507), (116, 15615), (117, 15645),

Gene: NewKitty_21 Start: 15014, Stop: 15841, Start Num: 2

Candidate Starts for NewKitty_21:

(Start: 2 @15014 has 87 MA's), (9, 15062), (12, 15089), (15, 15104), (16, 15110), (31, 15218), (33, 15230), (42, 15287), (45, 15311), (51, 15344), (58, 15419), (59, 15425), (63, 15437), (66, 15455), (69, 15476), (77, 15530), (82, 15551), (85, 15569), (93, 15611), (97, 15632), (109, 15716),

Gene: NidoQ_19 Start: 14841, Stop: 15668, Start Num: 2

Candidate Starts for NidoQ_19:

(Start: 2 @14841 has 87 MA's), (7, 14865), (15, 14931), (16, 14937), (33, 15057), (40, 15108), (42, 15114), (45, 15138), (51, 15171), (63, 15264), (66, 15282), (67, 15288), (69, 15303), (71, 15318), (82, 15378), (84, 15393), (93, 15438), (98, 15462), (101, 15480), (108, 15540),

Gene: NikkiHotWheels_19 Start: 14802, Stop: 15629, Start Num: 2

Candidate Starts for NikkiHotWheels_19:

(Start: 2 @14802 has 87 MA's), (7, 14826), (9, 14850), (16, 14898), (33, 15018), (40, 15069), (42, 15075), (45, 15099), (58, 15207), (63, 15225), (66, 15243), (67, 15249), (69, 15264), (71, 15279), (82, 15339), (93, 15399), (98, 15423), (101, 15441),

Gene: Nyilah_19 Start: 14774, Stop: 15601, Start Num: 2

Candidate Starts for Nyilah_19:

(Start: 2 @14774 has 87 MA's), (7, 14798), (9, 14822), (14, 14861), (15, 14864), (16, 14870), (31, 14978), (33, 14990), (42, 15047), (45, 15071), (50, 15098), (52, 15107), (63, 15197), (66, 15215), (69, 15236), (73, 15263), (77, 15290), (91, 15359), (93, 15371), (97, 15392),

Gene: Oppalora_16 Start: 12074, Stop: 12919, Start Num: 2

Candidate Starts for Oppalora_16:

(Start: 2 @12074 has 87 MA's), (9, 12116), (10, 12122), (11, 12128), (16, 12164), (18, 12191), (28, 12260), (31, 12272), (34, 12290), (35, 12293), (42, 12341), (48, 12386), (49, 12389), (53, 12431), (61, 12491), (71, 12548), (73, 12560), (80, 12602), (83, 12620), (92, 12671), (94, 12680), (95, 12686), (96, 12692), (97, 12695), (98, 12698), (105, 12764), (110, 12800), (112, 12812),

Gene: OtsoOtso_17 Start: 12352, Stop: 13206, Start Num: 2

Candidate Starts for OtsoOtso_17:

(Start: 2 @12352 has 87 MA's), (9, 12394), (10, 12400), (14, 12433), (19, 12478), (25, 12520), (28, 12541), (30, 12550), (34, 12571), (38, 12601), (50, 12673), (51, 12679), (53, 12712), (57, 12742), (59, 12763), (63, 12775), (71, 12829), (73, 12841), (80, 12883), (81, 12886), (83, 12901), (85, 12907), (92, 12952), (94, 12961), (95, 12967), (97, 12976), (98, 12979), (105, 13051), (106, 13063), (110, 13087), (119, 13177),

Gene: Peas_19 Start: 14788, Stop: 15615, Start Num: 2

Candidate Starts for Peas_19:

(Start: 2 @14788 has 87 MA's), (7, 14812), (9, 14836), (12, 14863), (15, 14878), (16, 14884), (33, 15004), (40, 15055), (42, 15061), (45, 15085), (58, 15193), (63, 15211), (66, 15229), (67, 15235), (69, 15250), (71, 15265), (82, 15325), (93, 15385), (98, 15409), (101, 15427),

Gene: PeggyLeg03_19 Start: 14827, Stop: 15654, Start Num: 2

Candidate Starts for PeggyLeg03_19:

(Start: 2 @14827 has 87 MA's), (7, 14851), (15, 14917), (16, 14923), (33, 15043), (42, 15100), (45, 15124), (51, 15157), (63, 15250), (66, 15268), (67, 15274), (69, 15289), (71, 15304), (82, 15364), (93, 15424), (98, 15448), (101, 15466), (108, 15526),

Gene: Persistence_19 Start: 14705, Stop: 15532, Start Num: 2

Candidate Starts for Persistence_19:

(Start: 2 @14705 has 87 MA's), (9, 14753), (10, 14759), (12, 14780), (14, 14792), (15, 14795), (16, 14801), (33, 14921), (34, 14927), (42, 14978), (45, 15002), (50, 15029), (52, 15038), (56, 15092), (58, 15110), (59, 15116), (63, 15128), (66, 15146), (69, 15167), (72, 15188), (73, 15194), (77, 15221), (79, 15227), (88, 15272), (89, 15278), (91, 15290), (93, 15302), (94, 15308), (105, 15377),

Gene: PhirstandPhine_18 Start: 12510, Stop: 13364, Start Num: 2

Candidate Starts for PhirstandPhine_18:

(Start: 2 @12510 has 87 MA's), (9, 12552), (10, 12558), (14, 12591), (19, 12636), (25, 12678), (28, 12699), (30, 12708), (34, 12729), (38, 12759), (50, 12831), (51, 12837), (53, 12870), (57, 12900), (59, 12921), (63, 12933), (71, 12987), (73, 12999), (80, 13041), (81, 13044), (83, 13059), (85, 13065), (92, 13110), (94, 13119), (95, 13125), (97, 13134), (98, 13137), (105, 13209), (106, 13221), (110, 13245), (119, 13335),

Gene: PhluffyCoco_16 Start: 12076, Stop: 12921, Start Num: 2

Candidate Starts for PhluffyCoco_16:

(Start: 2 @12076 has 87 MA's), (9, 12118), (10, 12124), (11, 12130), (16, 12166), (18, 12193), (28, 12262), (31, 12274), (34, 12292), (35, 12295), (42, 12343), (48, 12388), (49, 12391), (53, 12433), (61, 12493), (71, 12550), (73, 12562), (80, 12604), (83, 12622), (92, 12673), (94, 12682), (95, 12688), (96, 12694), (97, 12697), (98, 12700), (105, 12766), (110, 12802), (112, 12814),

Gene: Phrank15_19 Start: 14718, Stop: 15545, Start Num: 2

Candidate Starts for Phrank15_19:

(Start: 2 @14718 has 87 MA's), (12, 14793), (14, 14805), (15, 14808), (16, 14814), (31, 14922), (33, 14934), (42, 14991), (45, 15015), (51, 15048), (58, 15123), (59, 15129), (63, 15141), (66, 15159), (67, 15165), (69, 15180), (77, 15234), (82, 15255), (93, 15315), (97, 15336),

Gene: Pineda_18 Start: 12510, Stop: 13364, Start Num: 2

Candidate Starts for Pineda_18:

(Start: 2 @12510 has 87 MA's), (9, 12552), (10, 12558), (14, 12591), (19, 12636), (25, 12678), (28, 12699), (30, 12708), (34, 12729), (38, 12759), (50, 12831), (51, 12837), (53, 12870), (57, 12900), (59, 12921), (63, 12933), (71, 12987), (73, 12999), (80, 13041), (81, 13044), (83, 13059), (85, 13065), (92, 13110), (94, 13119), (95, 13125), (97, 13134), (98, 13137), (105, 13209), (106, 13221), (110, 13245), (119, 13335),

Gene: Polka_17 Start: 12352, Stop: 13206, Start Num: 2

Candidate Starts for Polka_17:

(Start: 2 @12352 has 87 MA's), (9, 12394), (10, 12400), (14, 12433), (19, 12478), (25, 12520), (28, 12541), (30, 12550), (34, 12571), (38, 12601), (50, 12673), (51, 12679), (53, 12712), (57, 12742), (59, 12763), (63, 12775), (71, 12829), (73, 12841), (80, 12883), (81, 12886), (83, 12901), (85, 12907), (92, 12952), (94, 12961), (95, 12967), (97, 12976), (98, 12979), (105, 13051), (106, 13063), (110, 13087), (119, 13177),

Gene: Pucara_19 Start: 14788, Stop: 15615, Start Num: 2

Candidate Starts for Pucara_19:

(Start: 2 @14788 has 87 MA's), (7, 14812), (9, 14836), (16, 14884), (33, 15004), (40, 15055), (42, 15061), (45, 15085), (58, 15193), (63, 15211), (66, 15229), (67, 15235), (69, 15250), (71, 15265), (82, 15325), (93, 15385), (98, 15409), (101, 15427),

Gene: RadFad_20 Start: 14784, Stop: 15611, Start Num: 2

Candidate Starts for RadFad_20:

(Start: 2 @14784 has 87 MA's), (12, 14859), (14, 14871), (15, 14874), (16, 14880), (31, 14988), (33, 15000), (42, 15057), (45, 15081), (51, 15114), (58, 15189), (59, 15195), (63, 15207), (66, 15225), (69, 15246), (77, 15300), (82, 15321), (93, 15381), (97, 15402), (108, 15483),

Gene: Raphaella_20 Start: 14784, Stop: 15611, Start Num: 2

Candidate Starts for Raphaella_20:

(Start: 2 @14784 has 87 MA's), (9, 14832), (12, 14859), (14, 14871), (15, 14874), (16, 14880), (31, 14988), (33, 15000), (42, 15057), (45, 15081), (51, 15114), (58, 15189), (59, 15195), (63, 15207), (66, 15225), (69, 15246), (77, 15300), (82, 15321), (93, 15381), (97, 15402), (108, 15483),

Gene: Rattail_16 Start: 12127, Stop: 12972, Start Num: 2

Candidate Starts for Rattail_16:

(Start: 2 @12127 has 87 MA's), (9, 12169), (10, 12175), (11, 12181), (16, 12217), (18, 12244), (28, 12313), (31, 12325), (34, 12343), (35, 12346), (42, 12394), (48, 12439), (49, 12442), (53, 12484), (61, 12544), (71, 12601), (73, 12613), (80, 12655), (83, 12673), (92, 12724), (94, 12733), (95, 12739), (96, 12745), (97, 12748), (98, 12751), (105, 12817), (110, 12853),

Gene: RedFox_16 Start: 12076, Stop: 12921, Start Num: 2

Candidate Starts for RedFox_16:

(Start: 2 @12076 has 87 MA's), (9, 12118), (10, 12124), (11, 12130), (16, 12166), (18, 12193), (28, 12262), (31, 12274), (34, 12292), (35, 12295), (42, 12343), (48, 12388), (49, 12391), (53, 12433), (61, 12493), (71, 12550), (73, 12562), (80, 12604), (83, 12622), (92, 12673), (94, 12682), (95, 12688), (96, 12694), (97, 12697), (98, 12700), (105, 12766), (110, 12802), (112, 12814),

Gene: Renna12_17 Start: 12417, Stop: 13265, Start Num: 2

Candidate Starts for Renna12_17:

(Start: 2 @12417 has 87 MA's), (10, 12465), (11, 12471), (16, 12507), (18, 12534), (28, 12603), (31, 12615), (34, 12633), (35, 12636), (42, 12684), (48, 12729), (49, 12732), (50, 12735), (51, 12741), (53, 12774), (61, 12834), (71, 12891), (73, 12903), (80, 12945), (83, 12963), (85, 12969), (92, 13014), (94, 13023), (95, 13029), (98, 13041), (103, 13077), (110, 13146), (112, 13158),

Gene: Richie_20 Start: 14799, Stop: 15626, Start Num: 2

Candidate Starts for Richie_20:

(Start: 2 @14799 has 87 MA's), (9, 14847), (12, 14874), (14, 14886), (15, 14889), (16, 14895), (31, 15003), (33, 15015), (42, 15072), (45, 15096), (51, 15129), (58, 15204), (59, 15210), (63, 15222), (66, 15240), (67, 15246), (69, 15261), (77, 15315), (82, 15336), (93, 15396), (97, 15417), (108, 15498),

Gene: Sakai_20 Start: 14793, Stop: 15620, Start Num: 2

Candidate Starts for Sakai_20:

(Start: 2 @14793 has 87 MA's), (9, 14841), (12, 14868), (14, 14880), (15, 14883), (16, 14889), (31, 14997), (33, 15009), (42, 15066), (45, 15090), (51, 15123), (58, 15198), (59, 15204), (63, 15216), (66, 15234), (69, 15255), (77, 15309), (82, 15330), (93, 15390), (97, 15411), (108, 15492),

Gene: Satrap_20 Start: 14705, Stop: 15532, Start Num: 2

Candidate Starts for Satrap_20:

(Start: 2 @14705 has 87 MA's), (7, 14729), (9, 14753), (12, 14780), (14, 14792), (16, 14801), (33, 14921), (39, 14960), (42, 14978), (44, 14999), (45, 15002), (50, 15029), (51, 15035), (58, 15110), (63, 15128), (66, 15146), (67, 15152), (69, 15167), (71, 15182), (80, 15236), (93, 15302), (100, 15338), (101, 15344), (105, 15377), (110, 15413),

Gene: Seahorse_21 Start: 15148, Stop: 15978, Start Num: 2

Candidate Starts for Seahorse_21:

(Start: 2 @15148 has 87 MA's), (9, 15199), (12, 15226), (16, 15247), (23, 15307), (33, 15367), (42, 15424), (58, 15556), (63, 15574), (66, 15592), (67, 15598), (69, 15613), (71, 15628), (75, 15652), (77, 15667), (82, 15688), (85, 15706), (91, 15736), (93, 15748), (101, 15790),

Gene: Shukran_20 Start: 14705, Stop: 15532, Start Num: 2

Candidate Starts for Shukran_20:

(Start: 2 @14705 has 87 MA's), (7, 14729), (9, 14753), (12, 14780), (14, 14792), (16, 14801), (33, 14921), (39, 14960), (42, 14978), (44, 14999), (45, 15002), (50, 15029), (51, 15035), (58, 15110), (63, 15128), (66, 15146), (67, 15152), (69, 15167), (71, 15182), (80, 15236), (93, 15302), (100, 15338), (101, 15344), (105, 15377), (110, 15413),

Gene: SonDevVon_19 Start: 14834, Stop: 15613, Start Num: 9

Candidate Starts for SonDevVon_19:

(Start: 2 @14786 has 87 MA's), (9, 14834), (12, 14861), (15, 14876), (16, 14882), (31, 14990), (33, 15002), (42, 15059), (45, 15083), (51, 15116), (58, 15191), (59, 15197), (63, 15209), (66, 15227), (67, 15233), (69, 15248), (77, 15302), (82, 15323), (93, 15383), (97, 15404), (108, 15485),

Gene: SpicyFrank_20 Start: 14861, Stop: 15688, Start Num: 2

Candidate Starts for SpicyFrank_20:

(Start: 2 @14861 has 87 MA's), (9, 14909), (14, 14948), (15, 14951), (16, 14957), (31, 15065), (33, 15077), (42, 15134), (45, 15158), (51, 15191), (58, 15266), (59, 15272), (63, 15284), (66, 15302), (69, 15323), (77, 15377), (82, 15398), (93, 15458), (101, 15500), (108, 15560), (115, 15605),

Gene: Sporco_21 Start: 14841, Stop: 15668, Start Num: 2

Candidate Starts for Sporco_21:

(Start: 2 @14841 has 87 MA's), (9, 14889), (12, 14916), (14, 14928), (15, 14931), (16, 14937), (31, 15045), (33, 15057), (42, 15114), (45, 15138), (51, 15171), (58, 15246), (59, 15252), (63, 15264), (66, 15282), (69, 15303), (77, 15357), (82, 15378), (93, 15438), (97, 15459), (108, 15540),

Gene: StuartMinion_16 Start: 12108, Stop: 12959, Start Num: 2

Candidate Starts for StuartMinion_16:

(Start: 2 @12108 has 87 MA's), (18, 12231), (27, 12294), (28, 12300), (31, 12312), (34, 12330), (35, 12333), (42, 12381), (48, 12426), (49, 12429), (50, 12432), (51, 12438), (53, 12471), (61, 12531), (65, 12546), (71, 12588), (73, 12600), (80, 12642), (83, 12660), (85, 12666), (92, 12711), (94, 12720), (110, 12840), (112, 12852), (114, 12870),

Gene: TaylorSipt_17 Start: 12499, Stop: 13338, Start Num: 3

Candidate Starts for TaylorSipt_17:

(Start: 3 @12499 has 1 MA's), (11, 12550), (25, 12664), (31, 12697), (37, 12742), (38, 12745), (41, 12763), (42, 12766), (47, 12808), (49, 12814), (59, 12907), (61, 12916), (80, 13027), (92, 13096), (94, 13105), (99, 13129), (111, 13225), (112, 13231), (116, 13258), (120, 13318),

Gene: ThayneTheZag_20 Start: 14951, Stop: 15778, Start Num: 2

Candidate Starts for ThayneTheZag_20:

(Start: 2 @14951 has 87 MA's), (9, 14999), (12, 15026), (14, 15038), (15, 15041), (16, 15047), (33, 15167), (45, 15248), (51, 15281), (52, 15284), (58, 15356), (63, 15374), (66, 15392), (67, 15398), (69, 15413), (80, 15482), (89, 15524), (93, 15548), (100, 15584), (101, 15590), (117, 15728),

Gene: Tiff81_21 Start: 14879, Stop: 15706, Start Num: 2

Candidate Starts for Tiff81_21:

(Start: 2 @14879 has 87 MA's), (7, 14903), (14, 14966), (15, 14969), (16, 14975), (33, 15095), (42, 15152), (45, 15176), (50, 15203), (52, 15212), (58, 15284), (63, 15302), (66, 15320), (69, 15341), (73, 15368), (77, 15395), (93, 15476), (97, 15497), (109, 15581),

Gene: Vopal_21 Start: 14856, Stop: 15683, Start Num: 2

Candidate Starts for Vopal_21:

(Start: 2 @14856 has 87 MA's), (9, 14904), (12, 14931), (14, 14943), (15, 14946), (16, 14952), (31, 15060), (33, 15072), (42, 15129), (45, 15153), (51, 15186), (58, 15261), (59, 15267), (63, 15279), (66, 15297), (69, 15318), (77, 15372), (82, 15393), (93, 15453), (97, 15474), (107, 15543), (108, 15555),

Gene: Vulpecula_17 Start: 13222, Stop: 14061, Start Num: 2

Candidate Starts for Vulpecula_17:

(Start: 2 @13222 has 87 MA's), (Start: 3 @13225 has 1 MA's), (10, 13270), (14, 13303), (25, 13387), (31, 13420), (34, 13438), (37, 13465), (42, 13489), (49, 13537), (51, 13546), (54, 13588), (61, 13639), (70, 13684), (81, 13753), (92, 13819), (95, 13834), (107, 13921), (110, 13942), (111, 13948), (120, 14041),

Gene: WileyE_16 Start: 12557, Stop: 13396, Start Num: 2

Candidate Starts for WileyE_16:

(Start: 2 @12557 has 87 MA's), (Start: 3 @12560 has 1 MA's), (10, 12605), (13, 12632), (14, 12638), (21, 12698), (25, 12722), (27, 12737), (31, 12755), (34, 12773), (37, 12800), (42, 12824), (49, 12872), (51, 12881), (54, 12923), (61, 12974), (70, 13019), (81, 13088), (92, 13154), (95, 13169), (110, 13277), (111, 13283), (120, 13376),

Gene: Windest_21 Start: 14840, Stop: 15667, Start Num: 2

Candidate Starts for Windest_21:

(Start: 2 @14840 has 87 MA's), (9, 14888), (12, 14915), (15, 14930), (16, 14936), (33, 15056), (42, 15113), (45, 15137), (51, 15170), (58, 15245), (59, 15251), (63, 15263), (66, 15281), (67, 15287), (69, 15302), (77, 15356), (82, 15377), (93, 15437), (97, 15458), (108, 15539),

Gene: YoungHarleezy_20 Start: 14797, Stop: 15624, Start Num: 2

Candidate Starts for YoungHarleezy_20:

(Start: 2 @14797 has 87 MA's), (9, 14845), (12, 14872), (14, 14884), (15, 14887), (16, 14893), (31, 15001), (33, 15013), (42, 15070), (45, 15094), (51, 15127), (58, 15202), (59, 15208), (63, 15220), (66, 15238), (69, 15259), (77, 15313), (82, 15334), (93, 15394), (97, 15415), (108, 15496),

Gene: Zhuangyuan_18 Start: 12919, Stop: 13767, Start Num: 2

Candidate Starts for Zhuangyuan_18:

(Start: 2 @12919 has 87 MA's), (9, 12961), (10, 12967), (14, 13000), (15, 13003), (16, 13009), (22, 13066), (25, 13084), (26, 13087), (27, 13099), (31, 13117), (32, 13120), (36, 13159), (38, 13165), (40, 13180), (42, 13186), (44, 13207), (48, 13231), (50, 13237), (51, 13243), (58, 13321), (66, 13357), (71, 13393), (80, 13447), (85, 13471), (86, 13474), (94, 13525), (105, 13612), (110, 13648), (111, 13654),