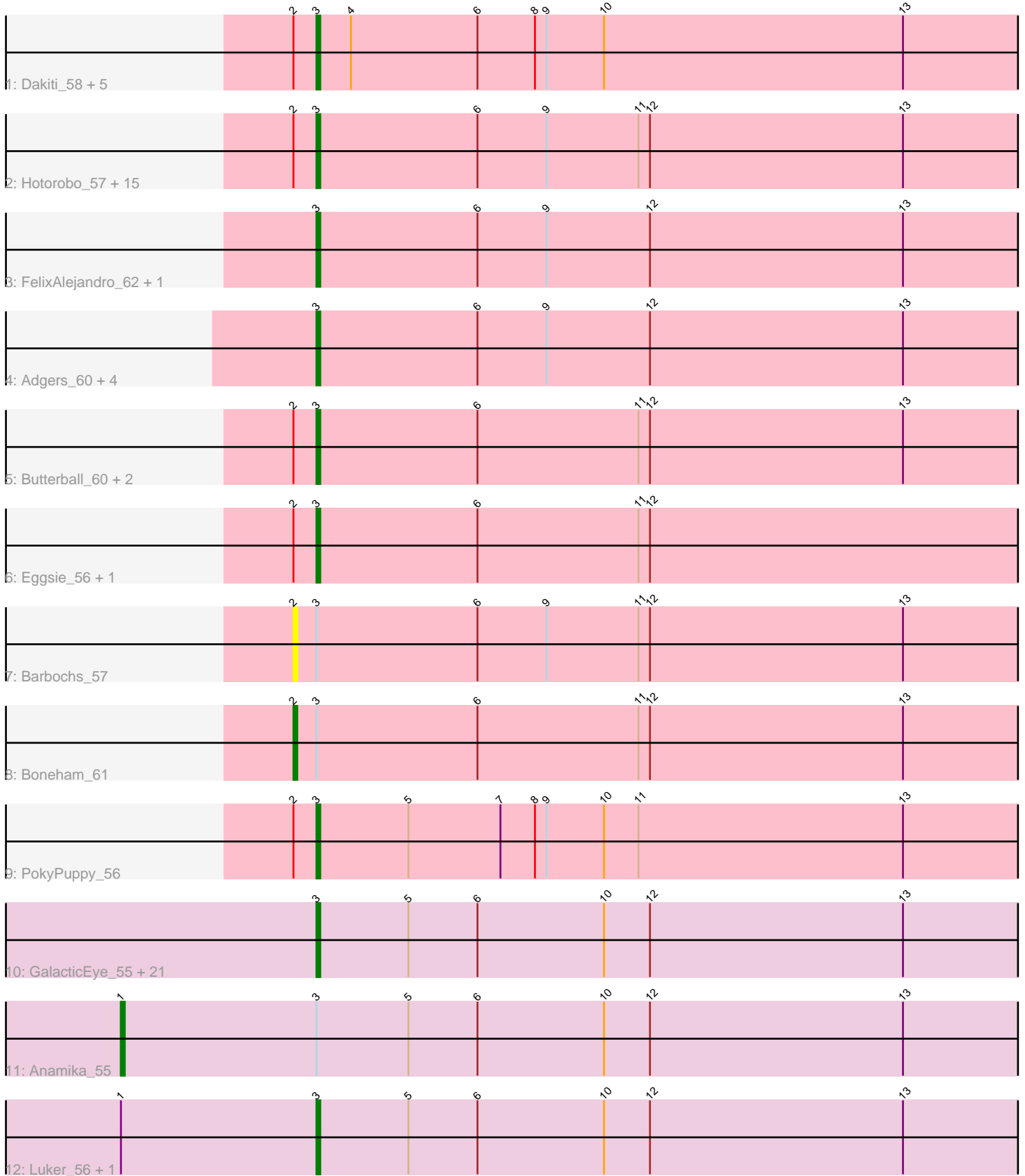


Pham 196547



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 196547 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196547 has 62 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Dakiti\_58, BigShaq\_56, PierreThree\_56, Chelms\_57, BenoitCattle\_57, Linetti\_57
- Track 2 : Hotorobo\_57, Flakey\_56, Monty\_56, Squibbles\_56, BirksAndSocks\_62, Exiguo\_56, RemRem\_58, Lizzo\_57, John316\_60, Sam12\_56, Breezic\_57, GourdThymes\_57, Gorko\_56, CathyBurgh\_56, Ekhein\_57, Beaver\_60
- Track 3 : FelixAlejandro\_62, Sombrero\_58
- Track 4 : Adgers\_60, Poland\_62, Msay19\_62, CinnamonToast\_63, Jellybones\_59
- Track 5 : Butterball\_60, SteveFrench\_56, RoyalG\_57
- Track 6 : Eggsie\_56, Diabla\_61
- Track 7 : Barbochs\_57
- Track 8 : Boneham\_61
- Track 9 : PokyPuppy\_56
- Track 10 : GalacticEye\_55, Woes\_55, Bianmat\_55, Sticker17\_55, Berries\_55, Hello\_55, Jams\_55, Guillaume\_55, Harambe\_55, Lahirium\_55, Shelley\_55, Teal\_55, Newt\_56, Kaseim\_55, MrWormie\_55, Neoevie\_55, Minos\_56, Jormungandr\_55, Charianelly\_55, Nimi13\_55, Damp\_55, Lidong\_55
- Track 11 : Anamika\_55
- Track 12 : Luker\_56, Hail2Pitt\_54

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

The start number called the most often in the published annotations is 3, it was called in 53 of the 55 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adgers\_60, Beaver\_60, BenoitCattle\_57, Berries\_55, Bianmat\_55, BigShaq\_56, BirksAndSocks\_62, Breezic\_57, Butterball\_60, CathyBurgh\_56, Charianelly\_55, Chelms\_57, CinnamonToast\_63, Dakiti\_58, Damp\_55, Diabla\_61, Eggsie\_56, Ekhein\_57, Exiguo\_56, FelixAlejandro\_62, Flakey\_56, GalacticEye\_55, Gorko\_56, GourdThymes\_57, Guillaume\_55, Hail2Pitt\_54, Harambe\_55, Hello\_55, Hotorobo\_57, Jams\_55, Jellybones\_59, John316\_60, Jormungandr\_55, Kaseim\_55, Lahirium\_55, Lidong\_55, Linetti\_57, Lizzo\_57, Luker\_56, Minos\_56, Monty\_56, MrWormie\_55, Msay19\_62, Neoevie\_55, Newt\_56, Nimi13\_55, PierreThree\_56, PokyPuppy\_56, Poland\_62, RemRem\_58, RoyalG\_57, Sam12\_56, Shelley\_55,

Sombrero\_58, Squibbles\_56, SteveFrench\_56, Sticker17\_55, Teal\_55, Woes\_55,

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

- Anamika\_55, Barbochs\_57, Boneham\_61,

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

- 

### Summary by start number:

Start 1:

- Found in 3 of 62 ( 4.8% ) 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: Anamika\_55 (CS3),

Start 2:

- Found in 30 of 62 ( 48.4% ) of genes in pham
- Manual Annotations of this start: 1 of 55
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Barbochs\_57 (CS2), Boneham\_61 (CS2),

Start 3:

- Found in 62 of 62 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 53 of 55
- Called 95.2% of time when present
- Phage (with cluster) where this start called: Adgers\_60 (CS2), Beaver\_60 (CS2), BenoitCattle\_57 (CS2), Berries\_55 (CS3), Bianmat\_55 (CS3), BigShaq\_56 (CS2), BirksAndSocks\_62 (CS2), Breezic\_57 (CS2), Butterball\_60 (CS2), CathyBurgh\_56 (CS2), Charianelly\_55 (CS3), Chelms\_57 (CS2), CinnamonToast\_63 (CS2), Dakiti\_58 (CS2), Damp\_55 (CS3), Diabla\_61 (CS2), Eggsie\_56 (CS2), Ekhein\_57 (CS2), Exiguo\_56 (CS2), FelixAlejandro\_62 (CS2), Flakey\_56 (CS2), GalacticEye\_55 (CS3), Gorko\_56 (CS2), GourdThymes\_57 (CS2), Guillaume\_55 (CS3), Hail2Pitt\_54 (CS3), Harambe\_55 (CS3), Hello\_55 (CS3), Hotorobo\_57 (CS2), Jams\_55 (CS3), Jellybones\_59 (CS2), John316\_60 (CS2), Jormungandr\_55 (CS3), Kaseim\_55 (CS3), Lahirium\_55 (CS3), Lidong\_55 (CS3), Linetti\_57 (CS2), Lizzo\_57 (CS2), Luker\_56 (CS3), Minos\_56 (CS3), Monty\_56 (CS2), MrWormie\_55 (CS3), Msay19\_62 (CS2), Neoevie\_55 (CS3), Newt\_56 (CS3), Nimi13\_55 (CS3), PierreThree\_56 (CS2), PokyPuppy\_56 (CS2), Poland\_62 (CS2), RemRem\_58 (CS2), RoyalG\_57 (CS2), Sam12\_56 (CS2), Shelley\_55 (CS3), Sombrero\_58 (CS2), Squibbles\_56 (CS2), SteveFrench\_56 (CS2), Sticker17\_55 (CS3), Teal\_55 (CS3), Woes\_55 (CS3),

### Summary by clusters:

There are 2 clusters represented in this pham: CS3, CS2,

Info for manual annotations of cluster CS2:

- Start number 2 was manually annotated 1 time for cluster CS2.
- Start number 3 was manually annotated 30 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 1 was manually annotated 1 time for cluster CS3.

- Start number 3 was manually annotated 23 times for cluster CS3.

### **Gene Information:**

Gene: Adgers\_60 Start: 50114, Stop: 49920, Start Num: 3

Candidate Starts for Adgers\_60:

(Start: 3 @50114 has 53 MA's), (6, 50072), (9, 50054), (12, 50027), (13, 49961),

Gene: Anamika\_55 Start: 50962, Stop: 50717, Start Num: 1

Candidate Starts for Anamika\_55:

(Start: 1 @50962 has 1 MA's), (Start: 3 @50911 has 53 MA's), (5, 50887), (6, 50869), (10, 50836), (12, 50824), (13, 50758),

Gene: Barbochs\_57 Start: 49664, Stop: 49464, Start Num: 2

Candidate Starts for Barbochs\_57:

(Start: 2 @49664 has 1 MA's), (Start: 3 @49658 has 53 MA's), (6, 49616), (9, 49598), (11, 49574), (12, 49571), (13, 49505),

Gene: Beaver\_60 Start: 51428, Stop: 51234, Start Num: 3

Candidate Starts for Beaver\_60:

(Start: 2 @51434 has 1 MA's), (Start: 3 @51428 has 53 MA's), (6, 51386), (9, 51368), (11, 51344), (12, 51341), (13, 51275),

Gene: BenoitCattle\_57 Start: 50065, Stop: 49871, Start Num: 3

Candidate Starts for BenoitCattle\_57:

(Start: 2 @50071 has 1 MA's), (Start: 3 @50065 has 53 MA's), (4, 50056), (6, 50023), (8, 50008), (9, 50005), (10, 49990), (13, 49912),

Gene: Berries\_55 Start: 50883, Stop: 50689, Start Num: 3

Candidate Starts for Berries\_55:

(Start: 3 @50883 has 53 MA's), (5, 50859), (6, 50841), (10, 50808), (12, 50796), (13, 50730),

Gene: Bianmat\_55 Start: 50923, Stop: 50729, Start Num: 3

Candidate Starts for Bianmat\_55:

(Start: 3 @50923 has 53 MA's), (5, 50899), (6, 50881), (10, 50848), (12, 50836), (13, 50770),

Gene: BigShaq\_56 Start: 50070, Stop: 49876, Start Num: 3

Candidate Starts for BigShaq\_56:

(Start: 2 @50076 has 1 MA's), (Start: 3 @50070 has 53 MA's), (4, 50061), (6, 50028), (8, 50013), (9, 50010), (10, 49995), (13, 49917),

Gene: BirksAndSocks\_62 Start: 51778, Stop: 51584, Start Num: 3

Candidate Starts for BirksAndSocks\_62:

(Start: 2 @51784 has 1 MA's), (Start: 3 @51778 has 53 MA's), (6, 51736), (9, 51718), (11, 51694), (12, 51691), (13, 51625),

Gene: Boneham\_61 Start: 51685, Stop: 51485, Start Num: 2

Candidate Starts for Boneham\_61:

(Start: 2 @51685 has 1 MA's), (Start: 3 @51679 has 53 MA's), (6, 51637), (11, 51595), (12, 51592), (13, 51526),

Gene: Breezic\_57 Start: 49671, Stop: 49477, Start Num: 3

Candidate Starts for Breezic\_57:

(Start: 2 @49677 has 1 MA's), (Start: 3 @49671 has 53 MA's), (6, 49629), (9, 49611), (11, 49587), (12, 49584), (13, 49518),

Gene: Butterball\_60 Start: 51684, Stop: 51490, Start Num: 3

Candidate Starts for Butterball\_60:

(Start: 2 @51690 has 1 MA's), (Start: 3 @51684 has 53 MA's), (6, 51642), (11, 51600), (12, 51597), (13, 51531),

Gene: CathyBurgh\_56 Start: 50248, Stop: 50054, Start Num: 3

Candidate Starts for CathyBurgh\_56:

(Start: 2 @50254 has 1 MA's), (Start: 3 @50248 has 53 MA's), (6, 50206), (9, 50188), (11, 50164), (12, 50161), (13, 50095),

Gene: Charianelly\_55 Start: 50633, Stop: 50439, Start Num: 3

Candidate Starts for Charianelly\_55:

(Start: 3 @50633 has 53 MA's), (5, 50609), (6, 50591), (10, 50558), (12, 50546), (13, 50480),

Gene: Chelms\_57 Start: 50214, Stop: 50020, Start Num: 3

Candidate Starts for Chelms\_57:

(Start: 2 @50220 has 1 MA's), (Start: 3 @50214 has 53 MA's), (4, 50205), (6, 50172), (8, 50157), (9, 50154), (10, 50139), (13, 50061),

Gene: CinnamonToast\_63 Start: 51738, Stop: 51544, Start Num: 3

Candidate Starts for CinnamonToast\_63:

(Start: 3 @51738 has 53 MA's), (6, 51696), (9, 51678), (12, 51651), (13, 51585),

Gene: Dakiti\_58 Start: 51082, Stop: 50888, Start Num: 3

Candidate Starts for Dakiti\_58:

(Start: 2 @51088 has 1 MA's), (Start: 3 @51082 has 53 MA's), (4, 51073), (6, 51040), (8, 51025), (9, 51022), (10, 51007), (13, 50929),

Gene: Damp\_55 Start: 49797, Stop: 49603, Start Num: 3

Candidate Starts for Damp\_55:

(Start: 3 @49797 has 53 MA's), (5, 49773), (6, 49755), (10, 49722), (12, 49710), (13, 49644),

Gene: Diabla\_61 Start: 51737, Stop: 51543, Start Num: 3

Candidate Starts for Diabla\_61:

(Start: 2 @51743 has 1 MA's), (Start: 3 @51737 has 53 MA's), (6, 51695), (11, 51653), (12, 51650),

Gene: Eggsie\_56 Start: 49514, Stop: 49320, Start Num: 3

Candidate Starts for Eggsie\_56:

(Start: 2 @49520 has 1 MA's), (Start: 3 @49514 has 53 MA's), (6, 49472), (11, 49430), (12, 49427),

Gene: Ekhein\_57 Start: 49376, Stop: 49182, Start Num: 3

Candidate Starts for Ekhein\_57:

(Start: 2 @49382 has 1 MA's), (Start: 3 @49376 has 53 MA's), (6, 49334), (9, 49316), (11, 49292), (12, 49289), (13, 49223),

Gene: Exiguo\_56 Start: 49388, Stop: 49194, Start Num: 3

Candidate Starts for Exiguo\_56:

(Start: 2 @49394 has 1 MA's), (Start: 3 @49388 has 53 MA's), (6, 49346), (9, 49328), (11, 49304), (12, 49301), (13, 49235),

Gene: FelixAlejandro\_62 Start: 52082, Stop: 51888, Start Num: 3  
Candidate Starts for FelixAlejandro\_62:  
(Start: 3 @52082 has 53 MA's), (6, 52040), (9, 52022), (12, 51995), (13, 51929),

Gene: Flakey\_56 Start: 50252, Stop: 50058, Start Num: 3  
Candidate Starts for Flakey\_56:  
(Start: 2 @50258 has 1 MA's), (Start: 3 @50252 has 53 MA's), (6, 50210), (9, 50192), (11, 50168), (12, 50165), (13, 50099),

Gene: GalacticEye\_55 Start: 50594, Stop: 50400, Start Num: 3  
Candidate Starts for GalacticEye\_55:  
(Start: 3 @50594 has 53 MA's), (5, 50570), (6, 50552), (10, 50519), (12, 50507), (13, 50441),

Gene: Gorko\_56 Start: 49380, Stop: 49186, Start Num: 3  
Candidate Starts for Gorko\_56:  
(Start: 2 @49386 has 1 MA's), (Start: 3 @49380 has 53 MA's), (6, 49338), (9, 49320), (11, 49296), (12, 49293), (13, 49227),

Gene: GourdThymes\_57 Start: 50254, Stop: 50060, Start Num: 3  
Candidate Starts for GourdThymes\_57:  
(Start: 2 @50260 has 1 MA's), (Start: 3 @50254 has 53 MA's), (6, 50212), (9, 50194), (11, 50170), (12, 50167), (13, 50101),

Gene: Guillaume\_55 Start: 50644, Stop: 50450, Start Num: 3  
Candidate Starts for Guillaume\_55:  
(Start: 3 @50644 has 53 MA's), (5, 50620), (6, 50602), (10, 50569), (12, 50557), (13, 50491),

Gene: Hail2Pitt\_54 Start: 51120, Stop: 50926, Start Num: 3  
Candidate Starts for Hail2Pitt\_54:  
(Start: 1 @51171 has 1 MA's), (Start: 3 @51120 has 53 MA's), (5, 51096), (6, 51078), (10, 51045), (12, 51033), (13, 50967),

Gene: Harambe\_55 Start: 50911, Stop: 50717, Start Num: 3  
Candidate Starts for Harambe\_55:  
(Start: 3 @50911 has 53 MA's), (5, 50887), (6, 50869), (10, 50836), (12, 50824), (13, 50758),

Gene: Hello\_55 Start: 50873, Stop: 50679, Start Num: 3  
Candidate Starts for Hello\_55:  
(Start: 3 @50873 has 53 MA's), (5, 50849), (6, 50831), (10, 50798), (12, 50786), (13, 50720),

Gene: Hotorobo\_57 Start: 50259, Stop: 50065, Start Num: 3  
Candidate Starts for Hotorobo\_57:  
(Start: 2 @50265 has 1 MA's), (Start: 3 @50259 has 53 MA's), (6, 50217), (9, 50199), (11, 50175), (12, 50172), (13, 50106),

Gene: Jams\_55 Start: 50083, Stop: 49889, Start Num: 3  
Candidate Starts for Jams\_55:  
(Start: 3 @50083 has 53 MA's), (5, 50059), (6, 50041), (10, 50008), (12, 49996), (13, 49930),

Gene: Jellybones\_59 Start: 51354, Stop: 51160, Start Num: 3

Candidate Starts for Jellybones\_59:

(Start: 3 @51354 has 53 MA's), (6, 51312), (9, 51294), (12, 51267), (13, 51201),

Gene: John316\_60 Start: 51417, Stop: 51223, Start Num: 3

Candidate Starts for John316\_60:

(Start: 2 @51423 has 1 MA's), (Start: 3 @51417 has 53 MA's), (6, 51375), (9, 51357), (11, 51333), (12, 51330), (13, 51264),

Gene: Jormungandr\_55 Start: 50626, Stop: 50432, Start Num: 3

Candidate Starts for Jormungandr\_55:

(Start: 3 @50626 has 53 MA's), (5, 50602), (6, 50584), (10, 50551), (12, 50539), (13, 50473),

Gene: Kaseim\_55 Start: 50068, Stop: 49874, Start Num: 3

Candidate Starts for Kaseim\_55:

(Start: 3 @50068 has 53 MA's), (5, 50044), (6, 50026), (10, 49993), (12, 49981), (13, 49915),

Gene: Lahirium\_55 Start: 51148, Stop: 50954, Start Num: 3

Candidate Starts for Lahirium\_55:

(Start: 3 @51148 has 53 MA's), (5, 51124), (6, 51106), (10, 51073), (12, 51061), (13, 50995),

Gene: Lidong\_55 Start: 50883, Stop: 50689, Start Num: 3

Candidate Starts for Lidong\_55:

(Start: 3 @50883 has 53 MA's), (5, 50859), (6, 50841), (10, 50808), (12, 50796), (13, 50730),

Gene: Linetti\_57 Start: 51067, Stop: 50873, Start Num: 3

Candidate Starts for Linetti\_57:

(Start: 2 @51073 has 1 MA's), (Start: 3 @51067 has 53 MA's), (4, 51058), (6, 51025), (8, 51010), (9, 51007), (10, 50992), (13, 50914),

Gene: Lizzo\_57 Start: 50248, Stop: 50054, Start Num: 3

Candidate Starts for Lizzo\_57:

(Start: 2 @50254 has 1 MA's), (Start: 3 @50248 has 53 MA's), (6, 50206), (9, 50188), (11, 50164), (12, 50161), (13, 50095),

Gene: Luker\_56 Start: 51101, Stop: 50907, Start Num: 3

Candidate Starts for Luker\_56:

(Start: 1 @51152 has 1 MA's), (Start: 3 @51101 has 53 MA's), (5, 51077), (6, 51059), (10, 51026), (12, 51014), (13, 50948),

Gene: Minos\_56 Start: 50625, Stop: 50431, Start Num: 3

Candidate Starts for Minos\_56:

(Start: 3 @50625 has 53 MA's), (5, 50601), (6, 50583), (10, 50550), (12, 50538), (13, 50472),

Gene: Monty\_56 Start: 49398, Stop: 49204, Start Num: 3

Candidate Starts for Monty\_56:

(Start: 2 @49404 has 1 MA's), (Start: 3 @49398 has 53 MA's), (6, 49356), (9, 49338), (11, 49314), (12, 49311), (13, 49245),

Gene: MrWormie\_55 Start: 49786, Stop: 49592, Start Num: 3

Candidate Starts for MrWormie\_55:

(Start: 3 @49786 has 53 MA's), (5, 49762), (6, 49744), (10, 49711), (12, 49699), (13, 49633),

Gene: Msay19\_62 Start: 51968, Stop: 51774, Start Num: 3

Candidate Starts for Msay19\_62:

(Start: 3 @51968 has 53 MA's), (6, 51926), (9, 51908), (12, 51881), (13, 51815),

Gene: Neoevie\_55 Start: 50887, Stop: 50693, Start Num: 3

Candidate Starts for Neoevie\_55:

(Start: 3 @50887 has 53 MA's), (5, 50863), (6, 50845), (10, 50812), (12, 50800), (13, 50734),

Gene: Newt\_56 Start: 51115, Stop: 50921, Start Num: 3

Candidate Starts for Newt\_56:

(Start: 3 @51115 has 53 MA's), (5, 51091), (6, 51073), (10, 51040), (12, 51028), (13, 50962),

Gene: Nimi13\_55 Start: 50634, Stop: 50440, Start Num: 3

Candidate Starts for Nimi13\_55:

(Start: 3 @50634 has 53 MA's), (5, 50610), (6, 50592), (10, 50559), (12, 50547), (13, 50481),

Gene: PierreThree\_56 Start: 50713, Stop: 50519, Start Num: 3

Candidate Starts for PierreThree\_56:

(Start: 2 @50719 has 1 MA's), (Start: 3 @50713 has 53 MA's), (4, 50704), (6, 50671), (8, 50656), (9, 50653), (10, 50638), (13, 50560),

Gene: PokyPuppy\_56 Start: 50707, Stop: 50513, Start Num: 3

Candidate Starts for PokyPuppy\_56:

(Start: 2 @50713 has 1 MA's), (Start: 3 @50707 has 53 MA's), (5, 50683), (7, 50659), (8, 50650), (9, 50647), (10, 50632), (11, 50623), (13, 50554),

Gene: Poland\_62 Start: 51947, Stop: 51753, Start Num: 3

Candidate Starts for Poland\_62:

(Start: 3 @51947 has 53 MA's), (6, 51905), (9, 51887), (12, 51860), (13, 51794),

Gene: RemRem\_58 Start: 49388, Stop: 49194, Start Num: 3

Candidate Starts for RemRem\_58:

(Start: 2 @49394 has 1 MA's), (Start: 3 @49388 has 53 MA's), (6, 49346), (9, 49328), (11, 49304), (12, 49301), (13, 49235),

Gene: RoyalG\_57 Start: 50163, Stop: 49969, Start Num: 3

Candidate Starts for RoyalG\_57:

(Start: 2 @50169 has 1 MA's), (Start: 3 @50163 has 53 MA's), (6, 50121), (11, 50079), (12, 50076), (13, 50010),

Gene: Sam12\_56 Start: 49388, Stop: 49194, Start Num: 3

Candidate Starts for Sam12\_56:

(Start: 2 @49394 has 1 MA's), (Start: 3 @49388 has 53 MA's), (6, 49346), (9, 49328), (11, 49304), (12, 49301), (13, 49235),

Gene: Shelley\_55 Start: 50110, Stop: 49916, Start Num: 3

Candidate Starts for Shelley\_55:

(Start: 3 @50110 has 53 MA's), (5, 50086), (6, 50068), (10, 50035), (12, 50023), (13, 49957),

Gene: Sombrero\_58 Start: 49955, Stop: 49761, Start Num: 3

Candidate Starts for Sombrero\_58:

(Start: 3 @49955 has 53 MA's), (6, 49913), (9, 49895), (12, 49868), (13, 49802),

Gene: Squibbles\_56 Start: 50251, Stop: 50057, Start Num: 3



Candidate Starts for Squibbles\_56:

(Start: 2 @50257 has 1 MA's), (Start: 3 @50251 has 53 MA's), (6, 50209), (9, 50191), (11, 50167), (12, 50164), (13, 50098),

Gene: SteveFrench\_56 Start: 50403, Stop: 50209, Start Num: 3

Candidate Starts for SteveFrench\_56:

(Start: 2 @50409 has 1 MA's), (Start: 3 @50403 has 53 MA's), (6, 50361), (11, 50319), (12, 50316), (13, 50250),

Gene: Sticker17\_55 Start: 50625, Stop: 50431, Start Num: 3

Candidate Starts for Sticker17\_55:

(Start: 3 @50625 has 53 MA's), (5, 50601), (6, 50583), (10, 50550), (12, 50538), (13, 50472),

Gene: Teal\_55 Start: 51092, Stop: 50898, Start Num: 3

Candidate Starts for Teal\_55:

(Start: 3 @51092 has 53 MA's), (5, 51068), (6, 51050), (10, 51017), (12, 51005), (13, 50939),

Gene: Woes\_55 Start: 51143, Stop: 50949, Start Num: 3

Candidate Starts for Woes\_55:

(Start: 3 @51143 has 53 MA's), (5, 51119), (6, 51101), (10, 51068), (12, 51056), (13, 50990),