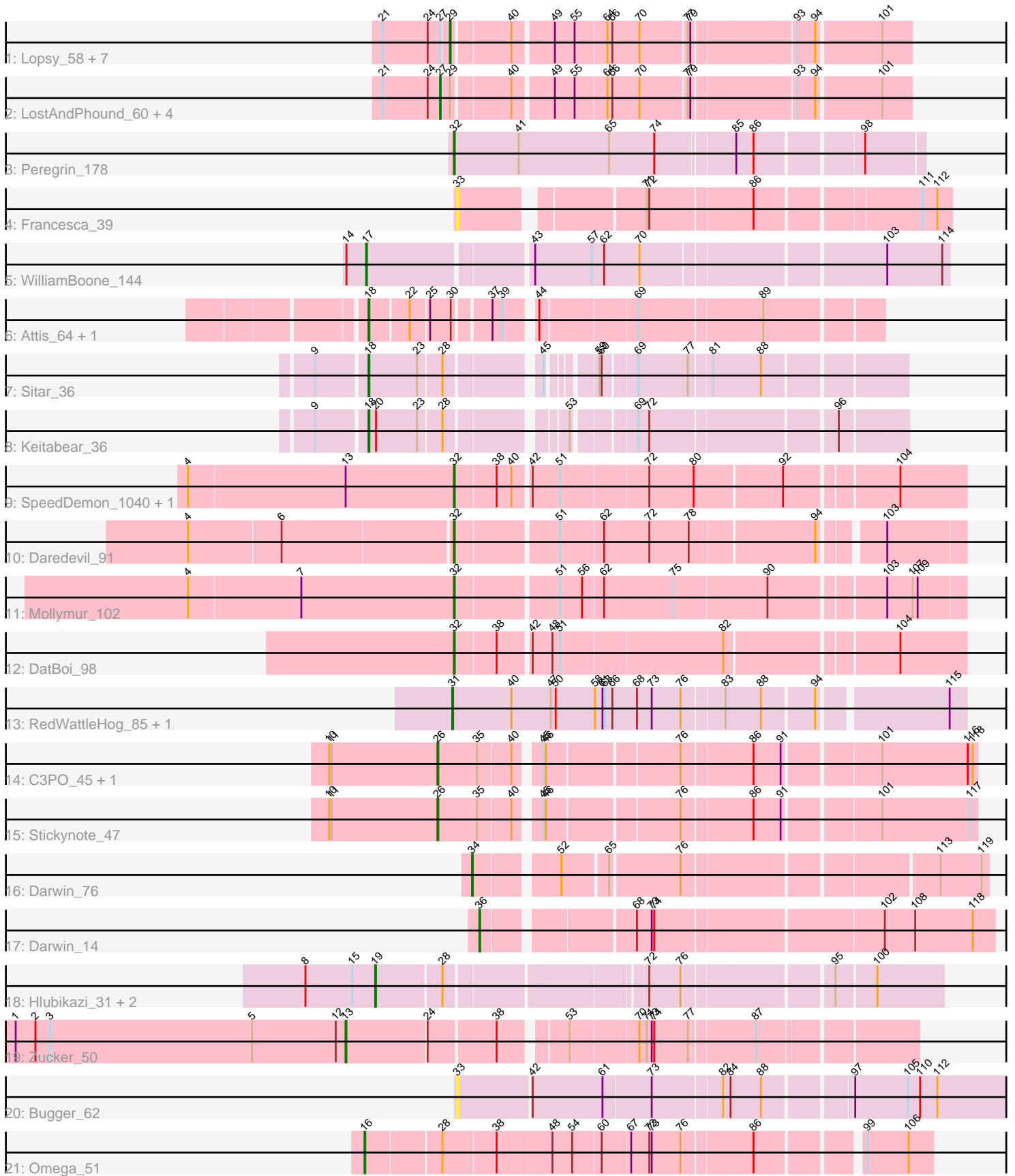


Pham 158022



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 158022 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158022 has 38 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Lopsy_58, Buckeye_60, Matalotodo_59, Adriana_61, Podrick_58, Coletti_62, KingTut_52, LeiMonet_62
- Track 2 : LostAndPhound_60, FugateOSU_60, Toni_59, Placalicious_60, Orfeu_59
- Track 3 : Peregrin_178
- Track 4 : Francesca_39
- Track 5 : WilliamBoone_144
- Track 6 : Attis_64, SoilAssassin_64
- Track 7 : Sitar_36
- Track 8 : Keitabear_36
- Track 9 : SpeedDemon_1040, Bantam_102
- Track 10 : Daredevil_91
- Track 11 : Mollymur_102
- Track 12 : DatBoi_98
- Track 13 : RedWattleHog_85, Stormageddon_82
- Track 14 : C3PO_45, Cruella_45
- Track 15 : Stickynote_47
- Track 16 : Darwin_76
- Track 17 : Darwin_14
- Track 18 : Hlubikazi_31, Mandlovu_31, Strokeseat_31
- Track 19 : Zucker_50
- Track 20 : Bugger_62
- Track 21 : Omega_51

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

The start number called the most often in the published annotations is 32, it was called in 6 of the 32 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bantam_102, Daredevil_91, DatBoi_98, Mollymur_102, Peregrin_178, SpeedDemon_1040,

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

-

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

- Adriana_61, Attis_64, Buckeye_60, Bugger_62, C3PO_45, Coletti_62, Cruella_45, Darwin_14, Darwin_76, Francesca_39, FugateOSU_60, Hlubikazi_31, Keitabear_36, KingTut_52, LeiMonet_62, Lopsy_58, LostAndPhound_60, Mandlovu_31, Matalotodo_59, Omega_51, Orfeu_59, Placalicious_60, Podrick_58, RedWattleHog_85, Sitar_36, SoilAssassin_64, Stickynote_47, Stormageddon_82, Strokeseat_31, Toni_59, WilliamBoone_144, Zucker_50,

Summary by start number:

Start 13:

- Found in 3 of 38 (7.9%) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Zucker_50 (FN),

Start 16:

- Found in 1 of 38 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Omega_51 (J),

Start 17:

- Found in 1 of 38 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: WilliamBoone_144 (CQ1),

Start 18:

- Found in 4 of 38 (10.5%) of genes in pham
- Manual Annotations of this start: 4 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attis_64 (CZ2), Keitabear_36 (DE1), Sitar_36 (DE1), SoilAssassin_64 (CZ2),

Start 19:

- Found in 3 of 38 (7.9%) of genes in pham
- Manual Annotations of this start: 3 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hlubikazi_31 (F1), Mandlovu_31 (F1), Strokeseat_31 (F1),

Start 26:

- Found in 3 of 38 (7.9%) of genes in pham
- Manual Annotations of this start: 3 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: C3PO_45 (EN), Cruella_45 (EN), Stickynote_47 (EN),

Start 27:

- Found in 13 of 38 (34.2%) of genes in pham
- Manual Annotations of this start: 4 of 32

- Called 38.5% of time when present
- Phage (with cluster) where this start called: FugateOSU_60 (B1), LostAndPhound_60 (B1), Orfeu_59 (B1), Placalicious_60 (B1), Toni_59 (B1),

Start 29:

- Found in 13 of 38 (34.2%) of genes in pham
- Manual Annotations of this start: 5 of 32
- Called 61.5% of time when present
- Phage (with cluster) where this start called: Adriana_61 (B1), Buckeye_60 (B1), Coletti_62 (B1), KingTut_52 (B1), LeiMonet_62 (B1), Lopsy_58 (B1), Matalotodo_59 (B1), Podrick_58 (B1),

Start 31:

- Found in 2 of 38 (5.3%) of genes in pham
- Manual Annotations of this start: 2 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog_85 (DX), Stormageddon_82 (DX),

Start 32:

- Found in 6 of 38 (15.8%) of genes in pham
- Manual Annotations of this start: 6 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam_102 (DL), Daredevil_91 (DL), DatBoi_98 (DL), Mollymur_102 (DL), Peregrin_178 (CB), SpeedDemon_1040 (DL),

Start 33:

- Found in 2 of 38 (5.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bugger_62 (GB), Francesca_39 (CG),

Start 34:

- Found in 1 of 38 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darwin_76 (EN),

Start 36:

- Found in 1 of 38 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 32
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darwin_14 (EN),

Summary by clusters:

There are 13 clusters represented in this pham: F1, DL, EN, CZ2, CB, J, CG, B1, DX, DE1, CQ1, FN, GB,

Info for manual annotations of cluster B1:

- Start number 27 was manually annotated 4 times for cluster B1.
- Start number 29 was manually annotated 5 times for cluster B1.

Info for manual annotations of cluster CB:

- Start number 32 was manually annotated 1 time for cluster CB.

Info for manual annotations of cluster CQ1:

- Start number 17 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CZ2:

- Start number 18 was manually annotated 2 times for cluster CZ2.

Info for manual annotations of cluster DE1:

- Start number 18 was manually annotated 2 times for cluster DE1.

Info for manual annotations of cluster DL:

- Start number 32 was manually annotated 5 times for cluster DL.

Info for manual annotations of cluster DX:

- Start number 31 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster EN:

- Start number 26 was manually annotated 3 times for cluster EN.
- Start number 34 was manually annotated 1 time for cluster EN.
- Start number 36 was manually annotated 1 time for cluster EN.

Info for manual annotations of cluster F1:

- Start number 19 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster FN:

- Start number 13 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster J:

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

Gene Information:

Gene: Adriana_61 Start: 53245, Stop: 52730, Start Num: 29

Candidate Starts for Adriana_61:

(21, 53323), (24, 53269), (Start: 27 @53254 has 4 MA's), (Start: 29 @53245 has 5 MA's), (40, 53179), (49, 53134), (55, 53110), (64, 53074), (66, 53068), (70, 53035), (77, 52981), (79, 52978), (93, 52861), (94, 52840), (101, 52765),

Gene: Attis_64 Start: 43105, Stop: 43650, Start Num: 18

Candidate Starts for Attis_64:

(Start: 18 @43105 has 4 MA's), (22, 43147), (25, 43168), (30, 43192), (37, 43231), (39, 43243), (44, 43273), (69, 43378), (89, 43516),

Gene: Bantam_102 Start: 67594, Stop: 68172, Start Num: 32

Candidate Starts for Bantam_102:

(4, 67276), (Start: 13 @67462 has 1 MA's), (Start: 32 @67594 has 6 MA's), (38, 67642), (40, 67660), (42, 67678), (51, 67711), (72, 67813), (80, 67864), (92, 67966), (104, 68092),

Gene: Buckeye_60 Start: 52975, Stop: 52460, Start Num: 29

Candidate Starts for Buckeye_60:

(21, 53053), (24, 52999), (Start: 27 @52984 has 4 MA's), (Start: 29 @52975 has 5 MA's), (40, 52909), (49, 52864), (55, 52840), (64, 52804), (66, 52798), (70, 52765), (77, 52711), (79, 52708), (93, 52591), (94, 52570), (101, 52495),

Gene: Bugger_62 Start: 35513, Stop: 34857, Start Num: 33

Candidate Starts for Bugger_62:

(33, 35513), (42, 35426), (61, 35345), (73, 35288), (82, 35210), (84, 35201), (88, 35165), (97, 35069), (105, 35006), (110, 34991), (112, 34970),

Gene: C3PO_45 Start: 42754, Stop: 42164, Start Num: 26

Candidate Starts for C3PO_45:

(10, 42886), (11, 42883), (Start: 26 @42754 has 3 MA's), (35, 42706), (40, 42667), (45, 42643), (46, 42640), (76, 42496), (86, 42418), (91, 42385), (101, 42277), (116, 42175), (118, 42169),

Gene: Coletti_62 Start: 53240, Stop: 52725, Start Num: 29

Candidate Starts for Coletti_62:

(21, 53318), (24, 53264), (Start: 27 @53249 has 4 MA's), (Start: 29 @53240 has 5 MA's), (40, 53174), (49, 53129), (55, 53105), (64, 53069), (66, 53063), (70, 53030), (77, 52976), (79, 52973), (93, 52856), (94, 52835), (101, 52760),

Gene: Cruella_45 Start: 42754, Stop: 42164, Start Num: 26

Candidate Starts for Cruella_45:

(10, 42886), (11, 42883), (Start: 26 @42754 has 3 MA's), (35, 42706), (40, 42667), (45, 42643), (46, 42640), (76, 42496), (86, 42418), (91, 42385), (101, 42277), (116, 42175), (118, 42169),

Gene: Daredevil_91 Start: 63069, Stop: 63638, Start Num: 32

Candidate Starts for Daredevil_91:

(4, 62760), (6, 62871), (Start: 32 @63069 has 6 MA's), (51, 63186), (62, 63237), (72, 63291), (78, 63336), (94, 63480), (103, 63546),

Gene: Darwin_76 Start: 54919, Stop: 54362, Start Num: 34

Candidate Starts for Darwin_76:

(Start: 34 @54919 has 1 MA's), (52, 54829), (65, 54778), (76, 54700), (113, 54418), (119, 54370),

Gene: Darwin_14 Start: 7286, Stop: 7858, Start Num: 36

Candidate Starts for Darwin_14:

(Start: 36 @7286 has 1 MA's), (68, 7448), (73, 7466), (74, 7469), (102, 7727), (108, 7763), (118, 7832),

Gene: DatBoi_98 Start: 66730, Stop: 67308, Start Num: 32

Candidate Starts for DatBoi_98:

(Start: 32 @66730 has 6 MA's), (38, 66778), (42, 66814), (48, 66838), (51, 66847), (82, 67036), (104, 67228),

Gene: Francesca_39 Start: 21303, Stop: 21839, Start Num: 33

Candidate Starts for Francesca_39:

(33, 21303), (71, 21498), (72, 21501), (86, 21618), (111, 21804), (112, 21822),

Gene: FugateOSU_60 Start: 53224, Stop: 52700, Start Num: 27

Candidate Starts for FugateOSU_60:

(21, 53293), (24, 53239), (Start: 27 @53224 has 4 MA's), (Start: 29 @53215 has 5 MA's), (40, 53149), (49, 53104), (55, 53080), (64, 53044), (66, 53038), (70, 53005), (77, 52951), (79, 52948), (93, 52831), (94, 52810), (101, 52735),

Gene: Hlubikazi_31 Start: 27761, Stop: 28381, Start Num: 19

Candidate Starts for Hlubikazi_31:

(8, 27677), (15, 27734), (Start: 19 @27761 has 3 MA's), (28, 27836), (72, 28058), (76, 28094), (95, 28259), (100, 28304),

Gene: Keitabear_36 Start: 34510, Stop: 33947, Start Num: 18

Candidate Starts for Keitabear_36:

(9, 34564), (Start: 18 @34510 has 4 MA's), (20, 34501), (23, 34453), (28, 34426), (53, 34306), (69, 34243), (72, 34231), (96, 34024),

Gene: KingTut_52 Start: 48894, Stop: 48379, Start Num: 29

Candidate Starts for KingTut_52:

(21, 48972), (24, 48918), (Start: 27 @48903 has 4 MA's), (Start: 29 @48894 has 5 MA's), (40, 48828), (49, 48783), (55, 48759), (64, 48723), (66, 48717), (70, 48684), (77, 48630), (79, 48627), (93, 48510), (94, 48489), (101, 48414),

Gene: LeiMonet_62 Start: 52626, Stop: 52111, Start Num: 29

Candidate Starts for LeiMonet_62:

(21, 52704), (24, 52650), (Start: 27 @52635 has 4 MA's), (Start: 29 @52626 has 5 MA's), (40, 52560), (49, 52515), (55, 52491), (64, 52455), (66, 52449), (70, 52416), (77, 52362), (79, 52359), (93, 52242), (94, 52221), (101, 52146),

Gene: Lopsy_58 Start: 51828, Stop: 51313, Start Num: 29

Candidate Starts for Lopsy_58:

(21, 51906), (24, 51852), (Start: 27 @51837 has 4 MA's), (Start: 29 @51828 has 5 MA's), (40, 51762), (49, 51717), (55, 51693), (64, 51657), (66, 51651), (70, 51618), (77, 51564), (79, 51561), (93, 51444), (94, 51423), (101, 51348),

Gene: LostAndPhound_60 Start: 52723, Stop: 52199, Start Num: 27

Candidate Starts for LostAndPhound_60:

(21, 52792), (24, 52738), (Start: 27 @52723 has 4 MA's), (Start: 29 @52714 has 5 MA's), (40, 52648), (49, 52603), (55, 52579), (64, 52543), (66, 52537), (70, 52504), (77, 52450), (79, 52447), (93, 52330), (94, 52309), (101, 52234),

Gene: Mandlovu_31 Start: 27703, Stop: 28323, Start Num: 19

Candidate Starts for Mandlovu_31:

(8, 27619), (15, 27676), (Start: 19 @27703 has 3 MA's), (28, 27778), (72, 28000), (76, 28036), (95, 28201), (100, 28246),

Gene: Matalotodo_59 Start: 52707, Stop: 52192, Start Num: 29

Candidate Starts for Matalotodo_59:

(21, 52785), (24, 52731), (Start: 27 @52716 has 4 MA's), (Start: 29 @52707 has 5 MA's), (40, 52641), (49, 52596), (55, 52572), (64, 52536), (66, 52530), (70, 52497), (77, 52443), (79, 52440), (93, 52323), (94, 52302), (101, 52227),

Gene: Mollymur_102 Start: 68397, Stop: 68978, Start Num: 32

Candidate Starts for Mollymur_102:

(4, 68076), (7, 68211), (Start: 32 @68397 has 6 MA's), (51, 68514), (56, 68541), (62, 68565), (75, 68646), (90, 68757), (103, 68886), (107, 68916), (109, 68922),

Gene: Omega_51 Start: 42659, Stop: 43288, Start Num: 16

Candidate Starts for Omega_51:

(Start: 16 @42659 has 1 MA's), (28, 42746), (38, 42809), (48, 42875), (54, 42899), (60, 42932), (67, 42965), (72, 42986), (73, 42989), (76, 43022), (86, 43100), (99, 43211), (106, 43259),

Gene: Orfeu_59 Start: 52711, Stop: 52187, Start Num: 27

Candidate Starts for Orfeu_59:

(21, 52780), (24, 52726), (Start: 27 @52711 has 4 MA's), (Start: 29 @52702 has 5 MA's), (40, 52636), (49, 52591), (55, 52567), (64, 52531), (66, 52525), (70, 52492), (77, 52438), (79, 52435), (93, 52318), (94, 52297), (101, 52222),

Gene: Peregrin_178 Start: 94313, Stop: 94846, Start Num: 32

Candidate Starts for Peregrin_178:

(Start: 32 @94313 has 6 MA's), (41, 94391), (65, 94499), (74, 94553), (85, 94640), (86, 94661), (98, 94781),

Gene: Placalicious_60 Start: 53221, Stop: 52697, Start Num: 27

Candidate Starts for Placalicious_60:

(21, 53290), (24, 53236), (Start: 27 @53221 has 4 MA's), (Start: 29 @53212 has 5 MA's), (40, 53146), (49, 53101), (55, 53077), (64, 53041), (66, 53035), (70, 53002), (77, 52948), (79, 52945), (93, 52828), (94, 52807), (101, 52732),

Gene: Podrick_58 Start: 51964, Stop: 51449, Start Num: 29

Candidate Starts for Podrick_58:

(21, 52042), (24, 51988), (Start: 27 @51973 has 4 MA's), (Start: 29 @51964 has 5 MA's), (40, 51898), (49, 51853), (55, 51829), (64, 51793), (66, 51787), (70, 51754), (77, 51700), (79, 51697), (93, 51580), (94, 51559), (101, 51484),

Gene: RedWattleHog_85 Start: 77917, Stop: 78504, Start Num: 31

Candidate Starts for RedWattleHog_85:

(Start: 31 @77917 has 2 MA's), (40, 77989), (47, 78037), (50, 78043), (58, 78091), (61, 78100), (63, 78103), (66, 78112), (68, 78142), (73, 78160), (76, 78193), (83, 78238), (88, 78280), (94, 78340), (115, 78484),

Gene: Sitar_36 Start: 34297, Stop: 33740, Start Num: 18

Candidate Starts for Sitar_36:

(9, 34351), (Start: 18 @34297 has 4 MA's), (23, 34240), (28, 34213), (45, 34114), (59, 34072), (60, 34069), (69, 34033), (77, 33976), (81, 33952), (88, 33895),

Gene: SoilAssassin_64 Start: 43104, Stop: 43649, Start Num: 18

Candidate Starts for SoilAssassin_64:

(Start: 18 @43104 has 4 MA's), (22, 43146), (25, 43167), (30, 43191), (37, 43230), (39, 43242), (44, 43272), (69, 43377), (89, 43515),

Gene: SpeedDemon_1040 Start: 70108, Stop: 70686, Start Num: 32

Candidate Starts for SpeedDemon_1040:

(4, 69790), (Start: 13 @69976 has 1 MA's), (Start: 32 @70108 has 6 MA's), (38, 70156), (40, 70174), (42, 70192), (51, 70225), (72, 70327), (80, 70378), (92, 70480), (104, 70606),

Gene: Stickynote_47 Start: 43021, Stop: 42431, Start Num: 26

Candidate Starts for Stickynote_47:

(10, 43153), (11, 43150), (Start: 26 @43021 has 3 MA's), (35, 42973), (40, 42934), (45, 42910), (46, 42907), (76, 42763), (86, 42685), (91, 42652), (101, 42544), (117, 42439),

Gene: Stormageddon_82 Start: 77898, Stop: 78485, Start Num: 31

Candidate Starts for Stormageddon_82:

(Start: 31 @77898 has 2 MA's), (40, 77970), (47, 78018), (50, 78024), (58, 78072), (61, 78081), (63, 78084), (66, 78093), (68, 78123), (73, 78141), (76, 78174), (83, 78219), (88, 78261), (94, 78321), (115, 78465),

Gene: Strokeseat_31 Start: 27760, Stop: 28380, Start Num: 19

Candidate Starts for Strokeseat_31:

(8, 27676), (15, 27733), (Start: 19 @27760 has 3 MA's), (28, 27835), (72, 28057), (76, 28093), (95, 28258), (100, 28303),

Gene: Toni_59 Start: 52612, Stop: 52088, Start Num: 27

Candidate Starts for Toni_59:

(21, 52681), (24, 52627), (Start: 27 @52612 has 4 MA's), (Start: 29 @52603 has 5 MA's), (40, 52537), (49, 52492), (55, 52468), (64, 52432), (66, 52426), (70, 52393), (77, 52339), (79, 52336), (93, 52219), (94, 52198), (101, 52123),

Gene: WilliamBoone_144 Start: 75606, Stop: 76268, Start Num: 17

Candidate Starts for WilliamBoone_144:

(14, 75582), (Start: 17 @75606 has 1 MA's), (43, 75792), (57, 75861), (62, 75876), (70, 75918), (103, 76194), (114, 76260),

Gene: Zucker_50 Start: 32261, Stop: 32884, Start Num: 13

Candidate Starts for Zucker_50:

(1, 31859), (2, 31883), (3, 31901), (5, 32147), (12, 32249), (Start: 13 @32261 has 1 MA's), (24, 32354), (38, 32432), (53, 32501), (70, 32579), (71, 32588), (73, 32594), (74, 32597), (77, 32633), (87, 32708),