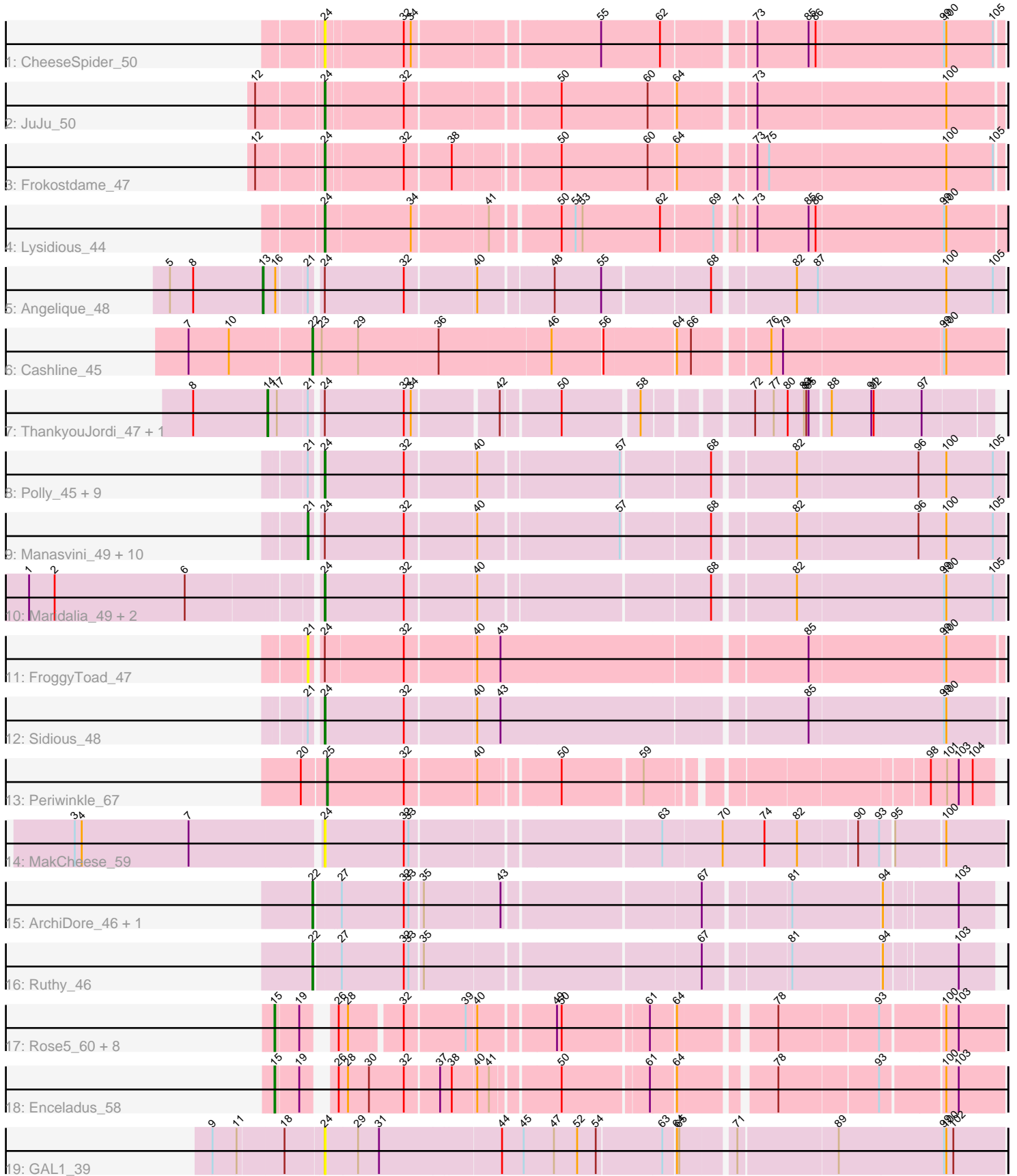


Pham 296665



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 296665 Report

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

Pham number 296665 has 50 members, 6 are drafts.

Phages represented in each track:

- Track 1 : CheeseSpider_50
- Track 2 : JuJu_50
- Track 3 : Frokostdame_47
- Track 4 : Lysidious_44
- Track 5 : Angelique_48
- Track 6 : Cashline_45
- Track 7 : ThankyouJordi_47, WelcomeAyanna_47
- Track 8 : Polly_45, Eudoria_48, AlumE_48, Agueybana_50, Trumpet_48, Suscepit_48, BoyNamedSue_48, Neobush_48, Tayonia_48, Zameen_48
- Track 9 : Manasvini_49, Yeet412_43, Attis_43, LordFarquaad_45, EdnaMode_42, Antonio_48, Zirinka_45, Pickett_41, SoilAssassin_43, Kita_49, Bialota_46
- Track 10 : Maridalia_49, SushiChef_45, Bunnybear_41
- Track 11 : FroggyToad_47
- Track 12 : Sidious_48
- Track 13 : Periwinkle_67
- Track 14 : MakCheese_59
- Track 15 : ArchiDore_46, DumpsterDude_48
- Track 16 : Ruthy_46
- Track 17 : Rose5_60, Silverleaf_60, CicholasNage_59, JoeDirt_59, Wyatt2_61, AvadaKedavra_60, Acquire49_60, Tyson_60, Poochiewood_60
- Track 18 : Enceladus_58
- Track 19 : GAL1_39

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

The start number called the most often in the published annotations is 24, it was called in 16 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agueybana_50, AlumE_48, BoyNamedSue_48, Bunnybear_41, CheeseSpider_50, Eudoria_48, Frokostdame_47, GAL1_39, JuJu_50, Lysidious_44, MakCheese_59, Maridalia_49, Neobush_48, Polly_45, Sidious_48, Suscepit_48, SushiChef_45, Tayonia_48, Trumpet_48, Zameen_48,

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

- Angelique_48, Antonio_48, Attis_43, Bialota_46, EdnaMode_42, FroggyToad_47, Kita_49, LordFarquaad_45, Manasvini_49, Pickett_41, SoilAssassin_43, ThankyouJordi_47, WelcomeAyanna_47, Yeet412_43, Zirinka_45,

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

- Acquire49_60, ArchiDore_46, AvadaKedavra_60, Cashline_45, CicholasNage_59, DumpsterDude_48, Enceladus_58, JoeDirt_59, Periwinkle_67, Poochiewood_60, Rose5_60, Ruthy_46, Silverleaf_60, Tyson_60, Wyatt2_61,

Summary by start number:

Start 13:

- Found in 1 of 50 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique_48 (CY1),

Start 14:

- Found in 2 of 50 (4.0%) of genes in pham
- Manual Annotations of this start: 2 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ThankyouJordi_47 (CZ1), WelcomeAyanna_47 (CZ1),

Start 15:

- Found in 10 of 50 (20.0%) of genes in pham
- Manual Annotations of this start: 9 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acquire49_60 (L1), AvadaKedavra_60 (L1), CicholasNage_59 (L1), Enceladus_58 (L1), JoeDirt_59 (L1), Poochiewood_60 (L1), Rose5_60 (L1), Silverleaf_60 (L1), Tyson_60 (L1), Wyatt2_61 (L1),

Start 21:

- Found in 26 of 50 (52.0%) of genes in pham
- Manual Annotations of this start: 11 of 44
- Called 46.2% of time when present
- Phage (with cluster) where this start called: Antonio_48 (CZ1), Attis_43 (CZ2), Bialota_46 (CZ1), EdnaMode_42 (CZ2), FroggyToad_47 (CZ2), Kita_49 (CZ1), LordFarquaad_45 (CZ2), Manasvini_49 (CZ1), Pickett_41 (CZ2), SoilAssassin_43 (CZ2), Yeet412_43 (CZ2), Zirinka_45 (CZ1),

Start 22:

- Found in 4 of 50 (8.0%) of genes in pham
- Manual Annotations of this start: 4 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArchiDore_46 (DW), Cashline_45 (CY6), DumpsterDude_48 (DW), Ruthy_46 (DW),

Start 24:

- Found in 35 of 50 (70.0%) of genes in pham
- Manual Annotations of this start: 16 of 44
- Called 57.1% of time when present

- Phage (with cluster) where this start called: Agueybana_50 (CZ1), AlumE_48 (CZ1), BoyNamedSue_48 (CZ1), Bunnybear_41 (CZ), CheeseSpider_50 (CV), Eudoria_48 (CZ1), Frokostdame_47 (CV), GAL1_39 (singleton), JuJu_50 (CV), Lysidious_44 (CV), MakCheese_59 (DW), Maridalia_49 (CZ1), Neobush_48 (CZ1), Polly_45 (CZ1), Sidious_48 (CZ7), Suscepit_48 (CZ1), SushiChef_45 (CZ), Tayonia_48 (CZ1), Trumpet_48 (CZ1), Zameen_48 (CZ1),

Start 25:

- Found in 1 of 50 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Periwinkle_67 (DN1),

Summary by clusters:

There are 11 clusters represented in this pham: singleton, CY6, CZ2, CZ1, CY1, CZ7, CZ, DN1, L1, DW, CV,

Info for manual annotations of cluster CV:

- Start number 24 was manually annotated 3 times for cluster CV.

Info for manual annotations of cluster CY1:

- Start number 13 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CY6:

- Start number 22 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CZ:

- Start number 24 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 14 was manually annotated 2 times for cluster CZ1.
- Start number 21 was manually annotated 5 times for cluster CZ1.
- Start number 24 was manually annotated 11 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 21 was manually annotated 6 times for cluster CZ2.

Info for manual annotations of cluster CZ7:

- Start number 24 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DN1:

- Start number 25 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DW:

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

Info for manual annotations of cluster L1:

- Start number 15 was manually annotated 9 times for cluster L1.

Gene Information:

Gene: Acquire49_60 Start: 42360, Stop: 43178, Start Num: 15

Candidate Starts for Acquire49_60:

(Start: 15 @42360 has 9 MA's), (19, 42387), (26, 42414), (28, 42426), (32, 42486), (39, 42561), (40, 42573), (49, 42663), (50, 42669), (61, 42774), (64, 42804), (78, 42909), (93, 43032), (100, 43107), (103, 43122),

Gene: Agueybana_50 Start: 37589, Stop: 38413, Start Num: 24

Candidate Starts for Agueybana_50:

(Start: 21 @37577 has 11 MA's), (Start: 24 @37589 has 16 MA's), (32, 37691), (40, 37778), (57, 37949), (68, 38054), (82, 38150), (96, 38303), (100, 38339), (105, 38399),

Gene: AlumE_48 Start: 36089, Stop: 36913, Start Num: 24

Candidate Starts for AlumE_48:

(Start: 21 @36077 has 11 MA's), (Start: 24 @36089 has 16 MA's), (32, 36191), (40, 36278), (57, 36449), (68, 36554), (82, 36650), (96, 36803), (100, 36839), (105, 36899),

Gene: Angelique_48 Start: 37247, Stop: 38128, Start Num: 13

Candidate Starts for Angelique_48:

(5, 37127), (8, 37157), (Start: 13 @37247 has 1 MA's), (16, 37259), (Start: 21 @37292 has 11 MA's), (Start: 24 @37304 has 16 MA's), (32, 37406), (40, 37493), (48, 37580), (55, 37640), (68, 37769), (82, 37865), (87, 37892), (100, 38054), (105, 38114),

Gene: Antonio_48 Start: 35350, Stop: 36186, Start Num: 21

Candidate Starts for Antonio_48:

(Start: 21 @35350 has 11 MA's), (Start: 24 @35362 has 16 MA's), (32, 35464), (40, 35551), (57, 35722), (68, 35827), (82, 35923), (96, 36076), (100, 36112), (105, 36172),

Gene: ArchiDore_46 Start: 36606, Stop: 37415, Start Num: 22

Candidate Starts for ArchiDore_46:

(Start: 22 @36606 has 4 MA's), (27, 36636), (32, 36714), (33, 36720), (35, 36735), (43, 36831), (67, 37068), (81, 37170), (94, 37284), (103, 37371),

Gene: Attis_43 Start: 32483, Stop: 33319, Start Num: 21

Candidate Starts for Attis_43:

(Start: 21 @32483 has 11 MA's), (Start: 24 @32495 has 16 MA's), (32, 32597), (40, 32684), (57, 32855), (68, 32960), (82, 33056), (96, 33209), (100, 33245), (105, 33305),

Gene: AvadaKedavra_60 Start: 42433, Stop: 43251, Start Num: 15

Candidate Starts for AvadaKedavra_60:

(Start: 15 @42433 has 9 MA's), (19, 42460), (26, 42487), (28, 42499), (32, 42559), (39, 42634), (40, 42646), (49, 42736), (50, 42742), (61, 42847), (64, 42877), (78, 42982), (93, 43105), (100, 43180), (103, 43195),

Gene: Bialota_46 Start: 35982, Stop: 36818, Start Num: 21

Candidate Starts for Bialota_46:

(Start: 21 @35982 has 11 MA's), (Start: 24 @35994 has 16 MA's), (32, 36096), (40, 36183), (57, 36354), (68, 36459), (82, 36555), (96, 36708), (100, 36744), (105, 36804),

Gene: BoyNamedSue_48 Start: 36089, Stop: 36913, Start Num: 24

Candidate Starts for BoyNamedSue_48:

(Start: 21 @36077 has 11 MA's), (Start: 24 @36089 has 16 MA's), (32, 36191), (40, 36278), (57, 36449), (68, 36554), (82, 36650), (96, 36803), (100, 36839), (105, 36899),

Gene: Bunnybear_41 Start: 33762, Stop: 34586, Start Num: 24

Candidate Starts for Bunnybear_41:

(1, 33405), (2, 33438), (6, 33606), (Start: 24 @33762 has 16 MA's), (32, 33864), (40, 33951), (68, 34227), (82, 34323), (99, 34509), (100, 34512), (105, 34572),

Gene: Cashline_45 Start: 35939, Stop: 36781, Start Num: 22

Candidate Starts for Cashline_45:

(7, 35786), (10, 35837), (Start: 22 @35939 has 4 MA's), (23, 35951), (29, 35996), (36, 36098), (46, 36236), (56, 36299), (64, 36383), (66, 36401), (76, 36488), (79, 36503), (99, 36704), (100, 36707),

Gene: CheeseSpider_50 Start: 33609, Stop: 34427, Start Num: 24

Candidate Starts for CheeseSpider_50:

(Start: 24 @33609 has 16 MA's), (32, 33705), (34, 33714), (55, 33939), (62, 34014), (73, 34119), (85, 34185), (86, 34194), (99, 34356), (100, 34359), (105, 34419),

Gene: CicholasNage_59 Start: 42396, Stop: 43214, Start Num: 15

Candidate Starts for CicholasNage_59:

(Start: 15 @42396 has 9 MA's), (19, 42423), (26, 42450), (28, 42462), (32, 42522), (39, 42597), (40, 42609), (49, 42699), (50, 42705), (61, 42810), (64, 42840), (78, 42945), (93, 43068), (100, 43143), (103, 43158),

Gene: DumpsterDude_48 Start: 38831, Stop: 39640, Start Num: 22

Candidate Starts for DumpsterDude_48:

(Start: 22 @38831 has 4 MA's), (27, 38861), (32, 38939), (33, 38945), (35, 38960), (43, 39056), (67, 39293), (81, 39395), (94, 39509), (103, 39596),

Gene: EdnaMode_42 Start: 31171, Stop: 32007, Start Num: 21

Candidate Starts for EdnaMode_42:

(Start: 21 @31171 has 11 MA's), (Start: 24 @31183 has 16 MA's), (32, 31285), (40, 31372), (57, 31543), (68, 31648), (82, 31744), (96, 31897), (100, 31933), (105, 31993),

Gene: Enceladus_58 Start: 42233, Stop: 43060, Start Num: 15

Candidate Starts for Enceladus_58:

(Start: 15 @42233 has 9 MA's), (19, 42260), (26, 42287), (28, 42299), (30, 42326), (32, 42371), (37, 42413), (38, 42428), (40, 42458), (41, 42473), (50, 42551), (61, 42656), (64, 42686), (78, 42791), (93, 42914), (100, 42989), (103, 43004),

Gene: Eudoria_48 Start: 35362, Stop: 36186, Start Num: 24

Candidate Starts for Eudoria_48:

(Start: 21 @35350 has 11 MA's), (Start: 24 @35362 has 16 MA's), (32, 35464), (40, 35551), (57, 35722), (68, 35827), (82, 35923), (96, 36076), (100, 36112), (105, 36172),

Gene: FroggyToad_47 Start: 33512, Stop: 34357, Start Num: 21

Candidate Starts for FroggyToad_47:

(Start: 21 @33512 has 11 MA's), (Start: 24 @33524 has 16 MA's), (32, 33623), (40, 33710), (43, 33740), (85, 34115), (99, 34286), (100, 34289),

Gene: Frokostdame_47 Start: 34936, Stop: 35751, Start Num: 24

Candidate Starts for Frokostdame_47:

(12, 34861), (Start: 24 @34936 has 16 MA's), (32, 35032), (38, 35089), (50, 35212), (60, 35323), (64, 35356), (73, 35443), (75, 35458), (100, 35683), (105, 35743),

Gene: GAL1_39 Start: 32334, Stop: 33173, Start Num: 24

Candidate Starts for GAL1_39:

(9, 32199), (11, 32229), (18, 32286), (Start: 24 @32334 has 16 MA's), (29, 32376), (31, 32403), (44, 32556), (45, 32583), (47, 32622), (52, 32652), (54, 32676), (63, 32757), (64, 32772), (65, 32775), (71, 32838), (89, 32961), (99, 33096), (100, 33099), (102, 33108),

Gene: JoeDirt_59 Start: 42675, Stop: 43493, Start Num: 15

Candidate Starts for JoeDirt_59:

(Start: 15 @42675 has 9 MA's), (19, 42702), (26, 42729), (28, 42741), (32, 42801), (39, 42876), (40, 42888), (49, 42978), (50, 42984), (61, 43089), (64, 43119), (78, 43224), (93, 43347), (100, 43422), (103, 43437),

Gene: JuJu_50 Start: 36277, Stop: 37092, Start Num: 24

Candidate Starts for JuJu_50:

(12, 36202), (Start: 24 @36277 has 16 MA's), (32, 36373), (50, 36553), (60, 36664), (64, 36697), (73, 36784), (100, 37024),

Gene: Kita_49 Start: 35359, Stop: 36195, Start Num: 21

Candidate Starts for Kita_49:

(Start: 21 @35359 has 11 MA's), (Start: 24 @35371 has 16 MA's), (32, 35473), (40, 35560), (57, 35731), (68, 35836), (82, 35932), (96, 36085), (100, 36121), (105, 36181),

Gene: LordFarquaad_45 Start: 32464, Stop: 33300, Start Num: 21

Candidate Starts for LordFarquaad_45:

(Start: 21 @32464 has 11 MA's), (Start: 24 @32476 has 16 MA's), (32, 32578), (40, 32665), (57, 32836), (68, 32941), (82, 33037), (96, 33190), (100, 33226), (105, 33286),

Gene: Lysidious_44 Start: 34244, Stop: 35065, Start Num: 24

Candidate Starts for Lysidious_44:

(Start: 24 @34244 has 16 MA's), (34, 34352), (41, 34442), (50, 34520), (51, 34538), (53, 34547), (62, 34646), (69, 34709), (71, 34730), (73, 34751), (85, 34817), (86, 34826), (99, 34988), (100, 34991),

Gene: MakCheese_59 Start: 40021, Stop: 40845, Start Num: 24

Candidate Starts for MakCheese_59:

(3, 39715), (4, 39724), (7, 39862), (Start: 24 @40021 has 16 MA's), (32, 40123), (33, 40129), (63, 40429), (70, 40504), (74, 40558), (82, 40600), (90, 40672), (93, 40699), (95, 40714), (100, 40774),

Gene: Manasvini_49 Start: 35374, Stop: 36210, Start Num: 21

Candidate Starts for Manasvini_49:

(Start: 21 @35374 has 11 MA's), (Start: 24 @35386 has 16 MA's), (32, 35488), (40, 35575), (57, 35746), (68, 35851), (82, 35947), (96, 36100), (100, 36136), (105, 36196),

Gene: Maridalia_49 Start: 35508, Stop: 36332, Start Num: 24

Candidate Starts for Maridalia_49:

(1, 35151), (2, 35184), (6, 35352), (Start: 24 @35508 has 16 MA's), (32, 35610), (40, 35697), (68, 35973), (82, 36069), (99, 36255), (100, 36258), (105, 36318),

Gene: Neobush_48 Start: 35356, Stop: 36180, Start Num: 24

Candidate Starts for Neobush_48:

(Start: 21 @35344 has 11 MA's), (Start: 24 @35356 has 16 MA's), (32, 35458), (40, 35545), (57, 35716), (68, 35821), (82, 35917), (96, 36070), (100, 36106), (105, 36166),

Gene: Periwinkle_67 Start: 39705, Stop: 40481, Start Num: 25

Candidate Starts for Periwinkle_67:

(20, 39675), (Start: 25 @39705 has 1 MA's), (32, 39804), (40, 39891), (50, 39984), (59, 40083), (98, 40401), (101, 40422), (103, 40437), (104, 40455),

Gene: Pickett_41 Start: 29647, Stop: 30483, Start Num: 21

Candidate Starts for Pickett_41:

(Start: 21 @29647 has 11 MA's), (Start: 24 @29659 has 16 MA's), (32, 29761), (40, 29848), (57, 30019), (68, 30124), (82, 30220), (96, 30373), (100, 30409), (105, 30469),

Gene: Polly_45 Start: 34805, Stop: 35629, Start Num: 24

Candidate Starts for Polly_45:

(Start: 21 @34793 has 11 MA's), (Start: 24 @34805 has 16 MA's), (32, 34907), (40, 34994), (57, 35165), (68, 35270), (82, 35366), (96, 35519), (100, 35555), (105, 35615),

Gene: Poochiewood_60 Start: 42683, Stop: 43501, Start Num: 15

Candidate Starts for Poochiewood_60:

(Start: 15 @42683 has 9 MA's), (19, 42710), (26, 42737), (28, 42749), (32, 42809), (39, 42884), (40, 42896), (49, 42986), (50, 42992), (61, 43097), (64, 43127), (78, 43232), (93, 43355), (100, 43430), (103, 43445),

Gene: Rose5_60 Start: 42695, Stop: 43513, Start Num: 15

Candidate Starts for Rose5_60:

(Start: 15 @42695 has 9 MA's), (19, 42722), (26, 42749), (28, 42761), (32, 42821), (39, 42896), (40, 42908), (49, 42998), (50, 43004), (61, 43109), (64, 43139), (78, 43244), (93, 43367), (100, 43442), (103, 43457),

Gene: Ruthy_46 Start: 36193, Stop: 37002, Start Num: 22

Candidate Starts for Ruthy_46:

(Start: 22 @36193 has 4 MA's), (27, 36223), (32, 36301), (33, 36307), (35, 36322), (67, 36655), (81, 36757), (94, 36871), (103, 36958),

Gene: Sidious_48 Start: 36674, Stop: 37510, Start Num: 24

Candidate Starts for Sidious_48:

(Start: 21 @36662 has 11 MA's), (Start: 24 @36674 has 16 MA's), (32, 36776), (40, 36863), (43, 36893), (85, 37268), (99, 37439), (100, 37442),

Gene: Silverleaf_60 Start: 42430, Stop: 43248, Start Num: 15

Candidate Starts for Silverleaf_60:

(Start: 15 @42430 has 9 MA's), (19, 42457), (26, 42484), (28, 42496), (32, 42556), (39, 42631), (40, 42643), (49, 42733), (50, 42739), (61, 42844), (64, 42874), (78, 42979), (93, 43102), (100, 43177), (103, 43192),

Gene: SoilAssassin_43 Start: 32482, Stop: 33318, Start Num: 21

Candidate Starts for SoilAssassin_43:

(Start: 21 @32482 has 11 MA's), (Start: 24 @32494 has 16 MA's), (32, 32596), (40, 32683), (57, 32854), (68, 32959), (82, 33055), (96, 33208), (100, 33244), (105, 33304),

Gene: Suscepit_48 Start: 35363, Stop: 36187, Start Num: 24

Candidate Starts for Suscepit_48:

(Start: 21 @35351 has 11 MA's), (Start: 24 @35363 has 16 MA's), (32, 35465), (40, 35552), (57, 35723), (68, 35828), (82, 35924), (96, 36077), (100, 36113), (105, 36173),

Gene: SushiChef_45 Start: 36276, Stop: 37100, Start Num: 24

Candidate Starts for SushiChef_45:

(1, 35919), (2, 35952), (6, 36120), (Start: 24 @36276 has 16 MA's), (32, 36378), (40, 36465), (68, 36741), (82, 36837), (99, 37023), (100, 37026), (105, 37086),

Gene: Tayonia_48 Start: 35362, Stop: 36186, Start Num: 24

Candidate Starts for Tayonia_48:

(Start: 21 @35350 has 11 MA's), (Start: 24 @35362 has 16 MA's), (32, 35464), (40, 35551), (57, 35722), (68, 35827), (82, 35923), (96, 36076), (100, 36112), (105, 36172),

Gene: ThankyouJordi_47 Start: 37192, Stop: 38031, Start Num: 14

Candidate Starts for ThankyouJordi_47:

(8, 37096), (Start: 14 @37192 has 2 MA's), (17, 37204), (Start: 21 @37237 has 11 MA's), (Start: 24 @37249 has 16 MA's), (32, 37351), (34, 37360), (42, 37462), (50, 37531), (58, 37624), (72, 37738), (77, 37762), (80, 37780), (83, 37801), (84, 37804), (85, 37807), (88, 37831), (91, 37882), (92, 37885), (97, 37945),

Gene: Trumpet_48 Start: 35363, Stop: 36187, Start Num: 24

Candidate Starts for Trumpet_48:

(Start: 21 @35351 has 11 MA's), (Start: 24 @35363 has 16 MA's), (32, 35465), (40, 35552), (57, 35723), (68, 35828), (82, 35924), (96, 36077), (100, 36113), (105, 36173),

Gene: Tyson_60 Start: 42697, Stop: 43515, Start Num: 15

Candidate Starts for Tyson_60:

(Start: 15 @42697 has 9 MA's), (19, 42724), (26, 42751), (28, 42763), (32, 42823), (39, 42898), (40, 42910), (49, 43000), (50, 43006), (61, 43111), (64, 43141), (78, 43246), (93, 43369), (100, 43444), (103, 43459),

Gene: WelcomeAyanna_47 Start: 37339, Stop: 38178, Start Num: 14

Candidate Starts for WelcomeAyanna_47:

(8, 37243), (Start: 14 @37339 has 2 MA's), (17, 37351), (Start: 21 @37384 has 11 MA's), (Start: 24 @37396 has 16 MA's), (32, 37498), (34, 37507), (42, 37609), (50, 37678), (58, 37771), (72, 37885), (77, 37909), (80, 37927), (83, 37948), (84, 37951), (85, 37954), (88, 37978), (91, 38029), (92, 38032), (97, 38092),

Gene: Wyatt2_61 Start: 42695, Stop: 43513, Start Num: 15

Candidate Starts for Wyatt2_61:

(Start: 15 @42695 has 9 MA's), (19, 42722), (26, 42749), (28, 42761), (32, 42821), (39, 42896), (40, 42908), (49, 42998), (50, 43004), (61, 43109), (64, 43139), (78, 43244), (93, 43367), (100, 43442), (103, 43457),

Gene: Yeet412_43 Start: 32483, Stop: 33319, Start Num: 21

Candidate Starts for Yeet412_43:

(Start: 21 @32483 has 11 MA's), (Start: 24 @32495 has 16 MA's), (32, 32597), (40, 32684), (57, 32855), (68, 32960), (82, 33056), (96, 33209), (100, 33245), (105, 33305),

Gene: Zameen_48 Start: 35362, Stop: 36186, Start Num: 24

Candidate Starts for Zameen_48:

(Start: 21 @35350 has 11 MA's), (Start: 24 @35362 has 16 MA's), (32, 35464), (40, 35551), (57, 35722), (68, 35827), (82, 35923), (96, 36076), (100, 36112), (105, 36172),

Gene: Zirinka_45 Start: 35970, Stop: 36806, Start Num: 21

Candidate Starts for Zirinka_45:

(Start: 21 @35970 has 11 MA's), (Start: 24 @35982 has 16 MA's), (32, 36084), (40, 36171), (57, 36342), (68, 36447), (82, 36543), (96, 36696), (100, 36732), (105, 36792),

