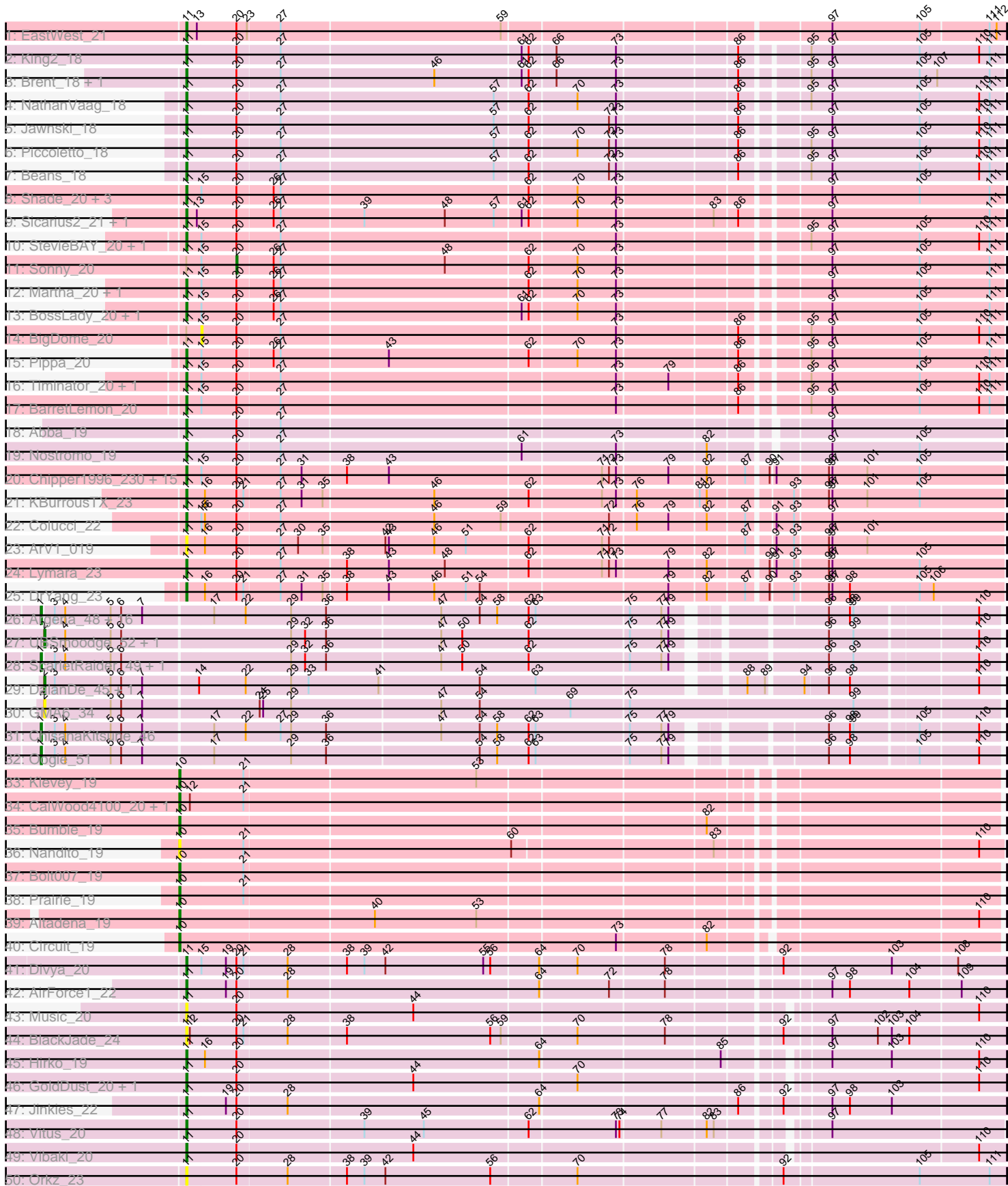
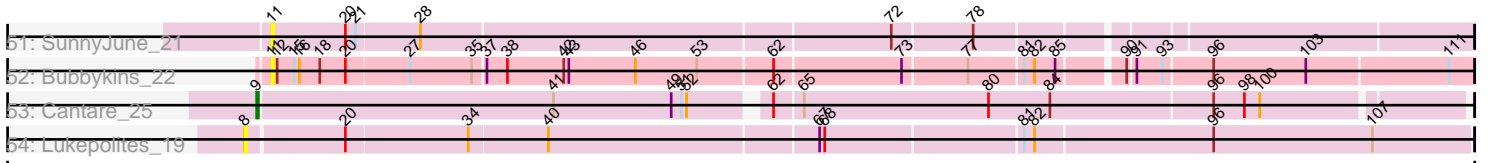


Pham 308388



Pham 308388



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 308388 Report

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

Pham number 308388 has 99 members, 25 are drafts.

Phages represented in each track:

- Track 1 : EastWest_21
- Track 2 : King2_18
- Track 3 : Brent_18, Franzy_18
- Track 4 : NathanVaag_18
- Track 5 : Jawnski_18
- Track 6 : Piccoletto_18
- Track 7 : Beans_18
- Track 8 : Shade_20, Jordan_20, Zartrosa_20, JKerns_20
- Track 9 : Sicarius2_21, Wyborn_21
- Track 10 : StevieBAY_20, GravityBall_20
- Track 11 : Sonny_20
- Track 12 : Martha_20, TaeYoung_20
- Track 13 : BossLady_20, Grekaycon_20
- Track 14 : BigDome_20
- Track 15 : Pippa_20
- Track 16 : Timinator_20, LeeroyJ_20
- Track 17 : BarretLemon_20
- Track 18 : Abba_19
- Track 19 : Nostromo_19
- Track 20 : Chipper1996_230, RosiePosie_23, EdgarPoe_23, Kabreeze_23, Conboy_23, JaNo_23, Mordred_23, HumptyDumpty_23, Linus_23, JayCookie_23, Chocolat_23, MoyaNatalis_23, Scavito_23, PrincessTrina_23, Chubster_23, Tophat_23
- Track 21 : KBurrousTX_23
- Track 22 : Colucci_22
- Track 23 : ArV1_019
- Track 24 : Lymara_23
- Track 25 : DrYang_23
- Track 26 : Argena_48, Hanem_50, EmoNemo_48, Kabocha_51, Pakusa_48, MintFritos_48, Twin_48, Amoonguss_48, Mikronejon_48, Schomber_49, Lenoshki_50, Aloki_50, Toneprano_48, Gray_50, Farrylius_48, Beted_50, Chidiebere_50
- Track 27 : UBSmoodge_52, FlyingTortilla_50
- Track 28 : ScarletRaider_49, FruityLoops_48
- Track 29 : DalanDe_45, Thales_44
- Track 30 : GMA6_34
- Track 31 : ChisanaKitsune_46

- Track 32 : Oogie_51
- Track 33 : Klevey_19
- Track 34 : CalWood4100_20, Lilmac1015_20
- Track 35 : Bumble_19
- Track 36 : Nandito_19
- Track 37 : Bolt007_19
- Track 38 : Prairie_19
- Track 39 : Altadena_19
- Track 40 : Circuit_19
- Track 41 : Divya_20
- Track 42 : AirForce1_22
- Track 43 : Music_20
- Track 44 : BlackJade_24
- Track 45 : Hirko_19
- Track 46 : GoldDust_20, Gooberta_20
- Track 47 : Jinkies_22
- Track 48 : Vitus_20
- Track 49 : Vibaki_20
- Track 50 : Orkz_23
- Track 51 : SunnyJune_21
- Track 52 : Bubbykins_22
- Track 53 : Cantare_25
- Track 54 : Lukepolites_19

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

The start number called the most often in the published annotations is 11, it was called in 53 of the 74 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abba_19, AirForce1_22, ArV1_019, BarretLemon_20, Beans_18, BlackJade_24, BossLady_20, Brent_18, Bubbykins_22, Chipper1996_230, Chocolat_23, Chubster_23, Colucci_22, Conboy_23, Divya_20, DrYang_23, EastWest_21, EdgarPoe_23, Franzy_18, GoldDust_20, Gooberta_20, GravityBall_20, Grekaycon_20, Hirko_19, HumptyDumpty_23, JKerns_20, JaNo_23, Jawnski_18, JayCookie_23, Jinkies_22, Jordan_20, KBurrousTX_23, Kabreeze_23, King2_18, LeeroyJ_20, Linus_23, Lymara_23, Martha_20, Mordred_23, MoyaNatalis_23, Music_20, NathanVaag_18, Nostromo_19, Orkz_23, Piccoletto_18, Pippa_20, PrincessTrina_23, RosiePosie_23, Scavito_23, Shade_20, Sicarius2_21, StevieBAY_20, SunnyJune_21, TaeYoung_20, Timinator_20, Tophat_23, Vibaki_20, Vitus_20, Wyborn_21, Zartrosa_20,

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

- BigDome_20, Sonny_20,

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

- Aloki_50, Altadena_19, Amoonguss_48, Argena_48, Beted_50, Bolt007_19, Bumble_19, CalWood4100_20, Cantare_25, Chidiebere_50, ChisanaKitsune_46, Circuit_19, DalanDe_45, EmoNemo_48, Farrylious_48, FlyingTortilla_50, FruityLoops_48, GMA6_34, Gray_50, Hanem_50, Kabocha_51, Klevey_19,

Lenoshki_50, Lilmac1015_20, Lukepolites_19, Mikronejon_48, MintFritos_48, Nandito_19, Oogie_51, Pakusa_48, Prairie_19, ScarletRaider_49, Schomber_49, Thales_44, Toneprano_48, Twin_48, UBSmoodge_52,

Summary by start number:

Start 1:

- Found in 21 of 99 (21.2%) of genes in pham
- Manual Annotations of this start: 9 of 74
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aloki_50 (DQ), Amoonguss_48 (DQ), Argena_48 (DQ), Beted_50 (DQ), Chidiebere_50 (DQ), ChisanaKitsune_46 (DQ), EmoNemo_48 (DQ), Farrylious_48 (DQ), FruityLoops_48 (DQ), Gray_50 (DQ), Hanem_50 (DQ), Kabocha_51 (DQ), Lenoshki_50 (DQ), Mikronejon_48 (DQ), MintFritos_48 (DQ), Oogie_51 (DQ), Pakusa_48 (DQ), ScarletRaider_49 (DQ), Schomber_49 (DQ), Toneprano_48 (DQ), Twin_48 (DQ),

Start 2:

- Found in 5 of 99 (5.1%) of genes in pham
- Manual Annotations of this start: 3 of 74
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DalanDe_45 (DQ), FlyingTortilla_50 (DQ), GMA6_34 (DQ), Thales_44 (DQ), UBSmoodge_52 (DQ),

Start 8:

- Found in 1 of 99 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lukepolites_19 (singleton),

Start 9:

- Found in 1 of 99 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 74
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare_25 (singleton),

Start 10:

- Found in 9 of 99 (9.1%) of genes in pham
- Manual Annotations of this start: 7 of 74
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Altadena_19 (FH), Bolt007_19 (FH), Bumble_19 (FH), CalWood4100_20 (FH), Circuit_19 (FH), Klevey_19 (FH), Lilmac1015_20 (FH), Nandito_19 (FH), Prairie_19 (FH),

Start 11:

- Found in 62 of 99 (62.6%) of genes in pham
- Manual Annotations of this start: 53 of 74
- Called 96.8% of time when present
- Phage (with cluster) where this start called: Abba_19 (AO3), AirForce1_22 (FL), ArV1_019 (AR), BarretLemon_20 (AO2), Beans_18 (AO1), BlackJade_24 (FL), BossLady_20 (AO2), Brent_18 (AO1), Bubbykins_22 (UNK), Chipper1996_230 (AR), Chocolat_23 (AR), Chubster_23 (AR), Colucci_22 (AR), Conboy_23 (AR), Divya_20 (FL), DrYang_23 (AR), EastWest_21 (AO), EdgarPoe_23 (AR), Franzy_18 (AO1),

GoldDust_20 (FL), Gooberta_20 (FL), GravityBall_20 (AO2), Grekaycon_20 (AO2), Hirko_19 (FL), HumptyDumpty_23 (AR), JKerns_20 (AO2), JaNo_23 (AR), Jawnski_18 (AO1), JayCookie_23 (AR), Jinkies_22 (FL), Jordan_20 (AO2), KBurrousTX_23 (AR), Kabreeze_23 (AR), King2_18 (AO1), LeeroyJ_20 (AO2), Linus_23 (AR), Lymara_23 (AR), Martha_20 (AO2), Mordred_23 (AR), MoyaNatalis_23 (AR), Music_20 (FL), NathanVaag_18 (AO1), Nostromo_19 (AO3), Orkz_23 (FL), Piccoletto_18 (AO1), Pippa_20 (AO2), PrincessTrina_23 (AR), RosiePosie_23 (AR), Scavito_23 (AR), Shade_20 (AO2), Sicarius2_21 (AO2), StevieBAY_20 (AO2), SunnyJune_21 (FL), TaeYoung_20 (AO2), Timinator_20 (AO2), Tophat_23 (AR), Vibaki_20 (FL), Vitus_20 (FL), Wyborn_21 (AO2), Zartrosa_20 (AO2),

Start 15:

- Found in 35 of 99 (35.4%) of genes in pham
- No Manual Annotations of this start.
- Called 2.9% of time when present
- Phage (with cluster) where this start called: BigDome_20 (AO2),

Start 20:

- Found in 63 of 99 (63.6%) of genes in pham
- Manual Annotations of this start: 1 of 74
- Called 1.6% of time when present
- Phage (with cluster) where this start called: Sonny_20 (AO2),

Summary by clusters:

There are 10 clusters represented in this pham: singleton, AO, AR, AO3, AO2, AO1, FH, UNK, FL, DQ,

Info for manual annotations of cluster AO:

- Start number 11 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 11 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 11 was manually annotated 16 times for cluster AO2.
- Start number 20 was manually annotated 1 time for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 11 was manually annotated 2 times for cluster AO3.

Info for manual annotations of cluster AR:

- Start number 11 was manually annotated 19 times for cluster AR.

Info for manual annotations of cluster DQ:

- Start number 1 was manually annotated 9 times for cluster DQ.
- Start number 2 was manually annotated 3 times for cluster DQ.

Info for manual annotations of cluster FH:

- Start number 10 was manually annotated 7 times for cluster FH.

Info for manual annotations of cluster FL:

- Start number 11 was manually annotated 8 times for cluster FL.

Gene Information:

Gene: Abba_19 Start: 16706, Stop: 17368, Start Num: 11

Candidate Starts for Abba_19:

(Start: 11 @16706 has 53 MA's), (Start: 20 @16748 has 1 MA's), (27, 16784), (97, 17222),

Gene: AirForce1_22 Start: 15898, Stop: 16563, Start Num: 11

Candidate Starts for AirForce1_22:

(Start: 11 @15898 has 53 MA's), (19, 15931), (Start: 20 @15940 has 1 MA's), (28, 15982), (64, 16192), (72, 16249), (78, 16294), (97, 16417), (98, 16432), (104, 16483), (109, 16525),

Gene: Alok1_50 Start: 37433, Stop: 38200, Start Num: 1

Candidate Starts for Alok1_50:

(Start: 1 @37433 has 9 MA's), (3, 37442), (4, 37451), (5, 37490), (6, 37499), (7, 37517), (17, 37574), (22, 37601), (29, 37640), (36, 37670), (47, 37766), (54, 37799), (58, 37814), (62, 37841), (63, 37847), (75, 37925), (77, 37952), (79, 37958), (96, 38063), (98, 38081), (99, 38084), (110, 38183),

Gene: Altadena_19 Start: 15733, Stop: 16398, Start Num: 10

Candidate Starts for Altadena_19:

(Start: 10 @15733 has 7 MA's), (40, 15895), (53, 15982), (110, 16381),

Gene: Amoonguss_48 Start: 37436, Stop: 38203, Start Num: 1

Candidate Starts for Amoonguss_48:

(Start: 1 @37436 has 9 MA's), (3, 37445), (4, 37454), (5, 37493), (6, 37502), (7, 37520), (17, 37577), (22, 37604), (29, 37643), (36, 37673), (47, 37769), (54, 37802), (58, 37817), (62, 37844), (63, 37850), (75, 37928), (77, 37955), (79, 37961), (96, 38066), (98, 38084), (99, 38087), (110, 38186),

Gene: ArV1_019 Start: 17587, Stop: 18255, Start Num: 11

Candidate Starts for ArV1_019:

(Start: 11 @17587 has 53 MA's), (16, 17602), (Start: 20 @17629 has 1 MA's), (27, 17665), (30, 17680), (35, 17701), (42, 17752), (43, 17755), (46, 17794), (51, 17821), (62, 17872), (71, 17932), (72, 17938), (87, 18046), (91, 18064), (93, 18079), (96, 18106), (97, 18109), (101, 18139),

Gene: Argena_48 Start: 37433, Stop: 38200, Start Num: 1

Candidate Starts for Argena_48:

(Start: 1 @37433 has 9 MA's), (3, 37442), (4, 37451), (5, 37490), (6, 37499), (7, 37517), (17, 37574), (22, 37601), (29, 37640), (36, 37670), (47, 37766), (54, 37799), (58, 37814), (62, 37841), (63, 37847), (75, 37925), (77, 37952), (79, 37958), (96, 38063), (98, 38081), (99, 38084), (110, 38183),

Gene: BarretLemon_20 Start: 16382, Stop: 17047, Start Num: 11

Candidate Starts for BarretLemon_20:

(Start: 11 @16382 has 53 MA's), (15, 16394), (Start: 20 @16424 has 1 MA's), (27, 16460), (73, 16739), (86, 16835), (95, 16883), (97, 16901), (105, 16976), (110, 17027), (111, 17036),

Gene: Beans_18 Start: 16085, Stop: 16750, Start Num: 11

Candidate Starts for Beans_18:

(Start: 11 @16085 has 53 MA's), (Start: 20 @16127 has 1 MA's), (27, 16163), (57, 16343), (62, 16370), (72, 16436), (73, 16442), (86, 16538), (95, 16586), (97, 16604), (105, 16679), (110, 16730), (111,

16739),

Gene: Beted_50 Start: 39113, Stop: 39880, Start Num: 1

Candidate Starts for Beted_50:

(Start: 1 @39113 has 9 MA's), (3, 39122), (4, 39131), (5, 39170), (6, 39179), (7, 39197), (17, 39254), (22, 39281), (29, 39320), (36, 39350), (47, 39446), (54, 39479), (58, 39494), (62, 39521), (63, 39527), (75, 39605), (77, 39632), (79, 39638), (96, 39743), (98, 39761), (99, 39764), (110, 39863),

Gene: BigDome_20 Start: 16382, Stop: 17035, Start Num: 15

Candidate Starts for BigDome_20:

(Start: 11 @16370 has 53 MA's), (15, 16382), (Start: 20 @16412 has 1 MA's), (27, 16448), (73, 16727), (86, 16823), (95, 16871), (97, 16889), (105, 16964), (110, 17015), (111, 17024),

Gene: BlackJade_24 Start: 18554, Stop: 19219, Start Num: 11

Candidate Starts for BlackJade_24:

(Start: 11 @18554 has 53 MA's), (12, 18557), (Start: 20 @18596 has 1 MA's), (21, 18602), (28, 18638), (38, 18686), (56, 18809), (59, 18818), (70, 18878), (78, 18950), (92, 19037), (97, 19073), (102, 19112), (103, 19124), (104, 19139),

Gene: Bolt007_19 Start: 15564, Stop: 16226, Start Num: 10

Candidate Starts for Bolt007_19:

(Start: 10 @15564 has 7 MA's), (21, 15618),

Gene: BossLady_20 Start: 16396, Stop: 17061, Start Num: 11

Candidate Starts for BossLady_20:

(Start: 11 @16396 has 53 MA's), (15, 16408), (Start: 20 @16438 has 1 MA's), (26, 16468), (27, 16474), (61, 16675), (62, 16681), (70, 16720), (73, 16753), (97, 16915), (105, 16990), (111, 17050),

Gene: Brent_18 Start: 16067, Stop: 16732, Start Num: 11

Candidate Starts for Brent_18:

(Start: 11 @16067 has 53 MA's), (Start: 20 @16109 has 1 MA's), (27, 16145), (46, 16274), (61, 16346), (62, 16352), (66, 16373), (73, 16424), (86, 16520), (95, 16568), (97, 16586), (105, 16661), (107, 16676), (111, 16721),

Gene: Bubbykins_22 Start: 18793, Stop: 19461, Start Num: 11

Candidate Starts for Bubbykins_22:

(Start: 11 @18793 has 53 MA's), (12, 18796), (15, 18805), (16, 18808), (18, 18820), (Start: 20 @18835 has 1 MA's), (27, 18871), (35, 18907), (37, 18913), (38, 18925), (42, 18958), (43, 18961), (46, 19000), (53, 19036), (62, 19078), (73, 19150), (77, 19186), (81, 19216), (82, 19222), (85, 19234), (90, 19267), (91, 19270), (93, 19285), (96, 19312), (103, 19366), (111, 19447),

Gene: Bumble_19 Start: 15738, Stop: 16403, Start Num: 10

Candidate Starts for Bumble_19:

(Start: 10 @15738 has 7 MA's), (82, 16173),

Gene: CalWood4100_20 Start: 15544, Stop: 16206, Start Num: 10

Candidate Starts for CalWood4100_20:

(Start: 10 @15544 has 7 MA's), (12, 15553), (21, 15598),

Gene: Cantare_25 Start: 24469, Stop: 25146, Start Num: 9

Candidate Starts for Cantare_25:

(Start: 9 @24469 has 1 MA's), (41, 24640), (49, 24709), (51, 24715), (52, 24718), (62, 24757), (65, 24772), (80, 24880), (84, 24916), (96, 25009), (98, 25027), (100, 25036),

Gene: Chidiebere_50 Start: 37433, Stop: 38200, Start Num: 1

Candidate Starts for Chidiebere_50:

(Start: 1 @37433 has 9 MA's), (3, 37442), (4, 37451), (5, 37490), (6, 37499), (7, 37517), (17, 37574), (22, 37601), (29, 37640), (36, 37670), (47, 37766), (54, 37799), (58, 37814), (62, 37841), (63, 37847), (75, 37925), (77, 37952), (79, 37958), (96, 38063), (98, 38081), (99, 38084), (110, 38183),

Gene: Chipper1996_230 Start: 19266, Stop: 19934, Start Num: 11

Candidate Starts for Chipper1996_230:

(Start: 11 @19266 has 53 MA's), (15, 19278), (Start: 20 @19308 has 1 MA's), (27, 19344), (31, 19362), (38, 19398), (43, 19434), (71, 19611), (72, 19617), (73, 19623), (79, 19665), (82, 19695), (87, 19725), (90, 19740), (91, 19743), (96, 19785), (97, 19788), (101, 19818), (105, 19863),

Gene: ChisanaKitsune_46 Start: 36224, Stop: 36991, Start Num: 1

Candidate Starts for ChisanaKitsune_46:

(Start: 1 @36224 has 9 MA's), (3, 36233), (4, 36242), (5, 36281), (6, 36290), (7, 36308), (17, 36365), (22, 36392), (27, 36422), (29, 36431), (36, 36461), (47, 36557), (54, 36590), (58, 36605), (62, 36632), (63, 36638), (75, 36716), (77, 36743), (79, 36749), (96, 36854), (98, 36872), (99, 36875), (105, 36926), (110, 36974),

Gene: Chocolat_23 Start: 19267, Stop: 19935, Start Num: 11

Candidate Starts for Chocolat_23:

(Start: 11 @19267 has 53 MA's), (15, 19279), (Start: 20 @19309 has 1 MA's), (27, 19345), (31, 19363), (38, 19399), (43, 19435), (71, 19612), (72, 19618), (73, 19624), (79, 19666), (82, 19696), (87, 19726), (90, 19741), (91, 19744), (96, 19786), (97, 19789), (101, 19819), (105, 19864),

Gene: Chubster_23 Start: 19037, Stop: 19705, Start Num: 11

Candidate Starts for Chubster_23:

(Start: 11 @19037 has 53 MA's), (15, 19049), (Start: 20 @19079 has 1 MA's), (27, 19115), (31, 19133), (38, 19169), (43, 19205), (71, 19382), (72, 19388), (73, 19394), (79, 19436), (82, 19466), (87, 19496), (90, 19511), (91, 19514), (96, 19556), (97, 19559), (101, 19589), (105, 19634),

Gene: Circuit_19 Start: 15736, Stop: 16398, Start Num: 10

Candidate Starts for Circuit_19:

(Start: 10 @15736 has 7 MA's), (73, 16099), (82, 16171),

Gene: Colucci_22 Start: 18736, Stop: 19404, Start Num: 11

Candidate Starts for Colucci_22:

(Start: 11 @18736 has 53 MA's), (15, 18748), (16, 18751), (Start: 20 @18778 has 1 MA's), (27, 18814), (46, 18943), (59, 19000), (72, 19087), (76, 19108), (79, 19135), (82, 19165), (87, 19195), (91, 19213), (93, 19228), (97, 19258),

Gene: Conboy_23 Start: 19265, Stop: 19933, Start Num: 11

Candidate Starts for Conboy_23:

(Start: 11 @19265 has 53 MA's), (15, 19277), (Start: 20 @19307 has 1 MA's), (27, 19343), (31, 19361), (38, 19397), (43, 19433), (71, 19610), (72, 19616), (73, 19622), (79, 19664), (82, 19694), (87, 19724), (90, 19739), (91, 19742), (96, 19784), (97, 19787), (101, 19817), (105, 19862),

Gene: DalanDe_45 Start: 40475, Stop: 41245, Start Num: 2

Candidate Starts for DalanDe_45:

(Start: 2 @40475 has 3 MA's), (3, 40484), (5, 40532), (6, 40541), (7, 40559), (14, 40604), (22, 40643), (29, 40682), (33, 40697), (41, 40757), (54, 40841), (63, 40889), (88, 41048), (89, 41063), (94, 41090), (96, 41108), (98, 41126), (110, 41228),

Gene: Divya_20 Start: 15958, Stop: 16626, Start Num: 11

Candidate Starts for Divya_20:

(Start: 11 @15958 has 53 MA's), (15, 15970), (19, 15991), (Start: 20 @16000 has 1 MA's), (21, 16006), (28, 16042), (38, 16090), (39, 16105), (42, 16123), (55, 16207), (56, 16213), (64, 16252), (70, 16282), (78, 16354), (92, 16441), (103, 16531), (108, 16585),

Gene: DrYang_23 Start: 19463, Stop: 20131, Start Num: 11

Candidate Starts for DrYang_23:

(Start: 11 @19463 has 53 MA's), (16, 19478), (Start: 20 @19505 has 1 MA's), (21, 19511), (27, 19541), (31, 19559), (35, 19577), (38, 19595), (43, 19631), (46, 19670), (51, 19697), (54, 19709), (79, 19862), (82, 19892), (87, 19922), (90, 19937), (93, 19955), (96, 19982), (97, 19985), (98, 20000), (105, 20060), (106, 20072),

Gene: EastWest_21 Start: 16369, Stop: 17040, Start Num: 11

Candidate Starts for EastWest_21:

(Start: 11 @16369 has 53 MA's), (13, 16378), (Start: 20 @16411 has 1 MA's), (23, 16420), (27, 16447), (59, 16633), (97, 16894), (105, 16969), (111, 17026), (112, 17032),

Gene: EdgarPoe_23 Start: 19265, Stop: 19933, Start Num: 11

Candidate Starts for EdgarPoe_23:

(Start: 11 @19265 has 53 MA's), (15, 19277), (Start: 20 @19307 has 1 MA's), (27, 19343), (31, 19361), (38, 19397), (43, 19433), (71, 19610), (72, 19616), (73, 19622), (79, 19664), (82, 19694), (87, 19724), (90, 19739), (91, 19742), (96, 19784), (97, 19787), (101, 19817), (105, 19862),

Gene: EmoNemo_48 Start: 37433, Stop: 38200, Start Num: 1

Candidate Starts for EmoNemo_48:

(Start: 1 @37433 has 9 MA's), (3, 37442), (4, 37451), (5, 37490), (6, 37499), (7, 37517), (17, 37574), (22, 37601), (29, 37640), (36, 37670), (47, 37766), (54, 37799), (58, 37814), (62, 37841), (63, 37847), (75, 37925), (77, 37952), (79, 37958), (96, 38063), (98, 38081), (99, 38084), (110, 38183),

Gene: Farrylious_48 Start: 37209, Stop: 37976, Start Num: 1

Candidate Starts for Farrylious_48:

(Start: 1 @37209 has 9 MA's), (3, 37218), (4, 37227), (5, 37266), (6, 37275), (7, 37293), (17, 37350), (22, 37377), (29, 37416), (36, 37446), (47, 37542), (54, 37575), (58, 37590), (62, 37617), (63, 37623), (75, 37701), (77, 37728), (79, 37734), (96, 37839), (98, 37857), (99, 37860), (110, 37959),

Gene: FlyingTortilla_50 Start: 41004, Stop: 41774, Start Num: 2

Candidate Starts for FlyingTortilla_50:

(Start: 2 @41004 has 3 MA's), (4, 41022), (5, 41061), (6, 41070), (29, 41211), (32, 41223), (36, 41241), (47, 41337), (50, 41355), (62, 41412), (75, 41496), (77, 41523), (79, 41529), (96, 41637), (99, 41658), (110, 41757),

Gene: Franzy_18 Start: 16067, Stop: 16732, Start Num: 11

Candidate Starts for Franzy_18:

(Start: 11 @16067 has 53 MA's), (Start: 20 @16109 has 1 MA's), (27, 16145), (46, 16274), (61, 16346), (62, 16352), (66, 16373), (73, 16424), (86, 16520), (95, 16568), (97, 16586), (105, 16661), (107, 16676), (111, 16721),

Gene: FruityLoops_48 Start: 40304, Stop: 41074, Start Num: 1

Candidate Starts for FruityLoops_48:

(Start: 1 @40304 has 9 MA's), (3, 40313), (4, 40322), (5, 40361), (6, 40370), (29, 40511), (32, 40523), (36, 40541), (47, 40637), (50, 40655), (62, 40712), (75, 40796), (77, 40823), (79, 40829), (96, 40937),

(99, 40958), (110, 41057),

Gene: GMA6_34 Start: 28264, Stop: 29061, Start Num: 2

Candidate Starts for GMA6_34:

(Start: 2 @28264 has 3 MA's), (5, 28321), (6, 28330), (7, 28348), (24, 28444), (25, 28447), (29, 28471), (47, 28597), (54, 28630), (69, 28708), (75, 28756), (99, 28945),

Gene: GoldDust_20 Start: 18471, Stop: 19127, Start Num: 11

Candidate Starts for GoldDust_20:

(Start: 11 @18471 has 53 MA's), (Start: 20 @18513 has 1 MA's), (44, 18660), (70, 18795), (110, 19104),

Gene: Gooberta_20 Start: 18470, Stop: 19126, Start Num: 11

Candidate Starts for Gooberta_20:

(Start: 11 @18470 has 53 MA's), (Start: 20 @18512 has 1 MA's), (44, 18659), (70, 18794), (110, 19103),

Gene: GravityBall_20 Start: 16381, Stop: 17046, Start Num: 11

Candidate Starts for GravityBall_20:

(Start: 11 @16381 has 53 MA's), (15, 16393), (Start: 20 @16423 has 1 MA's), (27, 16459), (73, 16738), (95, 16882), (97, 16900), (105, 16975), (110, 17026), (111, 17035),

Gene: Gray_50 Start: 37434, Stop: 38201, Start Num: 1

Candidate Starts for Gray_50:

(Start: 1 @37434 has 9 MA's), (3, 37443), (4, 37452), (5, 37491), (6, 37500), (7, 37518), (17, 37575), (22, 37602), (29, 37641), (36, 37671), (47, 37767), (54, 37800), (58, 37815), (62, 37842), (63, 37848), (75, 37926), (77, 37953), (79, 37959), (96, 38064), (98, 38082), (99, 38085), (110, 38184),

Gene: Grekaycon_20 Start: 16405, Stop: 17070, Start Num: 11

Candidate Starts for Grekaycon_20:

(Start: 11 @16405 has 53 MA's), (15, 16417), (Start: 20 @16447 has 1 MA's), (26, 16477), (27, 16483), (61, 16684), (62, 16690), (70, 16729), (73, 16762), (97, 16924), (105, 16999), (111, 17059),

Gene: Hanem_50 Start: 37433, Stop: 38200, Start Num: 1

Candidate Starts for Hanem_50:

(Start: 1 @37433 has 9 MA's), (3, 37442), (4, 37451), (5, 37490), (6, 37499), (7, 37517), (17, 37574), (22, 37601), (29, 37640), (36, 37670), (47, 37766), (54, 37799), (58, 37814), (62, 37841), (63, 37847), (75, 37925), (77, 37952), (79, 37958), (96, 38063), (98, 38081), (99, 38084), (110, 38183),

Gene: Hirko_19 Start: 17966, Stop: 18622, Start Num: 11

Candidate Starts for Hirko_19:

(Start: 11 @17966 has 53 MA's), (16, 17981), (Start: 20 @18008 has 1 MA's), (64, 18260), (85, 18407), (97, 18476), (103, 18527), (110, 18599),

Gene: HumptyDumpty_23 Start: 19264, Stop: 19932, Start Num: 11

Candidate Starts for HumptyDumpty_23:

(Start: 11 @19264 has 53 MA's), (15, 19276), (Start: 20 @19306 has 1 MA's), (27, 19342), (31, 19360), (38, 19396), (43, 19432), (71, 19609), (72, 19615), (73, 19621), (79, 19663), (82, 19693), (87, 19723), (90, 19738), (91, 19741), (96, 19783), (97, 19786), (101, 19816), (105, 19861),

Gene: JKerns_20 Start: 16432, Stop: 17097, Start Num: 11

Candidate Starts for JKerns_20:

(Start: 11 @16432 has 53 MA's), (15, 16444), (Start: 20 @16474 has 1 MA's), (26, 16504), (27, 16510), (62, 16717), (70, 16756), (73, 16789), (97, 16951), (105, 17026), (111, 17086),

Gene: JaNo_23 Start: 19264, Stop: 19932, Start Num: 11

Candidate Starts for JaNo_23:

(Start: 11 @19264 has 53 MA's), (15, 19276), (Start: 20 @19306 has 1 MA's), (27, 19342), (31, 19360), (38, 19396), (43, 19432), (71, 19609), (72, 19615), (73, 19621), (79, 19663), (82, 19693), (87, 19723), (90, 19738), (91, 19741), (96, 19783), (97, 19786), (101, 19816), (105, 19861),

Gene: Jawnski_18 Start: 16080, Stop: 16745, Start Num: 11

Candidate Starts for Jawnski_18:

(Start: 11 @16080 has 53 MA's), (Start: 20 @16122 has 1 MA's), (27, 16158), (57, 16338), (62, 16365), (72, 16431), (73, 16437), (86, 16533), (97, 16599), (105, 16674), (110, 16725), (111, 16734),

Gene: JayCookie_23 Start: 19267, Stop: 19935, Start Num: 11

Candidate Starts for JayCookie_23:

(Start: 11 @19267 has 53 MA's), (15, 19279), (Start: 20 @19309 has 1 MA's), (27, 19345), (31, 19363), (38, 19399), (43, 19435), (71, 19612), (72, 19618), (73, 19624), (79, 19666), (82, 19696), (87, 19726), (90, 19741), (91, 19744), (96, 19786), (97, 19789), (101, 19819), (105, 19864),

Gene: Jinkies_22 Start: 18541, Stop: 19206, Start Num: 11

Candidate Starts for Jinkies_22:

(Start: 11 @18541 has 53 MA's), (19, 18574), (Start: 20 @18583 has 1 MA's), (28, 18625), (64, 18835), (86, 18994), (92, 19024), (97, 19060), (98, 19075), (103, 19111),

Gene: Jordan_20 Start: 16402, Stop: 17067, Start Num: 11

Candidate Starts for Jordan_20:

(Start: 11 @16402 has 53 MA's), (15, 16414), (Start: 20 @16444 has 1 MA's), (26, 16474), (27, 16480), (62, 16687), (70, 16726), (73, 16759), (97, 16921), (105, 16996), (111, 17056),

Gene: KBurrousTX_23 Start: 19298, Stop: 19966, Start Num: 11

Candidate Starts for KBurrousTX_23:

(Start: 11 @19298 has 53 MA's), (16, 19313), (Start: 20 @19340 has 1 MA's), (21, 19346), (27, 19376), (31, 19394), (35, 19412), (46, 19505), (62, 19583), (71, 19643), (73, 19655), (76, 19670), (81, 19721), (82, 19727), (93, 19790), (96, 19817), (97, 19820), (101, 19850), (105, 19895),

Gene: Kabocha_51 Start: 38246, Stop: 39013, Start Num: 1

Candidate Starts for Kabocha_51:

(Start: 1 @38246 has 9 MA's), (3, 38255), (4, 38264), (5, 38303), (6, 38312), (7, 38330), (17, 38387), (22, 38414), (29, 38453), (36, 38483), (47, 38579), (54, 38612), (58, 38627), (62, 38654), (63, 38660), (75, 38738), (77, 38765), (79, 38771), (96, 38876), (98, 38894), (99, 38897), (110, 38996),

Gene: Kabreeze_23 Start: 19264, Stop: 19932, Start Num: 11

Candidate Starts for Kabreeze_23:

(Start: 11 @19264 has 53 MA's), (15, 19276), (Start: 20 @19306 has 1 MA's), (27, 19342), (31, 19360), (38, 19396), (43, 19432), (71, 19609), (72, 19615), (73, 19621), (79, 19663), (82, 19693), (87, 19723), (90, 19738), (91, 19741), (96, 19783), (97, 19786), (101, 19816), (105, 19861),

Gene: King2_18 Start: 16067, Stop: 16732, Start Num: 11

Candidate Starts for King2_18:

(Start: 11 @16067 has 53 MA's), (Start: 20 @16109 has 1 MA's), (27, 16145), (61, 16346), (62, 16352), (66, 16373), (73, 16424), (86, 16520), (95, 16568), (97, 16586), (105, 16661), (110, 16712), (111, 16721),

Gene: Klevey_19 Start: 15554, Stop: 16216, Start Num: 10

Candidate Starts for Klevey_19:

(Start: 10 @15554 has 7 MA's), (21, 15608), (53, 15803),

Gene: LeeroyJ_20 Start: 16381, Stop: 17046, Start Num: 11

Candidate Starts for LeeroyJ_20:

(Start: 11 @16381 has 53 MA's), (15, 16393), (Start: 20 @16423 has 1 MA's), (27, 16459), (73, 16738), (79, 16780), (86, 16834), (95, 16882), (97, 16900), (105, 16975), (110, 17026), (111, 17035),

Gene: Lenoshki_50 Start: 39113, Stop: 39880, Start Num: 1

Candidate Starts for Lenoshki_50:

(Start: 1 @39113 has 9 MA's), (3, 39122), (4, 39131), (5, 39170), (6, 39179), (7, 39197), (17, 39254), (22, 39281), (29, 39320), (36, 39350), (47, 39446), (54, 39479), (58, 39494), (62, 39521), (63, 39527), (75, 39605), (77, 39632), (79, 39638), (96, 39743), (98, 39761), (99, 39764), (110, 39863),

Gene: Lilmac1015_20 Start: 15544, Stop: 16206, Start Num: 10

Candidate Starts for Lilmac1015_20:

(Start: 10 @15544 has 7 MA's), (12, 15553), (21, 15598),

Gene: Linus_23 Start: 19264, Stop: 19932, Start Num: 11

Candidate Starts for Linus_23:

(Start: 11 @19264 has 53 MA's), (15, 19276), (Start: 20 @19306 has 1 MA's), (27, 19342), (31, 19360), (38, 19396), (43, 19432), (71, 19609), (72, 19615), (73, 19621), (79, 19663), (82, 19693), (87, 19723), (90, 19738), (91, 19741), (96, 19783), (97, 19786), (101, 19816), (105, 19861),

Gene: Lukepolites_19 Start: 15532, Stop: 16224, Start Num: 8

Candidate Starts for Lukepolites_19:

(8, 15532), (Start: 20 @15586 has 1 MA's), (34, 15655), (40, 15700), (67, 15853), (68, 15856), (81, 15967), (82, 15973), (96, 16075), (107, 16168),

Gene: Lymara_23 Start: 19262, Stop: 19930, Start Num: 11

Candidate Starts for Lymara_23:

(Start: 11 @19262 has 53 MA's), (Start: 20 @19304 has 1 MA's), (27, 19340), (38, 19394), (43, 19430), (48, 19478), (62, 19547), (71, 19607), (72, 19613), (73, 19619), (79, 19661), (82, 19691), (90, 19736), (91, 19739), (93, 19754), (96, 19781), (97, 19784), (105, 19859),

Gene: Martha_20 Start: 16343, Stop: 17008, Start Num: 11

Candidate Starts for Martha_20:

(Start: 11 @16343 has 53 MA's), (15, 16355), (Start: 20 @16385 has 1 MA's), (26, 16415), (27, 16421), (62, 16628), (70, 16667), (73, 16700), (97, 16862), (105, 16937), (111, 16997),

Gene: Mikronejon_48 Start: 37433, Stop: 38200, Start Num: 1

Candidate Starts for Mikronejon_48:

(Start: 1 @37433 has 9 MA's), (3, 37442), (4, 37451), (5, 37490), (6, 37499), (7, 37517), (17, 37574), (22, 37601), (29, 37640), (36, 37670), (47, 37766), (54, 37799), (58, 37814), (62, 37841), (63, 37847), (75, 37925), (77, 37952), (79, 37958), (96, 38063), (98, 38081), (99, 38084), (110, 38183),

Gene: MintFritos_48 Start: 37434, Stop: 38201, Start Num: 1

Candidate Starts for MintFritos_48:

(Start: 1 @37434 has 9 MA's), (3, 37443), (4, 37452), (5, 37491), (6, 37500), (7, 37518), (17, 37575), (22, 37602), (29, 37641), (36, 37671), (47, 37767), (54, 37800), (58, 37815), (62, 37842), (63, 37848), (75, 37926), (77, 37953), (79, 37959), (96, 38064), (98, 38082), (99, 38085), (110, 38184),

Gene: Mordred_23 Start: 19264, Stop: 19932, Start Num: 11

Candidate Starts for Mordred_23:

(Start: 11 @19264 has 53 MA's), (15, 19276), (Start: 20 @19306 has 1 MA's), (27, 19342), (31, 19360), (38, 19396), (43, 19432), (71, 19609), (72, 19615), (73, 19621), (79, 19663), (82, 19693), (87, 19723), (90, 19738), (91, 19741), (96, 19783), (97, 19786), (101, 19816), (105, 19861),

Gene: MoyaNatalis_23 Start: 19267, Stop: 19935, Start Num: 11

Candidate Starts for MoyaNatalis_23:

(Start: 11 @19267 has 53 MA's), (15, 19279), (Start: 20 @19309 has 1 MA's), (27, 19345), (31, 19363), (38, 19399), (43, 19435), (71, 19612), (72, 19618), (73, 19624), (79, 19666), (82, 19696), (87, 19726), (90, 19741), (91, 19744), (96, 19786), (97, 19789), (101, 19819), (105, 19864),

Gene: Music_20 Start: 18339, Stop: 18995, Start Num: 11

Candidate Starts for Music_20:

(Start: 11 @18339 has 53 MA's), (Start: 20 @18381 has 1 MA's), (44, 18528), (110, 18972),

Gene: Nandito_19 Start: 15643, Stop: 16308, Start Num: 10

Candidate Starts for Nandito_19:

(Start: 10 @15643 has 7 MA's), (21, 15697), (60, 15922), (83, 16084), (110, 16288),

Gene: NathanVaag_18 Start: 16073, Stop: 16738, Start Num: 11

Candidate Starts for NathanVaag_18:

(Start: 11 @16073 has 53 MA's), (Start: 20 @16115 has 1 MA's), (27, 16151), (57, 16331), (62, 16358), (70, 16397), (73, 16430), (86, 16526), (95, 16574), (97, 16592), (105, 16667), (110, 16718), (111, 16727),

Gene: Nostromo_19 Start: 16341, Stop: 17003, Start Num: 11

Candidate Starts for Nostromo_19:

(Start: 11 @16341 has 53 MA's), (Start: 20 @16383 has 1 MA's), (27, 16419), (61, 16620), (73, 16698), (82, 16770), (97, 16857), (105, 16932),

Gene: Oogie_51 Start: 39139, Stop: 39906, Start Num: 1

Candidate Starts for Oogie_51:

(Start: 1 @39139 has 9 MA's), (3, 39148), (4, 39157), (5, 39196), (6, 39205), (7, 39223), (17, 39280), (29, 39346), (36, 39376), (54, 39505), (58, 39520), (62, 39547), (63, 39553), (75, 39631), (77, 39658), (79, 39664), (96, 39769), (98, 39787), (105, 39841), (110, 39889),

Gene: Orkz_23 Start: 15943, Stop: 16611, Start Num: 11

Candidate Starts for Orkz_23:

(Start: 11 @15943 has 53 MA's), (Start: 20 @15985 has 1 MA's), (28, 16027), (38, 16075), (39, 16090), (42, 16108), (56, 16198), (70, 16267), (92, 16426), (105, 16537), (111, 16597),

Gene: Pakusa_48 Start: 37175, Stop: 37942, Start Num: 1

Candidate Starts for Pakusa_48:

(Start: 1 @37175 has 9 MA's), (3, 37184), (4, 37193), (5, 37232), (6, 37241), (7, 37259), (17, 37316), (22, 37343), (29, 37382), (36, 37412), (47, 37508), (54, 37541), (58, 37556), (62, 37583), (63, 37589), (75, 37667), (77, 37694), (79, 37700), (96, 37805), (98, 37823), (99, 37826), (110, 37925),

Gene: Piccoletto_18 Start: 16073, Stop: 16738, Start Num: 11

Candidate Starts for Piccoletto_18:

(Start: 11 @16073 has 53 MA's), (Start: 20 @16115 has 1 MA's), (27, 16151), (57, 16331), (62, 16358), (70, 16397), (72, 16424), (73, 16430), (86, 16526), (95, 16574), (97, 16592), (105, 16667), (110,

16718), (111, 16727),

Gene: Pippa_20 Start: 16434, Stop: 17099, Start Num: 11

Candidate Starts for Pippa_20:

(Start: 11 @16434 has 53 MA's), (15, 16446), (Start: 20 @16476 has 1 MA's), (26, 16506), (27, 16512), (43, 16602), (62, 16719), (70, 16758), (73, 16791), (86, 16887), (95, 16935), (97, 16953), (105, 17028), (111, 17088),

Gene: Prairie_19 Start: 15551, Stop: 16213, Start Num: 10

Candidate Starts for Prairie_19:

(Start: 10 @15551 has 7 MA's), (21, 15605),

Gene: PrincessTrina_23 Start: 19267, Stop: 19935, Start Num: 11

Candidate Starts for PrincessTrina_23:

(Start: 11 @19267 has 53 MA's), (15, 19279), (Start: 20 @19309 has 1 MA's), (27, 19345), (31, 19363), (38, 19399), (43, 19435), (71, 19612), (72, 19618), (73, 19624), (79, 19666), (82, 19696), (87, 19726), (90, 19741), (91, 19744), (96, 19786), (97, 19789), (101, 19819), (105, 19864),

Gene: RosiePosie_23 Start: 19267, Stop: 19935, Start Num: 11

Candidate Starts for RosiePosie_23:

(Start: 11 @19267 has 53 MA's), (15, 19279), (Start: 20 @19309 has 1 MA's), (27, 19345), (31, 19363), (38, 19399), (43, 19435), (71, 19612), (72, 19618), (73, 19624), (79, 19666), (82, 19696), (87, 19726), (90, 19741), (91, 19744), (96, 19786), (97, 19789), (101, 19819), (105, 19864),

Gene: ScarletRaider_49 Start: 40312, Stop: 41082, Start Num: 1

Candidate Starts for ScarletRaider_49:

(Start: 1 @40312 has 9 MA's), (3, 40321), (4, 40330), (5, 40369), (6, 40378), (29, 40519), (32, 40531), (36, 40549), (47, 40645), (50, 40663), (62, 40720), (75, 40804), (77, 40831), (79, 40837), (96, 40945), (99, 40966), (110, 41065),

Gene: Scavito_23 Start: 19264, Stop: 19932, Start Num: 11

Candidate Starts for Scavito_23:

(Start: 11 @19264 has 53 MA's), (15, 19276), (Start: 20 @19306 has 1 MA's), (27, 19342), (31, 19360), (38, 19396), (43, 19432), (71, 19609), (72, 19615), (73, 19621), (79, 19663), (82, 19693), (87, 19723), (90, 19738), (91, 19741), (96, 19783), (97, 19786), (101, 19816), (105, 19861),

Gene: Schomber_49 Start: 37183, Stop: 37950, Start Num: 1

Candidate Starts for Schomber_49:

(Start: 1 @37183 has 9 MA's), (3, 37192), (4, 37201), (5, 37240), (6, 37249), (7, 37267), (17, 37324), (22, 37351), (29, 37390), (36, 37420), (47, 37516), (54, 37549), (58, 37564), (62, 37591), (63, 37597), (75, 37675), (77, 37702), (79, 37708), (96, 37813), (98, 37831), (99, 37834), (110, 37933),

Gene: Shade_20 Start: 16381, Stop: 17046, Start Num: 11

Candidate Starts for Shade_20:

(Start: 11 @16381 has 53 MA's), (15, 16393), (Start: 20 @16423 has 1 MA's), (26, 16453), (27, 16459), (62, 16666), (70, 16705), (73, 16738), (97, 16900), (105, 16975), (111, 17035),

Gene: Sicarius2_21 Start: 16888, Stop: 17553, Start Num: 11

Candidate Starts for Sicarius2_21:

(Start: 11 @16888 has 53 MA's), (13, 16897), (Start: 20 @16930 has 1 MA's), (26, 16960), (27, 16966), (39, 17035), (48, 17104), (57, 17146), (61, 17167), (62, 17173), (70, 17212), (73, 17245), (83, 17323), (86, 17341), (97, 17407), (111, 17542),

Gene: Sonny_20 Start: 16444, Stop: 17067, Start Num: 20

Candidate Starts for Sonny_20:

(Start: 11 @16402 has 53 MA's), (15, 16414), (Start: 20 @16444 has 1 MA's), (26, 16474), (27, 16480), (48, 16618), (62, 16687), (70, 16726), (73, 16759), (97, 16921), (105, 16996), (111, 17056),

Gene: StevieBAY_20 Start: 16381, Stop: 17046, Start Num: 11

Candidate Starts for StevieBAY_20:

(Start: 11 @16381 has 53 MA's), (15, 16393), (Start: 20 @16423 has 1 MA's), (27, 16459), (73, 16738), (95, 16882), (97, 16900), (105, 16975), (110, 17026), (111, 17035),

Gene: SunnyJune_21 Start: 17671, Stop: 18336, Start Num: 11

Candidate Starts for SunnyJune_21:

(Start: 11 @17671 has 53 MA's), (Start: 20 @17713 has 1 MA's), (21, 17719), (28, 17755), (72, 18022), (78, 18067),

Gene: TaeYoung_20 Start: 16406, Stop: 17071, Start Num: 11

Candidate Starts for TaeYoung_20:

(Start: 11 @16406 has 53 MA's), (15, 16418), (Start: 20 @16448 has 1 MA's), (26, 16478), (27, 16484), (62, 16691), (70, 16730), (73, 16763), (97, 16925), (105, 17000), (111, 17060),

Gene: Thales_44 Start: 39391, Stop: 40161, Start Num: 2

Candidate Starts for Thales_44:

(Start: 2 @39391 has 3 MA's), (3, 39400), (5, 39448), (6, 39457), (7, 39475), (14, 39520), (22, 39559), (29, 39598), (33, 39613), (41, 39673), (54, 39757), (63, 39805), (88, 39964), (89, 39979), (94, 40006), (96, 40024), (98, 40042), (110, 40144),

Gene: Timinator_20 Start: 16381, Stop: 17046, Start Num: 11

Candidate Starts for Timinator_20:

(Start: 11 @16381 has 53 MA's), (15, 16393), (Start: 20 @16423 has 1 MA's), (27, 16459), (73, 16738), (79, 16780), (86, 16834), (95, 16882), (97, 16900), (105, 16975), (110, 17026), (111, 17035),

Gene: Toneprano_48 Start: 37433, Stop: 38200, Start Num: 1

Candidate Starts for Toneprano_48:

(Start: 1 @37433 has 9 MA's), (3, 37442), (4, 37451), (5, 37490), (6, 37499), (7, 37517), (17, 37574), (22, 37601), (29, 37640), (36, 37670), (47, 37766), (54, 37799), (58, 37814), (62, 37841), (63, 37847), (75, 37925), (77, 37952), (79, 37958), (96, 38063), (98, 38081), (99, 38084), (110, 38183),

Gene: Tophat_23 Start: 19266, Stop: 19934, Start Num: 11

Candidate Starts for Tophat_23:

(Start: 11 @19266 has 53 MA's), (15, 19278), (Start: 20 @19308 has 1 MA's), (27, 19344), (31, 19362), (38, 19398), (43, 19434), (71, 19611), (72, 19617), (73, 19623), (79, 19665), (82, 19695), (87, 19725), (90, 19740), (91, 19743), (96, 19785), (97, 19788), (101, 19818), (105, 19863),

Gene: Twin_48 Start: 37433, Stop: 38200, Start Num: 1

Candidate Starts for Twin_48:

(Start: 1 @37433 has 9 MA's), (3, 37442), (4, 37451), (5, 37490), (6, 37499), (7, 37517), (17, 37574), (22, 37601), (29, 37640), (36, 37670), (47, 37766), (54, 37799), (58, 37814), (62, 37841), (63, 37847), (75, 37925), (77, 37952), (79, 37958), (96, 38063), (98, 38081), (99, 38084), (110, 38183),

Gene: UBSmoodge_52 Start: 40770, Stop: 41540, Start Num: 2

Candidate Starts for UBSmoodge_52:

(Start: 2 @40770 has 3 MA's), (4, 40788), (5, 40827), (6, 40836), (29, 40977), (32, 40989), (36, 41007), (47, 41103), (50, 41121), (62, 41178), (75, 41262), (77, 41289), (79, 41295), (96, 41403), (99, 41424),

(110, 41523),

Gene: Vibaki_20 Start: 18352, Stop: 19008, Start Num: 11

Candidate Starts for Vibaki_20:

(Start: 11 @18352 has 53 MA's), (Start: 20 @18394 has 1 MA's), (44, 18541), (110, 18985),

Gene: Vitus_20 Start: 17510, Stop: 18163, Start Num: 11

Candidate Starts for Vitus_20:

(Start: 11 @17510 has 53 MA's), (Start: 20 @17552 has 1 MA's), (39, 17657), (45, 17708), (62, 17795), (73, 17867), (74, 17870), (77, 17903), (82, 17939), (83, 17945), (97, 18020),

Gene: Wyborn_21 Start: 16749, Stop: 17414, Start Num: 11

Candidate Starts for Wyborn_21:

(Start: 11 @16749 has 53 MA's), (13, 16758), (Start: 20 @16791 has 1 MA's), (26, 16821), (27, 16827), (39, 16896), (48, 16965), (57, 17007), (61, 17028), (62, 17034), (70, 17073), (73, 17106), (83, 17184), (86, 17202), (97, 17268), (111, 17403),

Gene: Zartrosa_20 Start: 16405, Stop: 17070, Start Num: 11

Candidate Starts for Zartrosa_20:

(Start: 11 @16405 has 53 MA's), (15, 16417), (Start: 20 @16447 has 1 MA's), (26, 16477), (27, 16483), (62, 16690), (70, 16729), (73, 16762), (97, 16924), (105, 16999), (111, 17059),