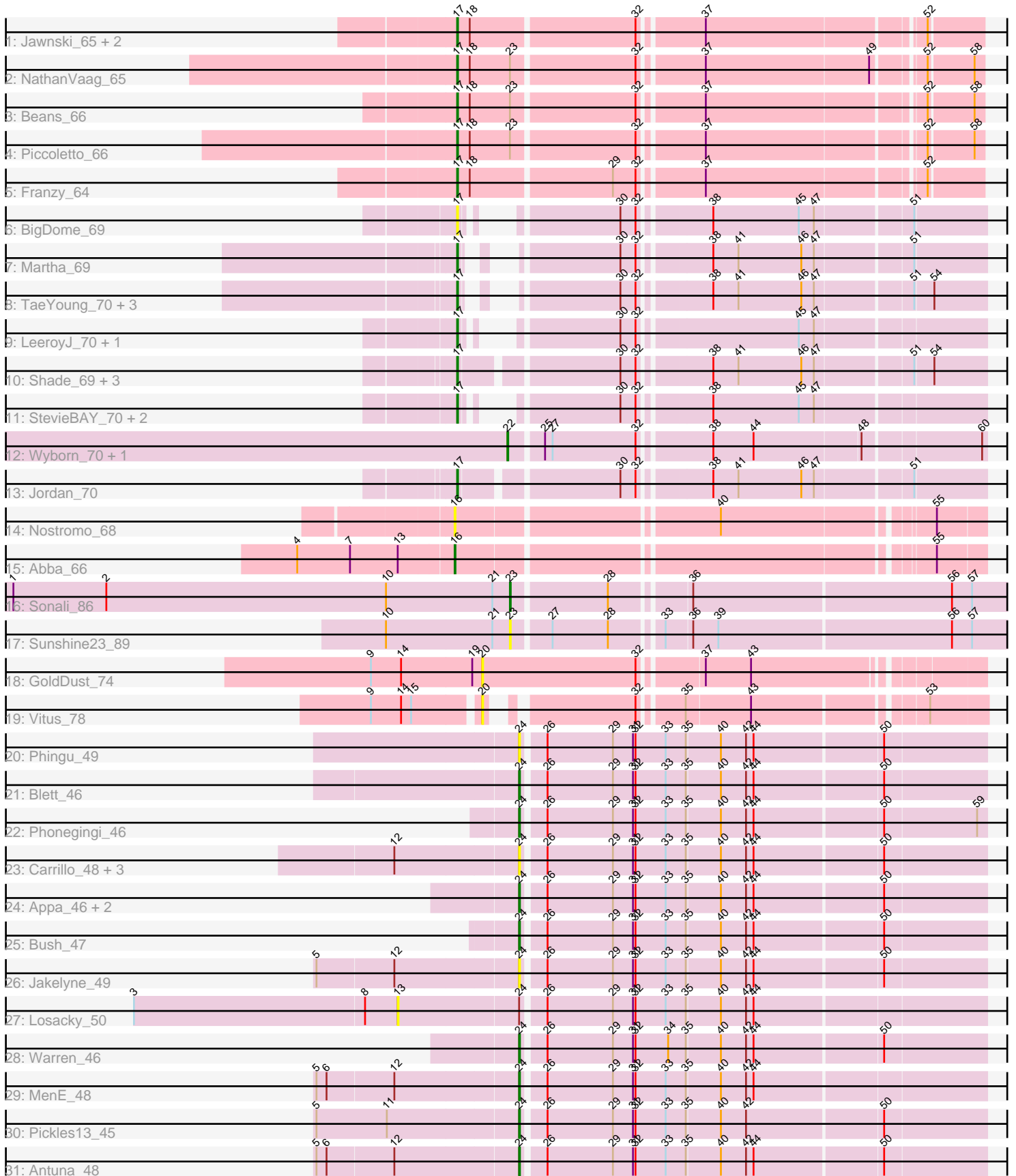


Pham 224669



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 224669 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224669 has 48 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Jawnski_65, Brent_66, King2_64
- Track 2 : NathanVaag_65
- Track 3 : Beans_66
- Track 4 : Piccoletto_66
- Track 5 : Franzy_64
- Track 6 : BigDome_69
- Track 7 : Martha_69
- Track 8 : TaeYoung_70, JKerns_69, Grekaycon_70, BossLady_71
- Track 9 : LeeroyJ_70, Timinator_70
- Track 10 : Shade_69, Sonny_69, Zartrosa_71, Pippa_70
- Track 11 : StevieBAY_70, BarretLemon_69, GravityBall_69
- Track 12 : Wyborn_70, Sicarius2_71
- Track 13 : Jordan_70
- Track 14 : Nostromo_68
- Track 15 : Abba_66
- Track 16 : Sonali_86
- Track 17 : Sunshine23_89
- Track 18 : GoldDust_74
- Track 19 : Vitus_78
- Track 20 : Phingu_49
- Track 21 : Blett_46
- Track 22 : Phonegingi_46
- Track 23 : Carrillo_48, Violeta_48, Guzman_46, CookieDog_46
- Track 24 : Appa_46, PhillyJawn_47, Dropshot_46
- Track 25 : Bush_47
- Track 26 : Jakelyne_49
- Track 27 : Losacky_50
- Track 28 : Warren_46
- Track 29 : MenE_48
- Track 30 : Pickles13_45
- Track 31 : Antuna_48

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

The start number called the most often in the published annotations is 17, it was called in 22 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BarretLemon_69, Beans_66, BigDome_69, BossLady_71, Brent_66, Franzy_64, GravityBall_69, Grekaycon_70, JKerns_69, Jawnski_65, Jordan_70, King2_64, LeeroyJ_70, Martha_69, NathanVaag_65, Piccoletto_66, Pippa_70, Shade_69, Sonny_69, StevieBAY_70, TaeYoung_70, Timinator_70, Zartrosa_71,

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

•

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

• Abba_66, Antuna_48, Appa_46, Blett_46, Bush_47, Carrillo_48, CookieDog_46, Dropshot_46, GoldDust_74, Guzman_46, Jakelyne_49, Losacky_50, MenE_48, Nostromo_68, PhillyJawn_47, Phingu_49, Phonegingi_46, Pickles13_45, Sicarius2_71, Sonali_86, Sunshine23_89, Violeta_48, Vitus_78, Warren_46, Wyborn_70,

Summary by start number:

Start 13:

- Found in 2 of 48 (4.2%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Losacky_50 (GA),

Start 16:

- Found in 2 of 48 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abba_66 (AO3), Nostromo_68 (AO3),

Start 17:

- Found in 23 of 48 (47.9%) of genes in pham
- Manual Annotations of this start: 22 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BarretLemon_69 (AO2), Beans_66 (AO1), BigDome_69 (AO2), BossLady_71 (AO2), Brent_66 (AO1), Franzy_64 (AO1), GravityBall_69 (AO2), Grekaycon_70 (AO2), JKerns_69 (AO2), Jawnski_65 (AO1), Jordan_70 (AO2), King2_64 (AO1), LeeroyJ_70 (AO2), Martha_69 (AO2), NathanVaag_65 (AO1), Piccoletto_66 (AO1), Pippa_70 (AO2), Shade_69 (AO2), Sonny_69 (AO2), StevieBAY_70 (AO2), TaeYoung_70 (AO2), Timinator_70 (AO2), Zartrosa_71 (AO2),

Start 20:

- Found in 2 of 48 (4.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GoldDust_74 (FL), Vitus_78 (FL),

Start 22:

- Found in 2 of 48 (4.2%) of genes in pham

- Manual Annotations of this start: 2 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sicarius2_71 (AO2), Wyborn_70 (AO2),

Start 23:

- Found in 5 of 48 (10.4%) of genes in pham
- Manual Annotations of this start: 1 of 35
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Sonali_86 (FG), Sunshine23_89 (FG),

Start 24:

- Found in 17 of 48 (35.4%) of genes in pham
- Manual Annotations of this start: 9 of 35
- Called 94.1% of time when present
- Phage (with cluster) where this start called: Antuna_48 (GA), Appa_46 (GA), Blett_46 (GA), Bush_47 (GA), Carrillo_48 (GA), CookieDog_46 (GA), Dropshot_46 (GA), Guzman_46 (GA), Jakelyne_49 (GA), MenE_48 (GA), PhillyJawn_47 (GA), Phingu_49 (GA), Phonegingi_46 (GA), Pickles13_45 (GA), Violeta_48 (GA), Warren_46 (GA),

Summary by clusters:

There are 6 clusters represented in this pham: GA, AO3, AO2, AO1, FG, FL,

Info for manual annotations of cluster AO1:

- Start number 17 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 17 was manually annotated 15 times for cluster AO2.
- Start number 22 was manually annotated 2 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 16 was manually annotated 1 time for cluster AO3.

Info for manual annotations of cluster FG:

- Start number 23 was manually annotated 1 time for cluster FG.

Info for manual annotations of cluster GA:

- Start number 24 was manually annotated 9 times for cluster GA.

Gene Information:

Gene: Abba_66 Start: 41901, Stop: 42479, Start Num: 16

Candidate Starts for Abba_66:

(4, 41721), (7, 41784), (13, 41841), (Start: 16 @41901 has 1 MA's), (55, 42423),

Gene: Antuna_48 Start: 29370, Stop: 29903, Start Num: 24

Candidate Starts for Antuna_48:

(5, 29136), (6, 29148), (12, 29226), (Start: 24 @29370 has 9 MA's), (26, 29394), (29, 29472), (31, 29496), (32, 29499), (33, 29535), (35, 29559), (40, 29598), (42, 29628), (44, 29637), (50, 29784),

Gene: Appa_46 Start: 29135, Stop: 29668, Start Num: 24

Candidate Starts for Appa_46:

(Start: 24 @29135 has 9 MA's), (26, 29159), (29, 29237), (31, 29261), (32, 29264), (33, 29300), (35, 29324), (40, 29363), (42, 29393), (44, 29402), (50, 29549),

Gene: BarretLemon_69 Start: 44545, Stop: 45120, Start Num: 17

Candidate Starts for BarretLemon_69:

(Start: 17 @44545 has 22 MA's), (30, 44716), (32, 44734), (38, 44809), (45, 44911), (47, 44929),

Gene: Beans_66 Start: 44464, Stop: 45042, Start Num: 17

Candidate Starts for Beans_66:

(Start: 17 @44464 has 22 MA's), (18, 44479), (Start: 23 @44527 has 1 MA's), (32, 44668), (37, 44737), (52, 44980), (58, 45031),

Gene: BigDome_69 Start: 44829, Stop: 45359, Start Num: 17

Candidate Starts for BigDome_69:

(Start: 17 @44829 has 22 MA's), (30, 44955), (32, 44973), (38, 45048), (45, 45150), (47, 45168), (51, 45276),

Gene: Blett_46 Start: 29321, Stop: 29854, Start Num: 24

Candidate Starts for Blett_46:

(Start: 24 @29321 has 9 MA's), (26, 29345), (29, 29423), (31, 29447), (32, 29450), (33, 29486), (35, 29510), (40, 29549), (42, 29579), (44, 29588), (50, 29735),

Gene: BossLady_71 Start: 45159, Stop: 45689, Start Num: 17

Candidate Starts for BossLady_71:

(Start: 17 @45159 has 22 MA's), (30, 45285), (32, 45303), (38, 45378), (41, 45408), (46, 45483), (47, 45498), (51, 45606), (54, 45627),

Gene: Brent_66 Start: 44549, Stop: 45127, Start Num: 17

Candidate Starts for Brent_66:

(Start: 17 @44549 has 22 MA's), (18, 44564), (32, 44753), (37, 44822), (52, 45065),

Gene: Bush_47 Start: 29269, Stop: 29802, Start Num: 24

Candidate Starts for Bush_47:

(Start: 24 @29269 has 9 MA's), (26, 29293), (29, 29371), (31, 29395), (32, 29398), (33, 29434), (35, 29458), (40, 29497), (42, 29527), (44, 29536), (50, 29683),

Gene: Carrillo_48 Start: 29243, Stop: 29776, Start Num: 24

Candidate Starts for Carrillo_48:

(12, 29099), (Start: 24 @29243 has 9 MA's), (26, 29267), (29, 29345), (31, 29369), (32, 29372), (33, 29408), (35, 29432), (40, 29471), (42, 29501), (44, 29510), (50, 29657),

Gene: CookieDog_46 Start: 29243, Stop: 29776, Start Num: 24

Candidate Starts for CookieDog_46:

(12, 29099), (Start: 24 @29243 has 9 MA's), (26, 29267), (29, 29345), (31, 29369), (32, 29372), (33, 29408), (35, 29432), (40, 29471), (42, 29501), (44, 29510), (50, 29657),

Gene: Dropshot_46 Start: 28970, Stop: 29503, Start Num: 24

Candidate Starts for Dropshot_46:

(Start: 24 @28970 has 9 MA's), (26, 28994), (29, 29072), (31, 29096), (32, 29099), (33, 29135), (35, 29159), (40, 29198), (42, 29228), (44, 29237), (50, 29384),

Gene: Franzy_64 Start: 44565, Stop: 45143, Start Num: 17

Candidate Starts for Franzy_64:

(Start: 17 @44565 has 22 MA's), (18, 44580), (29, 44742), (32, 44769), (37, 44838), (52, 45081),

Gene: GoldDust_74 Start: 47538, Stop: 48089, Start Num: 20

Candidate Starts for GoldDust_74:

(9, 47406), (14, 47442), (19, 47526), (20, 47538), (32, 47721), (37, 47787), (43, 47841),

Gene: GravityBall_69 Start: 44845, Stop: 45375, Start Num: 17

Candidate Starts for GravityBall_69:

(Start: 17 @44845 has 22 MA's), (30, 44971), (32, 44989), (38, 45064), (45, 45166), (47, 45184),

Gene: Grekaycon_70 Start: 45072, Stop: 45602, Start Num: 17

Candidate Starts for Grekaycon_70:

(Start: 17 @45072 has 22 MA's), (30, 45198), (32, 45216), (38, 45291), (41, 45321), (46, 45396), (47, 45411), (51, 45519), (54, 45540),

Gene: Guzman_46 Start: 29226, Stop: 29759, Start Num: 24

Candidate Starts for Guzman_46:

(12, 29082), (Start: 24 @29226 has 9 MA's), (26, 29250), (29, 29328), (31, 29352), (32, 29355), (33, 29391), (35, 29415), (40, 29454), (42, 29484), (44, 29493), (50, 29640),

Gene: JKerns_69 Start: 45051, Stop: 45626, Start Num: 17

Candidate Starts for JKerns_69:

(Start: 17 @45051 has 22 MA's), (30, 45222), (32, 45240), (38, 45315), (41, 45345), (46, 45420), (47, 45435), (51, 45543), (54, 45564),

Gene: Jakelyne_49 Start: 29336, Stop: 29869, Start Num: 24

Candidate Starts for Jakelyne_49:

(5, 29102), (12, 29192), (Start: 24 @29336 has 9 MA's), (26, 29360), (29, 29438), (31, 29462), (32, 29465), (33, 29501), (35, 29525), (40, 29564), (42, 29594), (44, 29603), (50, 29750),

Gene: Jawnski_65 Start: 44074, Stop: 44652, Start Num: 17

Candidate Starts for Jawnski_65:

(Start: 17 @44074 has 22 MA's), (18, 44089), (32, 44278), (37, 44347), (52, 44590),

Gene: Jordan_70 Start: 45176, Stop: 45751, Start Num: 17

Candidate Starts for Jordan_70:

(Start: 17 @45176 has 22 MA's), (30, 45347), (32, 45365), (38, 45440), (41, 45470), (46, 45545), (47, 45560), (51, 45668),

Gene: King2_64 Start: 44610, Stop: 45188, Start Num: 17

Candidate Starts for King2_64:

(Start: 17 @44610 has 22 MA's), (18, 44625), (32, 44814), (37, 44883), (52, 45126),

Gene: LeeroyJ_70 Start: 44774, Stop: 45304, Start Num: 17

Candidate Starts for LeeroyJ_70:

(Start: 17 @44774 has 22 MA's), (30, 44900), (32, 44918), (45, 45095), (47, 45113),

Gene: Losacky_50 Start: 29360, Stop: 30034, Start Num: 13

Candidate Starts for Losacky_50:

(3, 29048), (8, 29321), (13, 29360), (Start: 24 @29501 has 9 MA's), (26, 29525), (29, 29603), (31, 29627), (32, 29630), (33, 29666), (35, 29690), (40, 29729), (42, 29759), (44, 29768),

Gene: Martha_69 Start: 45008, Stop: 45538, Start Num: 17

Candidate Starts for Martha_69:

(Start: 17 @45008 has 22 MA's), (30, 45134), (32, 45152), (38, 45227), (41, 45257), (46, 45332), (47, 45347), (51, 45455),

Gene: MenE_48 Start: 29392, Stop: 29925, Start Num: 24

Candidate Starts for MenE_48:

(5, 29158), (6, 29170), (12, 29248), (Start: 24 @29392 has 9 MA's), (26, 29416), (29, 29494), (31, 29518), (32, 29521), (33, 29557), (35, 29581), (40, 29620), (42, 29650), (44, 29659),

Gene: NathanVaag_65 Start: 44298, Stop: 44876, Start Num: 17

Candidate Starts for NathanVaag_65:

(Start: 17 @44298 has 22 MA's), (18, 44313), (Start: 23 @44361 has 1 MA's), (32, 44502), (37, 44571), (49, 44763), (52, 44814), (58, 44865),

Gene: Nostromo_68 Start: 42650, Stop: 43228, Start Num: 16

Candidate Starts for Nostromo_68:

(Start: 16 @42650 has 1 MA's), (40, 42941), (55, 43172),

Gene: PhillyJawn_47 Start: 29132, Stop: 29665, Start Num: 24

Candidate Starts for PhillyJawn_47:

(Start: 24 @29132 has 9 MA's), (26, 29156), (29, 29234), (31, 29258), (32, 29261), (33, 29297), (35, 29321), (40, 29360), (42, 29390), (44, 29399), (50, 29546),

Gene: Phingu_49 Start: 29357, Stop: 29890, Start Num: 24

Candidate Starts for Phingu_49:

(Start: 24 @29357 has 9 MA's), (26, 29381), (29, 29459), (31, 29483), (32, 29486), (33, 29522), (35, 29546), (40, 29585), (42, 29615), (44, 29624), (50, 29771),

Gene: Phoningi_46 Start: 29171, Stop: 29704, Start Num: 24

Candidate Starts for Phoningi_46:

(Start: 24 @29171 has 9 MA's), (26, 29195), (29, 29273), (31, 29297), (32, 29300), (33, 29336), (35, 29360), (40, 29399), (42, 29429), (44, 29438), (50, 29585), (59, 29693),

Gene: Piccoletto_66 Start: 44460, Stop: 45038, Start Num: 17

Candidate Starts for Piccoletto_66:

(Start: 17 @44460 has 22 MA's), (18, 44475), (Start: 23 @44523 has 1 MA's), (32, 44664), (37, 44733), (52, 44976), (58, 45027),

Gene: Pickles13_45 Start: 29439, Stop: 29972, Start Num: 24

Candidate Starts for Pickles13_45:

(5, 29202), (11, 29286), (Start: 24 @29439 has 9 MA's), (26, 29463), (29, 29541), (31, 29565), (32, 29568), (33, 29604), (35, 29628), (40, 29667), (42, 29697), (50, 29853),

Gene: Pippa_70 Start: 45043, Stop: 45573, Start Num: 17

Candidate Starts for Pippa_70:

(Start: 17 @45043 has 22 MA's), (30, 45169), (32, 45187), (38, 45262), (41, 45292), (46, 45367), (47, 45382), (51, 45490), (54, 45511),

Gene: Shade_69 Start: 44814, Stop: 45389, Start Num: 17

Candidate Starts for Shade_69:

(Start: 17 @44814 has 22 MA's), (30, 44985), (32, 45003), (38, 45078), (41, 45108), (46, 45183), (47, 45198), (51, 45306), (54, 45327),

Gene: Sicarius2_71 Start: 43199, Stop: 43729, Start Num: 22

Candidate Starts for Sicarius2_71:

(Start: 22 @43199 has 2 MA's), (25, 43235), (27, 43244), (32, 43343), (38, 43421), (44, 43469), (48, 43592), (60, 43724),

Gene: Sonali_86 Start: 53450, Stop: 54043, Start Num: 23

Candidate Starts for Sonali_86:

(1, 52859), (2, 52970), (10, 53303), (21, 53429), (Start: 23 @53450 has 1 MA's), (28, 53558), (36, 53642), (56, 53945), (57, 53969),

Gene: Sonny_69 Start: 44737, Stop: 45312, Start Num: 17

Candidate Starts for Sonny_69:

(Start: 17 @44737 has 22 MA's), (30, 44908), (32, 44926), (38, 45001), (41, 45031), (46, 45106), (47, 45121), (51, 45229), (54, 45250),

Gene: StevieBAY_70 Start: 45067, Stop: 45597, Start Num: 17

Candidate Starts for StevieBAY_70:

(Start: 17 @45067 has 22 MA's), (30, 45193), (32, 45211), (38, 45286), (45, 45388), (47, 45406),

Gene: Sunshine23_89 Start: 53186, Stop: 53779, Start Num: 23

Candidate Starts for Sunshine23_89:

(10, 53039), (21, 53165), (Start: 23 @53186 has 1 MA's), (27, 53228), (28, 53294), (33, 53348), (36, 53378), (39, 53408), (56, 53681), (57, 53705),

Gene: TaeYoung_70 Start: 44980, Stop: 45510, Start Num: 17

Candidate Starts for TaeYoung_70:

(Start: 17 @44980 has 22 MA's), (30, 45106), (32, 45124), (38, 45199), (41, 45229), (46, 45304), (47, 45319), (51, 45427), (54, 45448),

Gene: Timinator_70 Start: 44887, Stop: 45417, Start Num: 17

Candidate Starts for Timinator_70:

(Start: 17 @44887 has 22 MA's), (30, 45013), (32, 45031), (45, 45208), (47, 45226),

Gene: Violeta_48 Start: 29234, Stop: 29767, Start Num: 24

Candidate Starts for Violeta_48:

(12, 29090), (Start: 24 @29234 has 9 MA's), (26, 29258), (29, 29336), (31, 29360), (32, 29363), (33, 29399), (35, 29423), (40, 29462), (42, 29492), (44, 29501), (50, 29648),

Gene: Vitus_78 Start: 46317, Stop: 46829, Start Num: 20

Candidate Starts for Vitus_78:

(9, 46197), (14, 46233), (15, 46245), (20, 46317), (32, 46458), (35, 46503), (43, 46578), (53, 46764),

Gene: Warren_46 Start: 29178, Stop: 29711, Start Num: 24

Candidate Starts for Warren_46:

(Start: 24 @29178 has 9 MA's), (26, 29202), (29, 29280), (31, 29304), (32, 29307), (34, 29346), (35, 29367), (40, 29406), (42, 29436), (44, 29445), (50, 29592),

Gene: Wyborn_70 Start: 43934, Stop: 44464, Start Num: 22

Candidate Starts for Wyborn_70:

(Start: 22 @43934 has 2 MA's), (25, 43970), (27, 43979), (32, 44078), (38, 44156), (44, 44204), (48, 44327), (60, 44459),

Gene: Zartrosa_71 Start: 45067, Stop: 45642, Start Num: 17

Candidate Starts for Zartrosa_71:

(Start: 17 @45067 has 22 MA's), (30, 45238), (32, 45256), (38, 45331), (41, 45361), (46, 45436), (47, 45451), (51, 45559), (54, 45580),