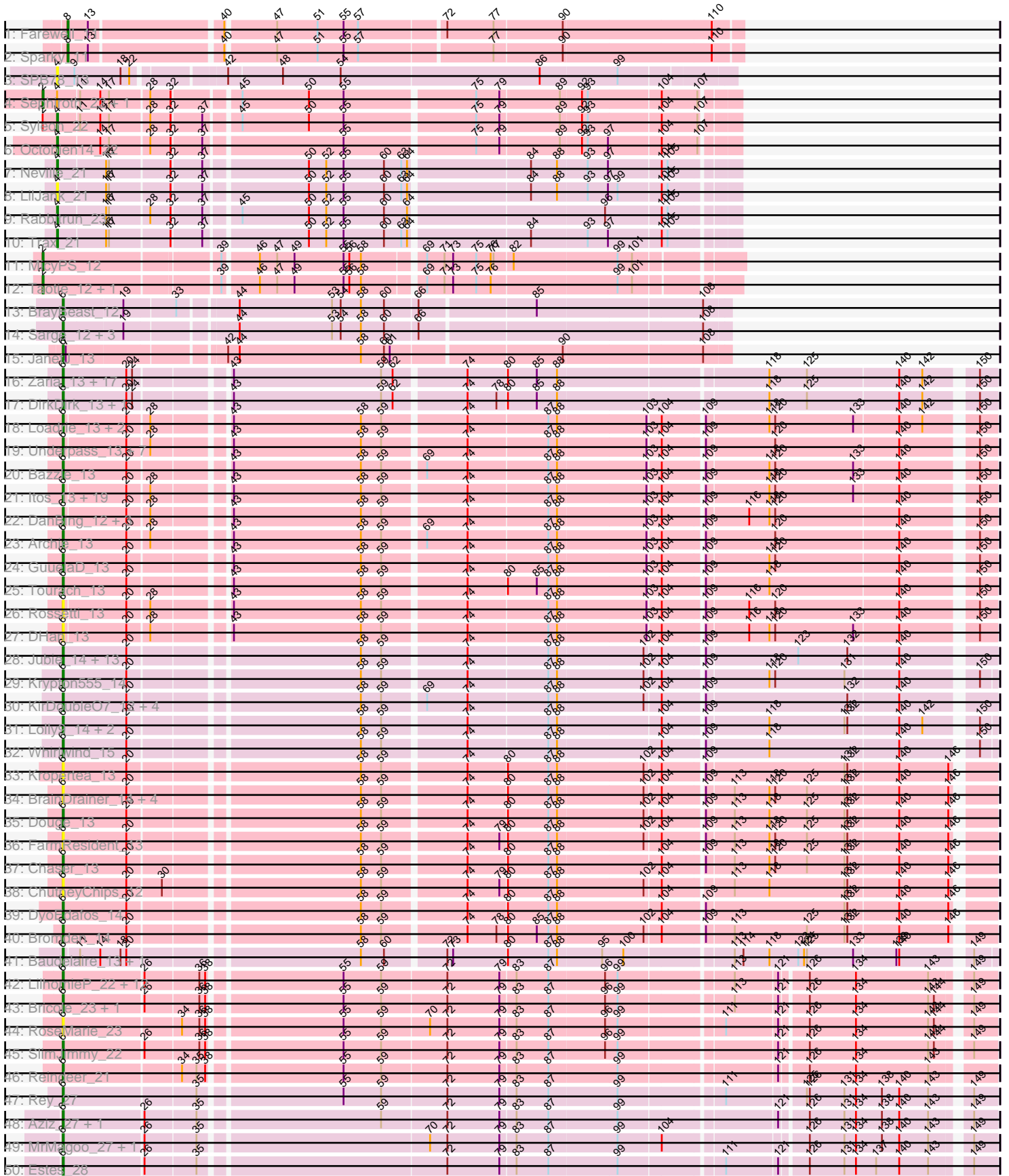
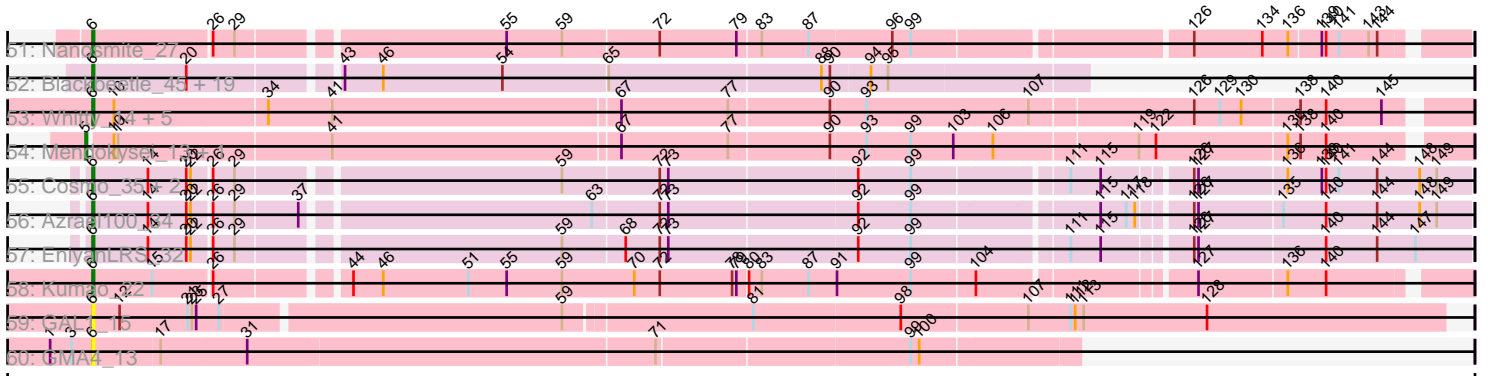


Pham 294459



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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 294459 Report

This analysis was run 04/18/26 on database version 643.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 294459 has 180 members, 36 are drafts.

Phages represented in each track:

- Track 1 : Farewell\_11
- Track 2 : Sparky\_11
- Track 3 : SPB78\_13
- Track 4 : Sephiroth\_22, Kudefre\_21
- Track 5 : Syleon\_22
- Track 6 : Octobien14\_22
- Track 7 : Neville\_21
- Track 8 : LilJank\_21
- Track 9 : Rabbitrun\_23
- Track 10 : Trax\_21
- Track 11 : MicyPS\_12
- Track 12 : Taotie\_12, PSonyx\_12
- Track 13 : BrayBeast\_12
- Track 14 : Sarge\_12, Shoya\_11, Rooter\_12, JeanClaude\_12
- Track 15 : JanetJ\_13
- Track 16 : Zaria\_13, Wyatt2\_13, Silverleaf\_13, Halena\_13, Appletree2\_13, AvadaKedavra\_13, Rose5\_13, Acquire49\_13, Tyson\_13, LeBron\_13, JoeDirt\_13, UPIE\_13, Poochiewood\_13, CicholasNage\_13, Enceladus\_13, MAckerman\_13, Wamburgrxpress\_13, Calm\_13
- Track 17 : DirkDirk\_13, OhShagHennessy\_13
- Track 18 : Loadrie\_13, OverPar\_13, Wigglewiggle\_13
- Track 19 : Underpass\_13, LilDestine\_13, Kahlid\_13, SoJulia\_13, Nicholasp3\_13, Finemlucis\_13, Gardann\_13, Wilder\_13
- Track 20 : Bazzle\_13
- Track 21 : Itos\_13, BigCheese\_13, Miley16\_13, DrSeegs\_13, Lewan\_13, MkaliMinitis3\_13, BobsGarage\_13, Faith1\_13, Sarshaun\_13, Zakai\_13, Vetrrix\_13, Hafay\_13, Soap141\_13, Crossroads\_13, Gabriela\_13, Winky\_13, Breezona\_13, Lynnae\_13, Rumpelstiltskin\_13, Netyap\_13
- Track 22 : DanBing\_12, Baoshan\_12, Claus\_13, ZhongYanYuan\_12
- Track 23 : Archie\_13
- Track 24 : GuuelaD\_13
- Track 25 : Tourach\_13
- Track 26 : Rossetti\_13

- Track 27 : DHan\_13
- Track 28 : Jubie\_14, Kingsolomon\_14, TriFive\_14, Clautastrophe\_14, Snenia\_14, Nicholas\_14, Moostard\_14, MsGreen\_14, Jobypre\_14, Finnry\_14, Bellis\_14, Red305\_14, Samty\_14, Lumos\_14
- Track 29 : Krypton555\_14
- Track 30 : KirDoubleO7\_12, BourbonZero\_13, DuncansLeg\_14, Ellson\_14, LiyuLake\_14
- Track 31 : Lolly9\_14, MiniMac\_14, MiniLon\_14
- Track 32 : Whirlwind\_15
- Track 33 : Kropertea\_13
- Track 34 : BrainDrainer\_14, Sheng711\_13, Quby\_13, Douzhi\_13, PYPDinur\_13
- Track 35 : Douge\_13
- Track 36 : FarmResident\_13
- Track 37 : Chaser\_13
- Track 38 : ChutneyChips\_12
- Track 39 : DyoEdafos\_14
- Track 40 : Bromden\_14
- Track 41 : Baudelaire\_13, Aegeus\_13
- Track 42 : LilhomieP\_22, Dulcita\_24, TyDawg\_23, Auspice\_23, IPhane7\_23, Glaske16\_24, Diminimus\_24, Skinny\_24, Bongo\_23, Izel\_24, PegLeg\_23, TpudiCK\_24, FreakyGoo\_24
- Track 43 : Bricole\_23, KleverKiS\_23
- Track 44 : RoseMarie\_23
- Track 45 : SlimJimmy\_22
- Track 46 : Reindeer\_21
- Track 47 : Rey\_27
- Track 48 : Aziz\_27, GenevaB15\_27
- Track 49 : MrMagoo\_27, GardenSalsa\_27
- Track 50 : Estes\_28
- Track 51 : Nanosmite\_27
- Track 52 : Blackbeetle\_45, Raela\_45, Clarkson\_46, GoongGoong\_44, Pringar\_45, VasuNzinga\_45, FeliMaine\_47, JoieB\_46, Corazon\_43, Poise\_45, Beelzebub\_49, Marvin\_43, Huphlepuuff\_47, Gattaca\_44, MosMoris\_43, Caprice\_42, Tesla\_44, RedRaider77\_45, LittleLaf\_45, Lilbit\_44
- Track 53 : Whitty\_14, RonRayGun\_14, Bernal13\_14, ZenTime222\_14, Nairb\_14, Ibrahim\_14
- Track 54 : Mendokysei\_13, Nette\_14
- Track 55 : Cosmo\_35, MaryV\_35, Wildcat\_35
- Track 56 : Azrael100\_34
- Track 57 : EniyanLRS\_32
- Track 58 : Kumao\_22
- Track 59 : GAL1\_15
- Track 60 : GMA4\_13

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

The start number called the most often in the published annotations is 6, it was called in 132 of the 144 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49\_13, Aegeus\_13, Appletree2\_13, Archie\_13, Auspice\_23, AvadaKedavra\_13, Aziz\_27, Azrael100\_34, Baoshan\_12, Baudelaire\_13, Bazzle\_13, Beelzebub\_49, Bellis\_14, Bernal13\_14, BigCheese\_13, Blackbeetle\_45, BobsGarage\_13, Bongo\_23, BourbonZero\_13, BrainDrainer\_14, BrayBeast\_12, Breezona\_13, Bricole\_23, Bromden\_14, Calm\_13, Caprice\_42, Chaser\_13, ChutneyChips\_12, CicholasNage\_13, Clarkson\_46, Claus\_13, Clautastrophe\_14, Corazon\_43, Cosmo\_35, Crossroads\_13, DHan\_13, DanBing\_12, Diminimus\_24, DirkDirk\_13, Douge\_13, Douzhi\_13, DrSeegs\_13, Dulcita\_24, DuncansLeg\_14, DyoEdafos\_14, Ellson\_14, Enceladus\_13, EniyanLRS\_32, Estes\_28, Faith1\_13, FarmResident\_13, FeliMaine\_47, Finemlucis\_13, Finnry\_14, FreakyGoo\_24, GAL1\_15, GMA4\_13, Gabriela\_13, Gardann\_13, GardenSalsa\_27, Gattaca\_44, GenevaB15\_27, Glaske16\_24, GoongGoong\_44, GuuelaD\_13, Hafay\_13, Halena\_13, Huphlepuuff\_47, IPhone7\_23, Ibrahim\_14, Itos\_13, Izel\_24, JanetJ\_13, JeanClaude\_12, Jobypre\_14, JoeDirt\_13, JoieB\_46, Jubie\_14, Kahlid\_13, Kingsolomon\_14, KirDoubleO7\_12, KleverKiS\_23, Kropertea\_13, Krypton555\_14, Kumao\_22, LeBron\_13, Lewan\_13, LilDestine\_13, Lilbit\_44, LilhomieP\_22, LittleLaf\_45, LiyuLake\_14, Loadrie\_13, Lolly9\_14, Lumos\_14, Lynnae\_13, MAckerman\_13, Marvin\_43, MaryV\_35, Miley16\_13, MiniLon\_14, MiniMac\_14, MkaliMinitis3\_13, Moostard\_14, MosMoris\_43, MrMagoo\_27, MsGreen\_14, Nairb\_14, Nanosmite\_27, Netyap\_13, Nicholas\_14, Nicholasp3\_13, OhShagHennessy\_13, OverPar\_13, PYPDinur\_13, PegLeg\_23, Poise\_45, Poochiewood\_13, Pringar\_45, Quby\_13, Raela\_45, Red305\_14, RedRaider77\_45, Reindeer\_21, Rey\_27, RonRayGun\_14, Rooter\_12, Rose5\_13, RoseMarie\_23, Rossetti\_13, Rumpelstiltskin\_13, Samty\_14, Sarge\_12, Sarshaun\_13, Sheng711\_13, Shoya\_11, Silverleaf\_13, Skinny\_24, SlimJimmy\_22, Snenia\_14, SoJulia\_13, Soap141\_13, Tesla\_44, Tourach\_13, TpudiCK\_24, TriFive\_14, TyDawg\_23, Tyson\_13, UPIE\_13, Underpass\_13, VasuNzinga\_45, Vetrix\_13, Wamburgexpress\_13, Whirlwind\_15, Whitty\_14, Wigglewiggles\_13, Wildcat\_35, Wilder\_13, Winky\_13, Wyatt2\_13, Zakai\_13, Zaria\_13, ZenTime222\_14, ZhongYanYuan\_12,

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

- 

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

- Farewell\_11, Kudefre\_21, LilJank\_21, Mendokysei\_13, MicyPS\_12, Nette\_14, Neville\_21, Octobien14\_22, PSonyx\_12, Rabbitrun\_23, SPB78\_13, Sephiroth\_22, Sparky\_11, Syleon\_22, Taotie\_12, Trax\_21,

### Summary by start number:

Start 2:

- Found in 6 of 180 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 4 of 144
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Kudefre\_21 (DU1), MicyPS\_12 (EQ), PSonyx\_12 (EQ), Sephiroth\_22 (DU1), Taotie\_12 (EQ),

Start 4:

- Found in 9 of 180 ( 5.0% ) of genes in pham
- Manual Annotations of this start: 5 of 144
- Called 77.8% of time when present
- Phage (with cluster) where this start called: LilJank\_21 (DU2), Neville\_21 (DU2), Octobien14\_22 (DU1), Rabbitrun\_23 (DU2), SPB78\_13 (BA), Syleon\_22 (DU1),

Trax\_21 (DU2),

Start 5:

- Found in 2 of 180 ( 1.1% ) of genes in pham
- Manual Annotations of this start: 1 of 144
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mendokysei\_13 (T), Nette\_14 (T),

Start 6:

- Found in 164 of 180 ( 91.1% ) of genes in pham
- Manual Annotations of this start: 132 of 144
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acquire49\_13 (L1), Aegeus\_13 (L5), Appletree2\_13 (L1), Archie\_13 (L2), Auspice\_23 (M1), AvadaKedavra\_13 (L1), Aziz\_27 (M2), Azrael100\_34 (V), Baoshan\_12 (L2), Baudelaire\_13 (L5), Bazzle\_13 (L2), Beelzebub\_49 (S), Bellis\_14 (L3), Bernal13\_14 (T), BigCheese\_13 (L2), Blackbeetle\_45 (S), BobsGarage\_13 (L2), Bongo\_23 (M1), BourbonZero\_13 (L3), BrainDrainer\_14 (L4), BrayBeast\_12 (FB), Breezona\_13 (L2), Bricole\_23 (M1), Bromden\_14 (L4), Calm\_13 (L1), Caprice\_42 (S), Chaser\_13 (L4), ChutneyChips\_12 (L4), CicholasNage\_13 (L1), Clarkson\_46 (S), Claus\_13 (L2), Clautastrophe\_14 (L3), Corazon\_43 (S), Cosmo\_35 (V), Crossroads\_13 (L2), DHan\_13 (L2), DanBing\_12 (L2), Diminimus\_24 (M1), DirkDirk\_13 (L1), Douge\_13 (L4), Douzhi\_13 (L4), DrSeegs\_13 (L2), Dulcita\_24 (M1), DuncansLeg\_14 (L3), DyoEdafos\_14 (L4), Ellson\_14 (L3), Enceladus\_13 (L1), EniyanLRS\_32 (V), Estes\_28 (M2), Faith1\_13 (L2), FarmResident\_13 (L4), FeliMaine\_47 (S), Finemlucis\_13 (L2), Finnry\_14 (L3), FreakyGoo\_24 (M1), GAL1\_15 (singleton), GMA4\_13 (singleton), Gabriela\_13 (L2), Gardann\_13 (L2), GardenSalsa\_27 (M2), Gattaca\_44 (S), GenevaB15\_27 (M2), Glaske16\_24 (M1), GoongGoong\_44 (S), GuuelaD\_13 (L2), Hafay\_13 (L2), Halena\_13 (L1), Huphlepuuff\_47 (S), IPhane7\_23 (M1), Ibrahim\_14 (T), Itos\_13 (L2), Izel\_24 (M1), JanetJ\_13 (FO), JeanClaude\_12 (FB), Jobypre\_14 (L3), JoeDirt\_13 (L1), JoieB\_46 (S), Jubie\_14 (L3), Kahlid\_13 (L2), Kingsolomon\_14 (L3), KirDoubleO7\_12 (L3), KleverKiS\_23 (M1), Kropertea\_13 (L4), Krypton555\_14 (L3), Kumao\_22 (singleton), LeBron\_13 (L1), Lewan\_13 (L2), LilDestine\_13 (L2), Lilbit\_44 (S), LilhomieP\_22 (M1), LittleLaf\_45 (S), LiyuLake\_14 (L3), Loadrie\_13 (L2), Lolly9\_14 (L3), Lumos\_14 (L3), Lynnae\_13 (L2), MAckerman\_13 (L1), Marvin\_43 (S), MaryV\_35 (V), Miley16\_13 (L2), MiniLon\_14 (L3), MiniMac\_14 (L3), MkaliMitinis3\_13 (L2), Moostard\_14 (L3), MosMoris\_43 (S), MrMagoo\_27 (M2), MsGreen\_14 (L3), Nairb\_14 (T), Nanosmite\_27 (M3), Netyap\_13 (L2), Nicholas\_14 (L3), Nicholasp3\_13 (L2), OhShagHennessy\_13 (L1), OverPar\_13 (L2), PYPDinur\_13 (L4), PegLeg\_23 (M1), Poise\_45 (S), Poochiewood\_13 (L1), Pringar\_45 (S), Quby\_13 (L4), Raela\_45 (S), Red305\_14 (L3), RedRaider77\_45 (S), Reindeer\_21 (M1), Rey\_27 (M2), RonRayGun\_14 (T), Rooter\_12 (FB), Rose5\_13 (L1), RoseMarie\_23 (M1), Rossetti\_13 (L2), Rumpelstiltskin\_13 (L2), Samty\_14 (L3), Sarge\_12 (FB), Sarshaun\_13 (L2), Sheng711\_13 (L4), Shoya\_11 (FB), Silverleaf\_13 (L1), Skinny\_24 (M1), SlimJimmy\_22 (M1), Snenia\_14 (L3), SoJulia\_13 (L2), Soap141\_13 (L2), Tesla\_44 (S), Tourach\_13 (L2), TpudiCK\_24 (M1), TriFive\_14 (L3), TyDawg\_23 (M1), Tyson\_13 (L1), UPIE\_13 (L1), Underpass\_13 (L2), VasuNzinga\_45 (S), Vetrrix\_13 (L2), Wamburggrxpress\_13 (L1), Whirlwind\_15 (L3), Whitty\_14 (T), Wigglewiggle\_13 (L2), Wildcat\_35 (V), Wilder\_13 (L2), Winky\_13 (L2), Wyatt2\_13 (L1), Zakai\_13 (L2), Zaria\_13 (L1), ZenTime222\_14 (T), ZhongYanYuan\_12 (L2),

Start 8:

- Found in 2 of 180 ( 1.1% ) of genes in pham

- Manual Annotations of this start: 2 of 144
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell\_11 (AF), Sparky\_11 (AF),

### **Summary by clusters:**

There are 19 clusters represented in this pham: singleton, BA, L1, AF, FB, V, L4, DU1, S, L5, L2, L3, M3, M2, M1, DU2, FO, EQ, T,

Info for manual annotations of cluster AF:

- Start number 8 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster DU1:

- Start number 2 was manually annotated 2 times for cluster DU1.
- Start number 4 was manually annotated 2 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 4 was manually annotated 3 times for cluster DU2.

Info for manual annotations of cluster EQ:

- Start number 2 was manually annotated 2 times for cluster EQ.

Info for manual annotations of cluster FB:

- Start number 6 was manually annotated 3 times for cluster FB.

Info for manual annotations of cluster FO:

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

Info for manual annotations of cluster L1:

- Start number 6 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 6 was manually annotated 31 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 6 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 6 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 6 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster M1:

- Start number 6 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 6 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 6 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster S:

- Start number 6 was manually annotated 19 times for cluster S.

Info for manual annotations of cluster T:

- Start number 5 was manually annotated 1 time for cluster T.
- Start number 6 was manually annotated 6 times for cluster T.

Info for manual annotations of cluster V:

- Start number 6 was manually annotated 5 times for cluster V.

### **Gene Information:**

Gene: Acquire49\_13 Start: 8989, Stop: 9891, Start Num: 6

Candidate Starts for Acquire49\_13:

(Start: 6 @8989 has 132 MA's), (20, 9055), (24, 9061), (43, 9145), (59, 9298), (62, 9310), (74, 9379), (80, 9418), (85, 9448), (88, 9469), (118, 9673), (125, 9712), (140, 9805), (142, 9829), (150, 9874),

Gene: Aegeus\_13 Start: 8615, Stop: 9511, Start Num: 6

Candidate Starts for Aegeus\_13:

(Start: 6 @8615 has 132 MA's), (11, 8630), (14, 8651), (18, 8672), (20, 8678), (58, 8900), (60, 8924), (72, 8981), (73, 8987), (80, 9041), (87, 9083), (88, 9092), (95, 9137), (100, 9158), (113, 9260), (114, 9269), (118, 9296), (123, 9326), (124, 9332), (125, 9335), (133, 9383), (139, 9425), (140, 9428), (149, 9491),

Gene: Appletree2\_13 Start: 8963, Stop: 9865, Start Num: 6

Candidate Starts for Appletree2\_13:

(Start: 6 @8963 has 132 MA's), (20, 9029), (24, 9035), (43, 9119), (59, 9272), (62, 9284), (74, 9353), (80, 9392), (85, 9422), (88, 9443), (118, 9647), (125, 9686), (140, 9779), (142, 9803), (150, 9848),

Gene: Archie\_13 Start: 8948, Stop: 9850, Start Num: 6

Candidate Starts for Archie\_13:

(Start: 6 @8948 has 132 MA's), (20, 9014), (28, 9035), (43, 9104), (58, 9236), (59, 9257), (69, 9296), (74, 9338), (87, 9419), (88, 9428), (103, 9518), (104, 9530), (109, 9569), (120, 9638), (140, 9764), (150, 9833),

Gene: Auspice\_23 Start: 12816, Stop: 13715, Start Num: 6

Candidate Starts for Auspice\_23:

(Start: 6 @12816 has 132 MA's), (26, 12897), (36, 12951), (38, 12957), (55, 13086), (59, 13125), (72, 13191), (79, 13245), (83, 13260), (87, 13293), (96, 13350), (99, 13362), (113, 13470), (121, 13512), (126, 13536), (134, 13584), (143, 13659), (149, 13692),

Gene: AvadaKedavra\_13 Start: 8989, Stop: 9891, Start Num: 6

Candidate Starts for AvadaKedavra\_13:

(Start: 6 @8989 has 132 MA's), (20, 9055), (24, 9061), (43, 9145), (59, 9298), (62, 9310), (74, 9379), (80, 9418), (85, 9448), (88, 9469), (118, 9673), (125, 9712), (140, 9805), (142, 9829), (150, 9874),

Gene: Aziz\_27 Start: 13394, Stop: 14293, Start Num: 6

Candidate Starts for Aziz\_27:

(Start: 6 @13394 has 132 MA's), (26, 13475), (35, 13526), (59, 13703), (72, 13769), (79, 13823), (83, 13838), (87, 13871), (99, 13940), (121, 14090), (126, 14114), (131, 14150), (134, 14162), (138, 14189), (140, 14207), (143, 14237), (149, 14270),

Gene: Azrael100\_34 Start: 15887, Stop: 16798, Start Num: 6

Candidate Starts for Azrael100\_34:

(Start: 6 @15887 has 132 MA's), (14, 15926), (20, 15953), (22, 15956), (26, 15968), (29, 15983), (37, 16025), (63, 16217), (72, 16262), (73, 16268), (92, 16397), (99, 16433), (115, 16553), (117, 16571), (118, 16577), (126, 16607), (127, 16610), (135, 16667), (140, 16697), (144, 16733), (148, 16763), (149, 16775),

Gene: Baoshan\_12 Start: 8830, Stop: 9729, Start Num: 6

Candidate Starts for Baoshan\_12:

(Start: 6 @8830 has 132 MA's), (20, 8893), (28, 8914), (43, 8983), (58, 9115), (59, 9136), (74, 9217), (87, 9298), (88, 9307), (103, 9397), (104, 9409), (109, 9448), (116, 9490), (118, 9511), (120, 9517), (140, 9643), (150, 9712),

Gene: Baudelaire\_13 Start: 8615, Stop: 9511, Start Num: 6

Candidate Starts for Baudelaire\_13:

(Start: 6 @8615 has 132 MA's), (11, 8630), (14, 8651), (18, 8672), (20, 8678), (58, 8900), (60, 8924), (72, 8981), (73, 8987), (80, 9041), (87, 9083), (88, 9092), (95, 9137), (100, 9158), (113, 9260), (114, 9269), (118, 9296), (123, 9326), (124, 9332), (125, 9335), (133, 9383), (139, 9425), (140, 9428), (149, 9491),

Gene: Bazzle\_13 Start: 8951, Stop: 9853, Start Num: 6

Candidate Starts for Bazzle\_13:

(Start: 6 @8951 has 132 MA's), (20, 9017), (43, 9107), (58, 9239), (59, 9260), (69, 9299), (74, 9341), (87, 9422), (88, 9431), (103, 9521), (104, 9533), (109, 9572), (118, 9635), (120, 9641), (133, 9722), (140, 9767), (150, 9836),

Gene: Beelzebub\_49 Start: 19342, Stop: 20007, Start Num: 6

Candidate Starts for Beelzebub\_49:

(Start: 6 @19342 has 132 MA's), (20, 19408), (43, 19501), (46, 19528), (54, 19612), (65, 19684), (88, 19831), (90, 19837), (94, 19864), (95, 19876),

Gene: Bellis\_14 Start: 9118, Stop: 10020, Start Num: 6

Candidate Starts for Bellis\_14:

(Start: 6 @9118 has 132 MA's), (20, 9184), (58, 9406), (59, 9427), (74, 9508), (87, 9589), (88, 9598), (102, 9685), (104, 9700), (109, 9739), (123, 9832), (132, 9883), (140, 9934),

Gene: Bernal13\_14 Start: 9882, Stop: 10814, Start Num: 6

Candidate Starts for Bernal13\_14:

(Start: 6 @9882 has 132 MA's), (10, 9897), (34, 10002), (41, 10047), (67, 10245), (77, 10320), (90, 10389), (93, 10413), (107, 10524), (126, 10635), (129, 10653), (130, 10668), (138, 10707), (140, 10725), (145, 10764),

Gene: BigCheese\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for BigCheese\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: Blackbeetle\_45 Start: 18361, Stop: 19026, Start Num: 6

Candidate Starts for Blackbeetle\_45:

(Start: 6 @18361 has 132 MA's), (20, 18427), (43, 18520), (46, 18547), (54, 18631), (65, 18703), (88, 18850), (90, 18856), (94, 18883), (95, 18895),

Gene: BobsGarage\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for BobsGarage\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: Bongo\_23 Start: 12816, Stop: 13715, Start Num: 6

Candidate Starts for Bongo\_23:

(Start: 6 @12816 has 132 MA's), (26, 12897), (36, 12951), (38, 12957), (55, 13086), (59, 13125), (72, 13191), (79, 13245), (83, 13260), (87, 13293), (96, 13350), (99, 13362), (113, 13470), (121, 13512), (126, 13536), (134, 13584), (143, 13659), (149, 13692),

Gene: BourbonZero\_13 Start: 9125, Stop: 10027, Start Num: 6

Candidate Starts for BourbonZero\_13:

(Start: 6 @9125 has 132 MA's), (20, 9191), (58, 9413), (59, 9434), (69, 9473), (74, 9515), (87, 9596), (88, 9605), (102, 9692), (104, 9707), (109, 9746), (132, 9890), (140, 9941),

Gene: BrainDrainer\_14 Start: 8811, Stop: 9713, Start Num: 6

Candidate Starts for BrainDrainer\_14:

(Start: 6 @8811 has 132 MA's), (20, 8877), (58, 9099), (59, 9120), (74, 9201), (80, 9240), (87, 9282), (88, 9291), (102, 9378), (104, 9393), (109, 9432), (113, 9459), (118, 9495), (120, 9501), (125, 9534), (131, 9573), (132, 9576), (140, 9627), (146, 9678),

Gene: BrayBeast\_12 Start: 8007, Stop: 8660, Start Num: 6

Candidate Starts for BrayBeast\_12:

(Start: 6 @8007 has 132 MA's), (19, 8067), (33, 8118), (44, 8172), (53, 8268), (54, 8277), (58, 8298), (60, 8322), (66, 8355), (85, 8469), (108, 8634),

Gene: Breezona\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Breezona\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: Bricole\_23 Start: 12815, Stop: 13714, Start Num: 6

Candidate Starts for Bricole\_23:

(Start: 6 @12815 has 132 MA's), (26, 12896), (36, 12950), (38, 12956), (55, 13085), (59, 13124), (72, 13190), (79, 13244), (83, 13259), (87, 13292), (96, 13349), (99, 13361), (113, 13469), (121, 13511), (126, 13535), (134, 13583), (143, 13658), (144, 13664), (149, 13691),

Gene: Bromden\_14 Start: 9135, Stop: 10037, Start Num: 6

Candidate Starts for Bromden\_14:

(Start: 6 @9135 has 132 MA's), (20, 9201), (58, 9423), (59, 9444), (74, 9525), (78, 9555), (80, 9564), (85, 9594), (87, 9606), (88, 9615), (102, 9702), (104, 9717), (109, 9756), (113, 9783), (125, 9858), (131, 9897), (132, 9900), (140, 9951), (146, 10002),

Gene: Calm\_13 Start: 8990, Stop: 9892, Start Num: 6

Candidate Starts for Calm\_13:

(Start: 6 @8990 has 132 MA's), (20, 9056), (24, 9062), (43, 9146), (59, 9299), (62, 9311), (74, 9380), (80, 9419), (85, 9449), (88, 9470), (118, 9674), (125, 9713), (140, 9806), (142, 9830), (150, 9875),

Gene: Caprice\_42 Start: 18431, Stop: 19096, Start Num: 6

Candidate Starts for Caprice\_42:

(Start: 6 @18431 has 132 MA's), (20, 18497), (43, 18590), (46, 18617), (54, 18701), (65, 18773), (88, 18920), (90, 18926), (94, 18953), (95, 18965),

Gene: Chaser\_13 Start: 8726, Stop: 9628, Start Num: 6

Candidate Starts for Chaser\_13:

(Start: 6 @8726 has 132 MA's), (20, 8792), (58, 9014), (59, 9035), (74, 9116), (80, 9155), (87, 9197), (88, 9206), (104, 9308), (109, 9347), (113, 9374), (118, 9410), (120, 9416), (125, 9449), (131, 9488), (132, 9491), (140, 9542), (146, 9593),

Gene: ChutneyChips\_12 Start: 8715, Stop: 9617, Start Num: 6

Candidate Starts for ChutneyChips\_12:

(Start: 6 @8715 has 132 MA's), (20, 8781), (30, 8814), (58, 9003), (59, 9024), (74, 9105), (79, 9138), (80, 9144), (87, 9186), (88, 9195), (102, 9282), (104, 9297), (113, 9363), (118, 9399), (131, 9477), (132, 9480), (140, 9531), (146, 9582),

Gene: CicholasNage\_13 Start: 8990, Stop: 9892, Start Num: 6

Candidate Starts for CicholasNage\_13:

(Start: 6 @8990 has 132 MA's), (20, 9056), (24, 9062), (43, 9146), (59, 9299), (62, 9311), (74, 9380), (80, 9419), (85, 9449), (88, 9470), (118, 9674), (125, 9713), (140, 9806), (142, 9830), (150, 9875),

Gene: Clarkson\_46 Start: 19043, Stop: 19708, Start Num: 6

Candidate Starts for Clarkson\_46:

(Start: 6 @19043 has 132 MA's), (20, 19109), (43, 19202), (46, 19229), (54, 19313), (65, 19385), (88, 19532), (90, 19538), (94, 19565), (95, 19577),

Gene: Claus\_13 Start: 9010, Stop: 9909, Start Num: 6

Candidate Starts for Claus\_13:

(Start: 6 @9010 has 132 MA's), (20, 9073), (28, 9094), (43, 9163), (58, 9295), (59, 9316), (74, 9397), (87, 9478), (88, 9487), (103, 9577), (104, 9589), (109, 9628), (116, 9670), (118, 9691), (120, 9697), (140, 9823), (150, 9892),

Gene: Clautastrophe\_14 Start: 9123, Stop: 10025, Start Num: 6

Candidate Starts for Clautastrophe\_14:

(Start: 6 @9123 has 132 MA's), (20, 9189), (58, 9411), (59, 9432), (74, 9513), (87, 9594), (88, 9603), (102, 9690), (104, 9705), (109, 9744), (123, 9837), (132, 9888), (140, 9939),

Gene: Corazon\_43 Start: 18996, Stop: 19661, Start Num: 6

Candidate Starts for Corazon\_43:

(Start: 6 @18996 has 132 MA's), (20, 19062), (43, 19155), (46, 19182), (54, 19266), (65, 19338), (88, 19485), (90, 19491), (94, 19518), (95, 19530),

Gene: Cosmo\_35 Start: 15894, Stop: 16805, Start Num: 6

Candidate Starts for Cosmo\_35:

(Start: 6 @15894 has 132 MA's), (14, 15933), (20, 15960), (22, 15963), (26, 15975), (29, 15990), (59, 16203), (72, 16269), (73, 16275), (92, 16404), (99, 16440), (111, 16539), (115, 16560), (126, 16614), (127, 16617), (136, 16677), (139, 16701), (140, 16704), (141, 16713), (144, 16740), (148, 16770), (149, 16782),

Gene: Crossroads\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Crossroads\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770),

(140, 9815), (150, 9884),

Gene: DHan\_13 Start: 8946, Stop: 9845, Start Num: 6

Candidate Starts for DHan\_13:

(Start: 6 @8946 has 132 MA's), (20, 9009), (28, 9030), (43, 9099), (58, 9231), (59, 9252), (74, 9333), (87, 9414), (88, 9423), (103, 9513), (104, 9525), (109, 9564), (116, 9606), (118, 9627), (120, 9633), (133, 9714), (140, 9759), (150, 9828),

Gene: DanBing\_12 Start: 8829, Stop: 9728, Start Num: 6

Candidate Starts for DanBing\_12:

(Start: 6 @8829 has 132 MA's), (20, 8892), (28, 8913), (43, 8982), (58, 9114), (59, 9135), (74, 9216), (87, 9297), (88, 9306), (103, 9396), (104, 9408), (109, 9447), (116, 9489), (118, 9510), (120, 9516), (140, 9642), (150, 9711),

Gene: Diminimus\_24 Start: 12815, Stop: 13714, Start Num: 6

Candidate Starts for Diminimus\_24:

(Start: 6 @12815 has 132 MA's), (26, 12896), (36, 12950), (38, 12956), (55, 13085), (59, 13124), (72, 13190), (79, 13244), (83, 13259), (87, 13292), (96, 13349), (99, 13361), (113, 13469), (121, 13511), (126, 13535), (134, 13583), (143, 13658), (149, 13691),

Gene: DirkDirk\_13 Start: 8991, Stop: 9893, Start Num: 6

Candidate Starts for DirkDirk\_13:

(Start: 6 @8991 has 132 MA's), (20, 9057), (24, 9063), (43, 9147), (59, 9300), (62, 9312), (74, 9381), (78, 9411), (80, 9420), (85, 9450), (88, 9471), (118, 9675), (125, 9714), (140, 9807), (142, 9831), (150, 9876),

Gene: Douge\_13 Start: 8672, Stop: 9574, Start Num: 6

Candidate Starts for Douge\_13:

(Start: 6 @8672 has 132 MA's), (20, 8738), (58, 8960), (59, 8981), (74, 9062), (80, 9101), (87, 9143), (88, 9152), (102, 9239), (104, 9254), (109, 9293), (113, 9320), (118, 9356), (125, 9395), (131, 9434), (132, 9437), (140, 9488), (146, 9539),

Gene: Douzhi\_13 Start: 8672, Stop: 9574, Start Num: 6

Candidate Starts for Douzhi\_13:

(Start: 6 @8672 has 132 MA's), (20, 8738), (58, 8960), (59, 8981), (74, 9062), (80, 9101), (87, 9143), (88, 9152), (102, 9239), (104, 9254), (109, 9293), (113, 9320), (118, 9356), (120, 9362), (125, 9395), (131, 9434), (132, 9437), (140, 9488), (146, 9539),

Gene: DrSeegs\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for DrSeegs\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: Dulcita\_24 Start: 12815, Stop: 13714, Start Num: 6

Candidate Starts for Dulcita\_24:

(Start: 6 @12815 has 132 MA's), (26, 12896), (36, 12950), (38, 12956), (55, 13085), (59, 13124), (72, 13190), (79, 13244), (83, 13259), (87, 13292), (96, 13349), (99, 13361), (113, 13469), (121, 13511), (126, 13535), (134, 13583), (143, 13658), (149, 13691),

Gene: DuncansLeg\_14 Start: 9127, Stop: 10029, Start Num: 6

Candidate Starts for DuncansLeg\_14:

(Start: 6 @9127 has 132 MA's), (20, 9193), (58, 9415), (59, 9436), (69, 9475), (74, 9517), (87, 9598), (88, 9607), (102, 9694), (104, 9709), (109, 9748), (132, 9892), (140, 9943),

Gene: DyoEdafos\_14 Start: 8883, Stop: 9785, Start Num: 6

Candidate Starts for DyoEdafos\_14:

(Start: 6 @8883 has 132 MA's), (20, 8949), (58, 9171), (59, 9192), (74, 9273), (80, 9312), (87, 9354), (88, 9363), (104, 9465), (109, 9504), (131, 9645), (132, 9648), (140, 9699), (146, 9750),

Gene: Ellson\_14 Start: 9135, Stop: 10037, Start Num: 6

Candidate Starts for Ellson\_14:

(Start: 6 @9135 has 132 MA's), (20, 9201), (58, 9423), (59, 9444), (69, 9483), (74, 9525), (87, 9606), (88, 9615), (102, 9702), (104, 9717), (109, 9756), (132, 9900), (140, 9951),

Gene: Enceladus\_13 Start: 8991, Stop: 9893, Start Num: 6

Candidate Starts for Enceladus\_13:

(Start: 6 @8991 has 132 MA's), (20, 9057), (24, 9063), (43, 9147), (59, 9300), (62, 9312), (74, 9381), (80, 9420), (85, 9450), (88, 9471), (118, 9675), (125, 9714), (140, 9807), (142, 9831), (150, 9876),

Gene: EniyanLRS\_32 Start: 15588, Stop: 16499, Start Num: 6

Candidate Starts for EniyanLRS\_32:

(Start: 6 @15588 has 132 MA's), (14, 15627), (20, 15654), (22, 15657), (26, 15669), (29, 15684), (59, 15897), (68, 15939), (72, 15963), (73, 15969), (92, 16098), (99, 16134), (111, 16233), (115, 16254), (126, 16308), (127, 16311), (140, 16398), (144, 16434), (147, 16461),

Gene: Estes\_28 Start: 13531, Stop: 14430, Start Num: 6

Candidate Starts for Estes\_28:

(Start: 6 @13531 has 132 MA's), (26, 13612), (35, 13663), (72, 13906), (79, 13960), (83, 13975), (87, 14008), (99, 14077), (111, 14176), (121, 14227), (126, 14251), (131, 14287), (134, 14299), (137, 14320), (140, 14344), (143, 14374), (149, 14407),

Gene: Faith1\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Faith1\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: Farewell\_11 Start: 8044, Stop: 8706, Start Num: 8

Candidate Starts for Farewell\_11:

(Start: 8 @8044 has 2 MA's), (13, 8065), (40, 8194), (47, 8242), (51, 8284), (55, 8311), (57, 8326), (72, 8410), (77, 8458), (90, 8527), (110, 8677),

Gene: FarmResident\_13 Start: 8717, Stop: 9619, Start Num: 6

Candidate Starts for FarmResident\_13:

(Start: 6 @8717 has 132 MA's), (20, 8783), (58, 9005), (59, 9026), (74, 9107), (79, 9140), (80, 9146), (87, 9188), (88, 9197), (102, 9284), (104, 9299), (109, 9338), (113, 9365), (118, 9401), (120, 9407), (125, 9440), (131, 9479), (132, 9482), (140, 9533), (146, 9584),

Gene: FeliMaine\_47 Start: 19044, Stop: 19709, Start Num: 6

Candidate Starts for FeliMaine\_47:

(Start: 6 @19044 has 132 MA's), (20, 19110), (43, 19203), (46, 19230), (54, 19314), (65, 19386), (88, 19533), (90, 19539), (94, 19566), (95, 19578),

Gene: Finemlucis\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Finemlucis\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (120, 9689), (140, 9815), (150, 9884),

Gene: Finnry\_14 Start: 9120, Stop: 10022, Start Num: 6

Candidate Starts for Finnry\_14:

(Start: 6 @9120 has 132 MA's), (20, 9186), (58, 9408), (59, 9429), (74, 9510), (87, 9591), (88, 9600), (102, 9687), (104, 9702), (109, 9741), (123, 9834), (132, 9885), (140, 9936),

Gene: FreakyGoo\_24 Start: 12816, Stop: 13715, Start Num: 6

Candidate Starts for FreakyGoo\_24:

(Start: 6 @12816 has 132 MA's), (26, 12897), (36, 12951), (38, 12957), (55, 13086), (59, 13125), (72, 13191), (79, 13245), (83, 13260), (87, 13293), (96, 13350), (99, 13362), (113, 13470), (121, 13512), (126, 13536), (134, 13584), (143, 13659), (149, 13692),

Gene: GAL1\_15 Start: 9773, Stop: 10699, Start Num: 6

Candidate Starts for GAL1\_15:

(Start: 6 @9773 has 132 MA's), (12, 9791), (21, 9839), (23, 9842), (25, 9845), (27, 9860), (59, 10091), (81, 10217), (98, 10319), (107, 10406), (111, 10436), (112, 10439), (113, 10445), (128, 10532),

Gene: GMA4\_13 Start: 8955, Stop: 9626, Start Num: 6

Candidate Starts for GMA4\_13:

(1, 8925), (3, 8940), (Start: 6 @8955 has 132 MA's), (17, 9000), (31, 9060), (71, 9342), (99, 9513), (100, 9519),

Gene: Gabriela\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Gabriela\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: Gardann\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Gardann\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (120, 9689), (140, 9815), (150, 9884),

Gene: GardenSalsa\_27 Start: 13367, Stop: 14266, Start Num: 6

Candidate Starts for GardenSalsa\_27:

(Start: 6 @13367 has 132 MA's), (26, 13448), (35, 13499), (70, 13724), (72, 13742), (79, 13796), (83, 13811), (87, 13844), (99, 13913), (104, 13955), (126, 14087), (131, 14123), (134, 14135), (138, 14162), (140, 14180), (143, 14210), (149, 14243),

Gene: Gattaca\_44 Start: 18223, Stop: 18888, Start Num: 6

Candidate Starts for Gattaca\_44:

(Start: 6 @18223 has 132 MA's), (20, 18289), (43, 18382), (46, 18409), (54, 18493), (65, 18565), (88, 18712), (90, 18718), (94, 18745), (95, 18757),

Gene: GenevaB15\_27 Start: 13394, Stop: 14293, Start Num: 6

Candidate Starts for GenevaB15\_27:

(Start: 6 @13394 has 132 MA's), (26, 13475), (35, 13526), (59, 13703), (72, 13769), (79, 13823), (83, 13838), (87, 13871), (99, 13940), (121, 14090), (126, 14114), (131, 14150), (134, 14162), (138, 14189), (140, 14207), (143, 14237), (149, 14270),

Gene: Glaske16\_24 Start: 12815, Stop: 13714, Start Num: 6

Candidate Starts for Glaske16\_24:

(Start: 6 @12815 has 132 MA's), (26, 12896), (36, 12950), (38, 12956), (55, 13085), (59, 13124), (72, 13190), (79, 13244), (83, 13259), (87, 13292), (96, 13349), (99, 13361), (113, 13469), (121, 13511), (126, 13535), (134, 13583), (143, 13658), (149, 13691),

Gene: GoongGoong\_44 Start: 18263, Stop: 18928, Start Num: 6

Candidate Starts for GoongGoong\_44:

(Start: 6 @18263 has 132 MA's), (20, 18329), (43, 18422), (46, 18449), (54, 18533), (65, 18605), (88, 18752), (90, 18758), (94, 18785), (95, 18797),

Gene: GuuelaD\_13 Start: 9034, Stop: 9936, Start Num: 6

Candidate Starts for GuuelaD\_13:

(Start: 6 @9034 has 132 MA's), (20, 9100), (43, 9190), (58, 9322), (59, 9343), (74, 9424), (87, 9505), (88, 9514), (103, 9604), (104, 9616), (109, 9655), (118, 9718), (120, 9724), (140, 9850), (150, 9919),

Gene: Hafay\_13 Start: 9035, Stop: 9934, Start Num: 6

Candidate Starts for Hafay\_13:

(Start: 6 @9035 has 132 MA's), (20, 9098), (28, 9119), (43, 9188), (58, 9320), (59, 9341), (74, 9422), (87, 9503), (88, 9512), (103, 9602), (104, 9614), (109, 9653), (118, 9716), (120, 9722), (133, 9803), (140, 9848), (150, 9917),

Gene: Halena\_13 Start: 8990, Stop: 9892, Start Num: 6

Candidate Starts for Halena\_13:

(Start: 6 @8990 has 132 MA's), (20, 9056), (24, 9062), (43, 9146), (59, 9299), (62, 9311), (74, 9380), (80, 9419), (85, 9449), (88, 9470), (118, 9674), (125, 9713), (140, 9806), (142, 9830), (150, 9875),

Gene: Huphlebuff\_47 Start: 18848, Stop: 19513, Start Num: 6

Candidate Starts for Huphlebuff\_47:

(Start: 6 @18848 has 132 MA's), (20, 18914), (43, 19007), (46, 19034), (54, 19118), (65, 19190), (88, 19337), (90, 19343), (94, 19370), (95, 19382),

Gene: IPhane7\_23 Start: 12816, Stop: 13715, Start Num: 6

Candidate Starts for IPhane7\_23:

(Start: 6 @12816 has 132 MA's), (26, 12897), (36, 12951), (38, 12957), (55, 13086), (59, 13125), (72, 13191), (79, 13245), (83, 13260), (87, 13293), (96, 13350), (99, 13362), (113, 13470), (121, 13512), (126, 13536), (134, 13584), (143, 13659), (149, 13692),

Gene: Ibrahim\_14 Start: 9882, Stop: 10814, Start Num: 6

Candidate Starts for Ibrahim\_14:

(Start: 6 @9882 has 132 MA's), (10, 9897), (34, 10002), (41, 10047), (67, 10245), (77, 10320), (90, 10389), (93, 10413), (107, 10524), (126, 10635), (129, 10653), (130, 10668), (138, 10707), (140, 10725), (145, 10764),

Gene: Itos\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Itos\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: Izel\_24 Start: 12815, Stop: 13714, Start Num: 6

Candidate Starts for Izel\_24:

(Start: 6 @12815 has 132 MA's), (26, 12896), (36, 12950), (38, 12956), (55, 13085), (59, 13124), (72, 13190), (79, 13244), (83, 13259), (87, 13292), (96, 13349), (99, 13361), (113, 13469), (121, 13511), (126, 13535), (134, 13583), (143, 13658), (149, 13691),

Gene: JanetJ\_13 Start: 8928, Stop: 9581, Start Num: 6

Candidate Starts for JanetJ\_13:

(Start: 6 @8928 has 132 MA's), (7, 8931), (42, 9081), (44, 9093), (58, 9219), (60, 9243), (61, 9249), (90, 9417), (108, 9555),

Gene: JeanClaude\_12 Start: 7914, Stop: 8567, Start Num: 6

Candidate Starts for JeanClaude\_12:

(Start: 6 @7914 has 132 MA's), (19, 7974), (44, 8079), (53, 8175), (54, 8184), (58, 8205), (60, 8229), (66, 8262), (108, 8541),

Gene: Jobypre\_14 Start: 9123, Stop: 10025, Start Num: 6

Candidate Starts for Jobypre\_14:

(Start: 6 @9123 has 132 MA's), (20, 9189), (58, 9411), (59, 9432), (74, 9513), (87, 9594), (88, 9603), (102, 9690), (104, 9705), (109, 9744), (123, 9837), (132, 9888), (140, 9939),

Gene: JoeDirt\_13 Start: 8990, Stop: 9892, Start Num: 6

Candidate Starts for JoeDirt\_13:

(Start: 6 @8990 has 132 MA's), (20, 9056), (24, 9062), (43, 9146), (59, 9299), (62, 9311), (74, 9380), (80, 9419), (85, 9449), (88, 9470), (118, 9674), (125, 9713), (140, 9806), (142, 9830), (150, 9875),

Gene: JoieB\_46 Start: 19067, Stop: 19732, Start Num: 6

Candidate Starts for JoieB\_46:

(Start: 6 @19067 has 132 MA's), (20, 19133), (43, 19226), (46, 19253), (54, 19337), (65, 19409), (88, 19556), (90, 19562), (94, 19589), (95, 19601),

Gene: Jubie\_14 Start: 9123, Stop: 10025, Start Num: 6

Candidate Starts for Jubie\_14:

(Start: 6 @9123 has 132 MA's), (20, 9189), (58, 9411), (59, 9432), (74, 9513), (87, 9594), (88, 9603), (102, 9690), (104, 9705), (109, 9744), (123, 9837), (132, 9888), (140, 9939),

Gene: Kahlid\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Kahlid\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (120, 9689), (140, 9815), (150, 9884),

Gene: Kingsolomon\_14 Start: 9123, Stop: 10025, Start Num: 6

Candidate Starts for Kingsolomon\_14:

(Start: 6 @9123 has 132 MA's), (20, 9189), (58, 9411), (59, 9432), (74, 9513), (87, 9594), (88, 9603), (102, 9690), (104, 9705), (109, 9744), (123, 9837), (132, 9888), (140, 9939),

Gene: KirDoubleO7\_12 Start: 9136, Stop: 10038, Start Num: 6

Candidate Starts for KirDoubleO7\_12:

(Start: 6 @9136 has 132 MA's), (20, 9202), (58, 9424), (59, 9445), (69, 9484), (74, 9526), (87, 9607), (88, 9616), (102, 9703), (104, 9718), (109, 9757), (132, 9901), (140, 9952),

Gene: KleverKiS\_23 Start: 12812, Stop: 13711, Start Num: 6

Candidate Starts for KleverKiS\_23:

(Start: 6 @12812 has 132 MA's), (26, 12893), (36, 12947), (38, 12953), (55, 13082), (59, 13121), (72, 13187), (79, 13241), (83, 13256), (87, 13289), (96, 13346), (99, 13358), (113, 13466), (121, 13508),

(126, 13532), (134, 13580), (143, 13655), (144, 13661), (149, 13688),

Gene: Kropertea\_13 Start: 8689, Stop: 9591, Start Num: 6

Candidate Starts for Kropertea\_13:

(Start: 6 @8689 has 132 MA's), (20, 8755), (58, 8977), (59, 8998), (74, 9079), (80, 9118), (87, 9160), (88, 9169), (102, 9256), (104, 9271), (109, 9310), (131, 9451), (132, 9454), (140, 9505), (146, 9556),

Gene: Krypton555\_14 Start: 9112, Stop: 10011, Start Num: 6

Candidate Starts for Krypton555\_14:

(Start: 6 @9112 has 132 MA's), (20, 9178), (58, 9400), (59, 9421), (74, 9502), (87, 9583), (88, 9592), (102, 9679), (104, 9694), (109, 9733), (118, 9796), (120, 9802), (131, 9874), (140, 9928), (150, 9997),

Gene: Kudfre\_21 Start: 12302, Stop: 12976, Start Num: 2

Candidate Starts for Kudfre\_21:

(Start: 2 @12302 has 4 MA's), (Start: 4 @12317 has 5 MA's), (11, 12338), (14, 12359), (17, 12368), (28, 12407), (32, 12428), (45, 12488), (50, 12557), (55, 12593), (75, 12722), (79, 12746), (89, 12806), (92, 12827), (93, 12833), (104, 12905), (107, 12941),

Gene: Kumao\_22 Start: 12078, Stop: 12980, Start Num: 6

Candidate Starts for Kumao\_22:

(Start: 6 @12078 has 132 MA's), (15, 12120), (26, 12159), (44, 12240), (46, 12261), (51, 12321), (55, 12348), (59, 12387), (70, 12438), (72, 12456), (78, 12507), (79, 12510), (80, 12516), (83, 12525), (87, 12558), (91, 12576), (99, 12627), (104, 12669), (127, 12804), (136, 12864), (140, 12891),

Gene: LeBron\_13 Start: 8990, Stop: 9892, Start Num: 6

Candidate Starts for LeBron\_13:

(Start: 6 @8990 has 132 MA's), (20, 9056), (24, 9062), (43, 9146), (59, 9299), (62, 9311), (74, 9380), (80, 9419), (85, 9449), (88, 9470), (118, 9674), (125, 9713), (140, 9806), (142, 9830), (150, 9875),

Gene: Lewan\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Lewan\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: LilDestine\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for LilDestine\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (120, 9689), (140, 9815), (150, 9884),

Gene: LilJank\_21 Start: 12209, Stop: 12868, Start Num: 4

Candidate Starts for LilJank\_21:

(Start: 4 @12209 has 5 MA's), (16, 12257), (17, 12260), (32, 12320), (37, 12350), (50, 12449), (52, 12467), (55, 12485), (60, 12527), (63, 12545), (64, 12551), (84, 12668), (88, 12695), (93, 12725), (97, 12746), (99, 12755), (104, 12797), (105, 12803),

Gene: Lilbit\_44 Start: 19044, Stop: 19709, Start Num: 6

Candidate Starts for Lilbit\_44:

(Start: 6 @19044 has 132 MA's), (20, 19110), (43, 19203), (46, 19230), (54, 19314), (65, 19386), (88, 19533), (90, 19539), (94, 19566), (95, 19578),

Gene: LilhomieP\_22 Start: 12816, Stop: 13715, Start Num: 6

Candidate Starts for LilhomieP\_22:

(Start: 6 @12816 has 132 MA's), (26, 12897), (36, 12951), (38, 12957), (55, 13086), (59, 13125), (72, 13191), (79, 13245), (83, 13260), (87, 13293), (96, 13350), (99, 13362), (113, 13470), (121, 13512), (126, 13536), (134, 13584), (143, 13659), (149, 13692),

Gene: LittleLaf\_45 Start: 18773, Stop: 19438, Start Num: 6

Candidate Starts for LittleLaf\_45:

(Start: 6 @18773 has 132 MA's), (20, 18839), (43, 18932), (46, 18959), (54, 19043), (65, 19115), (88, 19262), (90, 19268), (94, 19295), (95, 19307),

Gene: LiyuLake\_14 Start: 9127, Stop: 10029, Start Num: 6

Candidate Starts for LiyuLake\_14:

(Start: 6 @9127 has 132 MA's), (20, 9193), (58, 9415), (59, 9436), (69, 9475), (74, 9517), (87, 9598), (88, 9607), (102, 9694), (104, 9709), (109, 9748), (132, 9892), (140, 9943),

Gene: Loadrie\_13 Start: 9035, Stop: 9934, Start Num: 6

Candidate Starts for Loadrie\_13:

(Start: 6 @9035 has 132 MA's), (20, 9098), (28, 9119), (43, 9188), (58, 9320), (59, 9341), (74, 9422), (87, 9503), (88, 9512), (103, 9602), (104, 9614), (109, 9653), (118, 9716), (120, 9722), (133, 9803), (140, 9848), (142, 9872), (150, 9917),

Gene: Lolly9\_14 Start: 9130, Stop: 10029, Start Num: 6

Candidate Starts for Lolly9\_14:

(Start: 6 @9130 has 132 MA's), (20, 9196), (58, 9418), (59, 9439), (74, 9520), (87, 9601), (88, 9610), (104, 9712), (109, 9751), (118, 9814), (131, 9892), (132, 9895), (140, 9946), (142, 9970), (150, 10015),

Gene: Lumos\_14 Start: 9123, Stop: 10025, Start Num: 6

Candidate Starts for Lumos\_14:

(Start: 6 @9123 has 132 MA's), (20, 9189), (58, 9411), (59, 9432), (74, 9513), (87, 9594), (88, 9603), (102, 9690), (104, 9705), (109, 9744), (123, 9837), (132, 9888), (140, 9939),

Gene: Lynnae\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Lynnae\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: MAckerman\_13 Start: 8989, Stop: 9891, Start Num: 6

Candidate Starts for MAckerman\_13:

(Start: 6 @8989 has 132 MA's), (20, 9055), (24, 9061), (43, 9145), (59, 9298), (62, 9310), (74, 9379), (80, 9418), (85, 9448), (88, 9469), (118, 9673), (125, 9712), (140, 9805), (142, 9829), (150, 9874),

Gene: Marvin\_43 Start: 19043, Stop: 19708, Start Num: 6

Candidate Starts for Marvin\_43:

(Start: 6 @19043 has 132 MA's), (20, 19109), (43, 19202), (46, 19229), (54, 19313), (65, 19385), (88, 19532), (90, 19538), (94, 19565), (95, 19577),

Gene: MaryV\_35 Start: 15860, Stop: 16771, Start Num: 6

Candidate Starts for MaryV\_35:

(Start: 6 @15860 has 132 MA's), (14, 15899), (20, 15926), (22, 15929), (26, 15941), (29, 15956), (59, 16169), (72, 16235), (73, 16241), (92, 16370), (99, 16406), (111, 16505), (115, 16526), (126, 16580), (127, 16583), (136, 16643), (139, 16667), (140, 16670), (141, 16679), (144, 16706), (148, 16736), (149, 16748),

Gene: Mendokysei\_13 Start: 9859, Stop: 10791, Start Num: 5

Candidate Starts for Mendokysei\_13:

(Start: 5 @9859 has 1 MA's), (10, 9874), (11, 9877), (41, 10024), (67, 10222), (77, 10297), (90, 10366), (93, 10390), (99, 10420), (103, 10450), (106, 10477), (119, 10573), (122, 10585), (136, 10675), (138, 10684), (140, 10702),

Gene: MicyPS\_12 Start: 8715, Stop: 9389, Start Num: 2

Candidate Starts for MicyPS\_12:

(Start: 2 @8715 has 4 MA's), (39, 8886), (46, 8919), (47, 8937), (49, 8955), (55, 9006), (56, 9012), (58, 9024), (69, 9081), (71, 9099), (73, 9108), (75, 9132), (76, 9147), (77, 9150), (82, 9168), (99, 9273), (101, 9288),

Gene: Miley16\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Miley16\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: MiniLon\_14 Start: 9130, Stop: 10029, Start Num: 6

Candidate Starts for MiniLon\_14:

(Start: 6 @9130 has 132 MA's), (20, 9196), (58, 9418), (59, 9439), (74, 9520), (87, 9601), (88, 9610), (104, 9712), (109, 9751), (118, 9814), (131, 9892), (132, 9895), (140, 9946), (142, 9970), (150, 10015),

Gene: MiniMac\_14 Start: 9131, Stop: 10030, Start Num: 6

Candidate Starts for MiniMac\_14:

(Start: 6 @9131 has 132 MA's), (20, 9197), (58, 9419), (59, 9440), (74, 9521), (87, 9602), (88, 9611), (104, 9713), (109, 9752), (118, 9815), (131, 9893), (132, 9896), (140, 9947), (142, 9971), (150, 10016),

Gene: MkaliMitinis3\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for MkaliMitinis3\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: Moostard\_14 Start: 9119, Stop: 10021, Start Num: 6

Candidate Starts for Moostard\_14:

(Start: 6 @9119 has 132 MA's), (20, 9185), (58, 9407), (59, 9428), (74, 9509), (87, 9590), (88, 9599), (102, 9686), (104, 9701), (109, 9740), (123, 9833), (132, 9884), (140, 9935),

Gene: MosMoris\_43 Start: 18223, Stop: 18888, Start Num: 6

Candidate Starts for MosMoris\_43:

(Start: 6 @18223 has 132 MA's), (20, 18289), (43, 18382), (46, 18409), (54, 18493), (65, 18565), (88, 18712), (90, 18718), (94, 18745), (95, 18757),

Gene: MrMagoo\_27 Start: 13367, Stop: 14266, Start Num: 6

Candidate Starts for MrMagoo\_27:

(Start: 6 @13367 has 132 MA's), (26, 13448), (35, 13499), (70, 13724), (72, 13742), (79, 13796), (83, 13811), (87, 13844), (99, 13913), (104, 13955), (126, 14087), (131, 14123), (134, 14135), (138, 14162), (140, 14180), (143, 14210), (149, 14243),

Gene: MsGreen\_14 Start: 9123, Stop: 10025, Start Num: 6

Candidate Starts for MsGreen\_14:

(Start: 6 @9123 has 132 MA's), (20, 9189), (58, 9411), (59, 9432), (74, 9513), (87, 9594), (88, 9603), (102, 9690), (104, 9705), (109, 9744), (123, 9837), (132, 9888), (140, 9939),

Gene: Nairb\_14 Start: 9882, Stop: 10814, Start Num: 6

Candidate Starts for Nairb\_14:

(Start: 6 @9882 has 132 MA's), (10, 9897), (34, 10002), (41, 10047), (67, 10245), (77, 10320), (90, 10389), (93, 10413), (107, 10524), (126, 10635), (129, 10653), (130, 10668), (138, 10707), (140, 10725), (145, 10764),

Gene: Nanosmite\_27 Start: 13585, Stop: 14487, Start Num: 6

Candidate Starts for Nanosmite\_27:

(Start: 6 @13585 has 132 MA's), (26, 13666), (29, 13681), (55, 13855), (59, 13894), (72, 13960), (79, 14014), (83, 14029), (87, 14062), (96, 14119), (99, 14131), (126, 14311), (134, 14359), (136, 14377), (139, 14398), (140, 14401), (141, 14410), (143, 14431), (144, 14437),

Gene: Nette\_14 Start: 9868, Stop: 10800, Start Num: 5

Candidate Starts for Nette\_14:

(Start: 5 @9868 has 1 MA's), (10, 9883), (11, 9886), (41, 10033), (67, 10231), (77, 10306), (90, 10375), (93, 10399), (99, 10429), (103, 10459), (106, 10486), (119, 10582), (122, 10594), (136, 10684), (138, 10693), (140, 10711),

Gene: Netyap\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Netyap\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: Neville\_21 Start: 12158, Stop: 12817, Start Num: 4

Candidate Starts for Neville\_21:

(Start: 4 @12158 has 5 MA's), (16, 12206), (17, 12209), (32, 12269), (37, 12299), (50, 12398), (52, 12416), (55, 12434), (60, 12476), (63, 12494), (64, 12500), (84, 12617), (88, 12644), (93, 12674), (97, 12695), (104, 12746), (105, 12752),

Gene: Nicholas\_14 Start: 9123, Stop: 10025, Start Num: 6

Candidate Starts for Nicholas\_14:

(Start: 6 @9123 has 132 MA's), (20, 9189), (58, 9411), (59, 9432), (74, 9513), (87, 9594), (88, 9603), (102, 9690), (104, 9705), (109, 9744), (123, 9837), (132, 9888), (140, 9939),

Gene: Nicholasp3\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Nicholasp3\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (120, 9689), (140, 9815), (150, 9884),

Gene: Octobien14\_22 Start: 13362, Stop: 14021, Start Num: 4

Candidate Starts for Octobien14\_22:

(Start: 4 @13362 has 5 MA's), (14, 13404), (17, 13413), (28, 13452), (32, 13473), (37, 13503), (55, 13638), (75, 13767), (79, 13791), (89, 13851), (92, 13872), (93, 13878), (97, 13899), (104, 13950), (107, 13986),

Gene: OhShagHennessy\_13 Start: 8963, Stop: 9865, Start Num: 6

Candidate Starts for OhShagHennessy\_13:

(Start: 6 @8963 has 132 MA's), (20, 9029), (24, 9035), (43, 9119), (59, 9272), (62, 9284), (74, 9353), (78, 9383), (80, 9392), (85, 9422), (88, 9443), (118, 9647), (125, 9686), (140, 9779), (142, 9803), (150,

9848),

Gene: OverPar\_13 Start: 9035, Stop: 9934, Start Num: 6

Candidate Starts for OverPar\_13:

(Start: 6 @9035 has 132 MA's), (20, 9098), (28, 9119), (43, 9188), (58, 9320), (59, 9341), (74, 9422), (87, 9503), (88, 9512), (103, 9602), (104, 9614), (109, 9653), (118, 9716), (120, 9722), (133, 9803), (140, 9848), (142, 9872), (150, 9917),

Gene: PSonyx\_12 Start: 8868, Stop: 9539, Start Num: 2

Candidate Starts for PSonyx\_12:

(Start: 2 @8868 has 4 MA's), (39, 9039), (46, 9072), (47, 9090), (49, 9108), (55, 9159), (56, 9165), (58, 9177), (69, 9234), (71, 9252), (73, 9261), (75, 9285), (76, 9300), (99, 9426), (101, 9441),

Gene: PYPDinur\_13 Start: 8672, Stop: 9574, Start Num: 6

Candidate Starts for PYPDinur\_13:

(Start: 6 @8672 has 132 MA's), (20, 8738), (58, 8960), (59, 8981), (74, 9062), (80, 9101), (87, 9143), (88, 9152), (102, 9239), (104, 9254), (109, 9293), (113, 9320), (118, 9356), (120, 9362), (125, 9395), (131, 9434), (132, 9437), (140, 9488), (146, 9539),

Gene: PegLeg\_23 Start: 12815, Stop: 13714, Start Num: 6

Candidate Starts for PegLeg\_23:

(Start: 6 @12815 has 132 MA's), (26, 12896), (36, 12950), (38, 12956), (55, 13085), (59, 13124), (72, 13190), (79, 13244), (83, 13259), (87, 13292), (96, 13349), (99, 13361), (113, 13469), (121, 13511), (126, 13535), (134, 13583), (143, 13658), (149, 13691),

Gene: Poise\_45 Start: 18361, Stop: 19026, Start Num: 6

Candidate Starts for Poise\_45:

(Start: 6 @18361 has 132 MA's), (20, 18427), (43, 18520), (46, 18547), (54, 18631), (65, 18703), (88, 18850), (90, 18856), (94, 18883), (95, 18895),

Gene: Poochiewood\_13 Start: 8989, Stop: 9891, Start Num: 6

Candidate Starts for Poochiewood\_13:

(Start: 6 @8989 has 132 MA's), (20, 9055), (24, 9061), (43, 9145), (59, 9298), (62, 9310), (74, 9379), (80, 9418), (85, 9448), (88, 9469), (118, 9673), (125, 9712), (140, 9805), (142, 9829), (150, 9874),

Gene: Pringar\_45 Start: 18673, Stop: 19338, Start Num: 6

Candidate Starts for Pringar\_45:

(Start: 6 @18673 has 132 MA's), (20, 18739), (43, 18832), (46, 18859), (54, 18943), (65, 19015), (88, 19162), (90, 19168), (94, 19195), (95, 19207),

Gene: Quby\_13 Start: 8671, Stop: 9573, Start Num: 6

Candidate Starts for Quby\_13:

(Start: 6 @8671 has 132 MA's), (20, 8737), (58, 8959), (59, 8980), (74, 9061), (80, 9100), (87, 9142), (88, 9151), (102, 9238), (104, 9253), (109, 9292), (113, 9319), (118, 9355), (120, 9361), (125, 9394), (131, 9433), (132, 9436), (140, 9487), (146, 9538),

Gene: Rabbitrun\_23 Start: 12721, Stop: 13380, Start Num: 4

Candidate Starts for Rabbitrun\_23:

(Start: 4 @12721 has 5 MA's), (16, 12769), (17, 12772), (28, 12811), (32, 12832), (37, 12862), (45, 12892), (50, 12961), (52, 12979), (55, 12997), (60, 13039), (64, 13063), (96, 13255), (104, 13309), (105, 13315),

Gene: Raela\_45 Start: 18916, Stop: 19581, Start Num: 6

Candidate Starts for Raela\_45:

(Start: 6 @18916 has 132 MA's), (20, 18982), (43, 19075), (46, 19102), (54, 19186), (65, 19258), (88, 19405), (90, 19411), (94, 19438), (95, 19450),

Gene: Red305\_14 Start: 9123, Stop: 10025, Start Num: 6

Candidate Starts for Red305\_14:

(Start: 6 @9123 has 132 MA's), (20, 9189), (58, 9411), (59, 9432), (74, 9513), (87, 9594), (88, 9603), (102, 9690), (104, 9705), (109, 9744), (123, 9837), (132, 9888), (140, 9939),

Gene: RedRaider77\_45 Start: 18817, Stop: 19482, Start Num: 6

Candidate Starts for RedRaider77\_45:

(Start: 6 @18817 has 132 MA's), (20, 18883), (43, 18976), (46, 19003), (54, 19087), (65, 19159), (88, 19306), (90, 19312), (94, 19339), (95, 19351),

Gene: Reindeer\_21 Start: 12668, Stop: 13567, Start Num: 6

Candidate Starts for Reindeer\_21:

(Start: 6 @12668 has 132 MA's), (34, 12785), (35, 12800), (38, 12809), (55, 12938), (59, 12977), (72, 13043), (79, 13097), (83, 13112), (87, 13145), (99, 13214), (121, 13364), (126, 13388), (134, 13436), (143, 13511),

Gene: Rey\_27 Start: 13596, Stop: 14495, Start Num: 6

Candidate Starts for Rey\_27:

(Start: 6 @13596 has 132 MA's), (35, 13728), (55, 13866), (59, 13905), (72, 13971), (79, 14025), (83, 14040), (87, 14073), (99, 14142), (111, 14241), (125, 14313), (126, 14316), (131, 14352), (134, 14364), (138, 14391), (140, 14409), (143, 14439), (149, 14472),

Gene: RonRayGun\_14 Start: 9882, Stop: 10814, Start Num: 6

Candidate Starts for RonRayGun\_14:

(Start: 6 @9882 has 132 MA's), (10, 9897), (34, 10002), (41, 10047), (67, 10245), (77, 10320), (90, 10389), (93, 10413), (107, 10524), (126, 10635), (129, 10653), (130, 10668), (138, 10707), (140, 10725), (145, 10764),

Gene: Rooter\_12 Start: 7551, Stop: 8204, Start Num: 6

Candidate Starts for Rooter\_12:

(Start: 6 @7551 has 132 MA's), (19, 7611), (44, 7716), (53, 7812), (54, 7821), (58, 7842), (60, 7866), (66, 7899), (108, 8178),

Gene: Rose5\_13 Start: 8989, Stop: 9891, Start Num: 6

Candidate Starts for Rose5\_13:

(Start: 6 @8989 has 132 MA's), (20, 9055), (24, 9061), (43, 9145), (59, 9298), (62, 9310), (74, 9379), (80, 9418), (85, 9448), (88, 9469), (118, 9673), (125, 9712), (140, 9805), (142, 9829), (150, 9874),

Gene: RoseMarie\_23 Start: 13058, Stop: 13957, Start Num: 6

Candidate Starts for RoseMarie\_23:

(Start: 6 @13058 has 132 MA's), (34, 13175), (36, 13193), (38, 13199), (55, 13328), (59, 13367), (70, 13415), (72, 13433), (79, 13487), (83, 13502), (87, 13535), (96, 13592), (99, 13604), (111, 13703), (121, 13754), (126, 13778), (134, 13826), (143, 13901), (144, 13907), (149, 13934),

Gene: Rossetti\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Rossetti\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (116, 9662), (120, 9689), (140, 9815), (150, 9884),

Gene: Rumpelstiltskin\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Rumpelstiltskin\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: SPB78\_13 Start: 8500, Stop: 9165, Start Num: 4

Candidate Starts for SPB78\_13:

(Start: 4 @8500 has 5 MA's), (9, 8518), (18, 8566), (22, 8575), (42, 8659), (48, 8713), (54, 8773), (86, 8977), (99, 9055),

Gene: Samty\_14 Start: 9119, Stop: 10021, Start Num: 6

Candidate Starts for Samty\_14:

(Start: 6 @9119 has 132 MA's), (20, 9185), (58, 9407), (59, 9428), (74, 9509), (87, 9590), (88, 9599), (102, 9686), (104, 9701), (109, 9740), (123, 9833), (132, 9884), (140, 9935),

Gene: Sarge\_12 Start: 7918, Stop: 8571, Start Num: 6

Candidate Starts for Sarge\_12:

(Start: 6 @7918 has 132 MA's), (19, 7978), (44, 8083), (53, 8179), (54, 8188), (58, 8209), (60, 8233), (66, 8266), (108, 8545),

Gene: Sarshaun\_13 Start: 9035, Stop: 9934, Start Num: 6

Candidate Starts for Sarshaun\_13:

(Start: 6 @9035 has 132 MA's), (20, 9098), (28, 9119), (43, 9188), (58, 9320), (59, 9341), (74, 9422), (87, 9503), (88, 9512), (103, 9602), (104, 9614), (109, 9653), (118, 9716), (120, 9722), (133, 9803), (140, 9848), (150, 9917),

Gene: Sephiroth\_22 Start: 12473, Stop: 13147, Start Num: 2

Candidate Starts for Sephiroth\_22:

(Start: 2 @12473 has 4 MA's), (Start: 4 @12488 has 5 MA's), (11, 12509), (14, 12530), (17, 12539), (28, 12578), (32, 12599), (45, 12659), (50, 12728), (55, 12764), (75, 12893), (79, 12917), (89, 12977), (92, 12998), (93, 13004), (104, 13076), (107, 13112),

Gene: Sheng711\_13 Start: 8672, Stop: 9574, Start Num: 6

Candidate Starts for Sheng711\_13:

(Start: 6 @8672 has 132 MA's), (20, 8738), (58, 8960), (59, 8981), (74, 9062), (80, 9101), (87, 9143), (88, 9152), (102, 9239), (104, 9254), (109, 9293), (113, 9320), (118, 9356), (120, 9362), (125, 9395), (131, 9434), (132, 9437), (140, 9488), (146, 9539),

Gene: Shoya\_11 Start: 7554, Stop: 8207, Start Num: 6

Candidate Starts for Shoya\_11:

(Start: 6 @7554 has 132 MA's), (19, 7614), (44, 7719), (53, 7815), (54, 7824), (58, 7845), (60, 7869), (66, 7902), (108, 8181),

Gene: Silverleaf\_13 Start: 8989, Stop: 9891, Start Num: 6

Candidate Starts for Silverleaf\_13:

(Start: 6 @8989 has 132 MA's), (20, 9055), (24, 9061), (43, 9145), (59, 9298), (62, 9310), (74, 9379), (80, 9418), (85, 9448), (88, 9469), (118, 9673), (125, 9712), (140, 9805), (142, 9829), (150, 9874),

Gene: Skinny\_24 Start: 12816, Stop: 13715, Start Num: 6

Candidate Starts for Skinny\_24:

(Start: 6 @12816 has 132 MA's), (26, 12897), (36, 12951), (38, 12957), (55, 13086), (59, 13125), (72, 13191), (79, 13245), (83, 13260), (87, 13293), (96, 13350), (99, 13362), (113, 13470), (121, 13512), (126, 13536), (134, 13584), (143, 13659), (149, 13692),

Gene: SlimJimmy\_22 Start: 12815, Stop: 13714, Start Num: 6

Candidate Starts for SlimJimmy\_22:

(Start: 6 @12815 has 132 MA's), (26, 12896), (36, 12950), (38, 12956), (55, 13085), (59, 13124), (72, 13190), (79, 13244), (83, 13259), (87, 13292), (96, 13349), (99, 13361), (121, 13511), (126, 13535), (134, 13583), (143, 13658), (144, 13664), (149, 13691),

Gene: Snenia\_14 Start: 9124, Stop: 10026, Start Num: 6

Candidate Starts for Snenia\_14:

(Start: 6 @9124 has 132 MA's), (20, 9190), (58, 9412), (59, 9433), (74, 9514), (87, 9595), (88, 9604), (102, 9691), (104, 9706), (109, 9745), (123, 9838), (132, 9889), (140, 9940),

Gene: SoJulia\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for SoJulia\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (120, 9689), (140, 9815), (150, 9884),

Gene: Soap141\_13 Start: 9035, Stop: 9934, Start Num: 6

Candidate Starts for Soap141\_13:

(Start: 6 @9035 has 132 MA's), (20, 9098), (28, 9119), (43, 9188), (58, 9320), (59, 9341), (74, 9422), (87, 9503), (88, 9512), (103, 9602), (104, 9614), (109, 9653), (118, 9716), (120, 9722), (133, 9803), (140, 9848), (150, 9917),

Gene: Sparky\_11 Start: 8045, Stop: 8707, Start Num: 8

Candidate Starts for Sparky\_11:

(Start: 8 @8045 has 2 MA's), (13, 8066), (40, 8195), (47, 8243), (51, 8285), (55, 8312), (57, 8327), (77, 8459), (90, 8528), (110, 8678),

Gene: Syleon\_22 Start: 12411, Stop: 13070, Start Num: 4

Candidate Starts for Syleon\_22:

(Start: 2 @12396 has 4 MA's), (Start: 4 @12411 has 5 MA's), (11, 12432), (14, 12453), (17, 12462), (28, 12501), (32, 12522), (37, 12552), (45, 12582), (50, 12651), (55, 12687), (75, 12816), (79, 12840), (89, 12900), (92, 12921), (93, 12927), (104, 12999), (107, 13035),

Gene: Taotie\_12 Start: 9765, Stop: 10436, Start Num: 2

Candidate Starts for Taotie\_12:

(Start: 2 @9765 has 4 MA's), (39, 9936), (46, 9969), (47, 9987), (49, 10005), (55, 10056), (56, 10062), (58, 10074), (69, 10131), (71, 10149), (73, 10158), (75, 10182), (76, 10197), (99, 10323), (101, 10338),

Gene: Tesla\_44 Start: 18666, Stop: 19331, Start Num: 6

Candidate Starts for Tesla\_44:

(Start: 6 @18666 has 132 MA's), (20, 18732), (43, 18825), (46, 18852), (54, 18936), (65, 19008), (88, 19155), (90, 19161), (94, 19188), (95, 19200),

Gene: Tourach\_13 Start: 9015, Stop: 9917, Start Num: 6

Candidate Starts for Tourach\_13:

(Start: 6 @9015 has 132 MA's), (20, 9081), (43, 9171), (58, 9303), (59, 9324), (74, 9405), (80, 9444), (85, 9474), (87, 9486), (88, 9495), (103, 9585), (104, 9597), (109, 9636), (118, 9699), (140, 9831), (150, 9900),

Gene: TpudiCK\_24 Start: 12815, Stop: 13714, Start Num: 6

Candidate Starts for TpudiCK\_24:

(Start: 6 @12815 has 132 MA's), (26, 12896), (36, 12950), (38, 12956), (55, 13085), (59, 13124), (72, 13190), (79, 13244), (83, 13259), (87, 13292), (96, 13349), (99, 13361), (113, 13469), (121, 13511), (126, 13535), (134, 13583), (143, 13658), (149, 13691),

Gene: Trax\_21 Start: 12158, Stop: 12817, Start Num: 4

Candidate Starts for Trax\_21:

(Start: 4 @12158 has 5 MA's), (16, 12206), (17, 12209), (32, 12269), (37, 12299), (50, 12398), (52, 12416), (55, 12434), (60, 12476), (63, 12494), (64, 12500), (84, 12617), (93, 12674), (97, 12695), (104, 12746), (105, 12752),

Gene: TriFive\_14 Start: 9123, Stop: 10025, Start Num: 6

Candidate Starts for TriFive\_14:

(Start: 6 @9123 has 132 MA's), (20, 9189), (58, 9411), (59, 9432), (74, 9513), (87, 9594), (88, 9603), (102, 9690), (104, 9705), (109, 9744), (123, 9837), (132, 9888), (140, 9939),

Gene: TyDawg\_23 Start: 12816, Stop: 13715, Start Num: 6

Candidate Starts for TyDawg\_23:

(Start: 6 @12816 has 132 MA's), (26, 12897), (36, 12951), (38, 12957), (55, 13086), (59, 13125), (72, 13191), (79, 13245), (83, 13260), (87, 13293), (96, 13350), (99, 13362), (113, 13470), (121, 13512), (126, 13536), (134, 13584), (143, 13659), (149, 13692),

Gene: Tyson\_13 Start: 8989, Stop: 9891, Start Num: 6

Candidate Starts for Tyson\_13:

(Start: 6 @8989 has 132 MA's), (20, 9055), (24, 9061), (43, 9145), (59, 9298), (62, 9310), (74, 9379), (80, 9418), (85, 9448), (88, 9469), (118, 9673), (125, 9712), (140, 9805), (142, 9829), (150, 9874),

Gene: UPIE\_13 Start: 8987, Stop: 9889, Start Num: 6

Candidate Starts for UPIE\_13:

(Start: 6 @8987 has 132 MA's), (20, 9053), (24, 9059), (43, 9143), (59, 9296), (62, 9308), (74, 9377), (80, 9416), (85, 9446), (88, 9467), (118, 9671), (125, 9710), (140, 9803), (142, 9827), (150, 9872),

Gene: Underpass\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Underpass\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (120, 9689), (140, 9815), (150, 9884),

Gene: VasuNzinga\_45 Start: 18250, Stop: 18915, Start Num: 6

Candidate Starts for VasuNzinga\_45:

(Start: 6 @18250 has 132 MA's), (20, 18316), (43, 18409), (46, 18436), (54, 18520), (65, 18592), (88, 18739), (90, 18745), (94, 18772), (95, 18784),

Gene: Vetrax\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Vetrax\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: Wamburgexpress\_13 Start: 8989, Stop: 9891, Start Num: 6

Candidate Starts for Wamburgexpress\_13:

(Start: 6 @8989 has 132 MA's), (20, 9055), (24, 9061), (43, 9145), (59, 9298), (62, 9310), (74, 9379), (80, 9418), (85, 9448), (88, 9469), (118, 9673), (125, 9712), (140, 9805), (142, 9829), (150, 9874),

Gene: Whirlwind\_15 Start: 9117, Stop: 10016, Start Num: 6

Candidate Starts for Whirlwind\_15:

(Start: 6 @9117 has 132 MA's), (20, 9183), (58, 9405), (59, 9426), (74, 9507), (87, 9588), (88, 9597), (104, 9699), (109, 9738), (118, 9801), (140, 9933), (150, 10002),

Gene: Whitty\_14 Start: 9882, Stop: 10814, Start Num: 6

Candidate Starts for Whitty\_14:

(Start: 6 @9882 has 132 MA's), (10, 9897), (34, 10002), (41, 10047), (67, 10245), (77, 10320), (90, 10389), (93, 10413), (107, 10524), (126, 10635), (129, 10653), (130, 10668), (138, 10707), (140, 10725), (145, 10764),

Gene: Wigglewigggle\_13 Start: 9035, Stop: 9934, Start Num: 6

Candidate Starts for Wigglewigggle\_13:

(Start: 6 @9035 has 132 MA's), (20, 9098), (28, 9119), (43, 9188), (58, 9320), (59, 9341), (74, 9422), (87, 9503), (88, 9512), (103, 9602), (104, 9614), (109, 9653), (118, 9716), (120, 9722), (133, 9803), (140, 9848), (142, 9872), (150, 9917),

Gene: Wildcat\_35 Start: 15870, Stop: 16781, Start Num: 6

Candidate Starts for Wildcat\_35:

(Start: 6 @15870 has 132 MA's), (14, 15909), (20, 15936), (22, 15939), (26, 15951), (29, 15966), (59, 16179), (72, 16245), (73, 16251), (92, 16380), (99, 16416), (111, 16515), (115, 16536), (126, 16590), (127, 16593), (136, 16653), (139, 16677), (140, 16680), (141, 16689), (144, 16716), (148, 16746), (149, 16758),

Gene: Wilder\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Wilder\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (120, 9689), (140, 9815), (150, 9884),

Gene: Winky\_13 Start: 9002, Stop: 9901, Start Num: 6

Candidate Starts for Winky\_13:

(Start: 6 @9002 has 132 MA's), (20, 9065), (28, 9086), (43, 9155), (58, 9287), (59, 9308), (74, 9389), (87, 9470), (88, 9479), (103, 9569), (104, 9581), (109, 9620), (118, 9683), (120, 9689), (133, 9770), (140, 9815), (150, 9884),

Gene: Wyatt2\_13 Start: 8989, Stop: 9891, Start Num: 6

Candidate Starts for Wyatt2\_13:

(Start: 6 @8989 has 132 MA's), (20, 9055), (24, 9061), (43, 9145), (59, 9298), (62, 9310), (74, 9379), (80, 9418), (85, 9448), (88, 9469), (118, 9673), (125, 9712), (140, 9805), (142, 9829), (150, 9874),

Gene: Zakai\_13 Start: 8990, Stop: 9889, Start Num: 6

Candidate Starts for Zakai\_13:

(Start: 6 @8990 has 132 MA's), (20, 9053), (28, 9074), (43, 9143), (58, 9275), (59, 9296), (74, 9377), (87, 9458), (88, 9467), (103, 9557), (104, 9569), (109, 9608), (118, 9671), (120, 9677), (133, 9758), (140, 9803), (150, 9872),

Gene: Zaria\_13 Start: 8990, Stop: 9892, Start Num: 6

Candidate Starts for Zaria\_13:

(Start: 6 @8990 has 132 MA's), (20, 9056), (24, 9062), (43, 9146), (59, 9299), (62, 9311), (74, 9380), (80, 9419), (85, 9449), (88, 9470), (118, 9674), (125, 9713), (140, 9806), (142, 9830), (150, 9875),

Gene: ZenTime222\_14 Start: 9882, Stop: 10814, Start Num: 6

Candidate Starts for ZenTime222\_14:

(Start: 6 @9882 has 132 MA's), (10, 9897), (34, 10002), (41, 10047), (67, 10245), (77, 10320), (90, 10389), (93, 10413), (107, 10524), (126, 10635), (129, 10653), (130, 10668), (138, 10707), (140, 10725), (145, 10764),

Gene: ZhongYanYuan\_12 Start: 8830, Stop: 9729, Start Num: 6

Candidate Starts for ZhongYanYuan\_12:

(Start: 6 @8830 has 132 MA's), (20, 8893), (28, 8914), (43, 8983), (58, 9115), (59, 9136), (74, 9217), (87, 9298), (88, 9307), (103, 9397), (104, 9409), (109, 9448), (116, 9490), (118, 9511), (120, 9517), (140, 9643), (150, 9712),