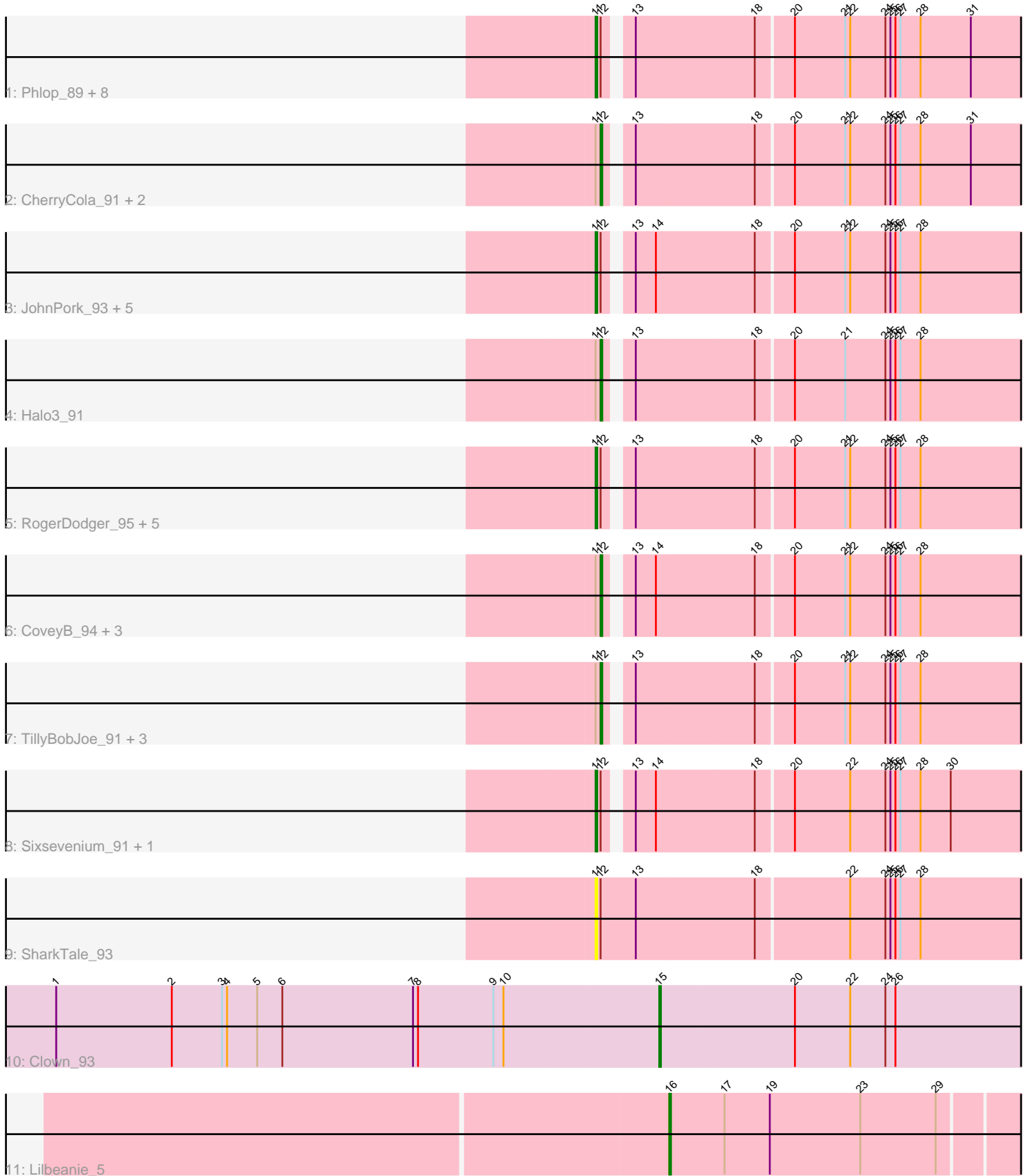


Pham 308909



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 308909 Report

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

Pham number 308909 has 38 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Phlop\_89, Gezellig\_88, Sendy\_94, Arri\_92, Shinji\_91, Egi03\_90, Fireball\_95, Wizard\_87, Valary\_93
- Track 2 : CherryCola\_91, PullumCavea\_90, KimmyK\_90
- Track 3 : JohnPork\_93, Portcullis\_92, Nubi\_95, Mutzi\_92, Danyall\_93, YungMoney\_92
- Track 4 : Halo3\_91
- Track 5 : RogerDodger\_95, Salvador\_92, Evamon\_92, SmokingBunny\_93, Togo\_92, Twister6\_91
- Track 6 : CoveyB\_94, PinkCoffee\_94, ClamChowder\_95, Barb\_96
- Track 7 : TillyBobJoe\_91, VanDeWege\_94, Jambalaya\_89, Savbucketdawg\_87
- Track 8 : Sixsevenium\_91, Bakery\_94
- Track 9 : SharkTale\_93
- Track 10 : Clown\_93
- Track 11 : Lilbeanie\_5

### ***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 19 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arri\_92, Bakery\_94, Danyall\_93, Egi03\_90, Evamon\_92, Fireball\_95, Gezellig\_88, JohnPork\_93, Mutzi\_92, Nubi\_95, Phlop\_89, Portcullis\_92, RogerDodger\_95, Salvador\_92, Sendy\_94, SharkTale\_93, Shinji\_91, Sixsevenium\_91, SmokingBunny\_93, Togo\_92, Twister6\_91, Valary\_93, Wizard\_87, YungMoney\_92,

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

- Barb\_96, CherryCola\_91, ClamChowder\_95, CoveyB\_94, Halo3\_91, Jambalaya\_89, KimmyK\_90, PinkCoffee\_94, PullumCavea\_90, Savbucketdawg\_87, TillyBobJoe\_91, VanDeWege\_94,

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

- Clown\_93, Lilbeanie\_5,

## Summary by start number:

### Start 11:

- Found in 36 of 38 ( 94.7% ) of genes in pham
- Manual Annotations of this start: 19 of 33
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Arri\_92 (DC1), Bakery\_94 (DC1), Danyall\_93 (DC1), Egi03\_90 (DC1), Evamon\_92 (DC1), Fireball\_95 (DC1), Gezellig\_88 (DC1), JohnPork\_93 (DC1), Mutzi\_92 (DC1), Nubi\_95 (DC1), Phlop\_89 (DC1), Portcullis\_92 (DC1), RogerDodger\_95 (DC1), Salvador\_92 (DC1), Sendy\_94 (DC1), SharkTale\_93 (DC1), Shinji\_91 (DC1), Sixsevenium\_91 (DC1), SmokingBunny\_93 (DC1), Togo\_92 (DC1), Twister6\_91 (DC1), Valary\_93 (DC1), Wizard\_87 (DC1), YungMoney\_92 (DC1),

### Start 12:

- Found in 36 of 38 ( 94.7% ) of genes in pham
- Manual Annotations of this start: 12 of 33
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Barb\_96 (DC1), CherryCola\_91 (DC1), ClamChowder\_95 (DC1), CoveyB\_94 (DC1), Halo3\_91 (DC1), Jambalaya\_89 (DC1), KimmyK\_90 (DC1), PinkCoffee\_94 (DC1), PullumCavea\_90 (DC1), Savbucketdawg\_87 (DC1), TillyBobJoe\_91 (DC1), VanDeWege\_94 (DC1),

### Start 15:

- Found in 1 of 38 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clown\_93 (DC2),

### Start 16:

- Found in 1 of 38 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lilbeanie\_5 (DE5),

## Summary by clusters:

There are 3 clusters represented in this pham: DC2, DE5, DC1,

### Info for manual annotations of cluster DC1:

- Start number 11 was manually annotated 19 times for cluster DC1.
- Start number 12 was manually annotated 12 times for cluster DC1.

### Info for manual annotations of cluster DC2:

- Start number 15 was manually annotated 1 time for cluster DC2.

### Info for manual annotations of cluster DE5:

- Start number 16 was manually annotated 1 time for cluster DE5.

## Gene Information:

Gene: Arri\_92 Start: 58023, Stop: 57730, Start Num: 11

Candidate Starts for Arri\_92:

(Start: 11 @58023 has 19 MA's), (Start: 12 @58020 has 12 MA's), (13, 58008), (18, 57939), (20, 57918), (21, 57888), (22, 57885), (24, 57864), (25, 57861), (26, 57858), (27, 57855), (28, 57843), (31, 57813),

Gene: Bakery\_94 Start: 59845, Stop: 59552, Start Num: 11

Candidate Starts for Bakery\_94:

(Start: 11 @59845 has 19 MA's), (Start: 12 @59842 has 12 MA's), (13, 59830), (14, 59818), (18, 59761), (20, 59740), (22, 59707), (24, 59686), (25, 59683), (26, 59680), (27, 59677), (28, 59665), (30, 59647),

Gene: Barb\_96 Start: 58884, Stop: 58594, Start Num: 12

Candidate Starts for Barb\_96:

(Start: 11 @58887 has 19 MA's), (Start: 12 @58884 has 12 MA's), (13, 58872), (14, 58860), (18, 58803), (20, 58782), (21, 58752), (22, 58749), (24, 58728), (25, 58725), (26, 58722), (27, 58719), (28, 58707),

Gene: CherryCola\_91 Start: 58433, Stop: 58143, Start Num: 12

Candidate Starts for CherryCola\_91:

(Start: 11 @58436 has 19 MA's), (Start: 12 @58433 has 12 MA's), (13, 58421), (18, 58352), (20, 58331), (21, 58301), (22, 58298), (24, 58277), (25, 58274), (26, 58271), (27, 58268), (28, 58256), (31, 58226),

Gene: ClamChowder\_95 Start: 58884, Stop: 58594, Start Num: 12

Candidate Starts for ClamChowder\_95:

(Start: 11 @58887 has 19 MA's), (Start: 12 @58884 has 12 MA's), (13, 58872), (14, 58860), (18, 58803), (20, 58782), (21, 58752), (22, 58749), (24, 58728), (25, 58725), (26, 58722), (27, 58719), (28, 58707),

Gene: Clown\_93 Start: 57542, Stop: 57276, Start Num: 15

Candidate Starts for Clown\_93:

(1, 57899), (2, 57830), (3, 57800), (4, 57797), (5, 57779), (6, 57764), (7, 57686), (8, 57683), (9, 57638), (10, 57632), (Start: 15 @57542 has 1 MA's), (20, 57464), (22, 57431), (24, 57410), (26, 57404),

Gene: CoveyB\_94 Start: 58371, Stop: 58081, Start Num: 12

Candidate Starts for CoveyB\_94:

(Start: 11 @58374 has 19 MA's), (Start: 12 @58371 has 12 MA's), (13, 58359), (14, 58347), (18, 58290), (20, 58269), (21, 58239), (22, 58236), (24, 58215), (25, 58212), (26, 58209), (27, 58206), (28, 58194),

Gene: Danyall\_93 Start: 58068, Stop: 57775, Start Num: 11

Candidate Starts for Danyall\_93:

(Start: 11 @58068 has 19 MA's), (Start: 12 @58065 has 12 MA's), (13, 58053), (14, 58041), (18, 57984), (20, 57963), (21, 57933), (22, 57930), (24, 57909), (25, 57906), (26, 57903), (27, 57900), (28, 57888),

Gene: Egi03\_90 Start: 57458, Stop: 57165, Start Num: 11

Candidate Starts for Egi03\_90:

(Start: 11 @57458 has 19 MA's), (Start: 12 @57455 has 12 MA's), (13, 57443), (18, 57374), (20, 57353), (21, 57323), (22, 57320), (24, 57299), (25, 57296), (26, 57293), (27, 57290), (28, 57278), (31, 57248),

Gene: Evamon\_92 Start: 57833, Stop: 57540, Start Num: 11

Candidate Starts for Evamon\_92:

(Start: 11 @57833 has 19 MA's), (Start: 12 @57830 has 12 MA's), (13, 57818), (18, 57749), (20, 57728), (21, 57698), (22, 57695), (24, 57674), (25, 57671), (26, 57668), (27, 57665), (28, 57653),

Gene: Fireball\_95 Start: 58297, Stop: 58004, Start Num: 11

Candidate Starts for Fireball\_95:

(Start: 11 @58297 has 19 MA's), (Start: 12 @58294 has 12 MA's), (13, 58282), (18, 58213), (20, 58192), (21, 58162), (22, 58159), (24, 58138), (25, 58135), (26, 58132), (27, 58129), (28, 58117), (31, 58087),

Gene: Gezellig\_88 Start: 57681, Stop: 57388, Start Num: 11

Candidate Starts for Gezellig\_88:

(Start: 11 @57681 has 19 MA's), (Start: 12 @57678 has 12 MA's), (13, 57666), (18, 57597), (20, 57576), (21, 57546), (22, 57543), (24, 57522), (25, 57519), (26, 57516), (27, 57513), (28, 57501), (31, 57471),

Gene: Halo3\_91 Start: 58552, Stop: 58262, Start Num: 12

Candidate Starts for Halo3\_91:

(Start: 11 @58555 has 19 MA's), (Start: 12 @58552 has 12 MA's), (13, 58540), (18, 58471), (20, 58450), (21, 58420), (24, 58396), (25, 58393), (26, 58390), (27, 58387), (28, 58375),

Gene: Jambalaya\_89 Start: 57134, Stop: 56844, Start Num: 12

Candidate Starts for Jambalaya\_89:

(Start: 11 @57137 has 19 MA's), (Start: 12 @57134 has 12 MA's), (13, 57122), (18, 57053), (20, 57032), (21, 57002), (22, 56999), (24, 56978), (25, 56975), (26, 56972), (27, 56969), (28, 56957),

Gene: JohnPork\_93 Start: 57737, Stop: 57444, Start Num: 11

Candidate Starts for JohnPork\_93:

(Start: 11 @57737 has 19 MA's), (Start: 12 @57734 has 12 MA's), (13, 57722), (14, 57710), (18, 57653), (20, 57632), (21, 57602), (22, 57599), (24, 57578), (25, 57575), (26, 57572), (27, 57569), (28, 57557),

Gene: KimmyK\_90 Start: 58125, Stop: 57835, Start Num: 12

Candidate Starts for KimmyK\_90:

(Start: 11 @58128 has 19 MA's), (Start: 12 @58125 has 12 MA's), (13, 58113), (18, 58044), (20, 58023), (21, 57993), (22, 57990), (24, 57969), (25, 57966), (26, 57963), (27, 57960), (28, 57948), (31, 57918),

Gene: Lilbeanie\_5 Start: 2865, Stop: 3122, Start Num: 16

Candidate Starts for Lilbeanie\_5:

(Start: 16 @2865 has 1 MA's), (17, 2898), (19, 2925), (23, 2979), (29, 3024),

Gene: Mutzi\_92 Start: 59028, Stop: 58735, Start Num: 11

Candidate Starts for Mutzi\_92:

(Start: 11 @59028 has 19 MA's), (Start: 12 @59025 has 12 MA's), (13, 59013), (14, 59001), (18, 58944), (20, 58923), (21, 58893), (22, 58890), (24, 58869), (25, 58866), (26, 58863), (27, 58860), (28, 58848),

Gene: Nubi\_95 Start: 58091, Stop: 57798, Start Num: 11

Candidate Starts for Nubi\_95:

(Start: 11 @58091 has 19 MA's), (Start: 12 @58088 has 12 MA's), (13, 58076), (14, 58064), (18, 58007), (20, 57986), (21, 57956), (22, 57953), (24, 57932), (25, 57929), (26, 57926), (27, 57923), (28,

57911),

Gene: Phlop\_89 Start: 57731, Stop: 57438, Start Num: 11

Candidate Starts for Phlop\_89:

(Start: 11 @57731 has 19 MA's), (Start: 12 @57728 has 12 MA's), (13, 57716), (18, 57647), (20, 57626), (21, 57596), (22, 57593), (24, 57572), (25, 57569), (26, 57566), (27, 57563), (28, 57551), (31, 57521),

Gene: PinkCoffee\_94 Start: 57929, Stop: 57639, Start Num: 12

Candidate Starts for PinkCoffee\_94:

(Start: 11 @57932 has 19 MA's), (Start: 12 @57929 has 12 MA's), (13, 57917), (14, 57905), (18, 57848), (20, 57827), (21, 57797), (22, 57794), (24, 57773), (25, 57770), (26, 57767), (27, 57764), (28, 57752),

Gene: Portcullis\_92 Start: 57737, Stop: 57444, Start Num: 11

Candidate Starts for Portcullis\_92:

(Start: 11 @57737 has 19 MA's), (Start: 12 @57734 has 12 MA's), (13, 57722), (14, 57710), (18, 57653), (20, 57632), (21, 57602), (22, 57599), (24, 57578), (25, 57575), (26, 57572), (27, 57569), (28, 57557),

Gene: PullumCavea\_90 Start: 57905, Stop: 57615, Start Num: 12

Candidate Starts for PullumCavea\_90:

(Start: 11 @57908 has 19 MA's), (Start: 12 @57905 has 12 MA's), (13, 57893), (18, 57824), (20, 57803), (21, 57773), (22, 57770), (24, 57749), (25, 57746), (26, 57743), (27, 57740), (28, 57728), (31, 57698),

Gene: RogerDodger\_95 Start: 58495, Stop: 58202, Start Num: 11

Candidate Starts for RogerDodger\_95:

(Start: 11 @58495 has 19 MA's), (Start: 12 @58492 has 12 MA's), (13, 58480), (18, 58411), (20, 58390), (21, 58360), (22, 58357), (24, 58336), (25, 58333), (26, 58330), (27, 58327), (28, 58315),

Gene: Salvador\_92 Start: 57831, Stop: 57538, Start Num: 11

Candidate Starts for Salvador\_92:

(Start: 11 @57831 has 19 MA's), (Start: 12 @57828 has 12 MA's), (13, 57816), (18, 57747), (20, 57726), (21, 57696), (22, 57693), (24, 57672), (25, 57669), (26, 57666), (27, 57663), (28, 57651),

Gene: Savbucketdawg\_87 Start: 57171, Stop: 56881, Start Num: 12

Candidate Starts for Savbucketdawg\_87:

(Start: 11 @57174 has 19 MA's), (Start: 12 @57171 has 12 MA's), (13, 57159), (18, 57090), (20, 57069), (21, 57039), (22, 57036), (24, 57015), (25, 57012), (26, 57009), (27, 57006), (28, 56994),

Gene: Sendy\_94 Start: 57913, Stop: 57620, Start Num: 11

Candidate Starts for Sendy\_94:

(Start: 11 @57913 has 19 MA's), (Start: 12 @57910 has 12 MA's), (13, 57898), (18, 57829), (20, 57808), (21, 57778), (22, 57775), (24, 57754), (25, 57751), (26, 57748), (27, 57745), (28, 57733), (31, 57703),

Gene: SharkTale\_93 Start: 58652, Stop: 58350, Start Num: 11

Candidate Starts for SharkTale\_93:

(Start: 11 @58652 has 19 MA's), (Start: 12 @58649 has 12 MA's), (13, 58628), (18, 58559), (22, 58505), (24, 58484), (25, 58481), (26, 58478), (27, 58475), (28, 58463),

Gene: Shinji\_91 Start: 57914, Stop: 57621, Start Num: 11

Candidate Starts for Shinji\_91:

(Start: 11 @57914 has 19 MA's), (Start: 12 @57911 has 12 MA's), (13, 57899), (18, 57830), (20, 57809), (21, 57779), (22, 57776), (24, 57755), (25, 57752), (26, 57749), (27, 57746), (28, 57734), (31, 57704),

Gene: Sixsevenium\_91 Start: 58826, Stop: 58533, Start Num: 11

Candidate Starts for Sixsevenium\_91:

(Start: 11 @58826 has 19 MA's), (Start: 12 @58823 has 12 MA's), (13, 58811), (14, 58799), (18, 58742), (20, 58721), (22, 58688), (24, 58667), (25, 58664), (26, 58661), (27, 58658), (28, 58646), (30, 58628),

Gene: SmokingBunny\_93 Start: 58827, Stop: 58534, Start Num: 11

Candidate Starts for SmokingBunny\_93:

(Start: 11 @58827 has 19 MA's), (Start: 12 @58824 has 12 MA's), (13, 58812), (18, 58743), (20, 58722), (21, 58692), (22, 58689), (24, 58668), (25, 58665), (26, 58662), (27, 58659), (28, 58647),

Gene: TillyBobJoe\_91 Start: 58047, Stop: 57757, Start Num: 12

Candidate Starts for TillyBobJoe\_91:

(Start: 11 @58050 has 19 MA's), (Start: 12 @58047 has 12 MA's), (13, 58035), (18, 57966), (20, 57945), (21, 57915), (22, 57912), (24, 57891), (25, 57888), (26, 57885), (27, 57882), (28, 57870),

Gene: Togo\_92 Start: 58827, Stop: 58534, Start Num: 11

Candidate Starts for Togo\_92:

(Start: 11 @58827 has 19 MA's), (Start: 12 @58824 has 12 MA's), (13, 58812), (18, 58743), (20, 58722), (21, 58692), (22, 58689), (24, 58668), (25, 58665), (26, 58662), (27, 58659), (28, 58647),

Gene: Twister6\_91 Start: 57177, Stop: 56884, Start Num: 11

Candidate Starts for Twister6\_91:

(Start: 11 @57177 has 19 MA's), (Start: 12 @57174 has 12 MA's), (13, 57162), (18, 57093), (20, 57072), (21, 57042), (22, 57039), (24, 57018), (25, 57015), (26, 57012), (27, 57009), (28, 56997),

Gene: Valary\_93 Start: 58821, Stop: 58528, Start Num: 11

Candidate Starts for Valary\_93:

(Start: 11 @58821 has 19 MA's), (Start: 12 @58818 has 12 MA's), (13, 58806), (18, 58737), (20, 58716), (21, 58686), (22, 58683), (24, 58662), (25, 58659), (26, 58656), (27, 58653), (28, 58641), (31, 58611),

Gene: VanDeWege\_94 Start: 58342, Stop: 58052, Start Num: 12

Candidate Starts for VanDeWege\_94:

(Start: 11 @58345 has 19 MA's), (Start: 12 @58342 has 12 MA's), (13, 58330), (18, 58261), (20, 58240), (21, 58210), (22, 58207), (24, 58186), (25, 58183), (26, 58180), (27, 58177), (28, 58165),

Gene: Wizard\_87 Start: 57681, Stop: 57388, Start Num: 11

Candidate Starts for Wizard\_87:

(Start: 11 @57681 has 19 MA's), (Start: 12 @57678 has 12 MA's), (13, 57666), (18, 57597), (20, 57576), (21, 57546), (22, 57543), (24, 57522), (25, 57519), (26, 57516), (27, 57513), (28, 57501), (31, 57471),

Gene: YungMoney\_92 Start: 59868, Stop: 59575, Start Num: 11

Candidate Starts for YungMoney\_92:

(Start: 11 @59868 has 19 MA's), (Start: 12 @59865 has 12 MA's), (13, 59853), (14, 59841), (18, 59784), (20, 59763), (21, 59733), (22, 59730), (24, 59709), (25, 59706), (26, 59703), (27, 59700), (28, 59688),

