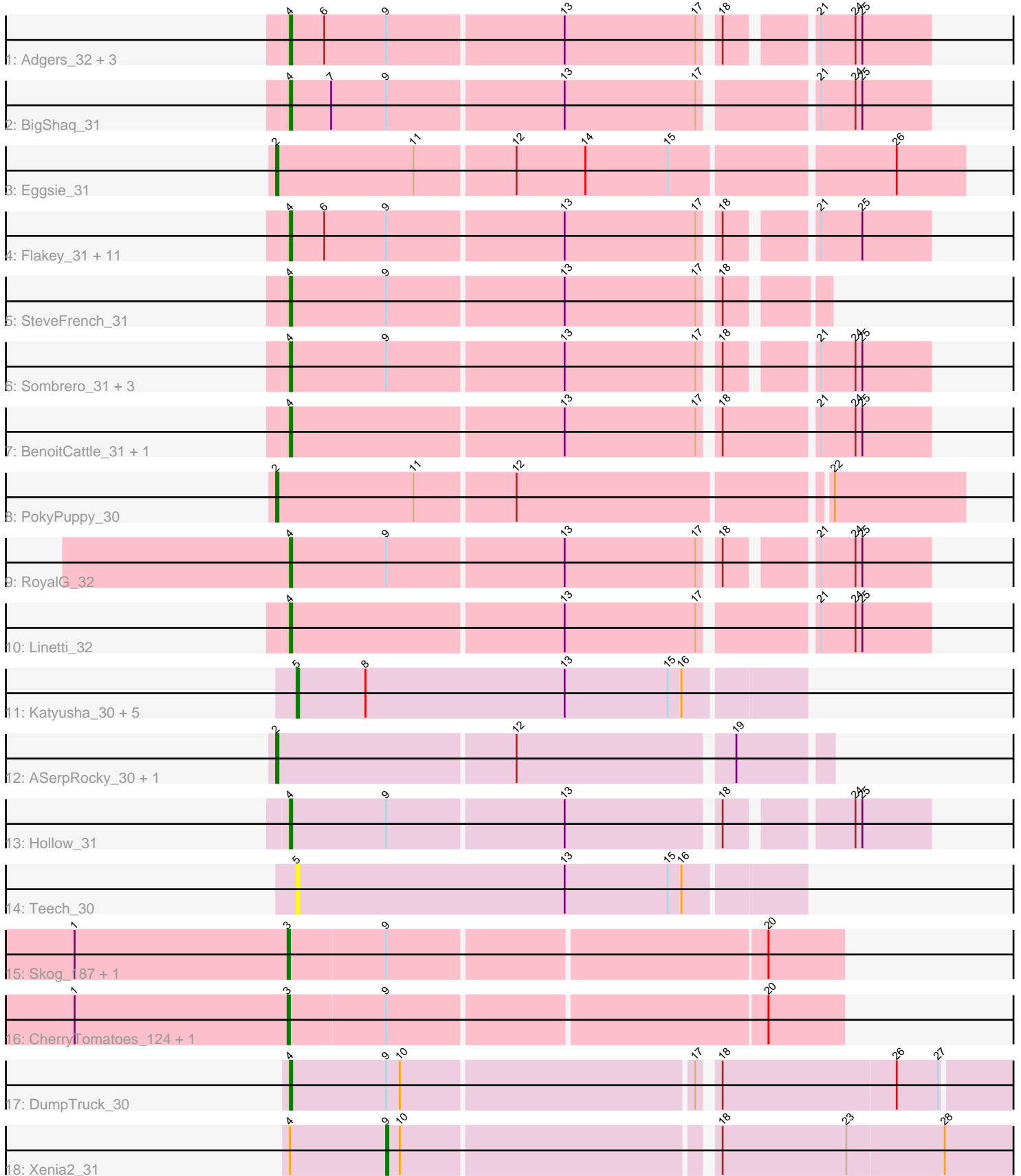


Pham 224687



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 224687 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224687 has 44 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Adgers_32, Barbochs_31, CathyBurgh_30, Lizzo_31
- Track 2 : BigShaq_31
- Track 3 : Eggsie_31
- Track 4 : Flakey_31, Exiguo_31, RemRem_32, Hotorobo_31, Sam12_31, Breezic_31, Monty_30, Squibbles_30, Gorko_31, Ekhein_31, Worcestershire_31, GourdThymes_31
- Track 5 : SteveFrench_31
- Track 6 : Sombrero_31, Chelms_31, PierreThree_31, Dakiti_31
- Track 7 : BenoitCattle_31, Crete_32
- Track 8 : PokyPuppy_30
- Track 9 : RoyalG_32
- Track 10 : Linetti_32
- Track 11 : Katyusha_30, Benczkowski14_30, Kvothe_30, Niagara_30, Teatealatte_30, Tredge_30
- Track 12 : ASerpRocky_30, Demosthenes_30
- Track 13 : Hollow_31
- Track 14 : Teech_30
- Track 15 : Skog_187, Pupper_125
- Track 16 : CherryTomatoes_124, SCentae_124
- Track 17 : DumpTruck_30
- Track 18 : Xenia2_31

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

The start number called the most often in the published annotations is 4, it was called in 23 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adgers_32, Barbochs_31, BenoitCattle_31, BigShaq_31, Breezic_31, CathyBurgh_30, Chelms_31, Crete_32, Dakiti_31, DumpTruck_30, Ekhein_31, Exiguo_31, Flakey_31, Gorko_31, GourdThymes_31, Hollow_31, Hotorobo_31, Linetti_32, Lizzo_31, Monty_30, PierreThree_31, RemRem_32, RoyalG_32, Sam12_31, Sombrero_31, Squibbles_30, SteveFrench_31, Worcestershire_31,

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

- Xenia2_31,

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

- ASerpRocky_30, Benczkowski14_30, CherryTomatoes_124, Demosthenes_30, Eggsie_31, Katyusha_30, Kvothe_30, Niagara_30, PokyPuppy_30, Pupper_125, SCentae_124, Skog_187, Teatealatte_30, Teech_30, Tredge_30,

Summary by start number:

Start 2:

- Found in 4 of 44 (9.1%) of genes in pham
- Manual Annotations of this start: 4 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_30 (CS4), Demosthenes_30 (CS4), Eggsie_31 (CS2), PokyPuppy_30 (CS2),

Start 3:

- Found in 4 of 44 (9.1%) of genes in pham
- Manual Annotations of this start: 4 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryTomatoes_124 (DO), Pupper_125 (DO), SCentae_124 (DO), Skog_187 (DO),

Start 4:

- Found in 29 of 44 (65.9%) of genes in pham
- Manual Annotations of this start: 23 of 38
- Called 96.6% of time when present
- Phage (with cluster) where this start called: Adgers_32 (CS2), Barbochs_31 (CS2), BenoitCattle_31 (CS2), BigShaq_31 (CS2), Breezic_31 (CS2), CathyBurgh_30 (CS2), Chelms_31 (CS2), Crete_32 (CS2), Dakiti_31 (CS2), DumpTruck_30 (DV), Ekhein_31 (CS2), Exiguo_31 (CS2), Flakey_31 (CS2), Gorko_31 (CS2), GourdThymes_31 (CS2), Hollow_31 (CS4), Hotorobo_31 (CS2), Linetti_32 (CS2), Lizzo_31 (CS2), Monty_30 (CS2), PierreThree_31 (CS2), RemRem_32 (CS2), RoyalG_32 (CS2), Sam12_31 (CS2), Sombrero_31 (CS2), Squibbles_30 (CS2), SteveFrench_31 (CS2), Worcestershire_31 (CS2),

Start 5:

- Found in 7 of 44 (15.9%) of genes in pham
- Manual Annotations of this start: 6 of 38
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Benczkowski14_30 (CS4), Katyusha_30 (CS4), Kvothe_30 (CS4), Niagara_30 (CS4), Teatealatte_30 (CS4), Teech_30 (CS4), Tredge_30 (CS4),

Start 9:

- Found in 30 of 44 (68.2%) of genes in pham
- Manual Annotations of this start: 1 of 38
- Called 3.3% of time when present
- Phage (with cluster) where this start called: Xenia2_31 (DV),

Summary by clusters:

There are 4 clusters represented in this pham: DO, CS4, DV, CS2,

Info for manual annotations of cluster CS2:

- Start number 2 was manually annotated 2 times for cluster CS2.
- Start number 4 was manually annotated 21 times for cluster CS2.

Info for manual annotations of cluster CS4:

- Start number 2 was manually annotated 2 times for cluster CS4.
- Start number 4 was manually annotated 1 time for cluster CS4.
- Start number 5 was manually annotated 6 times for cluster CS4.

Info for manual annotations of cluster DO:

- Start number 3 was manually annotated 4 times for cluster DO.

Info for manual annotations of cluster DV:

- Start number 4 was manually annotated 1 time for cluster DV.
- Start number 9 was manually annotated 1 time for cluster DV.

Gene Information:

Gene: ASerpRocky_30 Start: 38766, Stop: 38996, Start Num: 2

Candidate Starts for ASerpRocky_30:

(Start: 2 @38766 has 4 MA's), (12, 38868), (19, 38958),

Gene: Adgers_32 Start: 37251, Stop: 37511, Start Num: 4

Candidate Starts for Adgers_32:

(Start: 4 @37251 has 23 MA's), (6, 37266), (Start: 9 @37293 has 1 MA's), (13, 37368), (17, 37425), (18, 37431), (21, 37464), (24, 37479), (25, 37482),

Gene: Barbochs_31 Start: 37089, Stop: 37349, Start Num: 4

Candidate Starts for Barbochs_31:

(Start: 4 @37089 has 23 MA's), (6, 37104), (Start: 9 @37131 has 1 MA's), (13, 37206), (17, 37263), (18, 37269), (21, 37302), (24, 37317), (25, 37320),

Gene: Benczkowski14_30 Start: 38816, Stop: 39034, Start Num: 5

Candidate Starts for Benczkowski14_30:

(Start: 5 @38816 has 6 MA's), (8, 38846), (13, 38933), (15, 38978), (16, 38984),

Gene: BenoitCattle_31 Start: 37186, Stop: 37452, Start Num: 4

Candidate Starts for BenoitCattle_31:

(Start: 4 @37186 has 23 MA's), (13, 37303), (17, 37360), (18, 37366), (21, 37405), (24, 37420), (25, 37423),

Gene: BigShaq_31 Start: 37191, Stop: 37457, Start Num: 4

Candidate Starts for BigShaq_31:

(Start: 4 @37191 has 23 MA's), (7, 37209), (Start: 9 @37233 has 1 MA's), (13, 37308), (17, 37365), (21, 37410), (24, 37425), (25, 37428),

Gene: Breezic_31 Start: 37103, Stop: 37363, Start Num: 4

Candidate Starts for Breezic_31:

(Start: 4 @37103 has 23 MA's), (6, 37118), (Start: 9 @37145 has 1 MA's), (13, 37220), (17, 37277), (18, 37283), (21, 37316), (25, 37334),

Gene: CathyBurgh_30 Start: 37957, Stop: 38217, Start Num: 4

Candidate Starts for CathyBurgh_30:

(Start: 4 @37957 has 23 MA's), (6, 37972), (Start: 9 @37999 has 1 MA's), (13, 38074), (17, 38131), (18, 38137), (21, 38170), (24, 38185), (25, 38188),

Gene: Chelms_31 Start: 37194, Stop: 37460, Start Num: 4

Candidate Starts for Chelms_31:

(Start: 4 @37194 has 23 MA's), (Start: 9 @37236 has 1 MA's), (13, 37311), (17, 37368), (18, 37374), (21, 37413), (24, 37428), (25, 37431),

Gene: CherryTomatoes_124 Start: 82121, Stop: 82354, Start Num: 3

Candidate Starts for CherryTomatoes_124:

(1, 82028), (Start: 3 @82121 has 4 MA's), (Start: 9 @82163 has 1 MA's), (20, 82322),

Gene: Crete_32 Start: 37457, Stop: 37723, Start Num: 4

Candidate Starts for Crete_32:

(Start: 4 @37457 has 23 MA's), (13, 37574), (17, 37631), (18, 37637), (21, 37676), (24, 37691), (25, 37694),

Gene: Dakiti_31 Start: 38062, Stop: 38328, Start Num: 4

Candidate Starts for Dakiti_31:

(Start: 4 @38062 has 23 MA's), (Start: 9 @38104 has 1 MA's), (13, 38179), (17, 38236), (18, 38242), (21, 38281), (24, 38296), (25, 38299),

Gene: Demosthenes_30 Start: 38739, Stop: 38969, Start Num: 2

Candidate Starts for Demosthenes_30:

(Start: 2 @38739 has 4 MA's), (12, 38841), (19, 38931),

Gene: DumpTruck_30 Start: 27996, Stop: 28319, Start Num: 4

Candidate Starts for DumpTruck_30:

(Start: 4 @27996 has 23 MA's), (Start: 9 @28038 has 1 MA's), (10, 28044), (17, 28167), (18, 28173), (26, 28248), (27, 28266),

Gene: Eggsie_31 Start: 37210, Stop: 37500, Start Num: 2

Candidate Starts for Eggsie_31:

(Start: 2 @37210 has 4 MA's), (11, 37270), (12, 37312), (14, 37342), (15, 37378), (26, 37471),

Gene: Ekhein_31 Start: 37085, Stop: 37345, Start Num: 4

Candidate Starts for Ekhein_31:

(Start: 4 @37085 has 23 MA's), (6, 37100), (Start: 9 @37127 has 1 MA's), (13, 37202), (17, 37259), (18, 37265), (21, 37298), (25, 37316),

Gene: Exiguo_31 Start: 37097, Stop: 37357, Start Num: 4

Candidate Starts for Exiguo_31:

(Start: 4 @37097 has 23 MA's), (6, 37112), (Start: 9 @37139 has 1 MA's), (13, 37214), (17, 37271), (18, 37277), (21, 37310), (25, 37328),

Gene: Flakey_31 Start: 37961, Stop: 38221, Start Num: 4

Candidate Starts for Flakey_31:

(Start: 4 @37961 has 23 MA's), (6, 37976), (Start: 9 @38003 has 1 MA's), (13, 38078), (17, 38135), (18, 38141), (21, 38174), (25, 38192),

Gene: Gorko_31 Start: 37089, Stop: 37349, Start Num: 4

Candidate Starts for Gorko_31:

(Start: 4 @37089 has 23 MA's), (6, 37104), (Start: 9 @37131 has 1 MA's), (13, 37206), (17, 37263), (18, 37269), (21, 37302), (25, 37320),

Gene: GourdThymes_31 Start: 37963, Stop: 38223, Start Num: 4

Candidate Starts for GourdThymes_31:

(Start: 4 @37963 has 23 MA's), (6, 37978), (Start: 9 @38005 has 1 MA's), (13, 38080), (17, 38137), (18, 38143), (21, 38176), (25, 38194),

Gene: Hollow_31 Start: 39132, Stop: 39392, Start Num: 4

Candidate Starts for Hollow_31:

(Start: 4 @39132 has 23 MA's), (Start: 9 @39174 has 1 MA's), (13, 39249), (18, 39312), (24, 39360), (25, 39363),

Gene: Hotorobo_31 Start: 37968, Stop: 38228, Start Num: 4

Candidate Starts for Hotorobo_31:

(Start: 4 @37968 has 23 MA's), (6, 37983), (Start: 9 @38010 has 1 MA's), (13, 38085), (17, 38142), (18, 38148), (21, 38181), (25, 38199),

Gene: Katyusha_30 Start: 38816, Stop: 39034, Start Num: 5

Candidate Starts for Katyusha_30:

(Start: 5 @38816 has 6 MA's), (8, 38846), (13, 38933), (15, 38978), (16, 38984),

Gene: Kvothe_30 Start: 38715, Stop: 38933, Start Num: 5

Candidate Starts for Kvothe_30:

(Start: 5 @38715 has 6 MA's), (8, 38745), (13, 38832), (15, 38877), (16, 38883),

Gene: Linetti_32 Start: 38188, Stop: 38454, Start Num: 4

Candidate Starts for Linetti_32:

(Start: 4 @38188 has 23 MA's), (13, 38305), (17, 38362), (21, 38407), (24, 38422), (25, 38425),

Gene: Lizzo_31 Start: 37957, Stop: 38217, Start Num: 4

Candidate Starts for Lizzo_31:

(Start: 4 @37957 has 23 MA's), (6, 37972), (Start: 9 @37999 has 1 MA's), (13, 38074), (17, 38131), (18, 38137), (21, 38170), (24, 38185), (25, 38188),

Gene: Monty_30 Start: 37107, Stop: 37367, Start Num: 4

Candidate Starts for Monty_30:

(Start: 4 @37107 has 23 MA's), (6, 37122), (Start: 9 @37149 has 1 MA's), (13, 37224), (17, 37281), (18, 37287), (21, 37320), (25, 37338),

Gene: Niagara_30 Start: 38773, Stop: 38991, Start Num: 5

Candidate Starts for Niagara_30:

(Start: 5 @38773 has 6 MA's), (8, 38803), (13, 38890), (15, 38935), (16, 38941),

Gene: PierreThree_31 Start: 38059, Stop: 38325, Start Num: 4

Candidate Starts for PierreThree_31:

(Start: 4 @38059 has 23 MA's), (Start: 9 @38101 has 1 MA's), (13, 38176), (17, 38233), (18, 38239), (21, 38278), (24, 38293), (25, 38296),

Gene: PokyPuppy_30 Start: 37985, Stop: 38272, Start Num: 2
Candidate Starts for PokyPuppy_30:
(Start: 2 @37985 has 4 MA's), (11, 38045), (12, 38087), (22, 38216),

Gene: Pupper_125 Start: 82970, Stop: 83203, Start Num: 3
Candidate Starts for Pupper_125:
(1, 82877), (Start: 3 @82970 has 4 MA's), (Start: 9 @83012 has 1 MA's), (20, 83171),

Gene: RemRem_32 Start: 37097, Stop: 37357, Start Num: 4
Candidate Starts for RemRem_32:
(Start: 4 @37097 has 23 MA's), (6, 37112), (Start: 9 @37139 has 1 MA's), (13, 37214), (17, 37271),
(18, 37277), (21, 37310), (25, 37328),

Gene: RoyalG_32 Start: 37579, Stop: 37839, Start Num: 4
Candidate Starts for RoyalG_32:
(Start: 4 @37579 has 23 MA's), (Start: 9 @37621 has 1 MA's), (13, 37696), (17, 37753), (18, 37759),
(21, 37792), (24, 37807), (25, 37810),

Gene: SCentae_124 Start: 83123, Stop: 83356, Start Num: 3
Candidate Starts for SCentae_124:
(1, 83030), (Start: 3 @83123 has 4 MA's), (Start: 9 @83165 has 1 MA's), (20, 83324),

Gene: Sam12_31 Start: 37097, Stop: 37357, Start Num: 4
Candidate Starts for Sam12_31:
(Start: 4 @37097 has 23 MA's), (6, 37112), (Start: 9 @37139 has 1 MA's), (13, 37214), (17, 37271),
(18, 37277), (21, 37310), (25, 37328),

Gene: Skog_187 Start: 112853, Stop: 113086, Start Num: 3
Candidate Starts for Skog_187:
(1, 112760), (Start: 3 @112853 has 4 MA's), (Start: 9 @112895 has 1 MA's), (20, 113054),

Gene: Sombrero_31 Start: 37099, Stop: 37359, Start Num: 4
Candidate Starts for Sombrero_31:
(Start: 4 @37099 has 23 MA's), (Start: 9 @37141 has 1 MA's), (13, 37216), (17, 37273), (18, 37279),
(21, 37312), (24, 37327), (25, 37330),

Gene: Squibbles_30 Start: 37960, Stop: 38220, Start Num: 4
Candidate Starts for Squibbles_30:
(Start: 4 @37960 has 23 MA's), (6, 37975), (Start: 9 @38002 has 1 MA's), (13, 38077), (17, 38134),
(18, 38140), (21, 38173), (25, 38191),

Gene: SteveFrench_31 Start: 37818, Stop: 38036, Start Num: 4
Candidate Starts for SteveFrench_31:
(Start: 4 @37818 has 23 MA's), (Start: 9 @37860 has 1 MA's), (13, 37935), (17, 37992), (18, 37998),

Gene: Teatealatte_30 Start: 38718, Stop: 38936, Start Num: 5
Candidate Starts for Teatealatte_30:
(Start: 5 @38718 has 6 MA's), (8, 38748), (13, 38835), (15, 38880), (16, 38886),

Gene: Teech_30 Start: 38519, Stop: 38737, Start Num: 5
Candidate Starts for Teech_30:
(Start: 5 @38519 has 6 MA's), (13, 38636), (15, 38681), (16, 38687),

Gene: Tredge_30 Start: 38718, Stop: 38936, Start Num: 5

Candidate Starts for Tredge_30:

(Start: 5 @38718 has 6 MA's), (8, 38748), (13, 38835), (15, 38880), (16, 38886),

Gene: Worcestershire_31 Start: 37099, Stop: 37359, Start Num: 4

Candidate Starts for Worcestershire_31:

(Start: 4 @37099 has 23 MA's), (6, 37114), (Start: 9 @37141 has 1 MA's), (13, 37216), (17, 37273),
(18, 37279), (21, 37312), (25, 37330),

Gene: Xenia2_31 Start: 28080, Stop: 28364, Start Num: 9

Candidate Starts for Xenia2_31:

(Start: 4 @28038 has 23 MA's), (Start: 9 @28080 has 1 MA's), (10, 28086), (18, 28215), (23, 28269),
(28, 28311),