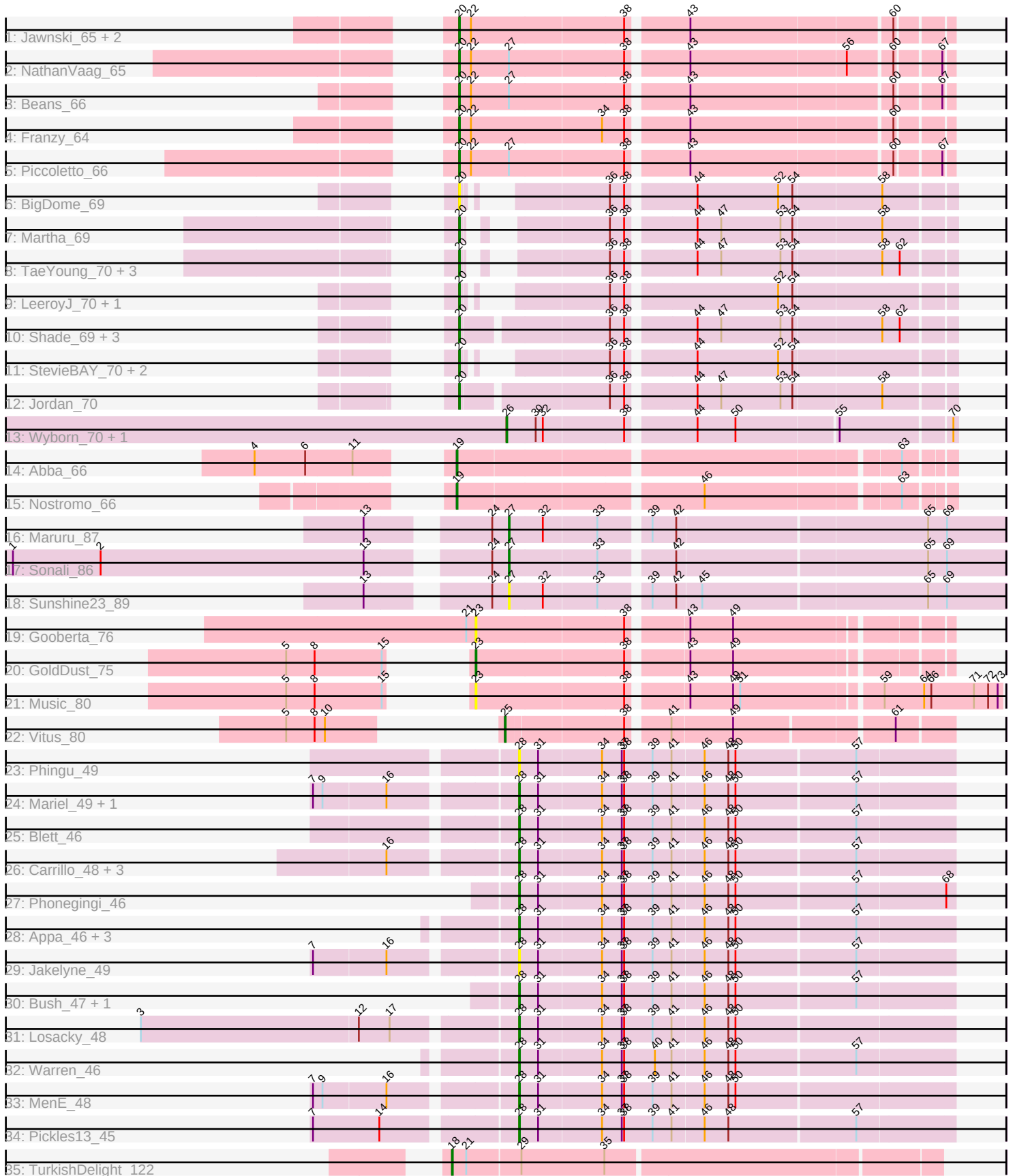


Pham 280504



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 280504 Report

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

Pham number 280504 has 55 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 : Franzy_64
- Track 5 : Piccoletto_66
- 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 : Jordan_70
- Track 13 : Wyborn_70, Sicarius2_71
- Track 14 : Abba_66
- Track 15 : Nostromo_66
- Track 16 : Maruru_87
- Track 17 : Sonali_86
- Track 18 : Sunshine23_89
- Track 19 : Gooberta_76
- Track 20 : GoldDust_75
- Track 21 : Music_80
- Track 22 : Vitus_80
- Track 23 : Phingu_49
- Track 24 : Mariel_49, Antuna_48
- Track 25 : Blett_46
- Track 26 : Carrillo_48, Guzman_46, CookieDog_46, Violeta_48
- Track 27 : Phonegingi_46
- Track 28 : Appa_46, Winchester007_62, PhillyJawn_47, Dropshot_46
- Track 29 : Jakelyne_49
- Track 30 : Bush_47, NCRodriguez_48
- Track 31 : Losacky_48
- Track 32 : Warren_46
- Track 33 : MenE_48
- Track 34 : Pickles13_45
- Track 35 : TurkishDelight_122

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

The start number called the most often in the published annotations is 20, it was called in 22 of the 42 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_75, Gooberta_76, Guzman_46, Jakelyne_49, Losacky_48, Mariel_49, Maruru_87, MenE_48, MusiC_80, NCRodriguez_48, Nostromo_66, PhillyJawn_47, Phingu_49, Phonegingi_46, Pickles13_45, Sicarius2_71, Sonali_86, Sunshine23_89, TurkishDelight_122, Violeta_48, Vitus_80, Warren_46, Winchester007_62, Wyborn_70,

Summary by start number:

Start 18:

- Found in 1 of 55 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TurkishDelight_122 (singleton),

Start 19:

- Found in 2 of 55 (3.6%) of genes in pham
- Manual Annotations of this start: 2 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abba_66 (AO3), Nostromo_66 (AO3),

Start 20:

- Found in 23 of 55 (41.8%) of genes in pham
- Manual Annotations of this start: 22 of 42
- 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 23:

- Found in 3 of 55 (5.5%) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 100.0% of time when present

- Phage (with cluster) where this start called: GoldDust_75 (FL), Gooberta_76 (FL), Music_80 (FL),

Start 25:

- Found in 1 of 55 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Vitus_80 (FL),

Start 26:

- Found in 2 of 55 (3.6%) of genes in pham
- Manual Annotations of this start: 2 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sicarius2_71 (AO2), Wyborn_70 (AO2),

Start 27:

- Found in 6 of 55 (10.9%) of genes in pham
- Manual Annotations of this start: 2 of 42
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Maruru_87 (FG), Sonali_86 (FG), Sunshine23_89 (FG),

Start 28:

- Found in 20 of 55 (36.4%) of genes in pham
- Manual Annotations of this start: 11 of 42
- Called 100.0% 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), Losacky_48 (GA), Mariel_49 (GA), MenE_48 (GA), NCRodriguez_48 (GA), PhillyJawn_47 (GA), Phingu_49 (GA), Phonegingi_46 (GA), Pickles13_45 (GA), Violeta_48 (GA), Warren_46 (GA), Winchester007_62 (GA),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, GA, AO3, AO2, AO1, FG, FL,

Info for manual annotations of cluster AO1:

- Start number 20 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 20 was manually annotated 15 times for cluster AO2.
- Start number 26 was manually annotated 2 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 19 was manually annotated 2 times for cluster AO3.

Info for manual annotations of cluster FG:

- Start number 27 was manually annotated 2 times for cluster FG.

Info for manual annotations of cluster FL:

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

- Start number 25 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster GA:

- Start number 28 was manually annotated 11 times for cluster GA.

Gene Information:

Gene: Abba_66 Start: 41901, Stop: 42479, Start Num: 19

Candidate Starts for Abba_66:

(4, 41721), (6, 41784), (11, 41841), (Start: 19 @41901 has 2 MA's), (63, 42423),

Gene: Antuna_48 Start: 29370, Stop: 29903, Start Num: 28

Candidate Starts for Antuna_48:

(7, 29136), (9, 29148), (16, 29226), (Start: 28 @29370 has 11 MA's), (31, 29394), (34, 29472), (37, 29496), (38, 29499), (39, 29535), (41, 29559), (46, 29598), (48, 29628), (50, 29637), (57, 29784),

Gene: Appa_46 Start: 29135, Stop: 29668, Start Num: 28

Candidate Starts for Appa_46:

(Start: 28 @29135 has 11 MA's), (31, 29159), (34, 29237), (37, 29261), (38, 29264), (39, 29300), (41, 29324), (46, 29363), (48, 29393), (50, 29402), (57, 29549),

Gene: BarretLemon_69 Start: 44545, Stop: 45120, Start Num: 20

Candidate Starts for BarretLemon_69:

(Start: 20 @44545 has 22 MA's), (36, 44716), (38, 44734), (44, 44809), (52, 44911), (54, 44929),

Gene: Beans_66 Start: 44464, Stop: 45042, Start Num: 20

Candidate Starts for Beans_66:

(Start: 20 @44464 has 22 MA's), (22, 44479), (Start: 27 @44527 has 2 MA's), (38, 44668), (43, 44737), (60, 44980), (67, 45031),

Gene: BigDome_69 Start: 44829, Stop: 45359, Start Num: 20

Candidate Starts for BigDome_69:

(Start: 20 @44829 has 22 MA's), (36, 44955), (38, 44973), (44, 45048), (52, 45150), (54, 45168), (58, 45276),

Gene: Blett_46 Start: 29321, Stop: 29854, Start Num: 28

Candidate Starts for Blett_46:

(Start: 28 @29321 has 11 MA's), (31, 29345), (34, 29423), (37, 29447), (38, 29450), (39, 29486), (41, 29510), (46, 29549), (48, 29579), (50, 29588), (57, 29735),

Gene: BossLady_71 Start: 45159, Stop: 45689, Start Num: 20

Candidate Starts for BossLady_71:

(Start: 20 @45159 has 22 MA's), (36, 45285), (38, 45303), (44, 45378), (47, 45408), (53, 45483), (54, 45498), (58, 45606), (62, 45627),

Gene: Brent_66 Start: 44549, Stop: 45127, Start Num: 20

Candidate Starts for Brent_66:

(Start: 20 @44549 has 22 MA's), (22, 44564), (38, 44753), (43, 44822), (60, 45065),

Gene: Bush_47 Start: 29269, Stop: 29802, Start Num: 28

Candidate Starts for Bush_47:

(Start: 28 @29269 has 11 MA's), (31, 29293), (34, 29371), (37, 29395), (38, 29398), (39, 29434), (41, 29458), (46, 29497), (48, 29527), (50, 29536), (57, 29683),

Gene: Carrillo_48 Start: 29243, Stop: 29776, Start Num: 28

Candidate Starts for Carrillo_48:

(16, 29099), (Start: 28 @29243 has 11 MA's), (31, 29267), (34, 29345), (37, 29369), (38, 29372), (39, 29408), (41, 29432), (46, 29471), (48, 29501), (50, 29510), (57, 29657),

Gene: CookieDog_46 Start: 29243, Stop: 29776, Start Num: 28

Candidate Starts for CookieDog_46:

(16, 29099), (Start: 28 @29243 has 11 MA's), (31, 29267), (34, 29345), (37, 29369), (38, 29372), (39, 29408), (41, 29432), (46, 29471), (48, 29501), (50, 29510), (57, 29657),

Gene: Dropshot_46 Start: 28970, Stop: 29503, Start Num: 28

Candidate Starts for Dropshot_46:

(Start: 28 @28970 has 11 MA's), (31, 28994), (34, 29072), (37, 29096), (38, 29099), (39, 29135), (41, 29159), (46, 29198), (48, 29228), (50, 29237), (57, 29384),

Gene: Franzy_64 Start: 44565, Stop: 45143, Start Num: 20

Candidate Starts for Franzy_64:

(Start: 20 @44565 has 22 MA's), (22, 44580), (34, 44742), (38, 44769), (43, 44838), (60, 45081),

Gene: GoldDust_75 Start: 47538, Stop: 48089, Start Num: 23

Candidate Starts for GoldDust_75:

(5, 47406), (8, 47442), (15, 47526), (Start: 23 @47538 has 1 MA's), (38, 47721), (43, 47787), (49, 47841),

Gene: Gooberta_76 Start: 48265, Stop: 48816, Start Num: 23

Candidate Starts for Gooberta_76:

(21, 48253), (Start: 23 @48265 has 1 MA's), (38, 48448), (43, 48514), (49, 48568),

Gene: GravityBall_69 Start: 44845, Stop: 45375, Start Num: 20

Candidate Starts for GravityBall_69:

(Start: 20 @44845 has 22 MA's), (36, 44971), (38, 44989), (44, 45064), (52, 45166), (54, 45184),

Gene: Grekaycon_70 Start: 45072, Stop: 45602, Start Num: 20

Candidate Starts for Grekaycon_70:

(Start: 20 @45072 has 22 MA's), (36, 45198), (38, 45216), (44, 45291), (47, 45321), (53, 45396), (54, 45411), (58, 45519), (62, 45540),

Gene: Guzman_46 Start: 29226, Stop: 29759, Start Num: 28

Candidate Starts for Guzman_46:

(16, 29082), (Start: 28 @29226 has 11 MA's), (31, 29250), (34, 29328), (37, 29352), (38, 29355), (39, 29391), (41, 29415), (46, 29454), (48, 29484), (50, 29493), (57, 29640),

Gene: JKerns_69 Start: 45051, Stop: 45626, Start Num: 20

Candidate Starts for JKerns_69:

(Start: 20 @45051 has 22 MA's), (36, 45222), (38, 45240), (44, 45315), (47, 45345), (53, 45420), (54, 45435), (58, 45543), (62, 45564),

Gene: Jakelyne_49 Start: 29336, Stop: 29869, Start Num: 28

Candidate Starts for Jakelyne_49:

(7, 29102), (16, 29192), (Start: 28 @29336 has 11 MA's), (31, 29360), (34, 29438), (37, 29462), (38, 29465), (39, 29501), (41, 29525), (46, 29564), (48, 29594), (50, 29603), (57, 29750),

Gene: Jawnski_65 Start: 44074, Stop: 44652, Start Num: 20

Candidate Starts for Jawnski_65:

(Start: 20 @44074 has 22 MA's), (22, 44089), (38, 44278), (43, 44347), (60, 44590),

Gene: Jordan_70 Start: 45176, Stop: 45751, Start Num: 20

Candidate Starts for Jordan_70:

(Start: 20 @45176 has 22 MA's), (36, 45347), (38, 45365), (44, 45440), (47, 45470), (53, 45545), (54, 45560), (58, 45668),

Gene: King2_64 Start: 44610, Stop: 45188, Start Num: 20

Candidate Starts for King2_64:

(Start: 20 @44610 has 22 MA's), (22, 44625), (38, 44814), (43, 44883), (60, 45126),

Gene: LeeroyJ_70 Start: 44774, Stop: 45304, Start Num: 20

Candidate Starts for LeeroyJ_70:

(Start: 20 @44774 has 22 MA's), (36, 44900), (38, 44918), (52, 45095), (54, 45113),

Gene: Losacky_48 Start: 29501, Stop: 30034, Start Num: 28

Candidate Starts for Losacky_48:

(3, 29048), (12, 29321), (17, 29360), (Start: 28 @29501 has 11 MA's), (31, 29525), (34, 29603), (37, 29627), (38, 29630), (39, 29666), (41, 29690), (46, 29729), (48, 29759), (50, 29768),

Gene: Mariel_49 Start: 29708, Stop: 30241, Start Num: 28

Candidate Starts for Mariel_49:

(7, 29474), (9, 29486), (16, 29564), (Start: 28 @29708 has 11 MA's), (31, 29732), (34, 29810), (37, 29834), (38, 29837), (39, 29873), (41, 29897), (46, 29936), (48, 29966), (50, 29975), (57, 30122),

Gene: Martha_69 Start: 45008, Stop: 45538, Start Num: 20

Candidate Starts for Martha_69:

(Start: 20 @45008 has 22 MA's), (36, 45134), (38, 45152), (44, 45227), (47, 45257), (53, 45332), (54, 45347), (58, 45455),

Gene: Maruru_87 Start: 52831, Stop: 53424, Start Num: 27

Candidate Starts for Maruru_87:

(13, 52684), (24, 52810), (Start: 27 @52831 has 2 MA's), (32, 52873), (33, 52939), (39, 52993), (42, 53023), (65, 53326), (69, 53350),

Gene: MenE_48 Start: 29392, Stop: 29925, Start Num: 28

Candidate Starts for MenE_48:

(7, 29158), (9, 29170), (16, 29248), (Start: 28 @29392 has 11 MA's), (31, 29416), (34, 29494), (37, 29518), (38, 29521), (39, 29557), (41, 29581), (46, 29620), (48, 29650), (50, 29659),

Gene: Music_80 Start: 47968, Stop: 48591, Start Num: 23

Candidate Starts for Music_80:

(5, 47836), (8, 47872), (15, 47956), (Start: 23 @47968 has 1 MA's), (38, 48151), (43, 48217), (49, 48271), (51, 48280), (59, 48445), (64, 48493), (66, 48502), (71, 48556), (72, 48574), (73, 48586),

Gene: NCRodriguez_48 Start: 29462, Stop: 29995, Start Num: 28

Candidate Starts for NCRodriguez_48:

(Start: 28 @29462 has 11 MA's), (31, 29486), (34, 29564), (37, 29588), (38, 29591), (39, 29627), (41, 29651), (46, 29690), (48, 29720), (50, 29729), (57, 29876),

Gene: NathanVaag_65 Start: 44298, Stop: 44876, Start Num: 20

Candidate Starts for NathanVaag_65:

(Start: 20 @44298 has 22 MA's), (22, 44313), (Start: 27 @44361 has 2 MA's), (38, 44502), (43, 44571), (56, 44763), (60, 44814), (67, 44865),

Gene: Nostromo_66 Start: 42650, Stop: 43228, Start Num: 19

Candidate Starts for Nostromo_66:

(Start: 19 @42650 has 2 MA's), (46, 42941), (63, 43172),

Gene: PhillyJawn_47 Start: 29132, Stop: 29665, Start Num: 28

Candidate Starts for PhillyJawn_47:

(Start: 28 @29132 has 11 MA's), (31, 29156), (34, 29234), (37, 29258), (38, 29261), (39, 29297), (41, 29321), (46, 29360), (48, 29390), (50, 29399), (57, 29546),

Gene: Phingu_49 Start: 29357, Stop: 29890, Start Num: 28

Candidate Starts for Phingu_49:

(Start: 28 @29357 has 11 MA's), (31, 29381), (34, 29459), (37, 29483), (38, 29486), (39, 29522), (41, 29546), (46, 29585), (48, 29615), (50, 29624), (57, 29771),

Gene: Phonegingi_46 Start: 29171, Stop: 29704, Start Num: 28

Candidate Starts for Phonegingi_46:

(Start: 28 @29171 has 11 MA's), (31, 29195), (34, 29273), (37, 29297), (38, 29300), (39, 29336), (41, 29360), (46, 29399), (48, 29429), (50, 29438), (57, 29585), (68, 29693),

Gene: Piccoletto_66 Start: 44460, Stop: 45038, Start Num: 20

Candidate Starts for Piccoletto_66:

(Start: 20 @44460 has 22 MA's), (22, 44475), (Start: 27 @44523 has 2 MA's), (38, 44664), (43, 44733), (60, 44976), (67, 45027),

Gene: Pickles13_45 Start: 29439, Stop: 29972, Start Num: 28

Candidate Starts for Pickles13_45:

(7, 29202), (14, 29286), (Start: 28 @29439 has 11 MA's), (31, 29463), (34, 29541), (37, 29565), (38, 29568), (39, 29604), (41, 29628), (46, 29667), (48, 29697), (57, 29853),

Gene: Pippa_70 Start: 45043, Stop: 45573, Start Num: 20

Candidate Starts for Pippa_70:

(Start: 20 @45043 has 22 MA's), (36, 45169), (38, 45187), (44, 45262), (47, 45292), (53, 45367), (54, 45382), (58, 45490), (62, 45511),

Gene: Shade_69 Start: 44814, Stop: 45389, Start Num: 20

Candidate Starts for Shade_69:

(Start: 20 @44814 has 22 MA's), (36, 44985), (38, 45003), (44, 45078), (47, 45108), (53, 45183), (54, 45198), (58, 45306), (62, 45327),

Gene: Sicarius2_71 Start: 43199, Stop: 43729, Start Num: 26

Candidate Starts for Sicarius2_71:

(Start: 26 @43199 has 2 MA's), (30, 43235), (32, 43244), (38, 43343), (44, 43421), (50, 43469), (55, 43592), (70, 43724),

Gene: Sonali_86 Start: 53450, Stop: 54043, Start Num: 27

Candidate Starts for Sonali_86:

(1, 52859), (2, 52970), (13, 53303), (24, 53429), (Start: 27 @53450 has 2 MA's), (33, 53558), (42, 53642), (65, 53945), (69, 53969),

Gene: Sonny_69 Start: 44737, Stop: 45312, Start Num: 20

Candidate Starts for Sonny_69:

(Start: 20 @44737 has 22 MA's), (36, 44908), (38, 44926), (44, 45001), (47, 45031), (53, 45106), (54, 45121), (58, 45229), (62, 45250),

Gene: StevieBAY_70 Start: 45067, Stop: 45597, Start Num: 20

Candidate Starts for StevieBAY_70:

(Start: 20 @45067 has 22 MA's), (36, 45193), (38, 45211), (44, 45286), (52, 45388), (54, 45406),

Gene: Sunshine23_89 Start: 53186, Stop: 53779, Start Num: 27

Candidate Starts for Sunshine23_89:

(13, 53039), (24, 53165), (Start: 27 @53186 has 2 MA's), (32, 53228), (33, 53294), (39, 53348), (42, 53378), (45, 53408), (65, 53681), (69, 53705),

Gene: TaeYoung_70 Start: 44980, Stop: 45510, Start Num: 20

Candidate Starts for TaeYoung_70:

(Start: 20 @44980 has 22 MA's), (36, 45106), (38, 45124), (44, 45199), (47, 45229), (53, 45304), (54, 45319), (58, 45427), (62, 45448),

Gene: Timinator_70 Start: 44887, Stop: 45417, Start Num: 20

Candidate Starts for Timinator_70:

(Start: 20 @44887 has 22 MA's), (36, 45013), (38, 45031), (52, 45208), (54, 45226),

Gene: TurkishDelight_122 Start: 89500, Stop: 90093, Start Num: 18

Candidate Starts for TurkishDelight_122:

(Start: 18 @89500 has 1 MA's), (21, 89518), (29, 89584), (35, 89689),

Gene: Violeta_48 Start: 29234, Stop: 29767, Start Num: 28

Candidate Starts for Violeta_48:

(16, 29090), (Start: 28 @29234 has 11 MA's), (31, 29258), (34, 29336), (37, 29360), (38, 29363), (39, 29399), (41, 29423), (46, 29462), (48, 29492), (50, 29501), (57, 29648),

Gene: Vitus_80 Start: 46317, Stop: 46829, Start Num: 25

Candidate Starts for Vitus_80:

(5, 46197), (8, 46233), (10, 46245), (Start: 25 @46317 has 1 MA's), (38, 46458), (41, 46503), (49, 46578), (61, 46764),

Gene: Warren_46 Start: 29178, Stop: 29711, Start Num: 28

Candidate Starts for Warren_46:

(Start: 28 @29178 has 11 MA's), (31, 29202), (34, 29280), (37, 29304), (38, 29307), (40, 29346), (41, 29367), (46, 29406), (48, 29436), (50, 29445), (57, 29592),

Gene: Winchester007_62 Start: 35247, Stop: 35780, Start Num: 28

Candidate Starts for Winchester007_62:

(Start: 28 @35247 has 11 MA's), (31, 35271), (34, 35349), (37, 35373), (38, 35376), (39, 35412), (41, 35436), (46, 35475), (48, 35505), (50, 35514), (57, 35661),

Gene: Wyborn_70 Start: 43934, Stop: 44464, Start Num: 26

Candidate Starts for Wyborn_70:

(Start: 26 @43934 has 2 MA's), (30, 43970), (32, 43979), (38, 44078), (44, 44156), (50, 44204), (55, 44327), (70, 44459),

Gene: Zartrosa_71 Start: 45067, Stop: 45642, Start Num: 20

Candidate Starts for Zartrosa_71:

(Start: 20 @45067 has 22 MA's), (36, 45238), (38, 45256), (44, 45331), (47, 45361), (53, 45436), (54, 45451), (58, 45559), (62, 45580),