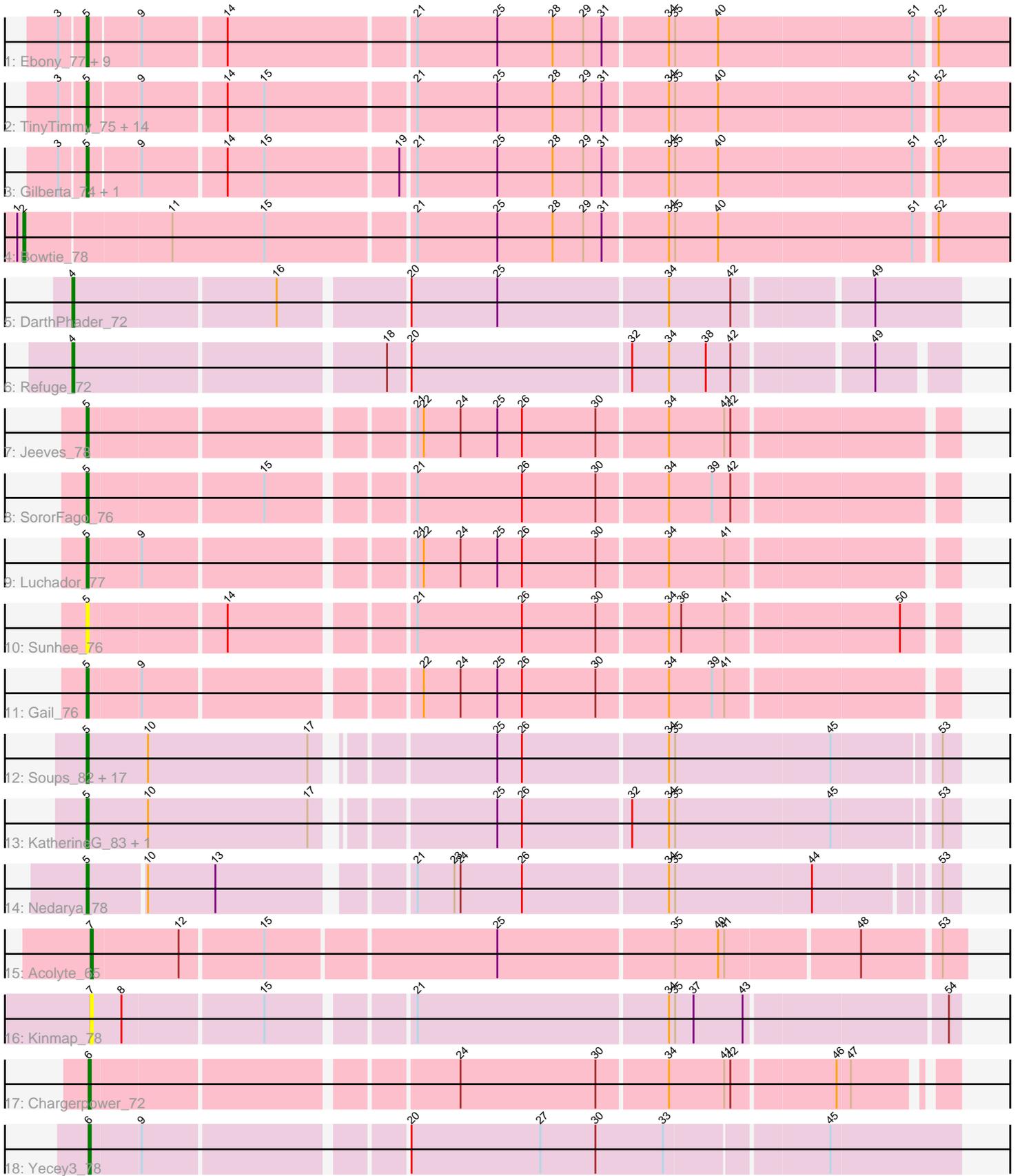


Pham 291183



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 291183 Report

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

Pham number 291183 has 60 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Ebony_77, Wolpertinger_76, Hutc2_72, Salz_72, Saskia_74, Jabith_76, Petersenfast_71, Fibonacci_76, Insomnia_76, Sham4_73
- Track 2 : TinyTimmy_75, Snape_77, Orange_76, Kimba_75, Munch_77, Et2Brutus_76, Aneem_78, Mulciber_75, Bud_72, Joselito_76, Lucivia_78, Flaverint_78, Mabel_77, Bachome_75, Timothy_77
- Track 3 : Gilberta_74, MaCh_77
- Track 4 : Bowtie_78
- Track 5 : DarthPhader_72
- Track 6 : Refuge_72
- Track 7 : Jeeves_78
- Track 8 : SororFago_76
- Track 9 : Luchador_77
- Track 10 : Sunhee_76
- Track 11 : Gail_76
- Track 12 : Soups_82, LastResort_81, Remus_83, Epsocamisio_80, Oofda_82, DekHockey33_84, MinecraftSteve_83, ReMo_81, Anaysia_83, Nebulosus_80, Warrior24_83, Switzerland_82, Waits_82, Ravana_85, Rosalind_81, Strosahl_83, Battleship_85, JSwag_83
- Track 13 : KatherineG_83, Looper_82
- Track 14 : Nedarya_78
- Track 15 : Acolyte_65
- Track 16 : Kinmap_78
- Track 17 : Chargerpower_72
- Track 18 : Yecey3_78

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

The start number called the most often in the published annotations is 5, it was called in 47 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anaysia_83, Aneem_78, Bachome_75, Battleship_85, Bud_72, DekHockey33_84, Ebony_77, Epsocamisio_80, Et2Brutus_76, Fibonacci_76, Flaverint_78, Gail_76, Gilberta_74, Hutc2_72, Insomnia_76, JSwag_83, Jabith_76, Jeeves_78, Joselito_76,

KatherineG_83, Kimba_75, LastResort_81, Looper_82, Luchador_77, Lucivia_78, MaCh_77, Mabel_77, MinecraftSteve_83, Mulciber_75, Munch_77, Nebulosus_80, Nedarya_78, Oofda_82, Orange_76, Petersenfast_71, Ravana_85, ReMo_81, Remus_83, Rosalind_81, Salz_72, Saskia_74, Sham4_73, Snape_77, SororFago_76, Soups_82, Strosahl_83, Sunhee_76, Switzerland_82, Timothy_77, TinyTimmy_75, Waits_82, Warrior24_83, Wolpertinger_76,

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

-

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

- Acolyte_65, Bowtie_78, Chargerpower_72, DarthPhader_72, Kinmap_78, Refuge_72, Yecey3_78,

Summary by start number:

Start 2:

- Found in 1 of 60 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bowtie_78 (A11),

Start 4:

- Found in 2 of 60 (3.3%) of genes in pham
- Manual Annotations of this start: 2 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DarthPhader_72 (A12), Refuge_72 (A12),

Start 5:

- Found in 53 of 60 (88.3%) of genes in pham
- Manual Annotations of this start: 47 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anaysia_83 (A15), Aneem_78 (A11), Bachome_75 (A11), Battleship_85 (A15), Bud_72 (A11), DekHockey33_84 (A15), Ebony_77 (A11), Epsocamiso_80 (A15), Et2Brutus_76 (A11), Fibonacci_76 (A11), Flaverint_78 (A11), Gail_76 (A14), Gilberta_74 (A11), Hutc2_72 (A11), Insomnia_76 (A11), JSwag_83 (A15), Jabith_76 (A11), Jeeves_78 (A14), Joselito_76 (A11), KatherineG_83 (A15), Kimba_75 (A11), LastResort_81 (A15), Looper_82 (A15), Luchador_77 (A14), Lucivia_78 (A11), MaCh_77 (A11), Mabel_77 (A11), MinecraftSteve_83 (A15), Mulciber_75 (A11), Munch_77 (A11), Nebulosus_80 (A15), Nedarya_78 (A15), Oofda_82 (A15), Orange_76 (A11), Petersenfast_71 (A11), Ravana_85 (A15), ReMo_81 (A15), Remus_83 (A15), Rosalind_81 (A15), Salz_72 (A11), Saskia_74 (A11), Sham4_73 (A11), Snape_77 (A11), SororFago_76 (A14), Soups_82 (A15), Strosahl_83 (A15), Sunhee_76 (A14), Switzerland_82 (A15), Timothy_77 (A11), TinyTimmy_75 (A11), Waits_82 (A15), Warrior24_83 (A15), Wolpertinger_76 (A11),

Start 6:

- Found in 2 of 60 (3.3%) of genes in pham
- Manual Annotations of this start: 2 of 53
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Chargerpower_72 (A22), Yecey3_78 (A9),

Start 7:

- Found in 2 of 60 (3.3%) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acolyte_65 (A2), Kinmap_78 (A21),

Summary by clusters:

There are 8 clusters represented in this pham: A15, A21, A22, A14, A11, A12, A2, A9,

Info for manual annotations of cluster A11:

- Start number 2 was manually annotated 1 time for cluster A11.
- Start number 5 was manually annotated 23 times for cluster A11.

Info for manual annotations of cluster A12:

- Start number 4 was manually annotated 2 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 5 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A15:

- Start number 5 was manually annotated 20 times for cluster A15.

Info for manual annotations of cluster A2:

- Start number 7 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A22:

- Start number 6 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A9:

- Start number 6 was manually annotated 1 time for cluster A9.

Gene Information:

Gene: Acolyte_65 Start: 42788, Stop: 42381, Start Num: 7

Candidate Starts for Acolyte_65:

(Start: 7 @42788 has 1 MA's), (12, 42746), (15, 42707), (25, 42599), (35, 42515), (40, 42494), (41, 42491), (48, 42428), (53, 42392),

Gene: Anaysia_83 Start: 45370, Stop: 44972, Start Num: 5

Candidate Starts for Anaysia_83:

(Start: 5 @45370 has 47 MA's), (10, 45340), (17, 45262), (25, 45187), (26, 45175), (34, 45106), (35, 45103), (45, 45028), (53, 44980),

Gene: Aneem_78 Start: 44778, Stop: 44341, Start Num: 5

Candidate Starts for Aneem_78:

(3, 44790), (Start: 5 @44778 has 47 MA's), (9, 44754), (14, 44715), (15, 44697), (21, 44628), (25, 44589), (28, 44562), (29, 44547), (31, 44538), (34, 44508), (35, 44505), (40, 44484), (51, 44391), (52, 44382),

Gene: Bachome_75 Start: 43657, Stop: 43220, Start Num: 5

Candidate Starts for Bachome_75:

(3, 43669), (Start: 5 @43657 has 47 MA's), (9, 43633), (14, 43594), (15, 43576), (21, 43507), (25, 43468), (28, 43441), (29, 43426), (31, 43417), (34, 43387), (35, 43384), (40, 43363), (51, 43270), (52, 43261),

Gene: Battleship_85 Start: 45243, Stop: 44845, Start Num: 5

Candidate Starts for Battleship_85:

(Start: 5 @45243 has 47 MA's), (10, 45213), (17, 45135), (25, 45060), (26, 45048), (34, 44979), (35, 44976), (45, 44901), (53, 44853),

Gene: Bowtie_78 Start: 44818, Stop: 44348, Start Num: 2

Candidate Starts for Bowtie_78:

(1, 44821), (Start: 2 @44818 has 1 MA's), (11, 44749), (15, 44704), (21, 44635), (25, 44596), (28, 44569), (29, 44554), (31, 44545), (34, 44515), (35, 44512), (40, 44491), (51, 44398), (52, 44389),

Gene: Bud_72 Start: 43215, Stop: 42778, Start Num: 5

Candidate Starts for Bud_72:

(3, 43227), (Start: 5 @43215 has 47 MA's), (9, 43191), (14, 43152), (15, 43134), (21, 43065), (25, 43026), (28, 42999), (29, 42984), (31, 42975), (34, 42945), (35, 42942), (40, 42921), (51, 42828), (52, 42819),

Gene: Chargerpower_72 Start: 43217, Stop: 42828, Start Num: 6

Candidate Starts for Chargerpower_72:

(Start: 6 @43217 has 2 MA's), (24, 43052), (30, 42986), (34, 42953), (41, 42926), (42, 42923), (46, 42875), (47, 42869),

Gene: DarthPhader_72 Start: 45280, Stop: 44870, Start Num: 4

Candidate Starts for DarthPhader_72:

(Start: 4 @45280 has 2 MA's), (16, 45184), (20, 45127), (25, 45085), (34, 45004), (42, 44974), (49, 44911),

Gene: DekHockey33_84 Start: 45328, Stop: 44930, Start Num: 5

Candidate Starts for DekHockey33_84:

(Start: 5 @45328 has 47 MA's), (10, 45298), (17, 45220), (25, 45145), (26, 45133), (34, 45064), (35, 45061), (45, 44986), (53, 44938),

Gene: Ebony_77 Start: 44349, Stop: 43912, Start Num: 5

Candidate Starts for Ebony_77:

(3, 44361), (Start: 5 @44349 has 47 MA's), (9, 44325), (14, 44286), (21, 44199), (25, 44160), (28, 44133), (29, 44118), (31, 44109), (34, 44079), (35, 44076), (40, 44055), (51, 43962), (52, 43953),

Gene: Epsocamisio_80 Start: 44618, Stop: 44220, Start Num: 5

Candidate Starts for Epsocamisio_80:

(Start: 5 @44618 has 47 MA's), (10, 44588), (17, 44510), (25, 44435), (26, 44423), (34, 44354), (35, 44351), (45, 44276), (53, 44228),

Gene: Et2Brutus_76 Start: 44312, Stop: 43875, Start Num: 5

Candidate Starts for Et2Brutus_76:

(3, 44324), (Start: 5 @44312 has 47 MA's), (9, 44288), (14, 44249), (15, 44231), (21, 44162), (25, 44123), (28, 44096), (29, 44081), (31, 44072), (34, 44042), (35, 44039), (40, 44018), (51, 43925), (52, 43916),

Gene: Fibonacci_76 Start: 44318, Stop: 43881, Start Num: 5

Candidate Starts for Fibonacci_76:

(3, 44330), (Start: 5 @44318 has 47 MA's), (9, 44294), (14, 44255), (21, 44168), (25, 44129), (28, 44102), (29, 44087), (31, 44078), (34, 44048), (35, 44045), (40, 44024), (51, 43931), (52, 43922),

Gene: Flaverint_78 Start: 44776, Stop: 44339, Start Num: 5

Candidate Starts for Flaverint_78:

(3, 44788), (Start: 5 @44776 has 47 MA's), (9, 44752), (14, 44713), (15, 44695), (21, 44626), (25, 44587), (28, 44560), (29, 44545), (31, 44536), (34, 44506), (35, 44503), (40, 44482), (51, 44389), (52, 44380),

Gene: Gail_76 Start: 45154, Stop: 44759, Start Num: 5

Candidate Starts for Gail_76:

(Start: 5 @45154 has 47 MA's), (9, 45130), (22, 45007), (24, 44989), (25, 44971), (26, 44959), (30, 44923), (34, 44890), (39, 44869), (41, 44863),

Gene: Gilberta_74 Start: 43652, Stop: 43215, Start Num: 5

Candidate Starts for Gilberta_74:

(3, 43664), (Start: 5 @43652 has 47 MA's), (9, 43628), (14, 43589), (15, 43571), (19, 43508), (21, 43502), (25, 43463), (28, 43436), (29, 43421), (31, 43412), (34, 43382), (35, 43379), (40, 43358), (51, 43265), (52, 43256),

Gene: Hutc2_72 Start: 43201, Stop: 42764, Start Num: 5

Candidate Starts for Hutc2_72:

(3, 43213), (Start: 5 @43201 has 47 MA's), (9, 43177), (14, 43138), (21, 43051), (25, 43012), (28, 42985), (29, 42970), (31, 42961), (34, 42931), (35, 42928), (40, 42907), (51, 42814), (52, 42805),

Gene: Insomnia_76 Start: 44493, Stop: 44056, Start Num: 5

Candidate Starts for Insomnia_76:

(3, 44505), (Start: 5 @44493 has 47 MA's), (9, 44469), (14, 44430), (21, 44343), (25, 44304), (28, 44277), (29, 44262), (31, 44253), (34, 44223), (35, 44220), (40, 44199), (51, 44106), (52, 44097),

Gene: JSwag_83 Start: 44903, Stop: 44505, Start Num: 5

Candidate Starts for JSwag_83:

(Start: 5 @44903 has 47 MA's), (10, 44873), (17, 44795), (25, 44720), (26, 44708), (34, 44639), (35, 44636), (45, 44561), (53, 44513),

Gene: Jabith_76 Start: 44510, Stop: 44073, Start Num: 5

Candidate Starts for Jabith_76:

(3, 44522), (Start: 5 @44510 has 47 MA's), (9, 44486), (14, 44447), (21, 44360), (25, 44321), (28, 44294), (29, 44279), (31, 44270), (34, 44240), (35, 44237), (40, 44216), (51, 44123), (52, 44114),

Gene: Jeeves_78 Start: 44070, Stop: 43675, Start Num: 5

Candidate Starts for Jeeves_78:

(Start: 5 @44070 has 47 MA's), (21, 43926), (22, 43923), (24, 43905), (25, 43887), (26, 43875), (30, 43839), (34, 43806), (41, 43779), (42, 43776),

Gene: Joselito_76 Start: 44530, Stop: 44093, Start Num: 5

Candidate Starts for Joselito_76:

(3, 44542), (Start: 5 @44530 has 47 MA's), (9, 44506), (14, 44467), (15, 44449), (21, 44380), (25, 44341), (28, 44314), (29, 44299), (31, 44290), (34, 44260), (35, 44257), (40, 44236), (51, 44143), (52, 44134),

Gene: KatherineG_83 Start: 45215, Stop: 44817, Start Num: 5

Candidate Starts for KatherineG_83:

(Start: 5 @45215 has 47 MA's), (10, 45185), (17, 45107), (25, 45032), (26, 45020), (32, 44969), (34, 44951), (35, 44948), (45, 44873), (53, 44825),

Gene: Kimba_75 Start: 44030, Stop: 43593, Start Num: 5

Candidate Starts for Kimba_75:

(3, 44042), (Start: 5 @44030 has 47 MA's), (9, 44006), (14, 43967), (15, 43949), (21, 43880), (25, 43841), (28, 43814), (29, 43799), (31, 43790), (34, 43760), (35, 43757), (40, 43736), (51, 43643), (52, 43634),

Gene: Kinmap_78 Start: 43580, Stop: 43182, Start Num: 7

Candidate Starts for Kinmap_78:

(Start: 7 @43580 has 1 MA's), (8, 43565), (15, 43499), (21, 43436), (34, 43316), (35, 43313), (37, 43304), (43, 43280), (54, 43187),

Gene: LastResort_81 Start: 45146, Stop: 44748, Start Num: 5

Candidate Starts for LastResort_81:

(Start: 5 @45146 has 47 MA's), (10, 45116), (17, 45038), (25, 44963), (26, 44951), (34, 44882), (35, 44879), (45, 44804), (53, 44756),

Gene: Looper_82 Start: 45058, Stop: 44660, Start Num: 5

Candidate Starts for Looper_82:

(Start: 5 @45058 has 47 MA's), (10, 45028), (17, 44950), (25, 44875), (26, 44863), (32, 44812), (34, 44794), (35, 44791), (45, 44716), (53, 44668),

Gene: Luchador_77 Start: 45554, Stop: 45159, Start Num: 5

Candidate Starts for Luchador_77:

(Start: 5 @45554 has 47 MA's), (9, 45530), (21, 45410), (22, 45407), (24, 45389), (25, 45371), (26, 45359), (30, 45323), (34, 45290), (41, 45263),

Gene: Lucivia_78 Start: 44809, Stop: 44372, Start Num: 5

Candidate Starts for Lucivia_78:

(3, 44821), (Start: 5 @44809 has 47 MA's), (9, 44785), (14, 44746), (15, 44728), (21, 44659), (25, 44620), (28, 44593), (29, 44578), (31, 44569), (34, 44539), (35, 44536), (40, 44515), (51, 44422), (52, 44413),

Gene: MaCh_77 Start: 44773, Stop: 44336, Start Num: 5

Candidate Starts for MaCh_77:

(3, 44785), (Start: 5 @44773 has 47 MA's), (9, 44749), (14, 44710), (15, 44692), (19, 44629), (21, 44623), (25, 44584), (28, 44557), (29, 44542), (31, 44533), (34, 44503), (35, 44500), (40, 44479), (51, 44386), (52, 44377),

Gene: Mabel_77 Start: 44774, Stop: 44337, Start Num: 5

Candidate Starts for Mabel_77:

(3, 44786), (Start: 5 @44774 has 47 MA's), (9, 44750), (14, 44711), (15, 44693), (21, 44624), (25, 44585), (28, 44558), (29, 44543), (31, 44534), (34, 44504), (35, 44501), (40, 44480), (51, 44387), (52, 44378),

Gene: MinecraftSteve_83 Start: 45039, Stop: 44641, Start Num: 5

Candidate Starts for MinecraftSteve_83:

(Start: 5 @45039 has 47 MA's), (10, 45009), (17, 44931), (25, 44856), (26, 44844), (34, 44775), (35, 44772), (45, 44697), (53, 44649),

Gene: Mulciber_75 Start: 44315, Stop: 43878, Start Num: 5

Candidate Starts for Mulciber_75:

(3, 44327), (Start: 5 @44315 has 47 MA's), (9, 44291), (14, 44252), (15, 44234), (21, 44165), (25, 44126), (28, 44099), (29, 44084), (31, 44075), (34, 44045), (35, 44042), (40, 44021), (51, 43928), (52, 43919),

Gene: Munch_77 Start: 44778, Stop: 44341, Start Num: 5

Candidate Starts for Munch_77:

(3, 44790), (Start: 5 @44778 has 47 MA's), (9, 44754), (14, 44715), (15, 44697), (21, 44628), (25, 44589), (28, 44562), (29, 44547), (31, 44538), (34, 44508), (35, 44505), (40, 44484), (51, 44391), (52, 44382),

Gene: Nebulosus_80 Start: 44703, Stop: 44305, Start Num: 5

Candidate Starts for Nebulosus_80:

(Start: 5 @44703 has 47 MA's), (10, 44673), (17, 44595), (25, 44520), (26, 44508), (34, 44439), (35, 44436), (45, 44361), (53, 44313),

Gene: Nedarya_78 Start: 44930, Stop: 44535, Start Num: 5

Candidate Starts for Nedarya_78:

(Start: 5 @44930 has 47 MA's), (10, 44903), (13, 44870), (21, 44786), (23, 44768), (24, 44765), (26, 44735), (34, 44666), (35, 44663), (44, 44597), (53, 44543),

Gene: Oofda_82 Start: 44994, Stop: 44596, Start Num: 5

Candidate Starts for Oofda_82:

(Start: 5 @44994 has 47 MA's), (10, 44964), (17, 44886), (25, 44811), (26, 44799), (34, 44730), (35, 44727), (45, 44652), (53, 44604),

Gene: Orange_76 Start: 44327, Stop: 43890, Start Num: 5

Candidate Starts for Orange_76:

(3, 44339), (Start: 5 @44327 has 47 MA's), (9, 44303), (14, 44264), (15, 44246), (21, 44177), (25, 44138), (28, 44111), (29, 44096), (31, 44087), (34, 44057), (35, 44054), (40, 44033), (51, 43940), (52, 43931),

Gene: Petersenfast_71 Start: 43209, Stop: 42772, Start Num: 5

Candidate Starts for Petersenfast_71:

(3, 43221), (Start: 5 @43209 has 47 MA's), (9, 43185), (14, 43146), (21, 43059), (25, 43020), (28, 42993), (29, 42978), (31, 42969), (34, 42939), (35, 42936), (40, 42915), (51, 42822), (52, 42813),

Gene: Ravana_85 Start: 46406, Stop: 46008, Start Num: 5

Candidate Starts for Ravana_85:

(Start: 5 @46406 has 47 MA's), (10, 46376), (17, 46298), (25, 46223), (26, 46211), (34, 46142), (35, 46139), (45, 46064), (53, 46016),

Gene: ReMo_81 Start: 45143, Stop: 44745, Start Num: 5

Candidate Starts for ReMo_81:

(Start: 5 @45143 has 47 MA's), (10, 45113), (17, 45035), (25, 44960), (26, 44948), (34, 44879), (35, 44876), (45, 44801), (53, 44753),

Gene: Refuge_72 Start: 45324, Stop: 44920, Start Num: 4

Candidate Starts for Refuge_72:

(Start: 4 @45324 has 2 MA's), (18, 45180), (20, 45171), (32, 45066), (34, 45048), (38, 45030), (42, 45018), (49, 44955),

Gene: Remus_83 Start: 45073, Stop: 44675, Start Num: 5

Candidate Starts for Remus_83:

(Start: 5 @45073 has 47 MA's), (10, 45043), (17, 44965), (25, 44890), (26, 44878), (34, 44809), (35, 44806), (45, 44731), (53, 44683),

Gene: Rosalind_81 Start: 44967, Stop: 44569, Start Num: 5

Candidate Starts for Rosalind_81:

(Start: 5 @44967 has 47 MA's), (10, 44937), (17, 44859), (25, 44784), (26, 44772), (34, 44703), (35, 44700), (45, 44625), (53, 44577),

Gene: Salz_72 Start: 43124, Stop: 42687, Start Num: 5

Candidate Starts for Salz_72:

(3, 43136), (Start: 5 @43124 has 47 MA's), (9, 43100), (14, 43061), (21, 42974), (25, 42935), (28, 42908), (29, 42893), (31, 42884), (34, 42854), (35, 42851), (40, 42830), (51, 42737), (52, 42728),

Gene: Saskia_74 Start: 43672, Stop: 43235, Start Num: 5

Candidate Starts for Saskia_74:

(3, 43684), (Start: 5 @43672 has 47 MA's), (9, 43648), (14, 43609), (21, 43522), (25, 43483), (28, 43456), (29, 43441), (31, 43432), (34, 43402), (35, 43399), (40, 43378), (51, 43285), (52, 43276),

Gene: Sham4_73 Start: 43208, Stop: 42771, Start Num: 5

Candidate Starts for Sham4_73:

(3, 43220), (Start: 5 @43208 has 47 MA's), (9, 43184), (14, 43145), (21, 43058), (25, 43019), (28, 42992), (29, 42977), (31, 42968), (34, 42938), (35, 42935), (40, 42914), (51, 42821), (52, 42812),

Gene: Snape_77 Start: 44317, Stop: 43880, Start Num: 5

Candidate Starts for Snape_77:

(3, 44329), (Start: 5 @44317 has 47 MA's), (9, 44293), (14, 44254), (15, 44236), (21, 44167), (25, 44128), (28, 44101), (29, 44086), (31, 44077), (34, 44047), (35, 44044), (40, 44023), (51, 43930), (52, 43921),

Gene: SororFago_76 Start: 45272, Stop: 44877, Start Num: 5

Candidate Starts for SororFago_76:

(Start: 5 @45272 has 47 MA's), (15, 45191), (21, 45128), (26, 45077), (30, 45041), (34, 45008), (39, 44987), (42, 44978),

Gene: Soups_82 Start: 44862, Stop: 44464, Start Num: 5

Candidate Starts for Soups_82:

(Start: 5 @44862 has 47 MA's), (10, 44832), (17, 44754), (25, 44679), (26, 44667), (34, 44598), (35, 44595), (45, 44520), (53, 44472),

Gene: Strosahl_83 Start: 45073, Stop: 44675, Start Num: 5

Candidate Starts for Strosahl_83:

(Start: 5 @45073 has 47 MA's), (10, 45043), (17, 44965), (25, 44890), (26, 44878), (34, 44809), (35, 44806), (45, 44731), (53, 44683),

Gene: Sunhee_76 Start: 43354, Stop: 42959, Start Num: 5

Candidate Starts for Sunhee_76:

(Start: 5 @43354 has 47 MA's), (14, 43291), (21, 43210), (26, 43159), (30, 43123), (34, 43090), (36, 43084), (41, 43063), (50, 42982),

Gene: Switzerland_82 Start: 45135, Stop: 44737, Start Num: 5

Candidate Starts for Switzerland_82:

(Start: 5 @45135 has 47 MA's), (10, 45105), (17, 45027), (25, 44952), (26, 44940), (34, 44871), (35, 44868), (45, 44793), (53, 44745),

Gene: Timothy_77 Start: 44294, Stop: 43857, Start Num: 5

Candidate Starts for Timothy_77:

(3, 44306), (Start: 5 @44294 has 47 MA's), (9, 44270), (14, 44231), (15, 44213), (21, 44144), (25, 44105), (28, 44078), (29, 44063), (31, 44054), (34, 44024), (35, 44021), (40, 44000), (51, 43907), (52, 43898),

Gene: TinyTimmy_75 Start: 44023, Stop: 43586, Start Num: 5

Candidate Starts for TinyTimmy_75:

(3, 44035), (Start: 5 @44023 has 47 MA's), (9, 43999), (14, 43960), (15, 43942), (21, 43873), (25, 43834), (28, 43807), (29, 43792), (31, 43783), (34, 43753), (35, 43750), (40, 43729), (51, 43636), (52, 43627),

Gene: Waits_82 Start: 44973, Stop: 44575, Start Num: 5

Candidate Starts for Waits_82:

(Start: 5 @44973 has 47 MA's), (10, 44943), (17, 44865), (25, 44790), (26, 44778), (34, 44709), (35, 44706), (45, 44631), (53, 44583),

Gene: Warrior24_83 Start: 45450, Stop: 45052, Start Num: 5

Candidate Starts for Warrior24_83:

(Start: 5 @45450 has 47 MA's), (10, 45420), (17, 45342), (25, 45267), (26, 45255), (34, 45186), (35, 45183), (45, 45108), (53, 45060),

Gene: Wolpertinger_76 Start: 44326, Stop: 43889, Start Num: 5

Candidate Starts for Wolpertinger_76:

(3, 44338), (Start: 5 @44326 has 47 MA's), (9, 44302), (14, 44263), (21, 44176), (25, 44137), (28, 44110), (29, 44095), (31, 44086), (34, 44056), (35, 44053), (40, 44032), (51, 43939), (52, 43930),

Gene: Yecey3_78 Start: 44191, Stop: 43790, Start Num: 6

Candidate Starts for Yecey3_78:

(Start: 6 @44191 has 2 MA's), (9, 44167), (20, 44050), (27, 43987), (30, 43960), (33, 43927), (45, 43852),