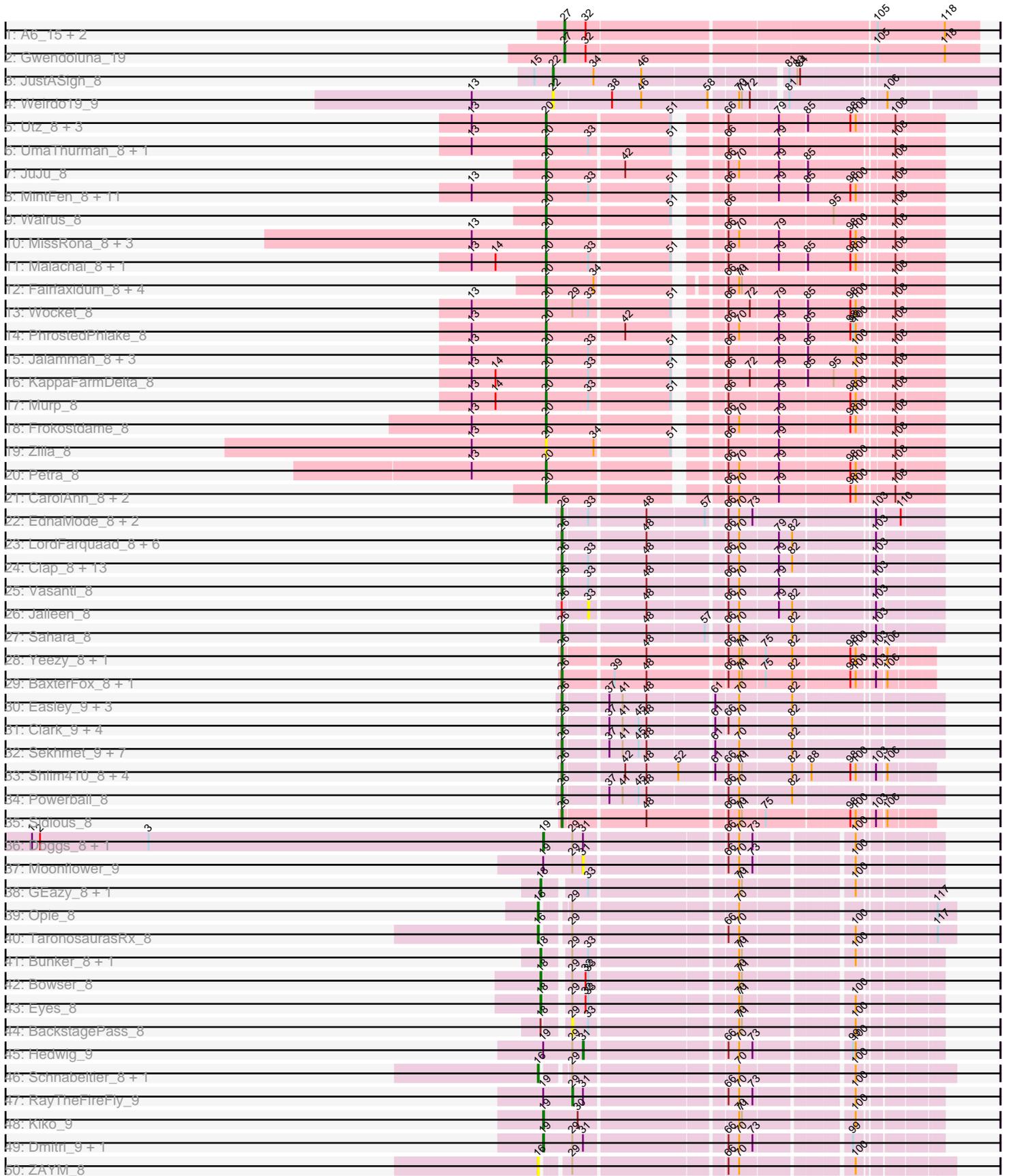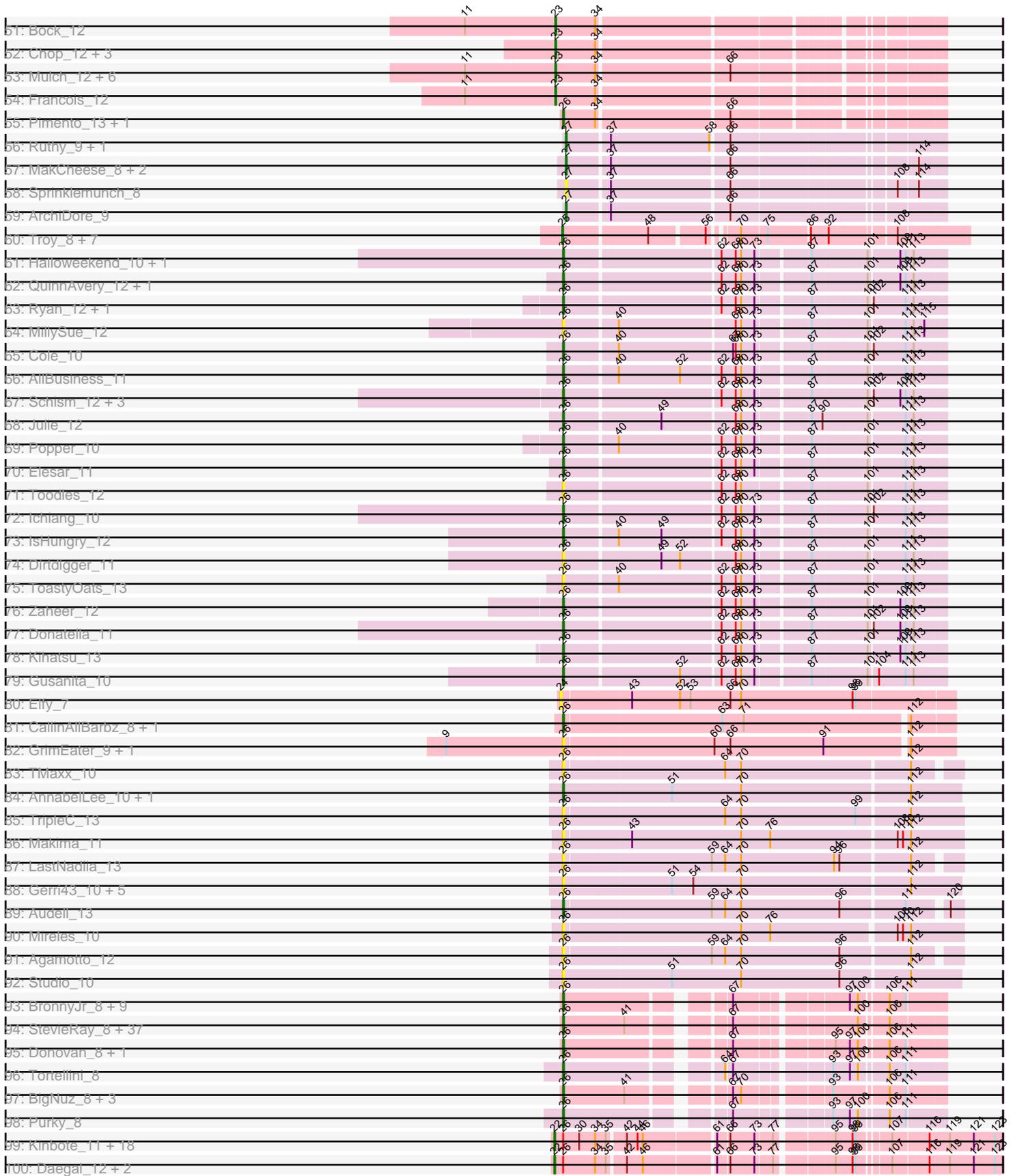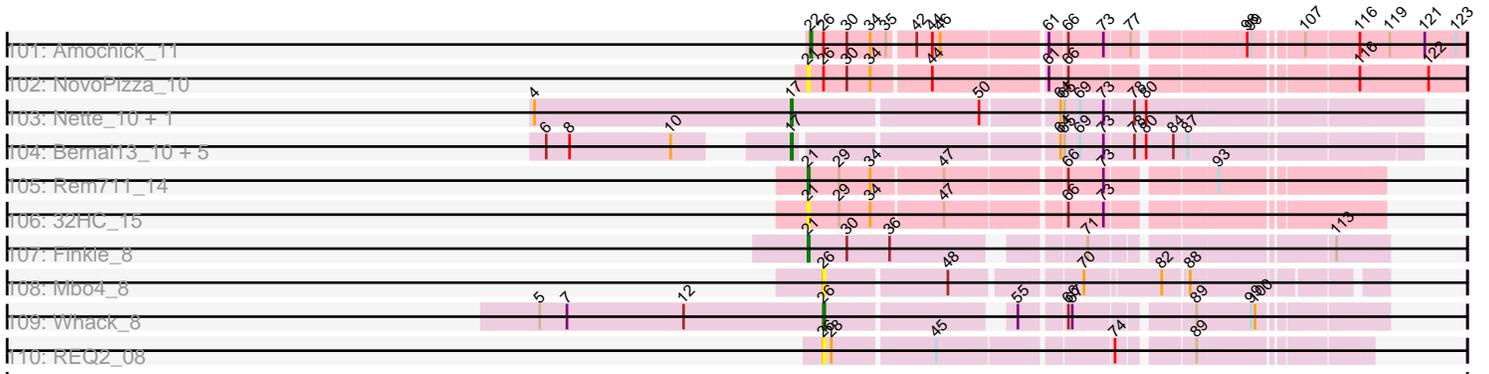# Pham 283423

Pham 283423

Pham 283423

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 283423 Report

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

Pham number 283423 has 296 members, 51 are drafts.

Phages represented in each track:
• Track 1 : A6_15, Ruotula_16, BK1_15
• Track 2 : Gwendoluna_19
• Track 3 : JustASigh_8
• Track 4 : Weirdo19_9
• Track 5 : Utz_8, Lysidious_8, Wisp_8, BlingBling_8
• Track 6 : UmaThurman_8, Samba_8
• Track 7 : JuJu_8
• Track 8 : MintFen_8, Delian_8, Guacamole_8, Pipp_8, Melba_8, Mellie_8, Barco_8, ZiggyZoo_8, Zarbodnamra_8, CaptainKirk2_8, JasperJr_8, Obliviate_8
• Track 9 : Walrus_8
• Track 10 : MissRona_8, Azula_8, Blueberry_8, Gambino_8
• Track 11 : Malachai_8, Begonia_8
• Track 12 : Fairfaxidum_8, PrincePatrick_8, William_8, PCoral7_8, Toast_8
• Track 13 : Wocket_8
• Track 14 : PhrostedPhlake_8
• Track 15 : Jalammah_8, Archis_8, Fenry_8, Hitter_8
• Track 16 : KappaFarmDelta_8
• Track 17 : Murp_8
• Track 18 : Frokostdame_8
• Track 19 : Zilla_8
• Track 20 : Petra_8
• Track 21 : CarolAnn_8, CheeseSpider_8, Blino_8
• Track 22 : EdnaMode_8, Lamberg_8, Nettuno_8
• Track 23 : LordFarquaad_8, Yeet412_8, Attis_8, SoilAssassin_8, Bjanes7_8, Matteo_8, Pickett_8
• Track 24 : Clap_8, Cynthia_8, GemG_8, Haley23_8, Denise_8, JCole_8, Gizermo_8, Ebert_8, Sproutie_8, FroggyToad_8, Savage_8, Whiteclaw_8, TuertoX_8, Mocha12_8
• Track 25 : Vasanti_8
• Track 26 : Jalleen_8
• Track 27 : Sahara_8
• Track 28 : Yeezy_8, PantheRoc_8
• Track 29 : BaxterFox_8, Ohgeesy_8
• Track 30 : Easley_9, Tuti_10, Beenie_9, MichaelScott_9
• Track 31 : Clark_9, Dorito_8, Annalisa_9, DobbysSock_8, PhriskyACE_8
• Track 32 : Sekhmet_9, Oregano_9, Suerte_8, Dolores_9, Samman98_9, WinkNick_9, Thimann_9, Invectra_9

- Track 33 : Shlim410_8, Hortense_8, Adora_8, Howe_8, Twinkle_8
- Track 34 : Powerball_8
- Track 35 : Sidious_8
- Track 36 : Doggs_8, Coriander_9
- Track 37 : Moonflower_9
- Track 38 : GEazy_8, HannahD_8
- Track 39 : Opie_8
- Track 40 : TaronosaurasRx_8
- Track 41 : Bunker_8, BBQValindra_8
- Track 42 : Bowser_8
- Track 43 : Eyes_8
- Track 44 : BackstagePass_8
- Track 45 : Hedwig_9
- Track 46 : Schnabeltier_8, MagicMan_8
- Track 47 : RayTheFireFly_9
- Track 48 : Kiko_9
- Track 49 : Dmitri_9, DirtyBoi_9
- Track 50 : ZAYM_8
- Track 51 : Bock_12
- Track 52 : Chop_12, Ayotoya_12, GrandSlam_12, Hamood_12
- Track 53 : Mulch_12, Parada_12, WheatThin_12, Nadeem_12, Brylie_12, BetterKatz_12, NancyRae_12
- Track 54 : Francois_12
- Track 55 : Pimento_13, DelRio_13
- Track 56 : Ruthy_9, DumpsterDude_9
- Track 57 : MakCheese_8, Zodiariah_8, Malibo_8
- Track 58 : Sprinklemunch_8
- Track 59 : ArchiDore_9
- Track 60 : Troy_8, Lederberg_8, Bran_8, SamW_8, StAB_8, Stiles_8, Dina_8, Adelaide_8
- Track 61 : Halloweekend_10, Lenoxika_12
- Track 62 : QuinnAvery_12, BigSherm_11
- Track 63 : Ryan_12, Yonex_12
- Track 64 : MillySue_12
- Track 65 : Cole_10
- Track 66 : AllBusiness_11
- Track 67 : Schism_12, GoodLuckBabe_12, Nandita_12, Guinevere_12
- Track 68 : Julie_12
- Track 69 : Popper_10
- Track 70 : Elesar_11
- Track 71 : Toodles_12
- Track 72 : Ichiang_10
- Track 73 : IsHungry_12
- Track 74 : Dirtdigger_11
- Track 75 : ToastyOats_13
- Track 76 : Zaheer_12
- Track 77 : Donatella_11
- Track 78 : Kihatsu_13
- Track 79 : Gusanita_10
- Track 80 : Elfy_7
- Track 81 : CallinAllBarbz_8, BaileyBlu_8
- Track 82 : GrimEater_9, Jankie_9
- Track 83 : TMaxx_10

- Track 84 : AnnabelLee_10, Ezurina_9
- Track 85 : TripleC_13
- Track 86 : Makima_11
- Track 87 : LastNadiia_13
- Track 88 : Gerri43_10, Neuvillette_10, ChipsNGuac_10, Roberts_10, CardboardBox_10, ChamoyPickle_10
- Track 89 : Audell_13
- Track 90 : Mireles_10
- Track 91 : Agamotto_12
- Track 92 : Studio_10
- Track 93 : BronnyJr_8, Mangethe_8, Langerak_8, Majeke_8, GaloreK_8, Techage_8, Arib1_8, Phegasus_8, Juniormint_8, Jebeks_8
- Track 94 : StevieRay_8, Glaske_8, Brusacoram_8, Dynamo_8, Venti_8, Shipwreck_8, Atcoo_8, Bunnies_8, Polkaroo_8, Chubbello_8, Bartholomew_8, Phalm_8, Jung_8, Pygmy_8, FirstPlacePfu_8, Etoile_8, Necropolis_8, HUHilltop_8, Phineas_8, Xavia_8, Bhagsy_8, KilKor_8, GreaseLightnin_8, Fishburne_8, StressBall_8, CactusJack_8, PeanutPie_8, Zilizebeth_8, Thespis_8, Bogie_8, Gavriela_8, Willsammy_8, Malithi_8, Kari_8, Ksquared_8, Vidya_8, Megiddo_8, Camster_8
- Track 95 : Donovan_8, Sonah_8
- Track 96 : Tortellini_8
- Track 97 : BigNuz_8, ThulaThula_8, Nazo_8, Phayonce_8
- Track 98 : Purky_8
- Track 99 : Kinbote_11, BloominB_11, Ein37_11, OBUpride_11, HH92_11, Luna22_11, Ubuntu_11, Evanesce_11, DeepSoil15_11, Dewey_11, Amymech_11, Webster2_11, Giles_11, Wishmaker_11, Luke_11, Hail_11, LilHazelnut_11, Forge_11, Hadrien_11
- Track 100 : Daegal_12, Gancho_10, Gravaillia_11
- Track 101 : Amochick_11
- Track 102 : NovoPizza_10
- Track 103 : Nette_10, Mendokysei_9
- Track 104 : Bernal13_10, RonRayGun_10, ZenTime222_10, Nairb_10, Ibrahim_10, Whitty_10
- Track 105 : Rem711_14
- Track 106 : 32HC_15
- Track 107 : Finkle_8
- Track 108 : Mbo4_8
- Track 109 : Whack_8
- Track 110 : REQ2_08

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

The start number called the most often in the published annotations is 26, it was called in 124 of the 245 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Adora_8, Agamotto_12, AllBusiness_11, AnnabelLee_10, Annalisa_9, Arib1_8, Atcoo_8, Attis_8, Audell_13, BaileyBlu_8, Bartholomew_8, BaxterFox_8, Beenie_9, Bhagsy_8, BigNuz_8, BigSherm_11, Bjanes7_8, Bogie_8, BronnyJr_8, Brusacoram_8, Bunnies_8, CactusJack_8, CallinAllBarbz_8, Camster_8,

CardboardBox_10, ChamoyPickle_10, ChipsNGuac_10, Chubbello_8, Clap_8, Clark_9, Cole_10, Cynthia_8, DelRio_13, Denise_8, Dirtdigger_11, DobbysSock_8, Dolores_9, Donatella_11, Donovan_8, Dorito_8, Dynamo_8, Easley_9, Ebert_8, EdnaMode_8, Elesar_11, Etoile_8, Ezurina_9, FirstPlacePfu_8, Fishburne_8, FroggyToad_8, GaloreK_8, Gavriela_8, GemG_8, Gerri43_10, Gizermo_8, Glaske_8, GoodLuckBabe_12, GreaseLightnin_8, GrimEater_9, Guinevere_12, Gusanita_10, HUHilltop_8, Haley23_8, Halloweekend_10, Hortense_8, Howe_8, Ichiang_10, Invectra_9, IsHungry_12, JCole_8, Jankie_9, Jebeks_8, Julie_12, Jung_8, Juniormint_8, Kari_8, Kihatsu_13, KilKor_8, Ksquared_8, Lamberg_8, Langerak_8, LastNadiia_13, Lenoxika_12, LordFarquaad_8, Majeke_8, Makima_11, Malithi_8, Mangethe_8, Matteo_8, Mbo4_8, Megiddo_8, MichaelScott_9, MillySue_12, Mireles_10, Mocha12_8, Nandita_12, Nazo_8, Necropolis_8, Nettuno_8, Neuvillette_10, Ohgeesy_8, Oregano_9, PantheRoc_8, PeanutPie_8, Phalm_8, Phayonce_8, Phegasus_8, Phineas_8, PhriskyACE_8, Pickett_8, Pimento_13, Polkaroo_8, Popper_10, Powerball_8, Purky_8, Pygmy_8, QuinnAvery_12, REQ2_08, Roberts_10, Ryan_12, Sahara_8, Samman98_9, Savage_8, Schism_12, Sekhmet_9, Shipwreck_8, Shlim410_8, Sidious_8, SoilAssassin_8, Sonah_8, Sproutie_8, StevieRay_8, StressBall_8, Studio_10, Suerte_8, TMaxx_10, Techage_8, Thespis_8, Thimann_9, ThulaThula_8, ToastyOats_13, Toodles_12, Tortellini_8, TripleC_13, TuertoX_8, Tuti_10, Twinkle_8, Vasanti_8, Venti_8, Vidya_8, Whack_8, Whiteclaw_8, Willsammy_8, WinkNick_9, Xavia_8, Yeet412_8, Yeezy_8, Yonex_12, Zaheer_12, Zilizebeth_8,

Genes that have the "Most Annotated" start but do not call it:
• Amochick_11, Amymech_11, BloominB_11, Daegal_12, DeepSoil15_11, Dewey_11, Ein37_11, Evanesce_11, Forge_11, Gancho_10, Giles_11, Gravaillia_11, HH92_11, Hadrien_11, Hail_11, Jalleen_8, Kinbote_11, LilHazelnut_11, Luke_11, Luna22_11, NovoPizza_10, OBUpride_11, Ubuntu_11, Webster2_11, Wishmaker_11,

Genes that do not have the "Most Annotated" start:
• 32HC_15, A6_15, Adelaide_8, ArchiDore_9, Archis_8, Ayotoya_12, Azula_8, BBQValindra_8, BK1_15, BackstagePass_8, Barco_8, Begonia_8, Bernal13_10, BetterKatz_12, BlingBling_8, Blino_8, Blueberry_8, Bock_12, Bowser_8, Bran_8, Brylie_12, Bunker_8, CaptainKirk2_8, CarolAnn_8, CheeseSpider_8, Chop_12, Coriander_9, Delian_8, Dina_8, DirtyBoi_9, Dmitri_9, Doggs_8, DumpsterDude_9, Elfy_7, Eyes_8, Fairfaxidum_8, Fenry_8, Finkle_8, Francois_12, Frokostdame_8, GEazy_8, Gambino_8, GrandSlam_12, Guacamole_8, Gwendoluna_19, Hamood_12, HannahD_8, Hedwig_9, Hitter_8, Ibrahim_10, Jalammah_8, JasperJr_8, JuJu_8, JustASigh_8, KappaFarmDelta_8, Kiko_9, Lederberg_8, Lysidious_8, MagicMan_8, MakCheese_8, Malachai_8, Malibo_8, Melba_8, Mellie_8, Mendokysei_9, MintFen_8, MissRona_8, Moonflower_9, Mulch_12, Murp_8, Nadeem_12, Nairb_10, NancyRae_12, Nette_10, Obliviate_8, Opie_8, PCoral7_8, Parada_12, Petra_8, PhrostedPhlake_8, Pipp_8, PrincePatrick_8, RayTheFireFly_9, Rem711_14, RonRayGun_10, Ruotula_16, Ruthy_9, SamW_8, Samba_8, Schnabeltier_8, Sprinklemunch_8, StAB_8, Stiles_8, TaronosaurasRx_8, Toast_8, Troy_8, UmaThurman_8, Utz_8, Walrus_8, Weirdo19_9, WheatThin_12, Whitty_10, William_8, Wisp_8, Wocket_8, ZAYM_8, Zarbodnamra_8, ZenTime222_10, ZiggyZoo_8, Zilla_8, Zodiariah_8,

Summary by start number:

Start 16:

• Found in 5 of 296 (1.7%) of genes in pham
• Manual Annotations of this start: 4 of 245
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MagicMan_8 (DB), Opie_8 (DB), Schnabeltier_8 (DB), TaronosaurasRx_8 (DB), ZAYM_8 (DB),

Start 17:
• Found in 8 of 296 (2.7%) of genes in pham
• Manual Annotations of this start: 7 of 245
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bernal13_10 (T), Ibrahim_10 (T), Mendokysei_9 (T), Nairb_10 (T), Nette_10 (T), RonRayGun_10 (T), Whitty_10 (T), ZenTime222_10 (T),

Start 18:
• Found in 7 of 296 (2.4%) of genes in pham
• Manual Annotations of this start: 6 of 245
• Called 85.7% of time when present
• Phage (with cluster) where this start called: BBQValindra_8 (DB), Bowser_8 (DB), Bunker_8 (DB), Eyes_8 (DB), GEazy_8 (DB), HannahD_8 (DB),

Start 19:
• Found in 8 of 296 (2.7%) of genes in pham
• Manual Annotations of this start: 5 of 245
• Called 62.5% of time when present
• Phage (with cluster) where this start called: Coriander_9 (DB), DirtyBoi_9 (DB), Dmitri_9 (DB), Doggs_8 (DB), Kiko_9 (DB),

Start 20:
• Found in 45 of 296 (15.2%) of genes in pham
• Manual Annotations of this start: 42 of 245
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Archis_8 (CV), Azula_8 (CV), Barco_8 (CV), Begonia_8 (CV), BlingBling_8 (CV), Blino_8 (CV), Blueberry_8 (CV), CaptainKirk2_8 (CV), CarolAnn_8 (CV), CheeseSpider_8 (CV), Delian_8 (CV), Fairfaxidum_8 (CV), Fenry_8 (CV), Frokostdame_8 (CV), Gambino_8 (CV), Guacamole_8 (CV), Hitter_8 (CV), Jalammah_8 (CV), JasperJr_8 (CV), JuJu_8 (CV), KappaFarmDelta_8 (CV), Lysidious_8 (CV), Malachai_8 (CV), Melba_8 (CV), Mellie_8 (CV), MintFen_8 (CV), MissRona_8 (CV), Murp_8 (CV), Obliviate_8 (CV), PCoral7_8 (CV), Petra_8 (CV), PhrostedPhlake_8 (CV), Pipp_8 (CV), PrincePatrick_8 (CV), Samba_8 (CV), Toast_8 (CV), UmaThurman_8 (CV), Utz_8 (CV), Walrus_8 (CV), William_8 (CV), Wisp_8 (CV), Wocket_8 (CV), Zarbodnamra_8 (CV), ZiggyZoo_8 (CV), Zilla_8 (CV),

Start 21:
• Found in 4 of 296 (1.4%) of genes in pham
• Manual Annotations of this start: 2 of 245
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 32HC_15 (Z), Finkle_8 (singleton), NovoPizza_10 (Q), Rem711_14 (Z),

Start 22:
• Found in 25 of 296 (8.4%) of genes in pham

• Manual Annotations of this start: 23 of 245
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amochick_11 (Q), Amymech_11 (Q), BloominB_11 (Q), Daegal_12 (Q), DeepSoil15_11 (Q), Dewey_11 (Q), Ein37_11 (Q), Evanesce_11 (Q), Forge_11 (Q), Gancho_10 (Q), Giles_11 (Q), Gravaillia_11 (Q), HH92_11 (Q), Hadrien_11 (Q), Hail_11 (Q), JustASigh_8 (AH), Kinbote_11 (Q), LilHazelnut_11 (Q), Luke_11 (Q), Luna22_11 (Q), OBUpride_11 (Q), Ubuntu_11 (Q), Webster2_11 (Q), Weirdo19_9 (AH), Wishmaker_11 (Q),

Start 23:
• Found in 13 of 296 (4.4%) of genes in pham
• Manual Annotations of this start: 13 of 245
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ayotoya_12 (DI), BetterKatz_12 (DI), Bock_12 (DI), Brylie_12 (DI), Chop_12 (DI), Francois_12 (DI), GrandSlam_12 (DI), Hamood_12 (DI), Mulch_12 (DI), Nadeem_12 (DI), NancyRae_12 (DI), Parada_12 (DI), WheatThin_12 (DI),

Start 24:
• Found in 1 of 296 (0.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elfy_7 (FP),

Start 25:
• Found in 8 of 296 (2.7%) of genes in pham
• Manual Annotations of this start: 8 of 245
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adelaide_8 (EP), Bran_8 (EP), Dina_8 (EP), Lederberg_8 (EP), SamW_8 (EP), StAB_8 (EP), Stiles_8 (EP), Troy_8 (EP),

Start 26:
• Found in 185 of 296 (62.5%) of genes in pham
• Manual Annotations of this start: 124 of 245
• Called 86.5% of time when present
• Phage (with cluster) where this start called: Adora_8 (CZ4), Agamotto_12 (FR), AllBusiness_11 (FF), AnnabelLee_10 (FR), Annalisa_9 (CZ4), Arib1_8 (P1), Atcoo_8 (P1), Attis_8 (CZ2), Audell_13 (FR), BaileyBlu_8 (FP), Bartholomew_8 (P1), BaxterFox_8 (CZ3), Beenie_9 (CZ4), Bhagsy_8 (P1), BigNuz_8 (P4), BigSherm_11 (FF), Bjanes7_8 (CZ2), Bogie_8 (P1), BronnyJr_8 (P1), Brusacoram_8 (P1), Bunnies_8 (P1), CactusJack_8 (P1), CallinAllBarbz_8 (FP), Camster_8 (P1), CardboardBox_10 (FR), ChamoyPickle_10 (FR), ChipsNGuac_10 (FR), Chubbello_8 (none), Clap_8 (CZ2), Clark_9 (CZ4), Cole_10 (FF), Cynthia_8 (CZ2), DelRio_13 (DI), Denise_8 (CZ5), Dirtdigger_11 (FF), DobbysSock_8 (CZ4), Dolores_9 (CZ4), Donatella_11 (FF), Donovan_8 (P1), Dorito_8 (CZ4), Dynamo_8 (P1), Easley_9 (CZ4), Ebert_8 (CZ2), EdnaMode_8 (CZ2), Elesar_11 (FF), Etoile_8 (P1), Ezurina_9 (FR), FirstPlacePfu_8 (P1), Fishburne_8 (P1), FroggyToad_8 (CZ2), GaloreK_8 (P1), Gavriela_8 (P1), GemG_8 (CZ2), Gerri43_10 (FR), Gizermo_8 (CZ2), Glaske_8 (P1), GoodLuckBabe_12 (FF), GreaseLightnin_8 (P1), GrimEater_9 (FP), Guinevere_12 (FF), Gusanita_10 (FF), HUHilltop_8 (P1), Haley23_8 (CZ2), Halloweekend_10 (FF), Hortense_8 (CZ4), Howe_8 (CZ4), Ichiang_10 (FF), Invectra_9 (CZ4), IsHungry_12 (FF), JCole_8 (CZ2), Jankie_9 (FP), Jebeks_8 (P1), Julie_12 (FF), Jung_8 (P1), Juniormint_8 (P1), Kari_8 (P1), Kihatsu_13 (FF), KilKor_8 (P1), Ksquared_8 (P1),

Lamberg_8 (CZ2), Langerak_8 (P1), LastNadiia_13 (FR), Lenoxika_12 (FF),
LordFarquaad_8 (CZ2), Majeke_8 (P1), Makima_11 (FR), Malithi_8 (P1),
Mangethe_8 (P1), Matteo_8 (CZ2), Mbo4_8 (singleton), Megiddo_8 (P1),
MichaelScott_9 (CZ4), MillySue_12 (FF), Mireles_10 (FR), Mocha12_8 (CZ2),
Nandita_12 (FF), Nazo_8 (P4), Necropolis_8 (P1), Nettuno_8 (CZ2), Neuvillette_10
(FR), Ohgeesy_8 (CZ), Oregano_9 (CZ4), PantheRoc_8 (CZ3), PeanutPie_8 (P1),
Phalm_8 (P1), Phayonce_8 (P5), Phegasus_8 (P1), Phineas_8 (P1), PhriskyACE_8
(CZ4), Pickett_8 (CZ2), Pimento_13 (DI), Polkaroo_8 (P1), Popper_10 (FF),
Powerball_8 (CZ4), Purky_8 (P6), Pygmy_8 (P1), QuinnAvery_12 (FF), REQ2_08
(singleton), Roberts_10 (FR), Ryan_12 (FF), Sahara_8 (CZ2), Samman98_9 (CZ4),
Savage_8 (CZ2), Schism_12 (FF), Sekhmet_9 (CZ4), Shipwreck_8 (P1), Shlim410_8
(CZ4), Sidious_8 (CZ7), SoilAssassin_8 (CZ2), Sonah_8 (P1), Sproutie_8 (CZ2),
StevieRay_8 (P1), StressBall_8 (P1), Studio_10 (FR), Suerte_8 (CZ4), TMaxx_10
(FR), Techage_8 (P1), Thespis_8 (P1), Thimann_9 (CZ4), ThulaThula_8 (P5),
ToastyOats_13 (FF), Toodles_12 (FF), Tortellini_8 (P2), TripleC_13 (FR), TuertoX_8
(CZ2), Tuti_10 (CZ4), Twinkle_8 (CZ4), Vasanti_8 (CZ2), Venti_8 (P1), Vidya_8 (P1),
Whack_8 (singleton), Whiteclaw_8 (CZ2), Willsammy_8 (P1), WinkNick_9 (CZ4),
Xavia_8 (P3), Yeet412_8 (CZ2), Yeezy_8 (CZ3), Yonex_12 (FF), Zaheer_12 (FF),
Zilizebeth_8 (P1),

Start 27:
• Found in 11 of 296 (3.7%) of genes in pham
• Manual Annotations of this start: 9 of 245
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A6_15 (A1), ArchiDore_9 (DW), BK1_15
(A1), DumpsterDude_9 (DW), Gwendoluna_19 (A1), MakCheese_8 (DW), Malibo_8
(DW), Ruotula_16 (A1), Ruthy_9 (DW), Sprinklemunch_8 (DW), Zodiariah_8 (DW),

Start 29:
• Found in 20 of 296 (6.8%) of genes in pham
• Manual Annotations of this start: 1 of 245
• Called 10.0% of time when present
• Phage (with cluster) where this start called: BackstagePass_8 (DB),
RayTheFireFly_9 (DB),

Start 31:
• Found in 7 of 296 (2.4%) of genes in pham
• Manual Annotations of this start: 1 of 245
• Called 28.6% of time when present
• Phage (with cluster) where this start called: Hedwig_9 (DB), Moonflower_9 (DB),

Start 33:
• Found in 49 of 296 (16.6%) of genes in pham
• No Manual Annotations of this start.
• Called 2.0% of time when present
• Phage (with cluster) where this start called: Jalleen_8 (CZ2),

Summary by clusters:

There are 27 clusters represented in this pham: FP, FR, DI, CZ2, CZ3, DB, singleton,
CZ4, CZ5, FF, DW, CV, A1, P2, P3, P1, P6, P4, P5, AH, CZ7, Q, CZ, T, Z, EP, none,

Info for manual annotations of cluster A1:

•Start number 27 was manually annotated 4 times for cluster A1.

Info for manual annotations of cluster AH:
•Start number 22 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster CV:
•Start number 20 was manually annotated 42 times for cluster CV.

Info for manual annotations of cluster CZ:
•Start number 26 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ2:
•Start number 26 was manually annotated 23 times for cluster CZ2.

Info for manual annotations of cluster CZ3:
•Start number 26 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:
•Start number 26 was manually annotated 21 times for cluster CZ4.

Info for manual annotations of cluster CZ5:
•Start number 26 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ7:
•Start number 26 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DB:
•Start number 16 was manually annotated 4 times for cluster DB.
•Start number 18 was manually annotated 6 times for cluster DB.
•Start number 19 was manually annotated 5 times for cluster DB.
•Start number 29 was manually annotated 1 time for cluster DB.
•Start number 31 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DI:
•Start number 23 was manually annotated 13 times for cluster DI.
•Start number 26 was manually annotated 2 times for cluster DI.

Info for manual annotations of cluster DW:
•Start number 27 was manually annotated 5 times for cluster DW.

Info for manual annotations of cluster EP:
•Start number 25 was manually annotated 8 times for cluster EP.

Info for manual annotations of cluster FF:
•Start number 26 was manually annotated 17 times for cluster FF.

Info for manual annotations of cluster FP:
•Start number 26 was manually annotated 2 times for cluster FP.

Info for manual annotations of cluster FR:
•Start number 26 was manually annotated 2 times for cluster FR.

Info for manual annotations of cluster P1:

•Start number 26 was manually annotated 43 times for cluster P1.

Info for manual annotations of cluster P2:
•Start number 26 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:
•Start number 26 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:
•Start number 26 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:
•Start number 26 was manually annotated 2 times for cluster P5.

Info for manual annotations of cluster P6:
•Start number 26 was manually annotated 1 time for cluster P6.

Info for manual annotations of cluster Q:
•Start number 22 was manually annotated 22 times for cluster Q.

Info for manual annotations of cluster T:
•Start number 17 was manually annotated 7 times for cluster T.

Info for manual annotations of cluster Z:
•Start number 21 was manually annotated 1 time for cluster Z.

Gene Information:

Gene: 32HC_15 Start: 9730, Stop: 10119, Start Num: 21
Candidate Starts for 32HC_15:
(Start: 21 @9730 has 2 MA's), (Start: 29 @9754 has 1 MA's), (34, 9778), (47, 9829), (66, 9910), (73, 9934),

Gene: A6_15 Start: 12482, Stop: 12931, Start Num: 27
Candidate Starts for A6_15:
(Start: 27 @12482 has 9 MA's), (32, 12506), (105, 12818), (118, 12893),

Gene: Adelaide_8 Start: 6455, Stop: 6859, Start Num: 25
Candidate Starts for Adelaide_8:
(Start: 25 @6455 has 8 MA's), (48, 6545), (56, 6602), (70, 6626), (75, 6653), (86, 6698), (92, 6716), (108, 6782),

Gene: Adora_8 Start: 6280, Stop: 6651, Start Num: 26
Candidate Starts for Adora_8:
(Start: 26 @6280 has 124 MA's), (42, 6343), (48, 6367), (52, 6403), (61, 6439), (66, 6451), (70, 6463), (71, 6466), (82, 6520), (88, 6538), (98, 6577), (100, 6583), (103, 6598), (106, 6607),

Gene: Agamotto_12 Start: 9771, Stop: 10199, Start Num: 26
Candidate Starts for Agamotto_12:
(Start: 26 @9771 has 124 MA's), (59, 9933), (64, 9948), (70, 9966), (96, 10077), (112, 10152),

Gene: AllBusiness_11 Start: 7831, Stop: 8232, Start Num: 26
Candidate Starts for AllBusiness_11:
(Start: 26 @7831 has 124 MA's), (40, 7888), (52, 7957), (62, 7999), (68, 8014), (70, 8020), (73, 8035),
(87, 8089), (101, 8149), (111, 8188), (113, 8197),

Gene: Amochick_11 Start: 7977, Stop: 8429, Start Num: 22
Candidate Starts for Amochick_11:
(Start: 22 @7977 has 23 MA's), (Start: 26 @7986 has 124 MA's), (30, 8004), (34, 8022), (35, 8034),
(42, 8052), (44, 8064), (46, 8070), (61, 8145), (66, 8157), (73, 8184), (77, 8202), (98, 8277), (99, 8280),
(107, 8310), (116, 8349), (119, 8370), (121, 8397), (123, 8421),

Gene: Amymech_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Amymech_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040),
(42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283),
(99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: AnnabelLee_10 Start: 6689, Stop: 7129, Start Num: 26
Candidate Starts for AnnabelLee_10:
(Start: 26 @6689 has 124 MA's), (51, 6809), (70, 6887), (112, 7073),

Gene: Annalisa_9 Start: 6598, Stop: 6981, Start Num: 26
Candidate Starts for Annalisa_9:
(Start: 26 @6598 has 124 MA's), (37, 6643), (41, 6658), (45, 6676), (48, 6685), (61, 6754), (66, 6766),
(70, 6778), (82, 6835),

Gene: ArchiDore_9 Start: 6962, Stop: 7354, Start Num: 27
Candidate Starts for ArchiDore_9:
(Start: 27 @6962 has 9 MA's), (37, 7007), (66, 7136),

Gene: Archis_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for Archis_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (33, 6615), (51, 6702), (66, 6741), (79, 6795), (85, 6825),
(100, 6876), (108, 6909),

Gene: Arib1_8 Start: 6594, Stop: 6956, Start Num: 26
Candidate Starts for Arib1_8:
(Start: 26 @6594 has 124 MA's), (67, 6753), (97, 6861), (100, 6870), (106, 6897), (111, 6915),

Gene: Atcoo_8 Start: 6580, Stop: 6942, Start Num: 26
Candidate Starts for Atcoo_8:
(Start: 26 @6580 has 124 MA's), (41, 6649), (67, 6739), (100, 6856), (106, 6883),

Gene: Attis_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Attis_8:
(Start: 26 @6128 has 124 MA's), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Audell_13 Start: 10041, Stop: 10469, Start Num: 26
Candidate Starts for Audell_13:
(Start: 26 @10041 has 124 MA's), (59, 10203), (64, 10218), (70, 10236), (96, 10347), (111, 10416),
(120, 10455),

Gene: Ayotoya_12 Start: 8519, Stop: 8911, Start Num: 23
Candidate Starts for Ayotoya_12:
(Start: 23 @8519 has 13 MA's), (34, 8564),

Gene: Azula_8 Start: 6443, Stop: 6835, Start Num: 20
Candidate Starts for Azula_8:
(13, 6359), (Start: 20 @6443 has 42 MA's), (66, 6617), (70, 6629), (79, 6671), (98, 6746), (100, 6752), (108, 6785),

Gene: BBQValindra_8 Start: 6485, Stop: 6868, Start Num: 18
Candidate Starts for BBQValindra_8:
(Start: 18 @6485 has 6 MA's), (Start: 29 @6506 has 1 MA's), (33, 6524), (70, 6677), (71, 6680), (100, 6788),

Gene: BK1_15 Start: 12482, Stop: 12931, Start Num: 27
Candidate Starts for BK1_15:
(Start: 27 @12482 has 9 MA's), (32, 12506), (105, 12818), (118, 12893),

Gene: BackstagePass_8 Start: 6483, Stop: 6845, Start Num: 29
Candidate Starts for BackstagePass_8:
(Start: 18 @6462 has 6 MA's), (Start: 29 @6483 has 1 MA's), (33, 6501), (70, 6654), (71, 6657), (100, 6765),

Gene: BaileyBlu_8 Start: 5760, Stop: 6185, Start Num: 26
Candidate Starts for BaileyBlu_8:
(Start: 26 @5760 has 124 MA's), (63, 5934), (71, 5958), (112, 6138),

Gene: Barco_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for Barco_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (33, 6615), (51, 6702), (66, 6741), (79, 6795), (85, 6825), (98, 6870), (100, 6876), (108, 6909),

Gene: Bartholomew_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Bartholomew_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: BaxterFox_8 Start: 6274, Stop: 6648, Start Num: 26
Candidate Starts for BaxterFox_8:
(Start: 26 @6274 has 124 MA's), (39, 6328), (48, 6364), (66, 6448), (70, 6460), (71, 6463), (75, 6487), (82, 6517), (98, 6574), (100, 6580), (103, 6595), (106, 6604),

Gene: Beenie_9 Start: 6592, Stop: 6975, Start Num: 26
Candidate Starts for Beenie_9:
(Start: 26 @6592 has 124 MA's), (37, 6637), (41, 6652), (48, 6679), (61, 6748), (70, 6772), (82, 6829),

Gene: Begonia_8 Start: 6570, Stop: 6962, Start Num: 20
Candidate Starts for Begonia_8:
(13, 6486), (14, 6513), (Start: 20 @6570 has 42 MA's), (33, 6618), (51, 6705), (66, 6744), (79, 6798), (85, 6828), (98, 6873), (100, 6879), (108, 6912),

Gene: Bernal13_10 Start: 8271, Stop: 8714, Start Num: 17
Candidate Starts for Bernal13_10:

(6, 8115), (8, 8133), (10, 8211), (Start: 17 @8271 has 7 MA's), (64, 8457), (65, 8460), (69, 8472), (73, 8490), (78, 8511), (80, 8520), (84, 8541), (87, 8550),

Gene: BetterKatz_12 Start: 8487, Stop: 8879, Start Num: 23
Candidate Starts for BetterKatz_12:
(11, 8385), (Start: 23 @8487 has 13 MA's), (34, 8532), (66, 8673),

Gene: Bhagsy_8 Start: 6583, Stop: 6945, Start Num: 26
Candidate Starts for Bhagsy_8:
(Start: 26 @6583 has 124 MA's), (41, 6652), (67, 6742), (100, 6859), (106, 6886),

Gene: BigNuz_8 Start: 6561, Stop: 6923, Start Num: 26
Candidate Starts for BigNuz_8:
(Start: 26 @6561 has 124 MA's), (41, 6630), (67, 6720), (70, 6729), (93, 6810), (106, 6864), (111, 6882),

Gene: BigSherm_11 Start: 7780, Stop: 8181, Start Num: 26
Candidate Starts for BigSherm_11:
(Start: 26 @7780 has 124 MA's), (62, 7948), (68, 7963), (70, 7969), (73, 7984), (87, 8038), (101, 8098), (109, 8131), (111, 8137), (113, 8146),

Gene: Bjanes7_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Bjanes7_8:
(Start: 26 @6128 has 124 MA's), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: BlingBling_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for BlingBling_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (51, 6702), (66, 6741), (79, 6795), (85, 6825), (98, 6870), (100, 6876), (108, 6909),

Gene: Blino_8 Start: 6467, Stop: 6859, Start Num: 20
Candidate Starts for Blino_8:
(Start: 20 @6467 has 42 MA's), (66, 6641), (70, 6653), (79, 6695), (98, 6770), (100, 6776), (108, 6809),

Gene: BloominB_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for BloominB_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Blueberry_8 Start: 6443, Stop: 6835, Start Num: 20
Candidate Starts for Blueberry_8:
(13, 6359), (Start: 20 @6443 has 42 MA's), (66, 6617), (70, 6629), (79, 6671), (98, 6746), (100, 6752), (108, 6785),

Gene: Bock_12 Start: 8237, Stop: 8629, Start Num: 23
Candidate Starts for Bock_12:
(11, 8135), (Start: 23 @8237 has 13 MA's), (34, 8282),

Gene: Bogie_8 Start: 6580, Stop: 6942, Start Num: 26
Candidate Starts for Bogie_8:
(Start: 26 @6580 has 124 MA's), (41, 6649), (67, 6739), (100, 6856), (106, 6883),

Gene: Bowser_8 Start: 6483, Stop: 6866, Start Num: 18
Candidate Starts for Bowser_8:
(Start: 18 @6483 has 6 MA's), (Start: 29 @6504 has 1 MA's), (32, 6519), (33, 6522), (70, 6675), (71, 6678),

Gene: Bran_8 Start: 6460, Stop: 6864, Start Num: 25
Candidate Starts for Bran_8:
(Start: 25 @6460 has 8 MA's), (48, 6550), (56, 6607), (70, 6631), (75, 6658), (86, 6703), (92, 6721), (108, 6787),

Gene: BronnyJr_8 Start: 6597, Stop: 6959, Start Num: 26
Candidate Starts for BronnyJr_8:
(Start: 26 @6597 has 124 MA's), (67, 6756), (97, 6864), (100, 6873), (106, 6900), (111, 6918),

Gene: Brusacoram_8 Start: 6579, Stop: 6941, Start Num: 26
Candidate Starts for Brusacoram_8:
(Start: 26 @6579 has 124 MA's), (41, 6648), (67, 6738), (100, 6855), (106, 6882),

Gene: Brylie_12 Start: 8234, Stop: 8626, Start Num: 23
Candidate Starts for Brylie_12:
(11, 8132), (Start: 23 @8234 has 13 MA's), (34, 8279), (66, 8420),

Gene: Bunker_8 Start: 6485, Stop: 6868, Start Num: 18
Candidate Starts for Bunker_8:
(Start: 18 @6485 has 6 MA's), (Start: 29 @6506 has 1 MA's), (33, 6524), (70, 6677), (71, 6680), (100, 6788),

Gene: Bunnies_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Bunnies_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: CactusJack_8 Start: 6579, Stop: 6941, Start Num: 26
Candidate Starts for CactusJack_8:
(Start: 26 @6579 has 124 MA's), (41, 6648), (67, 6738), (100, 6855), (106, 6882),

Gene: CallinAllBarbz_8 Start: 5770, Stop: 6195, Start Num: 26
Candidate Starts for CallinAllBarbz_8:
(Start: 26 @5770 has 124 MA's), (63, 5944), (71, 5968), (112, 6148),

Gene: Camster_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Camster_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: CaptainKirk2_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for CaptainKirk2_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (33, 6615), (51, 6702), (66, 6741), (79, 6795), (85, 6825), (98, 6870), (100, 6876), (108, 6909),

Gene: CardboardBox_10 Start: 6689, Stop: 7129, Start Num: 26
Candidate Starts for CardboardBox_10:
(Start: 26 @6689 has 124 MA's), (51, 6809), (54, 6833), (70, 6887), (112, 7073),

Gene: CarolAnn_8 Start: 6466, Stop: 6858, Start Num: 20

Candidate Starts for CarolAnn_8:
(Start: 20 @6466 has 42 MA's), (66, 6640), (70, 6652), (79, 6694), (98, 6769), (100, 6775), (108, 6808),

Gene: ChamoyPickle_10 Start: 6689, Stop: 7129, Start Num: 26
Candidate Starts for ChamoyPickle_10:
(Start: 26 @6689 has 124 MA's), (51, 6809), (54, 6833), (70, 6887), (112, 7073),

Gene: CheeseSpider_8 Start: 6443, Stop: 6835, Start Num: 20
Candidate Starts for CheeseSpider_8:
(Start: 20 @6443 has 42 MA's), (66, 6617), (70, 6629), (79, 6671), (98, 6746), (100, 6752), (108, 6785),

Gene: ChipsNGuac_10 Start: 6689, Stop: 7129, Start Num: 26
Candidate Starts for ChipsNGuac_10:
(Start: 26 @6689 has 124 MA's), (51, 6809), (54, 6833), (70, 6887), (112, 7073),

Gene: Chop_12 Start: 8267, Stop: 8659, Start Num: 23
Candidate Starts for Chop_12:
(Start: 23 @8267 has 13 MA's), (34, 8312),

Gene: Chubbello_8 Start: 6591, Stop: 6953, Start Num: 26
Candidate Starts for Chubbello_8:
(Start: 26 @6591 has 124 MA's), (41, 6660), (67, 6750), (100, 6867), (106, 6894),

Gene: Clap_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Clap_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Clark_9 Start: 6598, Stop: 6981, Start Num: 26
Candidate Starts for Clark_9:
(Start: 26 @6598 has 124 MA's), (37, 6643), (41, 6658), (45, 6676), (48, 6685), (61, 6754), (66, 6766), (70, 6778), (82, 6835),

Gene: Cole_10 Start: 7439, Stop: 7840, Start Num: 26
Candidate Starts for Cole_10:
(Start: 26 @7439 has 124 MA's), (40, 7496), (67, 7619), (68, 7622), (70, 7628), (73, 7643), (87, 7697), (101, 7757), (102, 7760), (111, 7796), (113, 7805),

Gene: Coriander_9 Start: 6870, Stop: 7265, Start Num: 19
Candidate Starts for Coriander_9:
(1, 6291), (2, 6300), (3, 6423), (Start: 19 @6870 has 5 MA's), (Start: 29 @6903 has 1 MA's), (Start: 31 @6915 has 1 MA's), (66, 7062), (70, 7074), (73, 7089), (100, 7185),

Gene: Cynthia_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Cynthia_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Daegal_12 Start: 8274, Stop: 8726, Start Num: 22
Candidate Starts for Daegal_12:
(Start: 22 @8274 has 23 MA's), (Start: 26 @8283 has 124 MA's), (34, 8319), (35, 8331), (42, 8349), (46, 8367), (61, 8442), (66, 8454), (73, 8481), (77, 8499), (95, 8556), (98, 8574), (99, 8577), (107, 8607), (116, 8646), (119, 8667), (121, 8694), (123, 8718),

Gene: DeepSoil15_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for DeepSoil15_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040),
(42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283),
(99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: DelRio_13 Start: 8753, Stop: 9136, Start Num: 26
Candidate Starts for DelRio_13:
(Start: 26 @8753 has 124 MA's), (34, 8789), (66, 8930),

Gene: Delian_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for Delian_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (33, 6615), (51, 6702), (66, 6741), (79, 6795), (85, 6825),
(98, 6870), (100, 6876), (108, 6909),

Gene: Denise_8 Start: 6137, Stop: 6520, Start Num: 26
Candidate Starts for Denise_8:
(Start: 26 @6137 has 124 MA's), (33, 6164), (48, 6224), (66, 6305), (70, 6317), (79, 6359), (82, 6374),
(103, 6452),

Gene: Dewey_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Dewey_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040),
(42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283),
(99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Dina_8 Start: 6443, Stop: 6847, Start Num: 25
Candidate Starts for Dina_8:
(Start: 25 @6443 has 8 MA's), (48, 6533), (56, 6590), (70, 6614), (75, 6641), (86, 6686), (92, 6704),
(108, 6770),

Gene: Dirtdigger_11 Start: 7642, Stop: 8043, Start Num: 26
Candidate Starts for Dirtdigger_11:
(Start: 26 @7642 has 124 MA's), (49, 7747), (52, 7768), (68, 7825), (70, 7831), (73, 7846), (87, 7900),
(101, 7960), (111, 7999), (113, 8008),

Gene: DirtyBoi_9 Start: 6843, Stop: 7238, Start Num: 19
Candidate Starts for DirtyBoi_9:
(Start: 19 @6843 has 5 MA's), (Start: 29 @6876 has 1 MA's), (Start: 31 @6888 has 1 MA's), (66,
7035), (70, 7047), (73, 7062), (99, 7155),

Gene: Dmitri_9 Start: 6852, Stop: 7247, Start Num: 19
Candidate Starts for Dmitri_9:
(Start: 19 @6852 has 5 MA's), (Start: 29 @6885 has 1 MA's), (Start: 31 @6897 has 1 MA's), (66,
7044), (70, 7056), (73, 7071), (99, 7164),

Gene: DobbysSock_8 Start: 6090, Stop: 6473, Start Num: 26
Candidate Starts for DobbysSock_8:
(Start: 26 @6090 has 124 MA's), (37, 6135), (41, 6150), (45, 6168), (48, 6177), (61, 6246), (66, 6258),
(70, 6270), (82, 6327),

Gene: Doggs_8 Start: 6567, Stop: 6962, Start Num: 19

Candidate Starts for Doggs_8:
(1, 5988), (2, 5997), (3, 6120), (Start: 19 @6567 has 5 MA's), (Start: 29 @6600 has 1 MA's), (Start: 31 @6612 has 1 MA's), (66, 6759), (70, 6771), (73, 6786), (100, 6882),

Gene: Dolores_9 Start: 6592, Stop: 6975, Start Num: 26
Candidate Starts for Dolores_9:
(Start: 26 @6592 has 124 MA's), (37, 6637), (41, 6652), (45, 6670), (48, 6679), (61, 6748), (70, 6772), (82, 6829),

Gene: Donatella_11 Start: 7906, Stop: 8307, Start Num: 26
Candidate Starts for Donatella_11:
(Start: 26 @7906 has 124 MA's), (62, 8074), (68, 8089), (70, 8095), (73, 8110), (87, 8164), (101, 8224), (102, 8227), (109, 8257), (111, 8263), (113, 8272),

Gene: Donovan_8 Start: 6594, Stop: 6956, Start Num: 26
Candidate Starts for Donovan_8:
(Start: 26 @6594 has 124 MA's), (67, 6753), (95, 6846), (97, 6861), (100, 6870), (106, 6897), (111, 6915),

Gene: Dorito_8 Start: 6096, Stop: 6479, Start Num: 26
Candidate Starts for Dorito_8:
(Start: 26 @6096 has 124 MA's), (37, 6141), (41, 6156), (45, 6174), (48, 6183), (61, 6252), (66, 6264), (70, 6276), (82, 6333),

Gene: DumpsterDude_9 Start: 6975, Stop: 7367, Start Num: 27
Candidate Starts for DumpsterDude_9:
(Start: 27 @6975 has 9 MA's), (37, 7020), (58, 7131), (66, 7149),

Gene: Dynamo_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Dynamo_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Easley_9 Start: 6592, Stop: 6975, Start Num: 26
Candidate Starts for Easley_9:
(Start: 26 @6592 has 124 MA's), (37, 6637), (41, 6652), (48, 6679), (61, 6748), (70, 6772), (82, 6829),

Gene: Ebert_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Ebert_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: EdnaMode_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for EdnaMode_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (57, 6278), (66, 6296), (70, 6308), (73, 6323), (103, 6443), (110, 6467),

Gene: Ein37_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Ein37_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Elesar_11 Start: 7829, Stop: 8230, Start Num: 26

Candidate Starts for Elesar_11:
(Start: 26 @7829 has 124 MA's), (62, 7997), (68, 8012), (70, 8018), (73, 8033), (87, 8087), (101, 8147), (111, 8186), (113, 8195),

Gene: Elfy_7 Start: 5675, Stop: 6109, Start Num: 24
Candidate Starts for Elfy_7:
(24, 5675), (43, 5750), (52, 5804), (53, 5816), (66, 5861), (70, 5873), (98, 5999), (99, 6002),

Gene: Etoile_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Etoile_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Evanesce_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Evanesce_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Eyes_8 Start: 6492, Stop: 6875, Start Num: 18
Candidate Starts for Eyes_8:
(Start: 18 @6492 has 6 MA's), (Start: 29 @6513 has 1 MA's), (32, 6528), (33, 6531), (70, 6684), (71, 6687), (100, 6795),

Gene: Ezurina_9 Start: 6254, Stop: 6694, Start Num: 26
Candidate Starts for Ezurina_9:
(Start: 26 @6254 has 124 MA's), (51, 6374), (70, 6452), (112, 6638),

Gene: Fairfaxidum_8 Start: 6551, Stop: 6937, Start Num: 20
Candidate Starts for Fairfaxidum_8:
(Start: 20 @6551 has 42 MA's), (34, 6605), (66, 6719), (70, 6731), (71, 6734), (108, 6887),

Gene: Fenry_8 Start: 6576, Stop: 6968, Start Num: 20
Candidate Starts for Fenry_8:
(13, 6492), (Start: 20 @6576 has 42 MA's), (33, 6624), (51, 6711), (66, 6750), (79, 6804), (85, 6834), (100, 6885), (108, 6918),

Gene: Finkle_8 Start: 6251, Stop: 6634, Start Num: 21
Candidate Starts for Finkle_8:
(Start: 21 @6251 has 2 MA's), (30, 6281), (36, 6311), (71, 6437), (113, 6596),

Gene: FirstPlacePfu_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for FirstPlacePfu_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Fishburne_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Fishburne_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Forge_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Forge_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Francois_12 Start: 8248, Stop: 8640, Start Num: 23
Candidate Starts for Francois_12:
(11, 8146), (Start: 23 @8248 has 13 MA's), (34, 8293),

Gene: FroggyToad_8 Start: 6129, Stop: 6512, Start Num: 26
Candidate Starts for FroggyToad_8:
(Start: 26 @6129 has 124 MA's), (33, 6156), (48, 6216), (66, 6297), (70, 6309), (79, 6351), (82, 6366),
(103, 6444),

Gene: Frokostdame_8 Start: 6562, Stop: 6954, Start Num: 20
Candidate Starts for Frokostdame_8:
(13, 6478), (Start: 20 @6562 has 42 MA's), (66, 6736), (70, 6748), (79, 6790), (98, 6865), (100, 6871),
(108, 6904),

Gene: GEazy_8 Start: 6494, Stop: 6877, Start Num: 18
Candidate Starts for GEazy_8:
(Start: 18 @6494 has 6 MA's), (33, 6533), (70, 6686), (71, 6689), (100, 6797),

Gene: GaloreK_8 Start: 6595, Stop: 6957, Start Num: 26
Candidate Starts for GaloreK_8:
(Start: 26 @6595 has 124 MA's), (67, 6754), (97, 6862), (100, 6871), (106, 6898), (111, 6916),

Gene: Gambino_8 Start: 6443, Stop: 6835, Start Num: 20
Candidate Starts for Gambino_8:
(13, 6359), (Start: 20 @6443 has 42 MA's), (66, 6617), (70, 6629), (79, 6671), (98, 6746), (100, 6752),
(108, 6785),

Gene: Gancho_10 Start: 7683, Stop: 8135, Start Num: 22
Candidate Starts for Gancho_10:
(Start: 22 @7683 has 23 MA's), (Start: 26 @7692 has 124 MA's), (34, 7728), (35, 7740), (42, 7758),
(46, 7776), (61, 7851), (66, 7863), (73, 7890), (77, 7908), (95, 7965), (98, 7983), (99, 7986), (107,
8016), (116, 8055), (119, 8076), (121, 8103), (123, 8127),

Gene: Gavriela_8 Start: 6579, Stop: 6941, Start Num: 26
Candidate Starts for Gavriela_8:
(Start: 26 @6579 has 124 MA's), (41, 6648), (67, 6738), (100, 6855), (106, 6882),

Gene: GemG_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for GemG_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365),
(103, 6443),

Gene: Gerri43_10 Start: 6689, Stop: 7129, Start Num: 26
Candidate Starts for Gerri43_10:
(Start: 26 @6689 has 124 MA's), (51, 6809), (54, 6833), (70, 6887), (112, 7073),

Gene: Giles_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Giles_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040),
(42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283),
(99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Gizermo_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Gizermo_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Glaske_8 Start: 6579, Stop: 6941, Start Num: 26
Candidate Starts for Glaske_8:
(Start: 26 @6579 has 124 MA's), (41, 6648), (67, 6738), (100, 6855), (106, 6882),

Gene: GoodLuckBabe_12 Start: 7734, Stop: 8135, Start Num: 26
Candidate Starts for GoodLuckBabe_12:
(Start: 26 @7734 has 124 MA's), (62, 7902), (68, 7917), (70, 7923), (73, 7938), (87, 7992), (101, 8052), (102, 8055), (109, 8085), (111, 8091), (113, 8100),

Gene: GrandSlam_12 Start: 8267, Stop: 8659, Start Num: 23
Candidate Starts for GrandSlam_12:
(Start: 23 @8267 has 13 MA's), (34, 8312),

Gene: Gravaillia_11 Start: 7716, Stop: 8168, Start Num: 22
Candidate Starts for Gravaillia_11:
(Start: 22 @7716 has 23 MA's), (Start: 26 @7725 has 124 MA's), (34, 7761), (35, 7773), (42, 7791), (46, 7809), (61, 7884), (66, 7896), (73, 7923), (77, 7941), (95, 7998), (98, 8016), (99, 8019), (107, 8049), (116, 8088), (119, 8109), (121, 8136), (123, 8160),

Gene: GreaseLightnin_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for GreaseLightnin_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: GrimEater_9 Start: 5769, Stop: 6197, Start Num: 26
Candidate Starts for GrimEater_9:
(9, 5637), (Start: 26 @5769 has 124 MA's), (60, 5934), (66, 5952), (91, 6057), (112, 6147),

Gene: Guacamole_8 Start: 6571, Stop: 6963, Start Num: 20
Candidate Starts for Guacamole_8:
(13, 6487), (Start: 20 @6571 has 42 MA's), (33, 6619), (51, 6706), (66, 6745), (79, 6799), (85, 6829), (98, 6874), (100, 6880), (108, 6913),

Gene: Guinevere_12 Start: 7765, Stop: 8166, Start Num: 26
Candidate Starts for Guinevere_12:
(Start: 26 @7765 has 124 MA's), (62, 7933), (68, 7948), (70, 7954), (73, 7969), (87, 8023), (101, 8083), (102, 8086), (109, 8116), (111, 8122), (113, 8131),

Gene: Gusanita_10 Start: 7653, Stop: 8054, Start Num: 26
Candidate Starts for Gusanita_10:
(Start: 26 @7653 has 124 MA's), (52, 7779), (62, 7821), (68, 7836), (70, 7842), (73, 7857), (87, 7911), (101, 7971), (104, 7980), (111, 8010), (113, 8019),

Gene: Gwendoluna_19 Start: 14322, Stop: 14771, Start Num: 27
Candidate Starts for Gwendoluna_19:
(Start: 27 @14322 has 9 MA's), (32, 14346), (105, 14658), (118, 14733),

Gene: HH92_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for HH92_11:

(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: HUHilltop_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for HUHilltop_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Hadrien_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Hadrien_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Hail_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Hail_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Haley23_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Haley23_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Halloweekend_10 Start: 7406, Stop: 7807, Start Num: 26
Candidate Starts for Halloweekend_10:
(Start: 26 @7406 has 124 MA's), (62, 7574), (68, 7589), (70, 7595), (73, 7610), (87, 7664), (101, 7724), (109, 7757), (111, 7763), (113, 7772),

Gene: Hamood_12 Start: 8267, Stop: 8659, Start Num: 23
Candidate Starts for Hamood_12:
(Start: 23 @8267 has 13 MA's), (34, 8312),

Gene: HannahD_8 Start: 6494, Stop: 6877, Start Num: 18
Candidate Starts for HannahD_8:
(Start: 18 @6494 has 6 MA's), (33, 6533), (70, 6686), (71, 6689), (100, 6797),

Gene: Hedwig_9 Start: 6888, Stop: 7238, Start Num: 31
Candidate Starts for Hedwig_9:
(Start: 19 @6843 has 5 MA's), (Start: 29 @6876 has 1 MA's), (Start: 31 @6888 has 1 MA's), (66, 7035), (70, 7047), (73, 7062), (99, 7155), (100, 7158),

Gene: Hitter_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for Hitter_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (33, 6615), (51, 6702), (66, 6741), (79, 6795), (85, 6825), (100, 6876), (108, 6909),

Gene: Hortense_8 Start: 6280, Stop: 6651, Start Num: 26
Candidate Starts for Hortense_8:
(Start: 26 @6280 has 124 MA's), (42, 6343), (48, 6367), (52, 6403), (61, 6439), (66, 6451), (70, 6463), (71, 6466), (82, 6520), (88, 6538), (98, 6577), (100, 6583), (103, 6598), (106, 6607),

Gene: Howe_8 Start: 6280, Stop: 6651, Start Num: 26
Candidate Starts for Howe_8:
(Start: 26 @6280 has 124 MA's), (42, 6343), (48, 6367), (52, 6403), (61, 6439), (66, 6451), (70, 6463), (71, 6466), (82, 6520), (88, 6538), (98, 6577), (100, 6583), (103, 6598), (106, 6607),

Gene: Ibrahim_10 Start: 8271, Stop: 8714, Start Num: 17
Candidate Starts for Ibrahim_10:
(6, 8115), (8, 8133), (10, 8211), (Start: 17 @8271 has 7 MA's), (64, 8457), (65, 8460), (69, 8472), (73, 8490), (78, 8511), (80, 8520), (84, 8541), (87, 8550),

Gene: Ichiang_10 Start: 7421, Stop: 7822, Start Num: 26
Candidate Starts for Ichiang_10:
(Start: 26 @7421 has 124 MA's), (62, 7589), (68, 7604), (70, 7610), (73, 7625), (87, 7679), (101, 7739), (102, 7742), (111, 7778), (113, 7787),

Gene: Invectra_9 Start: 6592, Stop: 6975, Start Num: 26
Candidate Starts for Invectra_9:
(Start: 26 @6592 has 124 MA's), (37, 6637), (41, 6652), (45, 6670), (48, 6679), (61, 6748), (70, 6772), (82, 6829),

Gene: IsHungry_12 Start: 7727, Stop: 8128, Start Num: 26
Candidate Starts for IsHungry_12:
(Start: 26 @7727 has 124 MA's), (40, 7784), (49, 7832), (62, 7895), (68, 7910), (70, 7916), (73, 7931), (87, 7985), (101, 8045), (111, 8084), (113, 8093),

Gene: JCole_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for JCole_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Jalammah_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for Jalammah_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (33, 6615), (51, 6702), (66, 6741), (79, 6795), (85, 6825), (100, 6876), (108, 6909),

Gene: Jalleen_8 Start: 6155, Stop: 6511, Start Num: 33
Candidate Starts for Jalleen_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Jankie_9 Start: 5768, Stop: 6196, Start Num: 26
Candidate Starts for Jankie_9:
(9, 5636), (Start: 26 @5768 has 124 MA's), (60, 5933), (66, 5951), (91, 6056), (112, 6146),

Gene: JasperJr_8 Start: 6571, Stop: 6963, Start Num: 20
Candidate Starts for JasperJr_8:
(13, 6487), (Start: 20 @6571 has 42 MA's), (33, 6619), (51, 6706), (66, 6745), (79, 6799), (85, 6829), (98, 6874), (100, 6880), (108, 6913),

Gene: Jebeks_8 Start: 6594, Stop: 6956, Start Num: 26
Candidate Starts for Jebeks_8:
(Start: 26 @6594 has 124 MA's), (67, 6753), (97, 6861), (100, 6870), (106, 6897), (111, 6915),

Gene: JuJu_8 Start: 6492, Stop: 6884, Start Num: 20
Candidate Starts for JuJu_8:
(Start: 20 @6492 has 42 MA's), (42, 6576), (66, 6666), (70, 6678), (79, 6720), (85, 6750), (108, 6834),

Gene: Julie_12 Start: 7990, Stop: 8391, Start Num: 26
Candidate Starts for Julie_12:
(Start: 26 @7990 has 124 MA's), (49, 8095), (68, 8173), (70, 8179), (73, 8194), (87, 8248), (90, 8260), (101, 8308), (111, 8347), (113, 8356),

Gene: Jung_8 Start: 6579, Stop: 6941, Start Num: 26
Candidate Starts for Jung_8:
(Start: 26 @6579 has 124 MA's), (41, 6648), (67, 6738), (100, 6855), (106, 6882),

Gene: Juniormint_8 Start: 6597, Stop: 6959, Start Num: 26
Candidate Starts for Juniormint_8:
(Start: 26 @6597 has 124 MA's), (67, 6756), (97, 6864), (100, 6873), (106, 6900), (111, 6918),

Gene: JustASigh_8 Start: 7097, Stop: 7558, Start Num: 22
Candidate Starts for JustASigh_8:
(15, 7076), (Start: 22 @7097 has 23 MA's), (34, 7142), (46, 7196), (81, 7340), (83, 7349), (84, 7352),

Gene: KappaFarmDelta_8 Start: 6605, Stop: 6997, Start Num: 20
Candidate Starts for KappaFarmDelta_8:
(13, 6521), (14, 6548), (Start: 20 @6605 has 42 MA's), (33, 6653), (51, 6740), (66, 6779), (72, 6803), (79, 6833), (85, 6863), (95, 6890), (100, 6914), (108, 6947),

Gene: Kari_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Kari_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Kihatsu_13 Start: 8087, Stop: 8488, Start Num: 26
Candidate Starts for Kihatsu_13:
(Start: 26 @8087 has 124 MA's), (62, 8255), (68, 8270), (70, 8276), (73, 8291), (87, 8345), (101, 8405), (109, 8438), (111, 8444), (113, 8453),

Gene: Kiko_9 Start: 6686, Stop: 7078, Start Num: 19
Candidate Starts for Kiko_9:
(Start: 19 @6686 has 5 MA's), (30, 6722), (70, 6887), (71, 6890), (100, 6998),

Gene: KilKor_8 Start: 6579, Stop: 6941, Start Num: 26
Candidate Starts for KilKor_8:
(Start: 26 @6579 has 124 MA's), (41, 6648), (67, 6738), (100, 6855), (106, 6882),

Gene: Kinbote_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Kinbote_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Ksquared_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Ksquared_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Lamberg_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Lamberg_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (57, 6278), (66, 6296), (70, 6308), (73, 6323), (103, 6443), (110, 6467),

Gene: Langerak_8 Start: 6594, Stop: 6956, Start Num: 26
Candidate Starts for Langerak_8:
(Start: 26 @6594 has 124 MA's), (67, 6753), (97, 6861), (100, 6870), (106, 6897), (111, 6915),

Gene: LastNadiia_13 Start: 8993, Stop: 9421, Start Num: 26
Candidate Starts for LastNadiia_13:
(Start: 26 @8993 has 124 MA's), (59, 9155), (64, 9170), (70, 9188), (94, 9293), (96, 9299), (112, 9374),

Gene: Lederberg_8 Start: 6443, Stop: 6847, Start Num: 25
Candidate Starts for Lederberg_8:
(Start: 25 @6443 has 8 MA's), (48, 6533), (56, 6590), (70, 6614), (75, 6641), (86, 6686), (92, 6704), (108, 6770),

Gene: Lenoxika_12 Start: 7767, Stop: 8168, Start Num: 26
Candidate Starts for Lenoxika_12:
(Start: 26 @7767 has 124 MA's), (62, 7935), (68, 7950), (70, 7956), (73, 7971), (87, 8025), (101, 8085), (109, 8118), (111, 8124), (113, 8133),

Gene: LilHazelnut_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for LilHazelnut_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: LordFarquaad_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for LordFarquaad_8:
(Start: 26 @6128 has 124 MA's), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Luke_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Luke_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Luna22_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Luna22_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Lysidious_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for Lysidious_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (51, 6702), (66, 6741), (79, 6795), (85, 6825), (98, 6870), (100, 6876), (108, 6909),

Gene: MagicMan_8 Start: 6823, Stop: 7218, Start Num: 16
Candidate Starts for MagicMan_8:
(Start: 16 @6823 has 4 MA's), (Start: 29 @6844 has 1 MA's), (70, 7015), (100, 7126),

Gene: Majeke_8 Start: 6594, Stop: 6956, Start Num: 26
Candidate Starts for Majeke_8:
(Start: 26 @6594 has 124 MA's), (67, 6753), (97, 6861), (100, 6870), (106, 6897), (111, 6915),

Gene: MakCheese_8 Start: 6782, Stop: 7174, Start Num: 27
Candidate Starts for MakCheese_8:
(Start: 27 @6782 has 9 MA's), (37, 6827), (66, 6956), (114, 7145),

Gene: Makima_11 Start: 8080, Stop: 8520, Start Num: 26
Candidate Starts for Makima_11:
(Start: 26 @8080 has 124 MA's), (43, 8152), (70, 8275), (76, 8308), (108, 8446), (110, 8452), (112, 8461),

Gene: Malachai_8 Start: 6570, Stop: 6962, Start Num: 20
Candidate Starts for Malachai_8:
(13, 6486), (14, 6513), (Start: 20 @6570 has 42 MA's), (33, 6618), (51, 6705), (66, 6744), (79, 6798), (85, 6828), (98, 6873), (100, 6879), (108, 6912),

Gene: Malibo_8 Start: 6765, Stop: 7157, Start Num: 27
Candidate Starts for Malibo_8:
(Start: 27 @6765 has 9 MA's), (37, 6810), (66, 6939), (114, 7128),

Gene: Malithi_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Malithi_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Mangethe_8 Start: 6594, Stop: 6956, Start Num: 26
Candidate Starts for Mangethe_8:
(Start: 26 @6594 has 124 MA's), (67, 6753), (97, 6861), (100, 6870), (106, 6897), (111, 6915),

Gene: Matteo_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Matteo_8:
(Start: 26 @6128 has 124 MA's), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Mbo4_8 Start: 6815, Stop: 7189, Start Num: 26
Candidate Starts for Mbo4_8:
(Start: 26 @6815 has 124 MA's), (48, 6905), (70, 6992), (82, 7046), (88, 7064),

Gene: Megiddo_8 Start: 6579, Stop: 6941, Start Num: 26
Candidate Starts for Megiddo_8:
(Start: 26 @6579 has 124 MA's), (41, 6648), (67, 6738), (100, 6855), (106, 6882),

Gene: Melba_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for Melba_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (33, 6615), (51, 6702), (66, 6741), (79, 6795), (85, 6825), (98, 6870), (100, 6876), (108, 6909),

Gene: Mellie_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for Mellie_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (33, 6615), (51, 6702), (66, 6741), (79, 6795), (85, 6825), (98, 6870), (100, 6876), (108, 6909),

Gene: Mendokysei_9 Start: 8237, Stop: 8689, Start Num: 17
Candidate Starts for Mendokysei_9:
(4, 8039), (Start: 17 @8237 has 7 MA's), (50, 8375), (64, 8429), (65, 8432), (69, 8444), (73, 8462), (78, 8483), (80, 8492),

Gene: MichaelScott_9 Start: 6592, Stop: 6975, Start Num: 26
Candidate Starts for MichaelScott_9:
(Start: 26 @6592 has 124 MA's), (37, 6637), (41, 6652), (48, 6679), (61, 6748), (70, 6772), (82, 6829),

Gene: MillySue_12 Start: 7776, Stop: 8177, Start Num: 26
Candidate Starts for MillySue_12:
(Start: 26 @7776 has 124 MA's), (40, 7833), (68, 7959), (70, 7965), (73, 7980), (87, 8034), (101, 8094), (111, 8133), (113, 8142), (115, 8154),

Gene: MintFen_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for MintFen_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (33, 6615), (51, 6702), (66, 6741), (79, 6795), (85, 6825), (98, 6870), (100, 6876), (108, 6909),

Gene: Mireles_10 Start: 6479, Stop: 6916, Start Num: 26
Candidate Starts for Mireles_10:
(Start: 26 @6479 has 124 MA's), (70, 6674), (76, 6707), (108, 6842), (110, 6848), (112, 6857),

Gene: MissRona_8 Start: 6443, Stop: 6835, Start Num: 20
Candidate Starts for MissRona_8:
(13, 6359), (Start: 20 @6443 has 42 MA's), (66, 6617), (70, 6629), (79, 6671), (98, 6746), (100, 6752), (108, 6785),

Gene: Mocha12_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Mocha12_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Moonflower_9 Start: 6920, Stop: 7270, Start Num: 31
Candidate Starts for Moonflower_9:
(Start: 19 @6875 has 5 MA's), (Start: 29 @6908 has 1 MA's), (Start: 31 @6920 has 1 MA's), (66, 7067), (70, 7079), (73, 7094), (100, 7190),

Gene: Mulch_12 Start: 8234, Stop: 8626, Start Num: 23
Candidate Starts for Mulch_12:
(11, 8132), (Start: 23 @8234 has 13 MA's), (34, 8279), (66, 8420),

Gene: Murp_8 Start: 6608, Stop: 7000, Start Num: 20
Candidate Starts for Murp_8:
(13, 6524), (14, 6551), (Start: 20 @6608 has 42 MA's), (33, 6656), (51, 6743), (66, 6782), (79, 6836), (98, 6911), (100, 6917), (108, 6950),

Gene: Nadeem_12 Start: 8234, Stop: 8626, Start Num: 23
Candidate Starts for Nadeem_12:
(11, 8132), (Start: 23 @8234 has 13 MA's), (34, 8279), (66, 8420),

Gene: Nairb_10 Start: 8271, Stop: 8714, Start Num: 17
Candidate Starts for Nairb_10:

(6, 8115), (8, 8133), (10, 8211), (Start: 17 @8271 has 7 MA's), (64, 8457), (65, 8460), (69, 8472), (73, 8490), (78, 8511), (80, 8520), (84, 8541), (87, 8550),

Gene: NancyRae_12 Start: 8234, Stop: 8626, Start Num: 23
Candidate Starts for NancyRae_12:
(11, 8132), (Start: 23 @8234 has 13 MA's), (34, 8279), (66, 8420),

Gene: Nandita_12 Start: 7765, Stop: 8166, Start Num: 26
Candidate Starts for Nandita_12:
(Start: 26 @7765 has 124 MA's), (62, 7933), (68, 7948), (70, 7954), (73, 7969), (87, 8023), (101, 8083), (102, 8086), (109, 8116), (111, 8122), (113, 8131),

Gene: Nazo_8 Start: 6561, Stop: 6923, Start Num: 26
Candidate Starts for Nazo_8:
(Start: 26 @6561 has 124 MA's), (41, 6630), (67, 6720), (70, 6729), (93, 6810), (106, 6864), (111, 6882),

Gene: Necropolis_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Necropolis_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Nette_10 Start: 8246, Stop: 8698, Start Num: 17
Candidate Starts for Nette_10:
(4, 8048), (Start: 17 @8246 has 7 MA's), (50, 8384), (64, 8438), (65, 8441), (69, 8453), (73, 8471), (78, 8492), (80, 8501),

Gene: Nettuno_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Nettuno_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (57, 6278), (66, 6296), (70, 6308), (73, 6323), (103, 6443), (110, 6467),

Gene: Neuvillette_10 Start: 6689, Stop: 7129, Start Num: 26
Candidate Starts for Neuvillette_10:
(Start: 26 @6689 has 124 MA's), (51, 6809), (54, 6833), (70, 6887), (112, 7073),

Gene: NovoPizza_10 Start: 8112, Stop: 8564, Start Num: 21
Candidate Starts for NovoPizza_10:
(Start: 21 @8112 has 2 MA's), (Start: 26 @8124 has 124 MA's), (30, 8142), (34, 8160), (44, 8202), (61, 8280), (66, 8292), (116, 8484), (122, 8535),

Gene: OBUpride_11 Start: 7977, Stop: 8429, Start Num: 22
Candidate Starts for OBUpride_11:
(Start: 22 @7977 has 23 MA's), (Start: 26 @7986 has 124 MA's), (30, 8004), (34, 8022), (35, 8034), (42, 8052), (44, 8064), (46, 8070), (61, 8145), (66, 8157), (73, 8184), (77, 8202), (95, 8259), (98, 8277), (99, 8280), (107, 8310), (116, 8349), (119, 8370), (121, 8397), (123, 8421),

Gene: Obliviate_8 Start: 6591, Stop: 6983, Start Num: 20
Candidate Starts for Obliviate_8:
(13, 6507), (Start: 20 @6591 has 42 MA's), (33, 6639), (51, 6726), (66, 6765), (79, 6819), (85, 6849), (98, 6894), (100, 6900), (108, 6933),

Gene: Ohgeesy_8 Start: 6274, Stop: 6648, Start Num: 26
Candidate Starts for Ohgeesy_8:

(Start: 26 @6274 has 124 MA's), (39, 6328), (48, 6364), (66, 6448), (70, 6460), (71, 6463), (75, 6487), (82, 6517), (98, 6574), (100, 6580), (103, 6595), (106, 6604),

Gene: Opie_8 Start: 6838, Stop: 7233, Start Num: 16
Candidate Starts for Opie_8:
(Start: 16 @6838 has 4 MA's), (Start: 29 @6859 has 1 MA's), (70, 7030), (117, 7213),

Gene: Oregano_9 Start: 6263, Stop: 6646, Start Num: 26
Candidate Starts for Oregano_9:
(Start: 26 @6263 has 124 MA's), (37, 6308), (41, 6323), (45, 6341), (48, 6350), (61, 6419), (70, 6443), (82, 6500),

Gene: PCoral7_8 Start: 6551, Stop: 6937, Start Num: 20
Candidate Starts for PCoral7_8:
(Start: 20 @6551 has 42 MA's), (34, 6605), (66, 6719), (70, 6731), (71, 6734), (108, 6887),

Gene: PantheRoc_8 Start: 6274, Stop: 6648, Start Num: 26
Candidate Starts for PantheRoc_8:
(Start: 26 @6274 has 124 MA's), (48, 6364), (66, 6448), (70, 6460), (71, 6463), (75, 6487), (82, 6517), (98, 6574), (100, 6580), (103, 6595), (106, 6604),

Gene: Parada_12 Start: 8234, Stop: 8626, Start Num: 23
Candidate Starts for Parada_12:
(11, 8132), (Start: 23 @8234 has 13 MA's), (34, 8279), (66, 8420),

Gene: PeanutPie_8 Start: 6583, Stop: 6945, Start Num: 26
Candidate Starts for PeanutPie_8:
(Start: 26 @6583 has 124 MA's), (41, 6652), (67, 6742), (100, 6859), (106, 6886),

Gene: Petra_8 Start: 6473, Stop: 6865, Start Num: 20
Candidate Starts for Petra_8:
(13, 6389), (Start: 20 @6473 has 42 MA's), (66, 6647), (70, 6659), (79, 6701), (98, 6776), (100, 6782), (108, 6815),

Gene: Phalm_8 Start: 6579, Stop: 6941, Start Num: 26
Candidate Starts for Phalm_8:
(Start: 26 @6579 has 124 MA's), (41, 6648), (67, 6738), (100, 6855), (106, 6882),

Gene: Phayonce_8 Start: 6581, Stop: 6943, Start Num: 26
Candidate Starts for Phayonce_8:
(Start: 26 @6581 has 124 MA's), (41, 6650), (67, 6740), (70, 6749), (93, 6830), (106, 6884), (111, 6902),

Gene: Phegasus_8 Start: 6594, Stop: 6956, Start Num: 26
Candidate Starts for Phegasus_8:
(Start: 26 @6594 has 124 MA's), (67, 6753), (97, 6861), (100, 6870), (106, 6897), (111, 6915),

Gene: Phineas_8 Start: 6580, Stop: 6942, Start Num: 26
Candidate Starts for Phineas_8:
(Start: 26 @6580 has 124 MA's), (41, 6649), (67, 6739), (100, 6856), (106, 6883),

Gene: PhriskyACE_8 Start: 6096, Stop: 6479, Start Num: 26
Candidate Starts for PhriskyACE_8:

(Start: 26 @6096 has 124 MA's), (37, 6141), (41, 6156), (45, 6174), (48, 6183), (61, 6252), (66, 6264),
(70, 6276), (82, 6333),

Gene: PhrostedPhlake_8 Start: 6648, Stop: 7040, Start Num: 20
Candidate Starts for PhrostedPhlake_8:
(13, 6564), (Start: 20 @6648 has 42 MA's), (42, 6732), (66, 6822), (70, 6834), (79, 6876), (85, 6906),
(98, 6951), (99, 6954), (100, 6957), (108, 6990),

Gene: Pickett_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Pickett_8:
(Start: 26 @6128 has 124 MA's), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Pimento_13 Start: 8447, Stop: 8830, Start Num: 26
Candidate Starts for Pimento_13:
(Start: 26 @8447 has 124 MA's), (34, 8483), (66, 8624),

Gene: Pipp_8 Start: 6591, Stop: 6983, Start Num: 20
Candidate Starts for Pipp_8:
(13, 6507), (Start: 20 @6591 has 42 MA's), (33, 6639), (51, 6726), (66, 6765), (79, 6819), (85, 6849),
(98, 6894), (100, 6900), (108, 6933),

Gene: Polkaroo_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Polkaroo_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Popper_10 Start: 7293, Stop: 7694, Start Num: 26
Candidate Starts for Popper_10:
(Start: 26 @7293 has 124 MA's), (40, 7350), (62, 7461), (68, 7476), (70, 7482), (73, 7497), (87, 7551),
(101, 7611), (111, 7650), (113, 7659),

Gene: Powerball_8 Start: 6096, Stop: 6479, Start Num: 26
Candidate Starts for Powerball_8:
(Start: 26 @6096 has 124 MA's), (37, 6141), (41, 6156), (45, 6174), (48, 6183), (66, 6264), (70, 6276),
(82, 6333),

Gene: PrincePatrick_8 Start: 6552, Stop: 6938, Start Num: 20
Candidate Starts for PrincePatrick_8:
(Start: 20 @6552 has 42 MA's), (34, 6606), (66, 6720), (70, 6732), (71, 6735), (108, 6888),

Gene: Purky_8 Start: 6597, Stop: 6959, Start Num: 26
Candidate Starts for Purky_8:
(Start: 26 @6597 has 124 MA's), (67, 6756), (93, 6846), (97, 6864), (100, 6873), (106, 6900), (111,
6918),

Gene: Pygmy_8 Start: 6580, Stop: 6942, Start Num: 26
Candidate Starts for Pygmy_8:
(Start: 26 @6580 has 124 MA's), (41, 6649), (67, 6739), (100, 6856), (106, 6883),

Gene: QuinnAvery_12 Start: 7780, Stop: 8181, Start Num: 26
Candidate Starts for QuinnAvery_12:
(Start: 26 @7780 has 124 MA's), (62, 7948), (68, 7963), (70, 7969), (73, 7984), (87, 8038), (101, 8098),
(109, 8131), (111, 8137), (113, 8146),

Gene: REQ2_08 Start: 6272, Stop: 6640, Start Num: 26
Candidate Starts for REQ2_08:
(Start: 26 @6272 has 124 MA's), (28, 6278), (45, 6353), (74, 6476), (89, 6524),

Gene: RayTheFireFly_9 Start: 6909, Stop: 7271, Start Num: 29
Candidate Starts for RayTheFireFly_9:
(Start: 19 @6876 has 5 MA's), (Start: 29 @6909 has 1 MA's), (Start: 31 @6921 has 1 MA's), (66, 7068), (70, 7080), (73, 7095), (100, 7191),

Gene: Rem711_14 Start: 9778, Stop: 10167, Start Num: 21
Candidate Starts for Rem711_14:
(Start: 21 @9778 has 2 MA's), (Start: 29 @9802 has 1 MA's), (34, 9826), (47, 9877), (66, 9958), (73, 9982), (93, 10054),

Gene: Roberts_10 Start: 6689, Stop: 7129, Start Num: 26
Candidate Starts for Roberts_10:
(Start: 26 @6689 has 124 MA's), (51, 6809), (54, 6833), (70, 6887), (112, 7073),

Gene: RonRayGun_10 Start: 8271, Stop: 8714, Start Num: 17
Candidate Starts for RonRayGun_10:
(6, 8115), (8, 8133), (10, 8211), (Start: 17 @8271 has 7 MA's), (64, 8457), (65, 8460), (69, 8472), (73, 8490), (78, 8511), (80, 8520), (84, 8541), (87, 8550),

Gene: Ruotula_16 Start: 13164, Stop: 13610, Start Num: 27
Candidate Starts for Ruotula_16:
(Start: 27 @13164 has 9 MA's), (32, 13188), (105, 13497), (118, 13572),

Gene: Ruthy_9 Start: 7046, Stop: 7438, Start Num: 27
Candidate Starts for Ruthy_9:
(Start: 27 @7046 has 9 MA's), (37, 7091), (58, 7202), (66, 7220),

Gene: Ryan_12 Start: 7911, Stop: 8312, Start Num: 26
Candidate Starts for Ryan_12:
(Start: 26 @7911 has 124 MA's), (62, 8079), (68, 8094), (70, 8100), (73, 8115), (87, 8169), (101, 8229), (102, 8232), (111, 8268), (113, 8277),

Gene: Sahara_8 Start: 6144, Stop: 6527, Start Num: 26
Candidate Starts for Sahara_8:
(Start: 26 @6144 has 124 MA's), (48, 6231), (57, 6294), (66, 6312), (70, 6324), (82, 6381), (103, 6459),

Gene: SamW_8 Start: 6443, Stop: 6847, Start Num: 25
Candidate Starts for SamW_8:
(Start: 25 @6443 has 8 MA's), (48, 6533), (56, 6590), (70, 6614), (75, 6641), (86, 6686), (92, 6704), (108, 6770),

Gene: Samba_8 Start: 6568, Stop: 6960, Start Num: 20
Candidate Starts for Samba_8:
(13, 6484), (Start: 20 @6568 has 42 MA's), (33, 6616), (51, 6703), (66, 6742), (79, 6796), (108, 6910),

Gene: Samman98_9 Start: 6592, Stop: 6975, Start Num: 26
Candidate Starts for Samman98_9:
(Start: 26 @6592 has 124 MA's), (37, 6637), (41, 6652), (45, 6670), (48, 6679), (61, 6748), (70, 6772), (82, 6829),

Gene: Savage_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Savage_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Schism_12 Start: 7765, Stop: 8166, Start Num: 26
Candidate Starts for Schism_12:
(Start: 26 @7765 has 124 MA's), (62, 7933), (68, 7948), (70, 7954), (73, 7969), (87, 8023), (101, 8083), (102, 8086), (109, 8116), (111, 8122), (113, 8131),

Gene: Schnabeltier_8 Start: 6824, Stop: 7219, Start Num: 16
Candidate Starts for Schnabeltier_8:
(Start: 16 @6824 has 4 MA's), (Start: 29 @6845 has 1 MA's), (70, 7016), (100, 7127),

Gene: Sekhmet_9 Start: 6592, Stop: 6975, Start Num: 26
Candidate Starts for Sekhmet_9:
(Start: 26 @6592 has 124 MA's), (37, 6637), (41, 6652), (45, 6670), (48, 6679), (61, 6748), (70, 6772), (82, 6829),

Gene: Shipwreck_8 Start: 6580, Stop: 6942, Start Num: 26
Candidate Starts for Shipwreck_8:
(Start: 26 @6580 has 124 MA's), (41, 6649), (67, 6739), (100, 6856), (106, 6883),

Gene: Shlim410_8 Start: 6280, Stop: 6651, Start Num: 26
Candidate Starts for Shlim410_8:
(Start: 26 @6280 has 124 MA's), (42, 6343), (48, 6367), (52, 6403), (61, 6439), (66, 6451), (70, 6463), (71, 6466), (82, 6520), (88, 6538), (98, 6577), (100, 6583), (103, 6598), (106, 6607),

Gene: Sidious_8 Start: 6277, Stop: 6648, Start Num: 26
Candidate Starts for Sidious_8:
(Start: 26 @6277 has 124 MA's), (48, 6364), (66, 6448), (70, 6460), (71, 6463), (75, 6487), (98, 6574), (100, 6580), (103, 6595), (106, 6604),

Gene: SoilAssassin_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for SoilAssassin_8:
(Start: 26 @6128 has 124 MA's), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Sonah_8 Start: 6594, Stop: 6956, Start Num: 26
Candidate Starts for Sonah_8:
(Start: 26 @6594 has 124 MA's), (67, 6753), (95, 6846), (97, 6861), (100, 6870), (106, 6897), (111, 6915),

Gene: Sprinklemunch_8 Start: 6822, Stop: 7214, Start Num: 27
Candidate Starts for Sprinklemunch_8:
(Start: 27 @6822 has 9 MA's), (37, 6867), (66, 6996), (108, 7164), (114, 7185),

Gene: Sproutie_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Sproutie_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: StAB_8 Start: 6448, Stop: 6852, Start Num: 25

Candidate Starts for StAB_8:
(Start: 25 @6448 has 8 MA's), (48, 6538), (56, 6595), (70, 6619), (75, 6646), (86, 6691), (92, 6709), (108, 6775),

Gene: StevieRay_8 Start: 6583, Stop: 6945, Start Num: 26
Candidate Starts for StevieRay_8:
(Start: 26 @6583 has 124 MA's), (41, 6652), (67, 6742), (100, 6859), (106, 6886),

Gene: Stiles_8 Start: 6442, Stop: 6846, Start Num: 25
Candidate Starts for Stiles_8:
(Start: 25 @6442 has 8 MA's), (48, 6532), (56, 6589), (70, 6613), (75, 6640), (86, 6685), (92, 6703), (108, 6769),

Gene: StressBall_8 Start: 6579, Stop: 6941, Start Num: 26
Candidate Starts for StressBall_8:
(Start: 26 @6579 has 124 MA's), (41, 6648), (67, 6738), (100, 6855), (106, 6882),

Gene: Studio_10 Start: 6445, Stop: 6885, Start Num: 26
Candidate Starts for Studio_10:
(Start: 26 @6445 has 124 MA's), (51, 6565), (70, 6643), (96, 6754), (112, 6829),

Gene: Suerte_8 Start: 6090, Stop: 6473, Start Num: 26
Candidate Starts for Suerte_8:
(Start: 26 @6090 has 124 MA's), (37, 6135), (41, 6150), (45, 6168), (48, 6177), (61, 6246), (70, 6270), (82, 6327),

Gene: TMaxx_10 Start: 6580, Stop: 7008, Start Num: 26
Candidate Starts for TMaxx_10:
(Start: 26 @6580 has 124 MA's), (64, 6757), (70, 6775), (112, 6961),

Gene: TaronosaurasRx_8 Start: 6834, Stop: 7232, Start Num: 16
Candidate Starts for TaronosaurasRx_8:
(Start: 16 @6834 has 4 MA's), (Start: 29 @6858 has 1 MA's), (66, 7017), (70, 7029), (100, 7140), (117, 7212),

Gene: Techage_8 Start: 6597, Stop: 6959, Start Num: 26
Candidate Starts for Techage_8:
(Start: 26 @6597 has 124 MA's), (67, 6756), (97, 6864), (100, 6873), (106, 6900), (111, 6918),

Gene: Thespis_8 Start: 6579, Stop: 6941, Start Num: 26
Candidate Starts for Thespis_8:
(Start: 26 @6579 has 124 MA's), (41, 6648), (67, 6738), (100, 6855), (106, 6882),

Gene: Thimann_9 Start: 6592, Stop: 6975, Start Num: 26
Candidate Starts for Thimann_9:
(Start: 26 @6592 has 124 MA's), (37, 6637), (41, 6652), (45, 6670), (48, 6679), (61, 6748), (70, 6772), (82, 6829),

Gene: ThulaThula_8 Start: 6626, Stop: 6988, Start Num: 26
Candidate Starts for ThulaThula_8:
(Start: 26 @6626 has 124 MA's), (41, 6695), (67, 6785), (70, 6794), (93, 6875), (106, 6929), (111, 6947),

Gene: Toast_8 Start: 6551, Stop: 6937, Start Num: 20
Candidate Starts for Toast_8:
(Start: 20 @6551 has 42 MA's), (34, 6605), (66, 6719), (70, 6731), (71, 6734), (108, 6887),

Gene: ToastyOats_13 Start: 8134, Stop: 8535, Start Num: 26
Candidate Starts for ToastyOats_13:
(Start: 26 @8134 has 124 MA's), (40, 8191), (62, 8302), (68, 8317), (70, 8323), (73, 8338), (87, 8392), (101, 8452), (111, 8491), (113, 8500),

Gene: Toodles_12 Start: 7863, Stop: 8264, Start Num: 26
Candidate Starts for Toodles_12:
(Start: 26 @7863 has 124 MA's), (62, 8031), (68, 8046), (70, 8052), (87, 8121), (101, 8181), (111, 8220), (113, 8229),

Gene: Tortellini_8 Start: 6539, Stop: 6901, Start Num: 26
Candidate Starts for Tortellini_8:
(Start: 26 @6539 has 124 MA's), (64, 6692), (67, 6698), (93, 6788), (97, 6806), (100, 6815), (106, 6842), (111, 6860),

Gene: TripleC_13 Start: 10062, Stop: 10502, Start Num: 26
Candidate Starts for TripleC_13:
(Start: 26 @10062 has 124 MA's), (64, 10239), (70, 10257), (99, 10386), (112, 10443),

Gene: Troy_8 Start: 6443, Stop: 6847, Start Num: 25
Candidate Starts for Troy_8:
(Start: 25 @6443 has 8 MA's), (48, 6533), (56, 6590), (70, 6614), (75, 6641), (86, 6686), (92, 6704), (108, 6770),

Gene: TuertoX_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for TuertoX_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Tuti_10 Start: 6592, Stop: 6975, Start Num: 26
Candidate Starts for Tuti_10:
(Start: 26 @6592 has 124 MA's), (37, 6637), (41, 6652), (48, 6679), (61, 6748), (70, 6772), (82, 6829),

Gene: Twinkle_8 Start: 6280, Stop: 6651, Start Num: 26
Candidate Starts for Twinkle_8:
(Start: 26 @6280 has 124 MA's), (42, 6343), (48, 6367), (52, 6403), (61, 6439), (66, 6451), (70, 6463), (71, 6466), (82, 6520), (88, 6538), (98, 6577), (100, 6583), (103, 6598), (106, 6607),

Gene: Ubuntu_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Ubuntu_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: UmaThurman_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for UmaThurman_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (33, 6615), (51, 6702), (66, 6741), (79, 6795), (108, 6909),

Gene: Utz_8 Start: 6567, Stop: 6959, Start Num: 20

Candidate Starts for Utz_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (51, 6702), (66, 6741), (79, 6795), (85, 6825), (98, 6870), (100, 6876), (108, 6909),

Gene: Vasanti_8 Start: 6132, Stop: 6515, Start Num: 26
Candidate Starts for Vasanti_8:
(Start: 26 @6132 has 124 MA's), (33, 6159), (48, 6219), (66, 6300), (70, 6312), (79, 6354), (103, 6447),

Gene: Venti_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Venti_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Vidya_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Vidya_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Walrus_8 Start: 6479, Stop: 6871, Start Num: 20
Candidate Starts for Walrus_8:
(Start: 20 @6479 has 42 MA's), (51, 6614), (66, 6653), (95, 6764), (108, 6821),

Gene: Webster2_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Webster2_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Weirdo19_9 Start: 6915, Stop: 7337, Start Num: 22
Candidate Starts for Weirdo19_9:
(13, 6825), (Start: 22 @6915 has 23 MA's), (38, 6978), (46, 7011), (58, 7083), (70, 7110), (71, 7113), (72, 7122), (81, 7152), (106, 7248),

Gene: Whack_8 Start: 6270, Stop: 6635, Start Num: 26
Candidate Starts for Whack_8:
(5, 6051), (7, 6072), (12, 6162), (Start: 26 @6270 has 124 MA's), (55, 6396), (66, 6426), (67, 6429), (89, 6507), (99, 6546), (100, 6549),

Gene: WheatThin_12 Start: 8234, Stop: 8626, Start Num: 23
Candidate Starts for WheatThin_12:
(11, 8132), (Start: 23 @8234 has 13 MA's), (34, 8279), (66, 8420),

Gene: Whiteclaw_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Whiteclaw_8:
(Start: 26 @6128 has 124 MA's), (33, 6155), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Whitty_10 Start: 8271, Stop: 8714, Start Num: 17
Candidate Starts for Whitty_10:
(6, 8115), (8, 8133), (10, 8211), (Start: 17 @8271 has 7 MA's), (64, 8457), (65, 8460), (69, 8472), (73, 8490), (78, 8511), (80, 8520), (84, 8541), (87, 8550),

Gene: William_8 Start: 6566, Stop: 6952, Start Num: 20
Candidate Starts for William_8:
(Start: 20 @6566 has 42 MA's), (34, 6620), (66, 6734), (70, 6746), (71, 6749), (108, 6902),

Gene: Willsammy_8 Start: 6582, Stop: 6944, Start Num: 26
Candidate Starts for Willsammy_8:
(Start: 26 @6582 has 124 MA's), (41, 6651), (67, 6741), (100, 6858), (106, 6885),

Gene: WinkNick_9 Start: 6592, Stop: 6975, Start Num: 26
Candidate Starts for WinkNick_9:
(Start: 26 @6592 has 124 MA's), (37, 6637), (41, 6652), (45, 6670), (48, 6679), (61, 6748), (70, 6772), (82, 6829),

Gene: Wishmaker_11 Start: 7983, Stop: 8435, Start Num: 22
Candidate Starts for Wishmaker_11:
(Start: 22 @7983 has 23 MA's), (Start: 26 @7992 has 124 MA's), (30, 8010), (34, 8028), (35, 8040), (42, 8058), (44, 8070), (46, 8076), (61, 8151), (66, 8163), (73, 8190), (77, 8208), (95, 8265), (98, 8283), (99, 8286), (107, 8316), (116, 8355), (119, 8376), (121, 8403), (123, 8427),

Gene: Wisp_8 Start: 6567, Stop: 6959, Start Num: 20
Candidate Starts for Wisp_8:
(13, 6483), (Start: 20 @6567 has 42 MA's), (51, 6702), (66, 6741), (79, 6795), (85, 6825), (98, 6870), (100, 6876), (108, 6909),

Gene: Wocket_8 Start: 6632, Stop: 7024, Start Num: 20
Candidate Starts for Wocket_8:
(13, 6548), (Start: 20 @6632 has 42 MA's), (Start: 29 @6662 has 1 MA's), (33, 6680), (51, 6767), (66, 6806), (72, 6830), (79, 6860), (85, 6890), (98, 6935), (100, 6941), (108, 6974),

Gene: Xavia_8 Start: 6594, Stop: 6956, Start Num: 26
Candidate Starts for Xavia_8:
(Start: 26 @6594 has 124 MA's), (41, 6663), (67, 6753), (100, 6870), (106, 6897),

Gene: Yeet412_8 Start: 6128, Stop: 6511, Start Num: 26
Candidate Starts for Yeet412_8:
(Start: 26 @6128 has 124 MA's), (48, 6215), (66, 6296), (70, 6308), (79, 6350), (82, 6365), (103, 6443),

Gene: Yeezy_8 Start: 6274, Stop: 6645, Start Num: 26
Candidate Starts for Yeezy_8:
(Start: 26 @6274 has 124 MA's), (48, 6361), (66, 6445), (70, 6457), (71, 6460), (75, 6484), (82, 6514), (98, 6571), (100, 6577), (103, 6592), (106, 6601),

Gene: Yonex_12 Start: 7911, Stop: 8312, Start Num: 26
Candidate Starts for Yonex_12:
(Start: 26 @7911 has 124 MA's), (62, 8079), (68, 8094), (70, 8100), (73, 8115), (87, 8169), (101, 8229), (102, 8232), (111, 8268), (113, 8277),

Gene: ZAYM_8 Start: 6827, Stop: 7225, Start Num: 16
Candidate Starts for ZAYM_8:
(Start: 16 @6827 has 4 MA's), (Start: 29 @6851 has 1 MA's), (66, 7010), (70, 7022), (100, 7133),

Gene: Zaheer_12 Start: 8000, Stop: 8401, Start Num: 26
Candidate Starts for Zaheer_12:
(Start: 26 @8000 has 124 MA's), (62, 8168), (68, 8183), (70, 8189), (73, 8204), (87, 8258), (101, 8318), (109, 8351), (111, 8357), (113, 8366),

Gene: Zarbodnamra_8 Start: 6566, Stop: 6958, Start Num: 20
Candidate Starts for Zarbodnamra_8:
(13, 6482), (Start: 20 @6566 has 42 MA's), (33, 6614), (51, 6701), (66, 6740), (79, 6794), (85, 6824), (98, 6869), (100, 6875), (108, 6908),

Gene: ZenTime222_10 Start: 8271, Stop: 8714, Start Num: 17
Candidate Starts for ZenTime222_10:
(6, 8115), (8, 8133), (10, 8211), (Start: 17 @8271 has 7 MA's), (64, 8457), (65, 8460), (69, 8472), (73, 8490), (78, 8511), (80, 8520), (84, 8541), (87, 8550),

Gene: ZiggyZoo_8 Start: 6591, Stop: 6983, Start Num: 20
Candidate Starts for ZiggyZoo_8:
(13, 6507), (Start: 20 @6591 has 42 MA's), (33, 6639), (51, 6726), (66, 6765), (79, 6819), (85, 6849), (98, 6894), (100, 6900), (108, 6933),

Gene: Zilizebeth_8 Start: 6592, Stop: 6954, Start Num: 26
Candidate Starts for Zilizebeth_8:
(Start: 26 @6592 has 124 MA's), (41, 6661), (67, 6751), (100, 6868), (106, 6895),

Gene: Zilla_8 Start: 6619, Stop: 7011, Start Num: 20
Candidate Starts for Zilla_8:
(13, 6535), (Start: 20 @6619 has 42 MA's), (34, 6673), (51, 6754), (66, 6793), (79, 6847), (108, 6961),

Gene: Zodiariah_8 Start: 6772, Stop: 7164, Start Num: 27
Candidate Starts for Zodiariah_8:
(Start: 27 @6772 has 9 MA's), (37, 6817), (66, 6946), (114, 7135),