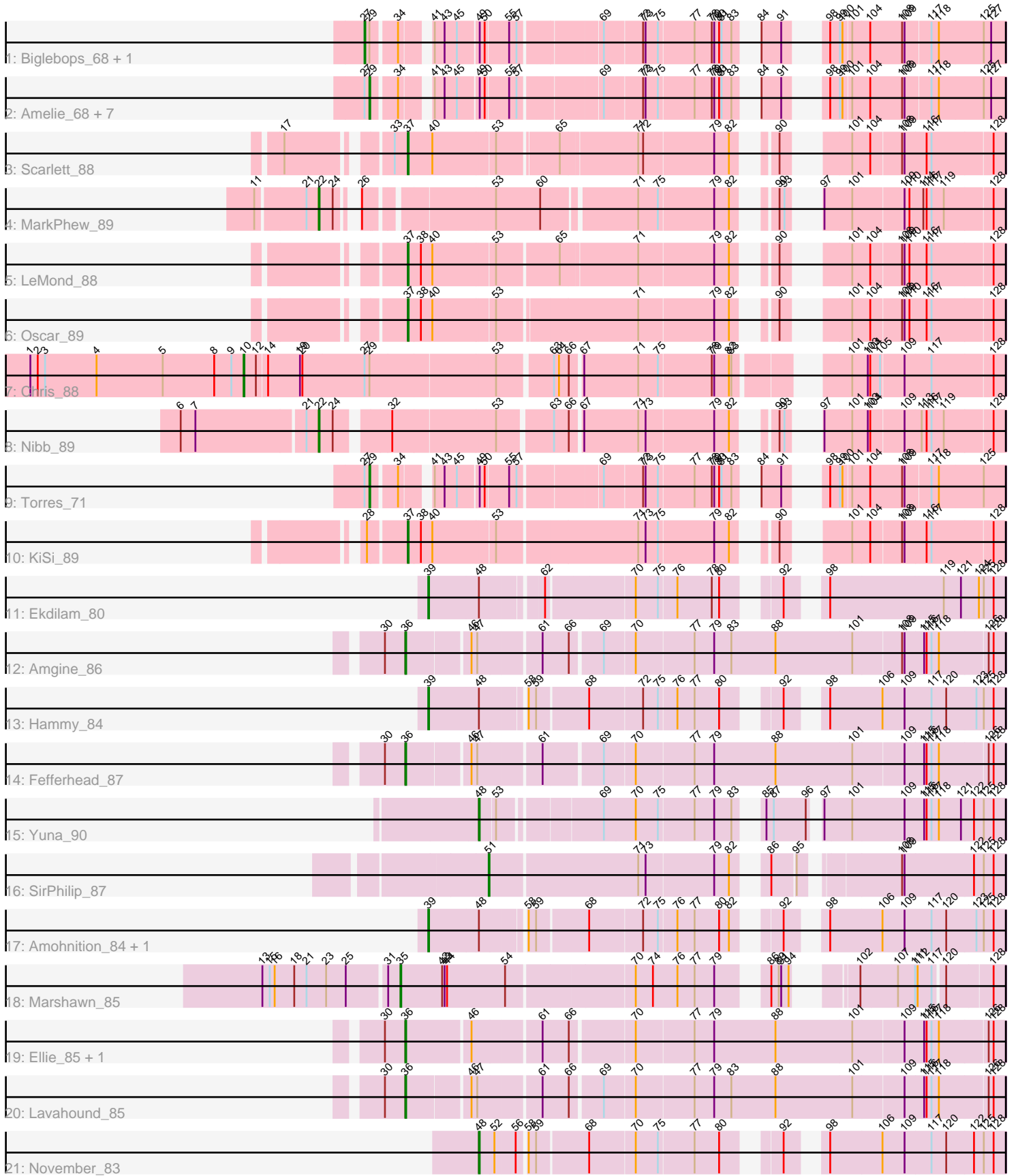


Pham 311867



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 311867 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311867 has 31 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Biglebops_68, LilPharaoh_69
- Track 2 : Amelie_68, Enkosi_70, Nutello_68, Nikao_71, Teejan_70, SgtBeansprout_69, Trice_68, Mdavu_69
- Track 3 : Scarlett_88
- Track 4 : MarkPhew_89
- Track 5 : LeMond_88
- Track 6 : Oscar_89
- Track 7 : Chris_88
- Track 8 : Nibb_89
- Track 9 : Torres_71
- Track 10 : KiSi_89
- Track 11 : Ekdilam_80
- Track 12 : Amgine_86
- Track 13 : Hammy_84
- Track 14 : Fefferhead_87
- Track 15 : Yuna_90
- Track 16 : SirPhilip_87
- Track 17 : Amohnition_84, DARTH_P_84
- Track 18 : Marshawn_85
- Track 19 : Ellie_85, Applecrisp_84
- Track 20 : Lavahound_85
- Track 21 : November_83

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

The start number called the most often in the published annotations is 29, it was called in 7 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amelie_68, Enkosi_70, Mdavu_69, Nikao_71, Nutello_68, SgtBeansprout_69, Teejan_70, Torres_71, Trice_68,

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

- Biglebops_68, Chris_88, LilPharaoh_69,

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

• Amgine_86, Amohnition_84, Applecrisp_84, DarthP_84, Ekdilam_80, Ellie_85, Fefferhead_87, Hammy_84, KiSi_89, Lavahound_85, LeMond_88, MarkPhew_89, Marshawn_85, Nibb_89, November_83, Oscar_89, Scarlett_88, SirPhilip_87, Yuna_90,

Summary by start number:

Start 10:

- Found in 1 of 31 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chris_88 (K1),

Start 22:

- Found in 2 of 31 (6.5%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MarkPhew_89 (K1), Nibb_89 (K1),

Start 27:

- Found in 12 of 31 (38.7%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Biglebops_68 (K1), LilPharaoh_69 (K1),

Start 29:

- Found in 12 of 31 (38.7%) of genes in pham
- Manual Annotations of this start: 7 of 29
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Amelie_68 (K1), Enkosi_70 (K1), Mdavu_69 (K1), Nikao_71 (K1), Nutello_68 (K1), SgtBeansprout_69 (K1), Teejan_70 (K1), Torres_71 (K1), Trice_68 (K1),

Start 35:

- Found in 1 of 31 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Marshawn_85 (K6),

Start 36:

- Found in 5 of 31 (16.1%) of genes in pham
- Manual Annotations of this start: 5 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amgine_86 (K6), Applecrisp_84 (K6), Ellie_85 (K6), Fefferhead_87 (K6), Lavahound_85 (K6),

Start 37:

- Found in 4 of 31 (12.9%) of genes in pham
- Manual Annotations of this start: 4 of 29
- Called 100.0% of time when present

- Phage (with cluster) where this start called: KiSi_89 (K1), LeMond_88 (K1), Oscar_89 (K1), Scarlett_88 (K1),

Start 39:

- Found in 4 of 31 (12.9%) of genes in pham
- Manual Annotations of this start: 4 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amohnition_84 (K6), DARTH_P_84 (K6), Ekdilam_80 (K6), Hammy_84 (K6),

Start 48:

- Found in 6 of 31 (19.4%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 33.3% of time when present
- Phage (with cluster) where this start called: November_83 (K6), Yuna_90 (K6),

Start 51:

- Found in 1 of 31 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SirPhilip_87 (K6),

Summary by clusters:

There are 2 clusters represented in this pham: K1, K6,

Info for manual annotations of cluster K1:

- Start number 10 was manually annotated 1 time for cluster K1.
- Start number 22 was manually annotated 2 times for cluster K1.
- Start number 27 was manually annotated 2 times for cluster K1.
- Start number 29 was manually annotated 7 times for cluster K1.
- Start number 37 was manually annotated 4 times for cluster K1.

Info for manual annotations of cluster K6:

- Start number 35 was manually annotated 1 time for cluster K6.
- Start number 36 was manually annotated 5 times for cluster K6.
- Start number 39 was manually annotated 4 times for cluster K6.
- Start number 48 was manually annotated 2 times for cluster K6.
- Start number 51 was manually annotated 1 time for cluster K6.

Gene Information:

Gene: Amelie_68 Start: 51228, Stop: 51872, Start Num: 29

Candidate Starts for Amelie_68:

(Start: 27 @51222 has 2 MA's), (Start: 29 @51228 has 7 MA's), (34, 51255), (41, 51282), (43, 51294), (45, 51309), (49, 51333), (50, 51339), (55, 51363), (57, 51372), (69, 51462), (72, 51507), (73, 51510), (75, 51525), (77, 51567), (78, 51588), (79, 51591), (80, 51597), (81, 51600), (83, 51612), (84, 51621), (91, 51645), (98, 51666), (99, 51678), (100, 51681), (101, 51690), (104, 51711), (108, 51750), (109, 51753), (117, 51783), (118, 51792), (125, 51846), (127, 51855),

Gene: Amgine_86 Start: 56691, Stop: 57377, Start Num: 36

Candidate Starts for Amgine_86:

(30, 56667), (Start: 36 @56691 has 5 MA's), (46, 56763), (47, 56769), (61, 56838), (66, 56868), (69, 56904), (70, 56940), (77, 57009), (79, 57033), (83, 57054), (88, 57108), (101, 57201), (108, 57258), (109, 57261), (115, 57282), (116, 57285), (117, 57291), (118, 57300), (126, 57357), (128, 57363),

Gene: Amohnition_84 Start: 55743, Stop: 56357, Start Num: 39

Candidate Starts for Amohnition_84:

(Start: 39 @55743 has 4 MA's), (Start: 48 @55800 has 2 MA's), (58, 55848), (59, 55857), (68, 55917), (72, 55980), (75, 55998), (76, 56019), (77, 56040), (80, 56070), (82, 56082), (92, 56118), (98, 56148), (106, 56211), (109, 56238), (117, 56268), (120, 56286), (123, 56322), (125, 56331), (128, 56343),

Gene: Applecrisp_84 Start: 55868, Stop: 56557, Start Num: 36

Candidate Starts for Applecrisp_84:

(30, 55844), (Start: 36 @55868 has 5 MA's), (46, 55943), (61, 56018), (66, 56048), (70, 56120), (77, 56189), (79, 56213), (88, 56288), (101, 56381), (109, 56441), (115, 56462), (116, 56465), (117, 56471), (118, 56480), (126, 56537), (128, 56543),

Gene: Biglebops_68 Start: 51237, Stop: 51887, Start Num: 27

Candidate Starts for Biglebops_68:

(Start: 27 @51237 has 2 MA's), (Start: 29 @51243 has 7 MA's), (34, 51270), (41, 51297), (43, 51309), (45, 51324), (49, 51348), (50, 51354), (55, 51378), (57, 51387), (69, 51477), (72, 51522), (73, 51525), (75, 51540), (77, 51582), (78, 51603), (79, 51606), (80, 51612), (81, 51615), (83, 51627), (84, 51636), (91, 51660), (98, 51681), (99, 51693), (100, 51696), (101, 51705), (104, 51726), (108, 51765), (109, 51768), (117, 51798), (118, 51807), (125, 51861), (127, 51870),

Gene: Chris_88 Start: 55802, Stop: 56641, Start Num: 10

Candidate Starts for Chris_88:

(1, 55541), (2, 55550), (3, 55559), (4, 55622), (5, 55703), (8, 55766), (9, 55787), (Start: 10 @55802 has 1 MA's), (12, 55817), (14, 55829), (19, 55868), (20, 55871), (Start: 27 @55946 has 2 MA's), (Start: 29 @55952 has 7 MA's), (53, 56099), (63, 56159), (64, 56165), (66, 56177), (67, 56189), (71, 56255), (75, 56279), (78, 56342), (79, 56345), (82, 56363), (83, 56366), (101, 56465), (103, 56483), (104, 56486), (105, 56498), (109, 56525), (117, 56555), (128, 56627),

Gene: DarthP_84 Start: 55596, Stop: 56210, Start Num: 39

Candidate Starts for DarthP_84:

(Start: 39 @55596 has 4 MA's), (Start: 48 @55653 has 2 MA's), (58, 55701), (59, 55710), (68, 55770), (72, 55833), (75, 55851), (76, 55872), (77, 55893), (80, 55923), (82, 55935), (92, 55971), (98, 56001), (106, 56064), (109, 56091), (117, 56121), (120, 56139), (123, 56175), (125, 56184), (128, 56196),

Gene: Ekdilam_80 Start: 55444, Stop: 56052, Start Num: 39

Candidate Starts for Ekdilam_80:

(Start: 39 @55444 has 4 MA's), (Start: 48 @55501 has 2 MA's), (62, 55567), (70, 55666), (75, 55693), (76, 55714), (78, 55756), (80, 55765), (92, 55813), (98, 55843), (119, 55978), (121, 55999), (124, 56020), (125, 56026), (128, 56038),

Gene: Ellie_85 Start: 55858, Stop: 56547, Start Num: 36

Candidate Starts for Ellie_85:

(30, 55834), (Start: 36 @55858 has 5 MA's), (46, 55933), (61, 56008), (66, 56038), (70, 56110), (77, 56179), (79, 56203), (88, 56278), (101, 56371), (109, 56431), (115, 56452), (116, 56455), (117, 56461), (118, 56470), (126, 56527), (128, 56533),

Gene: Enkosi_70 Start: 53841, Stop: 54485, Start Num: 29

Candidate Starts for Enkosi_70:

(Start: 27 @53835 has 2 MA's), (Start: 29 @53841 has 7 MA's), (34, 53868), (41, 53895), (43, 53907), (45, 53922), (49, 53946), (50, 53952), (55, 53976), (57, 53985), (69, 54075), (72, 54120), (73, 54123), (75, 54138), (77, 54180), (78, 54201), (79, 54204), (80, 54210), (81, 54213), (83, 54225), (84, 54234), (91, 54258), (98, 54279), (99, 54291), (100, 54294), (101, 54303), (104, 54324), (108, 54363), (109, 54366), (117, 54396), (118, 54405), (125, 54459), (127, 54468),

Gene: Fefferhead_87 Start: 55655, Stop: 56341, Start Num: 36

Candidate Starts for Fefferhead_87:

(30, 55631), (Start: 36 @55655 has 5 MA's), (46, 55727), (47, 55733), (61, 55802), (69, 55868), (70, 55904), (77, 55973), (79, 55997), (88, 56072), (101, 56165), (109, 56225), (115, 56246), (116, 56249), (117, 56255), (118, 56264), (126, 56321), (128, 56327),

Gene: Hammy_84 Start: 55586, Stop: 56200, Start Num: 39

Candidate Starts for Hammy_84:

(Start: 39 @55586 has 4 MA's), (Start: 48 @55643 has 2 MA's), (58, 55691), (59, 55700), (68, 55760), (72, 55823), (75, 55841), (76, 55862), (77, 55883), (80, 55913), (92, 55961), (98, 55991), (106, 56054), (109, 56081), (117, 56111), (120, 56129), (123, 56165), (125, 56174), (128, 56186),

Gene: KiSi_89 Start: 55752, Stop: 56375, Start Num: 37

Candidate Starts for KiSi_89:

(28, 55710), (Start: 37 @55752 has 4 MA's), (38, 55767), (40, 55779), (53, 55851), (71, 56016), (73, 56025), (75, 56040), (79, 56106), (82, 56124), (90, 56151), (101, 56199), (104, 56220), (108, 56256), (109, 56259), (116, 56283), (117, 56289), (128, 56361),

Gene: Lavahound_85 Start: 56824, Stop: 57510, Start Num: 36

Candidate Starts for Lavahound_85:

(30, 56800), (Start: 36 @56824 has 5 MA's), (46, 56896), (47, 56902), (61, 56971), (66, 57001), (69, 57037), (70, 57073), (77, 57142), (79, 57166), (83, 57187), (88, 57241), (101, 57334), (109, 57394), (115, 57415), (116, 57418), (117, 57424), (118, 57433), (126, 57490), (128, 57496),

Gene: LeMond_88 Start: 55714, Stop: 56331, Start Num: 37

Candidate Starts for LeMond_88:

(Start: 37 @55714 has 4 MA's), (38, 55729), (40, 55741), (53, 55813), (65, 55882), (71, 55972), (79, 56062), (82, 56080), (90, 56107), (101, 56155), (104, 56176), (108, 56212), (109, 56215), (110, 56221), (116, 56239), (117, 56245), (128, 56317),

Gene: LilPharaoh_69 Start: 50950, Stop: 51600, Start Num: 27

Candidate Starts for LilPharaoh_69:

(Start: 27 @50950 has 2 MA's), (Start: 29 @50956 has 7 MA's), (34, 50983), (41, 51010), (43, 51022), (45, 51037), (49, 51061), (50, 51067), (55, 51091), (57, 51100), (69, 51190), (72, 51235), (73, 51238), (75, 51253), (77, 51295), (78, 51316), (79, 51319), (80, 51325), (81, 51328), (83, 51340), (84, 51349), (91, 51373), (98, 51394), (99, 51406), (100, 51409), (101, 51418), (104, 51439), (108, 51478), (109, 51481), (117, 51511), (118, 51520), (125, 51574), (127, 51583),

Gene: MarkPhew_89 Start: 55775, Stop: 56458, Start Num: 22

Candidate Starts for MarkPhew_89:

(11, 55703), (21, 55760), (Start: 22 @55775 has 2 MA's), (24, 55790), (26, 55802), (53, 55940), (60, 55994), (71, 56099), (75, 56123), (79, 56189), (82, 56207), (90, 56234), (93, 56240), (97, 56249), (101, 56282), (109, 56342), (110, 56348), (114, 56363), (116, 56366), (117, 56372), (119, 56387), (128, 56444),

Gene: Marshawn_85 Start: 55928, Stop: 56566, Start Num: 35

Candidate Starts for Marshawn_85:

(13, 55766), (15, 55775), (16, 55781), (18, 55805), (21, 55820), (23, 55844), (25, 55868), (31, 55913), (Start: 35 @55928 has 1 MA's), (42, 55979), (43, 55982), (44, 55985), (54, 56054), (70, 56201), (74, 56222), (76, 56252), (77, 56273), (79, 56297), (86, 56339), (89, 56348), (91, 56351), (94, 56360), (102, 56402), (107, 56447), (111, 56468), (112, 56471), (117, 56486), (120, 56498), (128, 56552),

Gene: Mdavu_69 Start: 51232, Stop: 51876, Start Num: 29

Candidate Starts for Mdavu_69:

(Start: 27 @51226 has 2 MA's), (Start: 29 @51232 has 7 MA's), (34, 51259), (41, 51286), (43, 51298), (45, 51313), (49, 51337), (50, 51343), (55, 51367), (57, 51376), (69, 51466), (72, 51511), (73, 51514), (75, 51529), (77, 51571), (78, 51592), (79, 51595), (80, 51601), (81, 51604), (83, 51616), (84, 51625), (91, 51649), (98, 51670), (99, 51682), (100, 51685), (101, 51694), (104, 51715), (108, 51754), (109, 51757), (117, 51787), (118, 51796), (125, 51850), (127, 51859),

Gene: Nibb_89 Start: 55433, Stop: 56137, Start Num: 22

Candidate Starts for Nibb_89:

(6, 55271), (7, 55289), (21, 55418), (Start: 22 @55433 has 2 MA's), (24, 55448), (32, 55502), (53, 55622), (63, 55682), (66, 55700), (67, 55712), (71, 55778), (73, 55787), (79, 55868), (82, 55886), (90, 55913), (93, 55919), (97, 55928), (101, 55961), (103, 55979), (104, 55982), (109, 56021), (113, 56039), (116, 56045), (117, 56051), (119, 56066), (128, 56123),

Gene: Nikao_71 Start: 53841, Stop: 54485, Start Num: 29

Candidate Starts for Nikao_71:

(Start: 27 @53835 has 2 MA's), (Start: 29 @53841 has 7 MA's), (34, 53868), (41, 53895), (43, 53907), (45, 53922), (49, 53946), (50, 53952), (55, 53976), (57, 53985), (69, 54075), (72, 54120), (73, 54123), (75, 54138), (77, 54180), (78, 54201), (79, 54204), (80, 54210), (81, 54213), (83, 54225), (84, 54234), (91, 54258), (98, 54279), (99, 54291), (100, 54294), (101, 54303), (104, 54324), (108, 54363), (109, 54366), (117, 54396), (118, 54405), (125, 54459), (127, 54468),

Gene: November_83 Start: 55714, Stop: 56274, Start Num: 48

Candidate Starts for November_83:

(Start: 48 @55714 has 2 MA's), (52, 55732), (56, 55756), (58, 55765), (59, 55774), (68, 55834), (70, 55888), (75, 55915), (77, 55957), (80, 55987), (92, 56035), (98, 56065), (106, 56128), (109, 56155), (117, 56185), (120, 56203), (122, 56236), (125, 56248), (128, 56260),

Gene: Nutello_68 Start: 51228, Stop: 51872, Start Num: 29

Candidate Starts for Nutello_68:

(Start: 27 @51222 has 2 MA's), (Start: 29 @51228 has 7 MA's), (34, 51255), (41, 51282), (43, 51294), (45, 51309), (49, 51333), (50, 51339), (55, 51363), (57, 51372), (69, 51462), (72, 51507), (73, 51510), (75, 51525), (77, 51567), (78, 51588), (79, 51591), (80, 51597), (81, 51600), (83, 51612), (84, 51621), (91, 51645), (98, 51666), (99, 51678), (100, 51681), (101, 51690), (104, 51711), (108, 51750), (109, 51753), (117, 51783), (118, 51792), (125, 51846), (127, 51855),

Gene: Oscar_89 Start: 55635, Stop: 56255, Start Num: 37

Candidate Starts for Oscar_89:

(Start: 37 @55635 has 4 MA's), (38, 55650), (40, 55662), (53, 55734), (71, 55896), (79, 55986), (82, 56004), (90, 56031), (101, 56079), (104, 56100), (108, 56136), (109, 56139), (110, 56145), (116, 56163), (117, 56169), (128, 56241),

Gene: Scarlett_88 Start: 55509, Stop: 56123, Start Num: 37

Candidate Starts for Scarlett_88:

(17, 55389), (33, 55494), (Start: 37 @55509 has 4 MA's), (40, 55536), (53, 55608), (65, 55674), (71, 55764), (72, 55770), (79, 55854), (82, 55872), (90, 55899), (101, 55947), (104, 55968), (108, 56004), (109, 56007), (116, 56031), (117, 56037), (128, 56109),

Gene: SgtBeansprout_69 Start: 51228, Stop: 51872, Start Num: 29

Candidate Starts for SgtBeansprout_69:

(Start: 27 @51222 has 2 MA's), (Start: 29 @51228 has 7 MA's), (34, 51255), (41, 51282), (43, 51294), (45, 51309), (49, 51333), (50, 51339), (55, 51363), (57, 51372), (69, 51462), (72, 51507), (73, 51510), (75, 51525), (77, 51567), (78, 51588), (79, 51591), (80, 51597), (81, 51600), (83, 51612), (84, 51621), (91, 51645), (98, 51666), (99, 51678), (100, 51681), (101, 51690), (104, 51711), (108, 51750), (109, 51753), (117, 51783), (118, 51792), (125, 51846), (127, 51855),

Gene: SirPhilip_87 Start: 55717, Stop: 56277, Start Num: 51

Candidate Starts for SirPhilip_87:

(Start: 51 @55717 has 1 MA's), (71, 55894), (73, 55903), (79, 55984), (82, 56002), (86, 56026), (95, 56053), (108, 56155), (109, 56158), (122, 56239), (125, 56251), (128, 56263),

Gene: Teejan_70 Start: 53841, Stop: 54485, Start Num: 29

Candidate Starts for Teejan_70:

(Start: 27 @53835 has 2 MA's), (Start: 29 @53841 has 7 MA's), (34, 53868), (41, 53895), (43, 53907), (45, 53922), (49, 53946), (50, 53952), (55, 53976), (57, 53985), (69, 54075), (72, 54120), (73, 54123), (75, 54138), (77, 54180), (78, 54201), (79, 54204), (80, 54210), (81, 54213), (83, 54225), (84, 54234), (91, 54258), (98, 54279), (99, 54291), (100, 54294), (101, 54303), (104, 54324), (108, 54363), (109, 54366), (117, 54396), (118, 54405), (125, 54459), (127, 54468),

Gene: Torres_71 Start: 53842, Stop: 54486, Start Num: 29

Candidate Starts for Torres_71:

(Start: 27 @53836 has 2 MA's), (Start: 29 @53842 has 7 MA's), (34, 53869), (41, 53896), (43, 53908), (45, 53923), (49, 53947), (50, 53953), (55, 53977), (57, 53986), (69, 54076), (72, 54121), (73, 54124), (75, 54139), (77, 54181), (78, 54202), (79, 54205), (80, 54211), (81, 54214), (83, 54226), (84, 54235), (91, 54259), (98, 54280), (99, 54292), (100, 54295), (101, 54304), (104, 54325), (108, 54364), (109, 54367), (117, 54397), (118, 54406), (125, 54460),

Gene: Trice_68 Start: 51229, Stop: 51873, Start Num: 29

Candidate Starts for Trice_68:

(Start: 27 @51223 has 2 MA's), (Start: 29 @51229 has 7 MA's), (34, 51256), (41, 51283), (43, 51295), (45, 51310), (49, 51334), (50, 51340), (55, 51364), (57, 51373), (69, 51463), (72, 51508), (73, 51511), (75, 51526), (77, 51568), (78, 51589), (79, 51592), (80, 51598), (81, 51601), (83, 51613), (84, 51622), (91, 51646), (98, 51667), (99, 51679), (100, 51682), (101, 51691), (104, 51712), (108, 51751), (109, 51754), (117, 51784), (118, 51793), (125, 51847), (127, 51856),

Gene: Yuna_90 Start: 57455, Stop: 58021, Start Num: 48

Candidate Starts for Yuna_90:

(Start: 48 @57455 has 2 MA's), (53, 57473), (69, 57587), (70, 57623), (75, 57650), (77, 57692), (79, 57716), (83, 57737), (85, 57752), (87, 57761), (96, 57800), (97, 57806), (101, 57839), (109, 57902), (115, 57923), (116, 57926), (117, 57932), (118, 57941), (121, 57968), (122, 57983), (125, 57995), (128, 58007),