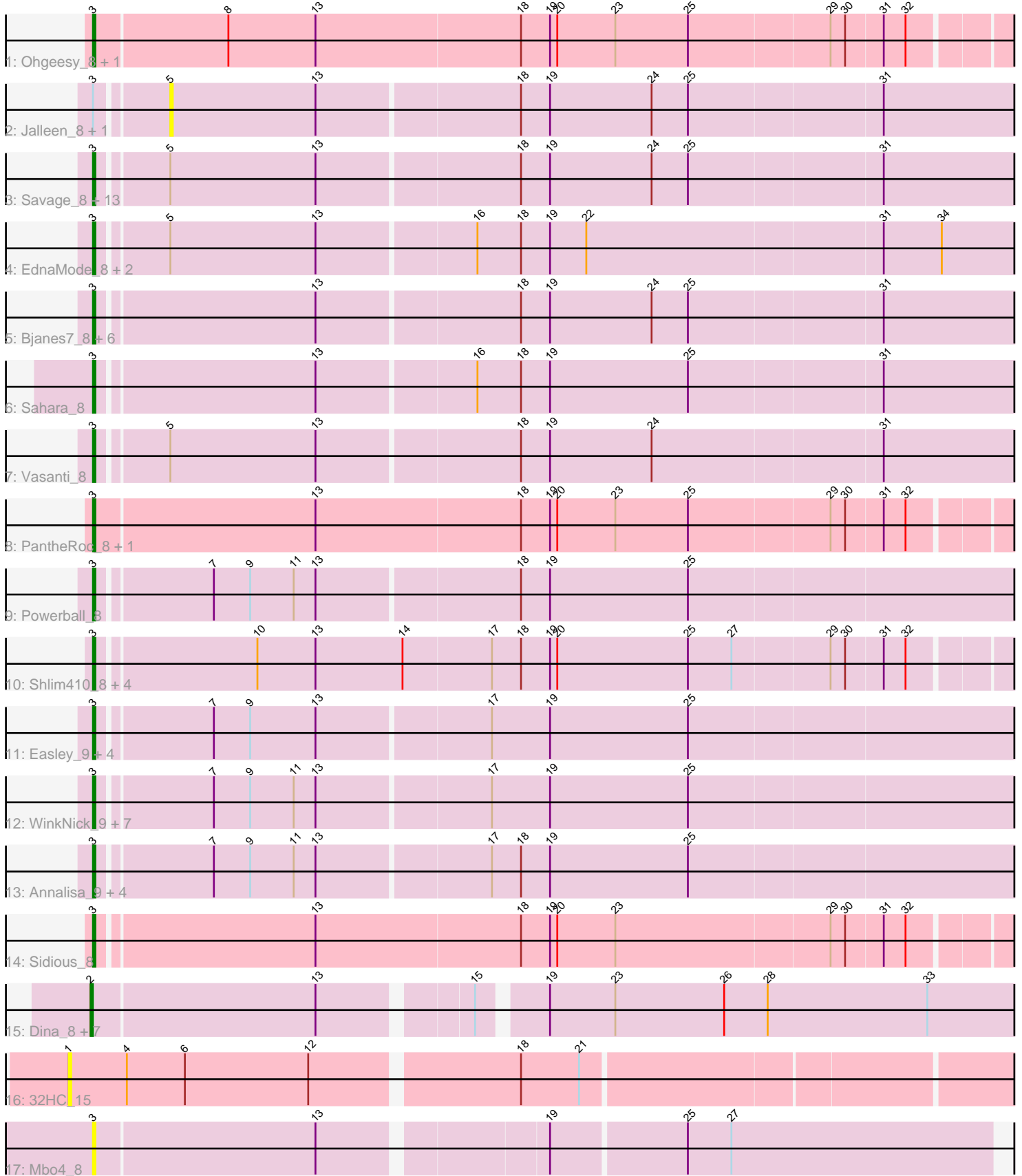


Pham 296553



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 296553 Report

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

Pham number 296553 has 67 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Ohgeesy_8, BaxterFox_8
- Track 2 : Jalleen_8, Yinzer_8
- Track 3 : Savage_8, Whiteclaw_8, Denise_8, JCole_8, Haley23_8, Sproutie_8, Clap_8, Cynthia_8, Gizermo_8, TuertoX_8, Mocha12_8, Ebert_8, GemG_8, FroggyToad_8
- Track 4 : EdnaMode_8, Lamberg_8, Nettuno_8
- Track 5 : Bjanes7_8, LordFarquaad_8, Attis_8, Pickett_8, SoilAssassin_8, Yeet412_8, Matteo_8
- Track 6 : Sahara_8
- Track 7 : Vasanti_8
- Track 8 : PantheRoc_8, Yeezy_8
- Track 9 : Powerball_8
- Track 10 : Shlim410_8, Hortense_8, Adora_8, Howe_8, Twinkle_8
- Track 11 : Easley_9, Beenie_9, MichaelScott_9, Tuti_10, Rizz_10
- Track 12 : WinkNick_9, Oregano_9, Invectra_9, Dolores_9, Thimann_9, Suerte_8, Samman98_9, Sekhmet_9
- Track 13 : Annalisa_9, Clark_9, Dorito_8, PhriskyACE_8, DobbysSock_8
- Track 14 : Sidious_8
- Track 15 : Dina_8, SamW_8, Troy_8, Adelaide_8, Lederberg_8, Stiles_8, StAB_8, Bran_8
- Track 16 : 32HC_15
- Track 17 : Mbo4_8

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

The start number called the most often in the published annotations is 3, it was called in 50 of the 58 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adora_8, Annalisa_9, Attis_8, BaxterFox_8, Beenie_9, Bjanes7_8, Clap_8, Clark_9, Cynthia_8, Denise_8, DobbysSock_8, Dolores_9, Dorito_8, Easley_9, Ebert_8, EdnaMode_8, FroggyToad_8, GemG_8, Gizermo_8, Haley23_8, Hortense_8, Howe_8, Invectra_9, JCole_8, Lamberg_8, LordFarquaad_8, Matteo_8, Mbo4_8, MichaelScott_9, Mocha12_8, Nettuno_8, Ohgeesy_8, Oregano_9, PantheRoc_8,

PhriskyACE_8, Pickett_8, Powerball_8, Rizz_10, Sahara_8, Samman98_9, Savage_8, Sekhmet_9, Shlim410_8, Sidious_8, SoilAssassin_8, Sproutie_8, Suerte_8, Thimann_9, TuertoX_8, Tuti_10, Twinkle_8, Vasanti_8, Whiteclaw_8, WinkNick_9, Yeet412_8, Yeezy_8,

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

- Jalleen_8, Yinzer_8,

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

- 32HC_15, Adelaide_8, Bran_8, Dina_8, Lederberg_8, SamW_8, StAB_8, Stiles_8, Troy_8,

Summary by start number:

Start 1:

- Found in 1 of 67 (1.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 32HC_15 (Z),

Start 2:

- Found in 8 of 67 (11.9%) of genes in pham
- Manual Annotations of this start: 8 of 58
- 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 3:

- Found in 58 of 67 (86.6%) of genes in pham
- Manual Annotations of this start: 50 of 58
- Called 96.6% of time when present
- Phage (with cluster) where this start called: Adora_8 (CZ4), Annalisa_9 (CZ4), Attis_8 (CZ2), BaxterFox_8 (CZ3), Beenie_9 (CZ4), Bjanes7_8 (CZ2), Clap_8 (CZ2), Clark_9 (CZ4), Cynthia_8 (CZ2), Denise_8 (CZ5), DobbysSock_8 (CZ4), Dolores_9 (CZ4), Dorito_8 (CZ4), Easley_9 (CZ4), Ebert_8 (CZ2), EdnaMode_8 (CZ2), FroggyToad_8 (CZ2), GemG_8 (CZ2), Gizermo_8 (CZ2), Haley23_8 (CZ2), Hortense_8 (CZ4), Howe_8 (CZ4), Invectra_9 (CZ4), JCole_8 (CZ2), Lamberg_8 (CZ2), LordFarquaad_8 (CZ2), Matteo_8 (CZ2), Mbo4_8 (singleton), MichaelScott_9 (CZ4), Mocha12_8 (CZ2), Nettuno_8 (CZ2), Ohgeesy_8 (CZ), Oregano_9 (CZ4), PantheRoc_8 (CZ3), PhriskyACE_8 (CZ4), Pickett_8 (CZ2), Powerball_8 (CZ4), Rizz_10 (CZ4), Sahara_8 (CZ2), Samman98_9 (CZ4), Savage_8 (CZ2), Sekhmet_9 (CZ4), Shlim410_8 (CZ4), Sidious_8 (CZ7), SoilAssassin_8 (CZ2), Sproutie_8 (CZ2), Suerte_8 (CZ4), Thimann_9 (CZ4), TuertoX_8 (CZ2), Tuti_10 (CZ4), Twinkle_8 (CZ4), Vasanti_8 (CZ2), Whiteclaw_8 (CZ2), WinkNick_9 (CZ4), Yeet412_8 (CZ2), Yeezy_8 (CZ3),

Start 5:

- Found in 20 of 67 (29.9%) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Jalleen_8 (CZ2), Yinzer_8 (CZ2),

Summary by clusters:

There are 9 clusters represented in this pham: singleton, CZ2, CZ3, CZ7, CZ4, CZ5, CZ, Z, EP,

Info for manual annotations of cluster CZ:

- Start number 3 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ2:

- Start number 3 was manually annotated 23 times for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 3 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:

- Start number 3 was manually annotated 21 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

- Start number 3 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ7:

- Start number 3 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster EP:

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

Gene Information:

Gene: 32HC_15 Start: 9730, Stop: 10119, Start Num: 1

Candidate Starts for 32HC_15:

(1, 9730), (4, 9754), (6, 9778), (12, 9829), (18, 9910), (21, 9934),

Gene: Adelaide_8 Start: 6455, Stop: 6859, Start Num: 2

Candidate Starts for Adelaide_8:

(Start: 2 @6455 has 8 MA's), (13, 6545), (15, 6602), (19, 6626), (23, 6653), (26, 6698), (28, 6716), (33, 6782),

Gene: Adora_8 Start: 6280, Stop: 6651, Start Num: 3

Candidate Starts for Adora_8:

(Start: 3 @6280 has 50 MA's), (10, 6343), (13, 6367), (14, 6403), (17, 6439), (18, 6451), (19, 6463), (20, 6466), (25, 6520), (27, 6538), (29, 6577), (30, 6583), (31, 6598), (32, 6607),

Gene: Annalisa_9 Start: 6598, Stop: 6981, Start Num: 3

Candidate Starts for Annalisa_9:

(Start: 3 @6598 has 50 MA's), (7, 6643), (9, 6658), (11, 6676), (13, 6685), (17, 6754), (18, 6766), (19, 6778), (25, 6835),

Gene: Attis_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Attis_8:

(Start: 3 @6128 has 50 MA's), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: BaxterFox_8 Start: 6274, Stop: 6648, Start Num: 3

Candidate Starts for BaxterFox_8:

(Start: 3 @6274 has 50 MA's), (8, 6328), (13, 6364), (18, 6448), (19, 6460), (20, 6463), (23, 6487), (25, 6517), (29, 6574), (30, 6580), (31, 6595), (32, 6604),

Gene: Beenie_9 Start: 6592, Stop: 6975, Start Num: 3

Candidate Starts for Beenie_9:

(Start: 3 @6592 has 50 MA's), (7, 6637), (9, 6652), (13, 6679), (17, 6748), (19, 6772), (25, 6829),

Gene: Bjaner7_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Bjaner7_8:

(Start: 3 @6128 has 50 MA's), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Bran_8 Start: 6460, Stop: 6864, Start Num: 2

Candidate Starts for Bran_8:

(Start: 2 @6460 has 8 MA's), (13, 6550), (15, 6607), (19, 6631), (23, 6658), (26, 6703), (28, 6721), (33, 6787),

Gene: Clap_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Clap_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Clark_9 Start: 6598, Stop: 6981, Start Num: 3

Candidate Starts for Clark_9:

(Start: 3 @6598 has 50 MA's), (7, 6643), (9, 6658), (11, 6676), (13, 6685), (17, 6754), (18, 6766), (19, 6778), (25, 6835),

Gene: Cynthia_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Cynthia_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Denise_8 Start: 6137, Stop: 6520, Start Num: 3

Candidate Starts for Denise_8:

(Start: 3 @6137 has 50 MA's), (5, 6164), (13, 6224), (18, 6305), (19, 6317), (24, 6359), (25, 6374), (31, 6452),

Gene: Dina_8 Start: 6443, Stop: 6847, Start Num: 2

Candidate Starts for Dina_8:

(Start: 2 @6443 has 8 MA's), (13, 6533), (15, 6590), (19, 6614), (23, 6641), (26, 6686), (28, 6704), (33, 6770),

Gene: DobbysSock_8 Start: 6090, Stop: 6473, Start Num: 3

Candidate Starts for DobbysSock_8:

(Start: 3 @6090 has 50 MA's), (7, 6135), (9, 6150), (11, 6168), (13, 6177), (17, 6246), (18, 6258), (19, 6270), (25, 6327),

Gene: Dolores_9 Start: 6592, Stop: 6975, Start Num: 3

Candidate Starts for Dolores_9:

(Start: 3 @6592 has 50 MA's), (7, 6637), (9, 6652), (11, 6670), (13, 6679), (17, 6748), (19, 6772), (25, 6829),

Gene: Dorito_8 Start: 6096, Stop: 6479, Start Num: 3

Candidate Starts for Dorito_8:

(Start: 3 @6096 has 50 MA's), (7, 6141), (9, 6156), (11, 6174), (13, 6183), (17, 6252), (18, 6264), (19, 6276), (25, 6333),

Gene: Easley_9 Start: 6592, Stop: 6975, Start Num: 3

Candidate Starts for Easley_9:

(Start: 3 @6592 has 50 MA's), (7, 6637), (9, 6652), (13, 6679), (17, 6748), (19, 6772), (25, 6829),

Gene: Ebert_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Ebert_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: EdnaMode_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for EdnaMode_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (16, 6278), (18, 6296), (19, 6308), (22, 6323), (31, 6443), (34, 6467),

Gene: FroggyToad_8 Start: 6129, Stop: 6512, Start Num: 3

Candidate Starts for FroggyToad_8:

(Start: 3 @6129 has 50 MA's), (5, 6156), (13, 6216), (18, 6297), (19, 6309), (24, 6351), (25, 6366), (31, 6444),

Gene: GemG_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for GemG_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Gizermo_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Gizermo_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Haley23_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Haley23_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Hortense_8 Start: 6280, Stop: 6651, Start Num: 3

Candidate Starts for Hortense_8:

(Start: 3 @6280 has 50 MA's), (10, 6343), (13, 6367), (14, 6403), (17, 6439), (18, 6451), (19, 6463), (20, 6466), (25, 6520), (27, 6538), (29, 6577), (30, 6583), (31, 6598), (32, 6607),

Gene: Howe_8 Start: 6280, Stop: 6651, Start Num: 3

Candidate Starts for Howe_8:

(Start: 3 @6280 has 50 MA's), (10, 6343), (13, 6367), (14, 6403), (17, 6439), (18, 6451), (19, 6463), (20, 6466), (25, 6520), (27, 6538), (29, 6577), (30, 6583), (31, 6598), (32, 6607),

Gene: Invectra_9 Start: 6592, Stop: 6975, Start Num: 3

Candidate Starts for Invectra_9:

(Start: 3 @6592 has 50 MA's), (7, 6637), (9, 6652), (11, 6670), (13, 6679), (17, 6748), (19, 6772), (25, 6829),

Gene: JCole_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for JCole_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Jalleen_8 Start: 6155, Stop: 6511, Start Num: 5

Candidate Starts for Jalleen_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Lamberg_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Lamberg_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (16, 6278), (18, 6296), (19, 6308), (22, 6323), (31, 6443), (34, 6467),

Gene: Lederberg_8 Start: 6443, Stop: 6847, Start Num: 2

Candidate Starts for Lederberg_8:

(Start: 2 @6443 has 8 MA's), (13, 6533), (15, 6590), (19, 6614), (23, 6641), (26, 6686), (28, 6704), (33, 6770),

Gene: LordFarquaad_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for LordFarquaad_8:

(Start: 3 @6128 has 50 MA's), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Matteo_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Matteo_8:

(Start: 3 @6128 has 50 MA's), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Mbo4_8 Start: 6815, Stop: 7189, Start Num: 3

Candidate Starts for Mbo4_8:

(Start: 3 @6815 has 50 MA's), (13, 6905), (19, 6992), (25, 7046), (27, 7064),

Gene: MichaelScott_9 Start: 6592, Stop: 6975, Start Num: 3

Candidate Starts for MichaelScott_9:

(Start: 3 @6592 has 50 MA's), (7, 6637), (9, 6652), (13, 6679), (17, 6748), (19, 6772), (25, 6829),

Gene: Mocha12_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Mocha12_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Nettuno_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Nettuno_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (16, 6278), (18, 6296), (19, 6308), (22, 6323), (31, 6443), (34, 6467),

Gene: Ohgeesy_8 Start: 6274, Stop: 6648, Start Num: 3

Candidate Starts for Ohgeesy_8:

(Start: 3 @6274 has 50 MA's), (8, 6328), (13, 6364), (18, 6448), (19, 6460), (20, 6463), (23, 6487), (25, 6517), (29, 6574), (30, 6580), (31, 6595), (32, 6604),

Gene: Oregano_9 Start: 6263, Stop: 6646, Start Num: 3

Candidate Starts for Oregano_9:

(Start: 3 @6263 has 50 MA's), (7, 6308), (9, 6323), (11, 6341), (13, 6350), (17, 6419), (19, 6443), (25, 6500),

Gene: PantheRoc_8 Start: 6274, Stop: 6648, Start Num: 3

Candidate Starts for PantheRoc_8:

(Start: 3 @6274 has 50 MA's), (13, 6364), (18, 6448), (19, 6460), (20, 6463), (23, 6487), (25, 6517), (29, 6574), (30, 6580), (31, 6595), (32, 6604),

Gene: PhriskyACE_8 Start: 6096, Stop: 6479, Start Num: 3

Candidate Starts for PhriskyACE_8:

(Start: 3 @6096 has 50 MA's), (7, 6141), (9, 6156), (11, 6174), (13, 6183), (17, 6252), (18, 6264), (19, 6276), (25, 6333),

Gene: Pickett_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Pickett_8:

(Start: 3 @6128 has 50 MA's), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Powerball_8 Start: 6096, Stop: 6479, Start Num: 3

Candidate Starts for Powerball_8:

(Start: 3 @6096 has 50 MA's), (7, 6141), (9, 6156), (11, 6174), (13, 6183), (18, 6264), (19, 6276), (25, 6333),

Gene: Rizz_10 Start: 6592, Stop: 6975, Start Num: 3

Candidate Starts for Rizz_10:

(Start: 3 @6592 has 50 MA's), (7, 6637), (9, 6652), (13, 6679), (17, 6748), (19, 6772), (25, 6829),

Gene: Sahara_8 Start: 6144, Stop: 6527, Start Num: 3

Candidate Starts for Sahara_8:

(Start: 3 @6144 has 50 MA's), (13, 6231), (16, 6294), (18, 6312), (19, 6324), (25, 6381), (31, 6459),

Gene: SamW_8 Start: 6443, Stop: 6847, Start Num: 2

Candidate Starts for SamW_8:

(Start: 2 @6443 has 8 MA's), (13, 6533), (15, 6590), (19, 6614), (23, 6641), (26, 6686), (28, 6704), (33, 6770),

Gene: Samman98_9 Start: 6592, Stop: 6975, Start Num: 3

Candidate Starts for Samman98_9:

(Start: 3 @6592 has 50 MA's), (7, 6637), (9, 6652), (11, 6670), (13, 6679), (17, 6748), (19, 6772), (25, 6829),

Gene: Savage_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Savage_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Sekhmet_9 Start: 6592, Stop: 6975, Start Num: 3

Candidate Starts for Sekhmet_9:

(Start: 3 @6592 has 50 MA's), (7, 6637), (9, 6652), (11, 6670), (13, 6679), (17, 6748), (19, 6772), (25, 6829),

Gene: Shlim410_8 Start: 6280, Stop: 6651, Start Num: 3

Candidate Starts for Shlim410_8:

(Start: 3 @6280 has 50 MA's), (10, 6343), (13, 6367), (14, 6403), (17, 6439), (18, 6451), (19, 6463), (20, 6466), (25, 6520), (27, 6538), (29, 6577), (30, 6583), (31, 6598), (32, 6607),

Gene: Sidious_8 Start: 6277, Stop: 6648, Start Num: 3

Candidate Starts for Sidious_8:

(Start: 3 @6277 has 50 MA's), (13, 6364), (18, 6448), (19, 6460), (20, 6463), (23, 6487), (29, 6574), (30, 6580), (31, 6595), (32, 6604),

Gene: SoilAssassin_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for SoilAssassin_8:

(Start: 3 @6128 has 50 MA's), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Sproutie_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Sproutie_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: StAB_8 Start: 6448, Stop: 6852, Start Num: 2

Candidate Starts for StAB_8:

(Start: 2 @6448 has 8 MA's), (13, 6538), (15, 6595), (19, 6619), (23, 6646), (26, 6691), (28, 6709), (33, 6775),

Gene: Stiles_8 Start: 6442, Stop: 6846, Start Num: 2

Candidate Starts for Stiles_8:

(Start: 2 @6442 has 8 MA's), (13, 6532), (15, 6589), (19, 6613), (23, 6640), (26, 6685), (28, 6703), (33, 6769),

Gene: Suerte_8 Start: 6090, Stop: 6473, Start Num: 3

Candidate Starts for Suerte_8:

(Start: 3 @6090 has 50 MA's), (7, 6135), (9, 6150), (11, 6168), (13, 6177), (17, 6246), (19, 6270), (25, 6327),

Gene: Thimann_9 Start: 6592, Stop: 6975, Start Num: 3

Candidate Starts for Thimann_9:

(Start: 3 @6592 has 50 MA's), (7, 6637), (9, 6652), (11, 6670), (13, 6679), (17, 6748), (19, 6772), (25, 6829),

Gene: Troy_8 Start: 6443, Stop: 6847, Start Num: 2

Candidate Starts for Troy_8:

(Start: 2 @6443 has 8 MA's), (13, 6533), (15, 6590), (19, 6614), (23, 6641), (26, 6686), (28, 6704), (33, 6770),

Gene: TuertoX_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for TuertoX_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Tuti_10 Start: 6592, Stop: 6975, Start Num: 3

Candidate Starts for Tuti_10:

(Start: 3 @6592 has 50 MA's), (7, 6637), (9, 6652), (13, 6679), (17, 6748), (19, 6772), (25, 6829),

Gene: Twinkle_8 Start: 6280, Stop: 6651, Start Num: 3

Candidate Starts for Twinkle_8:

(Start: 3 @6280 has 50 MA's), (10, 6343), (13, 6367), (14, 6403), (17, 6439), (18, 6451), (19, 6463), (20, 6466), (25, 6520), (27, 6538), (29, 6577), (30, 6583), (31, 6598), (32, 6607),

Gene: Vasanti_8 Start: 6132, Stop: 6515, Start Num: 3

Candidate Starts for Vasanti_8:

(Start: 3 @6132 has 50 MA's), (5, 6159), (13, 6219), (18, 6300), (19, 6312), (24, 6354), (31, 6447),

Gene: Whiteclaw_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Whiteclaw_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: WinkNick_9 Start: 6592, Stop: 6975, Start Num: 3

Candidate Starts for WinkNick_9:

(Start: 3 @6592 has 50 MA's), (7, 6637), (9, 6652), (11, 6670), (13, 6679), (17, 6748), (19, 6772), (25, 6829),

Gene: Yeet412_8 Start: 6128, Stop: 6511, Start Num: 3

Candidate Starts for Yeet412_8:

(Start: 3 @6128 has 50 MA's), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),

Gene: Yeezy_8 Start: 6274, Stop: 6645, Start Num: 3

Candidate Starts for Yeezy_8:

(Start: 3 @6274 has 50 MA's), (13, 6361), (18, 6445), (19, 6457), (20, 6460), (23, 6484), (25, 6514), (29, 6571), (30, 6577), (31, 6592), (32, 6601),

Gene: Yinzer_8 Start: 6155, Stop: 6511, Start Num: 5

Candidate Starts for Yinzer_8:

(Start: 3 @6128 has 50 MA's), (5, 6155), (13, 6215), (18, 6296), (19, 6308), (24, 6350), (25, 6365), (31, 6443),