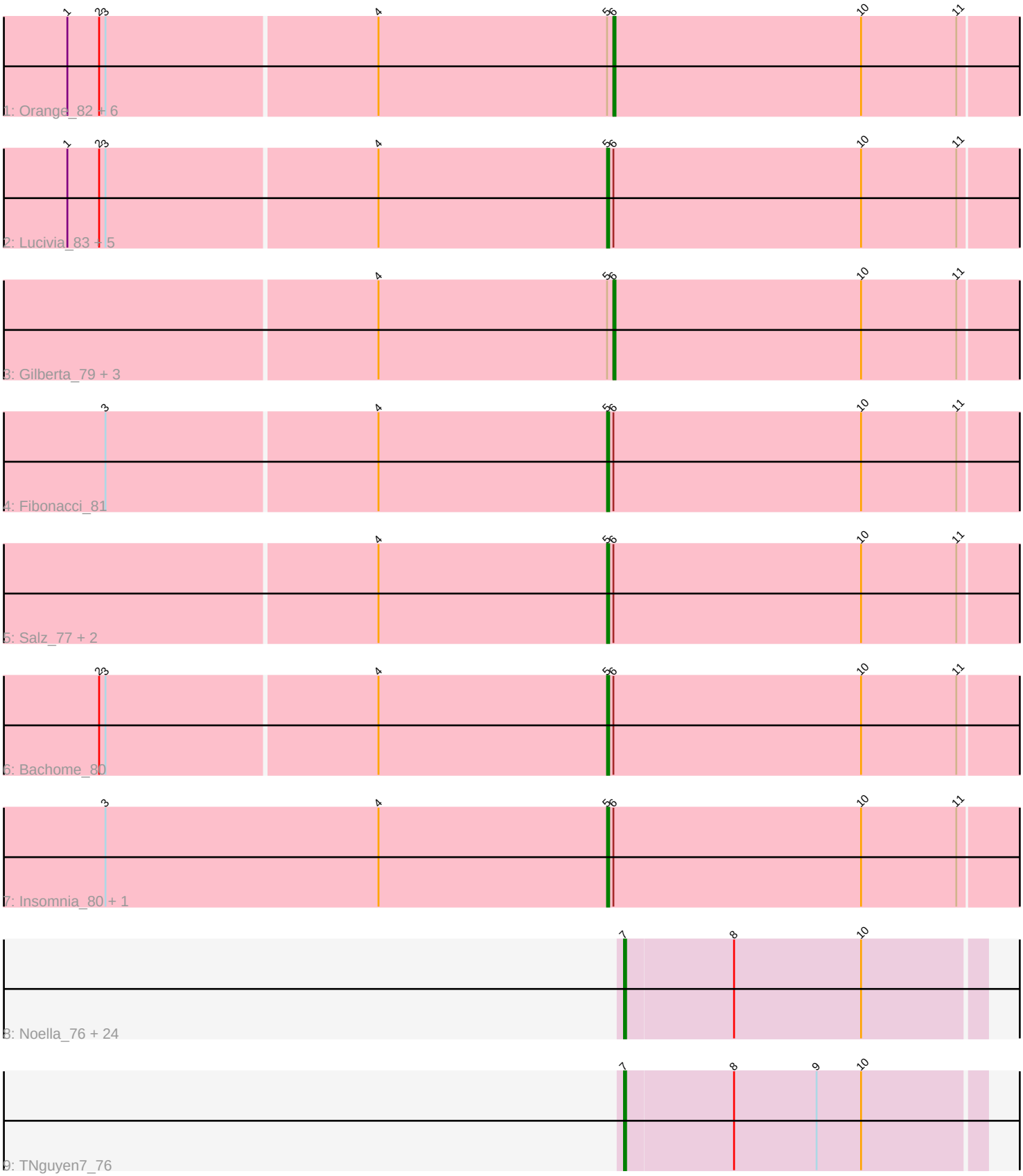
# Pham 1941


1: Orange_82 + 6
2: Lucivia_83 + 5
3: Gilberta_79 + 3
4: Fibonacci_81
5: Salz_77 + 2
6: Bachome_80
7: Insomnia_80 + 1
8: Noella_76 + 24
9: TNguyen7_76

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 1941 Report

This analysis was run 04/28/24 on database version 559.

Pham number 1941 has 50 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Orange_82, Flaverint_83, Munch_82, Timothy_82, Ebony_82, Mabel_82, Bowtie_79
• Track 2 : Lucivia_83, Aneem_83, Bud_77, MaCh_82, Joselito_81, Petersenfast_76
• Track 3 : Gilberta_79, Jabith_81, Snape_82, Mulciber_80
• Track 4 : Fibonacci_81
• Track 5 : Salz_77, Hutc2_78, Et2Brutus_81
• Track 6 : Bachome_80
• Track 7 : Insomnia_80, Sham4_78
• Track 8 : Noella_76, Norbert_71, Giroux_74, Lambert1_75, Fred313_73, Veracruz_72, Pistachio_76, Heathen_75, Panamaxus_73, Phantastic_77, SaturnRing_75, Bugatti_75, Popcicle_75, HelDan_75, Texage_73, Puppy_76, Margo_75, Idleandcovert_76, BlueBird_78, Scout_74, ResDef_73, Pocahontas_74, QuinnKiro_74, Hookmount_75, Todacoro_75
• Track 9 : TNguyen7_76

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

The start number called the most often in the published annotations is 7, it was called in 22 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BlueBird_78, Bugatti_75, Fred313_73, Giroux_74, Heathen_75, HelDan_75, Hookmount_75, Idleandcovert_76, Lambert1_75, Margo_75, Noella_76, Norbert_71, Panamaxus_73, Phantastic_77, Pistachio_76, Pocahontas_74, Popcicle_75, Puppy_76, QuinnKiro_74, ResDef_73, SaturnRing_75, Scout_74, TNguyen7_76, Texage_73, Todacoro_75, Veracruz_72,

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

Genes that do not have the "Most Annotated" start:
• Aneem_83, Bachome_80, Bowtie_79, Bud_77, Ebony_82, Et2Brutus_81, Fibonacci_81, Flaverint_83, Gilberta_79, Hutc2_78, Insomnia_80, Jabith_81, Joselito_81, Lucivia_83, MaCh_82, Mabel_82, Mulciber_80, Munch_82, Orange_82,

Petersenfast_76, Salz_77, Sham4_78, Snape_82, Timothy_82,

**Summary by start number:**

Start 5:
• Found in 24 of 50 ( 48.0% ) of genes in pham
• Manual Annotations of this start: 11 of 44
• Called 54.2% of time when present
• Phage (with cluster) where this start called: Aneem_83 (A11), Bachome_80 (A11), Bud_77 (A11), Et2Brutus_81 (A11), Fibonacci_81 (A11), Hutc2_78 (A11), Insomnia_80 (A11), Joselito_81 (A11), Lucivia_83 (A11), MaCh_82 (A11), Petersenfast_76 (A11), Salz_77 (A11), Sham4_78 (A11),

Start 6:
• Found in 24 of 50 ( 48.0% ) of genes in pham
• Manual Annotations of this start: 11 of 44
• Called 45.8% of time when present
• Phage (with cluster) where this start called: Bowtie_79 (A11), Ebony_82 (A11), Flaverint_83 (A11), Gilberta_79 (A11), Jabith_81 (A11), Mabel_82 (A11), Mulciber_80 (A11), Munch_82 (A11), Orange_82 (A11), Snape_82 (A11), Timothy_82 (A11),

Start 7:
• Found in 26 of 50 ( 52.0% ) of genes in pham
• Manual Annotations of this start: 22 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlueBird_78 (A3), Bugatti_75 (A3), Fred313_73 (A3), Giroux_74 (A3), Heathen_75 (A3), HelDan_75 (A3), Hookmount_75 (A3), Idleandcovert_76 (A3), Lambert1_75 (A3), Margo_75 (A3), Noella_76 (A3), Norbert_71 (A3), Panamaxus_73 (A3), Phantastic_77 (A3), Pistachio_76 (A3), Pocahontas_74 (A3), Popcicle_75 (A3), Puppy_76 (A3), QuinnKiro_74 (A3), ResDef_73 (A3), SaturnRing_75 (A3), Scout_74 (A3), TNguyen7_76 (A3), Texage_73 (A3), Todacoro_75 (A3), Veracruz_72 (A3),

**Summary by clusters:**

There are 2 clusters represented in this pham: A3, A11,

Info for manual annotations of cluster A11:
•Start number 5 was manually annotated 11 times for cluster A11.
•Start number 6 was manually annotated 11 times for cluster A11.

Info for manual annotations of cluster A3:
•Start number 7 was manually annotated 22 times for cluster A3.

***Gene Information:***

Gene: Aneem_83 Start: 46414, Stop: 46208, Start Num: 5
Candidate Starts for Aneem_83:
(1, 46666), (2, 46651), (3, 46648), (4, 46522), (Start: 5 @46414 has 11 MA's), (Start: 6 @46411 has 11 MA's), (10, 46294), (11, 46249),

Gene: Bachome_80 Start: 45294, Stop: 45088, Start Num: 5
Candidate Starts for Bachome_80:
(2, 45531), (3, 45528), (4, 45402), (Start: 5 @45294 has 11 MA's), (Start: 6 @45291 has 11 MA's), (10, 45174), (11, 45129),

Gene: BlueBird_78 Start: 45260, Stop: 45093, Start Num: 7
Candidate Starts for BlueBird_78:
(Start: 7 @45260 has 22 MA's), (8, 45209), (10, 45149),

Gene: Bowtie_79 Start: 45018, Stop: 44815, Start Num: 6
Candidate Starts for Bowtie_79:
(1, 45273), (2, 45258), (3, 45255), (4, 45129), (Start: 5 @45021 has 11 MA's), (Start: 6 @45018 has 11 MA's), (10, 44901), (11, 44856),

Gene: Bud_77 Start: 44851, Stop: 44645, Start Num: 5
Candidate Starts for Bud_77:
(1, 45103), (2, 45088), (3, 45085), (4, 44959), (Start: 5 @44851 has 11 MA's), (Start: 6 @44848 has 11 MA's), (10, 44731), (11, 44686),

Gene: Bugatti_75 Start: 45260, Stop: 45093, Start Num: 7
Candidate Starts for Bugatti_75:
(Start: 7 @45260 has 22 MA's), (8, 45209), (10, 45149),

Gene: Ebony_82 Start: 45982, Stop: 45779, Start Num: 6
Candidate Starts for Ebony_82:
(1, 46237), (2, 46222), (3, 46219), (4, 46093), (Start: 5 @45985 has 11 MA's), (Start: 6 @45982 has 11 MA's), (10, 45865), (11, 45820),

Gene: Et2Brutus_81 Start: 45948, Stop: 45742, Start Num: 5
Candidate Starts for Et2Brutus_81:
(4, 46056), (Start: 5 @45948 has 11 MA's), (Start: 6 @45945 has 11 MA's), (10, 45828), (11, 45783),

Gene: Fibonacci_81 Start: 45954, Stop: 45748, Start Num: 5
Candidate Starts for Fibonacci_81:
(3, 46188), (4, 46062), (Start: 5 @45954 has 11 MA's), (Start: 6 @45951 has 11 MA's), (10, 45834), (11, 45789),

Gene: Flaverint_83 Start: 46409, Stop: 46206, Start Num: 6
Candidate Starts for Flaverint_83:
(1, 46664), (2, 46649), (3, 46646), (4, 46520), (Start: 5 @46412 has 11 MA's), (Start: 6 @46409 has 11 MA's), (10, 46292), (11, 46247),

Gene: Fred313_73 Start: 44878, Stop: 44711, Start Num: 7
Candidate Starts for Fred313_73:
(Start: 7 @44878 has 22 MA's), (8, 44827), (10, 44767),

Gene: Gilberta_79 Start: 45285, Stop: 45082, Start Num: 6
Candidate Starts for Gilberta_79:
(4, 45396), (Start: 5 @45288 has 11 MA's), (Start: 6 @45285 has 11 MA's), (10, 45168), (11, 45123),

Gene: Giroux_74 Start: 45259, Stop: 45092, Start Num: 7
Candidate Starts for Giroux_74:
(Start: 7 @45259 has 22 MA's), (8, 45208), (10, 45148),

Gene: Heathen_75 Start: 44973, Stop: 44806, Start Num: 7
Candidate Starts for Heathen_75:
(Start: 7 @44973 has 22 MA's), (8, 44922), (10, 44862),

Gene: HelDan_75 Start: 45189, Stop: 45022, Start Num: 7
Candidate Starts for HelDan_75:
(Start: 7 @45189 has 22 MA's), (8, 45138), (10, 45078),

Gene: Hookmount_75 Start: 45213, Stop: 45046, Start Num: 7
Candidate Starts for Hookmount_75:
(Start: 7 @45213 has 22 MA's), (8, 45162), (10, 45102),

Gene: Hutc2_78 Start: 44838, Stop: 44632, Start Num: 5
Candidate Starts for Hutc2_78:
(4, 44946), (Start: 5 @44838 has 11 MA's), (Start: 6 @44835 has 11 MA's), (10, 44718), (11, 44673),

Gene: Idleandcovert_76 Start: 45260, Stop: 45093, Start Num: 7
Candidate Starts for Idleandcovert_76:
(Start: 7 @45260 has 22 MA's), (8, 45209), (10, 45149),

Gene: Insomnia_80 Start: 46129, Stop: 45923, Start Num: 5
Candidate Starts for Insomnia_80:
(3, 46366), (4, 46237), (Start: 5 @46129 has 11 MA's), (Start: 6 @46126 has 11 MA's), (10, 46009), (11, 45964),

Gene: Jabith_81 Start: 46143, Stop: 45940, Start Num: 6
Candidate Starts for Jabith_81:
(4, 46254), (Start: 5 @46146 has 11 MA's), (Start: 6 @46143 has 11 MA's), (10, 46026), (11, 45981),

Gene: Joselito_81 Start: 46166, Stop: 45960, Start Num: 5
Candidate Starts for Joselito_81:
(1, 46418), (2, 46403), (3, 46400), (4, 46274), (Start: 5 @46166 has 11 MA's), (Start: 6 @46163 has 11 MA's), (10, 46046), (11, 46001),

Gene: Lambert1_75 Start: 45214, Stop: 45047, Start Num: 7
Candidate Starts for Lambert1_75:
(Start: 7 @45214 has 22 MA's), (8, 45163), (10, 45103),

Gene: Lucivia_83 Start: 46445, Stop: 46239, Start Num: 5
Candidate Starts for Lucivia_83:
(1, 46697), (2, 46682), (3, 46679), (4, 46553), (Start: 5 @46445 has 11 MA's), (Start: 6 @46442 has 11 MA's), (10, 46325), (11, 46280),

Gene: MaCh_82 Start: 46409, Stop: 46203, Start Num: 5
Candidate Starts for MaCh_82:
(1, 46661), (2, 46646), (3, 46643), (4, 46517), (Start: 5 @46409 has 11 MA's), (Start: 6 @46406 has 11 MA's), (10, 46289), (11, 46244),

Gene: Mabel_82 Start: 46407, Stop: 46204, Start Num: 6
Candidate Starts for Mabel_82:
(1, 46662), (2, 46647), (3, 46644), (4, 46518), (Start: 5 @46410 has 11 MA's), (Start: 6 @46407 has 11 MA's), (10, 46290), (11, 46245),

Gene: Margo_75 Start: 45239, Stop: 45072, Start Num: 7
Candidate Starts for Margo_75:
(Start: 7 @45239 has 22 MA's), (8, 45188), (10, 45128),

Gene: Mulciber_80 Start: 45948, Stop: 45745, Start Num: 6
Candidate Starts for Mulciber_80:
(4, 46059), (Start: 5 @45951 has 11 MA's), (Start: 6 @45948 has 11 MA's), (10, 45831), (11, 45786),

Gene: Munch_82 Start: 46411, Stop: 46208, Start Num: 6
Candidate Starts for Munch_82:
(1, 46666), (2, 46651), (3, 46648), (4, 46522), (Start: 5 @46414 has 11 MA's), (Start: 6 @46411 has 11 MA's), (10, 46294), (11, 46249),

Gene: Noella_76 Start: 45215, Stop: 45048, Start Num: 7
Candidate Starts for Noella_76:
(Start: 7 @45215 has 22 MA's), (8, 45164), (10, 45104),

Gene: Norbert_71 Start: 45212, Stop: 45045, Start Num: 7
Candidate Starts for Norbert_71:
(Start: 7 @45212 has 22 MA's), (8, 45161), (10, 45101),

Gene: Orange_82 Start: 45961, Stop: 45758, Start Num: 6
Candidate Starts for Orange_82:
(1, 46216), (2, 46201), (3, 46198), (4, 46072), (Start: 5 @45964 has 11 MA's), (Start: 6 @45961 has 11 MA's), (10, 45844), (11, 45799),

Gene: Panamaxus_73 Start: 45214, Stop: 45047, Start Num: 7
Candidate Starts for Panamaxus_73:
(Start: 7 @45214 has 22 MA's), (8, 45163), (10, 45103),

Gene: Petersenfast_76 Start: 44845, Stop: 44639, Start Num: 5
Candidate Starts for Petersenfast_76:
(1, 45097), (2, 45082), (3, 45079), (4, 44953), (Start: 5 @44845 has 11 MA's), (Start: 6 @44842 has 11 MA's), (10, 44725), (11, 44680),

Gene: Phantastic_77 Start: 44904, Stop: 44734, Start Num: 7
Candidate Starts for Phantastic_77:
(Start: 7 @44904 has 22 MA's), (8, 44853), (10, 44793),

Gene: Pistachio_76 Start: 44807, Stop: 44640, Start Num: 7
Candidate Starts for Pistachio_76:
(Start: 7 @44807 has 22 MA's), (8, 44756), (10, 44696),

Gene: Pocahontas_74 Start: 45210, Stop: 45043, Start Num: 7
Candidate Starts for Pocahontas_74:
(Start: 7 @45210 has 22 MA's), (8, 45159), (10, 45099),

Gene: Popcicle_75 Start: 45210, Stop: 45043, Start Num: 7
Candidate Starts for Popcicle_75:
(Start: 7 @45210 has 22 MA's), (8, 45159), (10, 45099),

Gene: Puppy_76 Start: 44877, Stop: 44710, Start Num: 7

Candidate Starts for Puppy_76:
(Start: 7 @44877 has 22 MA's), (8, 44826), (10, 44766),

Gene: QuinnKiro_74 Start: 45213, Stop: 45046, Start Num: 7
Candidate Starts for QuinnKiro_74:
(Start: 7 @45213 has 22 MA's), (8, 45162), (10, 45102),

Gene: ResDef_73 Start: 45216, Stop: 45049, Start Num: 7
Candidate Starts for ResDef_73:
(Start: 7 @45216 has 22 MA's), (8, 45165), (10, 45105),

Gene: Salz_77 Start: 44760, Stop: 44554, Start Num: 5
Candidate Starts for Salz_77:
(4, 44868), (Start: 5 @44760 has 11 MA's), (Start: 6 @44757 has 11 MA's), (10, 44640), (11, 44595),

Gene: SaturnRing_75 Start: 45260, Stop: 45093, Start Num: 7
Candidate Starts for SaturnRing_75:
(Start: 7 @45260 has 22 MA's), (8, 45209), (10, 45149),

Gene: Scout_74 Start: 44436, Stop: 44269, Start Num: 7
Candidate Starts for Scout_74:
(Start: 7 @44436 has 22 MA's), (8, 44385), (10, 44325),

Gene: Sham4_78 Start: 44843, Stop: 44637, Start Num: 5
Candidate Starts for Sham4_78:
(3, 45080), (4, 44951), (Start: 5 @44843 has 11 MA's), (Start: 6 @44840 has 11 MA's), (10, 44723), (11, 44678),

Gene: Snape_82 Start: 45950, Stop: 45747, Start Num: 6
Candidate Starts for Snape_82:
(4, 46061), (Start: 5 @45953 has 11 MA's), (Start: 6 @45950 has 11 MA's), (10, 45833), (11, 45788),

Gene: TNguyen7_76 Start: 45218, Stop: 45051, Start Num: 7
Candidate Starts for TNguyen7_76:
(Start: 7 @45218 has 22 MA's), (8, 45167), (9, 45128), (10, 45107),

Gene: Texage_73 Start: 45214, Stop: 45047, Start Num: 7
Candidate Starts for Texage_73:
(Start: 7 @45214 has 22 MA's), (8, 45163), (10, 45103),

Gene: Timothy_82 Start: 45927, Stop: 45724, Start Num: 6
Candidate Starts for Timothy_82:
(1, 46182), (2, 46167), (3, 46164), (4, 46038), (Start: 5 @45930 has 11 MA's), (Start: 6 @45927 has 11 MA's), (10, 45810), (11, 45765),

Gene: Todacoro_75 Start: 45213, Stop: 45046, Start Num: 7
Candidate Starts for Todacoro_75:
(Start: 7 @45213 has 22 MA's), (8, 45162), (10, 45102),

Gene: Veracruz_72 Start: 45214, Stop: 45047, Start Num: 7
Candidate Starts for Veracruz_72:
(Start: 7 @45214 has 22 MA's), (8, 45163), (10, 45103),