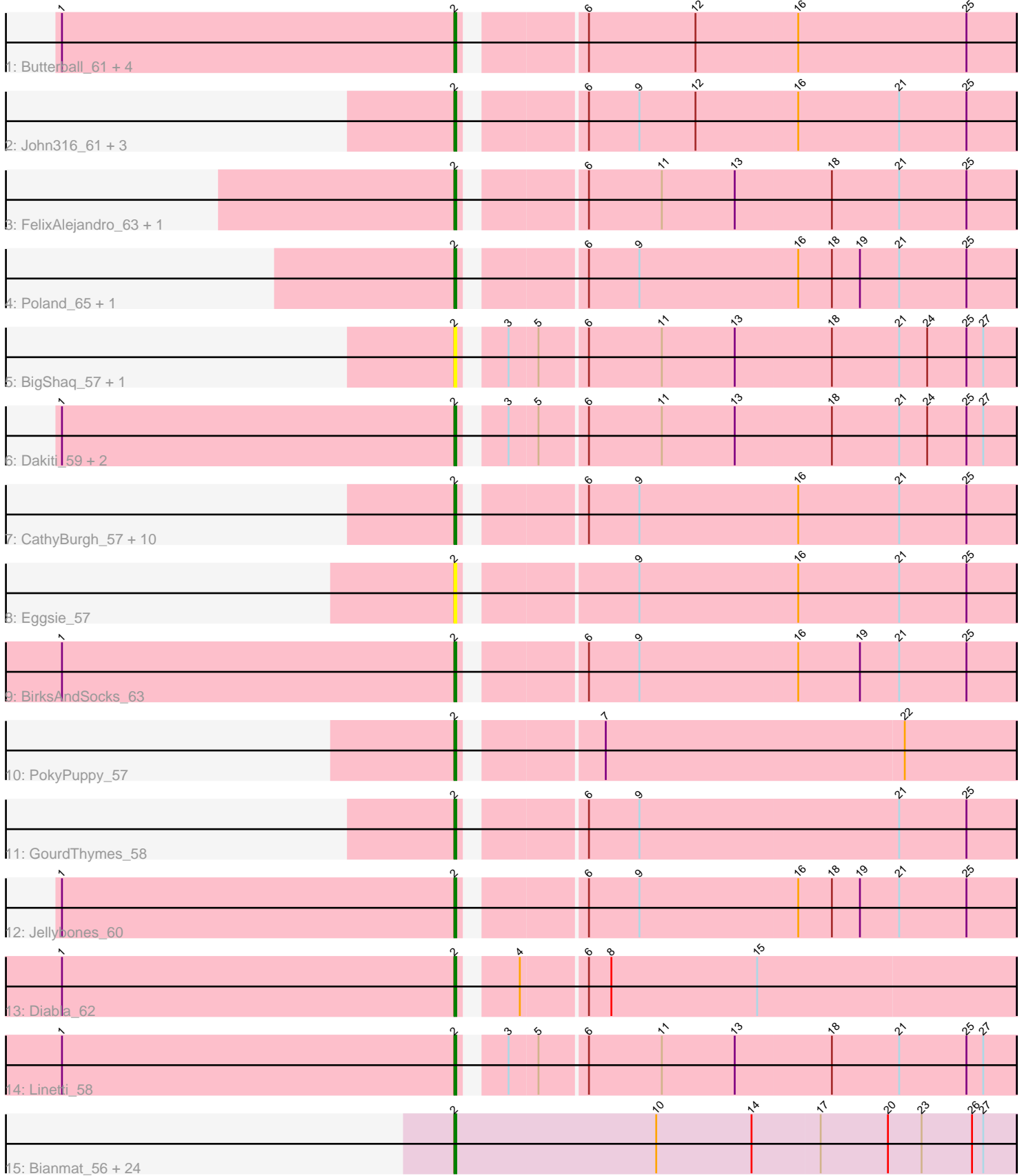


Pham 171470



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 171470 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171470 has 61 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Butterball\_61, Adgers\_61, SteveFrench\_57, RoyalG\_58, Boneham\_62
- Track 2 : John316\_61, Monty\_57, Hotorobo\_58, Gorko\_57
- Track 3 : FelixAlejandro\_63, Sombrero\_59
- Track 4 : Poland\_65, Msay19\_63
- Track 5 : BigShaq\_57, BenoitCattle\_59
- Track 6 : Dakiti\_59, PierreThree\_57, Chelms\_58
- Track 7 : CathyBurgh\_57, Beaver\_61, Lizzo\_58, Barbochs\_58, Exiguo\_57, Flakey\_57, Sam12\_57, Breezic\_58, RemRem\_59, Squibbles\_57, Ekhein\_58
- Track 8 : Eggsie\_57
- Track 9 : BirksAndSocks\_63
- Track 10 : PokyPuppy\_57
- Track 11 : GourdThymes\_58
- Track 12 : Jellybones\_60
- Track 13 : Diabla\_62
- Track 14 : Linetti\_58
- Track 15 : Bianmat\_56, Jormungandr\_56, GalacticEye\_56, Berries\_56, Hello\_56, Harambe\_56, Guillaume\_56, Jams\_56, Anamika\_56, Luker\_57, MrWormie\_56, Hail2Pitt\_55, Lahirium\_56, Newt\_57, Woes\_56, Teal\_56, Shelley\_56, Kaseim\_56, Neevie\_56, Sticker17\_56, Minos\_57, Charianelly\_56, Nimi13\_56, Damp\_54, Lidong\_56

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

The start number called the most often in the published annotations is 2, it was called in 52 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adgers\_61, Anamika\_56, Barbochs\_58, Beaver\_61, BenoitCattle\_59, Berries\_56, Bianmat\_56, BigShaq\_57, BirksAndSocks\_63, Boneham\_62, Breezic\_58, Butterball\_61, CathyBurgh\_57, Charianelly\_56, Chelms\_58, Dakiti\_59, Damp\_54, Diabla\_62, Eggsie\_57, Ekhein\_58, Exiguo\_57, FelixAlejandro\_63, Flakey\_57, GalacticEye\_56, Gorko\_57, GourdThymes\_58, Guillaume\_56, Hail2Pitt\_55, Harambe\_56, Hello\_56, Hotorobo\_58, Jams\_56, Jellybones\_60, John316\_61, Jormungandr\_56, Kaseim\_56, Lahirium\_56, Lidong\_56, Linetti\_58, Lizzo\_58,

Luker\_57, Minos\_57, Monty\_57, MrWormie\_56, Msay19\_63, Neoevie\_56, Newt\_57, Nimi13\_56, PierreThree\_57, PokyPuppy\_57, Poland\_65, RemRem\_59, RoyalG\_58, Sam12\_57, Shelley\_56, Sombrero\_59, Squibbles\_57, SteveFrench\_57, Sticker17\_56, Teal\_56, Woes\_56,

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

- 

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

- 

### Summary by start number:

Start 2:

- Found in 61 of 61 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 52 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adgers\_61 (CS2), Anamika\_56 (CS3), Barbochs\_58 (CS2), Beaver\_61 (CS2), BenoitCattle\_59 (CS2), Berries\_56 (CS3), Bianmat\_56 (CS3), BigShaq\_57 (CS2), BirksAndSocks\_63 (CS2), Boneham\_62 (CS2), Breezic\_58 (CS2), Butterball\_61 (CS2), CathyBurgh\_57 (CS2), Charianelly\_56 (CS3), Chelms\_58 (CS2), Dakiti\_59 (CS2), Damp\_54 (CS3), Diabla\_62 (CS2), Eggsie\_57 (CS2), Ekhein\_58 (CS2), Exiguo\_57 (CS2), FelixAlejandro\_63 (CS2), Flakey\_57 (CS2), GalacticEye\_56 (CS3), Gorko\_57 (CS2), GourdThymes\_58 (CS2), Guillaume\_56 (CS3), Hail2Pitt\_55 (CS3), Harambe\_56 (CS3), Hello\_56 (CS3), Hotorobo\_58 (CS2), Jams\_56 (CS3), Jellybones\_60 (CS2), John316\_61 (CS2), Jormungandr\_56 (CS3), Kaseim\_56 (CS3), Lahirium\_56 (CS3), Lidong\_56 (CS3), Linetti\_58 (CS2), Lizzo\_58 (CS2), Luker\_57 (CS3), Minos\_57 (CS3), Monty\_57 (CS2), MrWormie\_56 (CS3), Msay19\_63 (CS2), Neoevie\_56 (CS3), Newt\_57 (CS3), Nimi13\_56 (CS3), PierreThree\_57 (CS2), PokyPuppy\_57 (CS2), Poland\_65 (CS2), RemRem\_59 (CS2), RoyalG\_58 (CS2), Sam12\_57 (CS2), Shelley\_56 (CS3), Sombrero\_59 (CS2), Squibbles\_57 (CS2), SteveFrench\_57 (CS2), Sticker17\_56 (CS3), Teal\_56 (CS3), Woes\_56 (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 29 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 2 was manually annotated 23 times for cluster CS3.

### Gene Information:

Gene: Adgers\_61 Start: 50663, Stop: 50379, Start Num: 2

Candidate Starts for Adgers\_61:

(1, 50873), (Start: 2 @50663 has 52 MA's), (6, 50606), (12, 50549), (16, 50495), (25, 50405),

Gene: Anamika\_56 Start: 51478, Stop: 51179, Start Num: 2

Candidate Starts for Anamika\_56:

(Start: 2 @51478 has 52 MA's), (10, 51370), (14, 51319), (17, 51283), (20, 51247), (23, 51229), (26, 51202), (27, 51196),

Gene: Barbochs\_58 Start: 50207, Stop: 49923, Start Num: 2

Candidate Starts for Barbochs\_58:

(Start: 2 @50207 has 52 MA's), (6, 50150), (9, 50123), (16, 50039), (21, 49985), (25, 49949),

Gene: Beaver\_61 Start: 51977, Stop: 51693, Start Num: 2

Candidate Starts for Beaver\_61:

(Start: 2 @51977 has 52 MA's), (6, 51920), (9, 51893), (16, 51809), (21, 51755), (25, 51719),

Gene: BenoitCattle\_59 Start: 50614, Stop: 50330, Start Num: 2

Candidate Starts for BenoitCattle\_59:

(Start: 2 @50614 has 52 MA's), (3, 50596), (5, 50581), (6, 50557), (11, 50518), (13, 50479), (18, 50428), (21, 50392), (24, 50377), (25, 50356), (27, 50347),

Gene: Berries\_56 Start: 51450, Stop: 51151, Start Num: 2

Candidate Starts for Berries\_56:

(Start: 2 @51450 has 52 MA's), (10, 51342), (14, 51291), (17, 51255), (20, 51219), (23, 51201), (26, 51174), (27, 51168),

Gene: Bianmat\_56 Start: 51490, Stop: 51191, Start Num: 2

Candidate Starts for Bianmat\_56:

(Start: 2 @51490 has 52 MA's), (10, 51382), (14, 51331), (17, 51295), (20, 51259), (23, 51241), (26, 51214), (27, 51208),

Gene: BigShaq\_57 Start: 50619, Stop: 50335, Start Num: 2

Candidate Starts for BigShaq\_57:

(Start: 2 @50619 has 52 MA's), (3, 50601), (5, 50586), (6, 50562), (11, 50523), (13, 50484), (18, 50433), (21, 50397), (24, 50382), (25, 50361), (27, 50352),

Gene: BirksAndSocks\_63 Start: 52327, Stop: 52043, Start Num: 2

Candidate Starts for BirksAndSocks\_63:

(1, 52537), (Start: 2 @52327 has 52 MA's), (6, 52270), (9, 52243), (16, 52159), (19, 52126), (21, 52105), (25, 52069),

Gene: Boneham\_62 Start: 52228, Stop: 51944, Start Num: 2

Candidate Starts for Boneham\_62:

(1, 52438), (Start: 2 @52228 has 52 MA's), (6, 52171), (12, 52114), (16, 52060), (25, 51970),

Gene: Breezic\_58 Start: 50220, Stop: 49936, Start Num: 2

Candidate Starts for Breezic\_58:

(Start: 2 @50220 has 52 MA's), (6, 50163), (9, 50136), (16, 50052), (21, 49998), (25, 49962),

Gene: Butterball\_61 Start: 52233, Stop: 51949, Start Num: 2

Candidate Starts for Butterball\_61:

(1, 52443), (Start: 2 @52233 has 52 MA's), (6, 52176), (12, 52119), (16, 52065), (25, 51975),

Gene: CathyBurgh\_57 Start: 50797, Stop: 50513, Start Num: 2

Candidate Starts for CathyBurgh\_57:

(Start: 2 @50797 has 52 MA's), (6, 50740), (9, 50713), (16, 50629), (21, 50575), (25, 50539),

Gene: Charianelly\_56 Start: 51200, Stop: 50901, Start Num: 2

Candidate Starts for Charianelly\_56:

(Start: 2 @51200 has 52 MA's), (10, 51092), (14, 51041), (17, 51005), (20, 50969), (23, 50951), (26, 50924), (27, 50918),

Gene: Chelms\_58 Start: 50763, Stop: 50479, Start Num: 2

Candidate Starts for Chelms\_58:

(1, 50973), (Start: 2 @50763 has 52 MA's), (3, 50745), (5, 50730), (6, 50706), (11, 50667), (13, 50628), (18, 50577), (21, 50541), (24, 50526), (25, 50505), (27, 50496),

Gene: Dakiti\_59 Start: 51631, Stop: 51347, Start Num: 2

Candidate Starts for Dakiti\_59:

(1, 51841), (Start: 2 @51631 has 52 MA's), (3, 51613), (5, 51598), (6, 51574), (11, 51535), (13, 51496), (18, 51445), (21, 51409), (24, 51394), (25, 51373), (27, 51364),

Gene: Damp\_54 Start: 50364, Stop: 50065, Start Num: 2

Candidate Starts for Damp\_54:

(Start: 2 @50364 has 52 MA's), (10, 50256), (14, 50205), (17, 50169), (20, 50133), (23, 50115), (26, 50088), (27, 50082),

Gene: Diabla\_62 Start: 52286, Stop: 52002, Start Num: 2

Candidate Starts for Diabla\_62:

(1, 52496), (Start: 2 @52286 has 52 MA's), (4, 52262), (6, 52229), (8, 52217), (15, 52139),

Gene: Eggsie\_57 Start: 50063, Stop: 49779, Start Num: 2

Candidate Starts for Eggsie\_57:

(Start: 2 @50063 has 52 MA's), (9, 49979), (16, 49895), (21, 49841), (25, 49805),

Gene: Ekhein\_58 Start: 49925, Stop: 49641, Start Num: 2

Candidate Starts for Ekhein\_58:

(Start: 2 @49925 has 52 MA's), (6, 49868), (9, 49841), (16, 49757), (21, 49703), (25, 49667),

Gene: Exiguo\_57 Start: 49937, Stop: 49653, Start Num: 2

Candidate Starts for Exiguo\_57:

(Start: 2 @49937 has 52 MA's), (6, 49880), (9, 49853), (16, 49769), (21, 49715), (25, 49679),

Gene: FelixAlejandro\_63 Start: 52631, Stop: 52347, Start Num: 2

Candidate Starts for FelixAlejandro\_63:

(Start: 2 @52631 has 52 MA's), (6, 52574), (11, 52535), (13, 52496), (18, 52445), (21, 52409), (25, 52373),

Gene: Flakey\_57 Start: 50801, Stop: 50517, Start Num: 2

Candidate Starts for Flakey\_57:

(Start: 2 @50801 has 52 MA's), (6, 50744), (9, 50717), (16, 50633), (21, 50579), (25, 50543),

Gene: GalacticEye\_56 Start: 51161, Stop: 50862, Start Num: 2

Candidate Starts for GalacticEye\_56:

(Start: 2 @51161 has 52 MA's), (10, 51053), (14, 51002), (17, 50966), (20, 50930), (23, 50912), (26, 50885), (27, 50879),

Gene: Gorko\_57 Start: 49929, Stop: 49645, Start Num: 2

Candidate Starts for Gorko\_57:

(Start: 2 @49929 has 52 MA's), (6, 49872), (9, 49845), (12, 49815), (16, 49761), (21, 49707), (25, 49671),

Gene: GourdThymes\_58 Start: 50803, Stop: 50519, Start Num: 2

Candidate Starts for GourdThymes\_58:

(Start: 2 @50803 has 52 MA's), (6, 50746), (9, 50719), (21, 50581), (25, 50545),

Gene: Guillaume\_56 Start: 51211, Stop: 50912, Start Num: 2

Candidate Starts for Guillaume\_56:

(Start: 2 @51211 has 52 MA's), (10, 51103), (14, 51052), (17, 51016), (20, 50980), (23, 50962), (26, 50935), (27, 50929),

Gene: Hail2Pitt\_55 Start: 51687, Stop: 51388, Start Num: 2

Candidate Starts for Hail2Pitt\_55:

(Start: 2 @51687 has 52 MA's), (10, 51579), (14, 51528), (17, 51492), (20, 51456), (23, 51438), (26, 51411), (27, 51405),

Gene: Harambe\_56 Start: 51478, Stop: 51179, Start Num: 2

Candidate Starts for Harambe\_56:

(Start: 2 @51478 has 52 MA's), (10, 51370), (14, 51319), (17, 51283), (20, 51247), (23, 51229), (26, 51202), (27, 51196),

Gene: Hello\_56 Start: 51440, Stop: 51141, Start Num: 2

Candidate Starts for Hello\_56:

(Start: 2 @51440 has 52 MA's), (10, 51332), (14, 51281), (17, 51245), (20, 51209), (23, 51191), (26, 51164), (27, 51158),

Gene: Hotorobo\_58 Start: 50808, Stop: 50524, Start Num: 2

Candidate Starts for Hotorobo\_58:

(Start: 2 @50808 has 52 MA's), (6, 50751), (9, 50724), (12, 50694), (16, 50640), (21, 50586), (25, 50550),

Gene: Jams\_56 Start: 50650, Stop: 50351, Start Num: 2

Candidate Starts for Jams\_56:

(Start: 2 @50650 has 52 MA's), (10, 50542), (14, 50491), (17, 50455), (20, 50419), (23, 50401), (26, 50374), (27, 50368),

Gene: Jellybones\_60 Start: 51903, Stop: 51619, Start Num: 2

Candidate Starts for Jellybones\_60:

(1, 52113), (Start: 2 @51903 has 52 MA's), (6, 51846), (9, 51819), (16, 51735), (18, 51717), (19, 51702), (21, 51681), (25, 51645),

Gene: John316\_61 Start: 51966, Stop: 51682, Start Num: 2

Candidate Starts for John316\_61:

(Start: 2 @51966 has 52 MA's), (6, 51909), (9, 51882), (12, 51852), (16, 51798), (21, 51744), (25, 51708),

Gene: Jormungandr\_56 Start: 51193, Stop: 50894, Start Num: 2

Candidate Starts for Jormungandr\_56:

(Start: 2 @51193 has 52 MA's), (10, 51085), (14, 51034), (17, 50998), (20, 50962), (23, 50944), (26, 50917), (27, 50911),

Gene: Kaseim\_56 Start: 50635, Stop: 50336, Start Num: 2

Candidate Starts for Kaseim\_56:

(Start: 2 @50635 has 52 MA's), (10, 50527), (14, 50476), (17, 50440), (20, 50404), (23, 50386), (26, 50359), (27, 50353),

Gene: Lahirium\_56 Start: 51715, Stop: 51416, Start Num: 2

Candidate Starts for Lahirium\_56:

(Start: 2 @51715 has 52 MA's), (10, 51607), (14, 51556), (17, 51520), (20, 51484), (23, 51466), (26, 51439), (27, 51433),

Gene: Lidong\_56 Start: 51450, Stop: 51151, Start Num: 2

Candidate Starts for Lidong\_56:

(Start: 2 @51450 has 52 MA's), (10, 51342), (14, 51291), (17, 51255), (20, 51219), (23, 51201), (26, 51174), (27, 51168),

Gene: Linetti\_58 Start: 51616, Stop: 51332, Start Num: 2

Candidate Starts for Linetti\_58:

(1, 51826), (Start: 2 @51616 has 52 MA's), (3, 51598), (5, 51583), (6, 51559), (11, 51520), (13, 51481), (18, 51430), (21, 51394), (25, 51358), (27, 51349),

Gene: Lizzo\_58 Start: 50797, Stop: 50513, Start Num: 2

Candidate Starts for Lizzo\_58:

(Start: 2 @50797 has 52 MA's), (6, 50740), (9, 50713), (16, 50629), (21, 50575), (25, 50539),

Gene: Luker\_57 Start: 51668, Stop: 51369, Start Num: 2

Candidate Starts for Luker\_57:

(Start: 2 @51668 has 52 MA's), (10, 51560), (14, 51509), (17, 51473), (20, 51437), (23, 51419), (26, 51392), (27, 51386),

Gene: Minos\_57 Start: 51192, Stop: 50893, Start Num: 2

Candidate Starts for Minos\_57:

(Start: 2 @51192 has 52 MA's), (10, 51084), (14, 51033), (17, 50997), (20, 50961), (23, 50943), (26, 50916), (27, 50910),

Gene: Monty\_57 Start: 49947, Stop: 49663, Start Num: 2

Candidate Starts for Monty\_57:

(Start: 2 @49947 has 52 MA's), (6, 49890), (9, 49863), (12, 49833), (16, 49779), (21, 49725), (25, 49689),

Gene: MrWormie\_56 Start: 50353, Stop: 50054, Start Num: 2

Candidate Starts for MrWormie\_56:

(Start: 2 @50353 has 52 MA's), (10, 50245), (14, 50194), (17, 50158), (20, 50122), (23, 50104), (26, 50077), (27, 50071),

Gene: Msay19\_63 Start: 52517, Stop: 52233, Start Num: 2

Candidate Starts for Msay19\_63:

(Start: 2 @52517 has 52 MA's), (6, 52460), (9, 52433), (16, 52349), (18, 52331), (19, 52316), (21, 52295), (25, 52259),

Gene: Neoevie\_56 Start: 51454, Stop: 51155, Start Num: 2

Candidate Starts for Neoevie\_56:

(Start: 2 @51454 has 52 MA's), (10, 51346), (14, 51295), (17, 51259), (20, 51223), (23, 51205), (26, 51178), (27, 51172),

Gene: Newt\_57 Start: 51682, Stop: 51383, Start Num: 2  
Candidate Starts for Newt\_57:  
(Start: 2 @51682 has 52 MA's), (10, 51574), (14, 51523), (17, 51487), (20, 51451), (23, 51433), (26, 51406), (27, 51400),

Gene: Nimi13\_56 Start: 51201, Stop: 50902, Start Num: 2  
Candidate Starts for Nimi13\_56:  
(Start: 2 @51201 has 52 MA's), (10, 51093), (14, 51042), (17, 51006), (20, 50970), (23, 50952), (26, 50925), (27, 50919),

Gene: PierreThree\_57 Start: 51262, Stop: 50978, Start Num: 2  
Candidate Starts for PierreThree\_57:  
(1, 51472), (Start: 2 @51262 has 52 MA's), (3, 51244), (5, 51229), (6, 51205), (11, 51166), (13, 51127), (18, 51076), (21, 51040), (24, 51025), (25, 51004), (27, 50995),

Gene: PokyPuppy\_57 Start: 51259, Stop: 50975, Start Num: 2  
Candidate Starts for PokyPuppy\_57:  
(Start: 2 @51259 has 52 MA's), (7, 51193), (22, 51034),

Gene: Poland\_65 Start: 52496, Stop: 52212, Start Num: 2  
Candidate Starts for Poland\_65:  
(Start: 2 @52496 has 52 MA's), (6, 52439), (9, 52412), (16, 52328), (18, 52310), (19, 52295), (21, 52274), (25, 52238),

Gene: RemRem\_59 Start: 49937, Stop: 49653, Start Num: 2  
Candidate Starts for RemRem\_59:  
(Start: 2 @49937 has 52 MA's), (6, 49880), (9, 49853), (16, 49769), (21, 49715), (25, 49679),

Gene: RoyalG\_58 Start: 50712, Stop: 50428, Start Num: 2  
Candidate Starts for RoyalG\_58:  
(1, 50922), (Start: 2 @50712 has 52 MA's), (6, 50655), (12, 50598), (16, 50544), (25, 50454),

Gene: Sam12\_57 Start: 49937, Stop: 49653, Start Num: 2  
Candidate Starts for Sam12\_57:  
(Start: 2 @49937 has 52 MA's), (6, 49880), (9, 49853), (16, 49769), (21, 49715), (25, 49679),

Gene: Shelley\_56 Start: 50677, Stop: 50378, Start Num: 2  
Candidate Starts for Shelley\_56:  
(Start: 2 @50677 has 52 MA's), (10, 50569), (14, 50518), (17, 50482), (20, 50446), (23, 50428), (26, 50401), (27, 50395),

Gene: Sombrero\_59 Start: 50504, Stop: 50220, Start Num: 2  
Candidate Starts for Sombrero\_59:  
(Start: 2 @50504 has 52 MA's), (6, 50447), (11, 50408), (13, 50369), (18, 50318), (21, 50282), (25, 50246),

Gene: Squibbles\_57 Start: 50800, Stop: 50516, Start Num: 2  
Candidate Starts for Squibbles\_57:  
(Start: 2 @50800 has 52 MA's), (6, 50743), (9, 50716), (16, 50632), (21, 50578), (25, 50542),

Gene: SteveFrench\_57 Start: 50952, Stop: 50668, Start Num: 2  
Candidate Starts for SteveFrench\_57:  
(1, 51162), (Start: 2 @50952 has 52 MA's), (6, 50895), (12, 50838), (16, 50784), (25, 50694),



Gene: Sticker17\_56 Start: 51192, Stop: 50893, Start Num: 2

Candidate Starts for Sticker17\_56:

(Start: 2 @51192 has 52 MA's), (10, 51084), (14, 51033), (17, 50997), (20, 50961), (23, 50943), (26, 50916), (27, 50910),

Gene: Teal\_56 Start: 51659, Stop: 51360, Start Num: 2

Candidate Starts for Teal\_56:

(Start: 2 @51659 has 52 MA's), (10, 51551), (14, 51500), (17, 51464), (20, 51428), (23, 51410), (26, 51383), (27, 51377),

Gene: Woes\_56 Start: 51710, Stop: 51411, Start Num: 2

Candidate Starts for Woes\_56:

(Start: 2 @51710 has 52 MA's), (10, 51602), (14, 51551), (17, 51515), (20, 51479), (23, 51461), (26, 51434), (27, 51428),