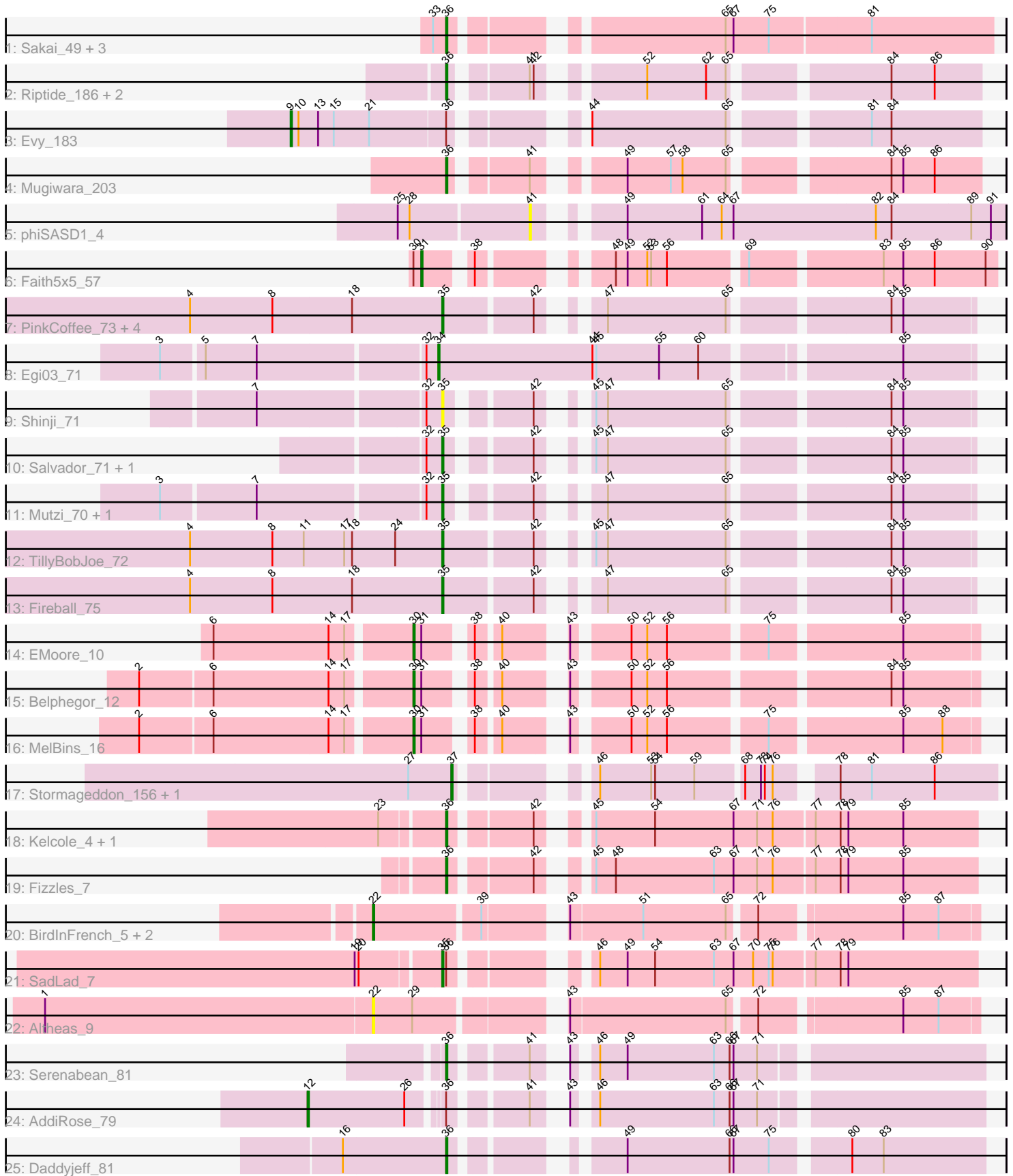


Pham 296723



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 296723 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296723 has 40 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Sakai_49, BlueShadow_49, Richie_52, Gorpy_50
- Track 2 : Riptide_186, Anedeia_194, LilSaint_186
- Track 3 : Evy_183
- Track 4 : Mugiwara_203
- Track 5 : phiSASD1_4
- Track 6 : Faith5x5_57
- Track 7 : PinkCoffee_73, ClamChowder_73, Barb_73, Danyall_72, Fugax_74
- Track 8 : Egi03_71
- Track 9 : Shinji_71
- Track 10 : Salvador_71, Evamon_71
- Track 11 : Mutzi_70, YungMoney_71
- Track 12 : TillyBobJoe_72
- Track 13 : Fireball_75
- Track 14 : EMoore_10
- Track 15 : Belphegor_12
- Track 16 : MelBins_16
- Track 17 : Stormageddon_156, RedWattleHog_155
- Track 18 : Kelcole_4, Tempo_5
- Track 19 : Fizzles_7
- Track 20 : BirdInFrench_5, Wilca_5, Pepe25_4
- Track 21 : SadLad_7
- Track 22 : Altheas_9
- Track 23 : Serenabean_81
- Track 24 : AddiRose_79
- Track 25 : Daddyjeff_81

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

The start number called the most often in the published annotations is 36, it was called in 13 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anedeia_194, BlueShadow_49, Daddyjeff_81, Fizzles_7, Gorpy_50, Kelcole_4, LilSaint_186, Mugiwara_203, Richie_52, Riptide_186, Sakai_49, Serenabean_81,

Tempo_5,

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

- AddiRose_79, Evy_183, SadLad_7,

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

- Altheas_9, Barb_73, Belphegor_12, BirdInFrench_5, ClamChowder_73, Danyall_72, EMOore_10, Egi03_71, Evamon_71, Faith5x5_57, Fireball_75, Fugax_74, MelBins_16, Mutzi_70, Pepe25_4, PinkCoffee_73, RedWattleHog_155, Salvador_71, Shinji_71, Stormageddon_156, TillyBobJoe_72, Wilca_5, YungMoney_71, phiSASD1_4,

Summary by start number:

Start 9:

- Found in 1 of 40 (2.5%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Evy_183 (BE1),

Start 12:

- Found in 1 of 40 (2.5%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AddiRose_79 (JA),

Start 22:

- Found in 4 of 40 (10.0%) of genes in pham
- Manual Annotations of this start: 3 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Altheas_9 (EG), BirdInFrench_5 (EG), Pepe25_4 (EG), Wilca_5 (EG),

Start 30:

- Found in 4 of 40 (10.0%) of genes in pham
- Manual Annotations of this start: 3 of 37
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Belphegor_12 (DE2), EMOore_10 (DE2), MelBins_16 (DE2),

Start 31:

- Found in 4 of 40 (10.0%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Faith5x5_57 (CZ6),

Start 34:

- Found in 1 of 40 (2.5%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Egi03_71 (DC1),

Start 35:

- Found in 13 of 40 (32.5%) of genes in pham
- Manual Annotations of this start: 12 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barb_73 (DC1), ClamChowder_73 (DC1), Danyall_72 (DC1), Evamon_71 (DC1), Fireball_75 (DC1), Fugax_74 (DC1), Mutzi_70 (DC1), PinkCoffee_73 (DC1), SadLad_7 (EG), Salvador_71 (DC1), Shinji_71 (DC1), TillyBobJoe_72 (DC1), YungMoney_71 (DC1),

Start 36:

- Found in 16 of 40 (40.0%) of genes in pham
- Manual Annotations of this start: 13 of 37
- Called 81.2% of time when present
- Phage (with cluster) where this start called: Anedea_194 (BE1), BlueShadow_49 (AY), Daddyjeff_81 (JA), Fizzles_7 (EG), Gorpy_50 (AY), Kelcole_4 (EG), LilSaint_186 (BE1), Mugiwara_203 (BE2), Richie_52 (AY), Riptide_186 (BE1), Sakai_49 (AY), Serenabean_81 (JA), Tempo_5 (EG),

Start 37:

- Found in 2 of 40 (5.0%) of genes in pham
- Manual Annotations of this start: 2 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog_155 (DX), Stormageddon_156 (DX),

Start 41:

- Found in 7 of 40 (17.5%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: phiSASD1_4 (BJ),

Summary by clusters:

There are 10 clusters represented in this pham: DE2, EG, CZ6, BJ, AY, DX, BE2, BE1, JA, DC1,

Info for manual annotations of cluster AY:

- Start number 36 was manually annotated 4 times for cluster AY.

Info for manual annotations of cluster BE1:

- Start number 9 was manually annotated 1 time for cluster BE1.
- Start number 36 was manually annotated 3 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 36 was manually annotated 1 time for cluster BE2.

Info for manual annotations of cluster CZ6:

- Start number 31 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DC1:

- Start number 34 was manually annotated 1 time for cluster DC1.
- Start number 35 was manually annotated 11 times for cluster DC1.

Info for manual annotations of cluster DE2:

- Start number 30 was manually annotated 3 times for cluster DE2.

Info for manual annotations of cluster DX:

- Start number 37 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster EG:

- Start number 22 was manually annotated 3 times for cluster EG.
- Start number 35 was manually annotated 1 time for cluster EG.
- Start number 36 was manually annotated 3 times for cluster EG.

Info for manual annotations of cluster JA:

- Start number 12 was manually annotated 1 time for cluster JA.
- Start number 36 was manually annotated 2 times for cluster JA.

Gene Information:

Gene: AddiRose_79 Start: 48807, Stop: 49250, Start Num: 12

Candidate Starts for AddiRose_79:

(Start: 12 @48807 has 1 MA's), (26, 48879), (Start: 36 @48900 has 13 MA's), (41, 48948), (43, 48960), (46, 48972), (63, 49059), (66, 49071), (67, 49074), (71, 49092),

Gene: Altheas_9 Start: 2820, Stop: 2407, Start Num: 22

Candidate Starts for Altheas_9:

(1, 3069), (Start: 22 @2820 has 3 MA's), (29, 2790), (43, 2697), (65, 2580), (72, 2562), (85, 2463), (87, 2436),

Gene: Anedea_194 Start: 99583, Stop: 99927, Start Num: 36

Candidate Starts for Anedea_194:

(Start: 36 @99583 has 13 MA's), (41, 99631), (42, 99634), (52, 99694), (62, 99739), (65, 99754), (84, 99859), (86, 99892),

Gene: Barb_73 Start: 50062, Stop: 50412, Start Num: 35

Candidate Starts for Barb_73:

(4, 49870), (8, 49933), (18, 49993), (Start: 35 @50062 has 12 MA's), (42, 50125), (47, 50152), (65, 50242), (84, 50350), (85, 50359),

Gene: Belphegor_12 Start: 9683, Stop: 10045, Start Num: 30

Candidate Starts for Belphegor_12:

(2, 9485), (6, 9539), (14, 9626), (17, 9638), (Start: 30 @9683 has 3 MA's), (Start: 31 @9689 has 1 MA's), (38, 9716), (40, 9731), (43, 9764), (50, 9800), (52, 9812), (56, 9827), (84, 9980), (85, 9989),

Gene: BirdInFrench_5 Start: 1900, Stop: 1487, Start Num: 22

Candidate Starts for BirdInFrench_5:

(Start: 22 @1900 has 3 MA's), (39, 1825), (43, 1777), (51, 1723), (65, 1660), (72, 1642), (85, 1543), (87, 1516),

Gene: BlueShadow_49 Start: 30672, Stop: 31046, Start Num: 36

Candidate Starts for BlueShadow_49:

(33, 30663), (Start: 36 @30672 has 13 MA's), (65, 30846), (67, 30852), (75, 30879), (81, 30954),

Gene: ClamChowder_73 Start: 50062, Stop: 50412, Start Num: 35

Candidate Starts for ClamChowder_73:

(4, 49870), (8, 49933), (18, 49993), (Start: 35 @50062 has 12 MA's), (42, 50125), (47, 50152), (65, 50242), (84, 50350), (85, 50359),

Gene: Daddyjeff_81 Start: 49245, Stop: 49598, Start Num: 36

Candidate Starts for Daddyjeff_81:

(16, 49167), (Start: 36 @49245 has 13 MA's), (49, 49338), (66, 49416), (67, 49419), (75, 49446), (80, 49497), (83, 49521),

Gene: Danyall_72 Start: 50043, Stop: 50393, Start Num: 35

Candidate Starts for Danyall_72:

(4, 49851), (8, 49914), (18, 49974), (Start: 35 @50043 has 12 MA's), (42, 50106), (47, 50133), (65, 50223), (84, 50331), (85, 50340),

Gene: EMoore_10 Start: 8765, Stop: 9127, Start Num: 30

Candidate Starts for EMoore_10:

(6, 8621), (14, 8708), (17, 8720), (Start: 30 @8765 has 3 MA's), (Start: 31 @8771 has 1 MA's), (38, 8798), (40, 8813), (43, 8846), (50, 8882), (52, 8894), (56, 8909), (75, 8978), (85, 9071),

Gene: Egi03_71 Start: 49655, Stop: 50041, Start Num: 34

Candidate Starts for Egi03_71:

(3, 49457), (5, 49487), (7, 49526), (32, 49646), (Start: 34 @49655 has 1 MA's), (44, 49772), (45, 49775), (55, 49823), (60, 49853), (85, 49988),

Gene: Evamon_71 Start: 49838, Stop: 50176, Start Num: 35

Candidate Starts for Evamon_71:

(32, 49826), (Start: 35 @49838 has 12 MA's), (42, 49889), (45, 49907), (47, 49916), (65, 50006), (84, 50114), (85, 50123),

Gene: Evy_183 Start: 100459, Stop: 100920, Start Num: 9

Candidate Starts for Evy_183:

(Start: 9 @100459 has 1 MA's), (10, 100465), (13, 100480), (15, 100492), (21, 100519), (Start: 36 @100576 has 13 MA's), (44, 100645), (65, 100747), (81, 100837), (84, 100852),

Gene: Faith5x5_57 Start: 35656, Stop: 36027, Start Num: 31

Candidate Starts for Faith5x5_57:

(Start: 30 @35650 has 3 MA's), (Start: 31 @35656 has 1 MA's), (38, 35683), (48, 35755), (49, 35764), (52, 35779), (53, 35782), (56, 35794), (69, 35848), (83, 35941), (85, 35956), (86, 35980), (90, 36019),

Gene: Fireball_75 Start: 50740, Stop: 51090, Start Num: 35

Candidate Starts for Fireball_75:

(4, 50548), (8, 50611), (18, 50671), (Start: 35 @50740 has 12 MA's), (42, 50803), (47, 50830), (65, 50920), (84, 51028), (85, 51037),

Gene: Fizzles_7 Start: 2470, Stop: 2108, Start Num: 36

Candidate Starts for Fizzles_7:

(Start: 36 @2470 has 13 MA's), (42, 2416), (45, 2395), (48, 2380), (63, 2305), (67, 2290), (71, 2272), (76, 2260), (77, 2230), (78, 2212), (79, 2206), (85, 2164),

Gene: Fugax_74 Start: 50054, Stop: 50404, Start Num: 35

Candidate Starts for Fugax_74:

(4, 49862), (8, 49925), (18, 49985), (Start: 35 @50054 has 12 MA's), (42, 50117), (47, 50144), (65, 50234), (84, 50342), (85, 50351),

Gene: Gorpy_50 Start: 31667, Stop: 32041, Start Num: 36

Candidate Starts for Gorpy_50:

(33, 31658), (Start: 36 @31667 has 13 MA's), (65, 31841), (67, 31847), (75, 31874), (81, 31949),

Gene: Kelcole_4 Start: 1820, Stop: 1458, Start Num: 36

Candidate Starts for Kelcole_4:

(23, 1865), (Start: 36 @1820 has 13 MA's), (42, 1766), (45, 1745), (54, 1700), (67, 1640), (71, 1622), (76, 1610), (77, 1580), (78, 1562), (79, 1556), (85, 1514),

Gene: LilSaint_186 Start: 98745, Stop: 99089, Start Num: 36

Candidate Starts for LilSaint_186:

(Start: 36 @98745 has 13 MA's), (41, 98793), (42, 98796), (52, 98856), (62, 98901), (65, 98916), (84, 99021), (86, 99054),

Gene: MelBins_16 Start: 11228, Stop: 11590, Start Num: 30

Candidate Starts for MelBins_16:

(2, 11030), (6, 11084), (14, 11171), (17, 11183), (Start: 30 @11228 has 3 MA's), (Start: 31 @11234 has 1 MA's), (38, 11261), (40, 11276), (43, 11309), (50, 11345), (52, 11357), (56, 11372), (75, 11441), (85, 11534), (88, 11564),

Gene: Mugiwara_203 Start: 101653, Stop: 101997, Start Num: 36

Candidate Starts for Mugiwara_203:

(Start: 36 @101653 has 13 MA's), (41, 101701), (49, 101749), (57, 101782), (58, 101791), (65, 101824), (84, 101929), (85, 101938), (86, 101962),

Gene: Mutzi_70 Start: 50930, Stop: 51268, Start Num: 35

Candidate Starts for Mutzi_70:

(3, 50729), (7, 50798), (32, 50918), (Start: 35 @50930 has 12 MA's), (42, 50981), (47, 51008), (65, 51098), (84, 51206), (85, 51215),

Gene: Pepe25_4 Start: 1900, Stop: 1487, Start Num: 22

Candidate Starts for Pepe25_4:

(Start: 22 @1900 has 3 MA's), (39, 1825), (43, 1777), (51, 1723), (65, 1660), (72, 1642), (85, 1543), (87, 1516),

Gene: PinkCoffee_73 Start: 50084, Stop: 50434, Start Num: 35

Candidate Starts for PinkCoffee_73:

(4, 49892), (8, 49955), (18, 50015), (Start: 35 @50084 has 12 MA's), (42, 50147), (47, 50174), (65, 50264), (84, 50372), (85, 50381),

Gene: RedWattleHog_155 Start: 105039, Stop: 105395, Start Num: 37

Candidate Starts for RedWattleHog_155:

(27, 105006), (Start: 37 @105039 has 2 MA's), (46, 105114), (53, 105153), (54, 105156), (59, 105186), (68, 105219), (73, 105231), (74, 105234), (76, 105240), (78, 105276), (81, 105300), (86, 105348),

Gene: Richie_52 Start: 31345, Stop: 31719, Start Num: 36

Candidate Starts for Richie_52:

(33, 31336), (Start: 36 @31345 has 13 MA's), (65, 31519), (67, 31525), (75, 31552), (81, 31627),

Gene: Riptide_186 Start: 98222, Stop: 98566, Start Num: 36

Candidate Starts for Riptide_186:

(Start: 36 @98222 has 13 MA's), (41, 98270), (42, 98273), (52, 98333), (62, 98378), (65, 98393), (84, 98498), (86, 98531),

Gene: SadLad_7 Start: 2504, Stop: 2139, Start Num: 35

Candidate Starts for SadLad_7:

(19, 2564), (20, 2561), (Start: 35 @2504 has 12 MA's), (Start: 36 @2501 has 13 MA's), (46, 2423), (49, 2402), (54, 2381), (63, 2336), (67, 2321), (70, 2306), (75, 2294), (76, 2291), (77, 2261), (78, 2243), (79, 2237),

Gene: Sakai_49 Start: 30378, Stop: 30752, Start Num: 36

Candidate Starts for Sakai_49:

(33, 30369), (Start: 36 @30378 has 13 MA's), (65, 30552), (67, 30558), (75, 30585), (81, 30660),

Gene: Salvador_71 Start: 49836, Stop: 50174, Start Num: 35

Candidate Starts for Salvador_71:

(32, 49824), (Start: 35 @49836 has 12 MA's), (42, 49887), (45, 49905), (47, 49914), (65, 50004), (84, 50112), (85, 50121),

Gene: Serenabean_81 Start: 49415, Stop: 49765, Start Num: 36

Candidate Starts for Serenabean_81:

(Start: 36 @49415 has 13 MA's), (41, 49463), (43, 49475), (46, 49487), (49, 49508), (63, 49574), (66, 49586), (67, 49589), (71, 49607),

Gene: Shinji_71 Start: 49826, Stop: 50164, Start Num: 35

Candidate Starts for Shinji_71:

(7, 49694), (32, 49814), (Start: 35 @49826 has 12 MA's), (42, 49877), (45, 49895), (47, 49904), (65, 49994), (84, 50102), (85, 50111),

Gene: Stormageddon_156 Start: 106003, Stop: 106359, Start Num: 37

Candidate Starts for Stormageddon_156:

(27, 105970), (Start: 37 @106003 has 2 MA's), (46, 106078), (53, 106117), (54, 106120), (59, 106150), (68, 106183), (73, 106195), (74, 106198), (76, 106204), (78, 106240), (81, 106264), (86, 106312),

Gene: Tempo_5 Start: 1841, Stop: 1479, Start Num: 36

Candidate Starts for Tempo_5:

(23, 1886), (Start: 36 @1841 has 13 MA's), (42, 1787), (45, 1766), (54, 1721), (67, 1661), (71, 1643), (76, 1631), (77, 1601), (78, 1583), (79, 1577), (85, 1535),

Gene: TillyBobJoe_72 Start: 50340, Stop: 50690, Start Num: 35

Candidate Starts for TillyBobJoe_72:

(4, 50148), (8, 50211), (11, 50235), (17, 50265), (18, 50271), (24, 50304), (Start: 35 @50340 has 12 MA's), (42, 50403), (45, 50421), (47, 50430), (65, 50520), (84, 50628), (85, 50637),

Gene: Wilca_5 Start: 1900, Stop: 1487, Start Num: 22

Candidate Starts for Wilca_5:

(Start: 22 @1900 has 3 MA's), (39, 1825), (43, 1777), (51, 1723), (65, 1660), (72, 1642), (85, 1543), (87, 1516),

Gene: YungMoney_71 Start: 51770, Stop: 52108, Start Num: 35

Candidate Starts for YungMoney_71:

(3, 51569), (7, 51638), (32, 51758), (Start: 35 @51770 has 12 MA's), (42, 51821), (47, 51848), (65, 51938), (84, 52046), (85, 52055),

Gene: phiSASD1_4 Start: 21332, Stop: 21664, Start Num: 41

Candidate Starts for phiSASD1_4:

(25, 21236), (28, 21245), (41, 21332), (49, 21377), (61, 21434), (64, 21449), (67, 21458), (82, 21566),
(84, 21578), (89, 21638), (91, 21653),