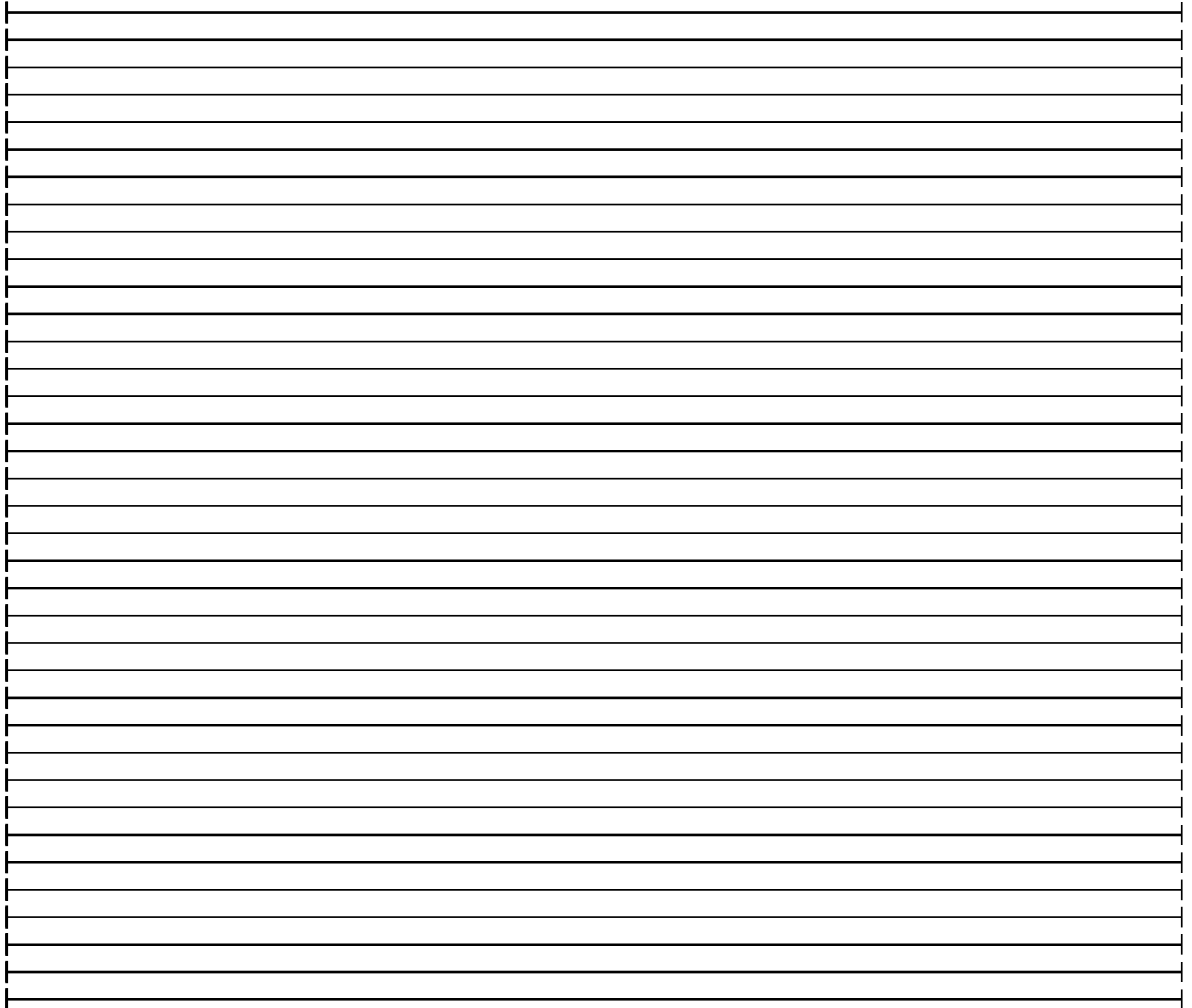
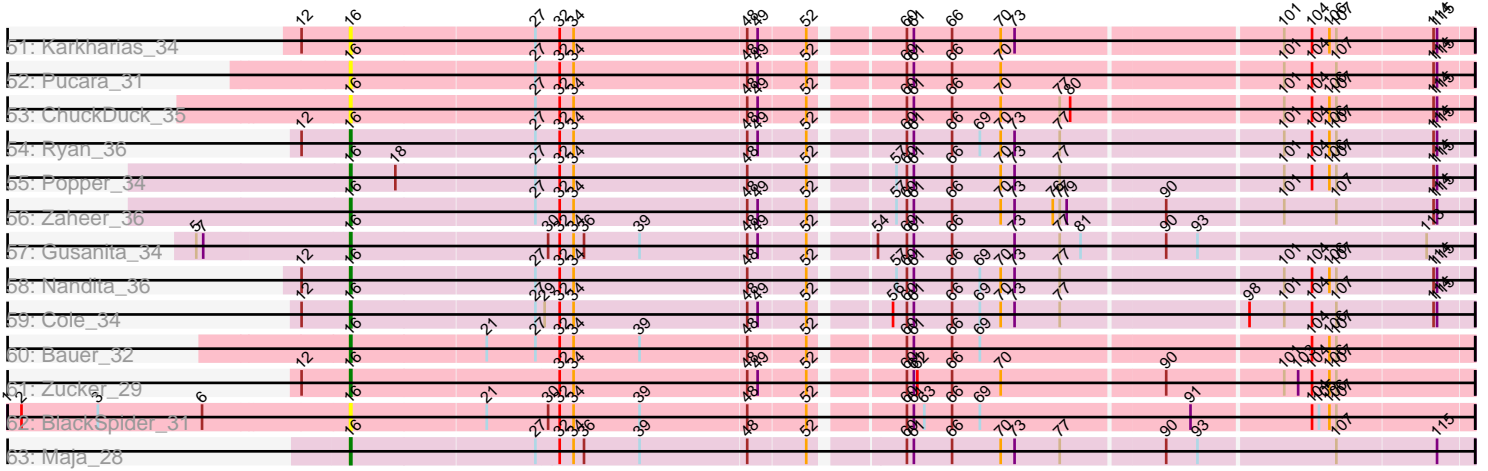


Pham 163529



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 163529 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163529 has 85 members, 17 are drafts.

Phages represented in each track:

- Track 1 : RadFad_36, Hillester_36
- Track 2 : Anekin_35
- Track 3 : Seahorse_38
- Track 4 : MidnightRain_38
- Track 5 : BillyTP_37, Sakai_36, Aikyam_33, CookieBear_37, Auxilium_34, YoungHarleezy_36, Gorpy_37, Raphaella_37
- Track 6 : BenchScraper_36
- Track 7 : Hestia_36
- Track 8 : Isolde_36
- Track 9 : Richie_36
- Track 10 : Sashimi_35
- Track 11 : Tiff81_34
- Track 12 : Globfish_36
- Track 13 : Culver_60
- Track 14 : Pipp_33
- Track 15 : BlingBling_33
- Track 16 : Melba_35
- Track 17 : Utz_31
- Track 18 : Jablanski_34, Pytheas_34
- Track 19 : LonelyBoi_37
- Track 20 : Pollux_37, EMsquaredA_36, Marteena_35
- Track 21 : EnalisNailo_34, Lilas_37
- Track 22 : Bradissa_35
- Track 23 : Confidence_36
- Track 24 : Floral_35
- Track 25 : Bunnybear_32
- Track 26 : Beenie_30, MichaelScott_36
- Track 27 : PhriskyACE_35
- Track 28 : Thimann_34, WinkNick_38, Dolores_37, Samman98_36
- Track 29 : DobbysSock_30, Clark_36, Dorito_32
- Track 30 : Hortense_36, Shlim410_35, Twinkle_35, Howe_36
- Track 31 : Oregano_37
- Track 32 : Annalisa_34
- Track 33 : Mcklovin_34
- Track 34 : Adora_34
- Track 35 : Bunker_34
- Track 36 : Bowser_37

- Track 37 : BBQValindra_35
- Track 38 : Dmitri_36
- Track 39 : Kiko_37
- Track 40 : YungMoney_41
- Track 41 : Bakery_42
- Track 42 : Mutzi_37
- Track 43 : Squiddly_37
- Track 44 : Spooky_35
- Track 45 : Sixama_89
- Track 46 : Malibo_38
- Track 47 : PeggyLeg03_34
- Track 48 : Bridgette_34
- Track 49 : Constance_34, Judy_35
- Track 50 : GlobiWarming_35
- Track 51 : Karkharias_34
- Track 52 : Pucara_31
- Track 53 : ChuckDuck_35
- Track 54 : Ryan_36
- Track 55 : Popper_34
- Track 56 : Zaheer_36
- Track 57 : Gusanita_34
- Track 58 : Nandita_36
- Track 59 : Cole_34
- Track 60 : Bauer_32
- Track 61 : Zucker_29
- Track 62 : BlackSpider_31
- Track 63 : Maja_28

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

The start number called the most often in the published annotations is 16, it was called in 52 of the 68 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Aikyam_33, Anekin_35, Auxilium_34, Bakery_42, Bauer_32, Beenie_30, BenchScraper_36, BillyTP_37, BlackSpider_31, BlingBling_33, Bowser_37, Bradissa_35, Bridgette_34, Bunker_34, ChuckDuck_35, Cole_34, Confidence_36, Constance_34, CookieBear_37, Culver_60, Dmitri_36, Dolores_37, EMsquaredA_36, Globfish_36, GlobiWarming_35, Gorpy_37, Gusanita_34, Hestia_36, Hillester_36, Hortense_36, Howe_36, Isolde_36, Judy_35, Karkharias_34, Kiko_37, LonelyBoi_37, Maja_28, Malibo_38, Marteena_35, Mcklovin_34, MichaelScott_36, MidnightRain_38, Mutzi_37, Nandita_36, Oregano_37, PeggyLeg03_34, PhriskyACE_35, Pollux_37, Popper_34, Pucara_31, RadFad_36, Raphaella_37, Richie_36, Ryan_36, Sakai_36, Samman98_36, Sashimi_35, Seahorse_38, Shlim410_35, Thimann_34, Tiff81_34, Twinkle_35, Utz_31, WinkNick_38, YoungHarleezy_36, YungMoney_41, Zaheer_36, Zucker_29,

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

• Adora_34, Annalisa_34, BBQValindra_35, Bunnybear_32, Clark_36, DobbysSock_30, Dorito_32, EnalisNailo_34, Floral_35, Lilas_37, Melba_35, Pipp_33,

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

- Jablanski_34, Pytheas_34, Sixama_89, Spooky_35, Squiddly_37,

Summary by start number:

Start 15:

- Found in 46 of 85 (54.1%) of genes in pham
- Manual Annotations of this start: 15 of 68
- Called 34.8% of time when present
- Phage (with cluster) where this start called: Adora_34 (CZ4), Annalisa_34 (CZ4), BBQValindra_35 (DB), Bunnybear_32 (CZ), Clark_36 (CZ4), DobbysSock_30 (CZ4), Dorito_32 (CZ4), EnalisNailo_34 (CY1), Floral_35 (CY1), Jablanski_34 (CY), Lilas_37 (CY1), Melba_35 (CV), Pipp_33 (CV), Pytheas_34 (CY), Spooky_35 (DN2), Squiddly_37 (DN2),

Start 16:

- Found in 80 of 85 (94.1%) of genes in pham
- Manual Annotations of this start: 52 of 68
- Called 85.0% of time when present
- Phage (with cluster) where this start called: Aikyam_33 (AY), Anekin_35 (AY), Auxilium_34 (AY), Bakery_42 (DC1), Bauer_32 (FN), Beenie_30 (CZ4), BenchScraper_36 (AY), BillyTP_37 (AY), BlackSpider_31 (FN), BlingBling_33 (CV), Bowser_37 (DB), Bradissa_35 (CY1), Bridgette_34 (FA), Bunker_34 (DB), ChuckDuck_35 (FA), Cole_34 (FF), Confidence_36 (CY1), Constance_34 (FA), CookieBear_37 (AY), Culver_60 (CQ1), Dmitri_36 (DB), Dolores_37 (CZ4), EMSquaredA_36 (CY1), Globfish_36 (AY), GlobiWarming_35 (FA), Gorpy_37 (AY), Gusanita_34 (FF), Hestia_36 (AY), Hillester_36 (AY), Hortense_36 (CZ4), Howe_36 (CZ4), Isolde_36 (AY), Judy_35 (FA), Karkharias_34 (FA), Kiko_37 (DB), LonelyBoi_37 (CY), Maja_28 (FO), Malibo_38 (DW), Marteena_35 (CY1), Mcklovin_34 (CZ4), MichaelScott_36 (CZ4), MidnightRain_38 (AY), Mutzi_37 (DC1), Nandita_36 (FF), Oregano_37 (CZ4), PeggyLeg03_34 (FA), PhriskyACE_35 (CZ4), Pollux_37 (CY1), Popper_34 (FF), Pucara_31 (FA), RadFad_36 (AY), Raphaella_37 (AY), Richie_36 (AY), Ryan_36 (FF), Sakai_36 (AY), Samman98_36 (CZ4), Sashimi_35 (AY), Seahorse_38 (AY), Shlim410_35 (CZ4), Thimann_34 (CZ4), Tiff81_34 (AY), Twinkle_35 (CZ4), Utz_31 (CV), WinkNick_38 (CZ4), YoungHarleezy_36 (AY), YungMoney_41 (DC1), Zaheer_36 (FF), Zucker_29 (FN),

Start 17:

- Found in 14 of 85 (16.5%) of genes in pham
- Manual Annotations of this start: 1 of 68
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Sixama_89 (DS),

Summary by clusters:

There are 16 clusters represented in this pham: CY1, FA, DB, CZ4, DS, CZ, CY, FF, DN2, AY, DW, CQ1, FO, CV, FN, DC1,

Info for manual annotations of cluster AY:

- Start number 16 was manually annotated 9 times for cluster AY.

Info for manual annotations of cluster CQ1:

- Start number 16 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CV:

- Start number 15 was manually annotated 2 times for cluster CV.
- Start number 16 was manually annotated 2 times for cluster CV.

Info for manual annotations of cluster CY:

- Start number 15 was manually annotated 2 times for cluster CY.
- Start number 16 was manually annotated 1 time for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 15 was manually annotated 3 times for cluster CY1.
- Start number 16 was manually annotated 5 times for cluster CY1.

Info for manual annotations of cluster CZ:

- Start number 15 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ4:

- Start number 15 was manually annotated 4 times for cluster CZ4.
- Start number 16 was manually annotated 12 times for cluster CZ4.

Info for manual annotations of cluster DB:

- Start number 15 was manually annotated 1 time for cluster DB.
- Start number 16 was manually annotated 4 times for cluster DB.

Info for manual annotations of cluster DC1:

- Start number 16 was manually annotated 3 times for cluster DC1.

Info for manual annotations of cluster DN2:

- Start number 15 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DS:

- Start number 17 was manually annotated 1 time for cluster DS.

Info for manual annotations of cluster DW:

- Start number 16 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster FA:

- Start number 16 was manually annotated 5 times for cluster FA.

Info for manual annotations of cluster FF:

- Start number 16 was manually annotated 6 times for cluster FF.

Info for manual annotations of cluster FN:

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

Info for manual annotations of cluster FO:

- Start number 16 was manually annotated 1 time for cluster FO.

Gene Information:

Gene: Adora_34 Start: 29404, Stop: 30327, Start Num: 15

Candidate Starts for Adora_34:

(Start: 15 @29404 has 15 MA's), (Start: 16 @29410 has 52 MA's), (36, 29599), (37, 29605), (44, 29707), (47, 29731), (53, 29791), (58, 29848), (60, 29854), (61, 29860), (75, 29974), (76, 29980), (79, 29992), (90, 30067), (92, 30091), (93, 30094), (97, 30130), (98, 30136), (102, 30169), (106, 30205), (110, 30250),

Gene: Aikyam_33 Start: 22410, Stop: 23327, Start Num: 16

Candidate Starts for Aikyam_33:

(5, 22281), (7, 22287), (Start: 16 @22410 has 52 MA's), (27, 22566), (31, 22581), (34, 22593), (48, 22740), (49, 22749), (52, 22788), (54, 22833), (60, 22857), (61, 22863), (66, 22896), (70, 22938), (72, 22947), (77, 22989), (90, 23073), (104, 23193), (106, 23208),

Gene: Anekin_35 Start: 24275, Stop: 25195, Start Num: 16

Candidate Starts for Anekin_35:

(5, 24146), (10, 24173), (12, 24233), (Start: 16 @24275 has 52 MA's), (21, 24389), (25, 24404), (27, 24431), (32, 24449), (39, 24518), (48, 24608), (49, 24617), (52, 24656), (60, 24725), (61, 24731), (66, 24764), (70, 24806), (72, 24815),

Gene: Annalisa_34 Start: 27176, Stop: 28099, Start Num: 15

Candidate Starts for Annalisa_34:

(Start: 15 @27176 has 15 MA's), (Start: 16 @27182 has 52 MA's), (36, 27371), (37, 27377), (44, 27479), (47, 27503), (53, 27563), (58, 27620), (60, 27626), (61, 27632), (75, 27746), (76, 27752), (79, 27764), (90, 27839), (92, 27863), (93, 27866), (97, 27902), (98, 27908), (99, 27920), (110, 28022),

Gene: Auxilium_34 Start: 22112, Stop: 23029, Start Num: 16

Candidate Starts for Auxilium_34:

(5, 21983), (7, 21989), (Start: 16 @22112 has 52 MA's), (27, 22268), (31, 22283), (34, 22295), (48, 22442), (49, 22451), (52, 22490), (54, 22535), (60, 22559), (61, 22565), (66, 22598), (70, 22640), (72, 22649), (77, 22691), (90, 22775), (104, 22895), (106, 22910),

Gene: BBQValindra_35 Start: 29573, Stop: 30496, Start Num: 15

Candidate Starts for BBQValindra_35:

(Start: 15 @29573 has 15 MA's), (Start: 16 @29579 has 52 MA's), (36, 29768), (37, 29774), (47, 29900), (51, 29945), (53, 29960), (60, 30023), (64, 30044), (76, 30149), (79, 30161), (87, 30215), (90, 30236), (93, 30263), (111, 30440), (115, 30467),

Gene: Bakery_42 Start: 33465, Stop: 34382, Start Num: 16

Candidate Starts for Bakery_42:

(Start: 15 @33459 has 15 MA's), (Start: 16 @33465 has 52 MA's), (23, 33582), (24, 33585), (35, 33648), (36, 33654), (37, 33660), (53, 33846), (57, 33900), (58, 33903), (60, 33909), (64, 33930), (75, 34029), (76, 34035), (79, 34047), (90, 34122), (93, 34149), (101, 34221), (106, 34260), (116, 34374),

Gene: Bauer_32 Start: 24145, Stop: 25065, Start Num: 16

Candidate Starts for Bauer_32:

(Start: 16 @24145 has 52 MA's), (21, 24259), (27, 24301), (32, 24319), (34, 24331), (39, 24388), (48, 24478), (52, 24526), (60, 24595), (61, 24601), (66, 24634), (69, 24658), (104, 24931), (106, 24946), (107, 24952),

Gene: Beenie_30 Start: 27395, Stop: 28312, Start Num: 16

Candidate Starts for Beenie_30:

(Start: 15 @27389 has 15 MA's), (Start: 16 @27395 has 52 MA's), (36, 27584), (37, 27590), (44, 27692), (47, 27716), (53, 27776), (58, 27833), (60, 27839), (61, 27845), (75, 27959), (76, 27965), (79,

27977), (90, 28052), (92, 28076), (93, 28079), (97, 28115), (98, 28121), (102, 28154), (110, 28235),

Gene: BenchScraper_36 Start: 24587, Stop: 25504, Start Num: 16

Candidate Starts for BenchScraper_36:

(5, 24458), (7, 24464), (Start: 16 @24587 has 52 MA's), (27, 24743), (31, 24758), (34, 24770), (48, 24917), (52, 24965), (54, 25010), (60, 25034), (61, 25040), (66, 25073), (72, 25124), (90, 25250), (93, 25277), (104, 25370), (115, 25475),

Gene: BillyTP_37 Start: 25308, Stop: 26225, Start Num: 16

Candidate Starts for BillyTP_37:

(5, 25179), (7, 25185), (Start: 16 @25308 has 52 MA's), (27, 25464), (31, 25479), (34, 25491), (48, 25638), (49, 25647), (52, 25686), (54, 25731), (60, 25755), (61, 25761), (66, 25794), (70, 25836), (72, 25845), (77, 25887), (90, 25971), (104, 26091), (106, 26106),

Gene: BlackSpider_31 Start: 24033, Stop: 24953, Start Num: 16

Candidate Starts for BlackSpider_31:

(1, 23742), (2, 23754), (3, 23820), (6, 23910), (Start: 16 @24033 has 52 MA's), (21, 24147), (30, 24198), (32, 24207), (34, 24219), (39, 24276), (48, 24366), (52, 24414), (60, 24483), (61, 24489), (63, 24498), (66, 24522), (69, 24546), (91, 24720), (104, 24819), (105, 24825), (106, 24834), (107, 24840),

Gene: BlingBling_33 Start: 29081, Stop: 30001, Start Num: 16

Candidate Starts for BlingBling_33:

(Start: 15 @29075 has 15 MA's), (Start: 16 @29081 has 52 MA's), (23, 29198), (24, 29201), (35, 29264), (36, 29270), (37, 29276), (53, 29462), (57, 29516), (58, 29519), (60, 29525), (64, 29546), (75, 29645), (76, 29651), (79, 29663), (90, 29738), (93, 29765), (97, 29801), (106, 29876),

Gene: Bowser_37 Start: 29401, Stop: 30318, Start Num: 16

Candidate Starts for Bowser_37:

(Start: 15 @29395 has 15 MA's), (Start: 16 @29401 has 52 MA's), (Start: 17 @29425 has 1 MA's), (24, 29521), (36, 29590), (37, 29596), (44, 29698), (46, 29719), (53, 29782), (57, 29836), (60, 29845), (64, 29866), (65, 29875), (68, 29905), (87, 30037), (90, 30058), (92, 30082), (93, 30085), (97, 30121), (100, 30142),

Gene: Bradissa_35 Start: 30283, Stop: 31200, Start Num: 16

Candidate Starts for Bradissa_35:

(Start: 15 @30277 has 15 MA's), (Start: 16 @30283 has 52 MA's), (Start: 17 @30307 has 1 MA's), (24, 30403), (37, 30478), (41, 30550), (46, 30601), (53, 30664), (57, 30718), (60, 30727), (64, 30748), (65, 30757), (68, 30787), (76, 30853), (87, 30919), (90, 30940), (93, 30967), (97, 31003),

Gene: Bridgette_34 Start: 24627, Stop: 25547, Start Num: 16

Candidate Starts for Bridgette_34:

(5, 24498), (7, 24504), (Start: 16 @24627 has 52 MA's), (27, 24783), (32, 24801), (34, 24813), (48, 24960), (49, 24969), (52, 25008), (60, 25077), (61, 25083), (66, 25116), (70, 25158), (73, 25170), (101, 25389), (104, 25413), (106, 25428), (107, 25434), (114, 25515), (115, 25518),

Gene: Bunker_34 Start: 28706, Stop: 29623, Start Num: 16

Candidate Starts for Bunker_34:

(Start: 15 @28700 has 15 MA's), (Start: 16 @28706 has 52 MA's), (36, 28895), (37, 28901), (44, 29003), (53, 29087), (58, 29144), (60, 29150), (61, 29156), (64, 29171), (76, 29276), (79, 29288), (90, 29363), (93, 29390),

Gene: Bunnybear_32 Start: 28492, Stop: 29415, Start Num: 15

Candidate Starts for Bunnybear_32:

(Start: 15 @28492 has 15 MA's), (Start: 16 @28498 has 52 MA's), (Start: 17 @28522 has 1 MA's), (24, 28618), (36, 28687), (37, 28693), (44, 28795), (46, 28816), (53, 28879), (57, 28933), (60, 28942), (64, 28963), (65, 28972), (68, 29002), (76, 29068), (81, 29092), (87, 29134), (90, 29155), (93, 29182), (97, 29218), (98, 29224),

Gene: ChuckDuck_35 Start: 24394, Stop: 25314, Start Num: 16

Candidate Starts for ChuckDuck_35:

(Start: 16 @24394 has 52 MA's), (27, 24550), (32, 24568), (34, 24580), (48, 24727), (49, 24736), (52, 24775), (60, 24844), (61, 24850), (66, 24883), (70, 24925), (77, 24976), (80, 24985), (101, 25156), (104, 25180), (106, 25195), (107, 25201), (114, 25282), (115, 25285),

Gene: Clark_36 Start: 27206, Stop: 28129, Start Num: 15

Candidate Starts for Clark_36:

(Start: 15 @27206 has 15 MA's), (Start: 16 @27212 has 52 MA's), (36, 27401), (37, 27407), (44, 27509), (47, 27533), (53, 27593), (58, 27650), (60, 27656), (61, 27662), (75, 27776), (76, 27782), (79, 27794), (90, 27869), (92, 27893), (93, 27896), (97, 27932), (98, 27938), (102, 27971), (110, 28052),

Gene: Cole_34 Start: 26120, Stop: 27040, Start Num: 16

Candidate Starts for Cole_34:

(12, 26078), (Start: 16 @26120 has 52 MA's), (27, 26276), (29, 26282), (32, 26294), (34, 26306), (48, 26453), (49, 26462), (52, 26501), (56, 26558), (60, 26570), (61, 26576), (66, 26609), (69, 26633), (70, 26651), (73, 26663), (77, 26702), (98, 26852), (101, 26882), (104, 26906), (107, 26927), (114, 27008), (115, 27011),

Gene: Confidence_36 Start: 28133, Stop: 29050, Start Num: 16

Candidate Starts for Confidence_36:

(Start: 15 @28127 has 15 MA's), (Start: 16 @28133 has 52 MA's), (Start: 17 @28157 has 1 MA's), (24, 28253), (36, 28322), (37, 28328), (46, 28451), (53, 28514), (57, 28568), (60, 28577), (64, 28598), (65, 28607), (68, 28637), (90, 28790), (93, 28817), (97, 28853),

Gene: Constance_34 Start: 24866, Stop: 25786, Start Num: 16

Candidate Starts for Constance_34:

(Start: 16 @24866 has 52 MA's), (27, 25022), (32, 25040), (34, 25052), (48, 25199), (49, 25208), (52, 25247), (60, 25316), (61, 25322), (66, 25355), (70, 25397), (77, 25448), (101, 25628), (104, 25652), (106, 25667), (107, 25673), (114, 25754), (115, 25757),

Gene: CookieBear_37 Start: 24572, Stop: 25489, Start Num: 16

Candidate Starts for CookieBear_37:

(5, 24443), (7, 24449), (Start: 16 @24572 has 52 MA's), (27, 24728), (31, 24743), (34, 24755), (48, 24902), (49, 24911), (52, 24950), (54, 24995), (60, 25019), (61, 25025), (66, 25058), (70, 25100), (72, 25109), (77, 25151), (90, 25235), (104, 25355), (106, 25370),

Gene: Culver_60 Start: 37716, Stop: 38639, Start Num: 16

Candidate Starts for Culver_60:

(Start: 15 @37710 has 15 MA's), (Start: 16 @37716 has 52 MA's), (Start: 17 @37746 has 1 MA's), (22, 37836), (34, 37902), (36, 37911), (37, 37917), (40, 37980), (44, 38019), (51, 38088), (55, 38142), (58, 38160), (59, 38163), (60, 38166), (64, 38187), (73, 38259), (74, 38283), (75, 38286), (76, 38292), (79, 38304), (84, 38352), (86, 38355), (90, 38379), (92, 38403), (97, 38442), (106, 38517), (109, 38556),

Gene: Dmitri_36 Start: 30429, Stop: 31346, Start Num: 16

Candidate Starts for Dmitri_36:

(Start: 15 @30423 has 15 MA's), (Start: 16 @30429 has 52 MA's), (Start: 17 @30453 has 1 MA's), (24, 30549), (36, 30618), (37, 30624), (46, 30747), (53, 30810), (57, 30864), (60, 30873), (64, 30894), (65, 30903), (68, 30933), (90, 31086), (93, 31113), (97, 31149), (98, 31155), (114, 31314),

Gene: DobbysSock_30 Start: 26128, Stop: 27051, Start Num: 15

Candidate Starts for DobbysSock_30:

(Start: 15 @26128 has 15 MA's), (Start: 16 @26134 has 52 MA's), (36, 26323), (37, 26329), (44, 26431), (47, 26455), (53, 26515), (58, 26572), (60, 26578), (61, 26584), (75, 26698), (76, 26704), (79, 26716), (90, 26791), (92, 26815), (93, 26818), (97, 26854), (98, 26860), (102, 26893), (110, 26974),

Gene: Dolores_37 Start: 28084, Stop: 29001, Start Num: 16

Candidate Starts for Dolores_37:

(Start: 15 @28078 has 15 MA's), (Start: 16 @28084 has 52 MA's), (36, 28273), (37, 28279), (44, 28381), (47, 28405), (53, 28465), (58, 28522), (60, 28528), (61, 28534), (75, 28648), (76, 28654), (79, 28666), (90, 28741), (92, 28765), (93, 28768), (97, 28804), (98, 28810), (99, 28822), (110, 28924),

Gene: Dorito_32 Start: 25772, Stop: 26695, Start Num: 15

Candidate Starts for Dorito_32:

(Start: 15 @25772 has 15 MA's), (Start: 16 @25778 has 52 MA's), (36, 25967), (37, 25973), (44, 26075), (47, 26099), (53, 26159), (58, 26216), (60, 26222), (61, 26228), (75, 26342), (76, 26348), (79, 26360), (90, 26435), (92, 26459), (93, 26462), (97, 26498), (98, 26504), (102, 26537), (110, 26618),

Gene: EMSquaredA_36 Start: 28837, Stop: 29754, Start Num: 16

Candidate Starts for EMSquaredA_36:

(Start: 15 @28831 has 15 MA's), (Start: 16 @28837 has 52 MA's), (Start: 17 @28861 has 1 MA's), (24, 28957), (36, 29026), (37, 29032), (46, 29155), (53, 29218), (57, 29272), (60, 29281), (64, 29302), (65, 29311), (68, 29341), (71, 29365), (87, 29473), (90, 29494), (93, 29521),

Gene: EnalisNailo_34 Start: 29811, Stop: 30734, Start Num: 15

Candidate Starts for EnalisNailo_34:

(Start: 15 @29811 has 15 MA's), (Start: 16 @29817 has 52 MA's), (Start: 17 @29841 has 1 MA's), (24, 29937), (37, 30012), (41, 30084), (46, 30135), (53, 30198), (57, 30252), (60, 30261), (64, 30282), (65, 30291), (68, 30321), (76, 30387), (87, 30453), (90, 30474), (93, 30501), (97, 30537),

Gene: Floral_35 Start: 30904, Stop: 31827, Start Num: 15

Candidate Starts for Floral_35:

(Start: 15 @30904 has 15 MA's), (Start: 16 @30910 has 52 MA's), (Start: 17 @30934 has 1 MA's), (24, 31030), (36, 31099), (37, 31105), (46, 31228), (53, 31291), (57, 31345), (60, 31354), (64, 31375), (65, 31384), (68, 31414), (71, 31438), (87, 31546), (90, 31567), (93, 31594),

Gene: Globfish_36 Start: 24809, Stop: 25729, Start Num: 16

Candidate Starts for Globfish_36:

(12, 24767), (14, 24791), (Start: 16 @24809 has 52 MA's), (32, 24983), (34, 24995), (48, 25142), (49, 25151), (52, 25190), (54, 25235), (60, 25259), (61, 25265), (66, 25298), (70, 25340), (72, 25349), (73, 25352), (79, 25397), (90, 25475), (104, 25595), (106, 25610), (115, 25700),

Gene: GlobiWarming_35 Start: 24310, Stop: 25230, Start Num: 16

Candidate Starts for GlobiWarming_35:

(5, 24181), (7, 24187), (Start: 16 @24310 has 52 MA's), (27, 24466), (32, 24484), (34, 24496), (48, 24643), (49, 24652), (52, 24691), (60, 24760), (61, 24766), (66, 24799), (70, 24841), (101, 25072), (104, 25096), (106, 25111), (107, 25117), (114, 25198), (115, 25201),

Gene: Gorpy_37 Start: 25804, Stop: 26721, Start Num: 16

Candidate Starts for Gorpy_37:

(5, 25675), (7, 25681), (Start: 16 @25804 has 52 MA's), (27, 25960), (31, 25975), (34, 25987), (48, 26134), (49, 26143), (52, 26182), (54, 26227), (60, 26251), (61, 26257), (66, 26290), (70, 26332), (72, 26341), (77, 26383), (90, 26467), (104, 26587), (106, 26602),

Gene: Gusanita_34 Start: 26041, Stop: 26961, Start Num: 16

Candidate Starts for Gusanita_34:

(5, 25912), (7, 25918), (Start: 16 @26041 has 52 MA's), (30, 26206), (32, 26215), (34, 26227), (36, 26236), (39, 26284), (48, 26374), (49, 26383), (52, 26422), (54, 26467), (60, 26491), (61, 26497), (66, 26530), (73, 26584), (77, 26623), (81, 26641), (90, 26707), (93, 26734), (113, 26923),

Gene: Hestia_36 Start: 24611, Stop: 25531, Start Num: 16

Candidate Starts for Hestia_36:

(5, 24482), (7, 24488), (Start: 16 @24611 has 52 MA's), (32, 24785), (34, 24797), (48, 24944), (52, 24992), (60, 25061), (61, 25067), (77, 25193), (90, 25277), (101, 25373), (104, 25397), (106, 25412), (107, 25418), (114, 25499),

Gene: Hillester_36 Start: 24572, Stop: 25492, Start Num: 16

Candidate Starts for Hillester_36:

(5, 24443), (10, 24470), (Start: 16 @24572 has 52 MA's), (21, 24686), (32, 24746), (34, 24758), (39, 24815), (48, 24905), (52, 24953), (60, 25022), (61, 25028), (66, 25061), (69, 25085), (104, 25358), (106, 25373), (107, 25379),

Gene: Hortense_36 Start: 30765, Stop: 31682, Start Num: 16

Candidate Starts for Hortense_36:

(Start: 15 @30759 has 15 MA's), (Start: 16 @30765 has 52 MA's), (34, 30945), (36, 30954), (37, 30960), (51, 31131), (53, 31146), (58, 31203), (60, 31209), (61, 31215), (64, 31230), (75, 31329), (76, 31335), (79, 31347), (90, 31422), (92, 31446), (93, 31449), (97, 31485), (98, 31491), (99, 31503), (110, 31605),

Gene: Howe_36 Start: 30765, Stop: 31682, Start Num: 16

Candidate Starts for Howe_36:

(Start: 15 @30759 has 15 MA's), (Start: 16 @30765 has 52 MA's), (34, 30945), (36, 30954), (37, 30960), (51, 31131), (53, 31146), (58, 31203), (60, 31209), (61, 31215), (64, 31230), (75, 31329), (76, 31335), (79, 31347), (90, 31422), (92, 31446), (93, 31449), (97, 31485), (98, 31491), (99, 31503), (110, 31605),

Gene: Isolde_36 Start: 24341, Stop: 25258, Start Num: 16

Candidate Starts for Isolde_36:

(5, 24212), (7, 24218), (Start: 16 @24341 has 52 MA's), (31, 24512), (34, 24524), (48, 24671), (52, 24719), (54, 24764), (60, 24788), (61, 24794), (66, 24827), (70, 24869), (72, 24878), (79, 24926), (90, 25004), (93, 25031), (106, 25139), (115, 25229),

Gene: Jablanski_34 Start: 28854, Stop: 29789, Start Num: 15

Candidate Starts for Jablanski_34:

(11, 28800), (Start: 15 @28854 has 15 MA's), (24, 28986), (39, 29103), (44, 29163), (45, 29166), (47, 29187), (56, 29298), (60, 29310), (70, 29391), (78, 29445), (80, 29451), (83, 29469), (90, 29529), (92, 29553), (93, 29556), (97, 29592), (98, 29598), (108, 29676), (112, 29736),

Gene: Judy_35 Start: 24877, Stop: 25797, Start Num: 16

Candidate Starts for Judy_35:

(Start: 16 @24877 has 52 MA's), (27, 25033), (32, 25051), (34, 25063), (48, 25210), (49, 25219), (52, 25258), (60, 25327), (61, 25333), (66, 25366), (70, 25408), (77, 25459), (101, 25639), (104, 25663),

(106, 25678), (107, 25684), (114, 25765), (115, 25768),

Gene: Karkharias_34 Start: 24280, Stop: 25200, Start Num: 16

Candidate Starts for Karkharias_34:

(12, 24238), (Start: 16 @24280 has 52 MA's), (27, 24436), (32, 24454), (34, 24466), (48, 24613), (49, 24622), (52, 24661), (60, 24730), (61, 24736), (66, 24769), (70, 24811), (73, 24823), (101, 25042), (104, 25066), (106, 25081), (107, 25087), (114, 25168), (115, 25171),

Gene: Kiko_37 Start: 28964, Stop: 29881, Start Num: 16

Candidate Starts for Kiko_37:

(Start: 15 @28958 has 15 MA's), (Start: 16 @28964 has 52 MA's), (35, 29147), (36, 29153), (37, 29159), (53, 29345), (60, 29408), (61, 29414), (64, 29429), (75, 29528), (76, 29534), (79, 29546), (90, 29621), (92, 29645), (93, 29648), (101, 29720), (102, 29723), (106, 29759),

Gene: Lilas_37 Start: 31522, Stop: 32445, Start Num: 15

Candidate Starts for Lilas_37:

(Start: 15 @31522 has 15 MA's), (Start: 16 @31528 has 52 MA's), (Start: 17 @31552 has 1 MA's), (24, 31648), (37, 31723), (41, 31795), (46, 31846), (53, 31909), (57, 31963), (60, 31972), (64, 31993), (65, 32002), (68, 32032), (76, 32098), (87, 32164), (90, 32185), (93, 32212), (97, 32248),

Gene: LonelyBoi_37 Start: 31310, Stop: 32227, Start Num: 16

Candidate Starts for LonelyBoi_37:

(Start: 15 @31304 has 15 MA's), (Start: 16 @31310 has 52 MA's), (Start: 17 @31334 has 1 MA's), (24, 31430), (37, 31505), (44, 31607), (46, 31628), (53, 31691), (57, 31745), (60, 31754), (64, 31775), (65, 31784), (68, 31814), (76, 31880), (81, 31904), (87, 31946), (90, 31967), (93, 31994), (97, 32030), (98, 32036),

Gene: Maja_28 Start: 23177, Stop: 24097, Start Num: 16

Candidate Starts for Maja_28:

(Start: 16 @23177 has 52 MA's), (27, 23333), (32, 23351), (34, 23363), (36, 23372), (39, 23420), (48, 23510), (52, 23558), (60, 23627), (61, 23633), (66, 23666), (70, 23708), (73, 23720), (77, 23759), (90, 23843), (93, 23870), (107, 23984), (115, 24068),

Gene: Malibo_38 Start: 29560, Stop: 30477, Start Num: 16

Candidate Starts for Malibo_38:

(Start: 15 @29554 has 15 MA's), (Start: 16 @29560 has 52 MA's), (24, 29680), (36, 29749), (37, 29755), (41, 29827), (44, 29857), (46, 29878), (53, 29941), (60, 30004), (64, 30025), (65, 30034), (68, 30064), (71, 30088), (90, 30217), (93, 30244), (97, 30280),

Gene: Marteena_35 Start: 28837, Stop: 29754, Start Num: 16

Candidate Starts for Marteena_35:

(Start: 15 @28831 has 15 MA's), (Start: 16 @28837 has 52 MA's), (Start: 17 @28861 has 1 MA's), (24, 28957), (36, 29026), (37, 29032), (46, 29155), (53, 29218), (57, 29272), (60, 29281), (64, 29302), (65, 29311), (68, 29341), (71, 29365), (87, 29473), (90, 29494), (93, 29521),

Gene: Mcklovin_34 Start: 32550, Stop: 33467, Start Num: 16

Candidate Starts for Mcklovin_34:

(Start: 15 @32544 has 15 MA's), (Start: 16 @32550 has 52 MA's), (36, 32739), (37, 32745), (44, 32847), (47, 32871), (53, 32931), (58, 32988), (60, 32994), (61, 33000), (75, 33114), (76, 33120), (79, 33132), (90, 33207), (92, 33231), (93, 33234), (97, 33270), (98, 33276), (102, 33309), (106, 33345), (110, 33390),

Gene: Melba_35 Start: 28919, Stop: 29845, Start Num: 15

Candidate Starts for Melba_35:

(Start: 15 @28919 has 15 MA's), (Start: 16 @28925 has 52 MA's), (23, 29042), (24, 29045), (35, 29108), (36, 29114), (37, 29120), (53, 29306), (57, 29360), (58, 29363), (60, 29369), (64, 29390), (75, 29489), (76, 29495), (79, 29507), (90, 29582), (93, 29609), (97, 29645), (106, 29720),

Gene: MichaelScott_36 Start: 28688, Stop: 29605, Start Num: 16

Candidate Starts for MichaelScott_36:

(Start: 15 @28682 has 15 MA's), (Start: 16 @28688 has 52 MA's), (36, 28877), (37, 28883), (44, 28985), (47, 29009), (53, 29069), (58, 29126), (60, 29132), (61, 29138), (75, 29252), (76, 29258), (79, 29270), (90, 29345), (92, 29369), (93, 29372), (97, 29408), (98, 29414), (102, 29447), (110, 29528),

Gene: MidnightRain_38 Start: 25380, Stop: 26300, Start Num: 16

Candidate Starts for MidnightRain_38:

(5, 25251), (7, 25257), (Start: 16 @25380 has 52 MA's), (21, 25494), (32, 25554), (34, 25566), (48, 25713), (52, 25761), (54, 25806), (60, 25830), (61, 25836), (63, 25845), (66, 25869), (70, 25911), (73, 25923), (77, 25962), (81, 25980), (90, 26046), (104, 26166), (106, 26181),

Gene: Mutzi_37 Start: 33648, Stop: 34565, Start Num: 16

Candidate Starts for Mutzi_37:

(Start: 15 @33642 has 15 MA's), (Start: 16 @33648 has 52 MA's), (24, 33768), (36, 33837), (37, 33843), (38, 33852), (44, 33945), (56, 34080), (57, 34083), (58, 34086), (60, 34092), (64, 34113), (71, 34176), (74, 34209), (75, 34212), (79, 34230), (87, 34284), (90, 34305), (92, 34329), (93, 34332), (97, 34368), (98, 34374), (100, 34389), (106, 34443), (115, 34536), (116, 34557),

Gene: Nandita_36 Start: 26292, Stop: 27212, Start Num: 16

Candidate Starts for Nandita_36:

(12, 26250), (Start: 16 @26292 has 52 MA's), (27, 26448), (32, 26466), (34, 26478), (48, 26625), (52, 26673), (57, 26733), (60, 26742), (61, 26748), (66, 26781), (69, 26805), (70, 26823), (73, 26835), (77, 26874), (101, 27054), (104, 27078), (106, 27093), (107, 27099), (114, 27180), (115, 27183),

Gene: Oregano_37 Start: 27817, Stop: 28734, Start Num: 16

Candidate Starts for Oregano_37:

(Start: 15 @27811 has 15 MA's), (Start: 16 @27817 has 52 MA's), (36, 28006), (37, 28012), (44, 28114), (47, 28138), (53, 28198), (58, 28255), (60, 28261), (61, 28267), (75, 28381), (76, 28387), (79, 28399), (90, 28474), (92, 28498), (93, 28501), (97, 28537), (98, 28543), (102, 28576),

Gene: PeggyLeg03_34 Start: 24890, Stop: 25810, Start Num: 16

Candidate Starts for PeggyLeg03_34:

(Start: 16 @24890 has 52 MA's), (27, 25046), (32, 25064), (34, 25076), (48, 25223), (49, 25232), (52, 25271), (60, 25340), (61, 25346), (66, 25379), (70, 25421), (73, 25433), (101, 25652), (103, 25664), (104, 25676), (106, 25691), (107, 25697), (114, 25778), (115, 25781),

Gene: PhriskyACE_35 Start: 28658, Stop: 29575, Start Num: 16

Candidate Starts for PhriskyACE_35:

(Start: 15 @28652 has 15 MA's), (Start: 16 @28658 has 52 MA's), (35, 28841), (36, 28847), (37, 28853), (53, 29039), (60, 29102), (61, 29108), (64, 29123), (75, 29222), (76, 29228), (79, 29240), (90, 29315), (92, 29339), (93, 29342), (97, 29378), (98, 29384), (99, 29396), (106, 29453), (110, 29498),

Gene: Pipp_33 Start: 27701, Stop: 28627, Start Num: 15

Candidate Starts for Pipp_33:

(Start: 15 @27701 has 15 MA's), (Start: 16 @27707 has 52 MA's), (23, 27824), (24, 27827), (35, 27890), (36, 27896), (37, 27902), (44, 28004), (53, 28088), (57, 28142), (58, 28145), (60, 28151), (64, 28172), (75, 28271), (79, 28289), (90, 28364), (93, 28391), (97, 28427), (106, 28502),

Gene: Pollux_37 Start: 30910, Stop: 31827, Start Num: 16

Candidate Starts for Pollux_37:

(Start: 15 @30904 has 15 MA's), (Start: 16 @30910 has 52 MA's), (Start: 17 @30934 has 1 MA's), (24, 31030), (36, 31099), (37, 31105), (46, 31228), (53, 31291), (57, 31345), (60, 31354), (64, 31375), (65, 31384), (68, 31414), (71, 31438), (87, 31546), (90, 31567), (93, 31594),

Gene: Popper_34 Start: 26204, Stop: 27124, Start Num: 16

Candidate Starts for Popper_34:

(Start: 16 @26204 has 52 MA's), (18, 26243), (27, 26360), (32, 26378), (34, 26390), (48, 26537), (52, 26585), (57, 26645), (60, 26654), (61, 26660), (66, 26693), (70, 26735), (73, 26747), (77, 26786), (101, 26966), (104, 26990), (106, 27005), (107, 27011), (114, 27092), (115, 27095),

Gene: Pucara_31 Start: 24120, Stop: 25040, Start Num: 16

Candidate Starts for Pucara_31:

(Start: 16 @24120 has 52 MA's), (27, 24276), (32, 24294), (34, 24306), (48, 24453), (49, 24462), (52, 24501), (60, 24570), (61, 24576), (66, 24609), (70, 24651), (101, 24882), (104, 24906), (107, 24927), (114, 25008), (115, 25011),

Gene: Pytheas_34 Start: 28853, Stop: 29788, Start Num: 15

Candidate Starts for Pytheas_34:

(11, 28799), (Start: 15 @28853 has 15 MA's), (24, 28985), (39, 29102), (44, 29162), (45, 29165), (47, 29186), (56, 29297), (60, 29309), (70, 29390), (78, 29444), (80, 29450), (83, 29468), (90, 29528), (92, 29552), (93, 29555), (97, 29591), (98, 29597), (108, 29675), (112, 29735),

Gene: RadFad_36 Start: 24572, Stop: 25492, Start Num: 16

Candidate Starts for RadFad_36:

(5, 24443), (10, 24470), (Start: 16 @24572 has 52 MA's), (21, 24686), (32, 24746), (34, 24758), (39, 24815), (48, 24905), (52, 24953), (60, 25022), (61, 25028), (66, 25061), (69, 25085), (104, 25358), (106, 25373), (107, 25379),

Gene: Raphaella_37 Start: 24506, Stop: 25423, Start Num: 16

Candidate Starts for Raphaella_37:

(5, 24377), (7, 24383), (Start: 16 @24506 has 52 MA's), (27, 24662), (31, 24677), (34, 24689), (48, 24836), (49, 24845), (52, 24884), (54, 24929), (60, 24953), (61, 24959), (66, 24992), (70, 25034), (72, 25043), (77, 25085), (90, 25169), (104, 25289), (106, 25304),

Gene: Richie_36 Start: 24587, Stop: 25504, Start Num: 16

Candidate Starts for Richie_36:

(5, 24458), (7, 24464), (Start: 16 @24587 has 52 MA's), (31, 24758), (34, 24770), (39, 24827), (48, 24917), (49, 24926), (52, 24965), (54, 25010), (60, 25034), (61, 25040), (66, 25073), (70, 25115), (72, 25124), (77, 25166), (90, 25250), (104, 25370), (106, 25385),

Gene: Ryan_36 Start: 26903, Stop: 27823, Start Num: 16

Candidate Starts for Ryan_36:

(12, 26861), (Start: 16 @26903 has 52 MA's), (27, 27059), (32, 27077), (34, 27089), (48, 27236), (49, 27245), (52, 27284), (60, 27353), (61, 27359), (66, 27392), (69, 27416), (70, 27434), (73, 27446), (77, 27485), (101, 27665), (104, 27689), (106, 27704), (107, 27710), (114, 27791), (115, 27794),

Gene: Sakai_36 Start: 24515, Stop: 25432, Start Num: 16

Candidate Starts for Sakai_36:

(5, 24386), (7, 24392), (Start: 16 @24515 has 52 MA's), (27, 24671), (31, 24686), (34, 24698), (48, 24845), (49, 24854), (52, 24893), (54, 24938), (60, 24962), (61, 24968), (66, 25001), (70, 25043), (72,

25052), (77, 25094), (90, 25178), (104, 25298), (106, 25313),

Gene: Samman98_36 Start: 27315, Stop: 28232, Start Num: 16

Candidate Starts for Samman98_36:

(Start: 15 @27309 has 15 MA's), (Start: 16 @27315 has 52 MA's), (36, 27504), (37, 27510), (44, 27612), (47, 27636), (53, 27696), (58, 27753), (60, 27759), (61, 27765), (75, 27879), (76, 27885), (79, 27897), (90, 27972), (92, 27996), (93, 27999), (97, 28035), (98, 28041), (99, 28053), (110, 28155),

Gene: Sashimi_35 Start: 25890, Stop: 26810, Start Num: 16

Candidate Starts for Sashimi_35:

(4, 25755), (5, 25758), (8, 25773), (9, 25782), (12, 25848), (Start: 16 @25890 has 52 MA's), (27, 26046), (29, 26052), (32, 26064), (34, 26076), (48, 26223), (49, 26232), (52, 26271), (54, 26316), (60, 26340), (61, 26346), (73, 26433), (81, 26490), (89, 26550), (90, 26556), (93, 26583), (104, 26676), (106, 26691), (115, 26781),

Gene: Seahorse_38 Start: 26187, Stop: 27107, Start Num: 16

Candidate Starts for Seahorse_38:

(5, 26058), (7, 26064), (Start: 16 @26187 has 52 MA's), (21, 26301), (30, 26352), (32, 26361), (34, 26373), (39, 26430), (48, 26520), (49, 26529), (52, 26568), (60, 26637), (61, 26643), (63, 26652), (66, 26676), (69, 26700), (91, 26874), (104, 26973), (106, 26988), (115, 27078),

Gene: Shlim410_35 Start: 30765, Stop: 31682, Start Num: 16

Candidate Starts for Shlim410_35:

(Start: 15 @30759 has 15 MA's), (Start: 16 @30765 has 52 MA's), (34, 30945), (36, 30954), (37, 30960), (51, 31131), (53, 31146), (58, 31203), (60, 31209), (61, 31215), (64, 31230), (75, 31329), (76, 31335), (79, 31347), (90, 31422), (92, 31446), (93, 31449), (97, 31485), (98, 31491), (99, 31503), (110, 31605),

Gene: Sixama_89 Start: 47436, Stop: 48350, Start Num: 17

Candidate Starts for Sixama_89:

(Start: 17 @47436 has 1 MA's), (19, 47481), (26, 47538), (29, 47568), (33, 47586), (40, 47667), (42, 47685), (53, 47796), (55, 47853), (59, 47874), (60, 47877), (82, 48027), (85, 48063), (88, 48072),

Gene: Spooky_35 Start: 27760, Stop: 28698, Start Num: 15

Candidate Starts for Spooky_35:

(13, 27748), (Start: 15 @27760 has 15 MA's), (20, 27853), (28, 27925), (38, 27976), (43, 28054), (47, 28093), (50, 28132), (56, 28204), (60, 28216), (63, 28231), (64, 28237), (67, 28261), (70, 28297), (80, 28357), (83, 28375), (84, 28408), (90, 28435), (92, 28459), (93, 28462), (96, 28495), (97, 28501), (108, 28585), (110, 28621), (116, 28690),

Gene: Squiddly_37 Start: 28992, Stop: 29930, Start Num: 15

Candidate Starts for Squiddly_37:

(13, 28980), (Start: 15 @28992 has 15 MA's), (28, 29157), (38, 29208), (47, 29325), (56, 29436), (60, 29448), (63, 29463), (64, 29469), (65, 29478), (67, 29493), (70, 29529), (75, 29568), (80, 29589), (83, 29607), (84, 29640), (90, 29667), (92, 29691), (93, 29694), (94, 29697), (95, 29721), (97, 29733), (106, 29808), (107, 29814), (108, 29817), (115, 29901), (116, 29922),

Gene: Thimann_34 Start: 26659, Stop: 27576, Start Num: 16

Candidate Starts for Thimann_34:

(Start: 15 @26653 has 15 MA's), (Start: 16 @26659 has 52 MA's), (36, 26848), (37, 26854), (44, 26956), (47, 26980), (53, 27040), (58, 27097), (60, 27103), (61, 27109), (75, 27223), (76, 27229), (79, 27241), (90, 27316), (92, 27340), (93, 27343), (97, 27379), (98, 27385), (99, 27397), (110, 27499),

Gene: Tiff81_34 Start: 21991, Stop: 22911, Start Num: 16

Candidate Starts for Tiff81_34:

(5, 21862), (Start: 16 @21991 has 52 MA's), (21, 22105), (32, 22165), (34, 22177), (48, 22324), (52, 22372), (54, 22417), (60, 22441), (61, 22447), (73, 22534), (81, 22591), (90, 22657), (93, 22684), (104, 22777), (106, 22792), (115, 22882),

Gene: Twinkle_35 Start: 31824, Stop: 32741, Start Num: 16

Candidate Starts for Twinkle_35:

(Start: 15 @31818 has 15 MA's), (Start: 16 @31824 has 52 MA's), (34, 32004), (36, 32013), (37, 32019), (51, 32190), (53, 32205), (58, 32262), (60, 32268), (61, 32274), (64, 32289), (75, 32388), (76, 32394), (79, 32406), (90, 32481), (92, 32505), (93, 32508), (97, 32544), (98, 32550), (99, 32562), (110, 32664),

Gene: Utz_31 Start: 28505, Stop: 29425, Start Num: 16

Candidate Starts for Utz_31:

(Start: 15 @28499 has 15 MA's), (Start: 16 @28505 has 52 MA's), (23, 28622), (24, 28625), (35, 28688), (36, 28694), (37, 28700), (44, 28802), (53, 28886), (57, 28940), (58, 28943), (60, 28949), (64, 28970), (75, 29069), (79, 29087), (90, 29162), (93, 29189), (97, 29225), (106, 29300),

Gene: WinkNick_38 Start: 28007, Stop: 28924, Start Num: 16

Candidate Starts for WinkNick_38:

(Start: 15 @28001 has 15 MA's), (Start: 16 @28007 has 52 MA's), (36, 28196), (37, 28202), (44, 28304), (47, 28328), (53, 28388), (58, 28445), (60, 28451), (61, 28457), (75, 28571), (76, 28577), (79, 28589), (90, 28664), (92, 28688), (93, 28691), (97, 28727), (98, 28733), (99, 28745), (110, 28847),

Gene: YoungHarleezy_36 Start: 24585, Stop: 25502, Start Num: 16

Candidate Starts for YoungHarleezy_36:

(5, 24456), (7, 24462), (Start: 16 @24585 has 52 MA's), (27, 24741), (31, 24756), (34, 24768), (48, 24915), (49, 24924), (52, 24963), (54, 25008), (60, 25032), (61, 25038), (66, 25071), (70, 25113), (72, 25122), (77, 25164), (90, 25248), (104, 25368), (106, 25383),

Gene: YungMoney_41 Start: 35216, Stop: 36133, Start Num: 16

Candidate Starts for YungMoney_41:

(Start: 15 @35210 has 15 MA's), (Start: 16 @35216 has 52 MA's), (23, 35333), (24, 35336), (35, 35399), (36, 35405), (37, 35411), (53, 35597), (57, 35651), (58, 35654), (60, 35660), (64, 35681), (75, 35780), (76, 35786), (79, 35798), (90, 35873), (93, 35900), (97, 35936), (101, 35972), (106, 36011), (115, 36104), (116, 36125),

Gene: Zaheer_36 Start: 26991, Stop: 27911, Start Num: 16

Candidate Starts for Zaheer_36:

(Start: 16 @26991 has 52 MA's), (27, 27147), (32, 27165), (34, 27177), (48, 27324), (49, 27333), (52, 27372), (57, 27432), (60, 27441), (61, 27447), (66, 27480), (70, 27522), (73, 27534), (76, 27567), (77, 27573), (79, 27579), (90, 27657), (101, 27753), (107, 27798), (114, 27879), (115, 27882),

Gene: Zucker_29 Start: 23884, Stop: 24804, Start Num: 16

Candidate Starts for Zucker_29:

(12, 23842), (Start: 16 @23884 has 52 MA's), (32, 24058), (34, 24070), (48, 24217), (49, 24226), (52, 24265), (60, 24334), (61, 24340), (62, 24343), (66, 24373), (70, 24415), (90, 24550), (101, 24646), (103, 24658), (104, 24670), (106, 24685), (107, 24691),