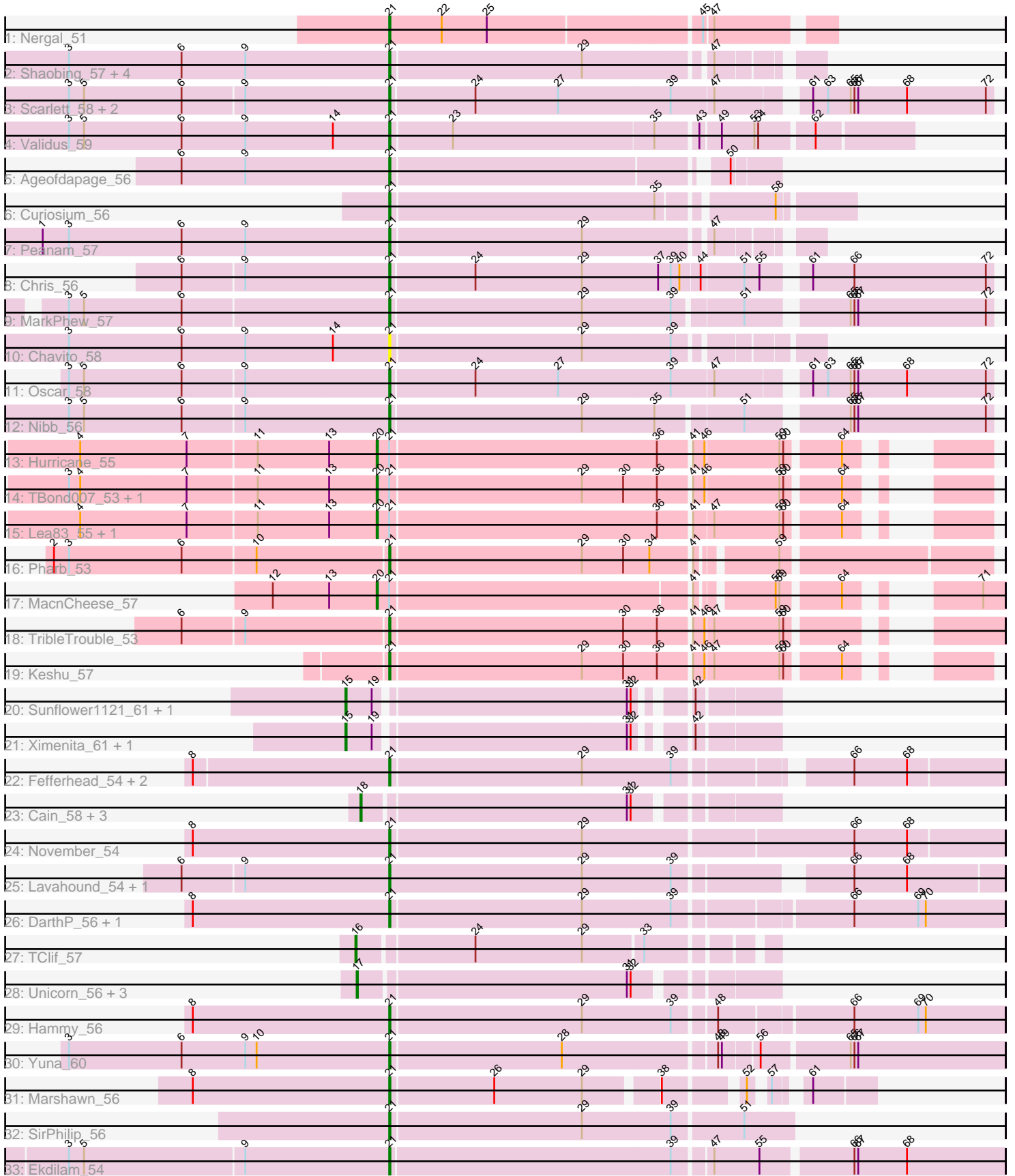


Pham 301450



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 301450 Report

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

Pham number 301450 has 53 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Nergal_51
- Track 2 : Shaobing_57, Dartin_57, Niklas_57, Richo_57, McMater_57
- Track 3 : Scarlett_58, LeMond_58, KiSi_58
- Track 4 : Validus_59
- Track 5 : Ageofdapage_56
- Track 6 : Curiosium_56
- Track 7 : Peanam_57
- Track 8 : Chris_56
- Track 9 : MarkPhew_57
- Track 10 : Chavito_58
- Track 11 : Oscar_58
- Track 12 : Nibb_56
- Track 13 : Hurricane_55
- Track 14 : TBond007_53, Pixie_54
- Track 15 : Lea83_55, ShedlockHolmes_56
- Track 16 : Pharb_53
- Track 17 : MacnCheese_57
- Track 18 : TribbleTrouble_53
- Track 19 : Keshu_57
- Track 20 : Sunflower1121_61, Shadow1_60
- Track 21 : Ximenita_61, Syra333_60
- Track 22 : Fefferhead_54, Applecrisp_53, Ellie_52
- Track 23 : Cain_58, Bryler_58, Phrank_58, Tierra_58
- Track 24 : November_54
- Track 25 : Lavahound_54, Amgine_55
- Track 26 : DarthP_56, Amohnition_56
- Track 27 : TClif_57
- Track 28 : Unicorn_56, Krueger_61, PhelpsODU_56, Tigress9_60
- Track 29 : Hammy_56
- Track 30 : Yuna_60
- Track 31 : Marshawn_56
- Track 32 : SirPhilip_56
- Track 33 : Ekdilam_54

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

The start number called the most often in the published annotations is 21, it was called in 30 of the 49 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ageofdapage_56, Amgine_55, Amohnition_56, Applecrisp_53, Chavito_58, Chris_56, Curiosium_56, DarthP_56, Dartin_57, Ekdilam_54, Ellie_52, Fefferhead_54, Hammy_56, Keshu_57, KiSi_58, Lavahound_54, LeMond_58, MarkPhew_57, Marshawn_56, McMater_57, Nergal_51, Nibb_56, Niklas_57, November_54, Oscar_58, Peanam_57, Pharb_53, Richo_57, Scarlett_58, Shaobing_57, SirPhilip_56, TribleTrouble_53, Validus_59, Yuna_60,

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

- Hurricane_55, Lea83_55, MacnCheese_57, Pixie_54, ShedlockHolmes_56, TBond007_53,

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

- Bryler_58, Cain_58, Krueger_61, PhelpsODU_56, Phrank_58, Shadow1_60, Sunflower1121_61, Syra333_60, TClif_57, Tierra_58, Tigress9_60, Unicorn_56, Ximenita_61,

Summary by start number:

Start 15:

- Found in 4 of 53 (7.5%) of genes in pham
- Manual Annotations of this start: 4 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shadow1_60 (K6), Sunflower1121_61 (K6), Syra333_60 (K6), Ximenita_61 (K6),

Start 16:

- Found in 1 of 53 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TClif_57 (K6),

Start 17:

- Found in 4 of 53 (7.5%) of genes in pham
- Manual Annotations of this start: 4 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Krueger_61 (K6), PhelpsODU_56 (K6), Tigress9_60 (K6), Unicorn_56 (K6),

Start 18:

- Found in 4 of 53 (7.5%) of genes in pham
- Manual Annotations of this start: 4 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bryler_58 (K6), Cain_58 (K6), Phrank_58 (K6), Tierra_58 (K6),

Start 20:

- Found in 6 of 53 (11.3%) of genes in pham
- Manual Annotations of this start: 6 of 49

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hurricane_55 (K3), Lea83_55 (K3), MacnCheese_57 (K3), Pixie_54 (K3), ShedlockHolmes_56 (K3), TBond007_53 (K3),

Start 21:

- Found in 40 of 53 (75.5%) of genes in pham
- Manual Annotations of this start: 30 of 49
- Called 85.0% of time when present
- Phage (with cluster) where this start called: Ageofdapage_56 (K1), Amgine_55 (K6), Amohnition_56 (K6), Applecrisp_53 (K6), Chavito_58 (K1), Chris_56 (K1), Curiosium_56 (K1), DarthP_56 (K6), Dartin_57 (K1), Ekdilam_54 (K6), Ellie_52 (K6), Fefferhead_54 (K6), Hammy_56 (K6), Keshu_57 (K3), KiSi_58 (K1), Lavahound_54 (K6), LeMond_58 (K1), MarkPheew_57 (K1), Marshawn_56 (K6), McMater_57 (K1), Nergal_51 (AG), Nibb_56 (K1), Niklas_57 (K1), November_54 (K6), Oscar_58 (K1), Peanam_57 (K1), Pharb_53 (K3), Richo_57 (K1), Scarlett_58 (K1), Shaobing_57 (K1), SirPhilip_56 (K6), TribleTrouble_53 (K3), Validus_59 (K1), Yuna_60 (K6),

Summary by clusters:

There are 4 clusters represented in this pham: K3, K1, K6, AG,

Info for manual annotations of cluster AG:

- Start number 21 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:

- Start number 21 was manually annotated 13 times for cluster K1.

Info for manual annotations of cluster K3:

- Start number 20 was manually annotated 6 times for cluster K3.
- Start number 21 was manually annotated 3 times for cluster K3.

Info for manual annotations of cluster K6:

- Start number 15 was manually annotated 4 times for cluster K6.
- Start number 16 was manually annotated 1 time for cluster K6.
- Start number 17 was manually annotated 4 times for cluster K6.
- Start number 18 was manually annotated 4 times for cluster K6.
- Start number 21 was manually annotated 13 times for cluster K6.

Gene Information:

Gene: Ageofdapage_56 Start: 40108, Stop: 40389, Start Num: 21

Candidate Starts for Ageofdapage_56:

(6, 39943), (9, 39994), (Start: 21 @40108 has 30 MA's), (50, 40354),

Gene: Amgine_55 Start: 40361, Stop: 40816, Start Num: 21

Candidate Starts for Amgine_55:

(6, 40199), (9, 40247), (Start: 21 @40361 has 30 MA's), (29, 40514), (39, 40583), (66, 40700), (68, 40742),

Gene: Amohnition_56 Start: 39941, Stop: 40408, Start Num: 21

Candidate Starts for Amohnition_56:

(8, 39785), (Start: 21 @39941 has 30 MA's), (29, 40091), (39, 40160), (66, 40289), (69, 40340), (70, 40346),

Gene: Applecrisp_53 Start: 39501, Stop: 39953, Start Num: 21

Candidate Starts for Applecrisp_53:

(8, 39348), (Start: 21 @39501 has 30 MA's), (29, 39651), (39, 39720), (66, 39837), (68, 39879),

Gene: Bryler_58 Start: 38878, Stop: 39183, Start Num: 18

Candidate Starts for Bryler_58:

(Start: 18 @38878 has 4 MA's), (31, 39082), (32, 39085),

Gene: Cain_58 Start: 38866, Stop: 39171, Start Num: 18

Candidate Starts for Cain_58:

(Start: 18 @38866 has 4 MA's), (31, 39070), (32, 39073),

Gene: Chavito_58 Start: 40526, Stop: 40843, Start Num: 21

Candidate Starts for Chavito_58:

(3, 40271), (6, 40361), (9, 40412), (14, 40481), (Start: 21 @40526 has 30 MA's), (29, 40676), (39, 40745),

Gene: Chris_56 Start: 39748, Stop: 40203, Start Num: 21

Candidate Starts for Chris_56:

(6, 39586), (9, 39634), (Start: 21 @39748 has 30 MA's), (24, 39814), (29, 39898), (37, 39958), (39, 39967), (40, 39973), (44, 39988), (51, 40021), (55, 40033), (61, 40060), (66, 40093), (72, 40198),

Gene: Curiosium_56 Start: 38035, Stop: 38376, Start Num: 21

Candidate Starts for Curiosium_56:

(Start: 21 @38035 has 30 MA's), (35, 38242), (58, 38320),

Gene: DarthP_56 Start: 39825, Stop: 40292, Start Num: 21

Candidate Starts for DarthP_56:

(8, 39669), (Start: 21 @39825 has 30 MA's), (29, 39975), (39, 40044), (66, 40173), (69, 40224), (70, 40230),

Gene: Dartin_57 Start: 39804, Stop: 40115, Start Num: 21

Candidate Starts for Dartin_57:

(3, 39549), (6, 39639), (9, 39690), (Start: 21 @39804 has 30 MA's), (29, 39954), (47, 40047),

Gene: Ekdilam_54 Start: 39830, Stop: 40297, Start Num: 21

Candidate Starts for Ekdilam_54:

(3, 39578), (5, 39590), (9, 39716), (Start: 21 @39830 has 30 MA's), (39, 40049), (47, 40076), (55, 40112), (66, 40178), (67, 40181), (68, 40220),

Gene: Ellie_52 Start: 39193, Stop: 39645, Start Num: 21

Candidate Starts for Ellie_52:

(8, 39040), (Start: 21 @39193 has 30 MA's), (29, 39343), (39, 39412), (66, 39529), (68, 39571),

Gene: Fefferhead_54 Start: 39140, Stop: 39592, Start Num: 21

Candidate Starts for Fefferhead_54:

(8, 38987), (Start: 21 @39140 has 30 MA's), (29, 39290), (39, 39359), (66, 39476), (68, 39518),

Gene: Hammy_56 Start: 39813, Stop: 40280, Start Num: 21

Candidate Starts for Hammy_56:

(8, 39657), (Start: 21 @39813 has 30 MA's), (29, 39963), (39, 40032), (48, 40062), (66, 40161), (69, 40212), (70, 40218),

Gene: Hurricane_55 Start: 39527, Stop: 39946, Start Num: 20

Candidate Starts for Hurricane_55:

(4, 39296), (7, 39380), (11, 39434), (13, 39491), (Start: 20 @39527 has 6 MA's), (Start: 21 @39536 has 30 MA's), (36, 39746), (41, 39770), (46, 39779), (59, 39836), (60, 39839), (64, 39878),

Gene: Keshu_57 Start: 39634, Stop: 40044, Start Num: 21

Candidate Starts for Keshu_57:

(Start: 21 @39634 has 30 MA's), (29, 39784), (30, 39817), (36, 39844), (41, 39868), (46, 39877), (47, 39883), (59, 39934), (60, 39937), (64, 39976),

Gene: KiSi_58 Start: 39779, Stop: 40234, Start Num: 21

Candidate Starts for KiSi_58:

(3, 39527), (5, 39539), (6, 39617), (9, 39665), (Start: 21 @39779 has 30 MA's), (24, 39845), (27, 39911), (39, 39998), (47, 40031), (61, 40091), (63, 40103), (65, 40121), (66, 40124), (67, 40127), (68, 40166), (72, 40229),

Gene: Krueger_61 Start: 39855, Stop: 40163, Start Num: 17

Candidate Starts for Krueger_61:

(Start: 17 @39855 has 4 MA's), (31, 40062), (32, 40065),

Gene: Lavahound_54 Start: 40482, Stop: 40937, Start Num: 21

Candidate Starts for Lavahound_54:

(6, 40320), (9, 40368), (Start: 21 @40482 has 30 MA's), (29, 40635), (39, 40704), (66, 40821), (68, 40863),

Gene: LeMond_58 Start: 39760, Stop: 40215, Start Num: 21

Candidate Starts for LeMond_58:

(3, 39508), (5, 39520), (6, 39598), (9, 39646), (Start: 21 @39760 has 30 MA's), (24, 39826), (27, 39892), (39, 39979), (47, 40012), (61, 40072), (63, 40084), (65, 40102), (66, 40105), (67, 40108), (68, 40147), (72, 40210),

Gene: Lea83_55 Start: 39580, Stop: 39999, Start Num: 20

Candidate Starts for Lea83_55:

(4, 39349), (7, 39433), (11, 39487), (13, 39544), (Start: 20 @39580 has 6 MA's), (Start: 21 @39589 has 30 MA's), (36, 39799), (41, 39823), (47, 39838), (59, 39889), (60, 39892), (64, 39931),

Gene: MacnCheese_57 Start: 40122, Stop: 40535, Start Num: 20

Candidate Starts for MacnCheese_57:

(12, 40041), (13, 40086), (Start: 20 @40122 has 6 MA's), (Start: 21 @40131 has 30 MA's), (41, 40362), (58, 40413), (59, 40416), (64, 40458), (71, 40518),

Gene: MarkPhew_57 Start: 39451, Stop: 39903, Start Num: 21

Candidate Starts for MarkPhew_57:

(3, 39199), (5, 39211), (6, 39289), (Start: 21 @39451 has 30 MA's), (29, 39601), (39, 39670), (51, 39721), (65, 39790), (66, 39793), (67, 39796), (72, 39898),

Gene: Marshawn_56 Start: 39609, Stop: 39935, Start Num: 21

Candidate Starts for Marshawn_56:

(8, 39453), (Start: 21 @39609 has 30 MA's), (26, 39690), (29, 39759), (38, 39810), (52, 39861), (57, 39870), (61, 39888),

Gene: McMater_57 Start: 39804, Stop: 40115, Start Num: 21

Candidate Starts for McMater_57:

(3, 39549), (6, 39639), (9, 39690), (Start: 21 @39804 has 30 MA's), (29, 39954), (47, 40047),

Gene: Nergal_51 Start: 37133, Stop: 37462, Start Num: 21

Candidate Starts for Nergal_51:

(Start: 21 @37133 has 30 MA's), (22, 37175), (25, 37211), (45, 37373), (47, 37379),

Gene: Nibb_56 Start: 39155, Stop: 39607, Start Num: 21

Candidate Starts for Nibb_56:

(3, 38903), (5, 38915), (6, 38993), (9, 39041), (Start: 21 @39155 has 30 MA's), (29, 39305), (35, 39362), (51, 39425), (65, 39494), (66, 39497), (67, 39500), (72, 39602),

Gene: Niklas_57 Start: 39865, Stop: 40176, Start Num: 21

Candidate Starts for Niklas_57:

(3, 39610), (6, 39700), (9, 39751), (Start: 21 @39865 has 30 MA's), (29, 40015), (47, 40108),

Gene: November_54 Start: 39693, Stop: 40166, Start Num: 21

Candidate Starts for November_54:

(8, 39537), (Start: 21 @39693 has 30 MA's), (29, 39843), (66, 40050), (68, 40092),

Gene: Oscar_58 Start: 39665, Stop: 40120, Start Num: 21

Candidate Starts for Oscar_58:

(3, 39413), (5, 39425), (6, 39503), (9, 39551), (Start: 21 @39665 has 30 MA's), (24, 39731), (27, 39797), (39, 39884), (47, 39917), (61, 39977), (63, 39989), (65, 40007), (66, 40010), (67, 40013), (68, 40052), (72, 40115),

Gene: Peanam_57 Start: 39823, Stop: 40134, Start Num: 21

Candidate Starts for Peanam_57:

(1, 39547), (3, 39568), (6, 39658), (9, 39709), (Start: 21 @39823 has 30 MA's), (29, 39973), (47, 40066),

Gene: Pharb_53 Start: 38444, Stop: 38890, Start Num: 21

Candidate Starts for Pharb_53:

(2, 38183), (3, 38195), (6, 38285), (10, 38342), (Start: 21 @38444 has 30 MA's), (29, 38594), (30, 38627), (34, 38648), (41, 38678), (59, 38732),

Gene: PhelpsODU_56 Start: 38793, Stop: 39101, Start Num: 17

Candidate Starts for PhelpsODU_56:

(Start: 17 @38793 has 4 MA's), (31, 39000), (32, 39003),

Gene: Phrank_58 Start: 38856, Stop: 39161, Start Num: 18

Candidate Starts for Phrank_58:

(Start: 18 @38856 has 4 MA's), (31, 39060), (32, 39063),

Gene: Pixie_54 Start: 39065, Stop: 39484, Start Num: 20

Candidate Starts for Pixie_54:

(3, 38825), (4, 38834), (7, 38918), (11, 38972), (13, 39029), (Start: 20 @39065 has 6 MA's), (Start: 21 @39074 has 30 MA's), (29, 39224), (30, 39257), (36, 39284), (41, 39308), (46, 39317), (59, 39374), (60, 39377), (64, 39416),

Gene: Richo_57 Start: 39804, Stop: 40115, Start Num: 21

Candidate Starts for Richo_57:

(3, 39549), (6, 39639), (9, 39690), (Start: 21 @39804 has 30 MA's), (29, 39954), (47, 40047),

Gene: Scarlett_58 Start: 39660, Stop: 40115, Start Num: 21

Candidate Starts for Scarlett_58:

(3, 39408), (5, 39420), (6, 39498), (9, 39546), (Start: 21 @39660 has 30 MA's), (24, 39726), (27, 39792), (39, 39879), (47, 39912), (61, 39972), (63, 39984), (65, 40002), (66, 40005), (67, 40008), (68, 40047), (72, 40110),

Gene: Shadow1_60 Start: 39700, Stop: 40008, Start Num: 15

Candidate Starts for Shadow1_60:

(Start: 15 @39700 has 4 MA's), (19, 39721), (31, 39913), (32, 39916), (42, 39946),

Gene: Shaobing_57 Start: 39841, Stop: 40152, Start Num: 21

Candidate Starts for Shaobing_57:

(3, 39586), (6, 39676), (9, 39727), (Start: 21 @39841 has 30 MA's), (29, 39991), (47, 40084),

Gene: ShedlockHolmes_56 Start: 39584, Stop: 40003, Start Num: 20

Candidate Starts for ShedlockHolmes_56:

(4, 39353), (7, 39437), (11, 39491), (13, 39548), (Start: 20 @39584 has 6 MA's), (Start: 21 @39593 has 30 MA's), (36, 39803), (41, 39827), (47, 39842), (59, 39893), (60, 39896), (64, 39935),

Gene: SirPhilip_56 Start: 40093, Stop: 40404, Start Num: 21

Candidate Starts for SirPhilip_56:

(Start: 21 @40093 has 30 MA's), (29, 40243), (39, 40312), (51, 40366),

Gene: Sunflower1121_61 Start: 39846, Stop: 40154, Start Num: 15

Candidate Starts for Sunflower1121_61:

(Start: 15 @39846 has 4 MA's), (19, 39867), (31, 40059), (32, 40062), (42, 40092),

Gene: Syra333_60 Start: 39867, Stop: 40175, Start Num: 15

Candidate Starts for Syra333_60:

(Start: 15 @39867 has 4 MA's), (19, 39888), (31, 40080), (32, 40083), (42, 40113),

Gene: TBond007_53 Start: 39064, Stop: 39483, Start Num: 20

Candidate Starts for TBond007_53:

(3, 38824), (4, 38833), (7, 38917), (11, 38971), (13, 39028), (Start: 20 @39064 has 6 MA's), (Start: 21 @39073 has 30 MA's), (29, 39223), (30, 39256), (36, 39283), (41, 39307), (46, 39316), (59, 39373), (60, 39376), (64, 39415),

Gene: TClif_57 Start: 39529, Stop: 39831, Start Num: 16

Candidate Starts for TClif_57:

(Start: 16 @39529 has 1 MA's), (24, 39616), (29, 39700), (33, 39745),

Gene: Tierra_58 Start: 39667, Stop: 39972, Start Num: 18

Candidate Starts for Tierra_58:

(Start: 18 @39667 has 4 MA's), (31, 39871), (32, 39874),

Gene: Tigress9_60 Start: 39855, Stop: 40163, Start Num: 17

Candidate Starts for Tigress9_60:

(Start: 17 @39855 has 4 MA's), (31, 40062), (32, 40065),

Gene: TribelTrouble_53 Start: 39295, Stop: 39714, Start Num: 21

Candidate Starts for TribbleTrouble_53:

(6, 39136), (9, 39184), (Start: 21 @39295 has 30 MA's), (30, 39478), (36, 39505), (41, 39529), (46, 39538), (47, 39544), (59, 39595), (60, 39598),

Gene: Unicorn_56 Start: 38793, Stop: 39101, Start Num: 17

Candidate Starts for Unicorn_56:

(Start: 17 @38793 has 4 MA's), (31, 39000), (32, 39003),

Gene: Validus_59 Start: 40022, Stop: 40411, Start Num: 21

Candidate Starts for Validus_59:

(3, 39767), (5, 39779), (6, 39857), (9, 39908), (14, 39977), (Start: 21 @40022 has 30 MA's), (23, 40070), (35, 40226), (43, 40256), (49, 40271), (53, 40295), (54, 40298), (62, 40337),

Gene: Ximenita_61 Start: 39864, Stop: 40172, Start Num: 15

Candidate Starts for Ximenita_61:

(Start: 15 @39864 has 4 MA's), (19, 39885), (31, 40077), (32, 40080), (42, 40110),

Gene: Yuna_60 Start: 40495, Stop: 40959, Start Num: 21

Candidate Starts for Yuna_60:

(3, 40240), (6, 40330), (9, 40381), (10, 40390), (Start: 21 @40495 has 30 MA's), (28, 40630), (48, 40744), (49, 40747), (56, 40771), (65, 40837), (66, 40840), (67, 40843),