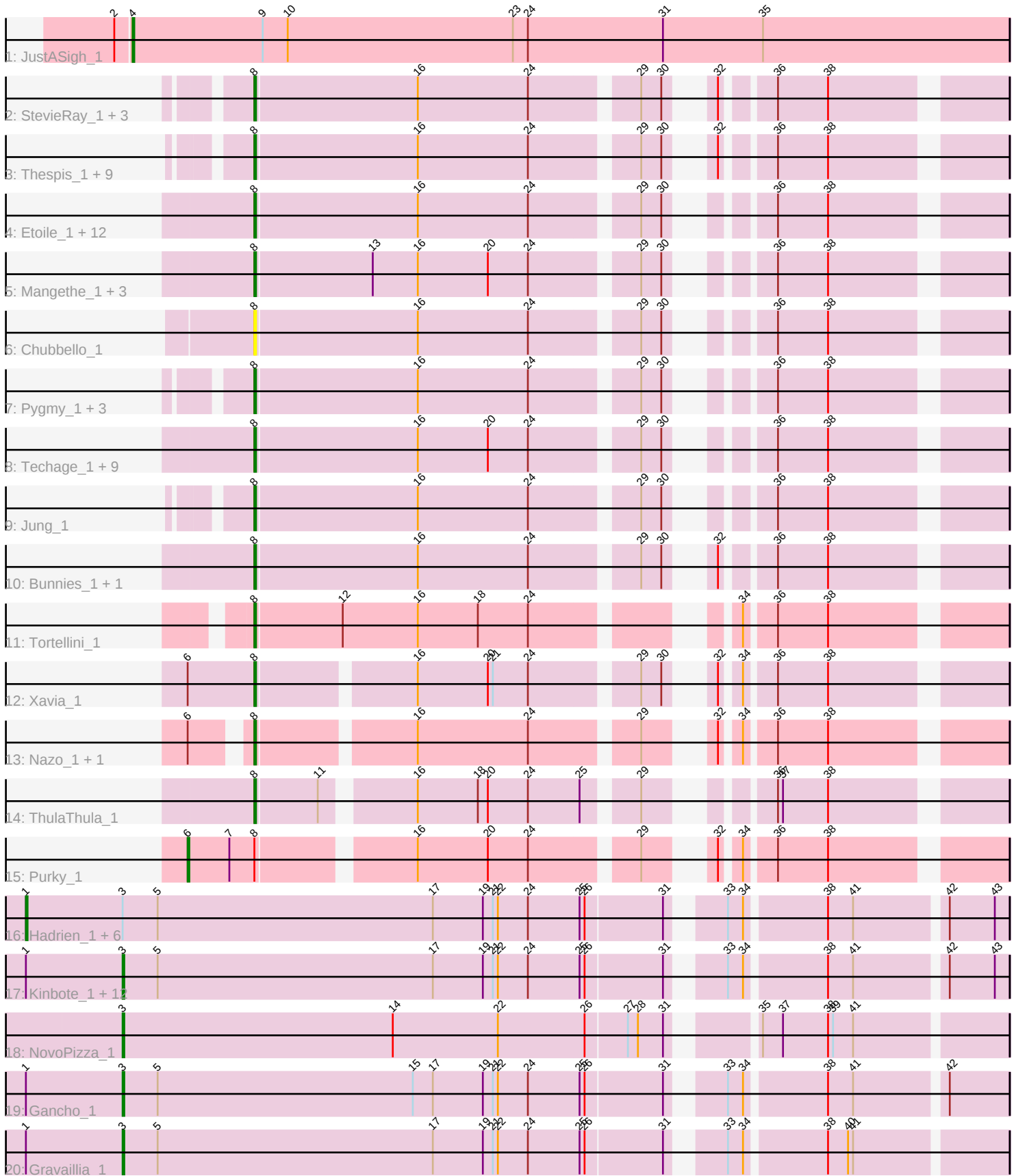


Pham 330758



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 330758 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330758 has 79 members, 6 are drafts.

Phages represented in each track:

- Track 1 : JustASigh_1
- Track 2 : StevieRay_1, PeanutPie_1, Bhagsy_1, Atcoo_1
- Track 3 : Thespi_1, Glaske_1, Gavriela_1, Brusacoram_1, KilKor_1, Willsammy_1, Phalm_1, Megiddo_1, StressBall_1, CactusJack_1
- Track 4 : Etoile_1, Langerak_1, Zilizebeth_1, Dynamo_1, Malithi_1, Kari_1, GreaseLightnin_1, Necropolis_1, Camster_1, Polkaroo_1, FirstPlacePfu_1, Fishburne_1, Vidya_1
- Track 5 : Mangethe_1, Arib1_1, Phegasus_1, Majeke_1
- Track 6 : Chubbello_1
- Track 7 : Pygmy_1, Shipwreck_1, Phineas_1, Bogie_1
- Track 8 : Techage_1, Venti_1, Sonah_1, HUHilltop_1, Bartholomew_1, Juniormint_1, Jebeks_1, BronnyJr_1, GaloreK_1, Donovan_1
- Track 9 : Jung_1
- Track 10 : Bunnies_1, Ksquared_1
- Track 11 : Tortellini_1
- Track 12 : Xavia_1
- Track 13 : Nazo_1, BigNuz_1
- Track 14 : ThulaThula_1
- Track 15 : Purky_1
- Track 16 : Hadrien_1, Luna22_1, Hail_1, Ubuntu_1, Giles_1, Luke_1, Wishmaker_1
- Track 17 : Kinbote_1, BloominB_1, HH92_1, OBUpide_1, DeepSoil15_1, Evanesce_1, LilHazelNut_1, Forge_1, Webster2_1, Dewey_1, Ein37_1, Amymech_1, Amochick_1
- Track 18 : NovoPizza_1
- Track 19 : Gancho_1
- Track 20 : Gravaillia_1

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

The start number called the most often in the published annotations is 8, it was called in 48 of the 73 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arib1_1, Atcoo_1, Bartholomew_1, Bhagsy_1, BigNuz_1, Bogie_1, BronnyJr_1, Brusacoram_1, Bunnies_1, CactusJack_1, Camster_1, Chubbello_1, Donovan_1, Dynamo_1, Etoile_1, FirstPlacePfu_1, Fishburne_1, GaloreK_1, Gavriela_1, Glaske_1, GreaseLightnin_1, HUHilltop_1, Jebeks_1, Jung_1, Juniormint_1, Kari_1, KilKor_1, Ksquared_1, Langerak_1, Majeke_1, Malithi_1, Mangethe_1, Megiddo_1, Nazo_1, Necropolis_1, PeanutPie_1, Phalm_1, Phegasus_1, Phineas_1, Polkaroo_1, Pygmy_1, Shipwreck_1, Sonah_1, StevieRay_1, StressBall_1, Techage_1, Thespis_1, ThulaThula_1, Tortellini_1, Venti_1, Vidya_1, Willsammy_1, Xavia_1, Zilizebeth_1,

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

- Purky_1,

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

- Amochick_1, Amymech_1, BloominB_1, DeepSoil15_1, Dewey_1, Ein37_1, Evanesce_1, Forge_1, Gancho_1, Giles_1, Gravaillia_1, HH92_1, Hadrien_1, Hail_1, JustASigh_1, Kinbote_1, LilHazelNut_1, Luke_1, Luna22_1, NovoPizza_1, OBUpride_1, Ubuntu_1, Webster2_1, Wishmaker_1,

Summary by start number:

Start 1:

- Found in 22 of 79 (27.8%) of genes in pham
- Manual Annotations of this start: 7 of 73
- Called 31.8% of time when present
- Phage (with cluster) where this start called: Giles_1 (Q), Hadrien_1 (Q), Hail_1 (Q), Luke_1 (Q), Luna22_1 (Q), Ubuntu_1 (Q), Wishmaker_1 (Q),

Start 3:

- Found in 23 of 79 (29.1%) of genes in pham
- Manual Annotations of this start: 16 of 73
- Called 69.6% of time when present
- Phage (with cluster) where this start called: Amochick_1 (Q), Amymech_1 (Q), BloominB_1 (Q), DeepSoil15_1 (Q), Dewey_1 (Q), Ein37_1 (Q), Evanesce_1 (Q), Forge_1 (Q), Gancho_1 (Q), Gravaillia_1 (Q), HH92_1 (Q), Kinbote_1 (Q), LilHazelNut_1 (Q), NovoPizza_1 (Q), OBUpride_1 (Q), Webster2_1 (Q),

Start 4:

- Found in 1 of 79 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 73
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JustASigh_1 (AH),

Start 6:

- Found in 4 of 79 (5.1%) of genes in pham
- Manual Annotations of this start: 1 of 73
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Purky_1 (P6),

Start 8:

- Found in 55 of 79 (69.6%) of genes in pham
- Manual Annotations of this start: 48 of 73
- Called 98.2% of time when present

- Phage (with cluster) where this start called: Arib1_1 (P1), Atcoo_1 (P1), Bartholomew_1 (P1), Bhagsy_1 (P1), BigNuz_1 (P4), Bogie_1 (P1), BronnyJr_1 (P1), Brusacoram_1 (P1), Bunnies_1 (P1), CactusJack_1 (P1), Camster_1 (P1), Chubbello_1 (P1), Donovan_1 (P1), Dynamo_1 (P1), Etoile_1 (P1), FirstPlacePfu_1 (P1), Fishburne_1 (P1), GaloreK_1 (P1), Gavriela_1 (P1), Glaske_1 (P1), GreaseLightnin_1 (P1), HUHilltop_1 (P1), Jebeks_1 (P1), Jung_1 (P1), Juniormint_1 (P1), Kari_1 (P1), KilKor_1 (P1), Ksquared_1 (P1), Langerak_1 (P1), Majeke_1 (P1), Malithi_1 (P1), Mangethe_1 (P1), Megiddo_1 (P1), Nazo_1 (P4), Necropolis_1 (P1), PeanutPie_1 (P1), Phalm_1 (P1), Phegasus_1 (P1), Phineas_1 (P1), Polkaroo_1 (P1), Pygmy_1 (P1), Shipwreck_1 (P1), Sonah_1 (P1), StevieRay_1 (P1), StressBall_1 (P1), Techage_1 (P1), Thespis_1 (P1), ThulaThula_1 (P5), Tortellini_1 (P2), Venti_1 (P1), Vidya_1 (P1), Willsammy_1 (P1), Xavia_1 (P3), Zilizebeth_1 (P1),

Summary by clusters:

There are 8 clusters represented in this pham: P2, P3, P1, P6, P4, P5, AH, Q,

Info for manual annotations of cluster AH:

- Start number 4 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster P1:

- Start number 8 was manually annotated 43 times for cluster P1.

Info for manual annotations of cluster P2:

- Start number 8 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:

- Start number 8 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:

- Start number 8 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 8 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster P6:

- Start number 6 was manually annotated 1 time for cluster P6.

Info for manual annotations of cluster Q:

- Start number 1 was manually annotated 7 times for cluster Q.
- Start number 3 was manually annotated 16 times for cluster Q.

Gene Information:

Gene: Amochick_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for Amochick_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Amymech_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for Amymech_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Arib1_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Arib1_1:

(Start: 8 @55 has 48 MA's), (13, 124), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Atcoo_1 Start: 43, Stop: 432, Start Num: 8

Candidate Starts for Atcoo_1:

(Start: 8 @43 has 48 MA's), (16, 139), (24, 205), (29, 262), (30, 274), (32, 286), (36, 310), (38, 340),

Gene: Bartholomew_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Bartholomew_1:

(Start: 8 @55 has 48 MA's), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Bhagsy_1 Start: 43, Stop: 432, Start Num: 8

Candidate Starts for Bhagsy_1:

(Start: 8 @43 has 48 MA's), (16, 139), (24, 205), (29, 262), (30, 274), (32, 286), (36, 310), (38, 340),

Gene: BigNuz_1 Start: 43, Stop: 423, Start Num: 8

Candidate Starts for BigNuz_1:

(Start: 6 @16 has 1 MA's), (Start: 8 @43 has 48 MA's), (16, 130), (24, 196), (29, 253), (32, 277), (34, 286), (36, 301), (38, 331),

Gene: BloominB_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for BloominB_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Bogie_1 Start: 43, Stop: 432, Start Num: 8

Candidate Starts for Bogie_1:

(Start: 8 @43 has 48 MA's), (16, 139), (24, 205), (29, 262), (30, 274), (36, 310), (38, 340),

Gene: BronnyJr_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for BronnyJr_1:

(Start: 8 @55 has 48 MA's), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Brusacoram_1 Start: 42, Stop: 431, Start Num: 8

Candidate Starts for Brusacoram_1:

(Start: 8 @42 has 48 MA's), (16, 138), (24, 204), (29, 261), (30, 273), (32, 285), (36, 309), (38, 339),

Gene: Bunnies_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Bunnies_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (32, 298), (36, 322), (38, 352),

Gene: CactusJack_1 Start: 42, Stop: 431, Start Num: 8

Candidate Starts for CactusJack_1:

(Start: 8 @42 has 48 MA's), (16, 138), (24, 204), (29, 261), (30, 273), (32, 285), (36, 309), (38, 339),

Gene: Camster_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Camster_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Chubbello_1 Start: 54, Stop: 443, Start Num: 8

Candidate Starts for Chubbello_1:

(Start: 8 @54 has 48 MA's), (16, 150), (24, 216), (29, 273), (30, 285), (36, 321), (38, 351),

Gene: DeepSoil15_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for DeepSoil15_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Dewey_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for Dewey_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Donovan_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Donovan_1:

(Start: 8 @55 has 48 MA's), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Dynamo_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Dynamo_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Ein37_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for Ein37_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Etoile_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Etoile_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Evanesce_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for Evanesce_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: FirstPlacePfu_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for FirstPlacePfu_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Fishburne_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Fishburne_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Forge_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for Forge_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: GaloreK_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for GaloreK_1:

(Start: 8 @55 has 48 MA's), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Gancho_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for Gancho_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (15, 245), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536),

Gene: Gavriela_1 Start: 42, Stop: 431, Start Num: 8

Candidate Starts for Gavriela_1:

(Start: 8 @42 has 48 MA's), (16, 138), (24, 204), (29, 261), (30, 273), (32, 285), (36, 309), (38, 339),

Gene: Giles_1 Start: 14, Stop: 571, Start Num: 1

Candidate Starts for Giles_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Glaske_1 Start: 42, Stop: 431, Start Num: 8

Candidate Starts for Glaske_1:

(Start: 8 @42 has 48 MA's), (16, 138), (24, 204), (29, 261), (30, 273), (32, 285), (36, 309), (38, 339),

Gene: Gravaillia_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for Gravaillia_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (40, 482), (41, 485),

Gene: GreaseLightnin_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for GreaseLightnin_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: HH92_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for HH92_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: HUHilltop_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for HUHilltop_1:

(Start: 8 @55 has 48 MA's), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Hadrien_1 Start: 14, Stop: 571, Start Num: 1

Candidate Starts for Hadrien_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Hail_1 Start: 14, Stop: 571, Start Num: 1

Candidate Starts for Hail_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Jebeks_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Jebeks_1:

(Start: 8 @55 has 48 MA's), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Jung_1 Start: 42, Stop: 431, Start Num: 8

Candidate Starts for Jung_1:

(Start: 8 @42 has 48 MA's), (16, 138), (24, 204), (29, 261), (30, 273), (36, 309), (38, 339),

Gene: Juniormint_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Juniormint_1:

(Start: 8 @55 has 48 MA's), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: JustASigh_1 Start: 54, Stop: 578, Start Num: 4

Candidate Starts for JustASigh_1:

(2, 45), (Start: 4 @54 has 1 MA's), (9, 132), (10, 147), (23, 282), (24, 291), (31, 372), (35, 432),

Gene: Kari_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Kari_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: KilKor_1 Start: 42, Stop: 431, Start Num: 8

Candidate Starts for KilKor_1:

(Start: 8 @42 has 48 MA's), (16, 138), (24, 204), (29, 261), (30, 273), (32, 285), (36, 309), (38, 339),

Gene: Kinbote_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for Kinbote_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Ksquared_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Ksquared_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (32, 298), (36, 322), (38, 352),

Gene: Langerak_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Langerak_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: LilHazelnut_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for LilHazelnut_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Luke_1 Start: 14, Stop: 571, Start Num: 1

Candidate Starts for Luke_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Luna22_1 Start: 14, Stop: 571, Start Num: 1

Candidate Starts for Luna22_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Majeke_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Majeke_1:

(Start: 8 @55 has 48 MA's), (13, 124), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Malithi_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Malithi_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Mangethe_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Mangethe_1:

(Start: 8 @55 has 48 MA's), (13, 124), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Megiddo_1 Start: 42, Stop: 431, Start Num: 8

Candidate Starts for Megiddo_1:

(Start: 8 @42 has 48 MA's), (16, 138), (24, 204), (29, 261), (30, 273), (32, 285), (36, 309), (38, 339),

Gene: Nazo_1 Start: 43, Stop: 423, Start Num: 8

Candidate Starts for Nazo_1:

(Start: 6 @16 has 1 MA's), (Start: 8 @43 has 48 MA's), (16, 130), (24, 196), (29, 253), (32, 277), (34, 286), (36, 301), (38, 331),

Gene: Necropolis_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Necropolis_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: NovoPizza_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for NovoPizza_1:

(Start: 3 @71 has 16 MA's), (14, 233), (22, 296), (26, 347), (27, 371), (28, 377), (31, 392), (35, 431), (37, 443), (38, 470), (39, 473), (41, 485),

Gene: OBUpride_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for OBUpride_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: PeanutPie_1 Start: 43, Stop: 432, Start Num: 8

Candidate Starts for PeanutPie_1:

(Start: 8 @43 has 48 MA's), (16, 139), (24, 205), (29, 262), (30, 274), (32, 286), (36, 310), (38, 340),

Gene: Phalm_1 Start: 42, Stop: 431, Start Num: 8

Candidate Starts for Phalm_1:

(Start: 8 @42 has 48 MA's), (16, 138), (24, 204), (29, 261), (30, 273), (32, 285), (36, 309), (38, 339),

Gene: Phegasus_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Phegasus_1:

(Start: 8 @55 has 48 MA's), (13, 124), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Phineas_1 Start: 43, Stop: 432, Start Num: 8

Candidate Starts for Phineas_1:

(Start: 8 @43 has 48 MA's), (16, 139), (24, 205), (29, 262), (30, 274), (36, 310), (38, 340),

Gene: Polkaroo_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Polkaroo_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Purky_1 Start: 16, Stop: 432, Start Num: 6

Candidate Starts for Purky_1:

(Start: 6 @16 has 1 MA's), (7, 40), (Start: 8 @55 has 48 MA's), (16, 139), (20, 181), (24, 205), (29, 262), (32, 286), (34, 295), (36, 310), (38, 340),

Gene: Pygmy_1 Start: 43, Stop: 432, Start Num: 8

Candidate Starts for Pygmy_1:

(Start: 8 @43 has 48 MA's), (16, 139), (24, 205), (29, 262), (30, 274), (36, 310), (38, 340),

Gene: Shipwreck_1 Start: 43, Stop: 432, Start Num: 8

Candidate Starts for Shipwreck_1:

(Start: 8 @43 has 48 MA's), (16, 139), (24, 205), (29, 262), (30, 274), (36, 310), (38, 340),

Gene: Sonah_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Sonah_1:

(Start: 8 @55 has 48 MA's), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: StevieRay_1 Start: 43, Stop: 432, Start Num: 8

Candidate Starts for StevieRay_1:

(Start: 8 @43 has 48 MA's), (16, 139), (24, 205), (29, 262), (30, 274), (32, 286), (36, 310), (38, 340),

Gene: StressBall_1 Start: 42, Stop: 431, Start Num: 8

Candidate Starts for StressBall_1:

(Start: 8 @42 has 48 MA's), (16, 138), (24, 204), (29, 261), (30, 273), (32, 285), (36, 309), (38, 339),

Gene: Techage_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Techage_1:

(Start: 8 @55 has 48 MA's), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Thespis_1 Start: 42, Stop: 431, Start Num: 8

Candidate Starts for Thespis_1:

(Start: 8 @42 has 48 MA's), (16, 138), (24, 204), (29, 261), (30, 273), (32, 285), (36, 309), (38, 339),

Gene: ThulaThula_1 Start: 55, Stop: 432, Start Num: 8

Candidate Starts for ThulaThula_1:

(Start: 8 @55 has 48 MA's), (11, 91), (16, 139), (18, 175), (20, 181), (24, 205), (25, 235), (29, 262), (36, 310), (37, 313), (38, 340),

Gene: Tortellini_1 Start: 43, Stop: 432, Start Num: 8

Candidate Starts for Tortellini_1:

(Start: 8 @43 has 48 MA's), (12, 94), (16, 139), (18, 175), (24, 205), (34, 295), (36, 310), (38, 340),

Gene: Ubuntu_1 Start: 14, Stop: 571, Start Num: 1

Candidate Starts for Ubuntu_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Venti_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Venti_1:

(Start: 8 @55 has 48 MA's), (16, 151), (20, 193), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Vidya_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Vidya_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),

Gene: Webster2_1 Start: 71, Stop: 571, Start Num: 3

Candidate Starts for Webster2_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Willsammy_1 Start: 42, Stop: 431, Start Num: 8

Candidate Starts for Willsammy_1:

(Start: 8 @42 has 48 MA's), (16, 138), (24, 204), (29, 261), (30, 273), (32, 285), (36, 309), (38, 339),

Gene: Wishmaker_1 Start: 14, Stop: 571, Start Num: 1

Candidate Starts for Wishmaker_1:

(Start: 1 @14 has 7 MA's), (Start: 3 @71 has 16 MA's), (5, 92), (17, 257), (19, 287), (21, 293), (22, 296), (24, 314), (25, 344), (26, 347), (31, 392), (33, 416), (34, 425), (38, 470), (41, 485), (42, 536), (43, 563),

Gene: Xavia_1 Start: 55, Stop: 435, Start Num: 8

Candidate Starts for Xavia_1:

(Start: 6 @16 has 1 MA's), (Start: 8 @55 has 48 MA's), (16, 142), (20, 184), (21, 187), (24, 208), (29, 265), (30, 277), (32, 289), (34, 298), (36, 313), (38, 343),

Gene: Zilizebeth_1 Start: 55, Stop: 444, Start Num: 8

Candidate Starts for Zilizebeth_1:

(Start: 8 @55 has 48 MA's), (16, 151), (24, 217), (29, 274), (30, 286), (36, 322), (38, 352),