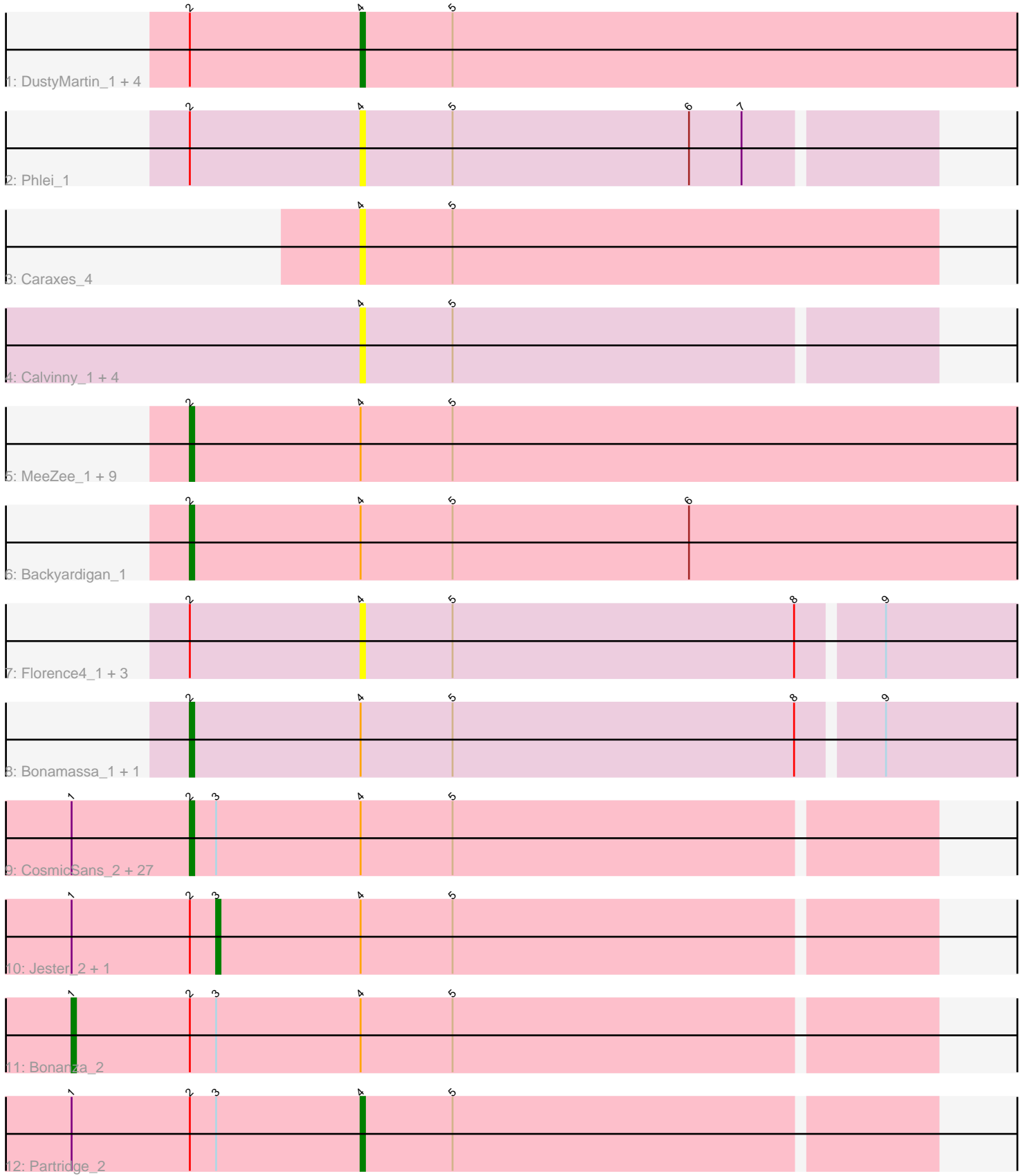


Pham 294745



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 294745 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294745 has 61 members, 19 are drafts.

Phages represented in each track:

- Track 1 : DustyMartin_1, FatCactus_1, Shapes_1, Rowdy_1, LeoAvram_1
- Track 2 : Phlei_1
- Track 3 : Caraxes_4
- Track 4 : Calvinny_1, Bigflo_1, ClownCar_1, Croquant_1, Lowa_1
- Track 5 : MeeZee_1, Maverick_1, Zarafa_1, Shaka_1, Marchesa_1, TiroTheta9_1, Rockstar_1, Peaches_1, Caelakin_1, DropBear_1
- Track 6 : Backyardigan_1
- Track 7 : Florence4_1, Florence1_1, Twigg_1, Prinasha11_1
- Track 8 : Bonamassa_1, Swirley_1
- Track 9 : CosmicSans_2, UhSalsa_2, Alpacados_2, Rhodalysa_2, Harlequin_2, RER2_65, Swann_2, Rasputin_2, Erik_2, Yoncess_2, Espica_2, PhailMary_2, Nancinator_2, Bryce_2, RexFury_2, Shuman_2, Phrankenstein_2, StCroix_2, Takoda_2, TWAMP_2, Naiad_2, Bradshaw_2, AppleCloud_1, Natosaleda_2, Gollum_2, Hiro_2, Krishelle_2, Lillie_2
- Track 10 : Jester_2, Belenaria_2
- Track 11 : Bonanza_2
- Track 12 : Partridge_2

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 37 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alpacados_2, AppleCloud_1, Backyardigan_1, Bonamassa_1, Bradshaw_2, Bryce_2, Caelakin_1, CosmicSans_2, DropBear_1, Erik_2, Espica_2, Gollum_2, Harlequin_2, Hiro_2, Krishelle_2, Lillie_2, Marchesa_1, Maverick_1, MeeZee_1, Naiad_2, Nancinator_2, Natosaleda_2, Peaches_1, PhailMary_2, Phrankenstein_2, RER2_65, Rasputin_2, RexFury_2, Rhodalysa_2, Rockstar_1, Shaka_1, Shuman_2, StCroix_2, Swann_2, Swirley_1, TWAMP_2, Takoda_2, TiroTheta9_1, UhSalsa_2, Yoncess_2, Zarafa_1,

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

- Belenaria_2, Bonanza_2, DustyMartin_1, FatCactus_1, Florence1_1, Florence4_1, Jester_2, LeoAvram_1, Partridge_2, Phlei_1, Prinashe11_1, Rowdy_1, Shapes_1, Twigg_1,

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

- Bigflo_1, Calvinny_1, Caraxes_4, ClownCar_1, Croquant_1, Lowa_1,

Summary by start number:

Start 1:

- Found in 32 of 61 (52.5%) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 3.1% of time when present
- Phage (with cluster) where this start called: Bonanza_2 (CA),

Start 2:

- Found in 55 of 61 (90.2%) of genes in pham
- Manual Annotations of this start: 37 of 42
- Called 74.5% of time when present
- Phage (with cluster) where this start called: Alpacados_2 (CA), AppleCloud_1 (CA), Backyardigan_1 (A4), Bonamassa_1 (A5), Bradshaw_2 (CA), Bryce_2 (CA), Caelakin_1 (A4), CosmicSans_2 (CA), DropBear_1 (A3), Erik_2 (CA), Espica_2 (CA), Gollum_2 (CA), Harlequin_2 (CA), Hiro_2 (CA), Krishelle_2 (CA), Lillie_2 (CA), Marchesa_1 (A3), Maverick_1 (A4), MeeZee_1 (A4), Naiad_2 (CA), Nancinator_2 (CA), Natosaleda_2 (CA), Peaches_1 (A4), PhailMary_2 (CA), Phrankenstien_2 (CA), RER2_65 (CA), Rasputin_2 (CA), RexFury_2 (CA), Rhodalysa_2 (CA), Rockstar_1 (A3), Shaka_1 (A4), Shuman_2 (CA), StCroix_2 (CA), Swann_2 (CA), Swirley_1 (A5), TWAMP_2 (CA), Takoda_2 (CA), TiroTheta9_1 (A4), UhSalsa_2 (CA), Yoncess_2 (CA), Zarafa_1 (A3),

Start 3:

- Found in 32 of 61 (52.5%) of genes in pham
- Manual Annotations of this start: 2 of 42
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Belenaria_2 (CA), Jester_2 (CA),

Start 4:

- Found in 61 of 61 (100.0%) of genes in pham
- Manual Annotations of this start: 2 of 42
- Called 27.9% of time when present
- Phage (with cluster) where this start called: Bigflo_1 (A3), Calvinny_1 (A3), Caraxes_4 (A2), ClownCar_1 (A3), Croquant_1 (A3), DustyMartin_1 (A10), FatCactus_1 (A20), Florence1_1 (A5), Florence4_1 (A5), LeoAvram_1 (A4), Lowa_1 (A3), Partridge_2 (CA), Phlei_1 (A13), Prinashe11_1 (A5), Rowdy_1 (A10), Shapes_1 (A10), Twigg_1 (A5),

Summary by clusters:

There are 8 clusters represented in this pham: A20, A10, A13, CA, A3, A2, A5, A4,

Info for manual annotations of cluster A3:

- Start number 2 was manually annotated 1 time for cluster A3.

Info for manual annotations of cluster A4:

- Start number 2 was manually annotated 7 times for cluster A4.
- Start number 4 was manually annotated 1 time for cluster A4.

Info for manual annotations of cluster A5:

- Start number 2 was manually annotated 2 times for cluster A5.

Info for manual annotations of cluster CA:

- Start number 1 was manually annotated 1 time for cluster CA.
- Start number 2 was manually annotated 27 times for cluster CA.
- Start number 3 was manually annotated 2 times for cluster CA.
- Start number 4 was manually annotated 1 time for cluster CA.

Gene Information:

Gene: Alpacados_2 Start: 885, Stop: 718, Start Num: 2

Candidate Starts for Alpacados_2:

(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: AppleCloud_1 Start: 680, Stop: 513, Start Num: 2

Candidate Starts for AppleCloud_1:

(Start: 1 @707 has 1 MA's), (Start: 2 @680 has 37 MA's), (Start: 3 @674 has 2 MA's), (Start: 4 @641 has 2 MA's), (5, 620),

Gene: Backyardigan_1 Start: 676, Stop: 461, Start Num: 2

Candidate Starts for Backyardigan_1:

(Start: 2 @676 has 37 MA's), (Start: 4 @637 has 2 MA's), (5, 616), (6, 562),

Gene: Belenaria_2 Start: 879, Stop: 718, Start Num: 3

Candidate Starts for Belenaria_2:

(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Bigflo_1 Start: 687, Stop: 559, Start Num: 4

Candidate Starts for Bigflo_1:

(Start: 4 @687 has 2 MA's), (5, 666),

Gene: Bonamassa_1 Start: 741, Stop: 553, Start Num: 2

Candidate Starts for Bonamassa_1:

(Start: 2 @741 has 37 MA's), (Start: 4 @702 has 2 MA's), (5, 681), (8, 603), (9, 585),

Gene: Bonanza_2 Start: 912, Stop: 718, Start Num: 1

Candidate Starts for Bonanza_2:

(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Bradshaw_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Bradshaw_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Bryce_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Bryce_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Caelakin_1 Start: 672, Stop: 457, Start Num: 2
Candidate Starts for Caelakin_1:
(Start: 2 @672 has 37 MA's), (Start: 4 @633 has 2 MA's), (5, 612),

Gene: Calvinny_1 Start: 692, Stop: 564, Start Num: 4
Candidate Starts for Calvinny_1:
(Start: 4 @692 has 2 MA's), (5, 671),

Gene: Caraxes_4 Start: 2318, Stop: 2187, Start Num: 4
Candidate Starts for Caraxes_4:
(Start: 4 @2318 has 2 MA's), (5, 2297),

Gene: ClownCar_1 Start: 692, Stop: 564, Start Num: 4
Candidate Starts for ClownCar_1:
(Start: 4 @692 has 2 MA's), (5, 671),

Gene: CosmicSans_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for CosmicSans_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Croquant_1 Start: 687, Stop: 559, Start Num: 4
Candidate Starts for Croquant_1:
(Start: 4 @687 has 2 MA's), (5, 666),

Gene: DropBear_1 Start: 619, Stop: 431, Start Num: 2
Candidate Starts for DropBear_1:
(Start: 2 @619 has 37 MA's), (Start: 4 @580 has 2 MA's), (5, 559),

Gene: DustyMartin_1 Start: 635, Stop: 486, Start Num: 4
Candidate Starts for DustyMartin_1:
(Start: 2 @674 has 37 MA's), (Start: 4 @635 has 2 MA's), (5, 614),

Gene: Erik_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Erik_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Espica_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Espica_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: FatCactus_1 Start: 540, Stop: 412, Start Num: 4
Candidate Starts for FatCactus_1:
(Start: 2 @579 has 37 MA's), (Start: 4 @540 has 2 MA's), (5, 519),

Gene: Florence1_1 Start: 670, Stop: 521, Start Num: 4
Candidate Starts for Florence1_1:
(Start: 2 @709 has 37 MA's), (Start: 4 @670 has 2 MA's), (5, 649), (8, 571), (9, 553),

Gene: Florence4_1 Start: 670, Stop: 521, Start Num: 4
Candidate Starts for Florence4_1:
(Start: 2 @709 has 37 MA's), (Start: 4 @670 has 2 MA's), (5, 649), (8, 571), (9, 553),

Gene: Gollum_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Gollum_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Harlequin_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Harlequin_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Hiro_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Hiro_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Jester_2 Start: 879, Stop: 718, Start Num: 3
Candidate Starts for Jester_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Krishelle_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Krishelle_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: LeoAvram_1 Start: 633, Stop: 457, Start Num: 4
Candidate Starts for LeoAvram_1:
(Start: 2 @672 has 37 MA's), (Start: 4 @633 has 2 MA's), (5, 612),

Gene: Lillie_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Lillie_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Lowa_1 Start: 687, Stop: 559, Start Num: 4
Candidate Starts for Lowa_1:
(Start: 4 @687 has 2 MA's), (5, 666),

Gene: Marchesa_1 Start: 619, Stop: 431, Start Num: 2
Candidate Starts for Marchesa_1:
(Start: 2 @619 has 37 MA's), (Start: 4 @580 has 2 MA's), (5, 559),

Gene: Maverick_1 Start: 672, Stop: 457, Start Num: 2
Candidate Starts for Maverick_1:
(Start: 2 @672 has 37 MA's), (Start: 4 @633 has 2 MA's), (5, 612),

Gene: MeeZee_1 Start: 672, Stop: 457, Start Num: 2
Candidate Starts for MeeZee_1:
(Start: 2 @672 has 37 MA's), (Start: 4 @633 has 2 MA's), (5, 612),

Gene: Naiad_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Naiad_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Nancinator_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Nancinator_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Natosaleda_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Natosaleda_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Partridge_2 Start: 841, Stop: 713, Start Num: 4
Candidate Starts for Partridge_2:
(Start: 1 @907 has 1 MA's), (Start: 2 @880 has 37 MA's), (Start: 3 @874 has 2 MA's), (Start: 4 @841 has 2 MA's), (5, 820),

Gene: Peaches_1 Start: 672, Stop: 457, Start Num: 2
Candidate Starts for Peaches_1:
(Start: 2 @672 has 37 MA's), (Start: 4 @633 has 2 MA's), (5, 612),

Gene: PhailMary_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for PhailMary_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Phlei_1 Start: 645, Stop: 517, Start Num: 4
Candidate Starts for Phlei_1:
(Start: 2 @684 has 37 MA's), (Start: 4 @645 has 2 MA's), (5, 624), (6, 570), (7, 558),

Gene: Phrankenstein_2 Start: 885, Stop: 718, Start Num: 2
Candidate Starts for Phrankenstein_2:
(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Prinashe11_1 Start: 670, Stop: 521, Start Num: 4
Candidate Starts for Prinashe11_1:
(Start: 2 @709 has 37 MA's), (Start: 4 @670 has 2 MA's), (5, 649), (8, 571), (9, 553),

Gene: RER2_65 Start: 44343, Stop: 44176, Start Num: 2
Candidate Starts for RER2_65:

(Start: 1 @44370 has 1 MA's), (Start: 2 @44343 has 37 MA's), (Start: 3 @44337 has 2 MA's), (Start: 4 @44304 has 2 MA's), (5, 44283),

Gene: Rasputin_2 Start: 885, Stop: 718, Start Num: 2

Candidate Starts for Rasputin_2:

(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: RexFury_2 Start: 916, Stop: 749, Start Num: 2

Candidate Starts for RexFury_2:

(Start: 1 @943 has 1 MA's), (Start: 2 @916 has 37 MA's), (Start: 3 @910 has 2 MA's), (Start: 4 @877 has 2 MA's), (5, 856),

Gene: Rhodalysa_2 Start: 885, Stop: 718, Start Num: 2

Candidate Starts for Rhodalysa_2:

(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Rockstar_1 Start: 622, Stop: 452, Start Num: 2

Candidate Starts for Rockstar_1:

(Start: 2 @622 has 37 MA's), (Start: 4 @583 has 2 MA's), (5, 562),

Gene: Rowdy_1 Start: 635, Stop: 486, Start Num: 4

Candidate Starts for Rowdy_1:

(Start: 2 @674 has 37 MA's), (Start: 4 @635 has 2 MA's), (5, 614),

Gene: Shaka_1 Start: 672, Stop: 457, Start Num: 2

Candidate Starts for Shaka_1:

(Start: 2 @672 has 37 MA's), (Start: 4 @633 has 2 MA's), (5, 612),

Gene: Shapes_1 Start: 635, Stop: 486, Start Num: 4

Candidate Starts for Shapes_1:

(Start: 2 @674 has 37 MA's), (Start: 4 @635 has 2 MA's), (5, 614),

Gene: Shuman_2 Start: 885, Stop: 718, Start Num: 2

Candidate Starts for Shuman_2:

(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: StCroix_2 Start: 885, Stop: 718, Start Num: 2

Candidate Starts for StCroix_2:

(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Swann_2 Start: 885, Stop: 718, Start Num: 2

Candidate Starts for Swann_2:

(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Swirley_1 Start: 709, Stop: 521, Start Num: 2

Candidate Starts for Swirley_1:

(Start: 2 @709 has 37 MA's), (Start: 4 @670 has 2 MA's), (5, 649), (8, 571), (9, 553),

Gene: TWAMP_2 Start: 885, Stop: 718, Start Num: 2

Candidate Starts for TWAMP_2:

(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Takoda_2 Start: 880, Stop: 713, Start Num: 2

Candidate Starts for Takoda_2:

(Start: 1 @907 has 1 MA's), (Start: 2 @880 has 37 MA's), (Start: 3 @874 has 2 MA's), (Start: 4 @841 has 2 MA's), (5, 820),

Gene: TiroTheta9_1 Start: 672, Stop: 457, Start Num: 2

Candidate Starts for TiroTheta9_1:

(Start: 2 @672 has 37 MA's), (Start: 4 @633 has 2 MA's), (5, 612),

Gene: Twigg_1 Start: 670, Stop: 521, Start Num: 4

Candidate Starts for Twigg_1:

(Start: 2 @709 has 37 MA's), (Start: 4 @670 has 2 MA's), (5, 649), (8, 571), (9, 553),

Gene: UhSalsa_2 Start: 885, Stop: 718, Start Num: 2

Candidate Starts for UhSalsa_2:

(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Yoncess_2 Start: 885, Stop: 718, Start Num: 2

Candidate Starts for Yoncess_2:

(Start: 1 @912 has 1 MA's), (Start: 2 @885 has 37 MA's), (Start: 3 @879 has 2 MA's), (Start: 4 @846 has 2 MA's), (5, 825),

Gene: Zarafa_1 Start: 619, Stop: 431, Start Num: 2

Candidate Starts for Zarafa_1:

(Start: 2 @619 has 37 MA's), (Start: 4 @580 has 2 MA's), (5, 559),