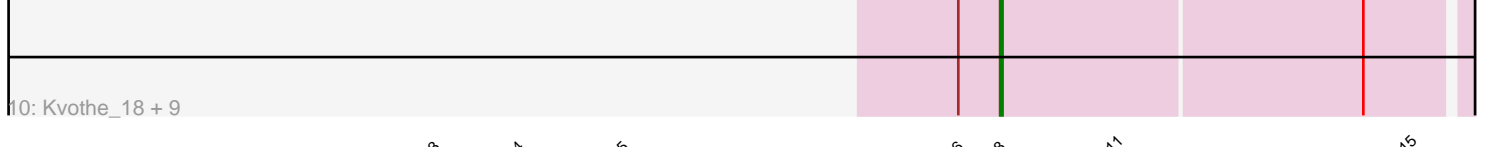
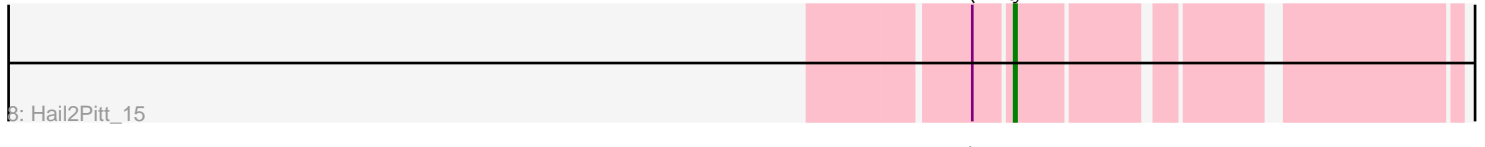
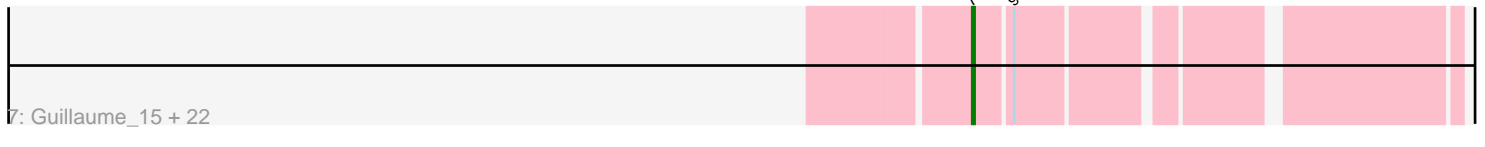
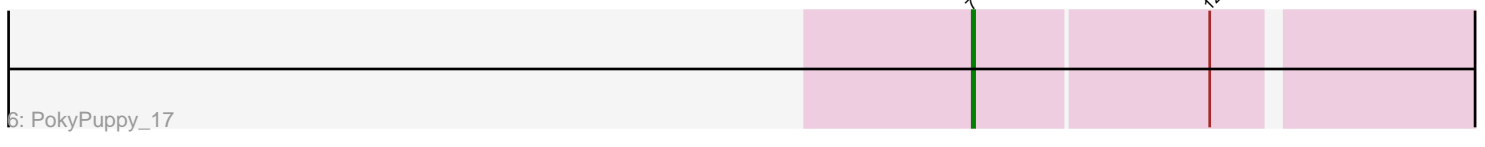
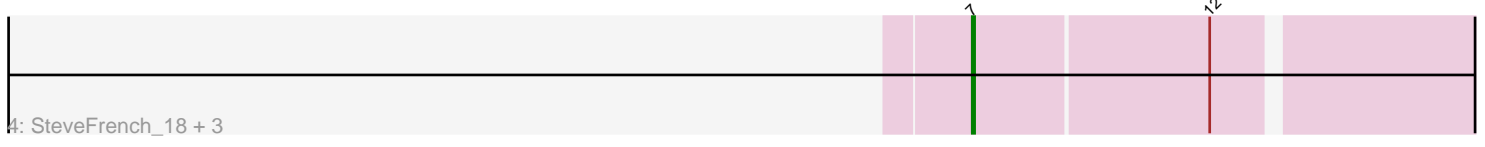
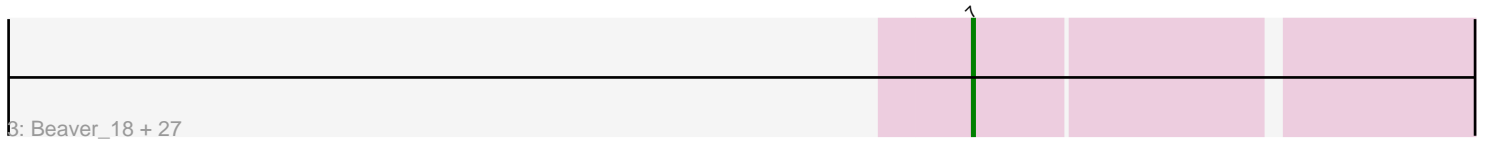
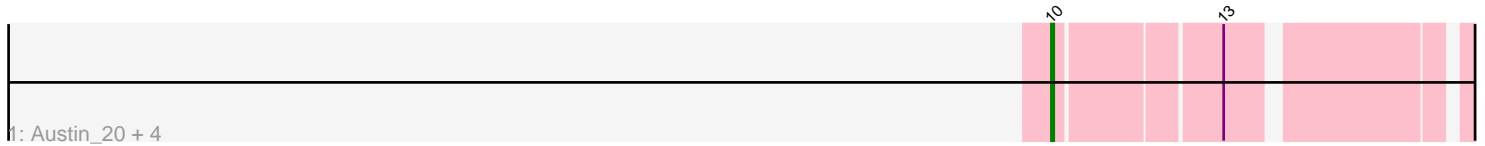


Pham 308464



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 308464 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308464 has 83 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Austin_20, Amore2_20, GTE7_11, HayZem_19, GMA7_11
- Track 2 : Adgers_19
- Track 3 : Beaver_18, Barbochs_18, FelixAlejandro_19, CathyBurgh_18, Exiguo_18, Jellybones_18, RemRem_19, Flakey_18, Boneham_18, Squibbles_18, Breezic_18, John316_18, Sombrero_18, Gorko_18, Butterball_18, BillyBobJr_19, Poland_19, BirksAndSocks_18, Msay19_19, Kelzog_18, Sam12_18, Worcestershire_18, CinnamonToast_19, Ekhein_18, Hotorobo_18, Monty_17, Lizzo_18, GourdThymes_18
- Track 4 : SteveFrench_18, Eggsie_18, Diabla_17, RoyalG_19
- Track 5 : BigShaq_18, Chelms_18, PierreThree_18, BenoitCattle_18, Linetti_19, Dakiti_18, Crete_19
- Track 6 : PokyPuppy_17
- Track 7 : Guillaume_15, Damp_15, Bianmat_15, Lidong_15, Jormungandr_15, Hello_15, Berries_15, MrWormie_15, GalacticEye_15, Shelley_15, Jams_15, Teal_15, Newt_15, Lahirium_15, Harambe_15, Woes_15, Neoevie_15, Anamika_15, Luker_15, Minos_15, Sticker17_15, Nimi13_15, Charianelly_15
- Track 8 : Hail2Pitt_15
- Track 9 : Kaseim_15
- Track 10 : Kvothe_18, Katyusha_18, Tredge_18, ASerpRocky_18, Teech_18, Demosthenes_18, Benczkowski14_18, Teatealatte_18, Hollow_18, Niagara_18
- Track 11 : Philon9_19, Vitaenoi_19

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

The start number called the most often in the published annotations is 7, it was called in 60 of the 76 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adgers_19, Anamika_15, Barbochs_18, Beaver_18, BenoitCattle_18, Berries_15, Bianmat_15, BigShaq_18, BillyBobJr_19, BirksAndSocks_18, Boneham_18, Breezic_18, Butterball_18, CathyBurgh_18, Charianelly_15, Chelms_18, CinnamonToast_19, Crete_19, Dakiti_18, Damp_15, Diabla_17, Eggsie_18, Ekhein_18, Exiguo_18, FelixAlejandro_19, Flakey_18, GalacticEye_15, Gorko_18, GourdThymes_18, Guillaume_15, Harambe_15, Hello_15, Hotorobo_18, Jams_15,

Jellybones_18, John316_18, Jormungandr_15, Kaseim_15, Kelzog_18, Lahirium_15, Lidong_15, Linetti_19, Lizzo_18, Luker_15, Minos_15, Monty_17, MrWormie_15, Msay19_19, Neoevie_15, Newt_15, Nimi13_15, PierreThree_18, PokyPuppy_17, Poland_19, RemRem_19, RoyalG_19, Sam12_18, Shelley_15, Sombrero_18, Squibbles_18, SteveFrench_18, Sticker17_15, Teal_15, Woes_15, Worcestershire_18,

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

- Hail2Pitt_15,

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

- ASerpRocky_18, Amore2_20, Austin_20, Benczkowski14_18, Demosthenes_18, GMA7_11, GTE7_11, HayZem_19, Hollow_18, Katyusha_18, Kvothe_18, Niagara_18, Philon9_19, Teatealatte_18, Teech_18, Tredge_18, Vitaenoi_19,

Summary by start number:

Start 7:

- Found in 66 of 83 (79.5%) of genes in pham
- Manual Annotations of this start: 60 of 76
- Called 98.5% of time when present
- Phage (with cluster) where this start called: Adgers_19 (CS2), Anamika_15 (CS3), Barbochs_18 (CS2), Beaver_18 (CS2), BenoitCattle_18 (CS2), Berries_15 (CS3), Bianmat_15 (CS3), BigShaq_18 (CS2), BillyBobJr_19 (CS2), BirksAndSocks_18 (CS2), Boneham_18 (CS2), Breezic_18 (CS2), Butterball_18 (CS2), CathyBurgh_18 (CS2), Charianelly_15 (CS3), Chelms_18 (CS2), CinnamonToast_19 (CS2), Crete_19 (CS2), Dakiti_18 (CS2), Damp_15 (CS3), Diabla_17 (CS2), Eggsie_18 (CS2), Ekhein_18 (CS2), Exiguo_18 (CS2), FelixAlejandro_19 (CS2), Flakey_18 (CS2), GalacticEye_15 (CS3), Gorko_18 (CS2), GourdThymes_18 (CS2), Guillaume_15 (CS3), Harambe_15 (CS3), Hello_15 (CS3), Hotorobo_18 (CS2), Jams_15 (CS3), Jellybones_18 (CS2), John316_18 (CS2), Jormungandr_15 (CS3), Kaseim_15 (CS3), Kelzog_18 (CS2), Lahirium_15 (CS3), Lidong_15 (CS3), Linetti_19 (CS2), Lizzo_18 (CS2), Luker_15 (CS3), Minos_15 (CS3), Monty_17 (CS2), MrWormie_15 (CS3), Msay19_19 (CS2), Neoevie_15 (CS3), Newt_15 (CS3), Nimi13_15 (CS3), PierreThree_18 (CS2), PokyPuppy_17 (CS2), Poland_19 (CS2), RemRem_19 (CS2), RoyalG_19 (CS2), Sam12_18 (CS2), Shelley_15 (CS3), Sombrero_18 (CS2), Squibbles_18 (CS2), SteveFrench_18 (CS2), Sticker17_15 (CS3), Teal_15 (CS3), Woes_15 (CS3), Worcestershire_18 (CS2),

Start 8:

- Found in 12 of 83 (14.5%) of genes in pham
- Manual Annotations of this start: 12 of 76
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_18 (CS4), Benczkowski14_18 (CS4), Demosthenes_18 (CS4), Hollow_18 (CS4), Katyusha_18 (CS4), Kvothe_18 (CS4), Niagara_18 (CS4), Philon9_19 (CS4), Teatealatte_18 (CS4), Teech_18 (CS4), Tredge_18 (CS4), Vitaenoi_19 (CS4),

Start 9:

- Found in 25 of 83 (30.1%) of genes in pham
- Manual Annotations of this start: 1 of 76
- Called 4.0% of time when present
- Phage (with cluster) where this start called: Hail2Pitt_15 (CS3),

Start 10:

- Found in 5 of 83 (6.0%) of genes in pham
- Manual Annotations of this start: 3 of 76
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amore2_20 (CS1), Austin_20 (CS1), GMA7_11 (CS1), GTE7_11 (CS1), HayZem_19 (CS1),

Summary by clusters:

There are 4 clusters represented in this pham: CS4, CS1, CS3, CS2,

Info for manual annotations of cluster CS1:

- Start number 10 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:

- Start number 7 was manually annotated 36 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 7 was manually annotated 24 times for cluster CS3.
- Start number 9 was manually annotated 1 time for cluster CS3.

Info for manual annotations of cluster CS4:

- Start number 8 was manually annotated 12 times for cluster CS4.

Gene Information:

Gene: ASerpRocky_18 Start: 18527, Stop: 18817, Start Num: 8

Candidate Starts for ASerpRocky_18:

(6, 18509), (Start: 8 @18527 has 12 MA's), (14, 18680),

Gene: Adgers_19 Start: 16152, Stop: 16469, Start Num: 7

Candidate Starts for Adgers_19:

(Start: 7 @16152 has 60 MA's), (12, 16251),

Gene: Amore2_20 Start: 16011, Stop: 16268, Start Num: 10

Candidate Starts for Amore2_20:

(Start: 10 @16011 has 3 MA's), (13, 16077),

Gene: Anamika_15 Start: 17040, Stop: 17342, Start Num: 7

Candidate Starts for Anamika_15:

(Start: 7 @17040 has 60 MA's), (Start: 9 @17055 has 1 MA's),

Gene: Austin_20 Start: 16011, Stop: 16268, Start Num: 10

Candidate Starts for Austin_20:

(Start: 10 @16011 has 3 MA's), (13, 16077),

Gene: Barbochs_18 Start: 15990, Stop: 16307, Start Num: 7

Candidate Starts for Barbochs_18:

(Start: 7 @15990 has 60 MA's),

Gene: Beaver_18 Start: 15998, Stop: 16315, Start Num: 7
Candidate Starts for Beaver_18:
(Start: 7 @15998 has 60 MA's),

Gene: Benczkowski14_18 Start: 18609, Stop: 18899, Start Num: 8
Candidate Starts for Benczkowski14_18:
(6, 18591), (Start: 8 @18609 has 12 MA's), (14, 18762),

Gene: BenoitCattle_18 Start: 15985, Stop: 16302, Start Num: 7
Candidate Starts for BenoitCattle_18:
(Start: 7 @15985 has 60 MA's),

Gene: Berries_15 Start: 17025, Stop: 17309, Start Num: 7
Candidate Starts for Berries_15:
(Start: 7 @17025 has 60 MA's), (Start: 9 @17040 has 1 MA's),

Gene: Bianmat_15 Start: 17047, Stop: 17349, Start Num: 7
Candidate Starts for Bianmat_15:
(Start: 7 @17047 has 60 MA's), (Start: 9 @17062 has 1 MA's),

Gene: BigShaq_18 Start: 15987, Stop: 16304, Start Num: 7
Candidate Starts for BigShaq_18:
(Start: 7 @15987 has 60 MA's),

Gene: BillyBobJr_19 Start: 16022, Stop: 16339, Start Num: 7
Candidate Starts for BillyBobJr_19:
(Start: 7 @16022 has 60 MA's),

Gene: BirksAndSocks_18 Start: 15987, Stop: 16304, Start Num: 7
Candidate Starts for BirksAndSocks_18:
(Start: 7 @15987 has 60 MA's),

Gene: Boneham_18 Start: 15986, Stop: 16303, Start Num: 7
Candidate Starts for Boneham_18:
(Start: 7 @15986 has 60 MA's),

Gene: Breezic_18 Start: 16001, Stop: 16318, Start Num: 7
Candidate Starts for Breezic_18:
(Start: 7 @16001 has 60 MA's),

Gene: Butterball_18 Start: 15986, Stop: 16303, Start Num: 7
Candidate Starts for Butterball_18:
(Start: 7 @15986 has 60 MA's),

Gene: CathyBurgh_18 Start: 16858, Stop: 17175, Start Num: 7
Candidate Starts for CathyBurgh_18:
(Start: 7 @16858 has 60 MA's),

Gene: Charianelly_15 Start: 16757, Stop: 17059, Start Num: 7
Candidate Starts for Charianelly_15:
(Start: 7 @16757 has 60 MA's), (Start: 9 @16772 has 1 MA's),

Gene: Chelms_18 Start: 15987, Stop: 16304, Start Num: 7

Candidate Starts for Chelms_18:
(Start: 7 @15987 has 60 MA's),

Gene: CinnamonToast_19 Start: 16022, Stop: 16339, Start Num: 7
Candidate Starts for CinnamonToast_19:
(Start: 7 @16022 has 60 MA's),

Gene: Crete_19 Start: 16238, Stop: 16555, Start Num: 7
Candidate Starts for Crete_19:
(Start: 7 @16238 has 60 MA's),

Gene: Dakiti_18 Start: 16855, Stop: 17172, Start Num: 7
Candidate Starts for Dakiti_18:
(Start: 7 @16855 has 60 MA's),

Gene: Damp_15 Start: 15921, Stop: 16223, Start Num: 7
Candidate Starts for Damp_15:
(Start: 7 @15921 has 60 MA's), (Start: 9 @15936 has 1 MA's),

Gene: Demosthenes_18 Start: 18500, Stop: 18790, Start Num: 8
Candidate Starts for Demosthenes_18:
(6, 18482), (Start: 8 @18500 has 12 MA's), (14, 18653),

Gene: Diabla_17 Start: 15806, Stop: 16120, Start Num: 7
Candidate Starts for Diabla_17:
(Start: 7 @15806 has 60 MA's), (12, 15905),

Gene: Eggsie_18 Start: 16001, Stop: 16315, Start Num: 7
Candidate Starts for Eggsie_18:
(Start: 7 @16001 has 60 MA's), (12, 16100),

Gene: Ekhein_18 Start: 15986, Stop: 16303, Start Num: 7
Candidate Starts for Ekhein_18:
(Start: 7 @15986 has 60 MA's),

Gene: Exiguo_18 Start: 15998, Stop: 16315, Start Num: 7
Candidate Starts for Exiguo_18:
(Start: 7 @15998 has 60 MA's),

Gene: FelixAlejandro_19 Start: 16184, Stop: 16501, Start Num: 7
Candidate Starts for FelixAlejandro_19:
(Start: 7 @16184 has 60 MA's),

Gene: Flakey_18 Start: 16859, Stop: 17176, Start Num: 7
Candidate Starts for Flakey_18:
(Start: 7 @16859 has 60 MA's),

Gene: GMA7_11 Start: 10200, Stop: 10454, Start Num: 10
Candidate Starts for GMA7_11:
(Start: 10 @10200 has 3 MA's), (13, 10266),

Gene: GTE7_11 Start: 10259, Stop: 10513, Start Num: 10
Candidate Starts for GTE7_11:

(Start: 10 @10259 has 3 MA's), (13, 10325),

Gene: GalacticEye_15 Start: 16746, Stop: 17030, Start Num: 7

Candidate Starts for GalacticEye_15:

(Start: 7 @16746 has 60 MA's), (Start: 9 @16761 has 1 MA's),

Gene: Gorko_18 Start: 15990, Stop: 16307, Start Num: 7

Candidate Starts for Gorko_18:

(Start: 7 @15990 has 60 MA's),

Gene: GourdThymes_18 Start: 16858, Stop: 17175, Start Num: 7

Candidate Starts for GourdThymes_18:

(Start: 7 @16858 has 60 MA's),

Gene: Guillaume_15 Start: 16778, Stop: 17080, Start Num: 7

Candidate Starts for Guillaume_15:

(Start: 7 @16778 has 60 MA's), (Start: 9 @16793 has 1 MA's),

Gene: Hail2Pitt_15 Start: 17270, Stop: 17557, Start Num: 9

Candidate Starts for Hail2Pitt_15:

(Start: 7 @17255 has 60 MA's), (Start: 9 @17270 has 1 MA's),

Gene: Harambe_15 Start: 17039, Stop: 17341, Start Num: 7

Candidate Starts for Harambe_15:

(Start: 7 @17039 has 60 MA's), (Start: 9 @17054 has 1 MA's),

Gene: HayZem_19 Start: 16011, Stop: 16265, Start Num: 10

Candidate Starts for HayZem_19:

(Start: 10 @16011 has 3 MA's), (13, 16077),

Gene: Hello_15 Start: 17025, Stop: 17309, Start Num: 7

Candidate Starts for Hello_15:

(Start: 7 @17025 has 60 MA's), (Start: 9 @17040 has 1 MA's),

Gene: Hollow_18 Start: 17775, Stop: 18065, Start Num: 8

Candidate Starts for Hollow_18:

(6, 17757), (Start: 8 @17775 has 12 MA's), (14, 17928),

Gene: Hotorobo_18 Start: 16869, Stop: 17186, Start Num: 7

Candidate Starts for Hotorobo_18:

(Start: 7 @16869 has 60 MA's),

Gene: Jams_15 Start: 16219, Stop: 16503, Start Num: 7

Candidate Starts for Jams_15:

(Start: 7 @16219 has 60 MA's), (Start: 9 @16234 has 1 MA's),

Gene: Jellybones_18 Start: 16021, Stop: 16338, Start Num: 7

Candidate Starts for Jellybones_18:

(Start: 7 @16021 has 60 MA's),

Gene: John316_18 Start: 15986, Stop: 16303, Start Num: 7

Candidate Starts for John316_18:

(Start: 7 @15986 has 60 MA's),

Gene: Jormungandr_15 Start: 16760, Stop: 17062, Start Num: 7
Candidate Starts for Jormungandr_15:
(Start: 7 @16760 has 60 MA's), (Start: 9 @16775 has 1 MA's),

Gene: Kaseim_15 Start: 16210, Stop: 16494, Start Num: 7
Candidate Starts for Kaseim_15:
(1, 15817), (2, 15841), (Start: 7 @16210 has 60 MA's), (Start: 9 @16225 has 1 MA's),

Gene: Katyusha_18 Start: 18609, Stop: 18899, Start Num: 8
Candidate Starts for Katyusha_18:
(6, 18591), (Start: 8 @18609 has 12 MA's), (14, 18762),

Gene: Kelzog_18 Start: 16870, Stop: 17187, Start Num: 7
Candidate Starts for Kelzog_18:
(Start: 7 @16870 has 60 MA's),

Gene: Kvothe_18 Start: 18546, Stop: 18836, Start Num: 8
Candidate Starts for Kvothe_18:
(6, 18528), (Start: 8 @18546 has 12 MA's), (14, 18699),

Gene: Lahirium_15 Start: 17276, Stop: 17578, Start Num: 7
Candidate Starts for Lahirium_15:
(Start: 7 @17276 has 60 MA's), (Start: 9 @17291 has 1 MA's),

Gene: Lidong_15 Start: 17025, Stop: 17309, Start Num: 7
Candidate Starts for Lidong_15:
(Start: 7 @17025 has 60 MA's), (Start: 9 @17040 has 1 MA's),

Gene: Linetti_19 Start: 17004, Stop: 17321, Start Num: 7
Candidate Starts for Linetti_19:
(Start: 7 @17004 has 60 MA's),

Gene: Lizzo_18 Start: 16858, Stop: 17175, Start Num: 7
Candidate Starts for Lizzo_18:
(Start: 7 @16858 has 60 MA's),

Gene: Luker_15 Start: 16740, Stop: 17042, Start Num: 7
Candidate Starts for Luker_15:
(Start: 7 @16740 has 60 MA's), (Start: 9 @16755 has 1 MA's),

Gene: Minos_15 Start: 16746, Stop: 17048, Start Num: 7
Candidate Starts for Minos_15:
(Start: 7 @16746 has 60 MA's), (Start: 9 @16761 has 1 MA's),

Gene: Monty_17 Start: 16002, Stop: 16319, Start Num: 7
Candidate Starts for Monty_17:
(Start: 7 @16002 has 60 MA's),

Gene: MrWormie_15 Start: 15910, Stop: 16212, Start Num: 7
Candidate Starts for MrWormie_15:
(Start: 7 @15910 has 60 MA's), (Start: 9 @15925 has 1 MA's),

Gene: Msay19_19 Start: 16176, Stop: 16493, Start Num: 7
Candidate Starts for Msay19_19:
(Start: 7 @16176 has 60 MA's),

Gene: Neoevie_15 Start: 17016, Stop: 17318, Start Num: 7
Candidate Starts for Neoevie_15:
(Start: 7 @17016 has 60 MA's), (Start: 9 @17031 has 1 MA's),

Gene: Newt_15 Start: 16757, Stop: 17059, Start Num: 7
Candidate Starts for Newt_15:
(Start: 7 @16757 has 60 MA's), (Start: 9 @16772 has 1 MA's),

Gene: Niagara_18 Start: 18566, Stop: 18856, Start Num: 8
Candidate Starts for Niagara_18:
(6, 18548), (Start: 8 @18566 has 12 MA's), (14, 18719),

Gene: Nimi13_15 Start: 16758, Stop: 17060, Start Num: 7
Candidate Starts for Nimi13_15:
(Start: 7 @16758 has 60 MA's), (Start: 9 @16773 has 1 MA's),

Gene: Philon9_19 Start: 20444, Stop: 20719, Start Num: 8
Candidate Starts for Philon9_19:
(3, 20204), (4, 20240), (5, 20285), (6, 20426), (Start: 8 @20444 has 12 MA's), (11, 20492), (15, 20612),

Gene: PierreThree_18 Start: 16855, Stop: 17172, Start Num: 7
Candidate Starts for PierreThree_18:
(Start: 7 @16855 has 60 MA's),

Gene: PokyPuppy_17 Start: 16742, Stop: 17065, Start Num: 7
Candidate Starts for PokyPuppy_17:
(Start: 7 @16742 has 60 MA's), (12, 16841),

Gene: Poland_19 Start: 16152, Stop: 16469, Start Num: 7
Candidate Starts for Poland_19:
(Start: 7 @16152 has 60 MA's),

Gene: RemRem_19 Start: 15998, Stop: 16315, Start Num: 7
Candidate Starts for RemRem_19:
(Start: 7 @15998 has 60 MA's),

Gene: RoyalG_19 Start: 16483, Stop: 16797, Start Num: 7
Candidate Starts for RoyalG_19:
(Start: 7 @16483 has 60 MA's), (12, 16582),

Gene: Sam12_18 Start: 15998, Stop: 16315, Start Num: 7
Candidate Starts for Sam12_18:
(Start: 7 @15998 has 60 MA's),

Gene: Shelley_15 Start: 16234, Stop: 16536, Start Num: 7
Candidate Starts for Shelley_15:
(Start: 7 @16234 has 60 MA's), (Start: 9 @16249 has 1 MA's),

Gene: Sombrero_18 Start: 16030, Stop: 16347, Start Num: 7

Candidate Starts for Sombrero_18:
(Start: 7 @16030 has 60 MA's),

Gene: Squibbles_18 Start: 16858, Stop: 17175, Start Num: 7
Candidate Starts for Squibbles_18:
(Start: 7 @16858 has 60 MA's),

Gene: SteveFrench_18 Start: 16679, Stop: 16993, Start Num: 7
Candidate Starts for SteveFrench_18:
(Start: 7 @16679 has 60 MA's), (12, 16778),

Gene: Sticker17_15 Start: 16757, Stop: 17059, Start Num: 7
Candidate Starts for Sticker17_15:
(Start: 7 @16757 has 60 MA's), (Start: 9 @16772 has 1 MA's),

Gene: Teal_15 Start: 16734, Stop: 17036, Start Num: 7
Candidate Starts for Teal_15:
(Start: 7 @16734 has 60 MA's), (Start: 9 @16749 has 1 MA's),

Gene: Teatealatte_18 Start: 18529, Stop: 18819, Start Num: 8
Candidate Starts for Teatealatte_18:
(6, 18511), (Start: 8 @18529 has 12 MA's), (14, 18682),

Gene: Teech_18 Start: 18330, Stop: 18620, Start Num: 8
Candidate Starts for Teech_18:
(6, 18312), (Start: 8 @18330 has 12 MA's), (14, 18483),

Gene: Tredge_18 Start: 18529, Stop: 18819, Start Num: 8
Candidate Starts for Tredge_18:
(6, 18511), (Start: 8 @18529 has 12 MA's), (14, 18682),

Gene: Vitaenoi_19 Start: 20443, Stop: 20718, Start Num: 8
Candidate Starts for Vitaenoi_19:
(3, 20203), (4, 20239), (5, 20284), (6, 20425), (Start: 8 @20443 has 12 MA's), (11, 20491), (15, 20611),

Gene: Woes_15 Start: 17286, Stop: 17570, Start Num: 7
Candidate Starts for Woes_15:
(Start: 7 @17286 has 60 MA's), (Start: 9 @17301 has 1 MA's),

Gene: Worcestershire_18 Start: 16000, Stop: 16317, Start Num: 7
Candidate Starts for Worcestershire_18:
(Start: 7 @16000 has 60 MA's),