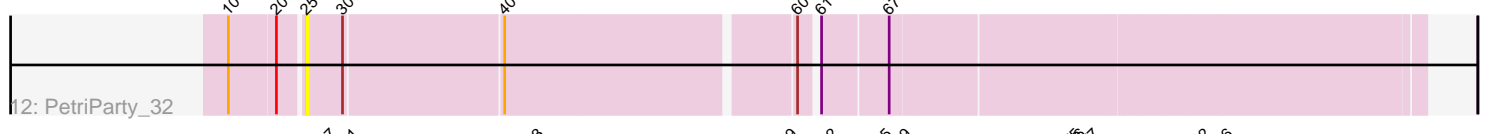
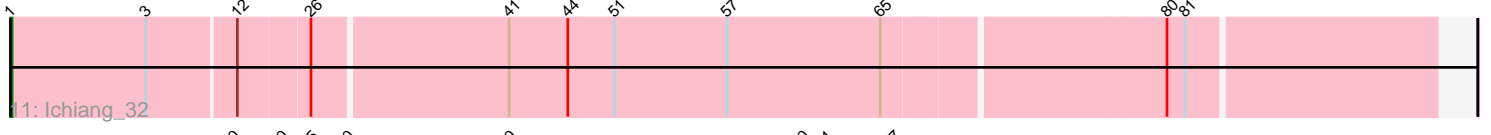
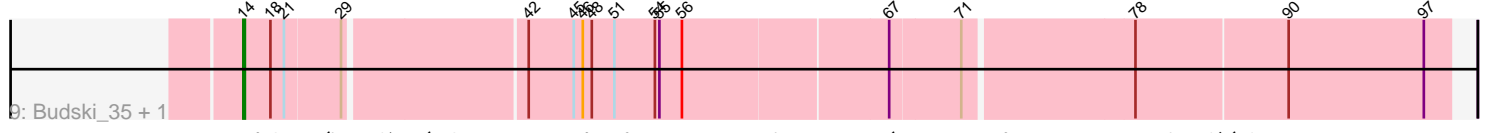
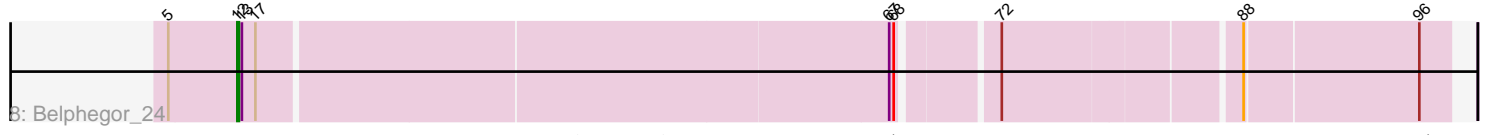
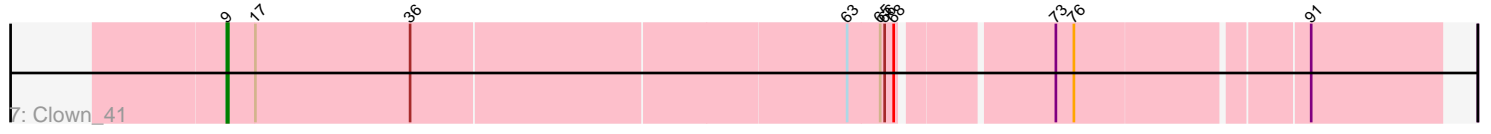
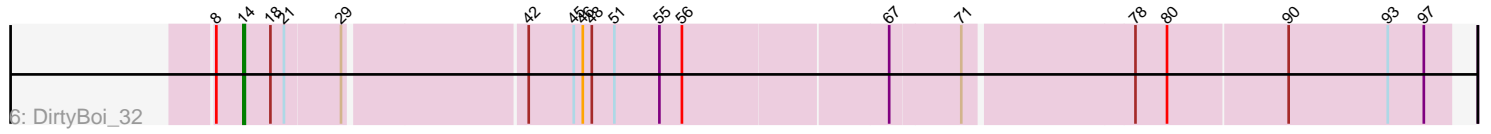
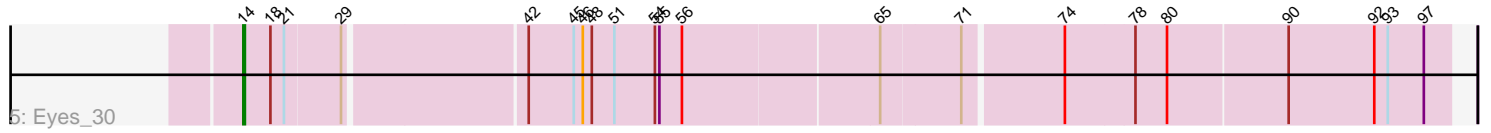
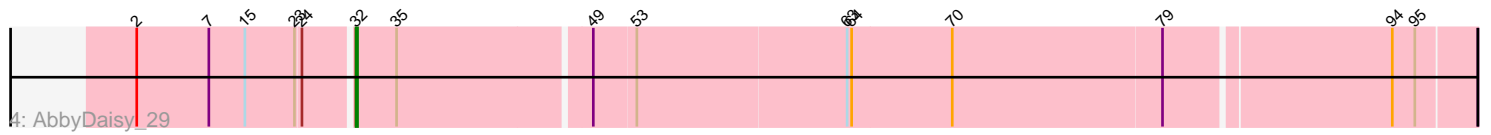
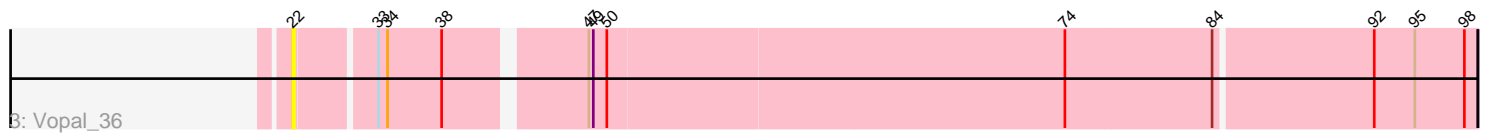
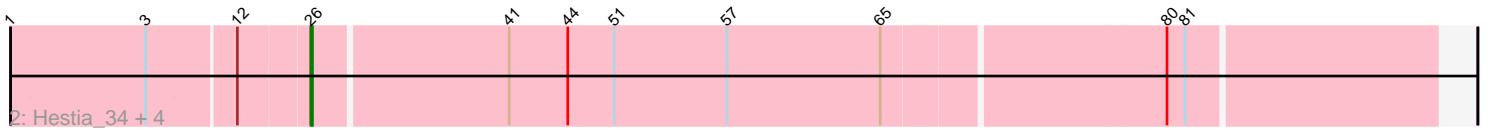
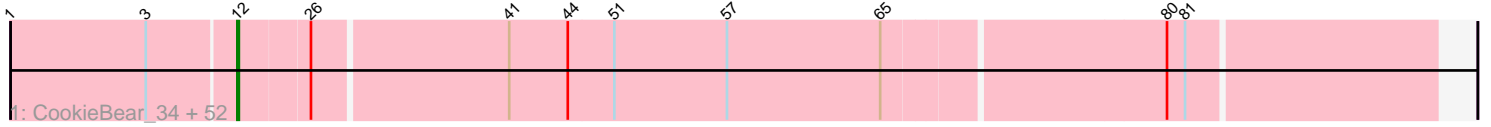


# Pham 296539



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 296539 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296539 has 70 members, 21 are drafts.

Phages represented in each track:

- Track 1 : CookieBear\_34, NikkiHotWheels\_34, Constance\_32, PeggyLeg03\_32, Toodles\_35, BellaJr\_31, KayMoney\_33, Halloweekend\_32, Yonex\_34, Shukran\_34, ThayneTheZag\_34, MidnightRain\_34, Bauer\_30, FosterFrank\_33, Ryan\_34, Hillester\_34, Popper\_32, Kihatsu\_35, Henrique\_33, BigSherm\_33, GlobiWarming\_33, Sakai\_34, MUWow\_33, Kabloowy\_34, BlackSpider\_29, BenchScraper\_34, Isolde\_34, Richie\_34, Zaheer\_34, RadFad\_34, Cole\_32, Guinevere\_34, Nandita\_34, Gusanita\_32, Lawnathon\_34, Judy\_33, GumGum\_34, SonDevVon\_33, Sporco\_35, Bridgette\_32, Karkharias\_32, YoungHarleezy\_34, QuinnAvery\_34, MaterMagnus\_34, Donatella\_33, CosmicBrownie\_34, Saintcarr\_34, BasketStar\_34, BlueShadow\_34, ChuckDuck\_33, Globfish\_34, GoodLuckBabe\_34, SpicyFrank\_34
- Track 2 : Hestia\_34, Raphaella\_34, Schism\_34, Dirtdigger\_34, MillySue\_34
- Track 3 : Vopal\_36
- Track 4 : AbbyDaisy\_29
- Track 5 : Eyes\_30
- Track 6 : DirtyBoi\_32
- Track 7 : Clown\_41
- Track 8 : Belphegor\_24
- Track 9 : Budski\_35, Matteo\_26
- Track 10 : JeanClaude\_27
- Track 11 : Ichiang\_32
- Track 12 : PetriParty\_32
- Track 13 : Kukla\_30

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

The start number called the most often in the published annotations is 12, it was called in 38 of the 49 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BasketStar\_34, Bauer\_30, BellaJr\_31, Belphegor\_24, BenchScraper\_34, BigSherm\_33, BlackSpider\_29, BlueShadow\_34, Bridgette\_32, ChuckDuck\_33, Cole\_32, Constance\_32, CookieBear\_34, CosmicBrownie\_34, Donatella\_33, FosterFrank\_33, Globfish\_34, GlobiWarming\_33, GoodLuckBabe\_34, Guinevere\_34, GumGum\_34, Gusanita\_32, Halloweekend\_32, Henrique\_33, Hillester\_34, Isolde\_34,

Judy\_33, Kabloowy\_34, Karkharias\_32, KayMoney\_33, Kihatsu\_35, Lawnathon\_34, MUWow\_33, MaterMagnus\_34, MidnightRain\_34, Nandita\_34, NikkiHotWheels\_34, PeggyLeg03\_32, Popper\_32, QuinnAvery\_34, RadFad\_34, Richie\_34, Ryan\_34, Saintcarr\_34, Sakai\_34, Shukran\_34, SonDevVon\_33, SpicyFrank\_34, Sporco\_35, ThayneTheZag\_34, Toodles\_35, Yonex\_34, YoungHarleezy\_34, Zaheer\_34,

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

- Dirdigger\_34, Hestia\_34, Ichiang\_32, MillySue\_34, Raphaella\_34, Schism\_34,

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

- AbbyDaisy\_29, Budski\_35, Clown\_41, DirtyBoi\_32, Eyes\_30, JeanClaude\_27, Kukla\_30, Matteo\_26, PetriParty\_32, Vopal\_36,

### Summary by start number:

Start 1:

- Found in 59 of 70 ( 84.3% ) of genes in pham
- Manual Annotations of this start: 1 of 49
- Called 1.7% of time when present
- Phage (with cluster) where this start called: Ichiang\_32 (FF),

Start 6:

- Found in 1 of 70 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 1 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kukla\_30 (FJ),

Start 9:

- Found in 1 of 70 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 1 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clown\_41 (DC2),

Start 12:

- Found in 60 of 70 ( 85.7% ) of genes in pham
- Manual Annotations of this start: 38 of 49
- Called 90.0% of time when present
- Phage (with cluster) where this start called: BasketStar\_34 (AY), Bauer\_30 (FN), BellaJr\_31 (FN), Belphegor\_24 (DE2), BenchScraper\_34 (AY), BigSherm\_33 (FF), BlackSpider\_29 (FN), BlueShadow\_34 (AY), Bridgette\_32 (FA), ChuckDuck\_33 (FA), Cole\_32 (FF), Constance\_32 (FA), CookieBear\_34 (AY), CosmicBrownie\_34 (AY), Donatella\_33 (FF), FosterFrank\_33 (FA), Globfish\_34 (AY), GlobiWarming\_33 (FA), GoodLuckBabe\_34 (FF), Guinevere\_34 (FF), GumGum\_34 (AY), Gusanita\_32 (FF), Halloweekend\_32 (FF), Henrique\_33 (FA), Hillester\_34 (AY), Isolde\_34 (AY), Judy\_33 (FA), Kabloowy\_34 (AY), Karkharias\_32 (FA), KayMoney\_33 (FA), Kihatsu\_35 (FF), Lawnathon\_34 (AY), MUWow\_33 (AY), MaterMagnus\_34 (AY), MidnightRain\_34 (AY), Nandita\_34 (FF), NikkiHotWheels\_34 (FA), PeggyLeg03\_32 (FA), Popper\_32 (FF), QuinnAvery\_34 (FF), RadFad\_34 (AY), Richie\_34 (AY), Ryan\_34 (FF), Saintcarr\_34 (FF), Sakai\_34 (AY), Shukran\_34 (AY), SonDevVon\_33 (AY), SpicyFrank\_34 (AY), Sporco\_35 (AY), ThayneTheZag\_34 (AY), Toodles\_35 (FF), Yonex\_34 (FF), YoungHarleezy\_34 (AY), Zaheer\_34 (FF),

Start 14:

- Found in 4 of 70 ( 5.7% ) of genes in pham
- Manual Annotations of this start: 4 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Budski\_35 (DN), DirtyBoi\_32 (DB), Eyes\_30 (DB), Matteo\_26 (CZ2),

Start 16:

- Found in 1 of 70 ( 1.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JeanClaude\_27 (FB),

Start 22:

- Found in 1 of 70 ( 1.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Vopal\_36 (AY),

Start 25:

- Found in 1 of 70 ( 1.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PetriParty\_32 (FJ),

Start 26:

- Found in 59 of 70 ( 84.3% ) of genes in pham
- Manual Annotations of this start: 3 of 49
- Called 8.5% of time when present
- Phage (with cluster) where this start called: Dirtdigger\_34 (FF), Hestia\_34 (AY), MillySue\_34 (FF), Raphaella\_34 (AY), Schism\_34 (FF),

Start 32:

- Found in 1 of 70 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 1 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_29 (AY),

**Summary by clusters:**

There are 11 clusters represented in this pham: DN, CZ2, DE2, DB, FA, FB, FF, AY, FJ, DC2, FN,

Info for manual annotations of cluster AY:

- Start number 12 was manually annotated 16 times for cluster AY.
- Start number 26 was manually annotated 2 times for cluster AY.
- Start number 32 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CZ2:

- Start number 14 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster DB:

- Start number 14 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster DC2:

- Start number 9 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE2:

- Start number 12 was manually annotated 1 time for cluster DE2.

Info for manual annotations of cluster DN:

- Start number 14 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster FA:

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

Info for manual annotations of cluster FF:

- Start number 1 was manually annotated 1 time for cluster FF.
- Start number 12 was manually annotated 11 times for cluster FF.
- Start number 26 was manually annotated 1 time for cluster FF.

Info for manual annotations of cluster FJ:

- Start number 6 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FN:

- Start number 12 was manually annotated 2 times for cluster FN.

### ***Gene Information:***

Gene: AbbyDaisy\_29 Start: 23243, Stop: 22524, Start Num: 32

Candidate Starts for AbbyDaisy\_29:

(2, 23381), (7, 23333), (15, 23309), (23, 23276), (24, 23273), (Start: 32 @23243 has 1 MA's), (35, 23216), (49, 23093), (53, 23066), (63, 22928), (64, 22925), (70, 22859), (79, 22721), (94, 22577), (95, 22562),

Gene: BasketStar\_34 Start: 23905, Stop: 23138, Start Num: 12

Candidate Starts for BasketStar\_34:

(Start: 1 @24052 has 1 MA's), (3, 23962), (Start: 12 @23905 has 38 MA's), (Start: 26 @23860 has 3 MA's), (41, 23734), (44, 23695), (51, 23665), (57, 23590), (65, 23488), (80, 23311), (81, 23299),

Gene: Bauer\_30 Start: 23423, Stop: 22656, Start Num: 12

Candidate Starts for Bauer\_30:

(Start: 1 @23570 has 1 MA's), (3, 23480), (Start: 12 @23423 has 38 MA's), (Start: 26 @23378 has 3 MA's), (41, 23252), (44, 23213), (51, 23183), (57, 23108), (65, 23006), (80, 22829), (81, 22817),

Gene: BellaJr\_31 Start: 24401, Stop: 23634, Start Num: 12

Candidate Starts for BellaJr\_31:

(Start: 1 @24548 has 1 MA's), (3, 24458), (Start: 12 @24401 has 38 MA's), (Start: 26 @24356 has 3 MA's), (41, 24230), (44, 24191), (51, 24161), (57, 24086), (65, 23984), (80, 23807), (81, 23795),

Gene: Belphegor\_24 Start: 20323, Stop: 19565, Start Num: 12

Candidate Starts for Belphegor\_24:

(5, 20368), (Start: 12 @20323 has 38 MA's), (13, 20320), (17, 20311), (67, 19903), (68, 19900), (72, 19843), (88, 19696), (96, 19585),

Gene: BenchScraper\_34 Start: 23866, Stop: 23099, Start Num: 12

Candidate Starts for BenchScraper\_34:

(Start: 1 @24013 has 1 MA's), (3, 23923), (Start: 12 @23866 has 38 MA's), (Start: 26 @23821 has 3 MA's), (41, 23695), (44, 23656), (51, 23626), (57, 23551), (65, 23449), (80, 23272), (81, 23260),

Gene: BigSherm\_33 Start: 25638, Stop: 24871, Start Num: 12

Candidate Starts for BigSherm\_33:

(Start: 1 @25785 has 1 MA's), (3, 25695), (Start: 12 @25638 has 38 MA's), (Start: 26 @25593 has 3 MA's), (41, 25467), (44, 25428), (51, 25398), (57, 25323), (65, 25221), (80, 25044), (81, 25032),

Gene: BlackSpider\_29 Start: 23313, Stop: 22546, Start Num: 12

Candidate Starts for BlackSpider\_29:

(Start: 1 @23460 has 1 MA's), (3, 23370), (Start: 12 @23313 has 38 MA's), (Start: 26 @23268 has 3 MA's), (41, 23142), (44, 23103), (51, 23073), (57, 22998), (65, 22896), (80, 22719), (81, 22707),

Gene: BlueShadow\_34 Start: 23851, Stop: 23084, Start Num: 12

Candidate Starts for BlueShadow\_34:

(Start: 1 @23998 has 1 MA's), (3, 23908), (Start: 12 @23851 has 38 MA's), (Start: 26 @23806 has 3 MA's), (41, 23680), (44, 23641), (51, 23611), (57, 23536), (65, 23434), (80, 23257), (81, 23245),

Gene: Bridgette\_32 Start: 23917, Stop: 23150, Start Num: 12

Candidate Starts for Bridgette\_32:

(Start: 1 @24064 has 1 MA's), (3, 23974), (Start: 12 @23917 has 38 MA's), (Start: 26 @23872 has 3 MA's), (41, 23746), (44, 23707), (51, 23677), (57, 23602), (65, 23500), (80, 23323), (81, 23311),

Gene: Budski\_35 Start: 29279, Stop: 28509, Start Num: 14

Candidate Starts for Budski\_35:

(Start: 14 @29279 has 4 MA's), (18, 29261), (21, 29252), (29, 29216), (42, 29102), (45, 29072), (46, 29066), (48, 29060), (51, 29045), (54, 29018), (55, 29015), (56, 29000), (67, 28868), (71, 28823), (78, 28715), (90, 28616), (97, 28526),

Gene: ChuckDuck\_33 Start: 23685, Stop: 22918, Start Num: 12

Candidate Starts for ChuckDuck\_33:

(Start: 1 @23832 has 1 MA's), (3, 23742), (Start: 12 @23685 has 38 MA's), (Start: 26 @23640 has 3 MA's), (41, 23514), (44, 23475), (51, 23445), (57, 23370), (65, 23268), (80, 23091), (81, 23079),

Gene: Clown\_41 Start: 34888, Stop: 34121, Start Num: 9

Candidate Starts for Clown\_41:

(Start: 9 @34888 has 1 MA's), (17, 34870), (36, 34768), (63, 34486), (65, 34465), (66, 34462), (68, 34456), (73, 34363), (76, 34351), (91, 34207),

Gene: Cole\_32 Start: 25385, Stop: 24618, Start Num: 12

Candidate Starts for Cole\_32:

(Start: 1 @25532 has 1 MA's), (3, 25442), (Start: 12 @25385 has 38 MA's), (Start: 26 @25340 has 3 MA's), (41, 25214), (44, 25175), (51, 25145), (57, 25070), (65, 24968), (80, 24791), (81, 24779),

Gene: Constance\_32 Start: 24157, Stop: 23390, Start Num: 12

Candidate Starts for Constance\_32:

(Start: 1 @24304 has 1 MA's), (3, 24214), (Start: 12 @24157 has 38 MA's), (Start: 26 @24112 has 3 MA's), (41, 23986), (44, 23947), (51, 23917), (57, 23842), (65, 23740), (80, 23563), (81, 23551),

Gene: CookieBear\_34 Start: 23851, Stop: 23084, Start Num: 12

Candidate Starts for CookieBear\_34:

(Start: 1 @23998 has 1 MA's), (3, 23908), (Start: 12 @23851 has 38 MA's), (Start: 26 @23806 has 3 MA's), (41, 23680), (44, 23641), (51, 23611), (57, 23536), (65, 23434), (80, 23257), (81, 23245),

Gene: CosmicBrownie\_34 Start: 23670, Stop: 22903, Start Num: 12

Candidate Starts for CosmicBrownie\_34:

(Start: 1 @23817 has 1 MA's), (3, 23727), (Start: 12 @23670 has 38 MA's), (Start: 26 @23625 has 3 MA's), (41, 23499), (44, 23460), (51, 23430), (57, 23355), (65, 23253), (80, 23076), (81, 23064),

Gene: Dirdigger\_34 Start: 25414, Stop: 24692, Start Num: 26

Candidate Starts for Dirdigger\_34:

(Start: 1 @25606 has 1 MA's), (3, 25516), (Start: 12 @25459 has 38 MA's), (Start: 26 @25414 has 3 MA's), (41, 25288), (44, 25249), (51, 25219), (57, 25144), (65, 25042), (80, 24865), (81, 24853),

Gene: DirtyBoi\_32 Start: 28002, Stop: 27232, Start Num: 14

Candidate Starts for DirtyBoi\_32:

(8, 28020), (Start: 14 @28002 has 4 MA's), (18, 27984), (21, 27975), (29, 27939), (42, 27825), (45, 27795), (46, 27789), (48, 27783), (51, 27768), (55, 27738), (56, 27723), (67, 27591), (71, 27546), (78, 27438), (80, 27417), (90, 27339), (93, 27273), (97, 27249),

Gene: Donatella\_33 Start: 25849, Stop: 25082, Start Num: 12

Candidate Starts for Donatella\_33:

(Start: 1 @25996 has 1 MA's), (3, 25906), (Start: 12 @25849 has 38 MA's), (Start: 26 @25804 has 3 MA's), (41, 25678), (44, 25639), (51, 25609), (57, 25534), (65, 25432), (80, 25255), (81, 25243),

Gene: Eyes\_30 Start: 27021, Stop: 26251, Start Num: 14

Candidate Starts for Eyes\_30:

(Start: 14 @27021 has 4 MA's), (18, 27003), (21, 26994), (29, 26958), (42, 26844), (45, 26814), (46, 26808), (48, 26802), (51, 26787), (54, 26760), (55, 26757), (56, 26742), (65, 26616), (71, 26565), (74, 26502), (78, 26457), (80, 26436), (90, 26358), (92, 26301), (93, 26292), (97, 26268),

Gene: FosterFrank\_33 Start: 23759, Stop: 22992, Start Num: 12

Candidate Starts for FosterFrank\_33:

(Start: 1 @23906 has 1 MA's), (3, 23816), (Start: 12 @23759 has 38 MA's), (Start: 26 @23714 has 3 MA's), (41, 23588), (44, 23549), (51, 23519), (57, 23444), (65, 23342), (80, 23165), (81, 23153),

Gene: Globfish\_34 Start: 24085, Stop: 23318, Start Num: 12

Candidate Starts for Globfish\_34:

(Start: 1 @24232 has 1 MA's), (3, 24142), (Start: 12 @24085 has 38 MA's), (Start: 26 @24040 has 3 MA's), (41, 23914), (44, 23875), (51, 23845), (57, 23770), (65, 23668), (80, 23491), (81, 23479),

Gene: GlobiWarming\_33 Start: 23600, Stop: 22833, Start Num: 12

Candidate Starts for GlobiWarming\_33:

(Start: 1 @23747 has 1 MA's), (3, 23657), (Start: 12 @23600 has 38 MA's), (Start: 26 @23555 has 3 MA's), (41, 23429), (44, 23390), (51, 23360), (57, 23285), (65, 23183), (80, 23006), (81, 22994),

Gene: GoodLuckBabe\_34 Start: 25967, Stop: 25200, Start Num: 12

Candidate Starts for GoodLuckBabe\_34:

(Start: 1 @26114 has 1 MA's), (3, 26024), (Start: 12 @25967 has 38 MA's), (Start: 26 @25922 has 3 MA's), (41, 25796), (44, 25757), (51, 25727), (57, 25652), (65, 25550), (80, 25373), (81, 25361),

Gene: Guinevere\_34 Start: 25557, Stop: 24790, Start Num: 12

Candidate Starts for Guinevere\_34:

(Start: 1 @25704 has 1 MA's), (3, 25614), (Start: 12 @25557 has 38 MA's), (Start: 26 @25512 has 3 MA's), (41, 25386), (44, 25347), (51, 25317), (57, 25242), (65, 25140), (80, 24963), (81, 24951),

Gene: GumGum\_34 Start: 24014, Stop: 23247, Start Num: 12

Candidate Starts for GumGum\_34:

(Start: 1 @24161 has 1 MA's), (3, 24071), (Start: 12 @24014 has 38 MA's), (Start: 26 @23969 has 3 MA's), (41, 23843), (44, 23804), (51, 23774), (57, 23699), (65, 23597), (80, 23420), (81, 23408),

Gene: Gusanita\_32 Start: 25320, Stop: 24553, Start Num: 12

Candidate Starts for Gusanita\_32:

(Start: 1 @25467 has 1 MA's), (3, 25377), (Start: 12 @25320 has 38 MA's), (Start: 26 @25275 has 3 MA's), (41, 25149), (44, 25110), (51, 25080), (57, 25005), (65, 24903), (80, 24726), (81, 24714),

Gene: Halloweekend\_32 Start: 25264, Stop: 24497, Start Num: 12

Candidate Starts for Halloweekend\_32:

(Start: 1 @25411 has 1 MA's), (3, 25321), (Start: 12 @25264 has 38 MA's), (Start: 26 @25219 has 3 MA's), (41, 25093), (44, 25054), (51, 25024), (57, 24949), (65, 24847), (80, 24670), (81, 24658),

Gene: Henrique\_33 Start: 23628, Stop: 22861, Start Num: 12

Candidate Starts for Henrique\_33:

(Start: 1 @23775 has 1 MA's), (3, 23685), (Start: 12 @23628 has 38 MA's), (Start: 26 @23583 has 3 MA's), (41, 23457), (44, 23418), (51, 23388), (57, 23313), (65, 23211), (80, 23034), (81, 23022),

Gene: Hestia\_34 Start: 23845, Stop: 23123, Start Num: 26

Candidate Starts for Hestia\_34:

(Start: 1 @24037 has 1 MA's), (3, 23947), (Start: 12 @23890 has 38 MA's), (Start: 26 @23845 has 3 MA's), (41, 23719), (44, 23680), (51, 23650), (57, 23575), (65, 23473), (80, 23296), (81, 23284),

Gene: Hillester\_34 Start: 23851, Stop: 23084, Start Num: 12

Candidate Starts for Hillester\_34:

(Start: 1 @23998 has 1 MA's), (3, 23908), (Start: 12 @23851 has 38 MA's), (Start: 26 @23806 has 3 MA's), (41, 23680), (44, 23641), (51, 23611), (57, 23536), (65, 23434), (80, 23257), (81, 23245),

Gene: Ichiang\_32 Start: 25430, Stop: 24516, Start Num: 1

Candidate Starts for Ichiang\_32:

(Start: 1 @25430 has 1 MA's), (3, 25340), (Start: 12 @25283 has 38 MA's), (Start: 26 @25238 has 3 MA's), (41, 25112), (44, 25073), (51, 25043), (57, 24968), (65, 24866), (80, 24689), (81, 24677),

Gene: Isolde\_34 Start: 23620, Stop: 22853, Start Num: 12

Candidate Starts for Isolde\_34:

(Start: 1 @23767 has 1 MA's), (3, 23677), (Start: 12 @23620 has 38 MA's), (Start: 26 @23575 has 3 MA's), (41, 23449), (44, 23410), (51, 23380), (57, 23305), (65, 23203), (80, 23026), (81, 23014),

Gene: JeanClaude\_27 Start: 21332, Stop: 20589, Start Num: 16

Candidate Starts for JeanClaude\_27:

(11, 21347), (16, 21332), (19, 21320), (27, 21287), (28, 21284), (33, 21257), (34, 21251), (37, 21230), (39, 21218), (46, 21134), (52, 21107), (58, 21008), (67, 20948), (72, 20882), (80, 20774), (83, 20747), (85, 20741), (87, 20732), (89, 20720),

Gene: Judy\_33 Start: 24168, Stop: 23401, Start Num: 12

Candidate Starts for Judy\_33:

(Start: 1 @24315 has 1 MA's), (3, 24225), (Start: 12 @24168 has 38 MA's), (Start: 26 @24123 has 3 MA's), (41, 23997), (44, 23958), (51, 23928), (57, 23853), (65, 23751), (80, 23574), (81, 23562),

Gene: Kabloowy\_34 Start: 24031, Stop: 23264, Start Num: 12

Candidate Starts for Kabloowy\_34:

(Start: 1 @24178 has 1 MA's), (3, 24088), (Start: 12 @24031 has 38 MA's), (Start: 26 @23986 has 3 MA's), (41, 23860), (44, 23821), (51, 23791), (57, 23716), (65, 23614), (80, 23437), (81, 23425),

Gene: Karkharias\_32 Start: 23545, Stop: 22778, Start Num: 12

Candidate Starts for Karkharias\_32:

(Start: 1 @23692 has 1 MA's), (3, 23602), (Start: 12 @23545 has 38 MA's), (Start: 26 @23500 has 3 MA's), (41, 23374), (44, 23335), (51, 23305), (57, 23230), (65, 23128), (80, 22951), (81, 22939),

Gene: KayMoney\_33 Start: 23689, Stop: 22922, Start Num: 12

Candidate Starts for KayMoney\_33:

(Start: 1 @23836 has 1 MA's), (3, 23746), (Start: 12 @23689 has 38 MA's), (Start: 26 @23644 has 3 MA's), (41, 23518), (44, 23479), (51, 23449), (57, 23374), (65, 23272), (80, 23095), (81, 23083),

Gene: Kihatsu\_35 Start: 25903, Stop: 25136, Start Num: 12

Candidate Starts for Kihatsu\_35:

(Start: 1 @26050 has 1 MA's), (3, 25960), (Start: 12 @25903 has 38 MA's), (Start: 26 @25858 has 3 MA's), (41, 25732), (44, 25693), (51, 25663), (57, 25588), (65, 25486), (80, 25309), (81, 25297),

Gene: Kukla\_30 Start: 24104, Stop: 23319, Start Num: 6

Candidate Starts for Kukla\_30:

(4, 24122), (Start: 6 @24104 has 1 MA's), (27, 24008), (31, 23993), (43, 23879), (59, 23723), (62, 23708), (65, 23675), (69, 23666), (75, 23558), (76, 23555), (77, 23546), (82, 23474), (86, 23459),

Gene: Lawnathon\_34 Start: 23714, Stop: 22947, Start Num: 12

Candidate Starts for Lawnathon\_34:

(Start: 1 @23861 has 1 MA's), (3, 23771), (Start: 12 @23714 has 38 MA's), (Start: 26 @23669 has 3 MA's), (41, 23543), (44, 23504), (51, 23474), (57, 23399), (65, 23297), (80, 23120), (81, 23108),

Gene: MUWow\_33 Start: 23878, Stop: 23111, Start Num: 12

Candidate Starts for MUWow\_33:

(Start: 1 @24025 has 1 MA's), (3, 23935), (Start: 12 @23878 has 38 MA's), (Start: 26 @23833 has 3 MA's), (41, 23707), (44, 23668), (51, 23638), (57, 23563), (65, 23461), (80, 23284), (81, 23272),

Gene: MaterMagnus\_34 Start: 23861, Stop: 23094, Start Num: 12

Candidate Starts for MaterMagnus\_34:

(Start: 1 @24008 has 1 MA's), (3, 23918), (Start: 12 @23861 has 38 MA's), (Start: 26 @23816 has 3 MA's), (41, 23690), (44, 23651), (51, 23621), (57, 23546), (65, 23444), (80, 23267), (81, 23255),

Gene: Matteo\_26 Start: 23698, Stop: 22928, Start Num: 14

Candidate Starts for Matteo\_26:

(Start: 14 @23698 has 4 MA's), (18, 23680), (21, 23671), (29, 23635), (42, 23521), (45, 23491), (46, 23485), (48, 23479), (51, 23464), (54, 23437), (55, 23434), (56, 23419), (67, 23287), (71, 23242), (78, 23134), (90, 23035), (97, 22945),

Gene: MidnightRain\_34 Start: 23850, Stop: 23083, Start Num: 12

Candidate Starts for MidnightRain\_34:

(Start: 1 @23997 has 1 MA's), (3, 23907), (Start: 12 @23850 has 38 MA's), (Start: 26 @23805 has 3 MA's), (41, 23679), (44, 23640), (51, 23610), (57, 23535), (65, 23433), (80, 23256), (81, 23244),

Gene: MillySue\_34 Start: 25421, Stop: 24699, Start Num: 26

Candidate Starts for MillySue\_34:

(Start: 1 @25613 has 1 MA's), (3, 25523), (Start: 12 @25466 has 38 MA's), (Start: 26 @25421 has 3 MA's), (41, 25295), (44, 25256), (51, 25226), (57, 25151), (65, 25049), (80, 24872), (81, 24860),

Gene: Nandita\_34 Start: 25557, Stop: 24790, Start Num: 12

Candidate Starts for Nandita\_34:

(Start: 1 @25704 has 1 MA's), (3, 25614), (Start: 12 @25557 has 38 MA's), (Start: 26 @25512 has 3 MA's), (41, 25386), (44, 25347), (51, 25317), (57, 25242), (65, 25140), (80, 24963), (81, 24951),

Gene: NikkiHotWheels\_34 Start: 23621, Stop: 22854, Start Num: 12

Candidate Starts for NikkiHotWheels\_34:

(Start: 1 @23768 has 1 MA's), (3, 23678), (Start: 12 @23621 has 38 MA's), (Start: 26 @23576 has 3 MA's), (41, 23450), (44, 23411), (51, 23381), (57, 23306), (65, 23204), (80, 23027), (81, 23015),

Gene: PeggyLeg03\_32 Start: 24157, Stop: 23390, Start Num: 12

Candidate Starts for PeggyLeg03\_32:

(Start: 1 @24304 has 1 MA's), (3, 24214), (Start: 12 @24157 has 38 MA's), (Start: 26 @24112 has 3 MA's), (41, 23986), (44, 23947), (51, 23917), (57, 23842), (65, 23740), (80, 23563), (81, 23551),

Gene: PetriParty\_32 Start: 25425, Stop: 24727, Start Num: 25

Candidate Starts for PetriParty\_32:

(10, 25470), (20, 25440), (25, 25425), (30, 25401), (40, 25299), (60, 25116), (61, 25107), (67, 25065),

Gene: Popper\_32 Start: 25470, Stop: 24703, Start Num: 12

Candidate Starts for Popper\_32:

(Start: 1 @25617 has 1 MA's), (3, 25527), (Start: 12 @25470 has 38 MA's), (Start: 26 @25425 has 3 MA's), (41, 25299), (44, 25260), (51, 25230), (57, 25155), (65, 25053), (80, 24876), (81, 24864),

Gene: QuinnAvery\_34 Start: 25647, Stop: 24880, Start Num: 12

Candidate Starts for QuinnAvery\_34:

(Start: 1 @25794 has 1 MA's), (3, 25704), (Start: 12 @25647 has 38 MA's), (Start: 26 @25602 has 3 MA's), (41, 25476), (44, 25437), (51, 25407), (57, 25332), (65, 25230), (80, 25053), (81, 25041),

Gene: RadFad\_34 Start: 23851, Stop: 23084, Start Num: 12

Candidate Starts for RadFad\_34:

(Start: 1 @23998 has 1 MA's), (3, 23908), (Start: 12 @23851 has 38 MA's), (Start: 26 @23806 has 3 MA's), (41, 23680), (44, 23641), (51, 23611), (57, 23536), (65, 23434), (80, 23257), (81, 23245),

Gene: Raphaella\_34 Start: 23740, Stop: 23018, Start Num: 26

Candidate Starts for Raphaella\_34:

(Start: 1 @23932 has 1 MA's), (3, 23842), (Start: 12 @23785 has 38 MA's), (Start: 26 @23740 has 3 MA's), (41, 23614), (44, 23575), (51, 23545), (57, 23470), (65, 23368), (80, 23191), (81, 23179),

Gene: Richie\_34 Start: 23866, Stop: 23099, Start Num: 12

Candidate Starts for Richie\_34:

(Start: 1 @24013 has 1 MA's), (3, 23923), (Start: 12 @23866 has 38 MA's), (Start: 26 @23821 has 3 MA's), (41, 23695), (44, 23656), (51, 23626), (57, 23551), (65, 23449), (80, 23272), (81, 23260),

Gene: Ryan\_34 Start: 26168, Stop: 25401, Start Num: 12

Candidate Starts for Ryan\_34:

(Start: 1 @26315 has 1 MA's), (3, 26225), (Start: 12 @26168 has 38 MA's), (Start: 26 @26123 has 3 MA's), (41, 25997), (44, 25958), (51, 25928), (57, 25853), (65, 25751), (80, 25574), (81, 25562),

Gene: Saintcarr\_34 Start: 25730, Stop: 24963, Start Num: 12

Candidate Starts for Saintcarr\_34:

(Start: 1 @25877 has 1 MA's), (3, 25787), (Start: 12 @25730 has 38 MA's), (Start: 26 @25685 has 3 MA's), (41, 25559), (44, 25520), (51, 25490), (57, 25415), (65, 25313), (80, 25136), (81, 25124),

Gene: Sakai\_34 Start: 23794, Stop: 23027, Start Num: 12

Candidate Starts for Sakai\_34:

(Start: 1 @23941 has 1 MA's), (3, 23851), (Start: 12 @23794 has 38 MA's), (Start: 26 @23749 has 3 MA's), (41, 23623), (44, 23584), (51, 23554), (57, 23479), (65, 23377), (80, 23200), (81, 23188),

Gene: Schism\_34 Start: 25512, Stop: 24790, Start Num: 26

Candidate Starts for Schism\_34:

(Start: 1 @25704 has 1 MA's), (3, 25614), (Start: 12 @25557 has 38 MA's), (Start: 26 @25512 has 3 MA's), (41, 25386), (44, 25347), (51, 25317), (57, 25242), (65, 25140), (80, 24963), (81, 24951),

Gene: Shukran\_34 Start: 23960, Stop: 23193, Start Num: 12

Candidate Starts for Shukran\_34:

(Start: 1 @24107 has 1 MA's), (3, 24017), (Start: 12 @23960 has 38 MA's), (Start: 26 @23915 has 3 MA's), (41, 23789), (44, 23750), (51, 23720), (57, 23645), (65, 23543), (80, 23366), (81, 23354),

Gene: SonDevVon\_33 Start: 23787, Stop: 23020, Start Num: 12

Candidate Starts for SonDevVon\_33:

(Start: 1 @23934 has 1 MA's), (3, 23844), (Start: 12 @23787 has 38 MA's), (Start: 26 @23742 has 3 MA's), (41, 23616), (44, 23577), (51, 23547), (57, 23472), (65, 23370), (80, 23193), (81, 23181),

Gene: SpicyFrank\_34 Start: 24086, Stop: 23319, Start Num: 12

Candidate Starts for SpicyFrank\_34:

(Start: 1 @24233 has 1 MA's), (3, 24143), (Start: 12 @24086 has 38 MA's), (Start: 26 @24041 has 3 MA's), (41, 23915), (44, 23876), (51, 23846), (57, 23771), (65, 23669), (80, 23492), (81, 23480),

Gene: Sporco\_35 Start: 23842, Stop: 23075, Start Num: 12

Candidate Starts for Sporco\_35:

(Start: 1 @23989 has 1 MA's), (3, 23899), (Start: 12 @23842 has 38 MA's), (Start: 26 @23797 has 3 MA's), (41, 23671), (44, 23632), (51, 23602), (57, 23527), (65, 23425), (80, 23248), (81, 23236),

Gene: ThayneTheZag\_34 Start: 24005, Stop: 23238, Start Num: 12

Candidate Starts for ThayneTheZag\_34:

(Start: 1 @24152 has 1 MA's), (3, 24062), (Start: 12 @24005 has 38 MA's), (Start: 26 @23960 has 3 MA's), (41, 23834), (44, 23795), (51, 23765), (57, 23690), (65, 23588), (80, 23411), (81, 23399),

Gene: Toodles\_35 Start: 26018, Stop: 25251, Start Num: 12

Candidate Starts for Toodles\_35:

(Start: 1 @26165 has 1 MA's), (3, 26075), (Start: 12 @26018 has 38 MA's), (Start: 26 @25973 has 3 MA's), (41, 25847), (44, 25808), (51, 25778), (57, 25703), (65, 25601), (80, 25424), (81, 25412),

Gene: Vopal\_36 Start: 25596, Stop: 24844, Start Num: 22

Candidate Starts for Vopal\_36:

(22, 25596), (33, 25548), (34, 25542), (38, 25506), (47, 25422), (49, 25419), (50, 25410), (74, 25110), (84, 25014), (92, 24912), (95, 24885), (98, 24852),

Gene: Yonex\_34 Start: 26168, Stop: 25401, Start Num: 12

Candidate Starts for Yonex\_34:

(Start: 1 @26315 has 1 MA's), (3, 26225), (Start: 12 @26168 has 38 MA's), (Start: 26 @26123 has 3 MA's), (41, 25997), (44, 25958), (51, 25928), (57, 25853), (65, 25751), (80, 25574), (81, 25562),

Gene: YoungHarleezy\_34 Start: 23864, Stop: 23097, Start Num: 12

Candidate Starts for YoungHarleezy\_34:

(Start: 1 @24011 has 1 MA's), (3, 23921), (Start: 12 @23864 has 38 MA's), (Start: 26 @23819 has 3 MA's), (41, 23693), (44, 23654), (51, 23624), (57, 23549), (65, 23447), (80, 23270), (81, 23258),

Gene: Zaheer\_34 Start: 26257, Stop: 25490, Start Num: 12

Candidate Starts for Zaheer\_34:

(Start: 1 @26404 has 1 MA's), (3, 26314), (Start: 12 @26257 has 38 MA's), (Start: 26 @26212 has 3 MA's), (41, 26086), (44, 26047), (51, 26017), (57, 25942), (65, 25840), (80, 25663), (81, 25651),