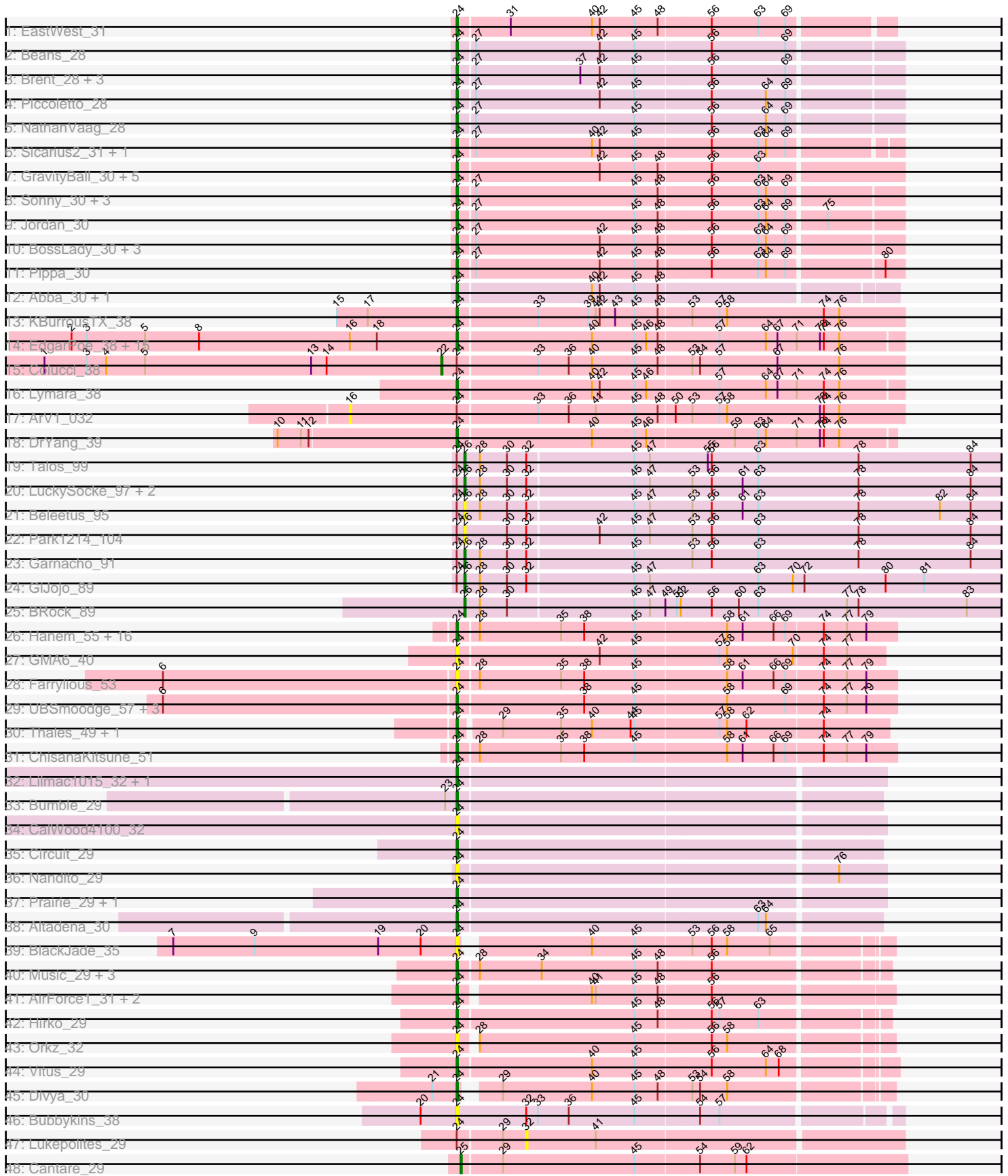


Pham 308349



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 308349 Report

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

Pham number 308349 has 108 members, 27 are drafts.

Phages represented in each track:

- Track 1 : EastWest_31
- Track 2 : Beans_28
- Track 3 : Brent_28, Franzy_28, Jawnski_28, King2_28
- Track 4 : Piccoletto_28
- Track 5 : NathanVaag_28
- Track 6 : Sicarius2_31, Wyborn_31
- Track 7 : GravityBall_30, LeeroyJ_30, StevieBAY_30, BarretLemon_30, BigDome_30, Timinator_30
- Track 8 : Sonny_30, Zartrosa_30, JKerns_30, Shade_30
- Track 9 : Jordan_30
- Track 10 : BossLady_30, Martha_30, TaeYoung_30, Grekaycon_30
- Track 11 : Pippa_30
- Track 12 : Abba_30, Nostromo_29
- Track 13 : KBurrousTX_38
- Track 14 : EdgarPoe_38, Tophat_38, Kabreeze_38, Chipper1996_380, Chubster_38, RosiePosie_38, Mordred_38, Conboy_38, JaNo_38, Linus_38, HumptyDumpty_38, Chocolat_38, Scavito_38, PrincessTrina_38, JayCookie_38, MoyaNatalis_38
- Track 15 : Colucci_38
- Track 16 : Lymara_38
- Track 17 : ArV1_032
- Track 18 : DrYang_39
- Track 19 : Talos_99
- Track 20 : LuckySocke_97, Alone3_99, Fudan_95
- Track 21 : Beleetus_95
- Track 22 : Park1214_104
- Track 23 : Garnacho_91
- Track 24 : GiJojo_89
- Track 25 : BRock_89
- Track 26 : Hanem_55, Pakusa_53, MintFritos_53, Argena_53, EmoNemo_53, Schomber_54, Twin_53, Amoonguss_53, Mikronejon_53, Lenoshki_55, Aloki_55, Gray_55, Toneprano_53, Kabocha_56, Oogie_56, Beted_55, Chidiebere_55
- Track 27 : GMA6_40
- Track 28 : Farrylious_53
- Track 29 : UBSmoodge_57, ScarletRaider_54, FruityLoops_53, FlyingTortilla_55
- Track 30 : Thales_49, DalanDe_50
- Track 31 : ChisanaKitsune_51

- Track 32 : Lilmac1015_32, Bolt007_31
- Track 33 : Bumble_29
- Track 34 : CalWood4100_32
- Track 35 : Circuit_29
- Track 36 : Nandito_29
- Track 37 : Prairie_29, Klevey_31
- Track 38 : Altadena_30
- Track 39 : BlackJade_35
- Track 40 : Music_29, GoldDust_29, Gooberta_29, Vibaki_29
- Track 41 : AirForce1_31, Jinkies_32, SunnyJune_31
- Track 42 : Hirko_29
- Track 43 : Orkz_32
- Track 44 : Vitus_29
- Track 45 : Divya_30
- Track 46 : Bubbykins_38
- Track 47 : Lukepolites_29
- Track 48 : Cantare_29

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

The start number called the most often in the published annotations is 24, it was called in 72 of the 81 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abba_30, AirForce1_31, Aloki_55, Altadena_30, Amoonguss_53, Argena_53, BarretLemon_30, Beans_28, Beted_55, BigDome_30, BlackJade_35, Bolt007_31, BossLady_30, Brent_28, Bubbykins_38, Bumble_29, CalWood4100_32, Chidiebere_55, Chipper1996_380, ChisanaKitsune_51, Chocolat_38, Chubster_38, Circuit_29, Conboy_38, DalanDe_50, Divya_30, DrYang_39, EastWest_31, EdgarPoe_38, EmoNemo_53, Farrylious_53, FlyingTortilla_55, Franzy_28, FruityLoops_53, GMA6_40, GoldDust_29, Gooberta_29, GravityBall_30, Gray_55, Grekaycon_30, Hanem_55, Hirko_29, HumptyDumpty_38, JKerns_30, JaNo_38, Jawnski_28, JayCookie_38, Jinkies_32, Jordan_30, KBurrousTX_38, Kabocha_56, Kabreeze_38, King2_28, Klevey_31, LeeroyJ_30, Lenoshki_55, Lilmac1015_32, Linus_38, Lymara_38, Martha_30, Mikronejon_53, MintFritos_53, Mordred_38, MoyaNatalis_38, Music_29, Nandito_29, NathanVaag_28, Nostromo_29, Oogie_56, Orkz_32, Pakusa_53, Piccoletto_28, Pippa_30, Prairie_29, PrincessTrina_38, RosiePosie_38, ScarletRaider_54, Scavito_38, Schomber_54, Shade_30, Sicarius2_31, Sonny_30, StevieBAY_30, SunnyJune_31, TaeYoung_30, Thales_49, Timinator_30, Toneprano_53, Tophat_38, Twin_53, UBSmoodge_57, Vibaki_29, Vitus_29, Wyborn_31, Zartrosa_30,

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

- Alone3_99, ArV1_032, Beleetus_95, Colucci_38, Fudan_95, Garnacho_91, GiJojo_89, LuckySocke_97, Lukepolites_29, Park1214_104, Talos_99,

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

- BRock_89, Cantare_29,

Summary by start number:

Start 16:

- Found in 17 of 108 (15.7%) of genes in pham
- No Manual Annotations of this start.
- Called 5.9% of time when present
- Phage (with cluster) where this start called: ArV1_032 (AR),

Start 22:

- Found in 1 of 108 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 81
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colucci_38 (AR),

Start 24:

- Found in 106 of 108 (98.1%) of genes in pham
- Manual Annotations of this start: 72 of 81
- Called 89.6% of time when present
- Phage (with cluster) where this start called: Abba_30 (AO3), AirForce1_31 (FL), Alok_55 (DQ), Altadena_30 (FH), Amoonguss_53 (DQ), Argenta_53 (DQ), BarretLemon_30 (AO2), Beans_28 (AO1), Beted_55 (DQ), BigDome_30 (AO2), BlackJade_35 (FL), Bolt007_31 (FH), BossLady_30 (AO2), Brent_28 (AO1), Bubbykins_38 (UNK), Bumble_29 (FH), CalWood4100_32 (FH), Chidiebere_55 (DQ), Chipper1996_380 (AR), ChisanaKitsune_51 (DQ), Chocolat_38 (AR), Chubster_38 (AR), Circuit_29 (FH), Conboy_38 (AR), DalanDe_50 (DQ), Divya_30 (FL), DrYang_39 (AR), EastWest_31 (AO), EdgarPoe_38 (AR), EmoNemo_53 (DQ), Farrylous_53 (DQ), FlyingTortilla_55 (DQ), Franzy_28 (AO1), FruityLoops_53 (DQ), GMA6_40 (DQ), GoldDust_29 (FL), Gooberta_29 (FL), GravityBall_30 (AO2), Gray_55 (DQ), Grekaycon_30 (AO2), Hanem_55 (DQ), Hirko_29 (FL), HumptyDumpty_38 (AR), JKerns_30 (AO2), JaNo_38 (AR), Jawnski_28 (AO1), JayCookie_38 (AR), Jinkies_32 (FL), Jordan_30 (AO2), KBurroustX_38 (AR), Kabocha_56 (DQ), Kabreeze_38 (AR), King2_28 (AO1), Klevey_31 (FH), LeeroyJ_30 (AO2), Lenoshki_55 (DQ), Lilmac1015_32 (FH), Linus_38 (AR), Lymara_38 (AR), Martha_30 (AO2), Mikronejon_53 (DQ), MintFritos_53 (DQ), Mordred_38 (AR), MoyaNatalis_38 (AR), Music_29 (FL), Nandito_29 (FH), NathanVaag_28 (AO1), Nostromo_29 (AO3), Oogie_56 (DQ), Orkz_32 (FL), Pakusa_53 (DQ), Piccoletto_28 (AO1), Pippa_30 (AO2), Prairie_29 (FH), PrincessTrina_38 (AR), RosiePosie_38 (AR), ScarletRaider_54 (DQ), Scavito_38 (AR), Schomber_54 (DQ), Shade_30 (AO2), Sicarius2_31 (AO2), Sonny_30 (AO2), StevieBAY_30 (AO2), SunnyJune_31 (FL), TaeYoung_30 (AO2), Thales_49 (DQ), Timinator_30 (AO2), Toneprano_53 (DQ), Tophat_38 (AR), Twin_53 (DQ), UBSmoodge_57 (DQ), Vibaki_29 (FL), Vitus_29 (FL), Wyborn_31 (AO2), Zartrosa_30 (AO2),

Start 25:

- Found in 1 of 108 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 81
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare_29 (singleton),

Start 26:

- Found in 9 of 108 (8.3%) of genes in pham
- Manual Annotations of this start: 7 of 81
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Alone3_99 (BS), BRock_89 (BS), Beleetus_95 (BS), Fudan_95 (BS), Garnacho_91 (BS), GiJojo_89 (BS), LuckySocke_97 (BS), Park1214_104 (BS), Talos_99 (BS),

Start 32:

- Found in 10 of 108 (9.3%) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Lukepolites_29 (singleton),

Summary by clusters:

There are 11 clusters represented in this pham: singleton, AO, AR, AO3, AO2, AO1, BS, FH, UNK, FL, DQ,

Info for manual annotations of cluster AO:

- Start number 24 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 24 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 24 was manually annotated 17 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 24 was manually annotated 2 times for cluster AO3.

Info for manual annotations of cluster AR:

- Start number 22 was manually annotated 1 time for cluster AR.
- Start number 24 was manually annotated 18 times for cluster AR.

Info for manual annotations of cluster BS:

- Start number 26 was manually annotated 7 times for cluster BS.

Info for manual annotations of cluster DQ:

- Start number 24 was manually annotated 12 times for cluster DQ.

Info for manual annotations of cluster FH:

- Start number 24 was manually annotated 7 times for cluster FH.

Info for manual annotations of cluster FL:

- Start number 24 was manually annotated 8 times for cluster FL.

Gene Information:

Gene: Abba_30 Start: 25231, Stop: 25557, Start Num: 24

Candidate Starts for Abba_30:

(Start: 24 @25231 has 72 MA's), (40, 25333), (42, 25339), (45, 25366), (48, 25384),

Gene: AirForce1_31 Start: 22562, Stop: 22882, Start Num: 24

Candidate Starts for AirForce1_31:

(Start: 24 @22562 has 72 MA's), (40, 22658), (41, 22661), (45, 22691), (48, 22709), (56, 22748),

Gene: Alok_i_55 Start: 41758, Stop: 42090, Start Num: 24

Candidate Starts for Alok_i_55:

(Start: 24 @41758 has 72 MA's), (28, 41773), (35, 41836), (38, 41854), (45, 41893), (58, 41962), (61, 41974), (66, 41998), (69, 42007), (74, 42034), (77, 42052), (79, 42067),

Gene: Alone3_99 Start: 50988, Stop: 51401, Start Num: 26

Candidate Starts for Alone3_99:

(Start: 24 @50982 has 72 MA's), (Start: 26 @50988 has 7 MA's), (28, 51000), (30, 51021), (32, 51036), (45, 51117), (47, 51129), (53, 51162), (56, 51177), (61, 51201), (63, 51213), (78, 51291), (84, 51378),

Gene: Altadena_30 Start: 23925, Stop: 24242, Start Num: 24

Candidate Starts for Altadena_30:

(Start: 24 @23925 has 72 MA's), (63, 24153), (64, 24159),

Gene: Amoonguss_53 Start: 41761, Stop: 42093, Start Num: 24

Candidate Starts for Amoonguss_53:

(Start: 24 @41761 has 72 MA's), (28, 41776), (35, 41839), (38, 41857), (45, 41896), (58, 41965), (61, 41977), (66, 42001), (69, 42010), (74, 42037), (77, 42055), (79, 42070),

Gene: ArV1_032 Start: 28698, Stop: 29120, Start Num: 16

Candidate Starts for ArV1_032:

(16, 28698), (Start: 24 @28779 has 72 MA's), (33, 28839), (36, 28863), (41, 28884), (45, 28914), (48, 28932), (50, 28944), (53, 28956), (57, 28977), (58, 28983), (73, 29055), (74, 29058), (76, 29070),

Gene: Argena_53 Start: 41758, Stop: 42090, Start Num: 24

Candidate Starts for Argena_53:

(Start: 24 @41758 has 72 MA's), (28, 41773), (35, 41836), (38, 41854), (45, 41893), (58, 41962), (61, 41974), (66, 41998), (69, 42007), (74, 42034), (77, 42052), (79, 42067),

Gene: BRock_89 Start: 45282, Stop: 45695, Start Num: 26

Candidate Starts for BRock_89:

(Start: 26 @45282 has 7 MA's), (28, 45294), (30, 45315), (45, 45411), (47, 45423), (49, 45435), (51, 45444), (52, 45447), (56, 45471), (60, 45492), (63, 45507), (77, 45576), (78, 45585), (83, 45669),

Gene: BarretLemon_30 Start: 25731, Stop: 26066, Start Num: 24

Candidate Starts for BarretLemon_30:

(Start: 24 @25731 has 72 MA's), (42, 25839), (45, 25866), (48, 25884), (56, 25923), (63, 25959),

Gene: Beans_28 Start: 25436, Stop: 25768, Start Num: 24

Candidate Starts for Beans_28:

(Start: 24 @25436 has 72 MA's), (27, 25448), (42, 25544), (45, 25571), (56, 25628), (69, 25685),

Gene: Beleetus_95 Start: 49118, Stop: 49531, Start Num: 26

Candidate Starts for Beleetus_95:

(Start: 24 @49112 has 72 MA's), (Start: 26 @49118 has 7 MA's), (28, 49130), (30, 49151), (32, 49166), (45, 49247), (47, 49259), (53, 49292), (56, 49307), (61, 49331), (63, 49343), (78, 49421), (82, 49484), (84, 49508),

Gene: Beted_55 Start: 43438, Stop: 43770, Start Num: 24

Candidate Starts for Beted_55:

(Start: 24 @43438 has 72 MA's), (28, 43453), (35, 43516), (38, 43534), (45, 43573), (58, 43642), (61, 43654), (66, 43678), (69, 43687), (74, 43714), (77, 43732), (79, 43747),

Gene: BigDome_30 Start: 25723, Stop: 26058, Start Num: 24

Candidate Starts for BigDome_30:

(Start: 24 @25723 has 72 MA's), (42, 25831), (45, 25858), (48, 25876), (56, 25915), (63, 25951),

Gene: BlackJade_35 Start: 25219, Stop: 25527, Start Num: 24

Candidate Starts for BlackJade_35:

(7, 25000), (9, 25063), (19, 25159), (20, 25192), (Start: 24 @25219 has 72 MA's), (40, 25309), (45, 25342), (53, 25384), (56, 25399), (58, 25411), (65, 25444),

Gene: Bolt007_31 Start: 22989, Stop: 23309, Start Num: 24

Candidate Starts for Bolt007_31:

(Start: 24 @22989 has 72 MA's),

Gene: BossLady_30 Start: 25711, Stop: 26043, Start Num: 24

Candidate Starts for BossLady_30:

(Start: 24 @25711 has 72 MA's), (27, 25723), (42, 25819), (45, 25846), (48, 25864), (56, 25903), (63, 25939), (64, 25945), (69, 25960),

Gene: Brent_28 Start: 25398, Stop: 25730, Start Num: 24

Candidate Starts for Brent_28:

(Start: 24 @25398 has 72 MA's), (27, 25410), (37, 25491), (42, 25506), (45, 25533), (56, 25590), (69, 25647),

Gene: Bubbykins_38 Start: 28392, Stop: 28721, Start Num: 24

Candidate Starts for Bubbykins_38:

(20, 28365), (Start: 24 @28392 has 72 MA's), (32, 28446), (33, 28455), (36, 28479), (45, 28530), (54, 28578), (57, 28593),

Gene: Bumble_29 Start: 23719, Stop: 24036, Start Num: 24

Candidate Starts for Bumble_29:

(23, 23710), (Start: 24 @23719 has 72 MA's),

Gene: CalWood4100_32 Start: 22982, Stop: 23302, Start Num: 24

Candidate Starts for CalWood4100_32:

(Start: 24 @22982 has 72 MA's),

Gene: Cantare_29 Start: 26667, Stop: 27005, Start Num: 25

Candidate Starts for Cantare_29:

(Start: 25 @26667 has 1 MA's), (29, 26697), (45, 26799), (54, 26847), (59, 26874), (62, 26883),

Gene: Chidiebere_55 Start: 41758, Stop: 42090, Start Num: 24

Candidate Starts for Chidiebere_55:

(Start: 24 @41758 has 72 MA's), (28, 41773), (35, 41836), (38, 41854), (45, 41893), (58, 41962), (61, 41974), (66, 41998), (69, 42007), (74, 42034), (77, 42052), (79, 42067),

Gene: Chipper1996_380 Start: 30497, Stop: 30835, Start Num: 24

Candidate Starts for Chipper1996_380:

(2, 30200), (3, 30212), (5, 30257), (8, 30299), (16, 30416), (18, 30437), (Start: 24 @30497 has 72 MA's), (40, 30599), (45, 30632), (46, 30641), (48, 30650), (57, 30695), (64, 30731), (67, 30740), (71, 30755), (73, 30773), (74, 30776), (76, 30788),

Gene: ChisanaKitsune_51 Start: 40549, Stop: 40881, Start Num: 24

Candidate Starts for ChisanaKitsune_51:

(Start: 24 @40549 has 72 MA's), (28, 40564), (35, 40627), (38, 40645), (45, 40684), (58, 40753), (61, 40765), (66, 40789), (69, 40798), (74, 40825), (77, 40843), (79, 40858),

Gene: Chocolat_38 Start: 30497, Stop: 30835, Start Num: 24

Candidate Starts for Chocolat_38:

(2, 30200), (3, 30212), (5, 30257), (8, 30299), (16, 30416), (18, 30437), (Start: 24 @30497 has 72 MA's), (40, 30599), (45, 30632), (46, 30641), (48, 30650), (57, 30695), (64, 30731), (67, 30740), (71, 30755), (73, 30773), (74, 30776), (76, 30788),

Gene: Chubster_38 Start: 30269, Stop: 30607, Start Num: 24

Candidate Starts for Chubster_38:

(2, 29972), (3, 29984), (5, 30029), (8, 30071), (16, 30188), (18, 30209), (Start: 24 @30269 has 72 MA's), (40, 30371), (45, 30404), (46, 30413), (48, 30422), (57, 30467), (64, 30503), (67, 30512), (71, 30527), (73, 30545), (74, 30548), (76, 30560),

Gene: Circuit_29 Start: 24572, Stop: 24889, Start Num: 24

Candidate Starts for Circuit_29:

(Start: 24 @24572 has 72 MA's),

Gene: Colucci_38 Start: 30063, Stop: 30416, Start Num: 22

Candidate Starts for Colucci_38:

(1, 29757), (3, 29790), (4, 29805), (5, 29835), (13, 29964), (14, 29976), (Start: 22 @30063 has 1 MA's), (Start: 24 @30075 has 72 MA's), (33, 30135), (36, 30159), (40, 30177), (45, 30210), (48, 30228), (53, 30252), (54, 30258), (57, 30273), (67, 30318), (76, 30366),

Gene: Conboy_38 Start: 30496, Stop: 30834, Start Num: 24

Candidate Starts for Conboy_38:

(2, 30199), (3, 30211), (5, 30256), (8, 30298), (16, 30415), (18, 30436), (Start: 24 @30496 has 72 MA's), (40, 30598), (45, 30631), (46, 30640), (48, 30649), (57, 30694), (64, 30730), (67, 30739), (71, 30754), (73, 30772), (74, 30775), (76, 30787),

Gene: DalanDe_50 Start: 44690, Stop: 45013, Start Num: 24

Candidate Starts for DalanDe_50:

(Start: 24 @44690 has 72 MA's), (29, 44720), (35, 44765), (40, 44789), (44, 44819), (45, 44822), (57, 44885), (58, 44891), (62, 44906), (74, 44963),

Gene: Divya_30 Start: 22518, Stop: 22826, Start Num: 24

Candidate Starts for Divya_30:

(21, 22500), (Start: 24 @22518 has 72 MA's), (29, 22539), (40, 22608), (45, 22641), (48, 22659), (53, 22683), (54, 22689), (58, 22710),

Gene: DrYang_39 Start: 31833, Stop: 32165, Start Num: 24

Candidate Starts for DrYang_39:

(10, 31698), (11, 31716), (12, 31722), (Start: 24 @31833 has 72 MA's), (40, 31935), (45, 31968), (46, 31977), (59, 32043), (63, 32061), (64, 32067), (71, 32091), (73, 32109), (74, 32112), (76, 32124),

Gene: EastWest_31 Start: 25558, Stop: 25881, Start Num: 24

Candidate Starts for EastWest_31:

(Start: 24 @25558 has 72 MA's), (31, 25597), (40, 25660), (42, 25666), (45, 25693), (48, 25711), (56, 25750), (63, 25786), (69, 25807),

Gene: EdgarPoe_38 Start: 30496, Stop: 30834, Start Num: 24

Candidate Starts for EdgarPoe_38:

(2, 30199), (3, 30211), (5, 30256), (8, 30298), (16, 30415), (18, 30436), (Start: 24 @30496 has 72 MA's), (40, 30598), (45, 30631), (46, 30640), (48, 30649), (57, 30694), (64, 30730), (67, 30739), (71, 30754), (73, 30772), (74, 30775), (76, 30787),

Gene: EmoNemo_53 Start: 41758, Stop: 42090, Start Num: 24

Candidate Starts for EmoNemo_53:

(Start: 24 @41758 has 72 MA's), (28, 41773), (35, 41836), (38, 41854), (45, 41893), (58, 41962), (61, 41974), (66, 41998), (69, 42007), (74, 42034), (77, 42052), (79, 42067),

Gene: Farrylious_53 Start: 41534, Stop: 41866, Start Num: 24

Candidate Starts for Farrylious_53:

(6, 41309), (Start: 24 @41534 has 72 MA's), (28, 41549), (35, 41612), (38, 41630), (45, 41669), (58, 41738), (61, 41750), (66, 41774), (69, 41783), (74, 41810), (77, 41828), (79, 41843),

Gene: FlyingTortilla_55 Start: 45339, Stop: 45671, Start Num: 24

Candidate Starts for FlyingTortilla_55:

(6, 45114), (Start: 24 @45339 has 72 MA's), (38, 45435), (45, 45474), (58, 45543), (69, 45588), (74, 45615), (77, 45633), (79, 45648),

Gene: Franzy_28 Start: 25397, Stop: 25729, Start Num: 24

Candidate Starts for Franzy_28:

(Start: 24 @25397 has 72 MA's), (27, 25409), (37, 25490), (42, 25505), (45, 25532), (56, 25589), (69, 25646),

Gene: FruityLoops_53 Start: 44639, Stop: 44971, Start Num: 24

Candidate Starts for FruityLoops_53:

(6, 44414), (Start: 24 @44639 has 72 MA's), (38, 44735), (45, 44774), (58, 44843), (69, 44888), (74, 44915), (77, 44933), (79, 44948),

Gene: Fudan_95 Start: 49781, Stop: 50194, Start Num: 26

Candidate Starts for Fudan_95:

(Start: 24 @49775 has 72 MA's), (Start: 26 @49781 has 7 MA's), (28, 49793), (30, 49814), (32, 49829), (45, 49910), (47, 49922), (53, 49955), (56, 49970), (61, 49994), (63, 50006), (78, 50084), (84, 50171),

Gene: GMA6_40 Start: 33089, Stop: 33412, Start Num: 24

Candidate Starts for GMA6_40:

(Start: 24 @33089 has 72 MA's), (42, 33197), (45, 33224), (57, 33287), (58, 33293), (70, 33344), (74, 33365), (77, 33383),

Gene: Garnacho_91 Start: 49430, Stop: 49843, Start Num: 26

Candidate Starts for Garnacho_91:

(Start: 24 @49424 has 72 MA's), (Start: 26 @49430 has 7 MA's), (28, 49442), (30, 49463), (32, 49478), (45, 49559), (53, 49604), (56, 49619), (63, 49655), (78, 49733), (84, 49820),

Gene: GiJojo_89 Start: 50517, Stop: 50930, Start Num: 26

Candidate Starts for GiJojo_89:

(Start: 24 @50511 has 72 MA's), (Start: 26 @50517 has 7 MA's), (28, 50529), (30, 50550), (32, 50565), (45, 50646), (47, 50658), (63, 50742), (70, 50769), (72, 50778), (80, 50841), (81, 50871),

Gene: GoldDust_29 Start: 26909, Stop: 27226, Start Num: 24

Candidate Starts for GoldDust_29:

(Start: 24 @26909 has 72 MA's), (28, 26924), (34, 26972), (45, 27044), (48, 27062), (56, 27101),

Gene: Gooberta_29 Start: 26908, Stop: 27225, Start Num: 24

Candidate Starts for Gooberta_29:

(Start: 24 @26908 has 72 MA's), (28, 26923), (34, 26971), (45, 27043), (48, 27061), (56, 27100),

Gene: GravityBall_30 Start: 25730, Stop: 26065, Start Num: 24

Candidate Starts for GravityBall_30:

(Start: 24 @25730 has 72 MA's), (42, 25838), (45, 25865), (48, 25883), (56, 25922), (63, 25958),

Gene: Gray_55 Start: 41759, Stop: 42091, Start Num: 24

Candidate Starts for Gray_55:

(Start: 24 @41759 has 72 MA's), (28, 41774), (35, 41837), (38, 41855), (45, 41894), (58, 41963), (61, 41975), (66, 41999), (69, 42008), (74, 42035), (77, 42053), (79, 42068),

Gene: Grekaycon_30 Start: 25657, Stop: 25989, Start Num: 24

Candidate Starts for Grekaycon_30:

(Start: 24 @25657 has 72 MA's), (27, 25669), (42, 25765), (45, 25792), (48, 25810), (56, 25849), (63, 25885), (64, 25891), (69, 25906),

Gene: Hanem_55 Start: 41758, Stop: 42090, Start Num: 24

Candidate Starts for Hanem_55:

(Start: 24 @41758 has 72 MA's), (28, 41773), (35, 41836), (38, 41854), (45, 41893), (58, 41962), (61, 41974), (66, 41998), (69, 42007), (74, 42034), (77, 42052), (79, 42067),

Gene: Hirko_29 Start: 27270, Stop: 27587, Start Num: 24

Candidate Starts for Hirko_29:

(Start: 24 @27270 has 72 MA's), (45, 27405), (48, 27423), (56, 27462), (57, 27468), (63, 27498),

Gene: HumptyDumpty_38 Start: 30495, Stop: 30833, Start Num: 24

Candidate Starts for HumptyDumpty_38:

(2, 30198), (3, 30210), (5, 30255), (8, 30297), (16, 30414), (18, 30435), (Start: 24 @30495 has 72 MA's), (40, 30597), (45, 30630), (46, 30639), (48, 30648), (57, 30693), (64, 30729), (67, 30738), (71, 30753), (73, 30771), (74, 30774), (76, 30786),

Gene: JKerns_30 Start: 25684, Stop: 26016, Start Num: 24

Candidate Starts for JKerns_30:

(Start: 24 @25684 has 72 MA's), (27, 25696), (45, 25819), (48, 25837), (56, 25876), (63, 25912), (64, 25918), (69, 25933),

Gene: JaNo_38 Start: 30495, Stop: 30833, Start Num: 24

Candidate Starts for JaNo_38:

(2, 30198), (3, 30210), (5, 30255), (8, 30297), (16, 30414), (18, 30435), (Start: 24 @30495 has 72 MA's), (40, 30597), (45, 30630), (46, 30639), (48, 30648), (57, 30693), (64, 30729), (67, 30738), (71, 30753), (73, 30771), (74, 30774), (76, 30786),

Gene: Jawnski_28 Start: 25407, Stop: 25739, Start Num: 24

Candidate Starts for Jawnski_28:

(Start: 24 @25407 has 72 MA's), (27, 25419), (37, 25500), (42, 25515), (45, 25542), (56, 25599), (69, 25656),

Gene: JayCookie_38 Start: 30499, Stop: 30837, Start Num: 24

Candidate Starts for JayCookie_38:

(2, 30202), (3, 30214), (5, 30259), (8, 30301), (16, 30418), (18, 30439), (Start: 24 @30499 has 72 MA's), (40, 30601), (45, 30634), (46, 30643), (48, 30652), (57, 30697), (64, 30733), (67, 30742), (71, 30757), (73, 30775), (74, 30778), (76, 30790),

Gene: Jinkies_32 Start: 25039, Stop: 25359, Start Num: 24

Candidate Starts for Jinkies_32:

(Start: 24 @25039 has 72 MA's), (40, 25135), (41, 25138), (45, 25168), (48, 25186), (56, 25225),

Gene: Jordan_30 Start: 25654, Stop: 25986, Start Num: 24

Candidate Starts for Jordan_30:

(Start: 24 @25654 has 72 MA's), (27, 25666), (45, 25789), (48, 25807), (56, 25846), (63, 25882), (64, 25888), (69, 25903), (75, 25930),

Gene: KBurrousTX_38 Start: 31594, Stop: 31935, Start Num: 24

Candidate Starts for KBurrousTX_38:

(15, 31504), (17, 31528), (Start: 24 @31594 has 72 MA's), (33, 31654), (39, 31693), (41, 31699), (42, 31702), (43, 31714), (45, 31729), (48, 31747), (53, 31771), (57, 31792), (58, 31798), (74, 31873), (76, 31885),

Gene: Kabocha_56 Start: 42571, Stop: 42903, Start Num: 24

Candidate Starts for Kabocha_56:

(Start: 24 @42571 has 72 MA's), (28, 42586), (35, 42649), (38, 42667), (45, 42706), (58, 42775), (61, 42787), (66, 42811), (69, 42820), (74, 42847), (77, 42865), (79, 42880),

Gene: Kabreeze_38 Start: 30495, Stop: 30833, Start Num: 24

Candidate Starts for Kabreeze_38:

(2, 30198), (3, 30210), (5, 30255), (8, 30297), (16, 30414), (18, 30435), (Start: 24 @30495 has 72 MA's), (40, 30597), (45, 30630), (46, 30639), (48, 30648), (57, 30693), (64, 30729), (67, 30738), (71, 30753), (73, 30771), (74, 30774), (76, 30786),

Gene: King2_28 Start: 25394, Stop: 25726, Start Num: 24

Candidate Starts for King2_28:

(Start: 24 @25394 has 72 MA's), (27, 25406), (37, 25487), (42, 25502), (45, 25529), (56, 25586), (69, 25643),

Gene: Klevey_31 Start: 22992, Stop: 23312, Start Num: 24

Candidate Starts for Klevey_31:

(Start: 24 @22992 has 72 MA's),

Gene: LeeroyJ_30 Start: 25730, Stop: 26065, Start Num: 24

Candidate Starts for LeeroyJ_30:

(Start: 24 @25730 has 72 MA's), (42, 25838), (45, 25865), (48, 25883), (56, 25922), (63, 25958),

Gene: Lenoshki_55 Start: 43438, Stop: 43770, Start Num: 24

Candidate Starts for Lenoshki_55:

(Start: 24 @43438 has 72 MA's), (28, 43453), (35, 43516), (38, 43534), (45, 43573), (58, 43642), (61, 43654), (66, 43678), (69, 43687), (74, 43714), (77, 43732), (79, 43747),

Gene: Lilmac1015_32 Start: 22982, Stop: 23302, Start Num: 24

Candidate Starts for Lilmac1015_32:

(Start: 24 @22982 has 72 MA's),

Gene: Linus_38 Start: 30496, Stop: 30834, Start Num: 24

Candidate Starts for Linus_38:

(2, 30199), (3, 30211), (5, 30256), (8, 30298), (16, 30415), (18, 30436), (Start: 24 @30496 has 72 MA's), (40, 30598), (45, 30631), (46, 30640), (48, 30649), (57, 30694), (64, 30730), (67, 30739), (71, 30754), (73, 30772), (74, 30775), (76, 30787),

Gene: LuckySocke_97 Start: 49730, Stop: 50143, Start Num: 26

Candidate Starts for LuckySocke_97:

(Start: 24 @49724 has 72 MA's), (Start: 26 @49730 has 7 MA's), (28, 49742), (30, 49763), (32, 49778), (45, 49859), (47, 49871), (53, 49904), (56, 49919), (61, 49943), (63, 49955), (78, 50033), (84, 50120),

Gene: Lukepolites_29 Start: 24238, Stop: 24522, Start Num: 32

Candidate Starts for Lukepolites_29:

(Start: 24 @24187 has 72 MA's), (29, 24220), (32, 24238), (41, 24292),

Gene: Lymara_38 Start: 30314, Stop: 30652, Start Num: 24

Candidate Starts for Lymara_38:

(Start: 24 @30314 has 72 MA's), (40, 30416), (42, 30422), (45, 30449), (46, 30458), (57, 30512), (64, 30548), (67, 30557), (71, 30572), (74, 30593), (76, 30605),

Gene: Martha_30 Start: 25658, Stop: 25990, Start Num: 24

Candidate Starts for Martha_30:

(Start: 24 @25658 has 72 MA's), (27, 25670), (42, 25766), (45, 25793), (48, 25811), (56, 25850), (63, 25886), (64, 25892), (69, 25907),

Gene: Mikronejon_53 Start: 41758, Stop: 42090, Start Num: 24

Candidate Starts for Mikronejon_53:

(Start: 24 @41758 has 72 MA's), (28, 41773), (35, 41836), (38, 41854), (45, 41893), (58, 41962), (61, 41974), (66, 41998), (69, 42007), (74, 42034), (77, 42052), (79, 42067),

Gene: MintFritos_53 Start: 41759, Stop: 42091, Start Num: 24

Candidate Starts for MintFritos_53:

(Start: 24 @41759 has 72 MA's), (28, 41774), (35, 41837), (38, 41855), (45, 41894), (58, 41963), (61, 41975), (66, 41999), (69, 42008), (74, 42035), (77, 42053), (79, 42068),

Gene: Mordred_38 Start: 30495, Stop: 30833, Start Num: 24

Candidate Starts for Mordred_38:

(2, 30198), (3, 30210), (5, 30255), (8, 30297), (16, 30414), (18, 30435), (Start: 24 @30495 has 72 MA's), (40, 30597), (45, 30630), (46, 30639), (48, 30648), (57, 30693), (64, 30729), (67, 30738), (71, 30753), (73, 30771), (74, 30774), (76, 30786),

Gene: MoyaNatalis_38 Start: 30499, Stop: 30837, Start Num: 24

Candidate Starts for MoyaNatalis_38:

(2, 30202), (3, 30214), (5, 30259), (8, 30301), (16, 30418), (18, 30439), (Start: 24 @30499 has 72 MA's), (40, 30601), (45, 30634), (46, 30643), (48, 30652), (57, 30697), (64, 30733), (67, 30742), (71, 30757), (73, 30775), (74, 30778), (76, 30790),

Gene: Music_29 Start: 26759, Stop: 27076, Start Num: 24

Candidate Starts for Music_29:

(Start: 24 @26759 has 72 MA's), (28, 26774), (34, 26822), (45, 26894), (48, 26912), (56, 26951),

Gene: Nandito_29 Start: 22133, Stop: 22453, Start Num: 24

Candidate Starts for Nandito_29:

(Start: 24 @22133 has 72 MA's), (76, 22418),

Gene: NathanVaag_28 Start: 25410, Stop: 25742, Start Num: 24

Candidate Starts for NathanVaag_28:

(Start: 24 @25410 has 72 MA's), (27, 25422), (45, 25545), (56, 25602), (64, 25644), (69, 25659),

Gene: Nostromo_29 Start: 24685, Stop: 25011, Start Num: 24

Candidate Starts for Nostromo_29:

(Start: 24 @24685 has 72 MA's), (40, 24787), (42, 24793), (45, 24820), (48, 24838),

Gene: Oogie_56 Start: 43464, Stop: 43796, Start Num: 24

Candidate Starts for Oogie_56:

(Start: 24 @43464 has 72 MA's), (28, 43479), (35, 43542), (38, 43560), (45, 43599), (58, 43668), (61, 43680), (66, 43704), (69, 43713), (74, 43740), (77, 43758), (79, 43773),

Gene: Orkz_32 Start: 21764, Stop: 22078, Start Num: 24

Candidate Starts for Orkz_32:

(Start: 24 @21764 has 72 MA's), (28, 21773), (45, 21893), (56, 21950), (58, 21962),

Gene: Pakusa_53 Start: 41500, Stop: 41832, Start Num: 24

Candidate Starts for Pakusa_53:

(Start: 24 @41500 has 72 MA's), (28, 41515), (35, 41578), (38, 41596), (45, 41635), (58, 41704), (61, 41716), (66, 41740), (69, 41749), (74, 41776), (77, 41794), (79, 41809),

Gene: Park1214_104 Start: 50580, Stop: 50993, Start Num: 26

Candidate Starts for Park1214_104:

(Start: 24 @50574 has 72 MA's), (Start: 26 @50580 has 7 MA's), (30, 50613), (32, 50628), (42, 50682), (45, 50709), (47, 50721), (53, 50754), (56, 50769), (63, 50805), (78, 50883), (84, 50970),

Gene: Piccoletto_28 Start: 25412, Stop: 25744, Start Num: 24

Candidate Starts for Piccoletto_28:

(Start: 24 @25412 has 72 MA's), (27, 25424), (42, 25520), (45, 25547), (56, 25604), (64, 25646), (69, 25661),

Gene: Pippa_30 Start: 25783, Stop: 26115, Start Num: 24

Candidate Starts for Pippa_30:

(Start: 24 @25783 has 72 MA's), (27, 25795), (42, 25891), (45, 25918), (48, 25936), (56, 25975), (63, 26011), (64, 26017), (69, 26032), (80, 26101),

Gene: Prairie_29 Start: 23013, Stop: 23333, Start Num: 24

Candidate Starts for Prairie_29:

(Start: 24 @23013 has 72 MA's),

Gene: PrincessTrina_38 Start: 30499, Stop: 30837, Start Num: 24

Candidate Starts for PrincessTrina_38:

(2, 30202), (3, 30214), (5, 30259), (8, 30301), (16, 30418), (18, 30439), (Start: 24 @30499 has 72 MA's), (40, 30601), (45, 30634), (46, 30643), (48, 30652), (57, 30697), (64, 30733), (67, 30742), (71, 30757), (73, 30775), (74, 30778), (76, 30790),

Gene: RosiePosie_38 Start: 30498, Stop: 30836, Start Num: 24

Candidate Starts for RosiePosie_38:

(2, 30201), (3, 30213), (5, 30258), (8, 30300), (16, 30417), (18, 30438), (Start: 24 @30498 has 72 MA's), (40, 30600), (45, 30633), (46, 30642), (48, 30651), (57, 30696), (64, 30732), (67, 30741), (71,

30756), (73, 30774), (74, 30777), (76, 30789),

Gene: ScarletRaider_54 Start: 44647, Stop: 44979, Start Num: 24

Candidate Starts for ScarletRaider_54:

(6, 44422), (Start: 24 @44647 has 72 MA's), (38, 44743), (45, 44782), (58, 44851), (69, 44896), (74, 44923), (77, 44941), (79, 44956),

Gene: Scavito_38 Start: 30496, Stop: 30834, Start Num: 24

Candidate Starts for Scavito_38:

(2, 30199), (3, 30211), (5, 30256), (8, 30298), (16, 30415), (18, 30436), (Start: 24 @30496 has 72 MA's), (40, 30598), (45, 30631), (46, 30640), (48, 30649), (57, 30694), (64, 30730), (67, 30739), (71, 30754), (73, 30772), (74, 30775), (76, 30787),

Gene: Schomber_54 Start: 41508, Stop: 41840, Start Num: 24

Candidate Starts for Schomber_54:

(Start: 24 @41508 has 72 MA's), (28, 41523), (35, 41586), (38, 41604), (45, 41643), (58, 41712), (61, 41724), (66, 41748), (69, 41757), (74, 41784), (77, 41802), (79, 41817),

Gene: Shade_30 Start: 25624, Stop: 25956, Start Num: 24

Candidate Starts for Shade_30:

(Start: 24 @25624 has 72 MA's), (27, 25636), (45, 25759), (48, 25777), (56, 25816), (63, 25852), (64, 25858), (69, 25873),

Gene: Sicarius2_31 Start: 25280, Stop: 25606, Start Num: 24

Candidate Starts for Sicarius2_31:

(Start: 24 @25280 has 72 MA's), (27, 25292), (40, 25382), (42, 25388), (45, 25415), (56, 25472), (63, 25508), (64, 25514), (69, 25529),

Gene: Sonny_30 Start: 25654, Stop: 25986, Start Num: 24

Candidate Starts for Sonny_30:

(Start: 24 @25654 has 72 MA's), (27, 25666), (45, 25789), (48, 25807), (56, 25846), (63, 25882), (64, 25888), (69, 25903),

Gene: StevieBAY_30 Start: 25730, Stop: 26065, Start Num: 24

Candidate Starts for StevieBAY_30:

(Start: 24 @25730 has 72 MA's), (42, 25838), (45, 25865), (48, 25883), (56, 25922), (63, 25958),

Gene: SunnyJune_31 Start: 23738, Stop: 24058, Start Num: 24

Candidate Starts for SunnyJune_31:

(Start: 24 @23738 has 72 MA's), (40, 23834), (41, 23837), (45, 23867), (48, 23885), (56, 23924),

Gene: TaeYoung_30 Start: 25658, Stop: 25990, Start Num: 24

Candidate Starts for TaeYoung_30:

(Start: 24 @25658 has 72 MA's), (27, 25670), (42, 25766), (45, 25793), (48, 25811), (56, 25850), (63, 25886), (64, 25892), (69, 25907),

Gene: Talos_99 Start: 49474, Stop: 49887, Start Num: 26

Candidate Starts for Talos_99:

(Start: 24 @49468 has 72 MA's), (Start: 26 @49474 has 7 MA's), (28, 49486), (30, 49507), (32, 49522), (45, 49603), (47, 49615), (55, 49660), (56, 49663), (63, 49699), (78, 49777), (84, 49864),

Gene: Thales_49 Start: 43606, Stop: 43929, Start Num: 24

Candidate Starts for Thales_49:

(Start: 24 @43606 has 72 MA's), (29, 43636), (35, 43681), (40, 43705), (44, 43735), (45, 43738), (57, 43801), (58, 43807), (62, 43822), (74, 43879),

Gene: Timinator_30 Start: 25730, Stop: 26065, Start Num: 24

Candidate Starts for Timinator_30:

(Start: 24 @25730 has 72 MA's), (42, 25838), (45, 25865), (48, 25883), (56, 25922), (63, 25958),

Gene: Toneprano_53 Start: 41758, Stop: 42090, Start Num: 24

Candidate Starts for Toneprano_53:

(Start: 24 @41758 has 72 MA's), (28, 41773), (35, 41836), (38, 41854), (45, 41893), (58, 41962), (61, 41974), (66, 41998), (69, 42007), (74, 42034), (77, 42052), (79, 42067),

Gene: Tophat_38 Start: 30497, Stop: 30835, Start Num: 24

Candidate Starts for Tophat_38:

(2, 30200), (3, 30212), (5, 30257), (8, 30299), (16, 30416), (18, 30437), (Start: 24 @30497 has 72 MA's), (40, 30599), (45, 30632), (46, 30641), (48, 30650), (57, 30695), (64, 30731), (67, 30740), (71, 30755), (73, 30773), (74, 30776), (76, 30788),

Gene: Twin_53 Start: 41758, Stop: 42090, Start Num: 24

Candidate Starts for Twin_53:

(Start: 24 @41758 has 72 MA's), (28, 41773), (35, 41836), (38, 41854), (45, 41893), (58, 41962), (61, 41974), (66, 41998), (69, 42007), (74, 42034), (77, 42052), (79, 42067),

Gene: UBSmoodge_57 Start: 45105, Stop: 45437, Start Num: 24

Candidate Starts for UBSmoodge_57:

(6, 44880), (Start: 24 @45105 has 72 MA's), (38, 45201), (45, 45240), (58, 45309), (69, 45354), (74, 45381), (77, 45399), (79, 45414),

Gene: Vibaki_29 Start: 26784, Stop: 27101, Start Num: 24

Candidate Starts for Vibaki_29:

(Start: 24 @26784 has 72 MA's), (28, 26799), (34, 26847), (45, 26919), (48, 26937), (56, 26976),

Gene: Vitus_29 Start: 23602, Stop: 23925, Start Num: 24

Candidate Starts for Vitus_29:

(Start: 24 @23602 has 72 MA's), (40, 23704), (45, 23737), (56, 23794), (64, 23836), (68, 23845),

Gene: Wyborn_31 Start: 25978, Stop: 26304, Start Num: 24

Candidate Starts for Wyborn_31:

(Start: 24 @25978 has 72 MA's), (27, 25990), (40, 26080), (42, 26086), (45, 26113), (56, 26170), (63, 26206), (64, 26212), (69, 26227),

Gene: Zartrosa_30 Start: 25648, Stop: 25980, Start Num: 24

Candidate Starts for Zartrosa_30:

(Start: 24 @25648 has 72 MA's), (27, 25660), (45, 25783), (48, 25801), (56, 25840), (63, 25876), (64, 25882), (69, 25897),