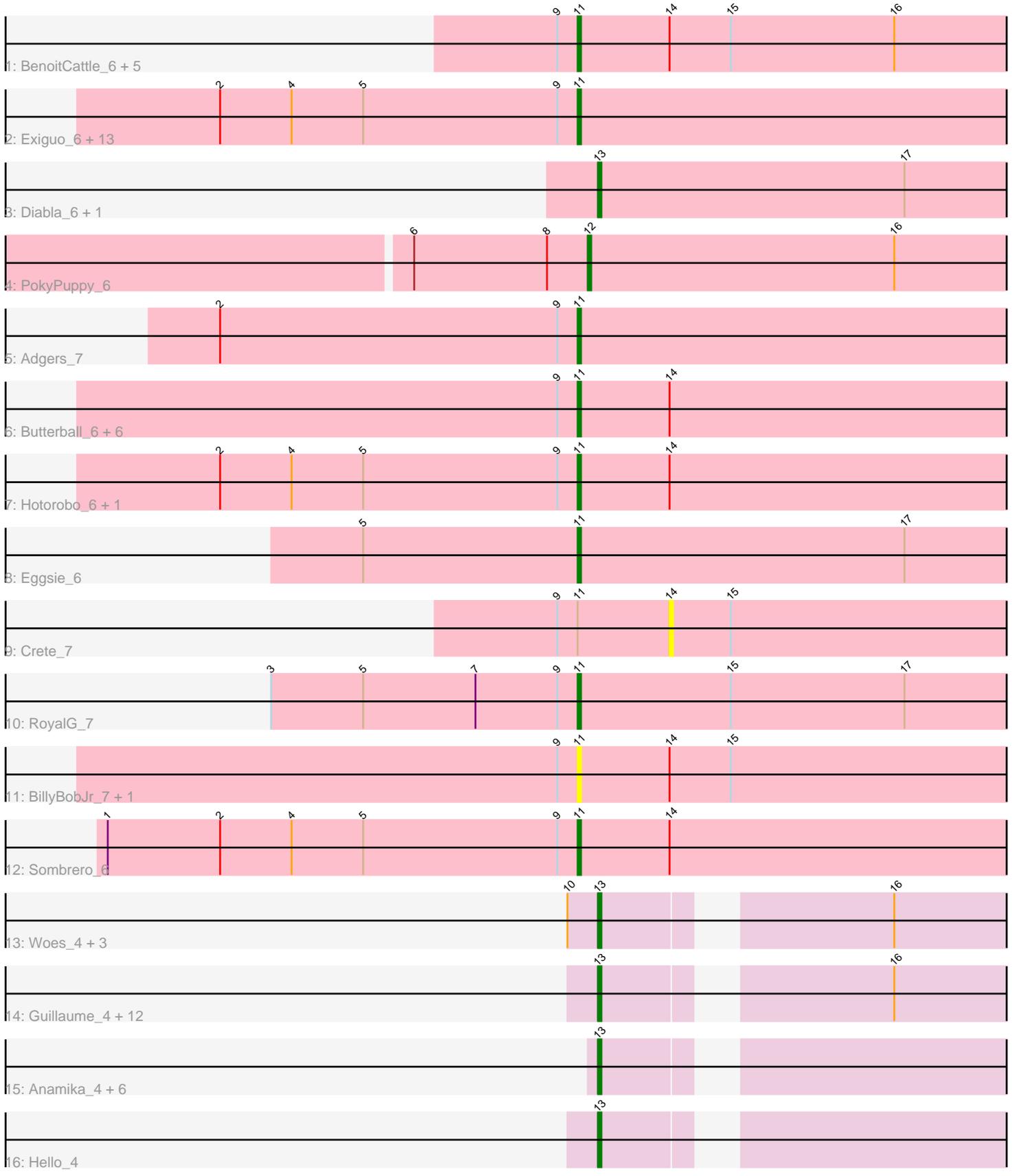


Pham 283801



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 283801 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283801 has 64 members, 5 are drafts.

Phages represented in each track:

- Track 1 : BenoitCattle\_6, Dakiti\_6, BigShaq\_6, Linetti\_7, Chelms\_6, PierreThree\_6
- Track 2 : Exiguo\_6, Lizzo\_6, RemRem\_6, CathyBurgh\_6, Breezic\_6, Squibbles\_6, Kelzog\_6, Gorko\_6, Flakey\_6, Worcestershire\_6, Sam12\_6, John316\_6, GourdThymes\_6, Barbochs\_6
- Track 3 : Diabla\_6, SteveFrench\_6
- Track 4 : PokyPuppy\_6
- Track 5 : Adgers\_7
- Track 6 : Butterball\_6, Jellybones\_6, FelixAlejandro\_7, Boneham\_6, BirksAndSocks\_6, Poland\_7, Msay19\_7
- Track 7 : Hotorobo\_6, Ekhein\_6
- Track 8 : Eggsie\_6
- Track 9 : Crete\_7
- Track 10 : RoyalG\_7
- Track 11 : BillyBobJr\_7, CinnamonToast\_7
- Track 12 : Sombrero\_6
- Track 13 : Woes\_4, Minos\_4, Jams\_4, Damp\_4
- Track 14 : Guillaume\_4, MrWormie\_4, Sticker17\_4, Shelley\_4, Charianelly\_4, Nimi13\_4, Lidong\_4, Newt\_4, Kaseim\_4, Teal\_4, Bianmat\_4, Berries\_4, GalacticEye\_4
- Track 15 : Anamika\_4, Luker\_4, Harambe\_4, Jormungandr\_4, Hail2Pitt\_4, Lahirium\_4, Neoevie\_4
- Track 16 : Hello\_4

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

The start number called the most often in the published annotations is 11, it was called in 31 of the 59 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adgers\_7, Barbochs\_6, BenoitCattle\_6, BigShaq\_6, BillyBobJr\_7, BirksAndSocks\_6, Boneham\_6, Breezic\_6, Butterball\_6, CathyBurgh\_6, Chelms\_6, CinnamonToast\_7, Dakiti\_6, Eggsie\_6, Ekhein\_6, Exiguo\_6, FelixAlejandro\_7, Flakey\_6, Gorko\_6, GourdThymes\_6, Hotorobo\_6, Jellybones\_6, John316\_6, Kelzog\_6, Linetti\_7, Lizzo\_6, Msay19\_7, PierreThree\_6, Poland\_7, RemRem\_6,

RoyalG\_7, Sam12\_6, Sombrero\_6, Squibbles\_6, Worcestershire\_6,

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

- Crete\_7,

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

- Anamika\_4, Berries\_4, Bianmat\_4, Charianelly\_4, Damp\_4, Diabla\_6, GalacticEye\_4, Guillaume\_4, Hail2Pitt\_4, Harambe\_4, Hello\_4, Jams\_4, Jormungandr\_4, Kaseim\_4, Lahirium\_4, Lidong\_4, Luker\_4, Minos\_4, MrWormie\_4, Neevie\_4, Newt\_4, Nimi13\_4, PokyPuppy\_6, Shelley\_4, SteveFrench\_6, Sticker17\_4, Teal\_4, Woes\_4,

### Summary by start number:

Start 11:

- Found in 36 of 64 ( 56.2% ) of genes in pham
- Manual Annotations of this start: 31 of 59
- Called 97.2% of time when present
- Phage (with cluster) where this start called: Adgers\_7 (CS2), Barbochs\_6 (CS2), BenoitCattle\_6 (CS2), BigShaq\_6 (CS2), BillyBobJr\_7 (CS2), BirksAndSocks\_6 (CS2), Boneham\_6 (CS2), Breezic\_6 (CS2), Butterball\_6 (CS2), CathyBurgh\_6 (CS2), Chelms\_6 (CS2), CinnamonToast\_7 (CS2), Dakiti\_6 (CS2), Eggsie\_6 (CS2), Ekhein\_6 (CS2), Exiguo\_6 (CS2), FelixAlejandro\_7 (CS2), Flakey\_6 (CS2), Gorko\_6 (CS2), GourdThymes\_6 (CS2), Hotorobo\_6 (CS2), Jellybones\_6 (CS2), John316\_6 (CS2), Kelzog\_6 (CS2), Linetti\_7 (CS2), Lizzo\_6 (CS2), Msay19\_7 (CS2), PierreThree\_6 (CS2), Poland\_7 (CS2), RemRem\_6 (CS2), RoyalG\_7 (CS2), Sam12\_6 (CS2), Sombrero\_6 (CS2), Squibbles\_6 (CS2), Worcestershire\_6 (CS2),

Start 12:

- Found in 1 of 64 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 1 of 59
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PokyPuppy\_6 (CS2),

Start 13:

- Found in 27 of 64 ( 42.2% ) of genes in pham
- Manual Annotations of this start: 27 of 59
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anamika\_4 (CS3), Berries\_4 (CS3), Bianmat\_4 (CS3), Charianelly\_4 (CS3), Damp\_4 (CS3), Diabla\_6 (CS2), GalacticEye\_4 (CS3), Guillaume\_4 (CS3), Hail2Pitt\_4 (CS3), Harambe\_4 (CS3), Hello\_4 (CS3), Jams\_4 (CS3), Jormungandr\_4 (CS3), Kaseim\_4 (CS3), Lahirium\_4 (CS3), Lidong\_4 (CS3), Luker\_4 (CS3), Minos\_4 (CS3), MrWormie\_4 (CS3), Neevie\_4 (CS3), Newt\_4 (CS3), Nimi13\_4 (CS3), Shelley\_4 (CS3), SteveFrench\_6 (CS2), Sticker17\_4 (CS3), Teal\_4 (CS3), Woes\_4 (CS3),

Start 14:

- Found in 19 of 64 ( 29.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 5.3% of time when present
- Phage (with cluster) where this start called: Crete\_7 (CS2),

### Summary by clusters:

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

Info for manual annotations of cluster CS2:

- Start number 11 was manually annotated 31 times for cluster CS2.
- Start number 12 was manually annotated 1 time for cluster CS2.
- Start number 13 was manually annotated 2 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 13 was manually annotated 25 times for cluster CS3.

**Gene Information:**

Gene: Adgers\_7 Start: 4589, Stop: 4446, Start Num: 11

Candidate Starts for Adgers\_7:

(2, 4694), (9, 4595), (Start: 11 @4589 has 31 MA's),

Gene: Anamika\_4 Start: 3734, Stop: 3615, Start Num: 13

Candidate Starts for Anamika\_4:

(Start: 13 @3734 has 27 MA's),

Gene: Barbochs\_6 Start: 4424, Stop: 4281, Start Num: 11

Candidate Starts for Barbochs\_6:

(2, 4529), (4, 4508), (5, 4487), (9, 4430), (Start: 11 @4424 has 31 MA's),

Gene: BenoitCattle\_6 Start: 4413, Stop: 4270, Start Num: 11

Candidate Starts for BenoitCattle\_6:

(9, 4419), (Start: 11 @4413 has 31 MA's), (14, 4386), (15, 4368), (16, 4320),

Gene: Berries\_4 Start: 3723, Stop: 3598, Start Num: 13

Candidate Starts for Berries\_4:

(Start: 13 @3723 has 27 MA's), (16, 3651),

Gene: Bianmat\_4 Start: 3746, Stop: 3621, Start Num: 13

Candidate Starts for Bianmat\_4:

(Start: 13 @3746 has 27 MA's), (16, 3674),

Gene: BigShaq\_6 Start: 4415, Stop: 4272, Start Num: 11

Candidate Starts for BigShaq\_6:

(9, 4421), (Start: 11 @4415 has 31 MA's), (14, 4388), (15, 4370), (16, 4322),

Gene: BillyBobJr\_7 Start: 4459, Stop: 4316, Start Num: 11

Candidate Starts for BillyBobJr\_7:

(9, 4465), (Start: 11 @4459 has 31 MA's), (14, 4432), (15, 4414),

Gene: BirksAndSocks\_6 Start: 4424, Stop: 4281, Start Num: 11

Candidate Starts for BirksAndSocks\_6:

(9, 4430), (Start: 11 @4424 has 31 MA's), (14, 4397),

Gene: Boneham\_6 Start: 4423, Stop: 4280, Start Num: 11

Candidate Starts for Boneham\_6:

(9, 4429), (Start: 11 @4423 has 31 MA's), (14, 4396),

Gene: Breezic\_6 Start: 4435, Stop: 4292, Start Num: 11

Candidate Starts for Breezic\_6:

(2, 4540), (4, 4519), (5, 4498), (9, 4441), (Start: 11 @4435 has 31 MA's),

Gene: Butterball\_6 Start: 4423, Stop: 4280, Start Num: 11

Candidate Starts for Butterball\_6:

(9, 4429), (Start: 11 @4423 has 31 MA's), (14, 4396),

Gene: CathyBurgh\_6 Start: 4423, Stop: 4280, Start Num: 11

Candidate Starts for CathyBurgh\_6:

(2, 4528), (4, 4507), (5, 4486), (9, 4429), (Start: 11 @4423 has 31 MA's),

Gene: Charianelly\_4 Start: 3734, Stop: 3609, Start Num: 13

Candidate Starts for Charianelly\_4:

(Start: 13 @3734 has 27 MA's), (16, 3662),

Gene: Chelms\_6 Start: 4415, Stop: 4272, Start Num: 11

Candidate Starts for Chelms\_6:

(9, 4421), (Start: 11 @4415 has 31 MA's), (14, 4388), (15, 4370), (16, 4322),

Gene: CinnamonToast\_7 Start: 4459, Stop: 4316, Start Num: 11

Candidate Starts for CinnamonToast\_7:

(9, 4465), (Start: 11 @4459 has 31 MA's), (14, 4432), (15, 4414),

Gene: Crete\_7 Start: 4639, Stop: 4523, Start Num: 14

Candidate Starts for Crete\_7:

(9, 4672), (Start: 11 @4666 has 31 MA's), (14, 4639), (15, 4621),

Gene: Dakiti\_6 Start: 4415, Stop: 4272, Start Num: 11

Candidate Starts for Dakiti\_6:

(9, 4421), (Start: 11 @4415 has 31 MA's), (14, 4388), (15, 4370), (16, 4322),

Gene: Damp\_4 Start: 3726, Stop: 3601, Start Num: 13

Candidate Starts for Damp\_4:

(10, 3735), (Start: 13 @3726 has 27 MA's), (16, 3654),

Gene: Diabla\_6 Start: 4440, Stop: 4303, Start Num: 13

Candidate Starts for Diabla\_6:

(Start: 13 @4440 has 27 MA's), (17, 4350),

Gene: Eggsie\_6 Start: 4435, Stop: 4292, Start Num: 11

Candidate Starts for Eggsie\_6:

(5, 4498), (Start: 11 @4435 has 31 MA's), (17, 4339),

Gene: Ekhein\_6 Start: 4423, Stop: 4280, Start Num: 11

Candidate Starts for Ekhein\_6:

(2, 4528), (4, 4507), (5, 4486), (9, 4429), (Start: 11 @4423 has 31 MA's), (14, 4396),

Gene: Exiguo\_6 Start: 4435, Stop: 4292, Start Num: 11

Candidate Starts for Exiguo\_6:

(2, 4540), (4, 4519), (5, 4498), (9, 4441), (Start: 11 @4435 has 31 MA's),

Gene: FelixAlejandro\_7 Start: 4621, Stop: 4478, Start Num: 11

Candidate Starts for FelixAlejandro\_7:

(9, 4627), (Start: 11 @4621 has 31 MA's), (14, 4594),

Gene: Flakey\_6 Start: 4424, Stop: 4281, Start Num: 11

Candidate Starts for Flakey\_6:

(2, 4529), (4, 4508), (5, 4487), (9, 4430), (Start: 11 @4424 has 31 MA's),

Gene: GalacticEye\_4 Start: 3723, Stop: 3598, Start Num: 13

Candidate Starts for GalacticEye\_4:

(Start: 13 @3723 has 27 MA's), (16, 3651),

Gene: Gorko\_6 Start: 4424, Stop: 4281, Start Num: 11

Candidate Starts for Gorko\_6:

(2, 4529), (4, 4508), (5, 4487), (9, 4430), (Start: 11 @4424 has 31 MA's),

Gene: GourdThymes\_6 Start: 4423, Stop: 4280, Start Num: 11

Candidate Starts for GourdThymes\_6:

(2, 4528), (4, 4507), (5, 4486), (9, 4429), (Start: 11 @4423 has 31 MA's),

Gene: Guillaume\_4 Start: 3734, Stop: 3609, Start Num: 13

Candidate Starts for Guillaume\_4:

(Start: 13 @3734 has 27 MA's), (16, 3662),

Gene: Hail2Pitt\_4 Start: 3712, Stop: 3593, Start Num: 13

Candidate Starts for Hail2Pitt\_4:

(Start: 13 @3712 has 27 MA's),

Gene: Harambe\_4 Start: 3733, Stop: 3614, Start Num: 13

Candidate Starts for Harambe\_4:

(Start: 13 @3733 has 27 MA's),

Gene: Hello\_4 Start: 3723, Stop: 3598, Start Num: 13

Candidate Starts for Hello\_4:

(Start: 13 @3723 has 27 MA's),

Gene: Hotorobo\_6 Start: 4434, Stop: 4291, Start Num: 11

Candidate Starts for Hotorobo\_6:

(2, 4539), (4, 4518), (5, 4497), (9, 4440), (Start: 11 @4434 has 31 MA's), (14, 4407),

Gene: Jams\_4 Start: 3746, Stop: 3621, Start Num: 13

Candidate Starts for Jams\_4:

(10, 3755), (Start: 13 @3746 has 27 MA's), (16, 3674),

Gene: Jellybones\_6 Start: 4458, Stop: 4315, Start Num: 11

Candidate Starts for Jellybones\_6:

(9, 4464), (Start: 11 @4458 has 31 MA's), (14, 4431),

Gene: John316\_6 Start: 4423, Stop: 4280, Start Num: 11

Candidate Starts for John316\_6:

(2, 4528), (4, 4507), (5, 4486), (9, 4429), (Start: 11 @4423 has 31 MA's),

Gene: Jormungandr\_4 Start: 3732, Stop: 3613, Start Num: 13  
Candidate Starts for Jormungandr\_4:  
(Start: 13 @3732 has 27 MA's),

Gene: Kaseim\_4 Start: 3734, Stop: 3609, Start Num: 13  
Candidate Starts for Kaseim\_4:  
(Start: 13 @3734 has 27 MA's), (16, 3662),

Gene: Kelzog\_6 Start: 4435, Stop: 4292, Start Num: 11  
Candidate Starts for Kelzog\_6:  
(2, 4540), (4, 4519), (5, 4498), (9, 4441), (Start: 11 @4435 has 31 MA's),

Gene: Lahirium\_4 Start: 3733, Stop: 3614, Start Num: 13  
Candidate Starts for Lahirium\_4:  
(Start: 13 @3733 has 27 MA's),

Gene: Lidong\_4 Start: 3723, Stop: 3598, Start Num: 13  
Candidate Starts for Lidong\_4:  
(Start: 13 @3723 has 27 MA's), (16, 3651),

Gene: Linetti\_7 Start: 4568, Stop: 4425, Start Num: 11  
Candidate Starts for Linetti\_7:  
(9, 4574), (Start: 11 @4568 has 31 MA's), (14, 4541), (15, 4523), (16, 4475),

Gene: Lizzo\_6 Start: 4423, Stop: 4280, Start Num: 11  
Candidate Starts for Lizzo\_6:  
(2, 4528), (4, 4507), (5, 4486), (9, 4429), (Start: 11 @4423 has 31 MA's),

Gene: Luker\_4 Start: 3712, Stop: 3593, Start Num: 13  
Candidate Starts for Luker\_4:  
(Start: 13 @3712 has 27 MA's),

Gene: Minos\_4 Start: 3726, Stop: 3601, Start Num: 13  
Candidate Starts for Minos\_4:  
(10, 3735), (Start: 13 @3726 has 27 MA's), (16, 3654),

Gene: MrWormie\_4 Start: 3712, Stop: 3587, Start Num: 13  
Candidate Starts for MrWormie\_4:  
(Start: 13 @3712 has 27 MA's), (16, 3640),

Gene: Msay19\_7 Start: 4613, Stop: 4470, Start Num: 11  
Candidate Starts for Msay19\_7:  
(9, 4619), (Start: 11 @4613 has 31 MA's), (14, 4586),

Gene: Neoevie\_4 Start: 3710, Stop: 3591, Start Num: 13  
Candidate Starts for Neoevie\_4:  
(Start: 13 @3710 has 27 MA's),

Gene: Newt\_4 Start: 3734, Stop: 3609, Start Num: 13  
Candidate Starts for Newt\_4:  
(Start: 13 @3734 has 27 MA's), (16, 3662),

Gene: Nimi13\_4 Start: 3735, Stop: 3610, Start Num: 13

Candidate Starts for Nimi13\_4:  
(Start: 13 @3735 has 27 MA's), (16, 3663),

Gene: PierreThree\_6 Start: 4415, Stop: 4272, Start Num: 11  
Candidate Starts for PierreThree\_6:  
(9, 4421), (Start: 11 @4415 has 31 MA's), (14, 4388), (15, 4370), (16, 4322),

Gene: PokyPuppy\_6 Start: 4498, Stop: 4358, Start Num: 12  
Candidate Starts for PokyPuppy\_6:  
(6, 4549), (8, 4510), (Start: 12 @4498 has 1 MA's), (16, 4408),

Gene: Poland\_7 Start: 4589, Stop: 4446, Start Num: 11  
Candidate Starts for Poland\_7:  
(9, 4595), (Start: 11 @4589 has 31 MA's), (14, 4562),

Gene: RemRem\_6 Start: 4435, Stop: 4292, Start Num: 11  
Candidate Starts for RemRem\_6:  
(2, 4540), (4, 4519), (5, 4498), (9, 4441), (Start: 11 @4435 has 31 MA's),

Gene: RoyalG\_7 Start: 4630, Stop: 4487, Start Num: 11  
Candidate Starts for RoyalG\_7:  
(3, 4720), (5, 4693), (7, 4660), (9, 4636), (Start: 11 @4630 has 31 MA's), (15, 4585), (17, 4534),

Gene: Sam12\_6 Start: 4435, Stop: 4292, Start Num: 11  
Candidate Starts for Sam12\_6:  
(2, 4540), (4, 4519), (5, 4498), (9, 4441), (Start: 11 @4435 has 31 MA's),

Gene: Shelley\_4 Start: 3757, Stop: 3632, Start Num: 13  
Candidate Starts for Shelley\_4:  
(Start: 13 @3757 has 27 MA's), (16, 3685),

Gene: Sombrero\_6 Start: 4469, Stop: 4326, Start Num: 11  
Candidate Starts for Sombrero\_6:  
(1, 4607), (2, 4574), (4, 4553), (5, 4532), (9, 4475), (Start: 11 @4469 has 31 MA's), (14, 4442),

Gene: Squibbles\_6 Start: 4423, Stop: 4280, Start Num: 11  
Candidate Starts for Squibbles\_6:  
(2, 4528), (4, 4507), (5, 4486), (9, 4429), (Start: 11 @4423 has 31 MA's),

Gene: SteveFrench\_6 Start: 4429, Stop: 4292, Start Num: 13  
Candidate Starts for SteveFrench\_6:  
(Start: 13 @4429 has 27 MA's), (17, 4339),

Gene: Sticker17\_4 Start: 3734, Stop: 3609, Start Num: 13  
Candidate Starts for Sticker17\_4:  
(Start: 13 @3734 has 27 MA's), (16, 3662),

Gene: Teal\_4 Start: 3711, Stop: 3586, Start Num: 13  
Candidate Starts for Teal\_4:  
(Start: 13 @3711 has 27 MA's), (16, 3639),

Gene: Woes\_4 Start: 3750, Stop: 3625, Start Num: 13  
Candidate Starts for Woes\_4:

(10, 3759), (Start: 13 @3750 has 27 MA's), (16, 3678),

Gene: Worcestershire\_6 Start: 4434, Stop: 4291, Start Num: 11

Candidate Starts for Worcestershire\_6:

(2, 4539), (4, 4518), (5, 4497), (9, 4440), (Start: 11 @4434 has 31 MA's),