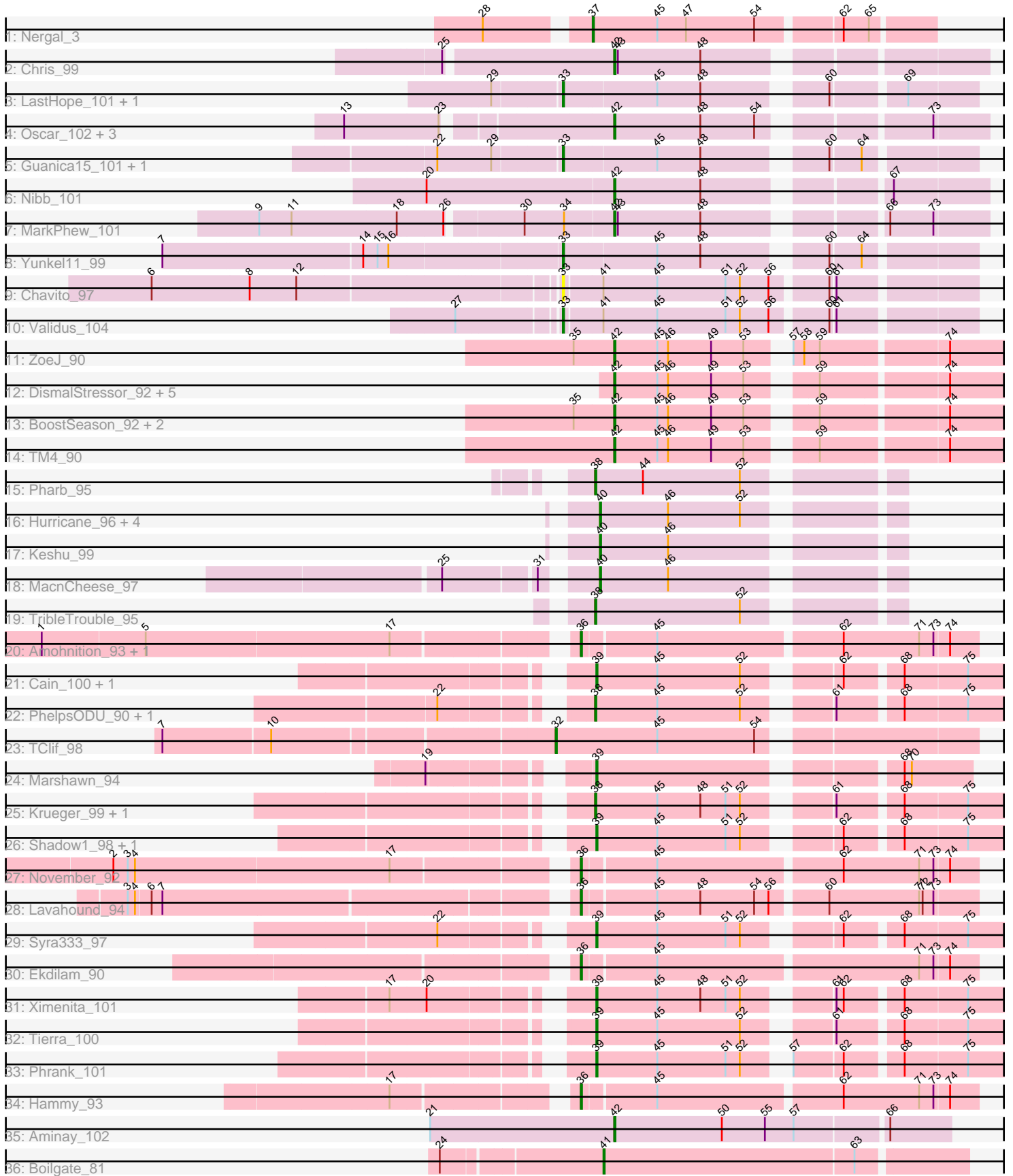


Pham 305045



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 305045 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305045 has 57 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Nergal_3
- Track 2 : Chris_99
- Track 3 : LastHope_101, TingHuaYa_99
- Track 4 : Oscar_102, LeMond_101, KiSi_102, Scarlett_101
- Track 5 : Guanica15_101, Efra2_102
- Track 6 : Nibb_101
- Track 7 : MarkPhew_101
- Track 8 : Yunkel11_99
- Track 9 : Chavito_97
- Track 10 : Validus_104
- Track 11 : ZoeJ_90
- Track 12 : DismalStressor_92, DismalFunk_92, Milly_92, Strobilo_93, Marcoliusprime_90, Findley_92
- Track 13 : BoostSeason_92, Doughnut_93, Mufasa_92
- Track 14 : TM4_90
- Track 15 : Pharb_95
- Track 16 : Hurricane_96, TBond007_95, Pixie_98, ShedlockHolmes_98, Lea83_96
- Track 17 : Keshu_99
- Track 18 : MacnCheese_97
- Track 19 : TribbleTrouble_95
- Track 20 : Amohnition_93, DARTH_P_93
- Track 21 : Cain_100, Bryler_92
- Track 22 : PhelpsODU_90, Unicorn_100
- Track 23 : TClif_98
- Track 24 : Marshawn_94
- Track 25 : Krueger_99, Tigress9_98
- Track 26 : Shadow1_98, Sunflower1121_98
- Track 27 : November_92
- Track 28 : Lavahound_94
- Track 29 : Syra333_97
- Track 30 : Ekdilam_90
- Track 31 : Ximenita_101
- Track 32 : Tierra_100
- Track 33 : Phrank_101
- Track 34 : Hammy_93
- Track 35 : Aminay_102
- Track 36 : Boilgate_81

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

The start number called the most often in the published annotations is 42, it was called in 19 of the 55 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aminay_102, BoostSeason_92, Chris_99, DismalFunk_92, DismalStressor_92, Doughnut_93, Findley_92, KiSi_102, LeMond_101, Marcoliusprime_90, MarkPhew_101, Milly_92, Mufasa_92, Nibb_101, Oscar_102, Scarlett_101, Strobilo_93, TM4_90, ZoeJ_90,

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

-

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

- Amohnition_93, Boilgate_81, Bryler_92, Cain_100, Chavito_97, DarthP_93, Efra2_102, Ekdilam_90, Guanica15_101, Hammy_93, Hurricane_96, Keshu_99, Krueger_99, LastHope_101, Lavahound_94, Lea83_96, MacnCheese_97, Marshawn_94, Nergal_3, November_92, Pharb_95, PhelpsODU_90, Phrank_101, Pixie_98, Shadow1_98, ShedlockHolmes_98, Sunflower1121_98, Syra333_97, TBond007_95, TClif_98, Tierra_100, Tigress9_98, TingHuaYa_99, TripleTrouble_95, Unicorn_100, Validus_104, Ximenita_101, Yunkel11_99,

Summary by start number:

Start 32:

- Found in 1 of 57 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TClif_98 (K6),

Start 33:

- Found in 7 of 57 (12.3%) of genes in pham
- Manual Annotations of this start: 5 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chavito_97 (K1), Efra2_102 (K1), Guanica15_101 (K1), LastHope_101 (K1), TingHuaYa_99 (K1), Validus_104 (K1), Yunkel11_99 (K1),

Start 36:

- Found in 6 of 57 (10.5%) of genes in pham
- Manual Annotations of this start: 6 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amohnition_93 (K6), DarthP_93 (K6), Ekdilam_90 (K6), Hammy_93 (K6), Lavahound_94 (K6), November_92 (K6),

Start 37:

- Found in 1 of 57 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 55

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nergal_3 (AG),

Start 38:

- Found in 6 of 57 (10.5%) of genes in pham
- Manual Annotations of this start: 6 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Krueger_99 (K6), Pharb_95 (K3), PhelpsODU_90 (K6), Tigress9_98 (K6), TripleTrouble_95 (K3), Unicorn_100 (K6),

Start 39:

- Found in 9 of 57 (15.8%) of genes in pham
- Manual Annotations of this start: 9 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bryler_92 (K6), Cain_100 (K6), Marshawn_94 (K6), Phrank_101 (K6), Shadow1_98 (K6), Sunflower1121_98 (K6), Syra333_97 (K6), Tierra_100 (K6), Ximenita_101 (K6),

Start 40:

- Found in 7 of 57 (12.3%) of genes in pham
- Manual Annotations of this start: 7 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hurricane_96 (K3), Keshu_99 (K3), Lea83_96 (K3), MacnCheese_97 (K3), Pixie_98 (K3), ShedlockHolmes_98 (K3), TBond007_95 (K3),

Start 41:

- Found in 3 of 57 (5.3%) of genes in pham
- Manual Annotations of this start: 1 of 55
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Boilgate_81 (K8),

Start 42:

- Found in 19 of 57 (33.3%) of genes in pham
- Manual Annotations of this start: 19 of 55
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay_102 (K7), BoostSeason_92 (K2), Chris_99 (K1), DismalFunk_92 (K2), DismalStressor_92 (K2), Doughnut_93 (K2), Findley_92 (K2), KiSi_102 (K1), LeMond_101 (K1), Marcoliusprime_90 (K2), MarkPhew_101 (K1), Milly_92 (K2), Mufasa_92 (K2), Nibb_101 (K1), Oscar_102 (K1), Scarlett_101 (K1), Strobilo_93 (K2), TM4_90 (K2), ZoeJ_90 (K2),

Summary by clusters:

There are 7 clusters represented in this pham: AG, K3, K2, K1, K7, K6, K8,

Info for manual annotations of cluster AG:

- Start number 37 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:

- Start number 33 was manually annotated 5 times for cluster K1.
- Start number 42 was manually annotated 7 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 42 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 38 was manually annotated 2 times for cluster K3.
- Start number 40 was manually annotated 7 times for cluster K3.

Info for manual annotations of cluster K6:

- Start number 32 was manually annotated 1 time for cluster K6.
- Start number 36 was manually annotated 6 times for cluster K6.
- Start number 38 was manually annotated 4 times for cluster K6.
- Start number 39 was manually annotated 9 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 42 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 41 was manually annotated 1 time for cluster K8.

Gene Information:

Gene: Aminay_102 Start: 58711, Stop: 58983, Start Num: 42

Candidate Starts for Aminay_102:

(21, 58558), (Start: 42 @58711 has 19 MA's), (50, 58801), (55, 58837), (57, 58861), (66, 58933),

Gene: Amohnition_93 Start: 60821, Stop: 61135, Start Num: 36

Candidate Starts for Amohnition_93:

(1, 60410), (5, 60494), (17, 60692), (Start: 36 @60821 has 6 MA's), (45, 60878), (62, 61025), (71, 61088), (73, 61100), (74, 61112),

Gene: Boilgate_81 Start: 56560, Stop: 56853, Start Num: 41

Candidate Starts for Boilgate_81:

(24, 56434), (Start: 41 @56560 has 1 MA's), (63, 56767),

Gene: BoostSeason_92 Start: 57164, Stop: 57460, Start Num: 42

Candidate Starts for BoostSeason_92:

(35, 57131), (Start: 42 @57164 has 19 MA's), (45, 57200), (46, 57209), (49, 57245), (53, 57272), (59, 57314), (74, 57413),

Gene: Bryler_92 Start: 56696, Stop: 57031, Start Num: 39

Candidate Starts for Bryler_92:

(Start: 39 @56696 has 9 MA's), (45, 56747), (52, 56816), (62, 56879), (68, 56921), (75, 56972),

Gene: Cain_100 Start: 59843, Stop: 60178, Start Num: 39

Candidate Starts for Cain_100:

(Start: 39 @59843 has 9 MA's), (45, 59894), (52, 59963), (62, 60026), (68, 60068), (75, 60119),

Gene: Chavito_97 Start: 61188, Stop: 61508, Start Num: 33

Candidate Starts for Chavito_97:

(6, 60867), (8, 60948), (12, 60987), (Start: 33 @61188 has 5 MA's), (Start: 41 @61218 has 1 MA's), (45, 61263), (51, 61320), (52, 61332), (56, 61356), (60, 61398), (61, 61401),

Gene: Chris_99 Start: 61172, Stop: 61450, Start Num: 42
Candidate Starts for Chris_99:
(25, 61040), (Start: 42 @61172 has 19 MA's), (43, 61175), (48, 61244),

Gene: DarthP_93 Start: 60654, Stop: 60968, Start Num: 36
Candidate Starts for DarthP_93:
(1, 60243), (5, 60327), (17, 60525), (Start: 36 @60654 has 6 MA's), (45, 60711), (62, 60858), (71, 60921), (73, 60933), (74, 60945),

Gene: DismalFunk_92 Start: 57214, Stop: 57510, Start Num: 42
Candidate Starts for DismalFunk_92:
(Start: 42 @57214 has 19 MA's), (45, 57250), (46, 57259), (49, 57295), (53, 57322), (59, 57364), (74, 57463),

Gene: DismalStressor_92 Start: 57214, Stop: 57510, Start Num: 42
Candidate Starts for DismalStressor_92:
(Start: 42 @57214 has 19 MA's), (45, 57250), (46, 57259), (49, 57295), (53, 57322), (59, 57364), (74, 57463),

Gene: Doughnut_93 Start: 57346, Stop: 57642, Start Num: 42
Candidate Starts for Doughnut_93:
(35, 57313), (Start: 42 @57346 has 19 MA's), (45, 57382), (46, 57391), (49, 57427), (53, 57454), (59, 57496), (74, 57595),

Gene: Efra2_102 Start: 60360, Stop: 60668, Start Num: 33
Candidate Starts for Efra2_102:
(22, 60264), (29, 60306), (Start: 33 @60360 has 5 MA's), (45, 60435), (48, 60471), (60, 60558), (64, 60582),

Gene: Ekdilam_90 Start: 60833, Stop: 61147, Start Num: 36
Candidate Starts for Ekdilam_90:
(Start: 36 @60833 has 6 MA's), (45, 60890), (71, 61100), (73, 61112), (74, 61124),

Gene: Findley_92 Start: 57233, Stop: 57529, Start Num: 42
Candidate Starts for Findley_92:
(Start: 42 @57233 has 19 MA's), (45, 57269), (46, 57278), (49, 57314), (53, 57341), (59, 57383), (74, 57482),

Gene: Guanica15_101 Start: 60049, Stop: 60357, Start Num: 33
Candidate Starts for Guanica15_101:
(22, 59953), (29, 59995), (Start: 33 @60049 has 5 MA's), (45, 60124), (48, 60160), (60, 60247), (64, 60271),

Gene: Hammy_93 Start: 60872, Stop: 61186, Start Num: 36
Candidate Starts for Hammy_93:
(17, 60743), (Start: 36 @60872 has 6 MA's), (45, 60929), (62, 61076), (71, 61139), (73, 61151), (74, 61163),

Gene: Hurricane_96 Start: 60266, Stop: 60493, Start Num: 40
Candidate Starts for Hurricane_96:
(Start: 40 @60266 has 7 MA's), (46, 60323), (52, 60383),

Gene: Keshu_99 Start: 60197, Stop: 60424, Start Num: 40

Candidate Starts for Keshu_99:

(Start: 40 @60197 has 7 MA's), (46, 60254),

Gene: KiSi_102 Start: 61643, Stop: 61921, Start Num: 42

Candidate Starts for KiSi_102:

(13, 61439), (23, 61517), (Start: 42 @61643 has 19 MA's), (48, 61715), (54, 61760), (73, 61877),

Gene: Krueger_99 Start: 59350, Stop: 59685, Start Num: 38

Candidate Starts for Krueger_99:

(Start: 38 @59350 has 6 MA's), (45, 59401), (48, 59437), (51, 59458), (52, 59470), (61, 59527), (68, 59575), (75, 59626),

Gene: LastHope_101 Start: 60006, Stop: 60314, Start Num: 33

Candidate Starts for LastHope_101:

(29, 59952), (Start: 33 @60006 has 5 MA's), (45, 60081), (48, 60117), (60, 60204), (69, 60258),

Gene: Lavahound_94 Start: 61437, Stop: 61751, Start Num: 36

Candidate Starts for Lavahound_94:

(3, 61098), (4, 61104), (6, 61116), (7, 61125), (Start: 36 @61437 has 6 MA's), (45, 61494), (48, 61530), (54, 61575), (56, 61587), (60, 61629), (71, 61704), (72, 61707), (73, 61716),

Gene: LeMond_101 Start: 61600, Stop: 61878, Start Num: 42

Candidate Starts for LeMond_101:

(13, 61396), (23, 61474), (Start: 42 @61600 has 19 MA's), (48, 61672), (54, 61717), (73, 61834),

Gene: Lea83_96 Start: 60025, Stop: 60252, Start Num: 40

Candidate Starts for Lea83_96:

(Start: 40 @60025 has 7 MA's), (46, 60082), (52, 60142),

Gene: MacnCheese_97 Start: 60456, Stop: 60683, Start Num: 40

Candidate Starts for MacnCheese_97:

(25, 60351), (31, 60423), (Start: 40 @60456 has 7 MA's), (46, 60513),

Gene: Marcoliusprime_90 Start: 57214, Stop: 57510, Start Num: 42

Candidate Starts for Marcoliusprime_90:

(Start: 42 @57214 has 19 MA's), (45, 57250), (46, 57259), (49, 57295), (53, 57322), (59, 57364), (74, 57463),

Gene: MarkPhew_101 Start: 61243, Stop: 61521, Start Num: 42

Candidate Starts for MarkPhew_101:

(9, 60964), (11, 60991), (18, 61078), (26, 61114), (30, 61171), (34, 61204), (Start: 42 @61243 has 19 MA's), (43, 61246), (48, 61315), (66, 61441), (73, 61477),

Gene: Marshawn_94 Start: 60534, Stop: 60815, Start Num: 39

Candidate Starts for Marshawn_94:

(19, 60429), (Start: 39 @60534 has 9 MA's), (68, 60759), (70, 60765),

Gene: Milly_92 Start: 57296, Stop: 57592, Start Num: 42

Candidate Starts for Milly_92:

(Start: 42 @57296 has 19 MA's), (45, 57332), (46, 57341), (49, 57377), (53, 57404), (59, 57446), (74, 57545),

Gene: Mufasa_92 Start: 57151, Stop: 57447, Start Num: 42

Candidate Starts for Mufasa_92:

(35, 57118), (Start: 42 @57151 has 19 MA's), (45, 57187), (46, 57196), (49, 57232), (53, 57259), (59, 57301), (74, 57400),

Gene: Nergal_3 Start: 1079, Stop: 1348, Start Num: 37

Candidate Starts for Nergal_3:

(28, 1004), (Start: 37 @1079 has 1 MA's), (45, 1133), (47, 1157), (54, 1214), (62, 1277), (65, 1298),

Gene: Nibb_101 Start: 61386, Stop: 61664, Start Num: 42

Candidate Starts for Nibb_101:

(20, 61233), (Start: 42 @61386 has 19 MA's), (48, 61458), (67, 61587),

Gene: November_92 Start: 60578, Stop: 60892, Start Num: 36

Candidate Starts for November_92:

(2, 60224), (3, 60236), (4, 60242), (17, 60449), (Start: 36 @60578 has 6 MA's), (45, 60635), (62, 60782), (71, 60845), (73, 60857), (74, 60869),

Gene: Oscar_102 Start: 61522, Stop: 61800, Start Num: 42

Candidate Starts for Oscar_102:

(13, 61318), (23, 61396), (Start: 42 @61522 has 19 MA's), (48, 61594), (54, 61639), (73, 61756),

Gene: Pharb_95 Start: 59832, Stop: 60062, Start Num: 38

Candidate Starts for Pharb_95:

(Start: 38 @59832 has 6 MA's), (44, 59871), (52, 59952),

Gene: PhelpsODU_90 Start: 55597, Stop: 55932, Start Num: 38

Candidate Starts for PhelpsODU_90:

(22, 55504), (Start: 38 @55597 has 6 MA's), (45, 55648), (52, 55717), (61, 55774), (68, 55822), (75, 55873),

Gene: Phrank_101 Start: 60141, Stop: 60476, Start Num: 39

Candidate Starts for Phrank_101:

(Start: 39 @60141 has 9 MA's), (45, 60192), (51, 60249), (52, 60261), (57, 60285), (62, 60324), (68, 60366), (75, 60417),

Gene: Pixie_98 Start: 60107, Stop: 60334, Start Num: 40

Candidate Starts for Pixie_98:

(Start: 40 @60107 has 7 MA's), (46, 60164), (52, 60224),

Gene: Scarlett_101 Start: 61391, Stop: 61669, Start Num: 42

Candidate Starts for Scarlett_101:

(13, 61187), (23, 61265), (Start: 42 @61391 has 19 MA's), (48, 61463), (54, 61508), (73, 61625),

Gene: Shadow1_98 Start: 59487, Stop: 59822, Start Num: 39

Candidate Starts for Shadow1_98:

(Start: 39 @59487 has 9 MA's), (45, 59538), (51, 59595), (52, 59607), (62, 59670), (68, 59712), (75, 59763),

Gene: ShedlockHolmes_98 Start: 60030, Stop: 60257, Start Num: 40

Candidate Starts for ShedlockHolmes_98:

(Start: 40 @60030 has 7 MA's), (46, 60087), (52, 60147),

Gene: Strobilo_93 Start: 57212, Stop: 57508, Start Num: 42
Candidate Starts for Strobilo_93:
(Start: 42 @57212 has 19 MA's), (45, 57248), (46, 57257), (49, 57293), (53, 57320), (59, 57362), (74, 57461),

Gene: Sunflower1121_98 Start: 59245, Stop: 59580, Start Num: 39
Candidate Starts for Sunflower1121_98:
(Start: 39 @59245 has 9 MA's), (45, 59296), (51, 59353), (52, 59365), (62, 59428), (68, 59470), (75, 59521),

Gene: Syra333_97 Start: 59326, Stop: 59661, Start Num: 39
Candidate Starts for Syra333_97:
(22, 59233), (Start: 39 @59326 has 9 MA's), (45, 59377), (51, 59434), (52, 59446), (62, 59509), (68, 59551), (75, 59602),

Gene: TBond007_95 Start: 60105, Stop: 60332, Start Num: 40
Candidate Starts for TBond007_95:
(Start: 40 @60105 has 7 MA's), (46, 60162), (52, 60222),

Gene: TClif_98 Start: 60473, Stop: 60799, Start Num: 32
Candidate Starts for TClif_98:
(7, 60170), (10, 60257), (Start: 32 @60473 has 1 MA's), (45, 60557), (54, 60638),

Gene: TM4_90 Start: 51883, Stop: 52179, Start Num: 42
Candidate Starts for TM4_90:
(Start: 42 @51883 has 19 MA's), (45, 51919), (46, 51928), (49, 51964), (53, 51991), (59, 52033), (74, 52132),

Gene: Tierra_100 Start: 60448, Stop: 60783, Start Num: 39
Candidate Starts for Tierra_100:
(Start: 39 @60448 has 9 MA's), (45, 60499), (52, 60568), (61, 60625), (68, 60673), (75, 60724),

Gene: Tigress9_98 Start: 59678, Stop: 60013, Start Num: 38
Candidate Starts for Tigress9_98:
(Start: 38 @59678 has 6 MA's), (45, 59729), (48, 59765), (51, 59786), (52, 59798), (61, 59855), (68, 59903), (75, 59954),

Gene: TingHuaYa_99 Start: 60335, Stop: 60643, Start Num: 33
Candidate Starts for TingHuaYa_99:
(29, 60281), (Start: 33 @60335 has 5 MA's), (45, 60410), (48, 60446), (60, 60533), (69, 60587),

Gene: TribelTrouble_95 Start: 60595, Stop: 60825, Start Num: 38
Candidate Starts for TribelTrouble_95:
(Start: 38 @60595 has 6 MA's), (52, 60715),

Gene: Unicorn_100 Start: 60225, Stop: 60560, Start Num: 38
Candidate Starts for Unicorn_100:
(22, 60132), (Start: 38 @60225 has 6 MA's), (45, 60276), (52, 60345), (61, 60402), (68, 60450), (75, 60501),

Gene: Validus_104 Start: 61559, Stop: 61879, Start Num: 33
Candidate Starts for Validus_104:

(27, 61484), (Start: 33 @61559 has 5 MA's), (Start: 41 @61589 has 1 MA's), (45, 61634), (51, 61691), (52, 61703), (56, 61727), (60, 61769), (61, 61772),

Gene: Ximenita_101 Start: 60060, Stop: 60395, Start Num: 39

Candidate Starts for Ximenita_101:

(17, 59928), (20, 59958), (Start: 39 @60060 has 9 MA's), (45, 60111), (48, 60147), (51, 60168), (52, 60180), (61, 60237), (62, 60243), (68, 60285), (75, 60336),

Gene: Yunkel11_99 Start: 59832, Stop: 60140, Start Num: 33

Candidate Starts for Yunkel11_99:

(7, 59514), (14, 59676), (15, 59688), (16, 59697), (Start: 33 @59832 has 5 MA's), (45, 59907), (48, 59943), (60, 60030), (64, 60054),

Gene: ZoeJ_90 Start: 56403, Stop: 56699, Start Num: 42

Candidate Starts for ZoeJ_90:

(35, 56370), (Start: 42 @56403 has 19 MA's), (45, 56439), (46, 56448), (49, 56484), (53, 56511), (57, 56532), (58, 56541), (59, 56553), (74, 56652),