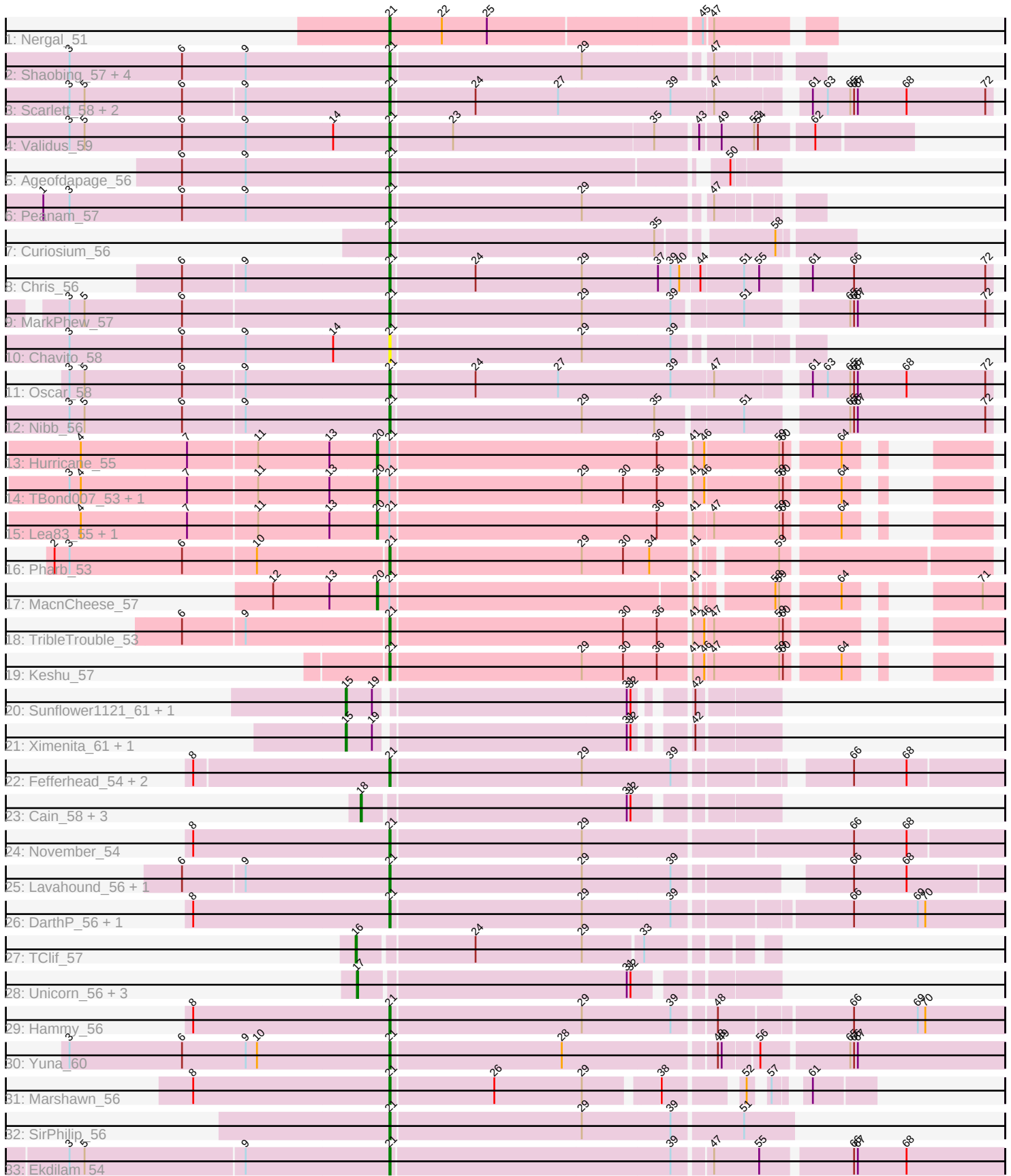


# Pham 276253



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 276253 Report

This analysis was run 02/07/26 on database version 634.

Pham number 276253 has 53 members, 6 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 : Peanam\_57
- Track 7 : Curiosium\_56
- 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\_56, Amgine\_55
- Track 26 : DarthP\_56, Amohnition\_56
- Track 27 : TClif\_57
- Track 28 : Unicorn\_56, Krueger\_61, PhelpsODU\_56, Tigress9\_63
- 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 29 of the 47 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\_56, 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, TribbleTrouble\_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\_63, 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 47
- 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 47
- 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: 3 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Krueger\_61 (K6), PhelpsODU\_56 (K6), Tigress9\_63 (K6), Unicorn\_56 (K6),

Start 18:

- Found in 4 of 53 ( 7.5% ) of genes in pham
- Manual Annotations of this start: 4 of 47
- 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 47

- 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: 29 of 47
- 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\_56 (K6), LeMond\_58 (K1), MarkPhew\_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), TripleTrouble\_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 3 times for cluster K6.
- Start number 18 was manually annotated 4 times for cluster K6.
- Start number 21 was manually annotated 12 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 3 MA's), (31, 40062), (32, 40065),

Gene: Lavahound\_56 Start: 40482, Stop: 40937, Start Num: 21

Candidate Starts for Lavahound\_56:

(6, 40320), (9, 40368), (Start: 21 @40482 has 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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 3 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 29 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 29 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 29 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 29 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 29 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 29 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 29 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\_63 Start: 39855, Stop: 40163, Start Num: 17

Candidate Starts for Tigress9\_63:

(Start: 17 @39855 has 3 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 29 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 3 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 29 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 29 MA's), (28, 40630), (48, 40744), (49, 40747), (56, 40771), (65, 40837), (66, 40840), (67, 40843),