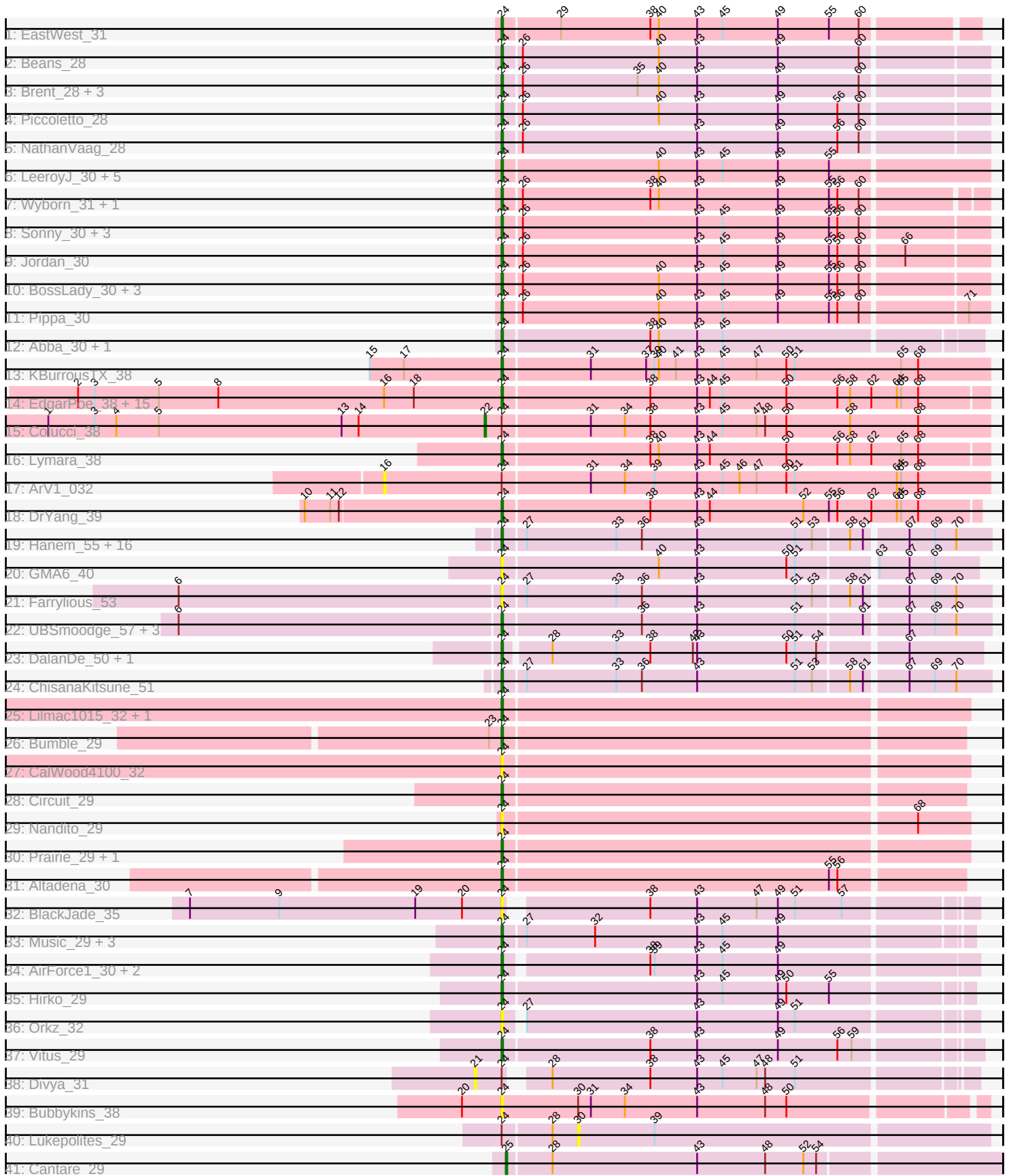


Pham 246825



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 246825 Report

This analysis was run 02/07/26 on database version 634.

Pham number 246825 has 99 members, 30 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 : LeeroyJ_30, GravityBall_30, StevieBAY_30, BarretLemon_30, BigDome_30, Timinator_30
- Track 7 : Wyborn_31, Sicarius2_31
- 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 : Hanem_55, Pakusa_53, MintFritos_53, Argena_53, EmoNemo_53, Schomber_54, Twin_53, Oogie_55, Amoonguss_53, Mikronejon_53, Lenoshki_55, Alok_53, Gray_55, Toneprano_53, Kabocha_56, Beted_55, Chidiebere_55
- Track 20 : GMA6_40
- Track 21 : Farrylious_53
- Track 22 : UBSmoodge_57, ScarletRaider_54, FruityLoops_53, FlyingTortilla_55
- Track 23 : DalanDe_50, Thales_49
- Track 24 : ChisanaKitsune_51
- Track 25 : Lilmac1015_32, Bolt007_31
- Track 26 : Bumble_29
- Track 27 : CalWood4100_32
- Track 28 : Circuit_29
- Track 29 : Nandito_29
- Track 30 : Prairie_29, Klevey_31
- Track 31 : Altadena_30

- Track 32 : BlackJade_35
- Track 33 : Music_29, GoldDust_29, Gooberta_29, Vibaki_29
- Track 34 : AirForce1_30, Jinkies_32, SunnyJune_31
- Track 35 : Hirko_29
- Track 36 : Orkz_32
- Track 37 : Vitus_29
- Track 38 : Divya_31
- Track 39 : Bubbykins_38
- Track 40 : Lukepolites_29
- Track 41 : 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 67 of the 69 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abba_30, AirForce1_30, Alok_53, Altadena_30, Amoonguss_53, Argona_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, DrYang_39, EastWest_31, EdgarPoe_38, EmoNemo_53, Farrylous_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_55, 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:

- ArV1_032, Colucci_38, Divya_31, Lukepolites_29,

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

- Cantare_29,

Summary by start number:

Start 16:

- Found in 17 of 99 (17.2%) 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 21:

- 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: Divya_31 (FL),

Start 22:

- Found in 1 of 99 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 69
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Colucci_38 (AR),

Start 24:

- Found in 98 of 99 (99.0%) of genes in pham
- Manual Annotations of this start: 67 of 69
- Called 95.9% of time when present
- Phage (with cluster) where this start called: Abba_30 (AO3), AirForce1_30 (FL), Alok_53 (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), 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_55 (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 99 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 69
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare_29 (singleton),

Start 30:

- Found in 2 of 99 (2.0%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Lukepolites_29 (singleton),

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 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 DQ:

- Start number 24 was manually annotated 10 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 5 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 67 MA's), (38, 25333), (40, 25339), (43, 25366), (45, 25384),

Gene: AirForce1_30 Start: 22562, Stop: 22882, Start Num: 24

Candidate Starts for AirForce1_30:

(Start: 24 @22562 has 67 MA's), (38, 22658), (39, 22661), (43, 22691), (45, 22709), (49, 22748),

Gene: Alok_53 Start: 41758, Stop: 42090, Start Num: 24

Candidate Starts for Alok_53:

(Start: 24 @41758 has 67 MA's), (27, 41773), (33, 41836), (36, 41854), (43, 41893), (51, 41962), (53, 41974), (58, 41998), (61, 42007), (67, 42034), (69, 42052), (70, 42067),

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

Candidate Starts for Altadena_30:

(Start: 24 @23925 has 67 MA's), (55, 24153), (56, 24159),

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

Candidate Starts for Amoonguss_53:

(Start: 24 @41761 has 67 MA's), (27, 41776), (33, 41839), (36, 41857), (43, 41896), (51, 41965), (53, 41977), (58, 42001), (61, 42010), (67, 42037), (69, 42055), (70, 42070),

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

Candidate Starts for ArV1_032:

(16, 28698), (Start: 24 @28779 has 67 MA's), (31, 28839), (34, 28863), (39, 28884), (43, 28914), (45, 28932), (46, 28944), (47, 28956), (50, 28977), (51, 28983), (64, 29055), (65, 29058), (68, 29070),

Gene: Argona_53 Start: 41758, Stop: 42090, Start Num: 24

Candidate Starts for Argona_53:

(Start: 24 @41758 has 67 MA's), (27, 41773), (33, 41836), (36, 41854), (43, 41893), (51, 41962), (53, 41974), (58, 41998), (61, 42007), (67, 42034), (69, 42052), (70, 42067),

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

Candidate Starts for BarretLemon_30:

(Start: 24 @25731 has 67 MA's), (40, 25839), (43, 25866), (45, 25884), (49, 25923), (55, 25959),

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

Candidate Starts for Beans_28:

(Start: 24 @25436 has 67 MA's), (26, 25448), (40, 25544), (43, 25571), (49, 25628), (60, 25685),

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

Candidate Starts for Beted_55:

(Start: 24 @43438 has 67 MA's), (27, 43453), (33, 43516), (36, 43534), (43, 43573), (51, 43642), (53, 43654), (58, 43678), (61, 43687), (67, 43714), (69, 43732), (70, 43747),

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

Candidate Starts for BigDome_30:

(Start: 24 @25723 has 67 MA's), (40, 25831), (43, 25858), (45, 25876), (49, 25915), (55, 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 67 MA's), (38, 25309), (43, 25342), (47, 25384), (49, 25399), (51, 25411), (57, 25444),

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

Candidate Starts for Bolt007_31:

(Start: 24 @22989 has 67 MA's),

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

Candidate Starts for BossLady_30:

(Start: 24 @25711 has 67 MA's), (26, 25723), (40, 25819), (43, 25846), (45, 25864), (49, 25903), (55, 25939), (56, 25945), (60, 25960),

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

Candidate Starts for Brent_28:

(Start: 24 @25398 has 67 MA's), (26, 25410), (35, 25491), (40, 25506), (43, 25533), (49, 25590), (60, 25647),

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

Candidate Starts for Bubbykins_38:

(20, 28365), (Start: 24 @28392 has 67 MA's), (30, 28446), (31, 28455), (34, 28479), (43, 28530), (48, 28578), (50, 28593),

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

Candidate Starts for Bumble_29:

(23, 23710), (Start: 24 @23719 has 67 MA's),

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

Candidate Starts for CalWood4100_32:

(Start: 24 @22982 has 67 MA's),

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

Candidate Starts for Cantare_29:

(Start: 25 @26667 has 1 MA's), (28, 26697), (43, 26799), (48, 26847), (52, 26874), (54, 26883),

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

Candidate Starts for Chidiebere_55:

(Start: 24 @41758 has 67 MA's), (27, 41773), (33, 41836), (36, 41854), (43, 41893), (51, 41962), (53, 41974), (58, 41998), (61, 42007), (67, 42034), (69, 42052), (70, 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 67 MA's), (38, 30599), (43, 30632), (44, 30641), (45, 30650), (50, 30695), (56, 30731), (58, 30740), (62, 30755), (64, 30773), (65, 30776), (68, 30788),

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

Candidate Starts for ChisanaKitsune_51:

(Start: 24 @40549 has 67 MA's), (27, 40564), (33, 40627), (36, 40645), (43, 40684), (51, 40753), (53, 40765), (58, 40789), (61, 40798), (67, 40825), (69, 40843), (70, 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 67 MA's), (38, 30599), (43, 30632), (44, 30641), (45, 30650), (50, 30695), (56, 30731), (58, 30740), (62, 30755), (64, 30773), (65, 30776), (68, 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 67 MA's), (38, 30371), (43, 30404), (44, 30413), (45, 30422), (50, 30467), (56, 30503), (58, 30512), (62, 30527), (64, 30545), (65, 30548), (68, 30560),

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

Candidate Starts for Circuit_29:

(Start: 24 @24572 has 67 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 67 MA's), (31, 30135), (34, 30159), (38, 30177), (43, 30210), (45, 30228), (47, 30252), (48, 30258), (50, 30273), (58, 30318), (68, 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 67 MA's), (38, 30598), (43, 30631), (44, 30640), (45, 30649), (50, 30694), (56, 30730), (58, 30739), (62, 30754), (64, 30772), (65, 30775), (68, 30787),

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

Candidate Starts for DalanDe_50:

(Start: 24 @44690 has 67 MA's), (28, 44720), (33, 44765), (38, 44789), (42, 44819), (43, 44822), (50, 44885), (51, 44891), (54, 44906), (67, 44963),

Gene: Divya_31 Start: 22500, Stop: 22826, Start Num: 21

Candidate Starts for Divya_31:

(21, 22500), (Start: 24 @22518 has 67 MA's), (28, 22539), (38, 22608), (43, 22641), (45, 22659), (47, 22683), (48, 22689), (51, 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 67 MA's), (38, 31935), (43, 31968), (44, 31977), (52, 32043), (55, 32061), (56, 32067), (62, 32091), (64, 32109), (65, 32112), (68, 32124),

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

Candidate Starts for EastWest_31:

(Start: 24 @25558 has 67 MA's), (29, 25597), (38, 25660), (40, 25666), (43, 25693), (45, 25711), (49, 25750), (55, 25786), (60, 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 67 MA's), (38, 30598), (43, 30631), (44, 30640), (45, 30649), (50, 30694), (56, 30730), (58, 30739), (62, 30754), (64, 30772), (65, 30775), (68, 30787),

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

Candidate Starts for EmoNemo_53:

(Start: 24 @41758 has 67 MA's), (27, 41773), (33, 41836), (36, 41854), (43, 41893), (51, 41962), (53, 41974), (58, 41998), (61, 42007), (67, 42034), (69, 42052), (70, 42067),

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

Candidate Starts for Farrylious_53:

(6, 41309), (Start: 24 @41534 has 67 MA's), (27, 41549), (33, 41612), (36, 41630), (43, 41669), (51, 41738), (53, 41750), (58, 41774), (61, 41783), (67, 41810), (69, 41828), (70, 41843),

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

Candidate Starts for FlyingTortilla_55:

(6, 45114), (Start: 24 @45339 has 67 MA's), (36, 45435), (43, 45474), (51, 45543), (61, 45588), (67, 45615), (69, 45633), (70, 45648),

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

Candidate Starts for Franzy_28:

(Start: 24 @25397 has 67 MA's), (26, 25409), (35, 25490), (40, 25505), (43, 25532), (49, 25589), (60, 25646),

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

Candidate Starts for FruityLoops_53:

(6, 44414), (Start: 24 @44639 has 67 MA's), (36, 44735), (43, 44774), (51, 44843), (61, 44888), (67, 44915), (69, 44933), (70, 44948),

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

Candidate Starts for GMA6_40:

(Start: 24 @33089 has 67 MA's), (40, 33197), (43, 33224), (50, 33287), (51, 33293), (63, 33344), (67, 33365), (69, 33383),

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

Candidate Starts for GoldDust_29:

(Start: 24 @26909 has 67 MA's), (27, 26924), (32, 26972), (43, 27044), (45, 27062), (49, 27101),

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

Candidate Starts for Gooberta_29:

(Start: 24 @26908 has 67 MA's), (27, 26923), (32, 26971), (43, 27043), (45, 27061), (49, 27100),

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

Candidate Starts for GravityBall_30:

(Start: 24 @25730 has 67 MA's), (40, 25838), (43, 25865), (45, 25883), (49, 25922), (55, 25958),

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

Candidate Starts for Gray_55:

(Start: 24 @41759 has 67 MA's), (27, 41774), (33, 41837), (36, 41855), (43, 41894), (51, 41963), (53, 41975), (58, 41999), (61, 42008), (67, 42035), (69, 42053), (70, 42068),

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

Candidate Starts for Grekaycon_30:

(Start: 24 @25657 has 67 MA's), (26, 25669), (40, 25765), (43, 25792), (45, 25810), (49, 25849), (55, 25885), (56, 25891), (60, 25906),

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

Candidate Starts for Hanem_55:

(Start: 24 @41758 has 67 MA's), (27, 41773), (33, 41836), (36, 41854), (43, 41893), (51, 41962), (53, 41974), (58, 41998), (61, 42007), (67, 42034), (69, 42052), (70, 42067),

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

Candidate Starts for Hirko_29:

(Start: 24 @27270 has 67 MA's), (43, 27405), (45, 27423), (49, 27462), (50, 27468), (55, 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 67 MA's), (38, 30597), (43, 30630), (44, 30639), (45, 30648), (50, 30693), (56, 30729), (58, 30738), (62, 30753), (64, 30771), (65, 30774), (68, 30786),

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

Candidate Starts for JKerns_30:

(Start: 24 @25684 has 67 MA's), (26, 25696), (43, 25819), (45, 25837), (49, 25876), (55, 25912), (56, 25918), (60, 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 67 MA's), (38, 30597), (43, 30630), (44, 30639), (45, 30648), (50, 30693), (56, 30729), (58, 30738), (62, 30753), (64, 30771), (65, 30774), (68, 30786),

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

Candidate Starts for Jawnski_28:

(Start: 24 @25407 has 67 MA's), (26, 25419), (35, 25500), (40, 25515), (43, 25542), (49, 25599), (60, 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 67 MA's), (38, 30601), (43, 30634), (44, 30643), (45, 30652), (50, 30697), (56, 30733), (58, 30742), (62, 30757), (64, 30775), (65, 30778), (68, 30790),

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

Candidate Starts for Jinkies_32:

(Start: 24 @25039 has 67 MA's), (38, 25135), (39, 25138), (43, 25168), (45, 25186), (49, 25225),

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

Candidate Starts for Jordan_30:

(Start: 24 @25654 has 67 MA's), (26, 25666), (43, 25789), (45, 25807), (49, 25846), (55, 25882), (56, 25888), (60, 25903), (66, 25930),

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

Candidate Starts for KBurrousTX_38:

(15, 31504), (17, 31528), (Start: 24 @31594 has 67 MA's), (31, 31654), (37, 31693), (39, 31699), (40, 31702), (41, 31714), (43, 31729), (45, 31747), (47, 31771), (50, 31792), (51, 31798), (65, 31873), (68, 31885),

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

Candidate Starts for Kabocha_56:

(Start: 24 @42571 has 67 MA's), (27, 42586), (33, 42649), (36, 42667), (43, 42706), (51, 42775), (53, 42787), (58, 42811), (61, 42820), (67, 42847), (69, 42865), (70, 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 67 MA's), (38, 30597), (43, 30630), (44, 30639), (45, 30648), (50, 30693), (56, 30729), (58, 30738), (62, 30753), (64, 30771), (65, 30774), (68, 30786),

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

Candidate Starts for King2_28:

(Start: 24 @25394 has 67 MA's), (26, 25406), (35, 25487), (40, 25502), (43, 25529), (49, 25586), (60, 25643),

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

Candidate Starts for Klevey_31:

(Start: 24 @22992 has 67 MA's),

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

Candidate Starts for LeeroyJ_30:

(Start: 24 @25730 has 67 MA's), (40, 25838), (43, 25865), (45, 25883), (49, 25922), (55, 25958),

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

Candidate Starts for Lenoshki_55:

(Start: 24 @43438 has 67 MA's), (27, 43453), (33, 43516), (36, 43534), (43, 43573), (51, 43642), (53, 43654), (58, 43678), (61, 43687), (67, 43714), (69, 43732), (70, 43747),

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

Candidate Starts for Lilmac1015_32:

(Start: 24 @22982 has 67 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 67 MA's), (38, 30598), (43, 30631), (44, 30640), (45, 30649), (50, 30694), (56, 30730), (58, 30739), (62, 30754), (64, 30772), (65, 30775), (68, 30787),

Gene: Lukepolites_29 Start: 24238, Stop: 24522, Start Num: 30

Candidate Starts for Lukepolites_29:

(Start: 24 @24187 has 67 MA's), (28, 24220), (30, 24238), (39, 24292),

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

Candidate Starts for Lymara_38:

(Start: 24 @30314 has 67 MA's), (38, 30416), (40, 30422), (43, 30449), (44, 30458), (50, 30512), (56, 30548), (58, 30557), (62, 30572), (65, 30593), (68, 30605),

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

Candidate Starts for Martha_30:

(Start: 24 @25658 has 67 MA's), (26, 25670), (40, 25766), (43, 25793), (45, 25811), (49, 25850), (55, 25886), (56, 25892), (60, 25907),

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

Candidate Starts for Mikronejon_53:

(Start: 24 @41758 has 67 MA's), (27, 41773), (33, 41836), (36, 41854), (43, 41893), (51, 41962), (53, 41974), (58, 41998), (61, 42007), (67, 42034), (69, 42052), (70, 42067),

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

Candidate Starts for MintFritos_53:

(Start: 24 @41759 has 67 MA's), (27, 41774), (33, 41837), (36, 41855), (43, 41894), (51, 41963), (53, 41975), (58, 41999), (61, 42008), (67, 42035), (69, 42053), (70, 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 67 MA's), (38, 30597), (43, 30630), (44, 30639), (45, 30648), (50, 30693), (56, 30729), (58, 30738), (62, 30753), (64, 30771), (65, 30774), (68, 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 67 MA's), (38, 30601), (43, 30634), (44, 30643), (45, 30652), (50, 30697), (56, 30733), (58, 30742), (62, 30757), (64, 30775), (65, 30778), (68, 30790),

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

Candidate Starts for Music_29:

(Start: 24 @26759 has 67 MA's), (27, 26774), (32, 26822), (43, 26894), (45, 26912), (49, 26951),

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

Candidate Starts for Nandito_29:

(Start: 24 @22133 has 67 MA's), (68, 22418),

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

Candidate Starts for NathanVaag_28:

(Start: 24 @25410 has 67 MA's), (26, 25422), (43, 25545), (49, 25602), (56, 25644), (60, 25659),

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

Candidate Starts for Nostromo_29:

(Start: 24 @24685 has 67 MA's), (38, 24787), (40, 24793), (43, 24820), (45, 24838),

Gene: Oogie_55 Start: 43464, Stop: 43796, Start Num: 24

Candidate Starts for Oogie_55:

(Start: 24 @43464 has 67 MA's), (27, 43479), (33, 43542), (36, 43560), (43, 43599), (51, 43668), (53, 43680), (58, 43704), (61, 43713), (67, 43740), (69, 43758), (70, 43773),

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

Candidate Starts for Orkz_32:

(Start: 24 @21764 has 67 MA's), (27, 21773), (43, 21893), (49, 21950), (51, 21962),

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

Candidate Starts for Pakusa_53:

(Start: 24 @41500 has 67 MA's), (27, 41515), (33, 41578), (36, 41596), (43, 41635), (51, 41704), (53, 41716), (58, 41740), (61, 41749), (67, 41776), (69, 41794), (70, 41809),

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

Candidate Starts for Piccoletto_28:

(Start: 24 @25412 has 67 MA's), (26, 25424), (40, 25520), (43, 25547), (49, 25604), (56, 25646), (60, 25661),

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

Candidate Starts for Pippa_30:

(Start: 24 @25783 has 67 MA's), (26, 25795), (40, 25891), (43, 25918), (45, 25936), (49, 25975), (55, 26011), (56, 26017), (60, 26032), (71, 26101),

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

Candidate Starts for Prairie_29:

(Start: 24 @23013 has 67 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 67 MA's), (38, 30601), (43, 30634), (44, 30643), (45, 30652), (50, 30697), (56, 30733), (58, 30742), (62, 30757), (64, 30775), (65, 30778), (68, 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 67 MA's), (38, 30600), (43, 30633), (44, 30642), (45, 30651), (50, 30696), (56, 30732), (58, 30741), (62,

30756), (64, 30774), (65, 30777), (68, 30789),

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

Candidate Starts for ScarletRaider_54:

(6, 44422), (Start: 24 @44647 has 67 MA's), (36, 44743), (43, 44782), (51, 44851), (61, 44896), (67, 44923), (69, 44941), (70, 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 67 MA's), (38, 30598), (43, 30631), (44, 30640), (45, 30649), (50, 30694), (56, 30730), (58, 30739), (62, 30754), (64, 30772), (65, 30775), (68, 30787),

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

Candidate Starts for Schomber_54:

(Start: 24 @41508 has 67 MA's), (27, 41523), (33, 41586), (36, 41604), (43, 41643), (51, 41712), (53, 41724), (58, 41748), (61, 41757), (67, 41784), (69, 41802), (70, 41817),

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

Candidate Starts for Shade_30:

(Start: 24 @25624 has 67 MA's), (26, 25636), (43, 25759), (45, 25777), (49, 25816), (55, 25852), (56, 25858), (60, 25873),

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

Candidate Starts for Sicarius2_31:

(Start: 24 @25280 has 67 MA's), (26, 25292), (38, 25382), (40, 25388), (43, 25415), (49, 25472), (55, 25508), (56, 25514), (60, 25529),

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

Candidate Starts for Sonny_30:

(Start: 24 @25654 has 67 MA's), (26, 25666), (43, 25789), (45, 25807), (49, 25846), (55, 25882), (56, 25888), (60, 25903),

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

Candidate Starts for StevieBAY_30:

(Start: 24 @25730 has 67 MA's), (40, 25838), (43, 25865), (45, 25883), (49, 25922), (55, 25958),

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

Candidate Starts for SunnyJune_31:

(Start: 24 @23738 has 67 MA's), (38, 23834), (39, 23837), (43, 23867), (45, 23885), (49, 23924),

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

Candidate Starts for TaeYoung_30:

(Start: 24 @25658 has 67 MA's), (26, 25670), (40, 25766), (43, 25793), (45, 25811), (49, 25850), (55, 25886), (56, 25892), (60, 25907),

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

Candidate Starts for Thales_49:

(Start: 24 @43606 has 67 MA's), (28, 43636), (33, 43681), (38, 43705), (42, 43735), (43, 43738), (50, 43801), (51, 43807), (54, 43822), (67, 43879),

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

Candidate Starts for Timinator_30:

(Start: 24 @25730 has 67 MA's), (40, 25838), (43, 25865), (45, 25883), (49, 25922), (55, 25958),

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

Candidate Starts for Toneprano_53:

(Start: 24 @41758 has 67 MA's), (27, 41773), (33, 41836), (36, 41854), (43, 41893), (51, 41962), (53, 41974), (58, 41998), (61, 42007), (67, 42034), (69, 42052), (70, 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 67 MA's), (38, 30599), (43, 30632), (44, 30641), (45, 30650), (50, 30695), (56, 30731), (58, 30740), (62, 30755), (64, 30773), (65, 30776), (68, 30788),

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

Candidate Starts for Twin_53:

(Start: 24 @41758 has 67 MA's), (27, 41773), (33, 41836), (36, 41854), (43, 41893), (51, 41962), (53, 41974), (58, 41998), (61, 42007), (67, 42034), (69, 42052), (70, 42067),

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

Candidate Starts for UBSmoodge_57:

(6, 44880), (Start: 24 @45105 has 67 MA's), (36, 45201), (43, 45240), (51, 45309), (61, 45354), (67, 45381), (69, 45399), (70, 45414),

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

Candidate Starts for Vibaki_29:

(Start: 24 @26784 has 67 MA's), (27, 26799), (32, 26847), (43, 26919), (45, 26937), (49, 26976),

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

Candidate Starts for Vitus_29:

(Start: 24 @23602 has 67 MA's), (38, 23704), (43, 23737), (49, 23794), (56, 23836), (59, 23845),

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

Candidate Starts for Wyborn_31:

(Start: 24 @25978 has 67 MA's), (26, 25990), (38, 26080), (40, 26086), (43, 26113), (49, 26170), (55, 26206), (56, 26212), (60, 26227),

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

Candidate Starts for Zartrosa_30:

(Start: 24 @25648 has 67 MA's), (26, 25660), (43, 25783), (45, 25801), (49, 25840), (55, 25876), (56, 25882), (60, 25897),