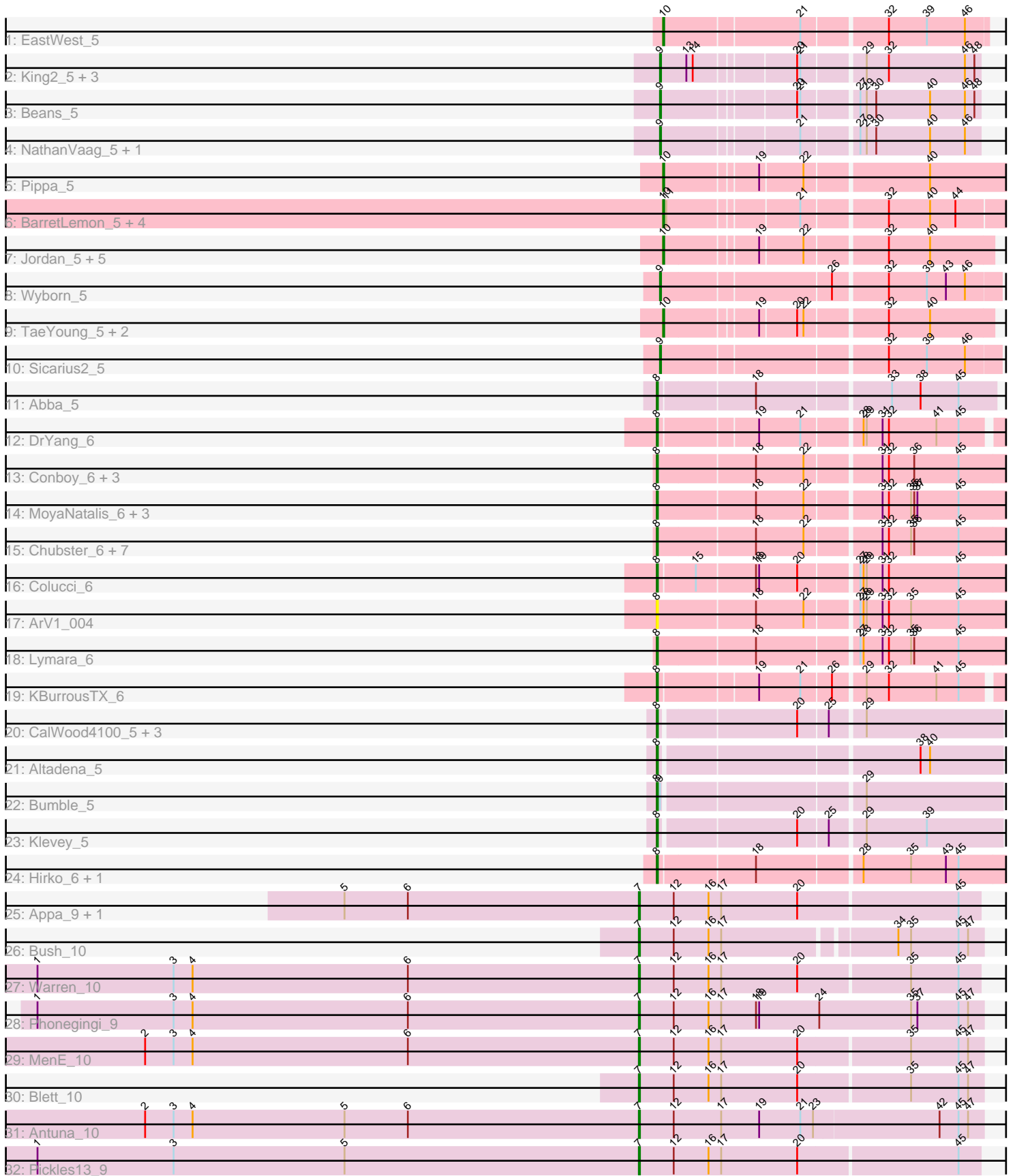


Pham 196531



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 196531 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196531 has 65 members, 4 are drafts.

Phages represented in each track:

- Track 1 : EastWest_5
- Track 2 : King2_5, Jawnski_5, Franzy_5, Brent_5
- Track 3 : Beans_5
- Track 4 : NathanVaag_5, Piccoletto_5
- Track 5 : Pippa_5
- Track 6 : BarretLemon_5, StevieBAY_5, GravityBall_5, Timinator_5, LeeroyJ_5
- Track 7 : Jordan_5, BossLady_5, Sonny_5, Shade_5, JKerns_5, Zartrosa_5
- Track 8 : Wyborn_5
- Track 9 : TaeYoung_5, Martha_5, Grekaycon_5
- Track 10 : Sicarius2_5
- Track 11 : Abba_5
- Track 12 : DrYang_6
- Track 13 : Conboy_6, EdgarPoe_6, Chipper1996_60, Tophat_6
- Track 14 : MoyaNatalis_6, Linus_6, PrincessTrina_6, JayCookie_6
- Track 15 : Chubster_6, Scavito_6, Chocolat_6, JaNo_6, HumptyDumpty_6, Mordred_6, RosiePosie_6, Kabreeze_6
- Track 16 : Colucci_6
- Track 17 : ArV1_004
- Track 18 : Lymara_6
- Track 19 : KBurrousTX_6
- Track 20 : CalWood4100_5, Bolt007_5, Prairie_5, Lilmac1015_5
- Track 21 : Altadena_5
- Track 22 : Bumble_5
- Track 23 : Klevey_5
- Track 24 : Hirko_6, Vibaki_7
- Track 25 : Appa_9, Dropshot_9
- Track 26 : Bush_10
- Track 27 : Warren_10
- Track 28 : Phonegingi_9
- Track 29 : MenE_10
- Track 30 : Blett_10
- Track 31 : Antuna_10
- Track 32 : Pickles13_9

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

The start number called the most often in the published annotations is 8, it was called in 28 of the 61 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abba_5, Altadena_5, ArV1_004, Bolt007_5, Bumble_5, CalWood4100_5, Chipper1996_60, Chocolat_6, Chubster_6, Colucci_6, Conboy_6, DrYang_6, EdgarPoe_6, Hirko_6, HumptyDumpty_6, JaNo_6, JayCookie_6, KBurrousTX_6, Kabreeze_6, Klevey_5, Lilmac1015_5, Linus_6, Lymara_6, Mordred_6, MoyaNatalis_6, Prairie_5, PrincessTrina_6, RosiePosie_6, Scavito_6, Tophat_6, Vibaki_7,

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

-

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

- Antuna_10, Appa_9, BarretLemon_5, Beans_5, Blett_10, BossLady_5, Brent_5, Bush_10, Dropshot_9, EastWest_5, Franzy_5, GravityBall_5, Grekaycon_5, JKerns_5, Jawnski_5, Jordan_5, King2_5, LeeroyJ_5, Martha_5, MenE_10, NathanVaag_5, Phonegingi_9, Piccoletto_5, Pickles13_9, Pippa_5, Shade_5, Sicarius2_5, Sonny_5, StevieBAY_5, TaeYoung_5, Timinator_5, Warren_10, Wyborn_5, Zartrosa_5,

Summary by start number:

Start 7:

- Found in 9 of 65 (13.8%) of genes in pham
- Manual Annotations of this start: 9 of 61
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antuna_10 (GA), Appa_9 (GA), Blett_10 (GA), Bush_10 (GA), Dropshot_9 (GA), MenE_10 (GA), Phonegingi_9 (GA), Pickles13_9 (GA), Warren_10 (GA),

Start 8:

- Found in 31 of 65 (47.7%) of genes in pham
- Manual Annotations of this start: 28 of 61
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abba_5 (AO3), Altadena_5 (FH), ArV1_004 (AR), Bolt007_5 (FH), Bumble_5 (FH), CalWood4100_5 (FH), Chipper1996_60 (AR), Chocolat_6 (AR), Chubster_6 (AR), Colucci_6 (AR), Conboy_6 (AR), DrYang_6 (AR), EdgarPoe_6 (AR), Hirko_6 (FL), HumptyDumpty_6 (AR), JaNo_6 (AR), JayCookie_6 (AR), KBurrousTX_6 (AR), Kabreeze_6 (AR), Klevey_5 (FH), Lilmac1015_5 (FH), Linus_6 (AR), Lymara_6 (AR), Mordred_6 (AR), MoyaNatalis_6 (AR), Prairie_5 (FH), PrincessTrina_6 (AR), RosiePosie_6 (AR), Scavito_6 (AR), Tophat_6 (AR), Vibaki_7 (FL),

Start 9:

- Found in 10 of 65 (15.4%) of genes in pham
- Manual Annotations of this start: 9 of 61
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Beans_5 (AO1), Brent_5 (AO1), Franzy_5 (AO1), Jawnski_5 (AO1), King2_5 (AO1), NathanVaag_5 (AO1), Piccoletto_5 (AO1), Sicarius2_5 (AO2), Wyborn_5 (AO2),

Start 10:

- Found in 16 of 65 (24.6%) of genes in pham
- Manual Annotations of this start: 15 of 61
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BarretLemon_5 (AO2), BossLady_5 (AO2), EastWest_5 (AO), GravityBall_5 (AO2), Grekaycon_5 (AO2), JKerns_5 (AO2), Jordan_5 (AO2), LeeroyJ_5 (AO2), Martha_5 (AO2), Pippa_5 (AO2), Shade_5 (AO2), Sonny_5 (AO2), StevieBAY_5 (AO2), TaeYoung_5 (AO2), Timinator_5 (AO2), Zartrosa_5 (AO2),

Summary by clusters:

There are 8 clusters represented in this pham: GA, AO, AR, AO3, AO2, AO1, FH, FL,

Info for manual annotations of cluster AO:

- Start number 10 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 9 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 9 was manually annotated 2 times for cluster AO2.
- Start number 10 was manually annotated 14 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 8 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster AR:

- Start number 8 was manually annotated 19 times for cluster AR.

Info for manual annotations of cluster FH:

- Start number 8 was manually annotated 6 times for cluster FH.

Info for manual annotations of cluster FL:

- Start number 8 was manually annotated 2 times for cluster FL.

Info for manual annotations of cluster GA:

- Start number 7 was manually annotated 9 times for cluster GA.

Gene Information:

Gene: Abba_5 Start: 5434, Stop: 5739, Start Num: 8

Candidate Starts for Abba_5:

(Start: 8 @5434 has 28 MA's), (18, 5521), (33, 5641), (38, 5668), (45, 5704),

Gene: Altadena_5 Start: 5253, Stop: 5561, Start Num: 8

Candidate Starts for Altadena_5:

(Start: 8 @5253 has 28 MA's), (38, 5484), (40, 5493),

Gene: Antuna_10 Start: 5629, Stop: 5952, Start Num: 7

Candidate Starts for Antuna_10:

(2, 5161), (3, 5188), (4, 5206), (5, 5350), (6, 5410), (Start: 7 @5629 has 9 MA's), (12, 5662), (17, 5707), (19, 5743), (21, 5782), (23, 5794), (42, 5911), (45, 5929), (47, 5938),

Gene: Appa_9 Start: 5494, Stop: 5811, Start Num: 7

Candidate Starts for Appa_9:

(5, 5215), (6, 5275), (Start: 7 @5494 has 9 MA's), (12, 5527), (16, 5560), (17, 5572), (20, 5644), (45, 5791),

Gene: ArV1_004 Start: 4864, Stop: 5190, Start Num: 8

Candidate Starts for ArV1_004:

(Start: 8 @4864 has 28 MA's), (18, 4954), (22, 4999), (27, 5044), (28, 5047), (29, 5050), (31, 5065), (32, 5071), (35, 5092), (45, 5137),

Gene: BarretLemon_5 Start: 5150, Stop: 5470, Start Num: 10

Candidate Starts for BarretLemon_5:

(Start: 10 @5150 has 15 MA's), (11, 5153), (21, 5267), (32, 5342), (40, 5381), (44, 5405),

Gene: Beans_5 Start: 5184, Stop: 5465, Start Num: 9

Candidate Starts for Beans_5:

(Start: 9 @5184 has 9 MA's), (20, 5301), (21, 5304), (27, 5352), (29, 5358), (30, 5367), (40, 5418), (46, 5451), (48, 5460),

Gene: Blett_10 Start: 5646, Stop: 5966, Start Num: 7

Candidate Starts for Blett_10:

(Start: 7 @5646 has 9 MA's), (12, 5679), (16, 5712), (17, 5724), (20, 5796), (35, 5898), (45, 5943), (47, 5952),

Gene: Bolt007_5 Start: 5214, Stop: 5522, Start Num: 8

Candidate Starts for Bolt007_5:

(Start: 8 @5214 has 28 MA's), (20, 5337), (25, 5364), (29, 5394),

Gene: BossLady_5 Start: 5158, Stop: 5448, Start Num: 10

Candidate Starts for BossLady_5:

(Start: 10 @5158 has 15 MA's), (19, 5239), (22, 5278), (32, 5350), (40, 5389),

Gene: Brent_5 Start: 5178, Stop: 5459, Start Num: 9

Candidate Starts for Brent_5:

(Start: 9 @5178 has 9 MA's), (13, 5202), (14, 5208), (20, 5295), (21, 5298), (29, 5352), (32, 5373), (46, 5445), (48, 5454),

Gene: Bumble_5 Start: 5268, Stop: 5576, Start Num: 8

Candidate Starts for Bumble_5:

(Start: 8 @5268 has 28 MA's), (Start: 9 @5271 has 9 MA's), (29, 5448),

Gene: Bush_10 Start: 5649, Stop: 5960, Start Num: 7

Candidate Starts for Bush_10:

(Start: 7 @5649 has 9 MA's), (12, 5682), (16, 5715), (17, 5727), (34, 5880), (35, 5892), (45, 5937), (47, 5946),

Gene: CalWood4100_5 Start: 5208, Stop: 5516, Start Num: 8

Candidate Starts for CalWood4100_5:

(Start: 8 @5208 has 28 MA's), (20, 5331), (25, 5358), (29, 5388),

Gene: Chipper1996_60 Start: 6253, Stop: 6579, Start Num: 8
Candidate Starts for Chipper1996_60:
(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (36, 6484), (45, 6526),

Gene: Chocolat_6 Start: 6253, Stop: 6579, Start Num: 8
Candidate Starts for Chocolat_6:
(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (35, 6481), (36, 6484), (45, 6526),

Gene: Chubster_6 Start: 6247, Stop: 6573, Start Num: 8
Candidate Starts for Chubster_6:
(Start: 8 @6247 has 28 MA's), (18, 6337), (22, 6382), (31, 6448), (32, 6454), (35, 6475), (36, 6478), (45, 6520),

Gene: Colucci_6 Start: 6229, Stop: 6546, Start Num: 8
Candidate Starts for Colucci_6:
(Start: 8 @6229 has 28 MA's), (15, 6262), (18, 6316), (19, 6319), (20, 6355), (27, 6406), (28, 6409), (29, 6412), (31, 6427), (32, 6433), (45, 6499),

Gene: Conboy_6 Start: 6253, Stop: 6579, Start Num: 8
Candidate Starts for Conboy_6:
(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (36, 6484), (45, 6526),

Gene: DrYang_6 Start: 6196, Stop: 6501, Start Num: 8
Candidate Starts for DrYang_6:
(Start: 8 @6196 has 28 MA's), (19, 6283), (21, 6322), (28, 6373), (29, 6376), (31, 6391), (32, 6397), (41, 6442), (45, 6463),

Gene: Dropshot_9 Start: 5494, Stop: 5811, Start Num: 7
Candidate Starts for Dropshot_9:
(5, 5215), (6, 5275), (Start: 7 @5494 has 9 MA's), (12, 5527), (16, 5560), (17, 5572), (20, 5644), (45, 5791),

Gene: EastWest_5 Start: 5085, Stop: 5375, Start Num: 10
Candidate Starts for EastWest_5:
(Start: 10 @5085 has 15 MA's), (21, 5208), (32, 5283), (39, 5319), (46, 5355),

Gene: EdgarPoe_6 Start: 6253, Stop: 6579, Start Num: 8
Candidate Starts for EdgarPoe_6:
(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (36, 6484), (45, 6526),

Gene: Franzy_5 Start: 5178, Stop: 5459, Start Num: 9
Candidate Starts for Franzy_5:
(Start: 9 @5178 has 9 MA's), (13, 5202), (14, 5208), (20, 5295), (21, 5298), (29, 5352), (32, 5373), (46, 5445), (48, 5454),

Gene: GravityBall_5 Start: 5150, Stop: 5470, Start Num: 10
Candidate Starts for GravityBall_5:
(Start: 10 @5150 has 15 MA's), (11, 5153), (21, 5267), (32, 5342), (40, 5381), (44, 5405),

Gene: Grekaycon_5 Start: 5158, Stop: 5448, Start Num: 10
Candidate Starts for Grekaycon_5:

(Start: 10 @5158 has 15 MA's), (19, 5239), (20, 5272), (22, 5278), (32, 5350), (40, 5389),

Gene: Hirko_6 Start: 6777, Stop: 7094, Start Num: 8

Candidate Starts for Hirko_6:

(Start: 8 @6777 has 28 MA's), (18, 6864), (28, 6957), (35, 7002), (43, 7035), (45, 7047),

Gene: HumptyDumpty_6 Start: 6253, Stop: 6579, Start Num: 8

Candidate Starts for HumptyDumpty_6:

(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (35, 6481), (36, 6484), (45, 6526),

Gene: JKerns_5 Start: 5155, Stop: 5445, Start Num: 10

Candidate Starts for JKerns_5:

(Start: 10 @5155 has 15 MA's), (19, 5236), (22, 5275), (32, 5347), (40, 5386),

Gene: JaNo_6 Start: 6253, Stop: 6579, Start Num: 8

Candidate Starts for JaNo_6:

(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (35, 6481), (36, 6484), (45, 6526),

Gene: Jawnski_5 Start: 5178, Stop: 5459, Start Num: 9

Candidate Starts for Jawnski_5:

(Start: 9 @5178 has 9 MA's), (13, 5202), (14, 5208), (20, 5295), (21, 5298), (29, 5352), (32, 5373), (46, 5445), (48, 5454),

Gene: JayCookie_6 Start: 6253, Stop: 6579, Start Num: 8

Candidate Starts for JayCookie_6:

(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (35, 6481), (36, 6484), (37, 6487), (45, 6526),

Gene: Jordan_5 Start: 5155, Stop: 5445, Start Num: 10

Candidate Starts for Jordan_5:

(Start: 10 @5155 has 15 MA's), (19, 5236), (22, 5275), (32, 5347), (40, 5386),

Gene: KBurrousTX_6 Start: 6280, Stop: 6585, Start Num: 8

Candidate Starts for KBurrousTX_6:

(Start: 8 @6280 has 28 MA's), (19, 6367), (21, 6406), (26, 6433), (29, 6460), (32, 6481), (41, 6526), (45, 6547),

Gene: Kabreeze_6 Start: 6253, Stop: 6579, Start Num: 8

Candidate Starts for Kabreeze_6:

(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (35, 6481), (36, 6484), (45, 6526),

Gene: King2_5 Start: 5178, Stop: 5459, Start Num: 9

Candidate Starts for King2_5:

(Start: 9 @5178 has 9 MA's), (13, 5202), (14, 5208), (20, 5295), (21, 5298), (29, 5352), (32, 5373), (46, 5445), (48, 5454),

Gene: Klevey_5 Start: 5208, Stop: 5516, Start Num: 8

Candidate Starts for Klevey_5:

(Start: 8 @5208 has 28 MA's), (20, 5331), (25, 5358), (29, 5388), (39, 5445),

Gene: LeeroyJ_5 Start: 5150, Stop: 5470, Start Num: 10

Candidate Starts for LeeroyJ_5:

(Start: 10 @5150 has 15 MA's), (11, 5153), (21, 5267), (32, 5342), (40, 5381), (44, 5405),

Gene: Lilmac1015_5 Start: 5208, Stop: 5516, Start Num: 8

Candidate Starts for Lilmac1015_5:

(Start: 8 @5208 has 28 MA's), (20, 5331), (25, 5358), (29, 5388),

Gene: Linus_6 Start: 6250, Stop: 6576, Start Num: 8

Candidate Starts for Linus_6:

(Start: 8 @6250 has 28 MA's), (18, 6340), (22, 6385), (31, 6451), (32, 6457), (35, 6478), (36, 6481), (37, 6484), (45, 6523),

Gene: Lymara_6 Start: 6247, Stop: 6573, Start Num: 8

Candidate Starts for Lymara_6:

(Start: 8 @6247 has 28 MA's), (18, 6337), (27, 6427), (28, 6430), (31, 6448), (32, 6454), (35, 6475), (36, 6478), (45, 6520),

Gene: Martha_5 Start: 5158, Stop: 5448, Start Num: 10

Candidate Starts for Martha_5:

(Start: 10 @5158 has 15 MA's), (19, 5239), (20, 5272), (22, 5278), (32, 5350), (40, 5389),

Gene: MenE_10 Start: 5760, Stop: 6080, Start Num: 7

Candidate Starts for MenE_10:

(2, 5292), (3, 5319), (4, 5337), (6, 5541), (Start: 7 @5760 has 9 MA's), (12, 5793), (16, 5826), (17, 5838), (20, 5910), (35, 6012), (45, 6057), (47, 6066),

Gene: Mordred_6 Start: 6253, Stop: 6579, Start Num: 8

Candidate Starts for Mordred_6:

(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (35, 6481), (36, 6484), (45, 6526),

Gene: MoyaNatalis_6 Start: 6253, Stop: 6579, Start Num: 8

Candidate Starts for MoyaNatalis_6:

(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (35, 6481), (36, 6484), (37, 6487), (45, 6526),

Gene: NathanVaag_5 Start: 5184, Stop: 5465, Start Num: 9

Candidate Starts for NathanVaag_5:

(Start: 9 @5184 has 9 MA's), (21, 5304), (27, 5352), (29, 5358), (30, 5367), (40, 5418), (46, 5451),

Gene: Phonegingi_9 Start: 5483, Stop: 5809, Start Num: 7

Candidate Starts for Phonegingi_9:

(1, 4913), (3, 5042), (4, 5060), (6, 5264), (Start: 7 @5483 has 9 MA's), (12, 5516), (16, 5549), (17, 5561), (18, 5594), (19, 5597), (24, 5654), (35, 5741), (37, 5747), (45, 5786), (47, 5795),

Gene: Piccoletto_5 Start: 5184, Stop: 5465, Start Num: 9

Candidate Starts for Piccoletto_5:

(Start: 9 @5184 has 9 MA's), (21, 5304), (27, 5352), (29, 5358), (30, 5367), (40, 5418), (46, 5451),

Gene: Pickles13_9 Start: 5631, Stop: 5948, Start Num: 7

Candidate Starts for Pickles13_9:

(1, 5061), (3, 5190), (5, 5352), (Start: 7 @5631 has 9 MA's), (12, 5664), (16, 5697), (17, 5709), (20, 5781), (45, 5928),

Gene: Pippa_5 Start: 5154, Stop: 5477, Start Num: 10
Candidate Starts for Pippa_5:
(Start: 10 @5154 has 15 MA's), (19, 5235), (22, 5274), (40, 5385),

Gene: Prairie_5 Start: 5208, Stop: 5516, Start Num: 8
Candidate Starts for Prairie_5:
(Start: 8 @5208 has 28 MA's), (20, 5331), (25, 5358), (29, 5388),

Gene: PrincessTrina_6 Start: 6253, Stop: 6579, Start Num: 8
Candidate Starts for PrincessTrina_6:
(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (35, 6481), (36, 6484), (37, 6487), (45, 6526),

Gene: RosiePosie_6 Start: 6253, Stop: 6579, Start Num: 8
Candidate Starts for RosiePosie_6:
(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (35, 6481), (36, 6484), (45, 6526),

Gene: Scavito_6 Start: 6253, Stop: 6579, Start Num: 8
Candidate Starts for Scavito_6:
(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (35, 6481), (36, 6484), (45, 6526),

Gene: Shade_5 Start: 5155, Stop: 5445, Start Num: 10
Candidate Starts for Shade_5:
(Start: 10 @5155 has 15 MA's), (19, 5236), (22, 5275), (32, 5347), (40, 5386),

Gene: Sicarius2_5 Start: 5199, Stop: 5504, Start Num: 9
Candidate Starts for Sicarius2_5:
(Start: 9 @5199 has 9 MA's), (32, 5400), (39, 5436), (46, 5472),

Gene: Sonny_5 Start: 5155, Stop: 5445, Start Num: 10
Candidate Starts for Sonny_5:
(Start: 10 @5155 has 15 MA's), (19, 5236), (22, 5275), (32, 5347), (40, 5386),

Gene: StevieBAY_5 Start: 5150, Stop: 5470, Start Num: 10
Candidate Starts for StevieBAY_5:
(Start: 10 @5150 has 15 MA's), (11, 5153), (21, 5267), (32, 5342), (40, 5381), (44, 5405),

Gene: TaeYoung_5 Start: 5158, Stop: 5448, Start Num: 10
Candidate Starts for TaeYoung_5:
(Start: 10 @5158 has 15 MA's), (19, 5239), (20, 5272), (22, 5278), (32, 5350), (40, 5389),

Gene: Timinator_5 Start: 5150, Stop: 5470, Start Num: 10
Candidate Starts for Timinator_5:
(Start: 10 @5150 has 15 MA's), (11, 5153), (21, 5267), (32, 5342), (40, 5381), (44, 5405),

Gene: Tophat_6 Start: 6253, Stop: 6579, Start Num: 8
Candidate Starts for Tophat_6:
(Start: 8 @6253 has 28 MA's), (18, 6343), (22, 6388), (31, 6454), (32, 6460), (36, 6484), (45, 6526),

Gene: Vibaki_7 Start: 7199, Stop: 7516, Start Num: 8

Candidate Starts for Vibaki_7:

(Start: 8 @7199 has 28 MA's), (18, 7286), (28, 7379), (35, 7424), (43, 7457), (45, 7469),

Gene: Warren_10 Start: 5673, Stop: 5990, Start Num: 7

Candidate Starts for Warren_10:

(1, 5103), (3, 5232), (4, 5250), (6, 5454), (Start: 7 @5673 has 9 MA's), (12, 5706), (16, 5739), (17, 5751), (20, 5823), (35, 5925), (45, 5970),

Gene: Wyborn_5 Start: 5205, Stop: 5510, Start Num: 9

Candidate Starts for Wyborn_5:

(Start: 9 @5205 has 9 MA's), (26, 5358), (32, 5406), (39, 5442), (43, 5460), (46, 5478),

Gene: Zartrosa_5 Start: 5155, Stop: 5445, Start Num: 10

Candidate Starts for Zartrosa_5:

(Start: 10 @5155 has 15 MA's), (19, 5236), (22, 5275), (32, 5347), (40, 5386),