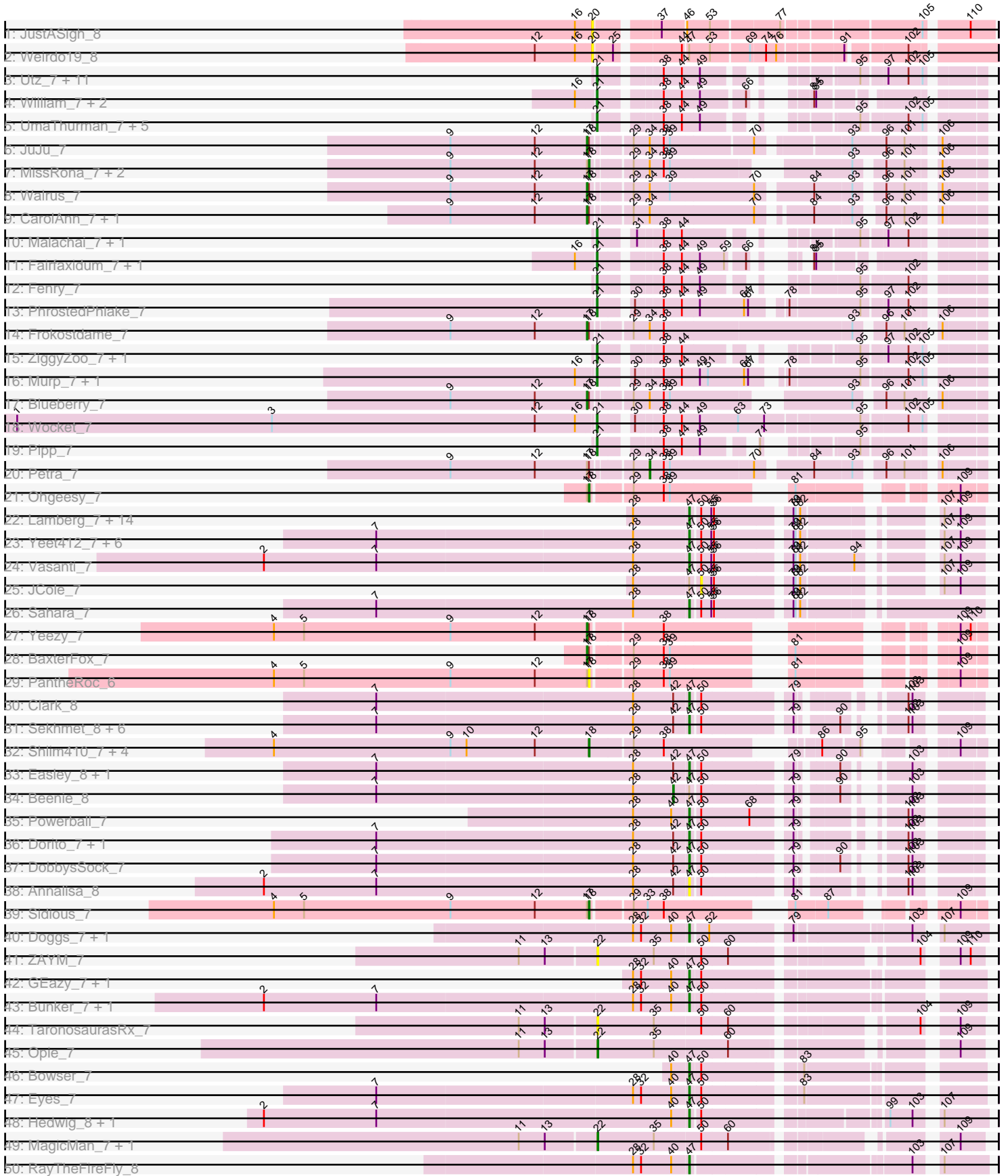
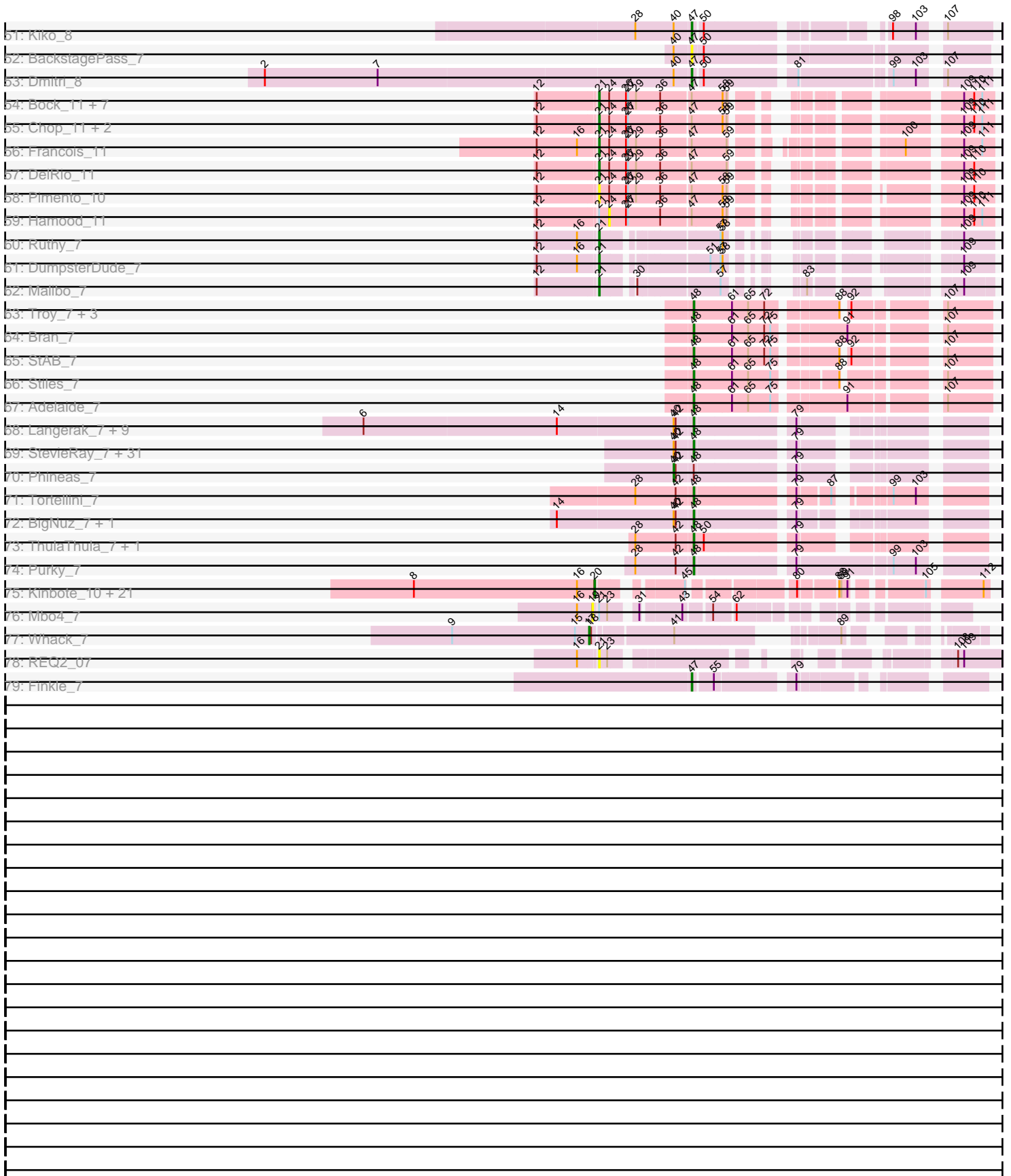


Pham 157584



Pham 157584



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 157584 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157584 has 216 members, 22 are drafts.

Phages represented in each track:

- Track 1 : JustASigh_8
- Track 2 : Weirido19_8
- Track 3 : Utz_7, Delian_7, Zarbodnamra_7, MintFen_7, Guacamole_7, CaptainKirk2_7, Lysidious_7, Melba_7, Barco_7, Wisp_7, BlingBling_7, JasperJr_7
- Track 4 : William_7, PCoral7_7, Toast_7
- Track 5 : UmaThurman_7, Jalammah_7, Archis_7, Mellie_7, Samba_7, Hitter_7
- Track 6 : JuJu_7
- Track 7 : MissRona_7, Azula_7, Gambino_7
- Track 8 : Walrus_7
- Track 9 : CarolAnn_7, Blino_7
- Track 10 : Malachai_7, Begonia_7
- Track 11 : Fairfaxidum_7, PrincePatrick_7
- Track 12 : Fenry_7
- Track 13 : PhrostedPhlake_7
- Track 14 : Frokostdame_7
- Track 15 : ZiggyZoo_7, Obliviate_7
- Track 16 : Murp_7, KappaFarmDelta_7
- Track 17 : Blueberry_7
- Track 18 : Wocket_7
- Track 19 : Pipp_7
- Track 20 : Petra_7
- Track 21 : Ohgeesy_7
- Track 22 : Lamberg_7, Cynthia_7, Clap_7, GemG_7, Denise_7, Mocha12_7, Gizermo_7, Nettuno_7, TuertoX_7, Ebert_7, Savage_7, Sproutie_7, Haley23_7, EdnaMode_7, Whiteclaw_7
- Track 23 : Yeet412_7, Attis_7, SoilAssassin_7, Matteo_7, Bjanes7_7, Pickett_7, LordFarquaad_7
- Track 24 : Vasanti_7
- Track 25 : JCole_7
- Track 26 : Sahara_7
- Track 27 : Yeezy_7
- Track 28 : BaxterFox_7
- Track 29 : PantheRoc_6
- Track 30 : Clark_8
- Track 31 : Sekhmet_8, Oregano_8, Suerte_7, Dolores_8, Samman98_8, Thimann_8, WinkNick_8
- Track 32 : Shlim410_7, Adora_7, Hortense_7, Howe_7, Twinkle_7

- Track 33 : Easley_8, MichaelScott_8
- Track 34 : Beenie_8
- Track 35 : Powerball_7
- Track 36 : Dorito_7, PhriskyACE_7
- Track 37 : DobbysSock_7
- Track 38 : Annalisa_8
- Track 39 : Sidious_7
- Track 40 : Doggs_7, Coriander_8
- Track 41 : ZAYM_7
- Track 42 : GEazy_7, HannahD_7
- Track 43 : Bunker_7, BBQValindra_7
- Track 44 : TaronosaurusRx_7
- Track 45 : Opie_7
- Track 46 : Bowser_7
- Track 47 : Eyes_7
- Track 48 : Hedwig_8, DirtyBoi_8
- Track 49 : MagicMan_7, Schnabeltier_7
- Track 50 : RayTheFireFly_8
- Track 51 : Kiko_8
- Track 52 : BackstagePass_7
- Track 53 : Dmitri_8
- Track 54 : Bock_11, Mulch_11, WheatThin_11, Nadeem_11, BetterKatz_11, Brylie_11, Parada_11, NancyRae_11
- Track 55 : Chop_11, Ayotoya_11, GrandSlam_11
- Track 56 : Francois_11
- Track 57 : DelRio_11
- Track 58 : Pimento_10
- Track 59 : Hamood_11
- Track 60 : Ruthy_7
- Track 61 : DumpsterDude_7
- Track 62 : Malibo_7
- Track 63 : Troy_7, Lederberg_7, SamW_7, Dina_7
- Track 64 : Bran_7
- Track 65 : StAB_7
- Track 66 : Stiles_7
- Track 67 : Adelaide_7
- Track 68 : Langerak_7, Mangethe_7, Sonah_7, Majeke_7, Donovan_7, Jebeks_7, Arib1_7, Phegasus_7, Juniormint_7, Techage_7
- Track 69 : StevieRay_7, Glaske_7, Thespis_7, Venti_7, Dynamo_7, Brusacorram_7, Malithi_7, Bunnies_7, Atcoo_7, Camster_7, Megiddo_7, FirstPlacePfu_7, Polkaroo_7, Pygmy_7, KilKor_7, HUHilltop_7, Necropolis_7, StressBall_7, Xavia_7, Shipwreck_7, Bartholomew_7, GreaseLightnin_7, Bogie_7, CactusJack_7, Zilizebeth_7, Jung_7, Willsammy_7, Fishburne_7, Phalm_7, Kari_7, Ksquared_7, Vidya_7
- Track 70 : Phineas_7
- Track 71 : Tortellini_7
- Track 72 : BigNuz_7, Nazo_7
- Track 73 : ThulaThula_7, Phayonce_7
- Track 74 : Purky_7
- Track 75 : Kinbote_10, HH92_10, Ein37_10, OBUpride_10, Daegal_11, Amochick_10, Luna22_10, Ubuntu_10, Evanesce_10, DeepSoil15_10, Gancho_9, Dewey_10, Amymech_10, Gravaiillia_10, Forge_10, Webster2_10, Giles_10, Wishmaker_10, Luke_10, Hail_10, LilHazelnut_10, Hadrien_10
- Track 76 : Mbo4_7

- Track 77 : Whack_7
- Track 78 : REQ2_07
- Track 79 : Finkle_7

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

The start number called the most often in the published annotations is 48, it was called in 52 of the 194 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adelaide_7, Arib1_7, Atcoo_7, Bartholomew_7, BigNuz_7, Bogie_7, Bran_7, Brusacoram_7, Bunnies_7, CactusJack_7, Camster_7, Dina_7, Donovan_7, Dynamo_7, FirstPlacePfu_7, Fishburne_7, Glaske_7, GreaseLightnin_7, HUHilltop_7, Jebeks_7, Jung_7, Juniormint_7, Kari_7, KillKor_7, Ksquared_7, Langerak_7, Lederberg_7, Majeke_7, Malithi_7, Mangethe_7, Megiddo_7, Nazo_7, Necropolis_7, Phalm_7, Phayonce_7, Phegasus_7, Polkaroo_7, Purky_7, Pygmy_7, SamW_7, Shipwreck_7, Sonah_7, StAB_7, StevieRay_7, Stiles_7, StressBall_7, Techage_7, Thespis_7, ThulaThula_7, Tortellini_7, Troy_7, Venti_7, Vidya_7, Willsammy_7, Xavia_7, Zilizebeth_7,

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

- Phineas_7,

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

- Adora_7, Amochick_10, Amymech_10, Annalisa_8, Archis_7, Attis_7, Ayotoya_11, Azula_7, BBQValindra_7, BackstagePass_7, Barco_7, BaxterFox_7, Beenie_8, Begonia_7, BetterKatz_11, Bjaner7_7, BlingBling_7, Blino_7, Blueberry_7, Bock_11, Bowser_7, Brylie_11, Bunker_7, CaptainKirk2_7, CarolAnn_7, Chop_11, Clap_7, Clark_8, Coriander_8, Cynthia_7, Daegal_11, DeepSoil15_10, DelRio_11, Delian_7, Denise_7, Dewey_10, DirtyBoi_8, Dmitri_8, DobbysSock_7, Doggs_7, Dolores_8, Dorito_7, DumpsterDude_7, Easley_8, Ebert_7, EdnaMode_7, Ein37_10, Evanesce_10, Eyes_7, Fairfaxidum_7, Fenry_7, Finkle_7, Forge_10, Francois_11, Frokostdame_7, GEazy_7, Gambino_7, Gancho_9, GemG_7, Giles_10, Gizermo_7, GrandSlam_11, Gravaillia_10, Guacamole_7, HH92_10, Hadrien_10, Hail_10, Haley23_7, Hamood_11, HannahD_7, Hedwig_8, Hitter_7, Hortense_7, Howe_7, JCole_7, Jalammah_7, JasperJr_7, JuJu_7, JustASigh_8, KappaFarmDelta_7, Kiko_8, Kinbote_10, Lamberg_7, LilHazelnut_10, LordFarquaad_7, Luke_10, Luna22_10, Lysidious_7, MagicMan_7, Malachai_7, Malibo_7, Matteo_7, Mbo4_7, Melba_7, Mellie_7, MichaelScott_8, MintFen_7, MissRona_7, Mocha12_7, Mulch_11, Murp_7, Nadeem_11, NancyRae_11, Nettuno_7, OBUpride_10, Obliviate_7, Ohgeesy_7, Opie_7, Oregano_8, PCoral7_7, PantheRoc_6, Parada_11, Petra_7, PhriskyACE_7, PhrostedPhlake_7, Pickett_7, Pimento_10, Pipp_7, Powerball_7, PrincePatrick_7, REQ2_07, RayTheFireFly_8, Ruthy_7, Sahara_7, Samba_7, Samman98_8, Savage_7, Schnabeltier_7, Sekhmet_8, Shlim410_7, Sidious_7, SoilAssassin_7, Sproutie_7, Suerte_7, TaronosaurusRx_7, Thimann_8, Toast_7, TuertoX_7, Twinkle_7, Ubuntu_10, UmaThurman_7, Utz_7, Vasanti_7, Walrus_7, Webster2_10, Weirdo19_8, Whack_7, WheatThin_11, Whiteclaw_7, William_7, WinkNick_8, Wishmaker_10, Wisp_7, Wocket_7, Yeet412_7, Yeezy_7, ZAYM_7, Zarbodnamra_7, ZiggyZoo_7,

Summary by start number:

Start 17:

- Found in 16 of 216 (7.4%) of genes in pham
- Manual Annotations of this start: 9 of 194
- Called 56.2% of time when present
- Phage (with cluster) where this start called: BaxterFox_7 (CZ3), Blino_7 (CV), Blueberry_7 (CV), CarolAnn_7 (CV), Frokostdame_7 (CV), JuJu_7 (CV), Walrus_7 (CV), Whack_7 (singleton), Yeezy_7 (CZ3),

Start 18:

- Found in 21 of 216 (9.7%) of genes in pham
- Manual Annotations of this start: 10 of 194
- Called 52.4% of time when present
- Phage (with cluster) where this start called: Adora_7 (CZ4), Azula_7 (CV), Gambino_7 (CV), Hortense_7 (CZ4), Howe_7 (CZ4), MissRona_7 (CV), Ohgeesy_7 (CZ), PantheRoc_6 (CZ3), Shlim410_7 (CZ4), Sidious_7 (CZ7), Twinkle_7 (CZ4),

Start 19:

- Found in 1 of 216 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mbo4_7 (singleton),

Start 20:

- Found in 24 of 216 (11.1%) of genes in pham
- Manual Annotations of this start: 21 of 194
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amochick_10 (Q), Amymech_10 (Q), Daegal_11 (Q), DeepSoil15_10 (Q), Dewey_10 (Q), Ein37_10 (Q), Evanesce_10 (Q), Forge_10 (Q), Gancho_9 (Q), Giles_10 (Q), Gravaillia_10 (Q), HH92_10 (Q), Hadrien_10 (Q), Hail_10 (Q), JustASigh_8 (AH), Kinbote_10 (Q), LilHazelNut_10 (Q), Luke_10 (Q), Luna22_10 (Q), OBUpride_10 (Q), Ubuntu_10 (Q), Webster2_10 (Q), Weirdo19_8 (AH), Wishmaker_10 (Q),

Start 21:

- Found in 53 of 216 (24.5%) of genes in pham
- Manual Annotations of this start: 47 of 194
- Called 96.2% of time when present
- Phage (with cluster) where this start called: Archis_7 (CV), Ayotoya_11 (DI), Barco_7 (CV), Begonia_7 (CV), BetterKatz_11 (DI), BlingBling_7 (CV), Bock_11 (DI), Brylie_11 (DI), CaptainKirk2_7 (CV), Chop_11 (DI), DelRio_11 (DI), Delian_7 (CV), DumpsterDude_7 (DW), Fairfaxidum_7 (CV), Fenry_7 (CV), Francois_11 (DI), GrandSlam_11 (DI), Guacamole_7 (CV), Hitter_7 (CV), Jalammah_7 (CV), JasperJr_7 (CV), KappaFarmDelta_7 (CV), Lysidious_7 (CV), Malachai_7 (CV), Malibo_7 (DW), Melba_7 (CV), Mellie_7 (CV), MintFen_7 (CV), Mulch_11 (DI), Murp_7 (CV), Nadeem_11 (DI), NancyRae_11 (DI), Obliviate_7 (CV), PCoral7_7 (CV), Parada_11 (DI), PhrostedPhlake_7 (CV), Pimento_10 (DI), Pipp_7 (CV), PrincePatrick_7 (CV), REQ2_07 (singleton), Ruthy_7 (DW), Samba_7 (CV), Toast_7 (CV), UmaThurman_7 (CV), Utz_7 (CV), WheatThin_11 (DI), William_7 (CV), Wisp_7 (CV), Wocket_7 (CV), Zarbodnamra_7 (CV), ZiggyZoo_7 (CV),

Start 22:

- Found in 5 of 216 (2.3%) of genes in pham
- Manual Annotations of this start: 3 of 194
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MagicMan_7 (DB), Opie_7 (DB), Schnabeltier_7 (DB), TaronosaurusRx_7 (DB), ZAYM_7 (DB),

Start 24:

- Found in 15 of 216 (6.9%) of genes in pham
- No Manual Annotations of this start.
- Called 6.7% of time when present
- Phage (with cluster) where this start called: Hamood_11 (DI),

Start 34:

- Found in 10 of 216 (4.6%) of genes in pham
- Manual Annotations of this start: 1 of 194
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Petra_7 (CV),

Start 40:

- Found in 60 of 216 (27.8%) of genes in pham
- Manual Annotations of this start: 1 of 194
- Called 1.7% of time when present
- Phage (with cluster) where this start called: Phineas_7 (P1),

Start 42:

- Found in 64 of 216 (29.6%) of genes in pham
- Manual Annotations of this start: 1 of 194
- Called 1.6% of time when present
- Phage (with cluster) where this start called: Beenie_8 (CZ4),

Start 47:

- Found in 72 of 216 (33.3%) of genes in pham
- Manual Annotations of this start: 49 of 194
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Annalisa_8 (CZ4), Attis_7 (CZ2), BBQValindra_7 (DB), BackstagePass_7 (DB), Bjaner7_7 (CZ2), Bowser_7 (DB), Bunker_7 (DB), Clap_7 (CZ2), Clark_8 (CZ4), Coriander_8 (DB), Cynthia_7 (CZ2), Denise_7 (CZ5), DirtyBoi_8 (DB), Dmitri_8 (DB), DobbysSock_7 (CZ4), Doggs_7 (DB), Dolores_8 (CZ4), Dorito_7 (CZ4), Easley_8 (CZ4), Ebert_7 (CZ2), EdnaMode_7 (CZ2), Eyes_7 (DB), Finkle_7 (singleton), GEazy_7 (DB), GemG_7 (CZ2), Gizermo_7 (CZ2), Haley23_7 (CZ2), HannahD_7 (DB), Hedwig_8 (DB), Kiko_8 (DB), Lamberg_7 (CZ2), LordFarquaad_7 (CZ2), Matteo_7 (CZ2), MichaelScott_8 (CZ4), Mocha12_7 (CZ2), Nettuno_7 (CZ2), Oregano_8 (CZ4), PhriskyACE_7 (CZ4), Pickett_7 (CZ2), Powerball_7 (CZ4), RayTheFireFly_8 (DB), Sahara_7 (CZ2), Samman98_8 (CZ4), Savage_7 (CZ2), Sekhmet_8 (CZ4), SoilAssassin_7 (CZ2), Sproutie_7 (CZ2), Suerte_7 (CZ4), Thimann_8 (CZ4), TuertoX_7 (CZ2), Vasanti_7 (CZ2), Whiteclaw_7 (CZ2), WinkNick_8 (CZ4), Yeet412_7 (CZ2),

Start 48:

- Found in 57 of 216 (26.4%) of genes in pham
- Manual Annotations of this start: 52 of 194
- Called 98.2% of time when present

- Phage (with cluster) where this start called: Adelaide_7 (EP), Arib1_7 (P1), Atcoo_7 (P1), Bartholomew_7 (P1), BigNuz_7 (P4), Bogie_7 (P1), Bran_7 (EP), Brusacoram_7 (P1), Bunnies_7 (P1), CactusJack_7 (P1), Camster_7 (P1), Dina_7 (EP), Donovan_7 (P1), Dynamo_7 (P1), FirstPlacePfu_7 (P1), Fishburne_7 (P1), Glaske_7 (P1), GreaseLightnin_7 (P1), HUHilltop_7 (P1), Jebeks_7 (P1), Jung_7 (P1), Juniormint_7 (P1), Kari_7 (P1), KilKor_7 (P1), Ksquared_7 (P1), Langerak_7 (P1), Lederberg_7 (EP), Majeke_7 (P1), Malithi_7 (P1), Mangethe_7 (P1), Megiddo_7 (P1), Nazo_7 (P4), Necropolis_7 (P1), Phalm_7 (P1), Phayonce_7 (P5), Phegasus_7 (P1), Polkaroo_7 (P1), Purky_7 (P6), Pygmy_7 (P1), SamW_7 (EP), Shipwreck_7 (P1), Sonah_7 (P1), StAB_7 (EP), StevieRay_7 (P1), Stiles_7 (EP), StressBall_7 (P1), Techage_7 (P1), Thespi_7 (P1), ThulaThula_7 (P5), Tortellini_7 (P2), Troy_7 (EP), Venti_7 (P1), Vidya_7 (P1), Willsammy_7 (P1), Xavia_7 (P3), Zilizebeth_7 (P1),

Start 50:

- Found in 58 of 216 (26.9%) of genes in pham
- No Manual Annotations of this start.
- Called 1.7% of time when present
- Phage (with cluster) where this start called: JCoale_7 (CZ2),

Summary by clusters:

There are 20 clusters represented in this pham: P2, P3, singleton, P1, P6, P4, DI, CZ2, CZ3, P5, DB, CZ7, CZ4, CZ5, Q, CZ, AH, DW, CV, EP,

Info for manual annotations of cluster CV:

- Start number 17 was manually annotated 6 times for cluster CV.
- Start number 18 was manually annotated 3 times for cluster CV.
- Start number 21 was manually annotated 31 times for cluster CV.
- Start number 34 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ:

- Start number 18 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ2:

- Start number 47 was manually annotated 22 times for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 17 was manually annotated 2 times for cluster CZ3.

Info for manual annotations of cluster CZ4:

- Start number 18 was manually annotated 5 times for cluster CZ4.
- Start number 42 was manually annotated 1 time for cluster CZ4.
- Start number 47 was manually annotated 13 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

- Start number 47 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ7:

- Start number 18 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DB:

- Start number 22 was manually annotated 3 times for cluster DB.

- Start number 47 was manually annotated 12 times for cluster DB.

Info for manual annotations of cluster DI:

- Start number 21 was manually annotated 13 times for cluster DI.

Info for manual annotations of cluster DW:

- Start number 21 was manually annotated 3 times for cluster DW.

Info for manual annotations of cluster EP:

- Start number 48 was manually annotated 8 times for cluster EP.

Info for manual annotations of cluster P1:

- Start number 40 was manually annotated 1 time for cluster P1.
- Start number 48 was manually annotated 37 times for cluster P1.

Info for manual annotations of cluster P2:

- Start number 48 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:

- Start number 48 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:

- Start number 48 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 48 was manually annotated 2 times for cluster P5.

Info for manual annotations of cluster P6:

- Start number 48 was manually annotated 1 time for cluster P6.

Info for manual annotations of cluster Q:

- Start number 20 was manually annotated 21 times for cluster Q.

Gene Information:

Gene: Adelaide_7 Start: 6050, Stop: 6430, Start Num: 48

Candidate Starts for Adelaide_7:

(Start: 48 @6050 has 52 MA's), (61, 6104), (65, 6128), (75, 6161), (91, 6254), (107, 6365),

Gene: Adora_7 Start: 5836, Stop: 6276, Start Num: 18

Candidate Starts for Adora_7:

(4, 5365), (9, 5629), (10, 5653), (12, 5755), (Start: 18 @5836 has 10 MA's), (29, 5896), (38, 5941), (86, 6106), (95, 6157), (109, 6241),

Gene: Amochick_10 Start: 7533, Stop: 7973, Start Num: 20

Candidate Starts for Amochick_10:

(8, 7266), (16, 7509), (Start: 20 @7533 has 21 MA's), (45, 7629), (80, 7758), (88, 7806), (89, 7809), (91, 7818), (105, 7899), (112, 7965),

Gene: Amymech_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Amymech_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Annalisa_8 Start: 6265, Stop: 6591, Start Num: 47

Candidate Starts for Annalisa_8:

(2, 5638), (7, 5806), (28, 6184), (Start: 42 @6244 has 1 MA's), (Start: 47 @6265 has 49 MA's), (50, 6277), (79, 6394), (102, 6502), (103, 6508),

Gene: Archis_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for Archis_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (102, 6481), (105, 6499),

Gene: Arib1_7 Start: 6243, Stop: 6590, Start Num: 48

Candidate Starts for Arib1_7:

(6, 5760), (14, 6045), (Start: 40 @6216 has 1 MA's), (Start: 42 @6219 has 1 MA's), (Start: 48 @6243 has 52 MA's), (79, 6372),

Gene: Atcoo_7 Start: 6226, Stop: 6576, Start Num: 48

Candidate Starts for Atcoo_7:

(Start: 40 @6199 has 1 MA's), (Start: 42 @6202 has 1 MA's), (Start: 48 @6226 has 52 MA's), (79, 6355),

Gene: Attis_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Attis_7:

(7, 5315), (28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Ayotoya_11 Start: 8058, Stop: 8519, Start Num: 21

Candidate Starts for Ayotoya_11:

(12, 7974), (Start: 21 @8058 has 47 MA's), (24, 8073), (26, 8097), (27, 8100), (36, 8148), (Start: 47 @8190 has 49 MA's), (58, 8235), (59, 8241), (109, 8475), (110, 8490), (111, 8502),

Gene: Azula_7 Start: 5970, Stop: 6446, Start Num: 18

Candidate Starts for Azula_7:

(9, 5763), (12, 5889), (Start: 17 @5967 has 9 MA's), (Start: 18 @5970 has 10 MA's), (29, 6021), (Start: 34 @6045 has 1 MA's), (38, 6066), (39, 6075), (93, 6291), (96, 6324), (101, 6351), (106, 6387),

Gene: BBQValindra_7 Start: 6114, Stop: 6488, Start Num: 47

Candidate Starts for BBQValindra_7:

(2, 5490), (7, 5658), (28, 6033), (32, 6045), (Start: 40 @6090 has 1 MA's), (Start: 47 @6114 has 49 MA's), (50, 6129),

Gene: BackstagePass_7 Start: 6091, Stop: 6465, Start Num: 47

Candidate Starts for BackstagePass_7:

(Start: 40 @6067 has 1 MA's), (Start: 47 @6091 has 49 MA's), (50, 6106),

Gene: Barco_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for Barco_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (97, 6451), (102, 6481), (105, 6499),

Gene: Bartholomew_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Bartholomew_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: BaxterFox_7 Start: 5821, Stop: 6270, Start Num: 17

Candidate Starts for BaxterFox_7:

(Start: 17 @5821 has 9 MA's), (Start: 18 @5824 has 10 MA's), (29, 5875), (38, 5920), (39, 5929), (81, 6058), (109, 6235),

Gene: Beenie_8 Start: 6244, Stop: 6585, Start Num: 42

Candidate Starts for Beenie_8:

(7, 5806), (28, 6184), (Start: 42 @6244 has 1 MA's), (Start: 47 @6265 has 49 MA's), (50, 6277), (79, 6394), (90, 6442), (103, 6502),

Gene: Begonia_7 Start: 6145, Stop: 6573, Start Num: 21

Candidate Starts for Begonia_7:

(Start: 21 @6145 has 47 MA's), (31, 6187), (38, 6220), (44, 6247), (95, 6421), (97, 6454), (102, 6484),

Gene: BetterKatz_11 Start: 8026, Stop: 8487, Start Num: 21

Candidate Starts for BetterKatz_11:

(12, 7942), (Start: 21 @8026 has 47 MA's), (24, 8041), (26, 8065), (27, 8068), (29, 8080), (36, 8116), (Start: 47 @8158 has 49 MA's), (58, 8203), (59, 8209), (109, 8443), (110, 8458), (111, 8470),

Gene: BigNuz_7 Start: 6216, Stop: 6557, Start Num: 48

Candidate Starts for BigNuz_7:

(14, 6018), (Start: 40 @6189 has 1 MA's), (Start: 42 @6192 has 1 MA's), (Start: 48 @6216 has 52 MA's), (79, 6345),

Gene: Bjaner7_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Bjaner7_7:

(7, 5315), (28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: BlingBling_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for BlingBling_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (97, 6451), (102, 6481), (105, 6499),

Gene: Blino_7 Start: 5970, Stop: 6470, Start Num: 17

Candidate Starts for Blino_7:

(9, 5766), (12, 5892), (Start: 17 @5970 has 9 MA's), (Start: 18 @5973 has 10 MA's), (29, 6024), (Start: 34 @6048 has 1 MA's), (70, 6201), (84, 6264), (93, 6318), (96, 6348), (101, 6375), (106, 6411),

Gene: Blueberry_7 Start: 5967, Stop: 6446, Start Num: 17

Candidate Starts for Blueberry_7:

(9, 5763), (12, 5889), (Start: 17 @5967 has 9 MA's), (Start: 18 @5970 has 10 MA's), (29, 6021), (Start: 34 @6045 has 1 MA's), (38, 6066), (39, 6075), (93, 6291), (96, 6324), (101, 6351), (106, 6387),

Gene: Bock_11 Start: 7776, Stop: 8237, Start Num: 21

Candidate Starts for Bock_11:

(12, 7692), (Start: 21 @7776 has 47 MA's), (24, 7791), (26, 7815), (27, 7818), (29, 7830), (36, 7866), (Start: 47 @7908 has 49 MA's), (58, 7953), (59, 7959), (109, 8193), (110, 8208), (111, 8220),

Gene: Bogie_7 Start: 6226, Stop: 6576, Start Num: 48

Candidate Starts for Bogie_7:

(Start: 40 @6199 has 1 MA's), (Start: 42 @6202 has 1 MA's), (Start: 48 @6226 has 52 MA's), (79, 6355),

Gene: Bowser_7 Start: 6112, Stop: 6486, Start Num: 47

Candidate Starts for Bowser_7:

(Start: 40 @6088 has 1 MA's), (Start: 47 @6112 has 49 MA's), (50, 6127), (83, 6256),

Gene: Bran_7 Start: 6055, Stop: 6435, Start Num: 48

Candidate Starts for Bran_7:

(Start: 48 @6055 has 52 MA's), (61, 6109), (65, 6133), (72, 6157), (75, 6166), (91, 6259), (107, 6370),

Gene: Brusacoram_7 Start: 6225, Stop: 6575, Start Num: 48

Candidate Starts for Brusacoram_7:

(Start: 40 @6198 has 1 MA's), (Start: 42 @6201 has 1 MA's), (Start: 48 @6225 has 52 MA's), (79, 6354),

Gene: Brylie_11 Start: 7773, Stop: 8234, Start Num: 21

Candidate Starts for Brylie_11:

(12, 7689), (Start: 21 @7773 has 47 MA's), (24, 7788), (26, 7812), (27, 7815), (29, 7827), (36, 7863), (Start: 47 @7905 has 49 MA's), (58, 7950), (59, 7956), (109, 8190), (110, 8205), (111, 8217),

Gene: Bunker_7 Start: 6114, Stop: 6488, Start Num: 47

Candidate Starts for Bunker_7:

(2, 5490), (7, 5658), (28, 6033), (32, 6045), (Start: 40 @6090 has 1 MA's), (Start: 47 @6114 has 49 MA's), (50, 6129),

Gene: Bunnies_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Bunnies_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: CactusJack_7 Start: 6225, Stop: 6575, Start Num: 48

Candidate Starts for CactusJack_7:

(Start: 40 @6198 has 1 MA's), (Start: 42 @6201 has 1 MA's), (Start: 48 @6225 has 52 MA's), (79, 6354),

Gene: Camster_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Camster_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: CaptainKirk2_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for CaptainKirk2_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (97, 6451), (102, 6481), (105, 6499),

Gene: CarolAnn_7 Start: 5969, Stop: 6469, Start Num: 17

Candidate Starts for CarolAnn_7:

(9, 5765), (12, 5891), (Start: 17 @5969 has 9 MA's), (Start: 18 @5972 has 10 MA's), (29, 6023), (Start: 34 @6047 has 1 MA's), (70, 6200), (84, 6263), (93, 6317), (96, 6347), (101, 6374), (106, 6410),

Gene: Chop_11 Start: 7806, Stop: 8267, Start Num: 21

Candidate Starts for Chop_11:

(12, 7722), (Start: 21 @7806 has 47 MA's), (24, 7821), (26, 7845), (27, 7848), (36, 7896), (Start: 47 @7938 has 49 MA's), (58, 7983), (59, 7989), (109, 8223), (110, 8238), (111, 8250),

Gene: Clap_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Clap_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Clark_8 Start: 6265, Stop: 6591, Start Num: 47

Candidate Starts for Clark_8:

(7, 5806), (28, 6184), (Start: 42 @6244 has 1 MA's), (Start: 47 @6265 has 49 MA's), (50, 6277), (79, 6394), (102, 6502), (103, 6508),

Gene: Coriander_8 Start: 6499, Stop: 6873, Start Num: 47

Candidate Starts for Coriander_8:

(28, 6418), (32, 6430), (Start: 40 @6475 has 1 MA's), (Start: 47 @6499 has 49 MA's), (52, 6523), (79, 6628), (103, 6784), (107, 6808),

Gene: Cynthia_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Cynthia_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Daegal_11 Start: 7830, Stop: 8270, Start Num: 20

Candidate Starts for Daegal_11:

(8, 7563), (16, 7806), (Start: 20 @7830 has 21 MA's), (45, 7926), (80, 8055), (88, 8103), (89, 8106), (91, 8115), (105, 8196), (112, 8262),

Gene: DeepSoil15_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for DeepSoil15_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: DelRio_11 Start: 8070, Stop: 8531, Start Num: 21

Candidate Starts for DelRio_11:

(12, 7986), (Start: 21 @8070 has 47 MA's), (24, 8085), (26, 8109), (27, 8112), (29, 8124), (36, 8160), (Start: 47 @8202 has 49 MA's), (59, 8253), (109, 8487), (110, 8502),

Gene: Delian_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for Delian_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (97, 6451), (102, 6481), (105, 6499),

Gene: Denise_7 Start: 5783, Stop: 6130, Start Num: 47

Candidate Starts for Denise_7:

(28, 5702), (Start: 47 @5783 has 49 MA's), (50, 5795), (55, 5810), (56, 5813), (79, 5912), (81, 5915), (82, 5918), (107, 6071), (109, 6095),

Gene: Dewey_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Dewey_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Dina_7 Start: 6050, Stop: 6418, Start Num: 48

Candidate Starts for Dina_7:

(Start: 48 @6050 has 52 MA's), (61, 6104), (65, 6128), (72, 6152), (88, 6242), (92, 6248), (107, 6353),

Gene: DirtyBoi_8 Start: 6478, Stop: 6846, Start Num: 47

Candidate Starts for DirtyBoi_8:

(2, 5854), (7, 6022), (Start: 40 @6454 has 1 MA's), (Start: 47 @6478 has 49 MA's), (50, 6490), (99, 6724), (103, 6757), (107, 6781),

Gene: Dmitri_8 Start: 6478, Stop: 6855, Start Num: 47

Candidate Starts for Dmitri_8:

(2, 5854), (7, 6022), (Start: 40 @6454 has 1 MA's), (Start: 47 @6478 has 49 MA's), (50, 6490), (81, 6610), (99, 6733), (103, 6766), (107, 6790),

Gene: DobbysSock_7 Start: 5763, Stop: 6083, Start Num: 47

Candidate Starts for DobbysSock_7:

(7, 5304), (28, 5682), (Start: 42 @5742 has 1 MA's), (Start: 47 @5763 has 49 MA's), (50, 5775), (79, 5892), (90, 5940), (102, 5994), (103, 6000),

Gene: Doggs_7 Start: 6196, Stop: 6570, Start Num: 47

Candidate Starts for Doggs_7:

(28, 6115), (32, 6127), (Start: 40 @6172 has 1 MA's), (Start: 47 @6196 has 49 MA's), (52, 6220), (79, 6325), (103, 6481), (107, 6505),

Gene: Dolores_8 Start: 6265, Stop: 6585, Start Num: 47

Candidate Starts for Dolores_8:

(7, 5806), (28, 6184), (Start: 42 @6244 has 1 MA's), (Start: 47 @6265 has 49 MA's), (50, 6277), (79, 6394), (90, 6442), (102, 6496), (103, 6502),

Gene: Donovan_7 Start: 6243, Stop: 6590, Start Num: 48

Candidate Starts for Donovan_7:

(6, 5760), (14, 6045), (Start: 40 @6216 has 1 MA's), (Start: 42 @6219 has 1 MA's), (Start: 48 @6243 has 52 MA's), (79, 6372),

Gene: Dorito_7 Start: 5763, Stop: 6089, Start Num: 47

Candidate Starts for Dorito_7:

(7, 5304), (28, 5682), (Start: 42 @5742 has 1 MA's), (Start: 47 @5763 has 49 MA's), (50, 5775), (79, 5892), (102, 6000), (103, 6006),

Gene: DumpsterDude_7 Start: 6346, Stop: 6756, Start Num: 21

Candidate Starts for DumpsterDude_7:

(12, 6262), (16, 6322), (Start: 21 @6346 has 47 MA's), (51, 6481), (57, 6496), (58, 6499), (109, 6712),

Gene: Dynamo_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Dynamo_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Easley_8 Start: 6265, Stop: 6585, Start Num: 47

Candidate Starts for Easley_8:

(7, 5806), (28, 6184), (Start: 42 @6244 has 1 MA's), (Start: 47 @6265 has 49 MA's), (50, 6277), (79, 6394), (90, 6442), (103, 6502),

Gene: Ebert_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Ebert_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: EdnaMode_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for EdnaMode_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Ein37_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Ein37_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Evanesce_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Evanesce_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Eyes_7 Start: 6121, Stop: 6495, Start Num: 47

Candidate Starts for Eyes_7:

(7, 5665), (28, 6040), (32, 6052), (Start: 40 @6097 has 1 MA's), (Start: 47 @6121 has 49 MA's), (50, 6136), (83, 6265),

Gene: Fairfaxidum_7 Start: 6141, Stop: 6554, Start Num: 21

Candidate Starts for Fairfaxidum_7:

(16, 6114), (Start: 21 @6141 has 47 MA's), (38, 6216), (44, 6243), (49, 6267), (59, 6303), (66, 6327), (84, 6354), (85, 6357),

Gene: Fenry_7 Start: 6145, Stop: 6579, Start Num: 21

Candidate Starts for Fenry_7:

(Start: 21 @6145 has 47 MA's), (38, 6220), (44, 6247), (49, 6271), (95, 6427), (102, 6490),

Gene: Finkle_7 Start: 5910, Stop: 6254, Start Num: 47

Candidate Starts for Finkle_7:

(Start: 47 @5910 has 49 MA's), (55, 5937), (79, 6036),

Gene: FirstPlacePfu_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for FirstPlacePfu_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Fishburne_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Fishburne_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Forge_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Forge_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Francois_11 Start: 7775, Stop: 8248, Start Num: 21

Candidate Starts for Francois_11:

(12, 7691), (16, 7751), (Start: 21 @7775 has 47 MA's), (24, 7790), (26, 7814), (27, 7817), (29, 7829), (36, 7865), (Start: 47 @7907 has 49 MA's), (59, 7958), (100, 8135), (109, 8204), (111, 8231),

Gene: Frokostdame_7 Start: 6038, Stop: 6565, Start Num: 17

Candidate Starts for Frokostdame_7:

(9, 5834), (12, 5960), (Start: 17 @6038 has 9 MA's), (Start: 18 @6041 has 10 MA's), (29, 6092), (Start: 34 @6116 has 1 MA's), (38, 6137), (93, 6410), (96, 6443), (101, 6470), (106, 6506),

Gene: GEazy_7 Start: 6123, Stop: 6497, Start Num: 47

Candidate Starts for GEazy_7:

(28, 6042), (32, 6054), (Start: 40 @6099 has 1 MA's), (Start: 47 @6123 has 49 MA's), (50, 6138),

Gene: Gambino_7 Start: 5970, Stop: 6446, Start Num: 18

Candidate Starts for Gambino_7:

(9, 5763), (12, 5889), (Start: 17 @5967 has 9 MA's), (Start: 18 @5970 has 10 MA's), (29, 6021), (Start: 34 @6045 has 1 MA's), (38, 6066), (39, 6075), (93, 6291), (96, 6324), (101, 6351), (106, 6387),

Gene: Gancho_9 Start: 7239, Stop: 7679, Start Num: 20

Candidate Starts for Gancho_9:

(8, 6972), (16, 7215), (Start: 20 @7239 has 21 MA's), (45, 7335), (80, 7464), (88, 7512), (89, 7515), (91, 7524), (105, 7605), (112, 7671),

Gene: GemG_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for GemG_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Giles_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Giles_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Gizermo_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Gizermo_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Glaske_7 Start: 6225, Stop: 6575, Start Num: 48

Candidate Starts for Glaske_7:

(Start: 40 @6198 has 1 MA's), (Start: 42 @6201 has 1 MA's), (Start: 48 @6225 has 52 MA's), (79, 6354),

Gene: GrandSlam_11 Start: 7806, Stop: 8267, Start Num: 21

Candidate Starts for GrandSlam_11:

(12, 7722), (Start: 21 @7806 has 47 MA's), (24, 7821), (26, 7845), (27, 7848), (36, 7896), (Start: 47 @7938 has 49 MA's), (58, 7983), (59, 7989), (109, 8223), (110, 8238), (111, 8250),

Gene: Gravaillia_10 Start: 7272, Stop: 7712, Start Num: 20

Candidate Starts for Gravaillia_10:

(8, 7005), (16, 7248), (Start: 20 @7272 has 21 MA's), (45, 7368), (80, 7497), (88, 7545), (89, 7548), (91, 7557), (105, 7638), (112, 7704),

Gene: GreaseLightnin_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for GreaseLightnin_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Guacamole_7 Start: 6146, Stop: 6574, Start Num: 21

Candidate Starts for Guacamole_7:

(Start: 21 @6146 has 47 MA's), (38, 6221), (44, 6248), (49, 6272), (95, 6422), (97, 6455), (102, 6485), (105, 6503),

Gene: HH92_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for HH92_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: HUHilltop_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for HUHilltop_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Hadrien_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Hadrien_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Hail_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Hail_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Haley23_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Haley23_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Hamood_11 Start: 7821, Stop: 8267, Start Num: 24

Candidate Starts for Hamood_11:

(12, 7722), (Start: 21 @7806 has 47 MA's), (24, 7821), (26, 7845), (27, 7848), (36, 7896), (Start: 47 @7938 has 49 MA's), (58, 7983), (59, 7989), (109, 8223), (110, 8238), (111, 8250),

Gene: HannahD_7 Start: 6123, Stop: 6497, Start Num: 47

Candidate Starts for HannahD_7:

(28, 6042), (32, 6054), (Start: 40 @6099 has 1 MA's), (Start: 47 @6123 has 49 MA's), (50, 6138),

Gene: Hedwig_8 Start: 6478, Stop: 6846, Start Num: 47

Candidate Starts for Hedwig_8:

(2, 5854), (7, 6022), (Start: 40 @6454 has 1 MA's), (Start: 47 @6478 has 49 MA's), (50, 6490), (99, 6724), (103, 6757), (107, 6781),

Gene: Hitter_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for Hitter_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (102, 6481), (105, 6499),

Gene: Hortense_7 Start: 5836, Stop: 6276, Start Num: 18

Candidate Starts for Hortense_7:

(4, 5365), (9, 5629), (10, 5653), (12, 5755), (Start: 18 @5836 has 10 MA's), (29, 5896), (38, 5941), (86, 6106), (95, 6157), (109, 6241),

Gene: Howe_7 Start: 5836, Stop: 6276, Start Num: 18

Candidate Starts for Howe_7:

(4, 5365), (9, 5629), (10, 5653), (12, 5755), (Start: 18 @5836 has 10 MA's), (29, 5896), (38, 5941), (86, 6106), (95, 6157), (109, 6241),

Gene: JCole_7 Start: 5786, Stop: 6121, Start Num: 50

Candidate Starts for JCole_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Jalammah_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for Jalammah_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (102, 6481), (105, 6499),

Gene: JasperJr_7 Start: 6146, Stop: 6574, Start Num: 21

Candidate Starts for JasperJr_7:

(Start: 21 @6146 has 47 MA's), (38, 6221), (44, 6248), (49, 6272), (95, 6422), (97, 6455), (102, 6485), (105, 6503),

Gene: Jebeks_7 Start: 6243, Stop: 6590, Start Num: 48

Candidate Starts for Jebeks_7:

(6, 5760), (14, 6045), (Start: 40 @6216 has 1 MA's), (Start: 42 @6219 has 1 MA's), (Start: 48 @6243 has 52 MA's), (79, 6372),

Gene: JuJu_7 Start: 5980, Stop: 6495, Start Num: 17

Candidate Starts for JuJu_7:

(9, 5776), (12, 5902), (Start: 17 @5980 has 9 MA's), (Start: 18 @5983 has 10 MA's), (29, 6034), (Start: 34 @6058 has 1 MA's), (38, 6079), (39, 6088), (70, 6205), (93, 6322), (96, 6373), (101, 6400), (106, 6436),

Gene: Jung_7 Start: 6225, Stop: 6575, Start Num: 48

Candidate Starts for Jung_7:

(Start: 40 @6198 has 1 MA's), (Start: 42 @6201 has 1 MA's), (Start: 48 @6225 has 52 MA's), (79, 6354),

Gene: Juniormint_7 Start: 6246, Stop: 6593, Start Num: 48

Candidate Starts for Juniormint_7:

(6, 5763), (14, 6048), (Start: 40 @6219 has 1 MA's), (Start: 42 @6222 has 1 MA's), (Start: 48 @6246 has 52 MA's), (79, 6375),

Gene: JustASigh_8 Start: 6534, Stop: 7046, Start Num: 20

Candidate Starts for JustASigh_8:

(16, 6510), (Start: 20 @6534 has 21 MA's), (37, 6612), (46, 6645), (53, 6678), (77, 6774), (105, 6957), (110, 7011),

Gene: KappaFarmDelta_7 Start: 6123, Stop: 6608, Start Num: 21

Candidate Starts for KappaFarmDelta_7:

(16, 6099), (Start: 21 @6123 has 47 MA's), (30, 6162), (38, 6198), (44, 6225), (49, 6249), (51, 6261), (64, 6315), (67, 6321), (78, 6354), (95, 6456), (102, 6519), (105, 6537),

Gene: Kari_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Kari_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Kiko_8 Start: 6339, Stop: 6689, Start Num: 47

Candidate Starts for Kiko_8:

(28, 6258), (Start: 40 @6315 has 1 MA's), (Start: 47 @6339 has 49 MA's), (50, 6351), (98, 6567), (103, 6600), (107, 6624),

Gene: KilKor_7 Start: 6225, Stop: 6575, Start Num: 48

Candidate Starts for KilKor_7:

(Start: 40 @6198 has 1 MA's), (Start: 42 @6201 has 1 MA's), (Start: 48 @6225 has 52 MA's), (79, 6354),

Gene: Kinbote_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Kinbote_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Ksquared_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Ksquared_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Lamberg_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Lamberg_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Langerak_7 Start: 6243, Stop: 6590, Start Num: 48

Candidate Starts for Langerak_7:

(6, 5760), (14, 6045), (Start: 40 @6216 has 1 MA's), (Start: 42 @6219 has 1 MA's), (Start: 48 @6243 has 52 MA's), (79, 6372),

Gene: Lederberg_7 Start: 6050, Stop: 6418, Start Num: 48

Candidate Starts for Lederberg_7:

(Start: 48 @6050 has 52 MA's), (61, 6104), (65, 6128), (72, 6152), (88, 6242), (92, 6248), (107, 6353),

Gene: LilHazelnut_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for LilHazelnut_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: LordFarquaad_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for LordFarquaad_7:

(7, 5315), (28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Luke_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Luke_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Luna22_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Luna22_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Lysidious_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for Lysidious_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (97, 6451), (102, 6481), (105, 6499),

Gene: MagicMan_7 Start: 6338, Stop: 6826, Start Num: 22

Candidate Starts for MagicMan_7:

(11, 6227), (13, 6266), (Start: 22 @6338 has 3 MA's), (35, 6422), (50, 6488), (60, 6527), (109, 6791),

Gene: Majeke_7 Start: 6243, Stop: 6590, Start Num: 48

Candidate Starts for Majeke_7:

(6, 5760), (14, 6045), (Start: 40 @6216 has 1 MA's), (Start: 42 @6219 has 1 MA's), (Start: 48 @6243 has 52 MA's), (79, 6372),

Gene: Malachai_7 Start: 6145, Stop: 6573, Start Num: 21

Candidate Starts for Malachai_7:

(Start: 21 @6145 has 47 MA's), (31, 6187), (38, 6220), (44, 6247), (95, 6421), (97, 6454), (102, 6484),

Gene: Malibo_7 Start: 6358, Stop: 6762, Start Num: 21

Candidate Starts for Malibo_7:

(12, 6274), (Start: 21 @6358 has 47 MA's), (30, 6397), (57, 6508), (83, 6556), (109, 6721),

Gene: Malithi_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Malithi_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Mangethe_7 Start: 6243, Stop: 6590, Start Num: 48

Candidate Starts for Mangethe_7:

(6, 5760), (14, 6045), (Start: 40 @6216 has 1 MA's), (Start: 42 @6219 has 1 MA's), (Start: 48 @6243 has 52 MA's), (79, 6372),

Gene: Matteo_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Matteo_7:

(7, 5315), (28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Mbo4_7 Start: 6382, Stop: 6798, Start Num: 19

Candidate Starts for Mbo4_7:

(16, 6361), (19, 6382), (Start: 21 @6388 has 47 MA's), (23, 6400), (31, 6430), (43, 6481), (54, 6514), (62, 6541),

Gene: Megiddo_7 Start: 6225, Stop: 6575, Start Num: 48

Candidate Starts for Megiddo_7:

(Start: 40 @6198 has 1 MA's), (Start: 42 @6201 has 1 MA's), (Start: 48 @6225 has 52 MA's), (79, 6354),

Gene: Melba_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for Melba_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (97, 6451), (102, 6481), (105, 6499),

Gene: Mellie_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for Mellie_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (102, 6481), (105, 6499),

Gene: MichaelScott_8 Start: 6265, Stop: 6585, Start Num: 47

Candidate Starts for MichaelScott_8:

(7, 5806), (28, 6184), (Start: 42 @6244 has 1 MA's), (Start: 47 @6265 has 49 MA's), (50, 6277), (79, 6394), (90, 6442), (103, 6502),

Gene: MintFen_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for MintFen_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (97, 6451), (102, 6481), (105, 6499),

Gene: MissRona_7 Start: 5970, Stop: 6446, Start Num: 18

Candidate Starts for MissRona_7:

(9, 5763), (12, 5889), (Start: 17 @5967 has 9 MA's), (Start: 18 @5970 has 10 MA's), (29, 6021), (Start: 34 @6045 has 1 MA's), (38, 6066), (39, 6075), (93, 6291), (96, 6324), (101, 6351), (106, 6387),

Gene: Mocha12_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Mocha12_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Mulch_11 Start: 7773, Stop: 8234, Start Num: 21

Candidate Starts for Mulch_11:

(12, 7689), (Start: 21 @7773 has 47 MA's), (24, 7788), (26, 7812), (27, 7815), (29, 7827), (36, 7863), (Start: 47 @7905 has 49 MA's), (58, 7950), (59, 7956), (109, 8190), (110, 8205), (111, 8217),

Gene: Murp_7 Start: 6126, Stop: 6611, Start Num: 21

Candidate Starts for Murp_7:

(16, 6102), (Start: 21 @6126 has 47 MA's), (30, 6165), (38, 6201), (44, 6228), (49, 6252), (51, 6264), (64, 6318), (67, 6324), (78, 6357), (95, 6459), (102, 6522), (105, 6540),

Gene: Nadeem_11 Start: 7773, Stop: 8234, Start Num: 21

Candidate Starts for Nadeem_11:

(12, 7689), (Start: 21 @7773 has 47 MA's), (24, 7788), (26, 7812), (27, 7815), (29, 7827), (36, 7863), (Start: 47 @7905 has 49 MA's), (58, 7950), (59, 7956), (109, 8190), (110, 8205), (111, 8217),

Gene: NancyRae_11 Start: 7773, Stop: 8234, Start Num: 21

Candidate Starts for NancyRae_11:

(12, 7689), (Start: 21 @7773 has 47 MA's), (24, 7788), (26, 7812), (27, 7815), (29, 7827), (36, 7863), (Start: 47 @7905 has 49 MA's), (58, 7950), (59, 7956), (109, 8190), (110, 8205), (111, 8217),

Gene: Nazo_7 Start: 6216, Stop: 6557, Start Num: 48

Candidate Starts for Nazo_7:

(14, 6018), (Start: 40 @6189 has 1 MA's), (Start: 42 @6192 has 1 MA's), (Start: 48 @6216 has 52 MA's), (79, 6345),

Gene: Necropolis_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Necropolis_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Nettuno_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Nettuno_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: OBUpride_10 Start: 7533, Stop: 7973, Start Num: 20

Candidate Starts for OBUpride_10:

(8, 7266), (16, 7509), (Start: 20 @7533 has 21 MA's), (45, 7629), (80, 7758), (88, 7806), (89, 7809), (91, 7818), (105, 7899), (112, 7965),

Gene: Obliviate_7 Start: 6166, Stop: 6594, Start Num: 21

Candidate Starts for Obliviate_7:

(Start: 21 @6166 has 47 MA's), (38, 6241), (44, 6268), (95, 6442), (97, 6475), (102, 6505), (105, 6523),

Gene: Ohgeesy_7 Start: 5824, Stop: 6270, Start Num: 18

Candidate Starts for Ohgeesy_7:

(Start: 17 @5821 has 9 MA's), (Start: 18 @5824 has 10 MA's), (29, 5875), (38, 5920), (39, 5929), (81, 6058), (109, 6235),

Gene: Opie_7 Start: 6347, Stop: 6841, Start Num: 22

Candidate Starts for Opie_7:

(11, 6236), (13, 6275), (Start: 22 @6347 has 3 MA's), (35, 6431), (60, 6536), (109, 6806),

Gene: Oregano_8 Start: 5936, Stop: 6256, Start Num: 47

Candidate Starts for Oregano_8:

(7, 5477), (28, 5855), (Start: 42 @5915 has 1 MA's), (Start: 47 @5936 has 49 MA's), (50, 5948), (79, 6065), (90, 6113), (102, 6167), (103, 6173),

Gene: PCoral7_7 Start: 6141, Stop: 6554, Start Num: 21

Candidate Starts for PCoral7_7:

(16, 6114), (Start: 21 @6141 has 47 MA's), (38, 6216), (44, 6243), (49, 6267), (66, 6327), (84, 6354), (85, 6357),

Gene: PantheRoc_6 Start: 5824, Stop: 6270, Start Num: 18

Candidate Starts for PantheRoc_6:

(4, 5353), (5, 5398), (9, 5617), (12, 5743), (Start: 17 @5821 has 9 MA's), (Start: 18 @5824 has 10 MA's), (29, 5875), (38, 5920), (39, 5929), (81, 6058), (109, 6235),

Gene: Parada_11 Start: 7773, Stop: 8234, Start Num: 21

Candidate Starts for Parada_11:

(12, 7689), (Start: 21 @7773 has 47 MA's), (24, 7788), (26, 7812), (27, 7815), (29, 7827), (36, 7863), (Start: 47 @7905 has 49 MA's), (58, 7950), (59, 7956), (109, 8190), (110, 8205), (111, 8217),

Gene: Petra_7 Start: 6045, Stop: 6476, Start Num: 34

Candidate Starts for Petra_7:

(9, 5763), (12, 5889), (Start: 17 @5967 has 9 MA's), (Start: 18 @5970 has 10 MA's), (29, 6021), (Start: 34 @6045 has 1 MA's), (38, 6066), (39, 6075), (70, 6195), (84, 6267), (93, 6321), (96, 6354), (101, 6381), (106, 6417),

Gene: Phalm_7 Start: 6225, Stop: 6575, Start Num: 48

Candidate Starts for Phalm_7:

(Start: 40 @6198 has 1 MA's), (Start: 42 @6201 has 1 MA's), (Start: 48 @6225 has 52 MA's), (79, 6354),

Gene: Phayonce_7 Start: 6224, Stop: 6577, Start Num: 48

Candidate Starts for Phayonce_7:

(28, 6140), (Start: 42 @6200 has 1 MA's), (Start: 48 @6224 has 52 MA's), (50, 6239), (79, 6356),

Gene: Phegasus_7 Start: 6243, Stop: 6590, Start Num: 48

Candidate Starts for Phegasus_7:

(6, 5760), (14, 6045), (Start: 40 @6216 has 1 MA's), (Start: 42 @6219 has 1 MA's), (Start: 48 @6243 has 52 MA's), (79, 6372),

Gene: Phineas_7 Start: 6199, Stop: 6576, Start Num: 40

Candidate Starts for Phineas_7:

(Start: 40 @6199 has 1 MA's), (Start: 42 @6202 has 1 MA's), (Start: 48 @6226 has 52 MA's), (79, 6355),

Gene: PhriskyACE_7 Start: 5763, Stop: 6089, Start Num: 47

Candidate Starts for PhriskyACE_7:

(7, 5304), (28, 5682), (Start: 42 @5742 has 1 MA's), (Start: 47 @5763 has 49 MA's), (50, 5775), (79, 5892), (102, 6000), (103, 6006),

Gene: PhrostedPhlake_7 Start: 6160, Stop: 6651, Start Num: 21

Candidate Starts for PhrostedPhlake_7:

(Start: 21 @6160 has 47 MA's), (30, 6199), (38, 6235), (44, 6262), (49, 6286), (64, 6352), (67, 6358), (78, 6397), (95, 6499), (97, 6532), (102, 6562),

Gene: Pickett_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Pickett_7:

(7, 5315), (28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Pimento_10 Start: 7770, Stop: 8225, Start Num: 21

Candidate Starts for Pimento_10:

(12, 7686), (Start: 21 @7770 has 47 MA's), (24, 7785), (26, 7809), (27, 7812), (29, 7824), (36, 7860), (Start: 47 @7902 has 49 MA's), (58, 7947), (59, 7953), (109, 8181), (110, 8196),

Gene: Pipp_7 Start: 6166, Stop: 6594, Start Num: 21

Candidate Starts for Pipp_7:

(Start: 21 @6166 has 47 MA's), (38, 6241), (44, 6268), (49, 6292), (71, 6349), (95, 6442),

Gene: Polkaroo_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Polkaroo_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Powerball_7 Start: 5763, Stop: 6089, Start Num: 47

Candidate Starts for Powerball_7:

(28, 5682), (Start: 40 @5739 has 1 MA's), (Start: 47 @5763 has 49 MA's), (50, 5775), (68, 5844), (79, 5892), (102, 6000), (103, 6006),

Gene: PrincePatrick_7 Start: 6142, Stop: 6555, Start Num: 21

Candidate Starts for PrincePatrick_7:

(16, 6115), (Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (59, 6304), (66, 6328), (84, 6355), (85, 6358),

Gene: Purky_7 Start: 6215, Stop: 6592, Start Num: 48

Candidate Starts for Purky_7:

(28, 6131), (Start: 42 @6191 has 1 MA's), (Start: 48 @6215 has 52 MA's), (79, 6344), (99, 6476), (103, 6509),

Gene: Pygmy_7 Start: 6226, Stop: 6576, Start Num: 48

Candidate Starts for Pygmy_7:

(Start: 40 @6199 has 1 MA's), (Start: 42 @6202 has 1 MA's), (Start: 48 @6226 has 52 MA's), (79, 6355),

Gene: REQ2_07 Start: 5849, Stop: 6256, Start Num: 21

Candidate Starts for REQ2_07:

(16, 5825), (Start: 21 @5849 has 47 MA's), (23, 5861), (108, 6194), (109, 6203),

Gene: RayTheFireFly_8 Start: 6505, Stop: 6879, Start Num: 47

Candidate Starts for RayTheFireFly_8:

(28, 6424), (32, 6436), (Start: 40 @6481 has 1 MA's), (Start: 47 @6505 has 49 MA's), (103, 6790), (107, 6814),

Gene: Ruthy_7 Start: 6423, Stop: 6830, Start Num: 21

Candidate Starts for Ruthy_7:

(12, 6339), (16, 6399), (Start: 21 @6423 has 47 MA's), (57, 6573), (58, 6576), (109, 6786),

Gene: Sahara_7 Start: 5765, Stop: 6136, Start Num: 47

Candidate Starts for Sahara_7:

(7, 5306), (28, 5684), (Start: 47 @5765 has 49 MA's), (50, 5777), (55, 5792), (56, 5795), (79, 5894), (81, 5897), (82, 5900),

Gene: SamW_7 Start: 6050, Stop: 6418, Start Num: 48

Candidate Starts for SamW_7:

(Start: 48 @6050 has 52 MA's), (61, 6104), (65, 6128), (72, 6152), (88, 6242), (92, 6248), (107, 6353),

Gene: Samba_7 Start: 6143, Stop: 6571, Start Num: 21

Candidate Starts for Samba_7:

(Start: 21 @6143 has 47 MA's), (38, 6218), (44, 6245), (49, 6269), (95, 6419), (102, 6482), (105, 6500),

Gene: Samman98_8 Start: 6265, Stop: 6585, Start Num: 47

Candidate Starts for Samman98_8:

(7, 5806), (28, 6184), (Start: 42 @6244 has 1 MA's), (Start: 47 @6265 has 49 MA's), (50, 6277), (79, 6394), (90, 6442), (102, 6496), (103, 6502),

Gene: Savage_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Savage_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Schnabeltier_7 Start: 6339, Stop: 6827, Start Num: 22

Candidate Starts for Schnabeltier_7:

(11, 6228), (13, 6267), (Start: 22 @6339 has 3 MA's), (35, 6423), (50, 6489), (60, 6528), (109, 6792),

Gene: Sekhmet_8 Start: 6265, Stop: 6585, Start Num: 47

Candidate Starts for Sekhmet_8:

(7, 5806), (28, 6184), (Start: 42 @6244 has 1 MA's), (Start: 47 @6265 has 49 MA's), (50, 6277), (79, 6394), (90, 6442), (102, 6496), (103, 6502),

Gene: Shipwreck_7 Start: 6226, Stop: 6576, Start Num: 48

Candidate Starts for Shipwreck_7:

(Start: 40 @6199 has 1 MA's), (Start: 42 @6202 has 1 MA's), (Start: 48 @6226 has 52 MA's), (79, 6355),

Gene: Shlim410_7 Start: 5836, Stop: 6276, Start Num: 18

Candidate Starts for Shlim410_7:

(4, 5365), (9, 5629), (10, 5653), (12, 5755), (Start: 18 @5836 has 10 MA's), (29, 5896), (38, 5941), (86, 6106), (95, 6157), (109, 6241),

Gene: Sidious_7 Start: 5827, Stop: 6273, Start Num: 18

Candidate Starts for Sidious_7:

(4, 5356), (5, 5401), (9, 5620), (12, 5746), (Start: 17 @5824 has 9 MA's), (Start: 18 @5827 has 10 MA's), (29, 5878), (33, 5899), (38, 5923), (81, 6061), (87, 6106), (109, 6238),

Gene: SoilAssassin_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for SoilAssassin_7:

(7, 5315), (28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Sonah_7 Start: 6243, Stop: 6590, Start Num: 48

Candidate Starts for Sonah_7:

(6, 5760), (14, 6045), (Start: 40 @6216 has 1 MA's), (Start: 42 @6219 has 1 MA's), (Start: 48 @6243 has 52 MA's), (79, 6372),

Gene: Sproutie_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Sproutie_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: StAB_7 Start: 6055, Stop: 6423, Start Num: 48

Candidate Starts for StAB_7:

(Start: 48 @6055 has 52 MA's), (61, 6109), (65, 6133), (72, 6157), (75, 6166), (88, 6247), (92, 6253), (107, 6358),

Gene: StevieRay_7 Start: 6229, Stop: 6579, Start Num: 48

Candidate Starts for StevieRay_7:

(Start: 40 @6202 has 1 MA's), (Start: 42 @6205 has 1 MA's), (Start: 48 @6229 has 52 MA's), (79, 6358),

Gene: Stiles_7 Start: 6055, Stop: 6417, Start Num: 48

Candidate Starts for Stiles_7:

(Start: 48 @6055 has 52 MA's), (61, 6109), (65, 6133), (75, 6166), (88, 6241), (107, 6352),

Gene: StressBall_7 Start: 6225, Stop: 6575, Start Num: 48

Candidate Starts for StressBall_7:

(Start: 40 @6198 has 1 MA's), (Start: 42 @6201 has 1 MA's), (Start: 48 @6225 has 52 MA's), (79, 6354),

Gene: Suerte_7 Start: 5763, Stop: 6083, Start Num: 47

Candidate Starts for Suerte_7:

(7, 5304), (28, 5682), (Start: 42 @5742 has 1 MA's), (Start: 47 @5763 has 49 MA's), (50, 5775), (79, 5892), (90, 5940), (102, 5994), (103, 6000),

Gene: TaronosaurusRx_7 Start: 6346, Stop: 6837, Start Num: 22

Candidate Starts for TaronosaurusRx_7:

(11, 6235), (13, 6274), (Start: 22 @6346 has 3 MA's), (35, 6430), (50, 6496), (60, 6535), (104, 6766), (109, 6802),

Gene: Techage_7 Start: 6246, Stop: 6593, Start Num: 48

Candidate Starts for Techage_7:

(6, 5763), (14, 6048), (Start: 40 @6219 has 1 MA's), (Start: 42 @6222 has 1 MA's), (Start: 48 @6246 has 52 MA's), (79, 6375),

Gene: Thespis_7 Start: 6225, Stop: 6575, Start Num: 48

Candidate Starts for Thespis_7:

(Start: 40 @6198 has 1 MA's), (Start: 42 @6201 has 1 MA's), (Start: 48 @6225 has 52 MA's), (79, 6354),

Gene: Thimann_8 Start: 6265, Stop: 6585, Start Num: 47

Candidate Starts for Thimann_8:

(7, 5806), (28, 6184), (Start: 42 @6244 has 1 MA's), (Start: 47 @6265 has 49 MA's), (50, 6277), (79, 6394), (90, 6442), (102, 6496), (103, 6502),

Gene: ThulaThula_7 Start: 6269, Stop: 6622, Start Num: 48

Candidate Starts for ThulaThula_7:

(28, 6185), (Start: 42 @6245 has 1 MA's), (Start: 48 @6269 has 52 MA's), (50, 6284), (79, 6401),

Gene: Toast_7 Start: 6141, Stop: 6554, Start Num: 21

Candidate Starts for Toast_7:

(16, 6114), (Start: 21 @6141 has 47 MA's), (38, 6216), (44, 6243), (49, 6267), (66, 6327), (84, 6354), (85, 6357),

Gene: Tortellini_7 Start: 6196, Stop: 6534, Start Num: 48

Candidate Starts for Tortellini_7:

(28, 6112), (Start: 42 @6172 has 1 MA's), (Start: 48 @6196 has 52 MA's), (79, 6325), (87, 6367), (99, 6418), (103, 6451),

Gene: Troy_7 Start: 6050, Stop: 6418, Start Num: 48

Candidate Starts for Troy_7:

(Start: 48 @6050 has 52 MA's), (61, 6104), (65, 6128), (72, 6152), (88, 6242), (92, 6248), (107, 6353),

Gene: TuertoX_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for TuertoX_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Twinkle_7 Start: 5836, Stop: 6276, Start Num: 18

Candidate Starts for Twinkle_7:

(4, 5365), (9, 5629), (10, 5653), (12, 5755), (Start: 18 @5836 has 10 MA's), (29, 5896), (38, 5941), (86, 6106), (95, 6157), (109, 6241),

Gene: Ubuntu_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Ubuntu_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: UmaThurman_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for UmaThurman_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (102, 6481), (105, 6499),

Gene: Utz_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for Utz_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (97, 6451), (102, 6481), (105, 6499),

Gene: Vasanti_7 Start: 5775, Stop: 6125, Start Num: 47

Candidate Starts for Vasanti_7:

(2, 5148), (7, 5316), (28, 5694), (Start: 47 @5775 has 49 MA's), (50, 5787), (55, 5802), (56, 5805), (79, 5904), (81, 5907), (82, 5910), (94, 5985), (107, 6066), (109, 6090),

Gene: Venti_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Venti_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Vidya_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Vidya_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),

Gene: Walrus_7 Start: 5970, Stop: 6482, Start Num: 17

Candidate Starts for Walrus_7:

(9, 5766), (12, 5892), (Start: 17 @5970 has 9 MA's), (Start: 18 @5973 has 10 MA's), (29, 6024), (Start: 34 @6048 has 1 MA's), (39, 6078), (70, 6201), (84, 6273), (93, 6327), (96, 6360), (101, 6387), (106, 6423),

Gene: Webster2_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Webster2_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Weirido19_8 Start: 6377, Stop: 6886, Start Num: 20

Candidate Starts for Weirido19_8:

(12, 6293), (16, 6353), (Start: 20 @6377 has 21 MA's), (25, 6404), (44, 6485), (Start: 47 @6491 has 49 MA's), (53, 6521), (69, 6575), (74, 6596), (76, 6611), (91, 6695), (102, 6773),

Gene: Whack_7 Start: 5839, Stop: 6255, Start Num: 17

Candidate Starts for Whack_7:

(9, 5635), (15, 5818), (Start: 17 @5839 has 9 MA's), (Start: 18 @5842 has 10 MA's), (41, 5950), (89, 6127),

Gene: WheatThin_11 Start: 7773, Stop: 8234, Start Num: 21

Candidate Starts for WheatThin_11:

(12, 7689), (Start: 21 @7773 has 47 MA's), (24, 7788), (26, 7812), (27, 7815), (29, 7827), (36, 7863), (Start: 47 @7905 has 49 MA's), (58, 7950), (59, 7956), (109, 8190), (110, 8205), (111, 8217),

Gene: Whiteclaw_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Whiteclaw_7:

(28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: William_7 Start: 6141, Stop: 6569, Start Num: 21

Candidate Starts for William_7:

(16, 6114), (Start: 21 @6141 has 47 MA's), (38, 6216), (44, 6243), (49, 6267), (66, 6327), (84, 6369), (85, 6372),

Gene: Willsammy_7 Start: 6228, Stop: 6578, Start Num: 48

Candidate Starts for Willsammy_7:

(Start: 40 @6201 has 1 MA's), (Start: 42 @6204 has 1 MA's), (Start: 48 @6228 has 52 MA's), (79, 6357),

Gene: WinkNick_8 Start: 6265, Stop: 6585, Start Num: 47

Candidate Starts for WinkNick_8:

(7, 5806), (28, 6184), (Start: 42 @6244 has 1 MA's), (Start: 47 @6265 has 49 MA's), (50, 6277), (79, 6394), (90, 6442), (102, 6496), (103, 6502),

Gene: Wishmaker_10 Start: 7539, Stop: 7979, Start Num: 20

Candidate Starts for Wishmaker_10:

(8, 7272), (16, 7515), (Start: 20 @7539 has 21 MA's), (45, 7635), (80, 7764), (88, 7812), (89, 7815), (91, 7824), (105, 7905), (112, 7971),

Gene: Wisp_7 Start: 6142, Stop: 6570, Start Num: 21

Candidate Starts for Wisp_7:

(Start: 21 @6142 has 47 MA's), (38, 6217), (44, 6244), (49, 6268), (95, 6418), (97, 6451), (102, 6481), (105, 6499),

Gene: Wocket_7 Start: 6129, Stop: 6635, Start Num: 21

Candidate Starts for Wocket_7:

(1, 5271), (3, 5652), (12, 6045), (16, 6105), (Start: 21 @6129 has 47 MA's), (30, 6168), (38, 6204), (44, 6231), (49, 6255), (63, 6312), (73, 6351), (95, 6483), (102, 6546), (105, 6564),

Gene: Xavia_7 Start: 6240, Stop: 6590, Start Num: 48

Candidate Starts for Xavia_7:

(Start: 40 @6213 has 1 MA's), (Start: 42 @6216 has 1 MA's), (Start: 48 @6240 has 52 MA's), (79, 6369),

Gene: Yeet412_7 Start: 5774, Stop: 6121, Start Num: 47

Candidate Starts for Yeet412_7:

(7, 5315), (28, 5693), (Start: 47 @5774 has 49 MA's), (50, 5786), (55, 5801), (56, 5804), (79, 5903), (81, 5906), (82, 5909), (107, 6062), (109, 6086),

Gene: Yeezy_7 Start: 5821, Stop: 6270, Start Num: 17

Candidate Starts for Yeezy_7:

(4, 5353), (5, 5398), (9, 5617), (12, 5743), (Start: 17 @5821 has 9 MA's), (Start: 18 @5824 has 10 MA's), (38, 5920), (109, 6235), (110, 6250),

Gene: ZAYM_7 Start: 6339, Stop: 6830, Start Num: 22

Candidate Starts for ZAYM_7:

(11, 6228), (13, 6267), (Start: 22 @6339 has 3 MA's), (35, 6423), (50, 6489), (60, 6528), (104, 6759), (109, 6795), (110, 6810),

Gene: Zarbodnamra_7 Start: 6141, Stop: 6569, Start Num: 21

Candidate Starts for Zarbodnamra_7:

(Start: 21 @6141 has 47 MA's), (38, 6216), (44, 6243), (49, 6267), (95, 6417), (97, 6450), (102, 6480), (105, 6498),

Gene: ZiggyZoo_7 Start: 6166, Stop: 6594, Start Num: 21

Candidate Starts for ZiggyZoo_7:

(Start: 21 @6166 has 47 MA's), (38, 6241), (44, 6268), (95, 6442), (97, 6475), (102, 6505), (105, 6523),

Gene: Zilizebeth_7 Start: 6238, Stop: 6588, Start Num: 48

Candidate Starts for Zilizebeth_7:

(Start: 40 @6211 has 1 MA's), (Start: 42 @6214 has 1 MA's), (Start: 48 @6238 has 52 MA's), (79, 6367),