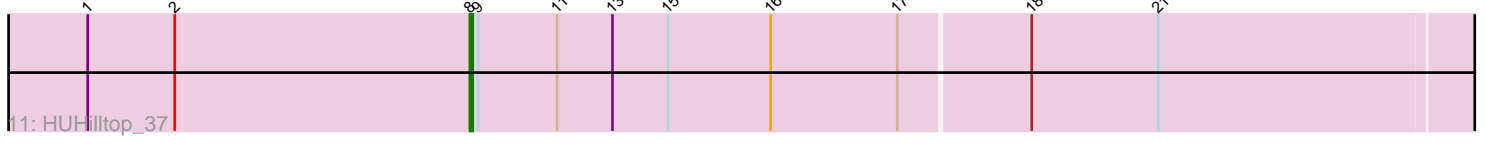
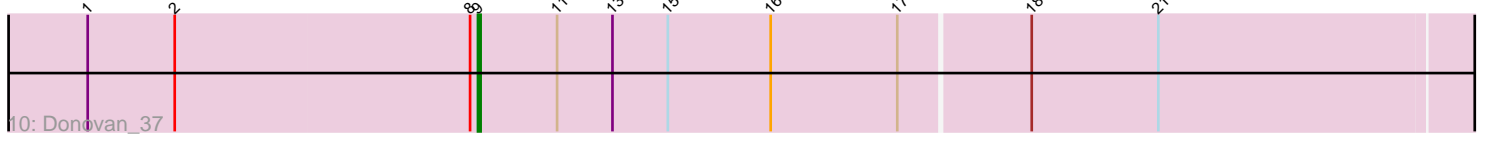
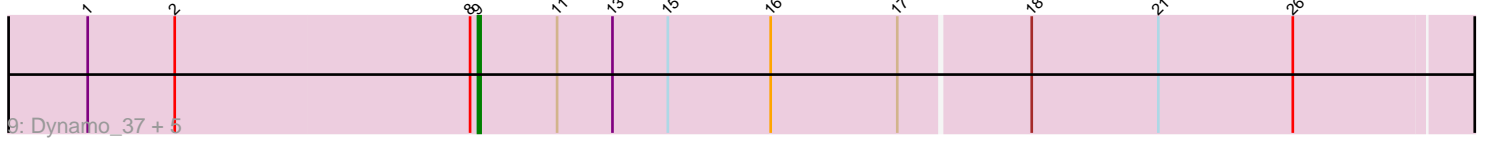
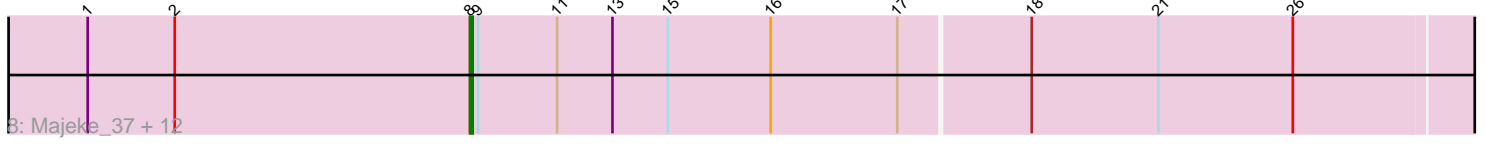
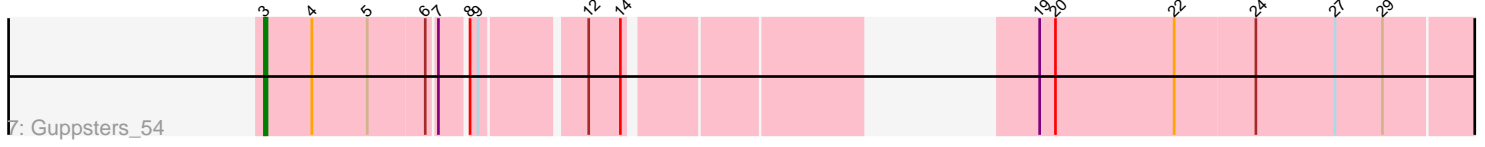
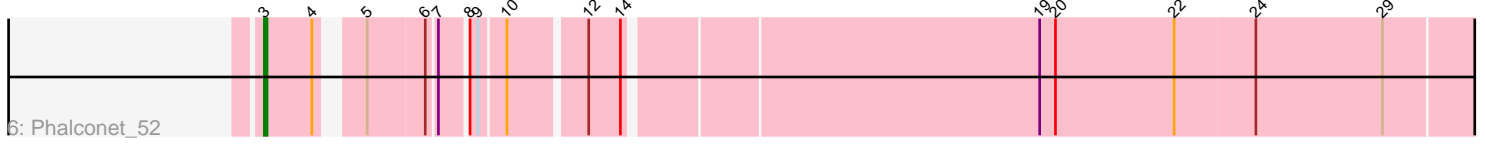
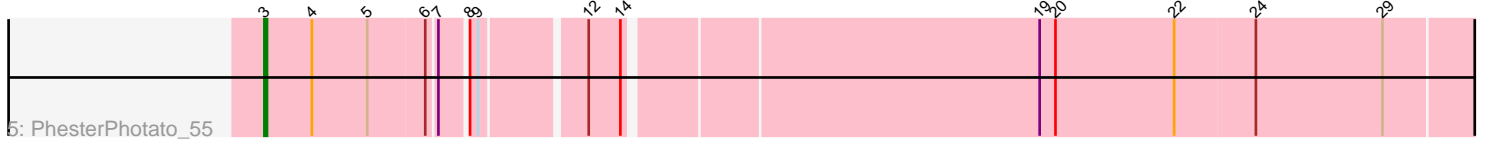
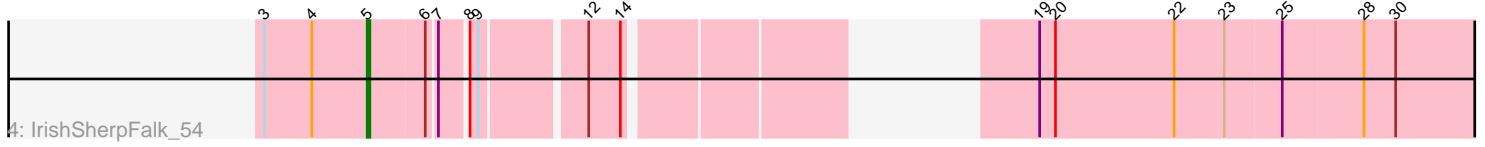
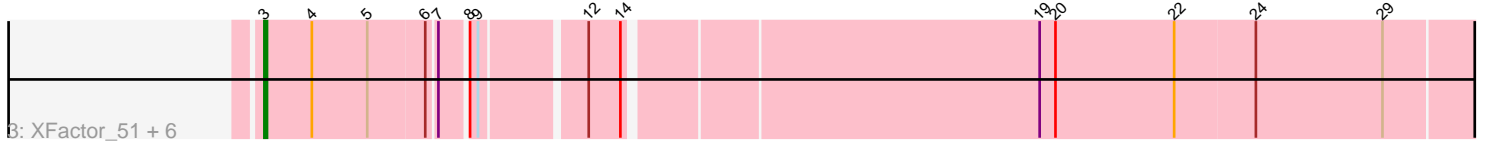
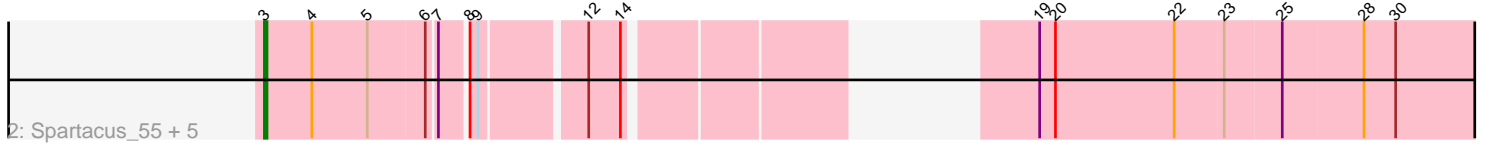
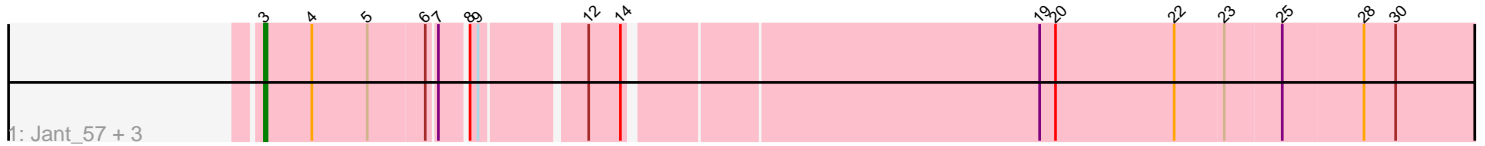


Pham 221561



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 221561 Report

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

Pham number 221561 has 42 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Jant_57, Batiatus_51, IMpilo_50, Filuzino_51
- Track 2 : Spartacus_55, SilverChicken_63, WillSterrel_54, Phanphagia_51, Shauna1_52, SuperGrey_57
- Track 3 : XFactor_51, Sparkdehlily_61, Doug_56, TDanisky_61, Zerg_53, DaWorst_55, RockyHorror_54
- Track 4 : IrishSherpFalk_54
- Track 5 : PhesterPhotato_55
- Track 6 : Phalconet_52
- Track 7 : Guppsters_54
- Track 8 : Majeke_37, Necropolis_37, Jebeks_38, Fishburne_37, Etoile_37, Arib1_37, Mangethe_37, Phineas_37, Zilizebeth_37, Techage_37, Kari_37, Vidya_37, Bartholomew_36
- Track 9 : Dynamo_37, Langerak_37, Sonah_37, Venti_37, Phegasus_37, FirstPlacePfu_37
- Track 10 : Donovan_37
- Track 11 : HUHilltop_37

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

The start number called the most often in the published annotations is 3, it was called in 17 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Batiatus_51, DaWorst_55, Doug_56, Filuzino_51, Guppsters_54, IMpilo_50, Jant_57, Phalconet_52, Phanphagia_51, PhesterPhotato_55, RockyHorror_54, Shauna1_52, SilverChicken_63, Sparkdehlily_61, Spartacus_55, SuperGrey_57, TDanisky_61, WillSterrel_54, XFactor_51, Zerg_53,

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

- IrishSherpFalk_54,

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

- Arib1_37, Bartholomew_36, Donovan_37, Dynamo_37, Etoile_37, FirstPlacePfu_37, Fishburne_37, HUHilltop_37, Jebeks_38, Kari_37, Langerak_37, Majeke_37,

Mangethe_37, Necropolis_37, Phegasus_37, Phineas_37, Sonah_37, Techage_37, Venti_37, Vidya_37, Zilizebeth_37,

Summary by start number:

Start 3:

- Found in 21 of 42 (50.0%) of genes in pham
- Manual Annotations of this start: 17 of 36
- Called 95.2% of time when present
- Phage (with cluster) where this start called: Batiatus_51 (F1), DaWorst_55 (F1), Doug_56 (F1), Filuzino_51 (F1), Guppsters_54 (F1), IMpilo_50 (F1), Jant_57 (F1), Phalconet_52 (F1), Phanphagia_51 (F1), PhesterPhotato_55 (F1), RockyHorror_54 (F1), Shauna1_52 (F1), SilverChicken_63 (F2), Sparkdehlily_61 (F1), Spartacus_55 (F1), SuperGrey_57 (F1), TDanisky_61 (F1), WillSterrel_54 (F1), XFactor_51 (F1), Zerg_53 (F1),

Start 5:

- Found in 21 of 42 (50.0%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 4.8% of time when present
- Phage (with cluster) where this start called: IrishSherpFalk_54 (F1),

Start 8:

- Found in 42 of 42 (100.0%) of genes in pham
- Manual Annotations of this start: 11 of 36
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Arib1_37 (P1), Bartholomew_36 (P1), Etoile_37 (P1), Fishburne_37 (P1), HUHilltop_37 (P1), Jebeks_38 (P1), Kari_37 (P1), Majeke_37 (P1), Mangethe_37 (P1), Necropolis_37 (P1), Phineas_37 (P1), Techage_37 (P1), Vidya_37 (P1), Zilizebeth_37 (P1),

Start 9:

- Found in 42 of 42 (100.0%) of genes in pham
- Manual Annotations of this start: 7 of 36
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Donovan_37 (P1), Dynamo_37 (P1), FirstPlacePfu_37 (P1), Langerak_37 (P1), Phegasus_37 (P1), Sonah_37 (P1), Venti_37 (P1),

Summary by clusters:

There are 3 clusters represented in this pham: F1, F2, P1,

Info for manual annotations of cluster F1:

- Start number 3 was manually annotated 17 times for cluster F1.
- Start number 5 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster P1:

- Start number 8 was manually annotated 11 times for cluster P1.
- Start number 9 was manually annotated 7 times for cluster P1.

Gene Information:

Gene: Arib1_37 Start: 29346, Stop: 29747, Start Num: 8

Candidate Starts for Arib1_37:

(1, 29202), (2, 29235), (Start: 8 @29346 has 11 MA's), (Start: 9 @29349 has 7 MA's), (11, 29379), (13, 29400), (15, 29421), (16, 29460), (17, 29508), (18, 29556), (21, 29604), (26, 29655),

Gene: Bartholomew_36 Start: 29343, Stop: 29744, Start Num: 8

Candidate Starts for Bartholomew_36:

(1, 29199), (2, 29232), (Start: 8 @29343 has 11 MA's), (Start: 9 @29346 has 7 MA's), (11, 29376), (13, 29397), (15, 29418), (16, 29457), (17, 29505), (18, 29553), (21, 29601), (26, 29652),

Gene: Batiatus_51 Start: 37273, Stop: 37695, Start Num: 3

Candidate Starts for Batiatus_51:

(Start: 3 @37273 has 17 MA's), (4, 37291), (Start: 5 @37312 has 1 MA's), (6, 37333), (7, 37336), (Start: 8 @37345 has 11 MA's), (Start: 9 @37348 has 7 MA's), (12, 37384), (14, 37396), (19, 37507), (20, 37513), (22, 37558), (23, 37576), (25, 37597), (28, 37627), (30, 37639),

Gene: DaWorst_55 Start: 38273, Stop: 38734, Start Num: 3

Candidate Starts for DaWorst_55:

(Start: 3 @38273 has 17 MA's), (4, 38291), (Start: 5 @38312 has 1 MA's), (6, 38333), (7, 38336), (Start: 8 @38345 has 11 MA's), (Start: 9 @38348 has 7 MA's), (12, 38384), (14, 38396), (19, 38546), (20, 38552), (22, 38597), (24, 38627), (29, 38675),

Gene: Donovan_37 Start: 29365, Stop: 29763, Start Num: 9

Candidate Starts for Donovan_37:

(1, 29218), (2, 29251), (Start: 8 @29362 has 11 MA's), (Start: 9 @29365 has 7 MA's), (11, 29395), (13, 29416), (15, 29437), (16, 29476), (17, 29524), (18, 29572), (21, 29620),

Gene: Doug_56 Start: 38539, Stop: 39000, Start Num: 3

Candidate Starts for Doug_56:

(Start: 3 @38539 has 17 MA's), (4, 38557), (Start: 5 @38578 has 1 MA's), (6, 38599), (7, 38602), (Start: 8 @38611 has 11 MA's), (Start: 9 @38614 has 7 MA's), (12, 38650), (14, 38662), (19, 38812), (20, 38818), (22, 38863), (24, 38893), (29, 38941),

Gene: Dynamo_37 Start: 29754, Stop: 30152, Start Num: 9

Candidate Starts for Dynamo_37:

(1, 29607), (2, 29640), (Start: 8 @29751 has 11 MA's), (Start: 9 @29754 has 7 MA's), (11, 29784), (13, 29805), (15, 29826), (16, 29865), (17, 29913), (18, 29961), (21, 30009), (26, 30060),

Gene: Etoile_37 Start: 29343, Stop: 29744, Start Num: 8

Candidate Starts for Etoile_37:

(1, 29199), (2, 29232), (Start: 8 @29343 has 11 MA's), (Start: 9 @29346 has 7 MA's), (11, 29376), (13, 29397), (15, 29418), (16, 29457), (17, 29505), (18, 29553), (21, 29601), (26, 29652),

Gene: Filuzino_51 Start: 36320, Stop: 36742, Start Num: 3

Candidate Starts for Filuzino_51:

(Start: 3 @36320 has 17 MA's), (4, 36338), (Start: 5 @36359 has 1 MA's), (6, 36380), (7, 36383), (Start: 8 @36392 has 11 MA's), (Start: 9 @36395 has 7 MA's), (12, 36431), (14, 36443), (19, 36554), (20, 36560), (22, 36605), (23, 36623), (25, 36644), (28, 36674), (30, 36686),

Gene: FirstPlacePfu_37 Start: 29378, Stop: 29776, Start Num: 9

Candidate Starts for FirstPlacePfu_37:

(1, 29231), (2, 29264), (Start: 8 @29375 has 11 MA's), (Start: 9 @29378 has 7 MA's), (11, 29408), (13, 29429), (15, 29450), (16, 29489), (17, 29537), (18, 29585), (21, 29633), (26, 29684),

Gene: Fishburne_37 Start: 29343, Stop: 29744, Start Num: 8

Candidate Starts for Fishburne_37:

(1, 29199), (2, 29232), (Start: 8 @29343 has 11 MA's), (Start: 9 @29346 has 7 MA's), (11, 29376), (13, 29397), (15, 29418), (16, 29457), (17, 29505), (18, 29553), (21, 29601), (26, 29652),

Gene: Guppsters_54 Start: 36848, Stop: 37258, Start Num: 3

Candidate Starts for Guppsters_54:

(Start: 3 @36848 has 17 MA's), (4, 36866), (Start: 5 @36887 has 1 MA's), (6, 36908), (7, 36911), (Start: 8 @36920 has 11 MA's), (Start: 9 @36923 has 7 MA's), (12, 36959), (14, 36971), (19, 37070), (20, 37076), (22, 37121), (24, 37151), (27, 37181), (29, 37199),

Gene: HUHilltop_37 Start: 29373, Stop: 29774, Start Num: 8

Candidate Starts for HUHilltop_37:

(1, 29229), (2, 29262), (Start: 8 @29373 has 11 MA's), (Start: 9 @29376 has 7 MA's), (11, 29406), (13, 29427), (15, 29448), (16, 29487), (17, 29535), (18, 29583), (21, 29631),

Gene: IMPilo_50 Start: 35763, Stop: 36185, Start Num: 3

Candidate Starts for IMPilo_50:

(Start: 3 @35763 has 17 MA's), (4, 35781), (Start: 5 @35802 has 1 MA's), (6, 35823), (7, 35826), (Start: 8 @35835 has 11 MA's), (Start: 9 @35838 has 7 MA's), (12, 35874), (14, 35886), (19, 35997), (20, 36003), (22, 36048), (23, 36066), (25, 36087), (28, 36117), (30, 36129),

Gene: IrishSherpFalk_54 Start: 38745, Stop: 39116, Start Num: 5

Candidate Starts for IrishSherpFalk_54:

(Start: 3 @38706 has 17 MA's), (4, 38724), (Start: 5 @38745 has 1 MA's), (6, 38766), (7, 38769), (Start: 8 @38778 has 11 MA's), (Start: 9 @38781 has 7 MA's), (12, 38817), (14, 38829), (19, 38928), (20, 38934), (22, 38979), (23, 38997), (25, 39018), (28, 39048), (30, 39060),

Gene: Jant_57 Start: 39083, Stop: 39544, Start Num: 3

Candidate Starts for Jant_57:

(Start: 3 @39083 has 17 MA's), (4, 39101), (Start: 5 @39122 has 1 MA's), (6, 39143), (7, 39146), (Start: 8 @39155 has 11 MA's), (Start: 9 @39158 has 7 MA's), (12, 39194), (14, 39206), (19, 39356), (20, 39362), (22, 39407), (23, 39425), (25, 39446), (28, 39476), (30, 39488),

Gene: Jebeks_38 Start: 29328, Stop: 29729, Start Num: 8

Candidate Starts for Jebeks_38:

(1, 29184), (2, 29217), (Start: 8 @29328 has 11 MA's), (Start: 9 @29331 has 7 MA's), (11, 29361), (13, 29382), (15, 29403), (16, 29442), (17, 29490), (18, 29538), (21, 29586), (26, 29637),

Gene: Kari_37 Start: 29340, Stop: 29741, Start Num: 8

Candidate Starts for Kari_37:

(1, 29196), (2, 29229), (Start: 8 @29340 has 11 MA's), (Start: 9 @29343 has 7 MA's), (11, 29373), (13, 29394), (15, 29415), (16, 29454), (17, 29502), (18, 29550), (21, 29598), (26, 29649),

Gene: Langerak_37 Start: 29359, Stop: 29757, Start Num: 9

Candidate Starts for Langerak_37:

(1, 29212), (2, 29245), (Start: 8 @29356 has 11 MA's), (Start: 9 @29359 has 7 MA's), (11, 29389), (13, 29410), (15, 29431), (16, 29470), (17, 29518), (18, 29566), (21, 29614), (26, 29665),

Gene: Majeke_37 Start: 29381, Stop: 29782, Start Num: 8

Candidate Starts for Majeke_37:

(1, 29237), (2, 29270), (Start: 8 @29381 has 11 MA's), (Start: 9 @29384 has 7 MA's), (11, 29414), (13, 29435), (15, 29456), (16, 29495), (17, 29543), (18, 29591), (21, 29639), (26, 29690),

Gene: Mangethe_37 Start: 29381, Stop: 29782, Start Num: 8

Candidate Starts for Mangethe_37:

(1, 29237), (2, 29270), (Start: 8 @29381 has 11 MA's), (Start: 9 @29384 has 7 MA's), (11, 29414), (13, 29435), (15, 29456), (16, 29495), (17, 29543), (18, 29591), (21, 29639), (26, 29690),

Gene: Necropolis_37 Start: 29340, Stop: 29741, Start Num: 8

Candidate Starts for Necropolis_37:

(1, 29196), (2, 29229), (Start: 8 @29340 has 11 MA's), (Start: 9 @29343 has 7 MA's), (11, 29373), (13, 29394), (15, 29415), (16, 29454), (17, 29502), (18, 29550), (21, 29598), (26, 29649),

Gene: Phalconet_52 Start: 36835, Stop: 37287, Start Num: 3

Candidate Starts for Phalconet_52:

(Start: 3 @36835 has 17 MA's), (4, 36853), (Start: 5 @36865 has 1 MA's), (6, 36886), (7, 36889), (Start: 8 @36898 has 11 MA's), (Start: 9 @36901 has 7 MA's), (10, 36910), (12, 36937), (14, 36949), (19, 37099), (20, 37105), (22, 37150), (24, 37180), (29, 37228),

Gene: Phanphagia_51 Start: 37739, Stop: 38149, Start Num: 3

Candidate Starts for Phanphagia_51:

(Start: 3 @37739 has 17 MA's), (4, 37757), (Start: 5 @37778 has 1 MA's), (6, 37799), (7, 37802), (Start: 8 @37811 has 11 MA's), (Start: 9 @37814 has 7 MA's), (12, 37850), (14, 37862), (19, 37961), (20, 37967), (22, 38012), (23, 38030), (25, 38051), (28, 38081), (30, 38093),

Gene: Phegasus_37 Start: 29351, Stop: 29749, Start Num: 9

Candidate Starts for Phegasus_37:

(1, 29204), (2, 29237), (Start: 8 @29348 has 11 MA's), (Start: 9 @29351 has 7 MA's), (11, 29381), (13, 29402), (15, 29423), (16, 29462), (17, 29510), (18, 29558), (21, 29606), (26, 29657),

Gene: PhesterPhotato_55 Start: 37823, Stop: 38284, Start Num: 3

Candidate Starts for PhesterPhotato_55:

(Start: 3 @37823 has 17 MA's), (4, 37841), (Start: 5 @37862 has 1 MA's), (6, 37883), (7, 37886), (Start: 8 @37895 has 11 MA's), (Start: 9 @37898 has 7 MA's), (12, 37934), (14, 37946), (19, 38096), (20, 38102), (22, 38147), (24, 38177), (29, 38225),

Gene: Phineas_37 Start: 29711, Stop: 30112, Start Num: 8

Candidate Starts for Phineas_37:

(1, 29567), (2, 29600), (Start: 8 @29711 has 11 MA's), (Start: 9 @29714 has 7 MA's), (11, 29744), (13, 29765), (15, 29786), (16, 29825), (17, 29873), (18, 29921), (21, 29969), (26, 30020),

Gene: RockyHorror_54 Start: 37296, Stop: 37757, Start Num: 3

Candidate Starts for RockyHorror_54:

(Start: 3 @37296 has 17 MA's), (4, 37314), (Start: 5 @37335 has 1 MA's), (6, 37356), (7, 37359), (Start: 8 @37368 has 11 MA's), (Start: 9 @37371 has 7 MA's), (12, 37407), (14, 37419), (19, 37569), (20, 37575), (22, 37620), (24, 37650), (29, 37698),

Gene: Shauna1_52 Start: 37720, Stop: 38130, Start Num: 3

Candidate Starts for Shauna1_52:

(Start: 3 @37720 has 17 MA's), (4, 37738), (Start: 5 @37759 has 1 MA's), (6, 37780), (7, 37783), (Start: 8 @37792 has 11 MA's), (Start: 9 @37795 has 7 MA's), (12, 37831), (14, 37843), (19, 37942), (20, 37948), (22, 37993), (23, 38011), (25, 38032), (28, 38062), (30, 38074),

Gene: SilverChicken_63 Start: 37324, Stop: 37746, Start Num: 3

Candidate Starts for SilverChicken_63:

(Start: 3 @37324 has 17 MA's), (4, 37342), (Start: 5 @37363 has 1 MA's), (6, 37384), (7, 37387),
(Start: 8 @37396 has 11 MA's), (Start: 9 @37399 has 7 MA's), (12, 37435), (14, 37447), (19, 37558),
(20, 37564), (22, 37609), (23, 37627), (25, 37648), (28, 37678), (30, 37690),

Gene: Sonah_37 Start: 29332, Stop: 29730, Start Num: 9

Candidate Starts for Sonah_37:

(1, 29185), (2, 29218), (Start: 8 @29329 has 11 MA's), (Start: 9 @29332 has 7 MA's), (11, 29362), (13,
29383), (15, 29404), (16, 29443), (17, 29491), (18, 29539), (21, 29587), (26, 29638),

Gene: Sparkdehlily_61 Start: 39036, Stop: 39497, Start Num: 3

Candidate Starts for Sparkdehlily_61:

(Start: 3 @39036 has 17 MA's), (4, 39054), (Start: 5 @39075 has 1 MA's), (6, 39096), (7, 39099),
(Start: 8 @39108 has 11 MA's), (Start: 9 @39111 has 7 MA's), (12, 39147), (14, 39159), (19, 39309),
(20, 39315), (22, 39360), (24, 39390), (29, 39438),

Gene: Spartacus_55 Start: 37623, Stop: 38033, Start Num: 3

Candidate Starts for Spartacus_55:

(Start: 3 @37623 has 17 MA's), (4, 37641), (Start: 5 @37662 has 1 MA's), (6, 37683), (7, 37686),
(Start: 8 @37695 has 11 MA's), (Start: 9 @37698 has 7 MA's), (12, 37734), (14, 37746), (19, 37845),
(20, 37851), (22, 37896), (23, 37914), (25, 37935), (28, 37965), (30, 37977),

Gene: SuperGrey_57 Start: 39146, Stop: 39556, Start Num: 3

Candidate Starts for SuperGrey_57:

(Start: 3 @39146 has 17 MA's), (4, 39164), (Start: 5 @39185 has 1 MA's), (6, 39206), (7, 39209),
(Start: 8 @39218 has 11 MA's), (Start: 9 @39221 has 7 MA's), (12, 39257), (14, 39269), (19, 39368),
(20, 39374), (22, 39419), (23, 39437), (25, 39458), (28, 39488), (30, 39500),

Gene: TDanisky_61 Start: 39036, Stop: 39497, Start Num: 3

Candidate Starts for TDanisky_61:

(Start: 3 @39036 has 17 MA's), (4, 39054), (Start: 5 @39075 has 1 MA's), (6, 39096), (7, 39099),
(Start: 8 @39108 has 11 MA's), (Start: 9 @39111 has 7 MA's), (12, 39147), (14, 39159), (19, 39309),
(20, 39315), (22, 39360), (24, 39390), (29, 39438),

Gene: Techage_37 Start: 29366, Stop: 29767, Start Num: 8

Candidate Starts for Techage_37:

(1, 29222), (2, 29255), (Start: 8 @29366 has 11 MA's), (Start: 9 @29369 has 7 MA's), (11, 29399), (13,
29420), (15, 29441), (16, 29480), (17, 29528), (18, 29576), (21, 29624), (26, 29675),

Gene: Venti_37 Start: 29346, Stop: 29744, Start Num: 9

Candidate Starts for Venti_37:

(1, 29199), (2, 29232), (Start: 8 @29343 has 11 MA's), (Start: 9 @29346 has 7 MA's), (11, 29376), (13,
29397), (15, 29418), (16, 29457), (17, 29505), (18, 29553), (21, 29601), (26, 29652),

Gene: Vidya_37 Start: 29376, Stop: 29777, Start Num: 8

Candidate Starts for Vidya_37:

(1, 29232), (2, 29265), (Start: 8 @29376 has 11 MA's), (Start: 9 @29379 has 7 MA's), (11, 29409), (13,
29430), (15, 29451), (16, 29490), (17, 29538), (18, 29586), (21, 29634), (26, 29685),

Gene: WillSterrel_54 Start: 38739, Stop: 39149, Start Num: 3

Candidate Starts for WillSterrel_54:

(Start: 3 @38739 has 17 MA's), (4, 38757), (Start: 5 @38778 has 1 MA's), (6, 38799), (7, 38802),
(Start: 8 @38811 has 11 MA's), (Start: 9 @38814 has 7 MA's), (12, 38850), (14, 38862), (19, 38961),
(20, 38967), (22, 39012), (23, 39030), (25, 39051), (28, 39081), (30, 39093),

Gene: XFactor_51 Start: 36239, Stop: 36700, Start Num: 3

Candidate Starts for XFactor_51:

(Start: 3 @36239 has 17 MA's), (4, 36257), (Start: 5 @36278 has 1 MA's), (6, 36299), (7, 36302),
(Start: 8 @36311 has 11 MA's), (Start: 9 @36314 has 7 MA's), (12, 36350), (14, 36362), (19, 36512),
(20, 36518), (22, 36563), (24, 36593), (29, 36641),

Gene: Zerg_53 Start: 37405, Stop: 37866, Start Num: 3

Candidate Starts for Zerg_53:

(Start: 3 @37405 has 17 MA's), (4, 37423), (Start: 5 @37444 has 1 MA's), (6, 37465), (7, 37468),
(Start: 8 @37477 has 11 MA's), (Start: 9 @37480 has 7 MA's), (12, 37516), (14, 37528), (19, 37678),
(20, 37684), (22, 37729), (24, 37759), (29, 37807),

Gene: Zilizebeth_37 Start: 29375, Stop: 29776, Start Num: 8

Candidate Starts for Zilizebeth_37:

(1, 29231), (2, 29264), (Start: 8 @29375 has 11 MA's), (Start: 9 @29378 has 7 MA's), (11, 29408), (13,
29429), (15, 29450), (16, 29489), (17, 29537), (18, 29585), (21, 29633), (26, 29684),