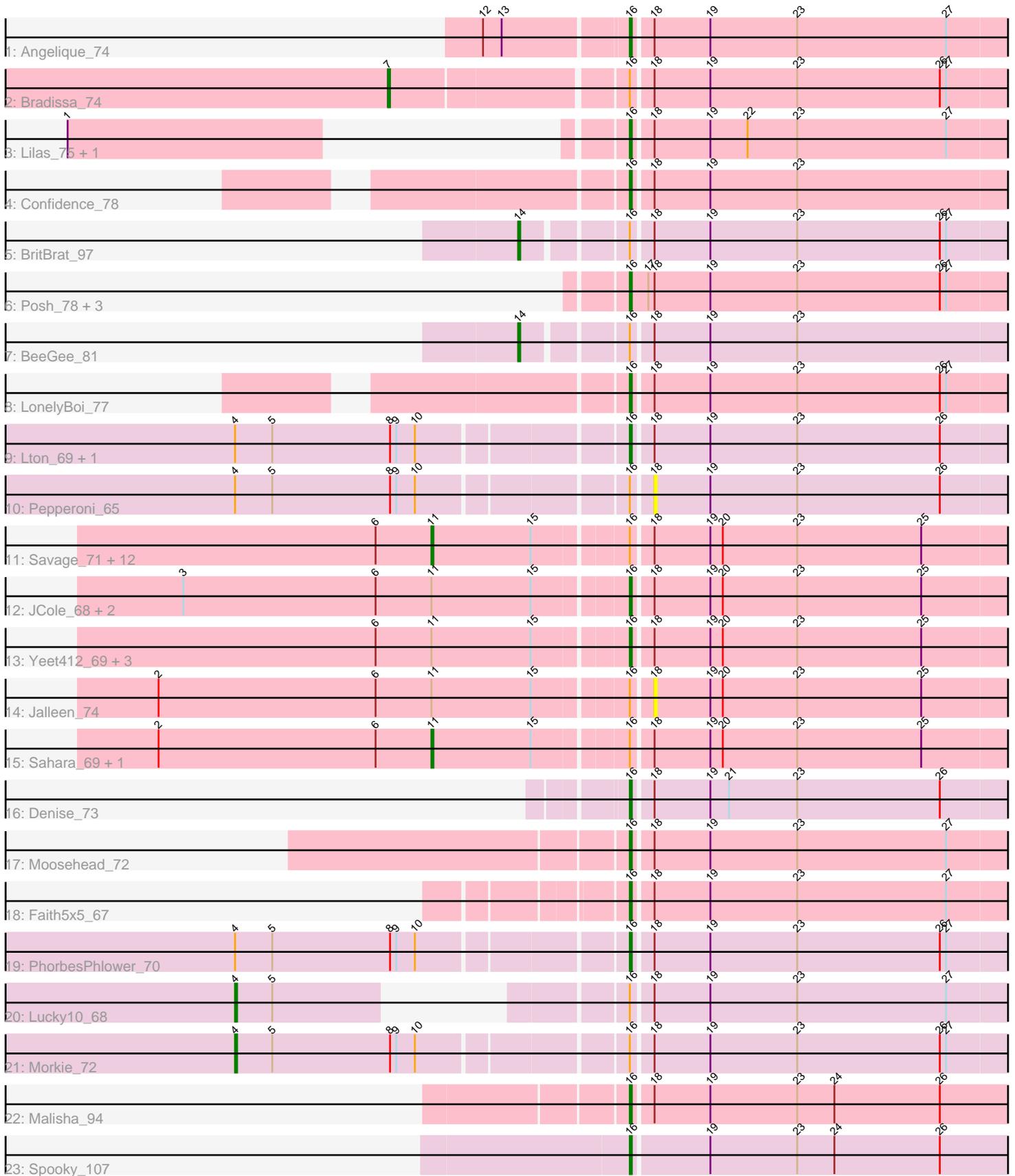Pham 291282

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 291282 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291282 has 46 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Angelique_74
• Track 2 : Bradissa_74
• Track 3 : Lilas_75, EnalisNailo_74
• Track 4 : Confidence_78
• Track 5 : BritBrat_97
• Track 6 : Posh_78, Pytheas_82, Wrigley_80, Jablanski_81
• Track 7 : BeeGee_81
• Track 8 : LonelyBoi_77
• Track 9 : Lton_69, OneDirection_66
• Track 10 : Pepperoni_65
• Track 11 : Savage_71, Whiteclaw_71, Lamberg_67, Bjanes7_68, Cynthia_71, SoilAssassin_70, Nettuno_68, Haley23_71, GemG_71, TuertoX_71, Attis_70, Sproutie_71, Mocha12_71
• Track 12 : JCole_68, Pickett_68, EdnaMode_70
• Track 13 : Yeet412_69, Ebert_74, Clap_71, Gizermo_71
• Track 14 : Jalleen_74
• Track 15 : Sahara_69, Matteo_64
• Track 16 : Denise_73
• Track 17 : Moosehead_72
• Track 18 : Faith5x5_67
• Track 19 : PhorbesPhlower_70
• Track 20 : Lucky10_68
• Track 21 : Morkie_72
• Track 22 : Malisha_94
• Track 23 : Spooky_107

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

The start number called the most often in the published annotations is 16, it was called in 23 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Angelique_74, Clap_71, Confidence_78, Denise_73, Ebert_74, EdnaMode_70, EnalisNailo_74, Faith5x5_67, Gizermo_71, JCole_68, Jablanski_81, Lilas_75,

LonelyBoi_77, Lton_69, Malisha_94, Moosehead_72, OneDirection_66, PhorbesPhlower_70, Pickett_68, Posh_78, Pytheas_82, Spooky_107, Wrigley_80, Yeet412_69,

Genes that have the "Most Annotated" start but do not call it:
• Attis_70, BeeGee_81, Bjanes7_68, Bradissa_74, BritBrat_97, Cynthia_71, GemG_71, Haley23_71, Jalleen_74, Lamberg_67, Lucky10_68, Matteo_64, Mocha12_71, Morkie_72, Nettuno_68, Pepperoni_65, Sahara_69, Savage_71, SoilAssassin_70, Sproutie_71, TuertoX_71, Whiteclaw_71,

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

Summary by start number:

Start 4:
• Found in 6 of 46 (13.0%) of genes in pham
• Manual Annotations of this start: 2 of 43
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Lucky10_68 (DH), Morkie_72 (DH),

Start 7:
• Found in 1 of 46 (2.2%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bradissa_74 (CY1),

Start 11:
• Found in 23 of 46 (50.0%) of genes in pham
• Manual Annotations of this start: 15 of 43
• Called 65.2% of time when present
• Phage (with cluster) where this start called: Attis_70 (CZ2), Bjanes7_68 (CZ2), Cynthia_71 (CZ2), GemG_71 (CZ2), Haley23_71 (CZ2), Lamberg_67 (CZ2), Matteo_64 (CZ2), Mocha12_71 (CZ2), Nettuno_68 (CZ2), Sahara_69 (CZ2), Savage_71 (CZ2), SoilAssassin_70 (CZ2), Sproutie_71 (CZ2), TuertoX_71 (CZ2), Whiteclaw_71 (CZ2),

Start 14:
• Found in 2 of 46 (4.3%) of genes in pham
• Manual Annotations of this start: 2 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BeeGee_81 (CY5), BritBrat_97 (CY2),

Start 16:
• Found in 46 of 46 (100.0%) of genes in pham
• Manual Annotations of this start: 23 of 43
• Called 52.2% of time when present
• Phage (with cluster) where this start called: Angelique_74 (CY1), Clap_71 (CZ2), Confidence_78 (CY1), Denise_73 (CZ5), Ebert_74 (CZ2), EdnaMode_70 (CZ2), EnalisNailo_74 (CY1), Faith5x5_67 (CZ6), Gizermo_71 (CZ2), JCole_68 (CZ2), Jablanski_81 (CY3), Lilas_75 (CY1), LonelyBoi_77 (CY7), Lton_69 (CZ), Malisha_94 (DN), Moosehead_72 (CZ6), OneDirection_66 (CZ6), PhorbesPhlower_70 (DH), Pickett_68 (CZ2), Posh_78 (CY4), Pytheas_82 (CY3), Spooky_107 (DN2),

Wrigley_80 (CY4), Yeet412_69 (CZ2),

Start 18:
• Found in 45 of 46 (97.8%) of genes in pham
• No Manual Annotations of this start.
• Called 4.4% of time when present
• Phage (with cluster) where this start called: Jalleen_74 (CZ2), Pepperoni_65 (CZ),

Summary by clusters:

There are 13 clusters represented in this pham: DN, CY2, CY1, CY3, CY5, DH, CY4, CZ2, CZ6, CZ5, CZ, DN2, CY7,

Info for manual annotations of cluster CY1:
•Start number 7 was manually annotated 1 time for cluster CY1.
•Start number 16 was manually annotated 4 times for cluster CY1.

Info for manual annotations of cluster CY2:
•Start number 14 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:
•Start number 16 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:
•Start number 16 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:
•Start number 14 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY7:
•Start number 16 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster CZ:
•Start number 16 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ2:
•Start number 11 was manually annotated 15 times for cluster CZ2.
•Start number 16 was manually annotated 6 times for cluster CZ2.

Info for manual annotations of cluster CZ5:
•Start number 16 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:
•Start number 16 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster DH:
•Start number 4 was manually annotated 2 times for cluster DH.
•Start number 16 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:
•Start number 16 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN2:

•Start number 16 was manually annotated 1 time for cluster DN2.

Gene Information:
Gene: Angelique_74 Start: 50251, Stop: 50433, Start Num: 16
Candidate Starts for Angelique_74:
(12, 50185), (13, 50194), (Start: 16 @50251 has 23 MA's), (18, 50260), (19, 50287), (23, 50329), (27, 50401),

Gene: Attis_70 Start: 46336, Stop: 46608, Start Num: 11
Candidate Starts for Attis_70:
(6, 46309), (Start: 11 @46336 has 15 MA's), (15, 46384), (Start: 16 @46426 has 23 MA's), (18, 46435), (19, 46462), (20, 46468), (23, 46504), (25, 46564),

Gene: BeeGee_81 Start: 51002, Stop: 51229, Start Num: 14
Candidate Starts for BeeGee_81:
(Start: 14 @51002 has 2 MA's), (Start: 16 @51047 has 23 MA's), (18, 51056), (19, 51083), (23, 51125),

Gene: Bjanes7_68 Start: 44497, Stop: 44769, Start Num: 11
Candidate Starts for Bjanes7_68:
(6, 44470), (Start: 11 @44497 has 15 MA's), (15, 44545), (Start: 16 @44587 has 23 MA's), (18, 44596), (19, 44623), (20, 44629), (23, 44665), (25, 44725),

Gene: Bradissa_74 Start: 51018, Stop: 51308, Start Num: 7
Candidate Starts for Bradissa_74:
(Start: 7 @51018 has 1 MA's), (Start: 16 @51126 has 23 MA's), (18, 51135), (19, 51162), (23, 51204), (26, 51273), (27, 51276),

Gene: BritBrat_97 Start: 54941, Stop: 55171, Start Num: 14
Candidate Starts for BritBrat_97:
(Start: 14 @54941 has 2 MA's), (Start: 16 @54986 has 23 MA's), (18, 54995), (19, 55022), (23, 55064), (26, 55133), (27, 55136),

Gene: Clap_71 Start: 44766, Stop: 44948, Start Num: 16
Candidate Starts for Clap_71:
(6, 44649), (Start: 11 @44676 has 15 MA's), (15, 44724), (Start: 16 @44766 has 23 MA's), (18, 44775), (19, 44802), (20, 44808), (23, 44844), (25, 44904),

Gene: Confidence_78 Start: 49927, Stop: 50109, Start Num: 16
Candidate Starts for Confidence_78:
(Start: 16 @49927 has 23 MA's), (18, 49936), (19, 49963), (23, 50005),

Gene: Cynthia_71 Start: 44674, Stop: 44946, Start Num: 11
Candidate Starts for Cynthia_71:
(6, 44647), (Start: 11 @44674 has 15 MA's), (15, 44722), (Start: 16 @44764 has 23 MA's), (18, 44773), (19, 44800), (20, 44806), (23, 44842), (25, 44902),

Gene: Denise_73 Start: 43091, Stop: 43273, Start Num: 16
Candidate Starts for Denise_73:
(Start: 16 @43091 has 23 MA's), (18, 43100), (19, 43127), (21, 43136), (23, 43169), (26, 43238),

Gene: Ebert_74 Start: 45198, Stop: 45380, Start Num: 16
Candidate Starts for Ebert_74:
(6, 45081), (Start: 11 @45108 has 15 MA's), (15, 45156), (Start: 16 @45198 has 23 MA's), (18, 45207), (19, 45234), (20, 45240), (23, 45276), (25, 45336),

Gene: EdnaMode_70 Start: 44874, Stop: 45056, Start Num: 16
Candidate Starts for EdnaMode_70:
(3, 44664), (6, 44757), (Start: 11 @44784 has 15 MA's), (15, 44832), (Start: 16 @44874 has 23 MA's), (18, 44883), (19, 44910), (20, 44916), (23, 44952), (25, 45012),

Gene: EnalisNailo_74 Start: 50297, Stop: 50479, Start Num: 16
Candidate Starts for EnalisNailo_74:
(1, 50147), (Start: 16 @50297 has 23 MA's), (18, 50306), (19, 50333), (22, 50351), (23, 50375), (27, 50447),

Gene: Faith5x5_67 Start: 40159, Stop: 40341, Start Num: 16
Candidate Starts for Faith5x5_67:
(Start: 16 @40159 has 23 MA's), (18, 40168), (19, 40195), (23, 40237), (27, 40309),

Gene: GemG_71 Start: 44680, Stop: 44952, Start Num: 11
Candidate Starts for GemG_71:
(6, 44653), (Start: 11 @44680 has 15 MA's), (15, 44728), (Start: 16 @44770 has 23 MA's), (18, 44779), (19, 44806), (20, 44812), (23, 44848), (25, 44908),

Gene: Gizermo_71 Start: 44766, Stop: 44948, Start Num: 16
Candidate Starts for Gizermo_71:
(6, 44649), (Start: 11 @44676 has 15 MA's), (15, 44724), (Start: 16 @44766 has 23 MA's), (18, 44775), (19, 44802), (20, 44808), (23, 44844), (25, 44904),

Gene: Haley23_71 Start: 44676, Stop: 44948, Start Num: 11
Candidate Starts for Haley23_71:
(6, 44649), (Start: 11 @44676 has 15 MA's), (15, 44724), (Start: 16 @44766 has 23 MA's), (18, 44775), (19, 44802), (20, 44808), (23, 44844), (25, 44904),

Gene: JCole_68 Start: 43436, Stop: 43618, Start Num: 16
Candidate Starts for JCole_68:
(3, 43226), (6, 43319), (Start: 11 @43346 has 15 MA's), (15, 43394), (Start: 16 @43436 has 23 MA's), (18, 43445), (19, 43472), (20, 43478), (23, 43514), (25, 43574),

Gene: Jablanski_81 Start: 52986, Stop: 53174, Start Num: 16
Candidate Starts for Jablanski_81:
(Start: 16 @52986 has 23 MA's), (17, 52995), (18, 52998), (19, 53025), (23, 53067), (26, 53136), (27, 53139),

Gene: Jalleen_74 Start: 44715, Stop: 44888, Start Num: 18
Candidate Starts for Jalleen_74:
(2, 44484), (6, 44589), (Start: 11 @44616 has 15 MA's), (15, 44664), (Start: 16 @44706 has 23 MA's), (18, 44715), (19, 44742), (20, 44748), (23, 44784), (25, 44844),

Gene: Lamberg_67 Start: 43185, Stop: 43457, Start Num: 11
Candidate Starts for Lamberg_67:
(6, 43158), (Start: 11 @43185 has 15 MA's), (15, 43233), (Start: 16 @43275 has 23 MA's), (18, 43284), (19, 43311), (20, 43317), (23, 43353), (25, 43413),

Gene: Lilas_75 Start: 51835, Stop: 52017, Start Num: 16
Candidate Starts for Lilas_75:
(1, 51685), (Start: 16 @51835 has 23 MA's), (18, 51844), (19, 51871), (22, 51889), (23, 51913), (27, 51985),

Gene: LonelyBoi_77 Start: 53074, Stop: 53259, Start Num: 16
Candidate Starts for LonelyBoi_77:
(Start: 16 @53074 has 23 MA's), (18, 53083), (19, 53110), (23, 53152), (26, 53221), (27, 53224),

Gene: Lton_69 Start: 40177, Stop: 40359, Start Num: 16
Candidate Starts for Lton_69:
(Start: 4 @39997 has 2 MA's), (5, 40015), (8, 40072), (9, 40075), (10, 40084), (Start: 16 @40177 has 23 MA's), (18, 40186), (19, 40213), (23, 40255), (26, 40324),

Gene: Lucky10_68 Start: 42097, Stop: 42402, Start Num: 4
Candidate Starts for Lucky10_68:
(Start: 4 @42097 has 2 MA's), (5, 42115), (Start: 16 @42220 has 23 MA's), (18, 42229), (19, 42256), (23, 42298), (27, 42370),

Gene: Malisha_94 Start: 54874, Stop: 55074, Start Num: 16
Candidate Starts for Malisha_94:
(Start: 16 @54874 has 23 MA's), (18, 54883), (19, 54910), (23, 54952), (24, 54970), (26, 55021),

Gene: Matteo_64 Start: 42430, Stop: 42702, Start Num: 11
Candidate Starts for Matteo_64:
(2, 42298), (6, 42403), (Start: 11 @42430 has 15 MA's), (15, 42478), (Start: 16 @42520 has 23 MA's), (18, 42529), (19, 42556), (20, 42562), (23, 42598), (25, 42658),

Gene: Mocha12_71 Start: 44676, Stop: 44948, Start Num: 11
Candidate Starts for Mocha12_71:
(6, 44649), (Start: 11 @44676 has 15 MA's), (15, 44724), (Start: 16 @44766 has 23 MA's), (18, 44775), (19, 44802), (20, 44808), (23, 44844), (25, 44904),

Gene: Moosehead_72 Start: 40706, Stop: 40888, Start Num: 16
Candidate Starts for Moosehead_72:
(Start: 16 @40706 has 23 MA's), (18, 40715), (19, 40742), (23, 40784), (27, 40856),

Gene: Morkie_72 Start: 41145, Stop: 41507, Start Num: 4
Candidate Starts for Morkie_72:
(Start: 4 @41145 has 2 MA's), (5, 41163), (8, 41220), (9, 41223), (10, 41232), (Start: 16 @41325 has 23 MA's), (18, 41334), (19, 41361), (23, 41403), (26, 41472), (27, 41475),

Gene: Nettuno_68 Start: 43094, Stop: 43366, Start Num: 11
Candidate Starts for Nettuno_68:
(6, 43067), (Start: 11 @43094 has 15 MA's), (15, 43142), (Start: 16 @43184 has 23 MA's), (18, 43193), (19, 43220), (20, 43226), (23, 43262), (25, 43322),

Gene: OneDirection_66 Start: 38739, Stop: 38921, Start Num: 16
Candidate Starts for OneDirection_66:
(Start: 4 @38559 has 2 MA's), (5, 38577), (8, 38634), (9, 38637), (10, 38646), (Start: 16 @38739 has 23 MA's), (18, 38748), (19, 38775), (23, 38817), (26, 38886),

Gene: Pepperoni_65 Start: 39874, Stop: 40047, Start Num: 18
Candidate Starts for Pepperoni_65:
(Start: 4 @39685 has 2 MA's), (5, 39703), (8, 39760), (9, 39763), (10, 39772), (Start: 16 @39865 has 23 MA's), (18, 39874), (19, 39901), (23, 39943), (26, 40012),

Gene: PhorbesPhlower_70 Start: 40720, Stop: 40902, Start Num: 16
Candidate Starts for PhorbesPhlower_70:
(Start: 4 @40540 has 2 MA's), (5, 40558), (8, 40615), (9, 40618), (10, 40627), (Start: 16 @40720 has 23 MA's), (18, 40729), (19, 40756), (23, 40798), (26, 40867), (27, 40870),

Gene: Pickett_68 Start: 43479, Stop: 43661, Start Num: 16
Candidate Starts for Pickett_68:
(3, 43269), (6, 43362), (Start: 11 @43389 has 15 MA's), (15, 43437), (Start: 16 @43479 has 23 MA's), (18, 43488), (19, 43515), (20, 43521), (23, 43557), (25, 43617),

Gene: Posh_78 Start: 51759, Stop: 51947, Start Num: 16
Candidate Starts for Posh_78:
(Start: 16 @51759 has 23 MA's), (17, 51768), (18, 51771), (19, 51798), (23, 51840), (26, 51909), (27, 51912),

Gene: Pytheas_82 Start: 52985, Stop: 53173, Start Num: 16
Candidate Starts for Pytheas_82:
(Start: 16 @52985 has 23 MA's), (17, 52994), (18, 52997), (19, 53024), (23, 53066), (26, 53135), (27, 53138),

Gene: Sahara_69 Start: 43710, Stop: 43982, Start Num: 11
Candidate Starts for Sahara_69:
(2, 43578), (6, 43683), (Start: 11 @43710 has 15 MA's), (15, 43758), (Start: 16 @43800 has 23 MA's), (18, 43809), (19, 43836), (20, 43842), (23, 43878), (25, 43938),

Gene: Savage_71 Start: 44676, Stop: 44948, Start Num: 11
Candidate Starts for Savage_71:
(6, 44649), (Start: 11 @44676 has 15 MA's), (15, 44724), (Start: 16 @44766 has 23 MA's), (18, 44775), (19, 44802), (20, 44808), (23, 44844), (25, 44904),

Gene: SoilAssassin_70 Start: 46335, Stop: 46607, Start Num: 11
Candidate Starts for SoilAssassin_70:
(6, 46308), (Start: 11 @46335 has 15 MA's), (15, 46383), (Start: 16 @46425 has 23 MA's), (18, 46434), (19, 46461), (20, 46467), (23, 46503), (25, 46563),

Gene: Spooky_107 Start: 56283, Stop: 56483, Start Num: 16
Candidate Starts for Spooky_107:
(Start: 16 @56283 has 23 MA's), (19, 56319), (23, 56361), (24, 56379), (26, 56430),

Gene: Sproutie_71 Start: 44676, Stop: 44948, Start Num: 11
Candidate Starts for Sproutie_71:
(6, 44649), (Start: 11 @44676 has 15 MA's), (15, 44724), (Start: 16 @44766 has 23 MA's), (18, 44775), (19, 44802), (20, 44808), (23, 44844), (25, 44904),

Gene: TuertoX_71 Start: 44676, Stop: 44948, Start Num: 11
Candidate Starts for TuertoX_71:
(6, 44649), (Start: 11 @44676 has 15 MA's), (15, 44724), (Start: 16 @44766 has 23 MA's), (18, 44775), (19, 44802), (20, 44808), (23, 44844), (25, 44904),

Gene: Whiteclaw_71 Start: 44676, Stop: 44948, Start Num: 11
Candidate Starts for Whiteclaw_71:
(6, 44649), (Start: 11 @44676 has 15 MA's), (15, 44724), (Start: 16 @44766 has 23 MA's), (18, 44775), (19, 44802), (20, 44808), (23, 44844), (25, 44904),

Gene: Wrigley_80 Start: 51342, Stop: 51530, Start Num: 16
Candidate Starts for Wrigley_80:
(Start: 16 @51342 has 23 MA's), (17, 51351), (18, 51354), (19, 51381), (23, 51423), (26, 51492), (27, 51495),

Gene: Yeet412_69 Start: 45229, Stop: 45411, Start Num: 16
Candidate Starts for Yeet412_69:
(6, 45112), (Start: 11 @45139 has 15 MA's), (15, 45187), (Start: 16 @45229 has 23 MA's), (18, 45238), (19, 45265), (20, 45271), (23, 45307), (25, 45367),