Pham 283577

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 283577 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283577 has 142 members, 15 are drafts.

Phages represented in each track:
• Track 1 : Adjutor_26, Butterscotch_25, Penelope2018_25, WaldoWhy_26, Thoth_25, BigMama_23, Erk16_25, Giuseppe_25, Mopey_25, Prager_25, PLot_26, Chill_26, Troll4_25, Nova_25, Visconti_25, SuperheroCarly_26, Helpful_26, PBI1_25
• Track 2 : SirHarley_24, Gumball_24
• Track 3 : Phalaborwa_25, Delton_25
• Track 4 : KandZ_25
• Track 5 : Hawkeye_27
• Track 6 : Madi_20, BiteSize_20, Terapin_20, Sienna_20, Beyoncage_20, Djokovic_20
• Track 7 : Suzy_20
• Track 8 : LilyPad_21
• Track 9 : LittleFella_22
• Track 10 : Sadboi_25, OtterstedtS21_25, Alephilan_22, DaviePasture_25, Gibbin_26, Mima20_23, GretelLyn_25, Patos_26, Ranch_25, Erutan_25, Zany_23, Rukungu_25, Yikes_26, NorManre_26, LavAbarElk_23, DoobyDoo_24
• Track 11 : Sampudon_25, Lila22_24, Jalebi_24
• Track 12 : Charminar_22, Astralis_22, Alyssamiracle_24, Avian_22, RazorC_22, Genamy16_24, Rumi_24, Jamemuya19_22, Stormer_23, NovaSharks_24
• Track 13 : ParvusTarda_25, Lambo_25, Fulcrum_26, MoiGyank_27, BirthdayBoy_26, GOATification_26, Wojtek_24, Rota_24
• Track 14 : DumpTruck_24, Xenia2_25
• Track 15 : LuckyLeo_24, Apeppi_22, Tillicus_24
• Track 16 : Krampus_27, FountainFog_26, Gilda_27, Pharpay_27, Anakin_27, Rachella_27, Poultress_26, Haunter_27, Kate_27, AnnaSerena_27, CoolCookie_27, Rie18_27, OhDear_27, Potty_27, Artiphact_27, Tedro_27, PhunaPhoke_27, Karate_26, Hager_28, NarutoRun_27, Tongui_26
• Track 17 : JDawG_26, Aesir_26, MortySmith_25
• Track 18 : LordBart_28, Ajin_28, Sparcetus_28
• Track 19 : Hiddenleaf_26, Snakehole_28, DannyDe_26, FreddieHg_26, SilentWarrior_26, Chivey_26
• Track 20 : Dauntless_26, Crestdrop_26, JingleBells_26, Annapurna_26, Erudite_26
• Track 21 : RikSengupta_28, TinyMiny_28, Kors_28
• Track 22 : Neptune_27, Cybele_27
• Track 23 : OverHedge_27
• Track 24 : Bramble_28
• Track 25 : Huwbert_48
• Track 26 : Triscuit_47

• Track 27 : Puissant_23
• Track 28 : BobtimousPrime_23, Phreeze_24, Beckerton_24, Oaker_24, Megatron06_26, Damien_24, Thumb_24
• Track 29 : Predator_28
• Track 30 : Cborch11_25
• Track 31 : Konstantine_29
• Track 32 : DrLupo_33
• Track 33 : Barnyard_31
• Track 34 : Demikore_32, Labelle_31, SuperSonics_31
• Track 35 : Madruga_30
• Track 36 : Patience_32
• Track 37 : Shrew_60
• Track 38 : Wollypog_15

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

The start number called the most often in the published annotations is 7, it was called in 41 of the 127 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aesir_26, Ajin_28, Anakin_27, AnnaSerena_27, Annapurna_26, Artiphact_27, Bramble_28, Chivey_26, CoolCookie_27, Crestdrop_26, Cybele_27, DannyDe_26, Dauntless_26, Erudite_26, FountainFog_26, FreddieHg_26, Gilda_27, Hager_28, Haunter_27, Hiddenleaf_26, JDawG_26, JingleBells_26, Karate_26, Kate_27, Kors_28, Krampus_27, LordBart_28, MortySmith_25, NarutoRun_27, Neptune_27, OhDear_27, OverHedge_27, Pharpay_27, PhunaPhoke_27, Potty_27, Poultress_26, Rachella_27, Rie18_27, RikSengupta_28, SilentWarrior_26, Snakehole_28, Sparcetus_28, Tedro_27, TinyMiny_28, Tongui_26,

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

Genes that do not have the "Most Annotated" start:
• Adjutor_26, Alephilan_22, Alyssamiracle_24, Apeppi_22, Astralis_22, Avian_22, Barnyard_31, Beckerton_24, Beyoncage_20, BigMama_23, BirthdayBoy_26, BiteSize_20, BobtimousPrime_23, Butterscotch_25, Cborch11_25, Charminar_22, Chill_26, Damien_24, DaviePasture_25, Delton_25, Demikore_32, Djokovic_20, DoobyDoo_24, DrLupo_33, DumpTruck_24, Erk16_25, Erutan_25, Fulcrum_26, GOATification_26, Genamy16_24, Gibbin_26, Giuseppe_25, GretelLyn_25, Gumball_24, Hawkeye_27, Helpful_26, Huwbert_48, Jalebi_24, Jamemuya19_22, KandZ_25, Konstantine_29, Labelle_31, Lambo_25, LavAbarElk_23, Lila22_24, LilyPad_21, LittleFella_22, LuckyLeo_24, Madi_20, Madruga_30, Megatron06_26, Mima20_23, MoiGyank_27, Mopey_25, NorManre_26, NovaSharks_24, Nova_25, Oaker_24, OtterstedtS21_25, PBI1_25, PLot_26, ParvusTarda_25, Patience_32, Patos_26, Penelope2018_25, Phalaborwa_25, Phreeze_24, Prager_25, Predator_28, Puissant_23, Ranch_25, RazorC_22, Rota_24, Rukungu_25, Rumi_24, Sadboi_25, Sampudon_25, Shrew_60, Sienna_20, SirHarley_24, Stormer_23, SuperSonics_31, SuperheroCarly_26, Suzy_20, Terapin_20, Thoth_25, Thumb_24, Tillicus_24, Triscuit_47, Troll4_25, Visconti_25, WaldoWhy_26, Wojtek_24, Wollypog_15, Xenia2_25, Yikes_26, Zany_23,

Summary by start number:

Start 5:
• Found in 24 of 142 (16.9%) of genes in pham
• Manual Annotations of this start: 22 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adjutor_26 (D1), BigMama_23 (D1), Butterscotch_25 (D1), Chill_26 (D1), Delton_25 (D1), Erk16_25 (D1), Giuseppe_25 (D1), Gumball_24 (D1), Hawkeye_27 (D2), Helpful_26 (D1), KandZ_25 (D1), Mopey_25 (D1), Nova_25 (D1), PBI1_25 (D1), PLot_26 (D1), Penelope2018_25 (D1), Phalaborwa_25 (D1), Prager_25 (D1), SirHarley_24 (D1), SuperheroCarly_26 (D1), Thoth_25 (D1), Troll4_25 (D1), Visconti_25 (D1), WaldoWhy_26 (D1),

Start 7:
• Found in 45 of 142 (31.7%) of genes in pham
• Manual Annotations of this start: 41 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aesir_26 (EF), Ajin_28 (EF), Anakin_27 (EF), AnnaSerena_27 (EF), Annapurna_26 (EF), Artiphact_27 (EF), Bramble_28 (EF), Chivey_26 (EF), CoolCookie_27 (EF), Crestdrop_26 (EF), Cybele_27 (EF), DannyDe_26 (EF), Dauntless_26 (EF), Erudite_26 (EF), FountainFog_26 (EF), FreddieHg_26 (EF), Gilda_27 (EF), Hager_28 (EF), Haunter_27 (EF), Hiddenleaf_26 (EF), JDawG_26 (EF), JingleBells_26 (EF), Karate_26 (EF), Kate_27 (EF), Kors_28 (EF), Krampus_27 (EF), LordBart_28 (EF), MortySmith_25 (EF), NarutoRun_27 (EF), Neptune_27 (EF), OhDear_27 (EF), OverHedge_27 (EF), Pharpay_27 (EF), PhunaPhoke_27 (EF), Potty_27 (EF), Poultress_26 (EF), Rachella_27 (EF), Rie18_27 (EF), RikSengupta_28 (EF), SilentWarrior_26 (EF), Snakehole_28 (EF), Sparcetus_28 (EF), Tedro_27 (EF), TinyMiny_28 (EF), Tongui_26 (EF),

Start 8:
• Found in 3 of 142 (2.1%) of genes in pham
• Manual Annotations of this start: 3 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Huwbert_48 (GG), Shrew_60 (singleton), Triscuit_47 (GG),

Start 9:
• Found in 2 of 142 (1.4%) of genes in pham
• Manual Annotations of this start: 2 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Barnyard_31 (H2), DrLupo_33 (H2),

Start 10:
• Found in 1 of 142 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Wollypog_15 (singleton),

Start 11:
• Found in 9 of 142 (6.3%) of genes in pham
• Manual Annotations of this start: 9 of 127
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Beyoncage_20 (DG1), BiteSize_20 (DG1), Djokovic_20 (DG1), LilyPad_21 (DG1), LittleFella_22 (DG2), Madi_20 (DG1), Sienna_20 (DG1), Suzy_20 (DG1), Terapin_20 (DG1),

Start 13:
• Found in 42 of 142 (29.6%) of genes in pham
• Manual Annotations of this start: 37 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alephilan_22 (DV), Alyssamiracle_24 (DV), Apeppi_22 (DV), Astralis_22 (DV), Avian_22 (DV), BirthdayBoy_26 (DV), Charminar_22 (DV), DaviePasture_25 (DV), DoobyDoo_24 (DV), DumpTruck_24 (DV), Erutan_25 (DV), Fulcrum_26 (DV), GOATification_26 (DV), Genamy16_24 (DV), Gibbin_26 (DV), GretelLyn_25 (DV), Jalebi_24 (DV), Jamemuya19_22 (DV), Lambo_25 (DV), LavAbarElk_23 (DV), Lila22_24 (DV), LuckyLeo_24 (DV), Mima20_23 (DV), MoiGyank_27 (DV), NorManre_26 (DV), NovaSharks_24 (DV), OtterstedtS21_25 (DV), ParvusTarda_25 (DV), Patos_26 (DV), Ranch_25 (DV), RazorC_22 (DV), Rota_24 (DV), Rukungu_25 (DV), Rumi_24 (DV), Sadboi_25 (DV), Sampudon_25 (DV), Stormer_23 (DV), Tillicus_24 (DV), Wojtek_24 (DV), Xenia2_25 (DV), Yikes_26 (DV), Zany_23 (DV),

Start 14:
• Found in 11 of 142 (7.7%) of genes in pham
• Manual Annotations of this start: 9 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Beckerton_24 (H1), BobtimousPrime_23 (H1), Cborch11_25 (H1), Damien_24 (H1), Konstantine_29 (H1), Megatron06_26 (H1), Oaker_24 (H1), Phreeze_24 (H1), Predator_28 (H1), Puissant_23 (H1), Thumb_24 (H1),

Start 16:
• Found in 5 of 142 (3.5%) of genes in pham
• Manual Annotations of this start: 3 of 127
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Demikore_32 (U), Labelle_31 (U), Madruga_30 (U), Patience_32 (U), SuperSonics_31 (U),

Summary by clusters:

There are 11 clusters represented in this pham: DG2, singleton, EF, H2, H1, GG, DG1, U, DV, D2, D1,

Info for manual annotations of cluster D1:
•Start number 5 was manually annotated 21 times for cluster D1.

Info for manual annotations of cluster D2:
•Start number 5 was manually annotated 1 time for cluster D2.

Info for manual annotations of cluster DG1:
•Start number 11 was manually annotated 8 times for cluster DG1.

Info for manual annotations of cluster DG2:
•Start number 11 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster DV:
•Start number 13 was manually annotated 37 times for cluster DV.

Info for manual annotations of cluster EF:
•Start number 7 was manually annotated 41 times for cluster EF.

Info for manual annotations of cluster GG:
•Start number 8 was manually annotated 2 times for cluster GG.

Info for manual annotations of cluster H1:
•Start number 14 was manually annotated 9 times for cluster H1.

Info for manual annotations of cluster H2:
•Start number 9 was manually annotated 2 times for cluster H2.

Info for manual annotations of cluster U:
•Start number 16 was manually annotated 3 times for cluster U.

Gene Information:

Gene: Adjutor_26 Start: 15426, Stop: 16079, Start Num: 5
Candidate Starts for Adjutor_26:
(Start: 5 @15426 has 22 MA's), (31, 15681), (39, 15729), (41, 15741), (64, 15843), (66, 15852), (76, 15882), (88, 15954), (92, 15972), (93, 15984), (95, 15999), (96, 16032),

Gene: Aesir_26 Start: 13825, Stop: 14427, Start Num: 7
Candidate Starts for Aesir_26:
(Start: 7 @13825 has 41 MA's), (24, 13969), (26, 13993), (44, 14098), (45, 14113), (46, 14116), (48, 14122), (57, 14164), (82, 14275), (88, 14308), (90, 14317), (96, 14380),

Gene: Ajin_28 Start: 13971, Stop: 14564, Start Num: 7
Candidate Starts for Ajin_28:
(Start: 7 @13971 has 41 MA's), (45, 14253), (46, 14256), (53, 14286), (63, 14325), (79, 14373), (82, 14412), (83, 14418), (88, 14445), (90, 14454), (96, 14517),

Gene: Alephilan_22 Start: 15936, Stop: 16421, Start Num: 13
Candidate Starts for Alephilan_22:
(Start: 13 @15936 has 37 MA's), (30, 16041), (65, 16197), (67, 16200), (70, 16209), (88, 16302), (91, 16317), (95, 16341), (96, 16374), (97, 16383),

Gene: Alyssamiracle_24 Start: 14342, Stop: 14818, Start Num: 13
Candidate Starts for Alyssamiracle_24:
(Start: 13 @14342 has 37 MA's), (30, 14438), (60, 14570), (65, 14594), (67, 14597), (70, 14606), (88, 14699), (91, 14714), (95, 14738), (96, 14771), (97, 14780),

Gene: Anakin_27 Start: 14035, Stop: 14679, Start Num: 7
Candidate Starts for Anakin_27:
(Start: 7 @14035 has 41 MA's), (24, 14182), (26, 14206), (38, 14287), (45, 14326), (46, 14329), (57, 14377), (82, 14527), (88, 14560), (90, 14569), (96, 14632),

Gene: AnnaSerena_27 Start: 14044, Stop: 14688, Start Num: 7

Candidate Starts for AnnaSerena_27:
(Start: 7 @14044 has 41 MA's), (24, 14191), (26, 14215), (38, 14296), (45, 14335), (46, 14338), (57, 14386), (82, 14536), (88, 14569), (90, 14578), (96, 14641),

Gene: Annapurna_26 Start: 13248, Stop: 13889, Start Num: 7
Candidate Starts for Annapurna_26:
(Start: 7 @13248 has 41 MA's), (24, 13392), (26, 13416), (44, 13521), (45, 13536), (46, 13539), (48, 13545), (57, 13587), (59, 13599), (82, 13737), (88, 13770), (90, 13779), (96, 13842),

Gene: Apeppi_22 Start: 16058, Stop: 16555, Start Num: 13
Candidate Starts for Apeppi_22:
(Start: 13 @16058 has 37 MA's), (28, 16163), (30, 16169), (54, 16271), (65, 16331), (88, 16436), (95, 16475), (96, 16508), (97, 16517),

Gene: Artiphact_27 Start: 14036, Stop: 14680, Start Num: 7
Candidate Starts for Artiphact_27:
(Start: 7 @14036 has 41 MA's), (24, 14183), (26, 14207), (38, 14288), (45, 14327), (46, 14330), (57, 14378), (82, 14528), (88, 14561), (90, 14570), (96, 14633),

Gene: Astralis_22 Start: 14342, Stop: 14818, Start Num: 13
Candidate Starts for Astralis_22:
(Start: 13 @14342 has 37 MA's), (30, 14438), (60, 14570), (65, 14594), (67, 14597), (70, 14606), (88, 14699), (91, 14714), (95, 14738), (96, 14771), (97, 14780),

Gene: Avian_22 Start: 14342, Stop: 14818, Start Num: 13
Candidate Starts for Avian_22:
(Start: 13 @14342 has 37 MA's), (30, 14438), (60, 14570), (65, 14594), (67, 14597), (70, 14606), (88, 14699), (91, 14714), (95, 14738), (96, 14771), (97, 14780),

Gene: Barnyard_31 Start: 17229, Stop: 17840, Start Num: 9
Candidate Starts for Barnyard_31:
(Start: 9 @17229 has 2 MA's), (30, 17403), (35, 17439), (36, 17448), (39, 17463), (57, 17523), (60, 17547), (61, 17556), (65, 17571), (75, 17598), (88, 17676), (91, 17691), (96, 17745), (97, 17754), (100, 17796),

Gene: Beckerton_24 Start: 15907, Stop: 16452, Start Num: 14
Candidate Starts for Beckerton_24:
(Start: 14 @15907 has 9 MA's), (30, 16027), (32, 16045), (33, 16051), (36, 16072), (42, 16105), (52, 16162), (56, 16180), (60, 16207), (67, 16234), (72, 16246), (81, 16300), (86, 16327), (88, 16336), (91, 16351), (96, 16405),

Gene: Beyoncage_20 Start: 11749, Stop: 12312, Start Num: 11
Candidate Starts for Beyoncage_20:
(Start: 11 @11749 has 9 MA's), (20, 11812), (25, 11878), (45, 12004), (48, 12013), (49, 12016), (57, 12055), (84, 12169), (85, 12178), (87, 12187), (93, 12220), (95, 12229),

Gene: BigMama_23 Start: 15502, Stop: 16155, Start Num: 5
Candidate Starts for BigMama_23:
(Start: 5 @15502 has 22 MA's), (31, 15757), (39, 15805), (41, 15817), (64, 15919), (66, 15928), (76, 15958), (88, 16030), (92, 16048), (93, 16060), (95, 16075), (96, 16108),

Gene: BirthdayBoy_26 Start: 16789, Stop: 17265, Start Num: 13
Candidate Starts for BirthdayBoy_26:

(Start: 13 @16789 has 37 MA's), (30, 16885), (65, 17041), (70, 17053), (88, 17146), (91, 17161), (95, 17185), (96, 17218), (97, 17227),

Gene: BiteSize_20 Start: 11749, Stop: 12312, Start Num: 11
Candidate Starts for BiteSize_20:
(Start: 11 @11749 has 9 MA's), (20, 11812), (25, 11878), (45, 12004), (48, 12013), (49, 12016), (57, 12055), (84, 12169), (85, 12178), (87, 12187), (93, 12220), (95, 12229),

Gene: BobtimousPrime_23 Start: 15827, Stop: 16372, Start Num: 14
Candidate Starts for BobtimousPrime_23:
(Start: 14 @15827 has 9 MA's), (30, 15947), (32, 15965), (33, 15971), (36, 15992), (42, 16025), (52, 16082), (56, 16100), (60, 16127), (67, 16154), (72, 16166), (81, 16220), (86, 16247), (88, 16256), (91, 16271), (96, 16325),

Gene: Bramble_28 Start: 13937, Stop: 14530, Start Num: 7
Candidate Starts for Bramble_28:
(2, 13700), (3, 13814), (Start: 7 @13937 has 41 MA's), (41, 14192), (45, 14219), (46, 14222), (53, 14252), (63, 14291), (79, 14339), (82, 14378), (83, 14384), (88, 14411), (90, 14420), (96, 14483),

Gene: Butterscotch_25 Start: 15486, Stop: 16139, Start Num: 5
Candidate Starts for Butterscotch_25:
(Start: 5 @15486 has 22 MA's), (31, 15741), (39, 15789), (41, 15801), (64, 15903), (66, 15912), (76, 15942), (88, 16014), (92, 16032), (93, 16044), (95, 16059), (96, 16092),

Gene: Cborch11_25 Start: 15369, Stop: 15914, Start Num: 14
Candidate Starts for Cborch11_25:
(Start: 14 @15369 has 9 MA's), (30, 15489), (32, 15507), (33, 15513), (36, 15534), (42, 15567), (52, 15624), (56, 15642), (60, 15669), (67, 15696), (72, 15708), (81, 15762), (86, 15789), (88, 15798), (91, 15813), (96, 15867),

Gene: Charminar_22 Start: 14342, Stop: 14818, Start Num: 13
Candidate Starts for Charminar_22:
(Start: 13 @14342 has 37 MA's), (30, 14438), (60, 14570), (65, 14594), (67, 14597), (70, 14606), (88, 14699), (91, 14714), (95, 14738), (96, 14771), (97, 14780),

Gene: Chill_26 Start: 15492, Stop: 16145, Start Num: 5
Candidate Starts for Chill_26:
(Start: 5 @15492 has 22 MA's), (31, 15747), (39, 15795), (41, 15807), (64, 15909), (66, 15918), (76, 15948), (88, 16020), (92, 16038), (93, 16050), (95, 16065), (96, 16098),

Gene: Chivey_26 Start: 13241, Stop: 13843, Start Num: 7
Candidate Starts for Chivey_26:
(Start: 7 @13241 has 41 MA's), (24, 13385), (26, 13409), (44, 13514), (45, 13529), (46, 13532), (48, 13538), (82, 13691), (88, 13724), (90, 13733), (96, 13796),

Gene: CoolCookie_27 Start: 14042, Stop: 14686, Start Num: 7
Candidate Starts for CoolCookie_27:
(Start: 7 @14042 has 41 MA's), (24, 14189), (26, 14213), (38, 14294), (45, 14333), (46, 14336), (57, 14384), (82, 14534), (88, 14567), (90, 14576), (96, 14639),

Gene: Crestdrop_26 Start: 13111, Stop: 13752, Start Num: 7
Candidate Starts for Crestdrop_26:

(Start: 7 @13111 has 41 MA's), (24, 13255), (26, 13279), (44, 13384), (45, 13399), (46, 13402), (48, 13408), (57, 13450), (59, 13462), (82, 13600), (88, 13633), (90, 13642), (96, 13705),

Gene: Cybele_27 Start: 14012, Stop: 14656, Start Num: 7
Candidate Starts for Cybele_27:
(Start: 7 @14012 has 41 MA's), (24, 14159), (26, 14183), (38, 14264), (45, 14303), (46, 14306), (57, 14354), (59, 14366), (82, 14504), (88, 14537), (90, 14546), (96, 14609),

Gene: Damien_24 Start: 15370, Stop: 15915, Start Num: 14
Candidate Starts for Damien_24:
(Start: 14 @15370 has 9 MA's), (30, 15490), (32, 15508), (33, 15514), (36, 15535), (42, 15568), (52, 15625), (56, 15643), (60, 15670), (67, 15697), (72, 15709), (81, 15763), (86, 15790), (88, 15799), (91, 15814), (96, 15868),

Gene: DannyDe_26 Start: 13233, Stop: 13835, Start Num: 7
Candidate Starts for DannyDe_26:
(Start: 7 @13233 has 41 MA's), (24, 13377), (26, 13401), (44, 13506), (45, 13521), (46, 13524), (48, 13530), (82, 13683), (88, 13716), (90, 13725), (96, 13788),

Gene: Dauntless_26 Start: 13754, Stop: 14395, Start Num: 7
Candidate Starts for Dauntless_26:
(Start: 7 @13754 has 41 MA's), (24, 13898), (26, 13922), (44, 14027), (45, 14042), (46, 14045), (48, 14051), (57, 14093), (59, 14105), (82, 14243), (88, 14276), (90, 14285), (96, 14348),

Gene: DaviePasture_25 Start: 16546, Stop: 17034, Start Num: 13
Candidate Starts for DaviePasture_25:
(Start: 13 @16546 has 37 MA's), (30, 16654), (65, 16810), (67, 16813), (70, 16822), (88, 16915), (91, 16930), (95, 16954), (96, 16987), (97, 16996),

Gene: Delton_25 Start: 15498, Stop: 16151, Start Num: 5
Candidate Starts for Delton_25:
(Start: 5 @15498 has 22 MA's), (31, 15753), (34, 15768), (39, 15801), (41, 15813), (64, 15915), (66, 15924), (76, 15954), (88, 16026), (92, 16044), (93, 16056), (95, 16071), (96, 16104),

Gene: Demikore_32 Start: 18730, Stop: 19290, Start Num: 16
Candidate Starts for Demikore_32:
(Start: 16 @18730 has 3 MA's), (30, 18838), (36, 18883), (47, 18928), (60, 18979), (61, 18988), (67, 19006), (82, 19090), (83, 19096), (88, 19123), (89, 19129), (91, 19138), (94, 19159), (96, 19192), (97, 19201), (98, 19210), (99, 19225), (100, 19243),

Gene: Djokovic_20 Start: 11749, Stop: 12312, Start Num: 11
Candidate Starts for Djokovic_20:
(Start: 11 @11749 has 9 MA's), (20, 11812), (25, 11878), (45, 12004), (48, 12013), (49, 12016), (57, 12055), (84, 12169), (85, 12178), (87, 12187), (93, 12220), (95, 12229),

Gene: DoobyDoo_24 Start: 15723, Stop: 16199, Start Num: 13
Candidate Starts for DoobyDoo_24:
(Start: 13 @15723 has 37 MA's), (30, 15819), (65, 15975), (67, 15978), (70, 15987), (88, 16080), (91, 16095), (95, 16119), (96, 16152), (97, 16161),

Gene: DrLupo_33 Start: 17635, Stop: 18246, Start Num: 9
Candidate Starts for DrLupo_33:

(Start: 9 @17635 has 2 MA's), (28, 17803), (30, 17809), (35, 17845), (36, 17854), (39, 17869), (57, 17929), (60, 17953), (61, 17962), (65, 17977), (72, 17992), (88, 18082), (91, 18097), (96, 18151), (97, 18160), (100, 18202),

Gene: DumpTruck_24 Start: 15958, Stop: 16452, Start Num: 13
Candidate Starts for DumpTruck_24:
(Start: 13 @15958 has 37 MA's), (30, 16066), (70, 16240), (72, 16243), (75, 16255), (88, 16333), (93, 16363), (95, 16372), (97, 16414), (99, 16438),

Gene: Erk16_25 Start: 15489, Stop: 16142, Start Num: 5
Candidate Starts for Erk16_25:
(Start: 5 @15489 has 22 MA's), (31, 15744), (39, 15792), (41, 15804), (64, 15906), (66, 15915), (76, 15945), (88, 16017), (92, 16035), (93, 16047), (95, 16062), (96, 16095),

Gene: Erudite_26 Start: 13754, Stop: 14395, Start Num: 7
Candidate Starts for Erudite_26:
(Start: 7 @13754 has 41 MA's), (24, 13898), (26, 13922), (44, 14027), (45, 14042), (46, 14045), (48, 14051), (57, 14093), (59, 14105), (82, 14243), (88, 14276), (90, 14285), (96, 14348),

Gene: Erutan_25 Start: 16236, Stop: 16712, Start Num: 13
Candidate Starts for Erutan_25:
(Start: 13 @16236 has 37 MA's), (30, 16332), (65, 16488), (67, 16491), (70, 16500), (88, 16593), (91, 16608), (95, 16632), (96, 16665), (97, 16674),

Gene: FountainFog_26 Start: 13354, Stop: 13998, Start Num: 7
Candidate Starts for FountainFog_26:
(Start: 7 @13354 has 41 MA's), (24, 13501), (26, 13525), (38, 13606), (45, 13645), (46, 13648), (57, 13696), (82, 13846), (88, 13879), (90, 13888), (96, 13951),

Gene: FreddieHg_26 Start: 13257, Stop: 13859, Start Num: 7
Candidate Starts for FreddieHg_26:
(Start: 7 @13257 has 41 MA's), (24, 13401), (26, 13425), (44, 13530), (45, 13545), (46, 13548), (48, 13554), (82, 13707), (88, 13740), (90, 13749), (96, 13812),

Gene: Fulcrum_26 Start: 16769, Stop: 17245, Start Num: 13
Candidate Starts for Fulcrum_26:
(Start: 13 @16769 has 37 MA's), (30, 16865), (65, 17021), (70, 17033), (88, 17126), (91, 17141), (95, 17165), (96, 17198), (97, 17207),

Gene: GOATification_26 Start: 16769, Stop: 17245, Start Num: 13
Candidate Starts for GOATification_26:
(Start: 13 @16769 has 37 MA's), (30, 16865), (65, 17021), (70, 17033), (88, 17126), (91, 17141), (95, 17165), (96, 17198), (97, 17207),

Gene: Genamy16_24 Start: 14342, Stop: 14818, Start Num: 13
Candidate Starts for Genamy16_24:
(Start: 13 @14342 has 37 MA's), (30, 14438), (60, 14570), (65, 14594), (67, 14597), (70, 14606), (88, 14699), (91, 14714), (95, 14738), (96, 14771), (97, 14780),

Gene: Gibbin_26 Start: 16829, Stop: 17317, Start Num: 13
Candidate Starts for Gibbin_26:
(Start: 13 @16829 has 37 MA's), (30, 16937), (65, 17093), (67, 17096), (70, 17105), (88, 17198), (91, 17213), (95, 17237), (96, 17270), (97, 17279),

Gene: Gilda_27 Start: 14036, Stop: 14680, Start Num: 7
Candidate Starts for Gilda_27:
(Start: 7 @14036 has 41 MA's), (24, 14183), (26, 14207), (38, 14288), (45, 14327), (46, 14330), (57, 14378), (82, 14528), (88, 14561), (90, 14570), (96, 14633),

Gene: Giuseppe_25 Start: 15478, Stop: 16131, Start Num: 5
Candidate Starts for Giuseppe_25:
(Start: 5 @15478 has 22 MA's), (31, 15733), (39, 15781), (41, 15793), (64, 15895), (66, 15904), (76, 15934), (88, 16006), (92, 16024), (93, 16036), (95, 16051), (96, 16084),

Gene: GretelLyn_25 Start: 17103, Stop: 17579, Start Num: 13
Candidate Starts for GretelLyn_25:
(Start: 13 @17103 has 37 MA's), (30, 17199), (65, 17355), (67, 17358), (70, 17367), (88, 17460), (91, 17475), (95, 17499), (96, 17532), (97, 17541),

Gene: Gumball_24 Start: 15436, Stop: 16089, Start Num: 5
Candidate Starts for Gumball_24:
(Start: 5 @15436 has 22 MA's), (28, 15673), (31, 15691), (33, 15703), (34, 15706), (39, 15739), (41, 15751), (64, 15853), (66, 15862), (73, 15877), (76, 15892), (88, 15964), (92, 15982), (93, 15994), (95, 16009), (96, 16042),

Gene: Hager_28 Start: 13598, Stop: 14242, Start Num: 7
Candidate Starts for Hager_28:
(Start: 7 @13598 has 41 MA's), (24, 13745), (26, 13769), (38, 13850), (45, 13889), (46, 13892), (57, 13940), (82, 14090), (88, 14123), (90, 14132), (96, 14195),

Gene: Haunter_27 Start: 13449, Stop: 14093, Start Num: 7
Candidate Starts for Haunter_27:
(Start: 7 @13449 has 41 MA's), (24, 13596), (26, 13620), (38, 13701), (45, 13740), (46, 13743), (57, 13791), (82, 13941), (88, 13974), (90, 13983), (96, 14046),

Gene: Hawkeye_27 Start: 15385, Stop: 16014, Start Num: 5
Candidate Starts for Hawkeye_27:
(4, 15328), (Start: 5 @15385 has 22 MA's), (6, 15418), (12, 15469), (31, 15616), (39, 15664), (41, 15676), (64, 15778), (68, 15790), (74, 15805), (76, 15817), (88, 15889), (95, 15934), (96, 15967),

Gene: Helpful_26 Start: 15486, Stop: 16139, Start Num: 5
Candidate Starts for Helpful_26:
(Start: 5 @15486 has 22 MA's), (31, 15741), (39, 15789), (41, 15801), (64, 15903), (66, 15912), (76, 15942), (88, 16014), (92, 16032), (93, 16044), (95, 16059), (96, 16092),

Gene: Hiddenleaf_26 Start: 13241, Stop: 13843, Start Num: 7
Candidate Starts for Hiddenleaf_26:
(Start: 7 @13241 has 41 MA's), (24, 13385), (26, 13409), (44, 13514), (45, 13529), (46, 13532), (48, 13538), (82, 13691), (88, 13724), (90, 13733), (96, 13796),

Gene: Huwbert_48 Start: 24385, Stop: 24990, Start Num: 8
Candidate Starts for Huwbert_48:
(1, 23998), (Start: 8 @24385 has 3 MA's), (17, 24460), (21, 24490), (23, 24502), (32, 24583), (43, 24643), (45, 24661), (46, 24664), (49, 24673), (58, 24718), (77, 24775), (96, 24919), (98, 24937),

Gene: JDawG_26 Start: 13823, Stop: 14425, Start Num: 7

Candidate Starts for JDawG_26:
(Start: 7 @13823 has 41 MA's), (24, 13967), (26, 13991), (44, 14096), (45, 14111), (46, 14114), (48, 14120), (57, 14162), (82, 14273), (88, 14306), (90, 14315), (96, 14378),

Gene: Jalebi_24 Start: 17279, Stop: 17755, Start Num: 13
Candidate Starts for Jalebi_24:
(Start: 13 @17279 has 37 MA's), (30, 17375), (65, 17531), (67, 17534), (70, 17543), (88, 17636), (95, 17675), (96, 17708), (97, 17717),

Gene: Jamemuya19_22 Start: 14342, Stop: 14818, Start Num: 13
Candidate Starts for Jamemuya19_22:
(Start: 13 @14342 has 37 MA's), (30, 14438), (60, 14570), (65, 14594), (67, 14597), (70, 14606), (88, 14699), (91, 14714), (95, 14738), (96, 14771), (97, 14780),

Gene: JingleBells_26 Start: 13318, Stop: 13959, Start Num: 7
Candidate Starts for JingleBells_26:
(Start: 7 @13318 has 41 MA's), (24, 13462), (26, 13486), (44, 13591), (45, 13606), (46, 13609), (48, 13615), (57, 13657), (59, 13669), (82, 13807), (88, 13840), (90, 13849), (96, 13912),

Gene: KandZ_25 Start: 15586, Stop: 16239, Start Num: 5
Candidate Starts for KandZ_25:
(Start: 5 @15586 has 22 MA's), (15, 15712), (31, 15841), (39, 15889), (41, 15901), (64, 16003), (66, 16012), (76, 16042), (88, 16114), (92, 16132), (93, 16144), (95, 16159), (96, 16192),

Gene: Karate_26 Start: 13448, Stop: 14092, Start Num: 7
Candidate Starts for Karate_26:
(Start: 7 @13448 has 41 MA's), (24, 13595), (26, 13619), (38, 13700), (45, 13739), (46, 13742), (57, 13790), (82, 13940), (88, 13973), (90, 13982), (96, 14045),

Gene: Kate_27 Start: 14044, Stop: 14688, Start Num: 7
Candidate Starts for Kate_27:
(Start: 7 @14044 has 41 MA's), (24, 14191), (26, 14215), (38, 14296), (45, 14335), (46, 14338), (57, 14386), (82, 14536), (88, 14569), (90, 14578), (96, 14641),

Gene: Konstantine_29 Start: 16571, Stop: 17116, Start Num: 14
Candidate Starts for Konstantine_29:
(Start: 14 @16571 has 9 MA's), (30, 16691), (32, 16709), (33, 16715), (36, 16736), (42, 16769), (52, 16826), (56, 16844), (60, 16871), (67, 16898), (72, 16910), (81, 16964), (86, 16991), (88, 17000), (91, 17015), (96, 17069),

Gene: Kors_28 Start: 14017, Stop: 14610, Start Num: 7
Candidate Starts for Kors_28:
(Start: 7 @14017 has 41 MA's), (41, 14272), (45, 14299), (46, 14302), (53, 14332), (63, 14371), (79, 14419), (82, 14458), (83, 14464), (88, 14491), (90, 14500), (96, 14563),

Gene: Krampus_27 Start: 14042, Stop: 14686, Start Num: 7
Candidate Starts for Krampus_27:
(Start: 7 @14042 has 41 MA's), (24, 14189), (26, 14213), (38, 14294), (45, 14333), (46, 14336), (57, 14384), (82, 14534), (88, 14567), (90, 14576), (96, 14639),

Gene: Labelle_31 Start: 18732, Stop: 19292, Start Num: 16
Candidate Starts for Labelle_31:

(Start: 16 @18732 has 3 MA's), (30, 18840), (36, 18885), (47, 18930), (60, 18981), (61, 18990), (67, 19008), (82, 19092), (83, 19098), (88, 19125), (89, 19131), (91, 19140), (94, 19161), (96, 19194), (97, 19203), (98, 19212), (99, 19227), (100, 19245),

Gene: Lambo_25 Start: 16772, Stop: 17257, Start Num: 13
Candidate Starts for Lambo_25:
(Start: 13 @16772 has 37 MA's), (30, 16877), (65, 17033), (70, 17045), (88, 17138), (91, 17153), (95, 17177), (96, 17210), (97, 17219),

Gene: LavAbarElk_23 Start: 15206, Stop: 15694, Start Num: 13
Candidate Starts for LavAbarElk_23:
(Start: 13 @15206 has 37 MA's), (30, 15314), (65, 15470), (67, 15473), (70, 15482), (88, 15575), (91, 15590), (95, 15614), (96, 15647), (97, 15656),

Gene: Lila22_24 Start: 16727, Stop: 17203, Start Num: 13
Candidate Starts for Lila22_24:
(Start: 13 @16727 has 37 MA's), (30, 16823), (65, 16979), (67, 16982), (70, 16991), (88, 17084), (95, 17123), (96, 17156), (97, 17165),

Gene: LilyPad_21 Start: 12413, Stop: 12973, Start Num: 11
Candidate Starts for LilyPad_21:
(Start: 11 @12413 has 9 MA's), (20, 12473), (22, 12500), (26, 12545), (40, 12635), (45, 12665), (49, 12677), (54, 12701), (77, 12773), (80, 12791), (84, 12830), (85, 12839), (87, 12848), (93, 12881), (95, 12890),

Gene: LittleFella_22 Start: 14288, Stop: 14845, Start Num: 11
Candidate Starts for LittleFella_22:
(Start: 11 @14288 has 9 MA's), (45, 14537), (48, 14546), (49, 14549), (85, 14711), (87, 14720), (93, 14753), (95, 14762),

Gene: LordBart_28 Start: 13933, Stop: 14526, Start Num: 7
Candidate Starts for LordBart_28:
(Start: 7 @13933 has 41 MA's), (45, 14215), (46, 14218), (53, 14248), (63, 14287), (79, 14335), (82, 14374), (83, 14380), (88, 14407), (90, 14416), (96, 14479),

Gene: LuckyLeo_24 Start: 16058, Stop: 16555, Start Num: 13
Candidate Starts for LuckyLeo_24:
(Start: 13 @16058 has 37 MA's), (28, 16163), (30, 16169), (54, 16271), (65, 16331), (88, 16436), (95, 16475), (96, 16508), (97, 16517),

Gene: Madi_20 Start: 11749, Stop: 12312, Start Num: 11
Candidate Starts for Madi_20:
(Start: 11 @11749 has 9 MA's), (20, 11812), (25, 11878), (45, 12004), (48, 12013), (49, 12016), (57, 12055), (84, 12169), (85, 12178), (87, 12187), (93, 12220), (95, 12229),

Gene: Madruga_30 Start: 18401, Stop: 18961, Start Num: 16
Candidate Starts for Madruga_30:
(Start: 16 @18401 has 3 MA's), (30, 18509), (36, 18554), (47, 18599), (60, 18650), (61, 18659), (67, 18677), (79, 18722), (82, 18761), (83, 18767), (88, 18794), (89, 18800), (91, 18809), (94, 18830), (96, 18863), (97, 18872), (98, 18881), (99, 18896), (100, 18914),

Gene: Megatron06_26 Start: 15903, Stop: 16448, Start Num: 14
Candidate Starts for Megatron06_26:

(Start: 14 @15903 has 9 MA's), (30, 16023), (32, 16041), (33, 16047), (36, 16068), (42, 16101), (52, 16158), (56, 16176), (60, 16203), (67, 16230), (72, 16242), (81, 16296), (86, 16323), (88, 16332), (91, 16347), (96, 16401),

Gene: Mima20_23 Start: 16456, Stop: 16944, Start Num: 13
Candidate Starts for Mima20_23:
(Start: 13 @16456 has 37 MA's), (30, 16564), (65, 16720), (67, 16723), (70, 16732), (88, 16825), (91, 16840), (95, 16864), (96, 16897), (97, 16906),

Gene: MoiGyank_27 Start: 17140, Stop: 17616, Start Num: 13
Candidate Starts for MoiGyank_27:
(Start: 13 @17140 has 37 MA's), (30, 17236), (65, 17392), (70, 17404), (88, 17497), (91, 17512), (95, 17536), (96, 17569), (97, 17578),

Gene: Mopey_25 Start: 15486, Stop: 16139, Start Num: 5
Candidate Starts for Mopey_25:
(Start: 5 @15486 has 22 MA's), (31, 15741), (39, 15789), (41, 15801), (64, 15903), (66, 15912), (76, 15942), (88, 16014), (92, 16032), (93, 16044), (95, 16059), (96, 16092),

Gene: MortySmith_25 Start: 13216, Stop: 13818, Start Num: 7
Candidate Starts for MortySmith_25:
(Start: 7 @13216 has 41 MA's), (24, 13360), (26, 13384), (44, 13489), (45, 13504), (46, 13507), (48, 13513), (57, 13555), (82, 13666), (88, 13699), (90, 13708), (96, 13771),

Gene: NarutoRun_27 Start: 14035, Stop: 14679, Start Num: 7
Candidate Starts for NarutoRun_27:
(Start: 7 @14035 has 41 MA's), (24, 14182), (26, 14206), (38, 14287), (45, 14326), (46, 14329), (57, 14377), (82, 14527), (88, 14560), (90, 14569), (96, 14632),

Gene: Neptune_27 Start: 14012, Stop: 14656, Start Num: 7
Candidate Starts for Neptune_27:
(Start: 7 @14012 has 41 MA's), (24, 14159), (26, 14183), (38, 14264), (45, 14303), (46, 14306), (57, 14354), (59, 14366), (82, 14504), (88, 14537), (90, 14546), (96, 14609),

Gene: NorManre_26 Start: 16335, Stop: 16823, Start Num: 13
Candidate Starts for NorManre_26:
(Start: 13 @16335 has 37 MA's), (30, 16443), (65, 16599), (67, 16602), (70, 16611), (88, 16704), (91, 16719), (95, 16743), (96, 16776), (97, 16785),

Gene: Nova_25 Start: 15913, Stop: 16566, Start Num: 5
Candidate Starts for Nova_25:
(Start: 5 @15913 has 22 MA's), (31, 16168), (39, 16216), (41, 16228), (64, 16330), (66, 16339), (76, 16369), (88, 16441), (92, 16459), (93, 16471), (95, 16486), (96, 16519),

Gene: NovaSharks_24 Start: 14342, Stop: 14818, Start Num: 13
Candidate Starts for NovaSharks_24:
(Start: 13 @14342 has 37 MA's), (30, 14438), (60, 14570), (65, 14594), (67, 14597), (70, 14606), (88, 14699), (91, 14714), (95, 14738), (96, 14771), (97, 14780),

Gene: Oaker_24 Start: 15627, Stop: 16172, Start Num: 14
Candidate Starts for Oaker_24:
(Start: 14 @15627 has 9 MA's), (30, 15747), (32, 15765), (33, 15771), (36, 15792), (42, 15825), (52, 15882), (56, 15900), (60, 15927), (67, 15954), (72, 15966), (81, 16020), (86, 16047), (88, 16056), (91,

16071), (96, 16125),

Gene: OhDear_27 Start: 14041, Stop: 14685, Start Num: 7
Candidate Starts for OhDear_27:
(Start: 7 @14041 has 41 MA's), (24, 14188), (26, 14212), (38, 14293), (45, 14332), (46, 14335), (57, 14383), (82, 14533), (88, 14566), (90, 14575), (96, 14638),

Gene: OtterstedtS21_25 Start: 16425, Stop: 16901, Start Num: 13
Candidate Starts for OtterstedtS21_25:
(Start: 13 @16425 has 37 MA's), (30, 16521), (65, 16677), (67, 16680), (70, 16689), (88, 16782), (91, 16797), (95, 16821), (96, 16854), (97, 16863),

Gene: OverHedge_27 Start: 14002, Stop: 14646, Start Num: 7
Candidate Starts for OverHedge_27:
(Start: 7 @14002 has 41 MA's), (24, 14149), (26, 14173), (38, 14254), (45, 14293), (46, 14296), (57, 14344), (71, 14410), (82, 14494), (88, 14527), (90, 14536), (96, 14599),

Gene: PBI1_25 Start: 15417, Stop: 16070, Start Num: 5
Candidate Starts for PBI1_25:
(Start: 5 @15417 has 22 MA's), (31, 15672), (39, 15720), (41, 15732), (64, 15834), (66, 15843), (76, 15873), (88, 15945), (92, 15963), (93, 15975), (95, 15990), (96, 16023),

Gene: PLot_26 Start: 15489, Stop: 16142, Start Num: 5
Candidate Starts for PLot_26:
(Start: 5 @15489 has 22 MA's), (31, 15744), (39, 15792), (41, 15804), (64, 15906), (66, 15915), (76, 15945), (88, 16017), (92, 16035), (93, 16047), (95, 16062), (96, 16095),

Gene: ParvusTarda_25 Start: 15907, Stop: 16383, Start Num: 13
Candidate Starts for ParvusTarda_25:
(Start: 13 @15907 has 37 MA's), (30, 16003), (65, 16159), (70, 16171), (88, 16264), (91, 16279), (95, 16303), (96, 16336), (97, 16345),

Gene: Patience_32 Start: 19282, Stop: 19842, Start Num: 16
Candidate Starts for Patience_32:
(Start: 16 @19282 has 3 MA's), (30, 19390), (36, 19435), (39, 19450), (60, 19531), (61, 19540), (67, 19558), (82, 19642), (83, 19648), (88, 19675), (89, 19681), (91, 19690), (94, 19711), (96, 19744), (97, 19753), (98, 19762), (99, 19777), (100, 19795),

Gene: Patos_26 Start: 16335, Stop: 16823, Start Num: 13
Candidate Starts for Patos_26:
(Start: 13 @16335 has 37 MA's), (30, 16443), (65, 16599), (67, 16602), (70, 16611), (88, 16704), (91, 16719), (95, 16743), (96, 16776), (97, 16785),

Gene: Penelope2018_25 Start: 15486, Stop: 16139, Start Num: 5
Candidate Starts for Penelope2018_25:
(Start: 5 @15486 has 22 MA's), (31, 15741), (39, 15789), (41, 15801), (64, 15903), (66, 15912), (76, 15942), (88, 16014), (92, 16032), (93, 16044), (95, 16059), (96, 16092),

Gene: Phalaborwa_25 Start: 15519, Stop: 16172, Start Num: 5
Candidate Starts for Phalaborwa_25:
(Start: 5 @15519 has 22 MA's), (31, 15774), (34, 15789), (39, 15822), (41, 15834), (64, 15936), (66, 15945), (76, 15975), (88, 16047), (92, 16065), (93, 16077), (95, 16092), (96, 16125),

Gene: Pharpay_27 Start: 14057, Stop: 14701, Start Num: 7
Candidate Starts for Pharpay_27:
(Start: 7 @14057 has 41 MA's), (24, 14204), (26, 14228), (38, 14309), (45, 14348), (46, 14351), (57, 14399), (82, 14549), (88, 14582), (90, 14591), (96, 14654),

Gene: Phreeze_24 Start: 15370, Stop: 15915, Start Num: 14
Candidate Starts for Phreeze_24:
(Start: 14 @15370 has 9 MA's), (30, 15490), (32, 15508), (33, 15514), (36, 15535), (42, 15568), (52, 15625), (56, 15643), (60, 15670), (67, 15697), (72, 15709), (81, 15763), (86, 15790), (88, 15799), (91, 15814), (96, 15868),

Gene: PhunaPhoke_27 Start: 14030, Stop: 14674, Start Num: 7
Candidate Starts for PhunaPhoke_27:
(Start: 7 @14030 has 41 MA's), (24, 14177), (26, 14201), (38, 14282), (45, 14321), (46, 14324), (57, 14372), (82, 14522), (88, 14555), (90, 14564), (96, 14627),

Gene: Potty_27 Start: 14035, Stop: 14679, Start Num: 7
Candidate Starts for Potty_27:
(Start: 7 @14035 has 41 MA's), (24, 14182), (26, 14206), (38, 14287), (45, 14326), (46, 14329), (57, 14377), (82, 14527), (88, 14560), (90, 14569), (96, 14632),

Gene: Poultress_26 Start: 13799, Stop: 14443, Start Num: 7
Candidate Starts for Poultress_26:
(Start: 7 @13799 has 41 MA's), (24, 13946), (26, 13970), (38, 14051), (45, 14090), (46, 14093), (57, 14141), (82, 14291), (88, 14324), (90, 14333), (96, 14396),

Gene: Prager_25 Start: 15498, Stop: 16151, Start Num: 5
Candidate Starts for Prager_25:
(Start: 5 @15498 has 22 MA's), (31, 15753), (39, 15801), (41, 15813), (64, 15915), (66, 15924), (76, 15954), (88, 16026), (92, 16044), (93, 16056), (95, 16071), (96, 16104),

Gene: Predator_28 Start: 16911, Stop: 17432, Start Num: 14
Candidate Starts for Predator_28:
(Start: 14 @16911 has 9 MA's), (27, 17016), (30, 17031), (33, 17055), (36, 17076), (60, 17187), (61, 17196), (70, 17223), (79, 17253), (81, 17280), (96, 17385),

Gene: Puissant_23 Start: 15838, Stop: 16380, Start Num: 14
Candidate Starts for Puissant_23:
(Start: 14 @15838 has 9 MA's), (30, 15958), (32, 15976), (33, 15982), (36, 16003), (42, 16036), (51, 16087), (52, 16090), (56, 16108), (70, 16171), (81, 16228), (86, 16255), (88, 16264), (91, 16279), (96, 16333),

Gene: Rachella_27 Start: 14038, Stop: 14682, Start Num: 7
Candidate Starts for Rachella_27:
(Start: 7 @14038 has 41 MA's), (24, 14185), (26, 14209), (38, 14290), (45, 14329), (46, 14332), (57, 14380), (82, 14530), (88, 14563), (90, 14572), (96, 14635),

Gene: Ranch_25 Start: 15273, Stop: 15749, Start Num: 13
Candidate Starts for Ranch_25:
(Start: 13 @15273 has 37 MA's), (30, 15369), (65, 15525), (67, 15528), (70, 15537), (88, 15630), (91, 15645), (95, 15669), (96, 15702), (97, 15711),

Gene: RazorC_22 Start: 14342, Stop: 14818, Start Num: 13

Candidate Starts for RazorC_22:
(Start: 13 @14342 has 37 MA's), (30, 14438), (60, 14570), (65, 14594), (67, 14597), (70, 14606), (88, 14699), (91, 14714), (95, 14738), (96, 14771), (97, 14780),

Gene: Rie18_27 Start: 13380, Stop: 14024, Start Num: 7
Candidate Starts for Rie18_27:
(Start: 7 @13380 has 41 MA's), (24, 13527), (26, 13551), (38, 13632), (45, 13671), (46, 13674), (57, 13722), (82, 13872), (88, 13905), (90, 13914), (96, 13977),

Gene: RikSengupta_28 Start: 14054, Stop: 14647, Start Num: 7
Candidate Starts for RikSengupta_28:
(Start: 7 @14054 has 41 MA's), (41, 14309), (45, 14336), (46, 14339), (53, 14369), (63, 14408), (79, 14456), (82, 14495), (83, 14501), (88, 14528), (90, 14537), (96, 14600),

Gene: Rota_24 Start: 16231, Stop: 16707, Start Num: 13
Candidate Starts for Rota_24:
(Start: 13 @16231 has 37 MA's), (30, 16327), (65, 16483), (70, 16495), (88, 16588), (91, 16603), (95, 16627), (96, 16660), (97, 16669),

Gene: Rukungu_25 Start: 16972, Stop: 17448, Start Num: 13
Candidate Starts for Rukungu_25:
(Start: 13 @16972 has 37 MA's), (30, 17068), (65, 17224), (67, 17227), (70, 17236), (88, 17329), (91, 17344), (95, 17368), (96, 17401), (97, 17410),

Gene: Rumi_24 Start: 14342, Stop: 14818, Start Num: 13
Candidate Starts for Rumi_24:
(Start: 13 @14342 has 37 MA's), (30, 14438), (60, 14570), (65, 14594), (67, 14597), (70, 14606), (88, 14699), (91, 14714), (95, 14738), (96, 14771), (97, 14780),

Gene: Sadboi_25 Start: 17103, Stop: 17579, Start Num: 13
Candidate Starts for Sadboi_25:
(Start: 13 @17103 has 37 MA's), (30, 17199), (65, 17355), (67, 17358), (70, 17367), (88, 17460), (91, 17475), (95, 17499), (96, 17532), (97, 17541),

Gene: Sampudon_25 Start: 17279, Stop: 17755, Start Num: 13
Candidate Starts for Sampudon_25:
(Start: 13 @17279 has 37 MA's), (30, 17375), (65, 17531), (67, 17534), (70, 17543), (88, 17636), (95, 17675), (96, 17708), (97, 17717),

Gene: Shrew_60 Start: 29033, Stop: 29623, Start Num: 8
Candidate Starts for Shrew_60:
(Start: 8 @29033 has 3 MA's), (29, 29210), (45, 29309), (46, 29312), (48, 29318), (49, 29321), (50, 29330), (96, 29576), (97, 29585),

Gene: Sienna_20 Start: 11749, Stop: 12312, Start Num: 11
Candidate Starts for Sienna_20:
(Start: 11 @11749 has 9 MA's), (20, 11812), (25, 11878), (45, 12004), (48, 12013), (49, 12016), (57, 12055), (84, 12169), (85, 12178), (87, 12187), (93, 12220), (95, 12229),

Gene: SilentWarrior_26 Start: 13249, Stop: 13851, Start Num: 7
Candidate Starts for SilentWarrior_26:
(Start: 7 @13249 has 41 MA's), (24, 13393), (26, 13417), (44, 13522), (45, 13537), (46, 13540), (48, 13546), (82, 13699), (88, 13732), (90, 13741), (96, 13804),

Gene: SirHarley_24 Start: 15418, Stop: 16071, Start Num: 5
Candidate Starts for SirHarley_24:
(Start: 5 @15418 has 22 MA's), (28, 15655), (31, 15673), (33, 15685), (34, 15688), (39, 15721), (41, 15733), (64, 15835), (66, 15844), (73, 15859), (76, 15874), (88, 15946), (92, 15964), (93, 15976), (95, 15991), (96, 16024),

Gene: Snakehole_28 Start: 13338, Stop: 13940, Start Num: 7
Candidate Starts for Snakehole_28:
(Start: 7 @13338 has 41 MA's), (24, 13482), (26, 13506), (44, 13611), (45, 13626), (46, 13629), (48, 13635), (82, 13788), (88, 13821), (90, 13830), (96, 13893),

Gene: Sparcetus_28 Start: 13933, Stop: 14526, Start Num: 7
Candidate Starts for Sparcetus_28:
(Start: 7 @13933 has 41 MA's), (45, 14215), (46, 14218), (53, 14248), (63, 14287), (79, 14335), (82, 14374), (83, 14380), (88, 14407), (90, 14416), (96, 14479),

Gene: Stormer_23 Start: 14342, Stop: 14818, Start Num: 13
Candidate Starts for Stormer_23:
(Start: 13 @14342 has 37 MA's), (30, 14438), (60, 14570), (65, 14594), (67, 14597), (70, 14606), (88, 14699), (91, 14714), (95, 14738), (96, 14771), (97, 14780),

Gene: SuperSonics_31 Start: 18458, Stop: 19018, Start Num: 16
Candidate Starts for SuperSonics_31:
(Start: 16 @18458 has 3 MA's), (30, 18566), (36, 18611), (47, 18656), (60, 18707), (61, 18716), (67, 18734), (82, 18818), (83, 18824), (88, 18851), (89, 18857), (91, 18866), (94, 18887), (96, 18920), (97, 18929), (98, 18938), (99, 18953), (100, 18971),

Gene: SuperheroCarly_26 Start: 15348, Stop: 16001, Start Num: 5
Candidate Starts for SuperheroCarly_26:
(Start: 5 @15348 has 22 MA's), (31, 15603), (39, 15651), (41, 15663), (64, 15765), (66, 15774), (76, 15804), (88, 15876), (92, 15894), (93, 15906), (95, 15921), (96, 15954),

Gene: Suzy_20 Start: 12976, Stop: 13545, Start Num: 11
Candidate Starts for Suzy_20:
(Start: 11 @12976 has 9 MA's), (18, 13039), (19, 13042), (25, 13111), (45, 13237), (48, 13246), (49, 13249), (57, 13288), (69, 13333), (84, 13402), (85, 13411), (87, 13420), (93, 13453), (95, 13462),

Gene: Tedro_27 Start: 13508, Stop: 14152, Start Num: 7
Candidate Starts for Tedro_27:
(Start: 7 @13508 has 41 MA's), (24, 13655), (26, 13679), (38, 13760), (45, 13799), (46, 13802), (57, 13850), (82, 14000), (88, 14033), (90, 14042), (96, 14105),

Gene: Terapin_20 Start: 11749, Stop: 12312, Start Num: 11
Candidate Starts for Terapin_20:
(Start: 11 @11749 has 9 MA's), (20, 11812), (25, 11878), (45, 12004), (48, 12013), (49, 12016), (57, 12055), (84, 12169), (85, 12178), (87, 12187), (93, 12220), (95, 12229),

Gene: Thoth_25 Start: 15483, Stop: 16136, Start Num: 5
Candidate Starts for Thoth_25:
(Start: 5 @15483 has 22 MA's), (31, 15738), (39, 15786), (41, 15798), (64, 15900), (66, 15909), (76, 15939), (88, 16011), (92, 16029), (93, 16041), (95, 16056), (96, 16089),

Gene: Thumb_24 Start: 15370, Stop: 15915, Start Num: 14
Candidate Starts for Thumb_24:
(Start: 14 @15370 has 9 MA's), (30, 15490), (32, 15508), (33, 15514), (36, 15535), (42, 15568), (52, 15625), (56, 15643), (60, 15670), (67, 15697), (72, 15709), (81, 15763), (86, 15790), (88, 15799), (91, 15814), (96, 15868),

Gene: Tillicus_24 Start: 15652, Stop: 16149, Start Num: 13
Candidate Starts for Tillicus_24:
(Start: 13 @15652 has 37 MA's), (28, 15757), (30, 15763), (54, 15865), (65, 15925), (88, 16030), (95, 16069), (96, 16102), (97, 16111),

Gene: TinyMiny_28 Start: 13952, Stop: 14545, Start Num: 7
Candidate Starts for TinyMiny_28:
(Start: 7 @13952 has 41 MA's), (41, 14207), (45, 14234), (46, 14237), (53, 14267), (63, 14306), (79, 14354), (82, 14393), (83, 14399), (88, 14426), (90, 14435), (96, 14498),

Gene: Tongui_26 Start: 13372, Stop: 14016, Start Num: 7
Candidate Starts for Tongui_26:
(Start: 7 @13372 has 41 MA's), (24, 13519), (26, 13543), (38, 13624), (45, 13663), (46, 13666), (57, 13714), (82, 13864), (88, 13897), (90, 13906), (96, 13969),

Gene: Triscuit_47 Start: 24305, Stop: 24910, Start Num: 8
Candidate Starts for Triscuit_47:
(Start: 8 @24305 has 3 MA's), (23, 24422), (32, 24503), (37, 24533), (43, 24563), (45, 24581), (46, 24584), (49, 24593), (58, 24638), (64, 24659), (96, 24839),

Gene: Troll4_25 Start: 15487, Stop: 16140, Start Num: 5
Candidate Starts for Troll4_25:
(Start: 5 @15487 has 22 MA's), (31, 15742), (39, 15790), (41, 15802), (64, 15904), (66, 15913), (76, 15943), (88, 16015), (92, 16033), (93, 16045), (95, 16060), (96, 16093),

Gene: Visconti_25 Start: 15496, Stop: 16149, Start Num: 5
Candidate Starts for Visconti_25:
(Start: 5 @15496 has 22 MA's), (31, 15751), (39, 15799), (41, 15811), (64, 15913), (66, 15922), (76, 15952), (88, 16024), (92, 16042), (93, 16054), (95, 16069), (96, 16102),

Gene: WaldoWhy_26 Start: 15492, Stop: 16145, Start Num: 5
Candidate Starts for WaldoWhy_26:
(Start: 5 @15492 has 22 MA's), (31, 15747), (39, 15795), (41, 15807), (64, 15909), (66, 15918), (76, 15948), (88, 16020), (92, 16038), (93, 16050), (95, 16065), (96, 16098),

Gene: Wojtek_24 Start: 15980, Stop: 16456, Start Num: 13
Candidate Starts for Wojtek_24:
(Start: 13 @15980 has 37 MA's), (30, 16076), (65, 16232), (70, 16244), (88, 16337), (91, 16352), (95, 16376), (96, 16409), (97, 16418),

Gene: Wollypog_15 Start: 10559, Stop: 11137, Start Num: 10
Candidate Starts for Wollypog_15:
(Start: 10 @10559 has 1 MA's), (24, 10679), (55, 10859), (56, 10862), (62, 10889), (71, 10919), (78, 10940), (83, 10991), (96, 11090),

Gene: Xenia2_25 Start: 16000, Stop: 16494, Start Num: 13
Candidate Starts for Xenia2_25:

(Start: 13 @16000 has 37 MA's), (30, 16108), (70, 16282), (72, 16285), (75, 16297), (88, 16375), (93, 16405), (95, 16414), (97, 16456), (99, 16480),

Gene: Yikes_26 Start: 17364, Stop: 17840, Start Num: 13
Candidate Starts for Yikes_26:
(Start: 13 @17364 has 37 MA's), (30, 17460), (65, 17616), (67, 17619), (70, 17628), (88, 17721), (91, 17736), (95, 17760), (96, 17793), (97, 17802),

Gene: Zany_23 Start: 16493, Stop: 16969, Start Num: 13
Candidate Starts for Zany_23:
(Start: 13 @16493 has 37 MA's), (30, 16589), (65, 16745), (67, 16748), (70, 16757), (88, 16850), (91, 16865), (95, 16889), (96, 16922), (97, 16931),