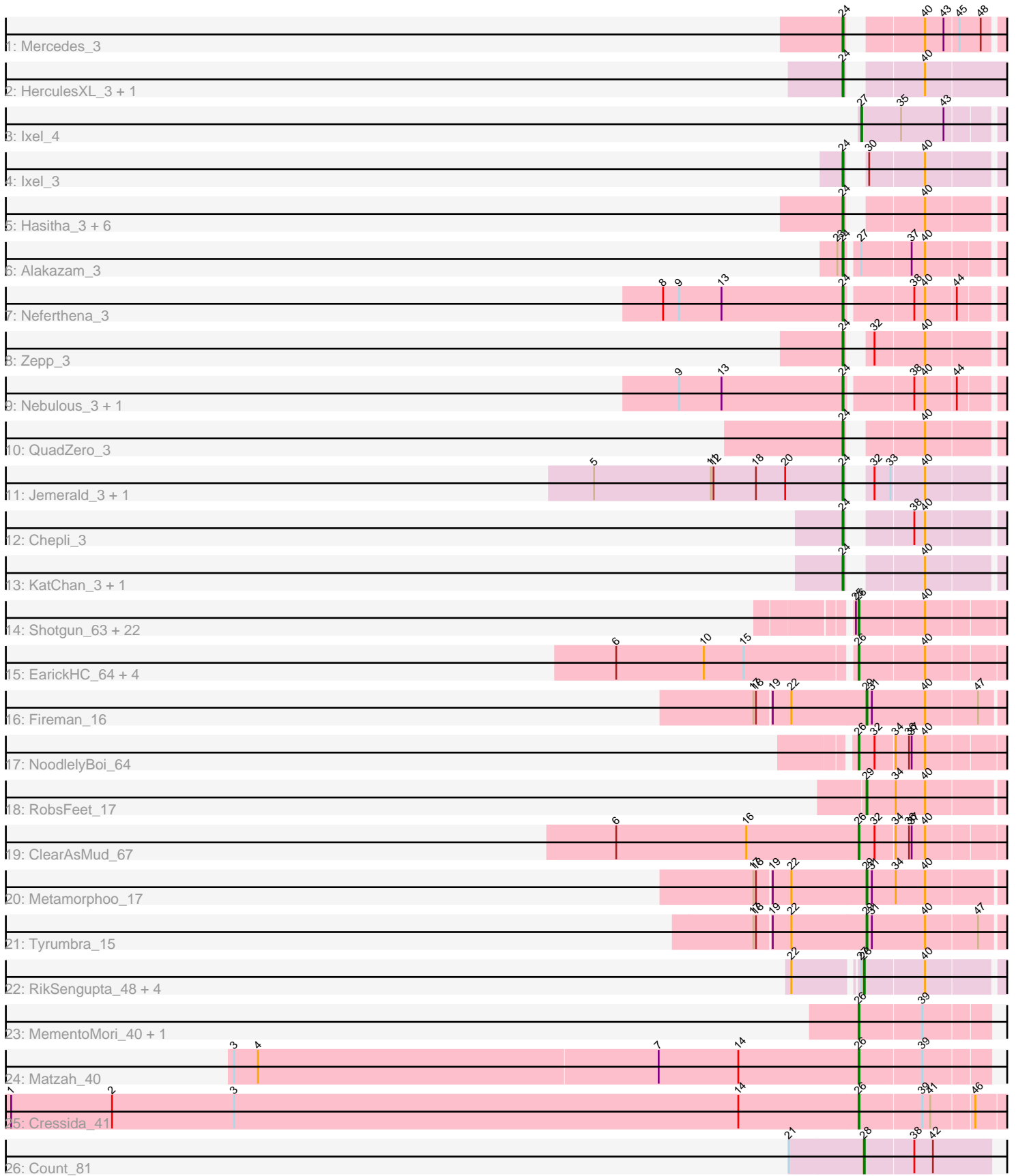


Pham 196524



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 196524 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196524 has 67 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Mercedes_3
- Track 2 : HerculesXL_3, Tinyman4_3
- Track 3 : Ixel_4
- Track 4 : Ixel_3
- Track 5 : Hasitha_3, Librie_3, Zayuliv_3, CaptainRex_3, GreenIvy_3, LilTerminator_3, Fulton_3
- Track 6 : Alakazam_3
- Track 7 : Neferthena_3
- Track 8 : Zepp_3
- Track 9 : Nebulous_3, Clock_3
- Track 10 : QuadZero_3
- Track 11 : Jemerald_3, Juicer_3
- Track 12 : Chepli_3
- Track 13 : KatChan_3, Luna18_3
- Track 14 : Shotgun_63, Hermeonysus_63, Cranjjs_64, Piperis_64, Busephilis_62, Savannah_62, Jefe_63, Kowalski_62, Ganandorf_62, Quhwah_67, Selwyn23_64, Scumberland_65, Honeyfin_64, Pulchra_65, Yeti_65, Onika_62, LittleFortune_65, Ramiel05_62, BrazzalePHS_62, Jollipop_64, Phrancesco_63, PiperSansNom_64, Antares_63
- Track 15 : EarickHC_64, PierreOrion_63, Crisis_64, KaiHaiDragon_64, Paschalis_63
- Track 16 : Fireman_16
- Track 17 : NoodlelyBoi_64
- Track 18 : RobsFeet_17
- Track 19 : ClearAsMud_67
- Track 20 : Metamorphoo_17
- Track 21 : Tyumbra_15
- Track 22 : RikSengupta_48, TinyMiny_48, Sparcetus_48, Ajin_48, Kors_49
- Track 23 : MementoMori_40, Cinna_39
- Track 24 : Matzah_40
- Track 25 : Cressida_41
- Track 26 : Count_81

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

The start number called the most often in the published annotations is 26, it was called in 33 of the 64 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares_63, BrazzalePHS_62, Busephilis_62, Cinna_39, ClearAsMud_67, Cranjjs_64, Cressida_41, Crisis_64, EarickHC_64, Ganandorf_62, Hermeonysus_63, Honeyfin_64, Jefe_63, Jollipop_64, KaiHaiDragon_64, Kowalski_62, LittleFortune_65, Matzah_40, MementoMori_40, NoodlelyBoi_64, Onika_62, Paschalis_63, Phrancesco_63, PierreOrion_63, PiperSansNom_64, Piperis_64, Pulchra_65, Quhwah_67, Ramiel05_62, Savannah_62, Scumberland_65, Selwyn23_64, Shotgun_63, Yeti_65,

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

-

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

- Ajin_48, Alakazam_3, CaptainRex_3, Chepli_3, Clock_3, Count_81, Fireman_16, Fulton_3, Greenlvy_3, Hasitha_3, HerculesXL_3, Ixel_3, Ixel_4, Jemerald_3, Juicer_3, KatChan_3, Kors_49, Librie_3, LilTerminator_3, Luna18_3, Mercedes_3, Metamorphoo_17, Nebulous_3, Neferthena_3, QuadZero_3, RikSengupta_48, RobsFeet_17, Sparcetus_48, TinyMiny_48, Tinyman4_3, Tyrumbra_15, Zayuliv_3, Zepp_3,

Summary by start number:

Start 24:

- Found in 22 of 67 (32.8%) of genes in pham
- Manual Annotations of this start: 21 of 64
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alakazam_3 (EA5), CaptainRex_3 (EA5), Chepli_3 (EA6), Clock_3 (EA5), Fulton_3 (EA5), Greenlvy_3 (EA5), Hasitha_3 (EA5), HerculesXL_3 (EA11), Ixel_3 (EA11), Jemerald_3 (EA6), Juicer_3 (EA6), KatChan_3 (EA6), Librie_3 (EA5), LilTerminator_3 (EA5), Luna18_3 (EA6), Mercedes_3 (EA), Nebulous_3 (EA5), Neferthena_3 (EA5), QuadZero_3 (EA5), Tinyman4_3 (EA11), Zayuliv_3 (EA5), Zepp_3 (EA5),

Start 26:

- Found in 34 of 67 (50.7%) of genes in pham
- Manual Annotations of this start: 33 of 64
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares_63 (EC), BrazzalePHS_62 (EC), Busephilis_62 (EC), Cinna_39 (EI), ClearAsMud_67 (EC), Cranjjs_64 (EC), Cressida_41 (EI), Crisis_64 (EC), EarickHC_64 (EC), Ganandorf_62 (EC), Hermeonysus_63 (EC), Honeyfin_64 (EC), Jefe_63 (EC), Jollipop_64 (EC), KaiHaiDragon_64 (EC), Kowalski_62 (EC), LittleFortune_65 (EC), Matzah_40 (EI), MementoMori_40 (EI), NoodlelyBoi_64 (EC), Onika_62 (EC), Paschalis_63 (EC), Phrancesco_63 (EC), PierreOrion_63 (EC), PiperSansNom_64 (EC), Piperis_64 (EC), Pulchra_65 (EC), Quhwah_67 (EC), Ramiel05_62 (EC), Savannah_62 (EC), Scumberland_65 (EC), Selwyn23_64 (EC), Shotgun_63 (EC), Yeti_65 (EC),

Start 27:

- Found in 7 of 67 (10.4%) of genes in pham

- Manual Annotations of this start: 1 of 64
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Ixel_4 (EA11),

Start 28:

- Found in 6 of 67 (9.0%) of genes in pham
- Manual Annotations of this start: 5 of 64
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ajin_48 (EF), Count_81 (EL), Kors_49 (EF), RikSengupta_48 (EF), Sparcetus_48 (EF), TinyMiny_48 (EF),

Start 29:

- Found in 4 of 67 (6.0%) of genes in pham
- Manual Annotations of this start: 4 of 64
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fireman_16 (EC), Metamorphoo_17 (EC), RobsFeet_17 (EC), Tyumbra_15 (EC),

Summary by clusters:

There are 8 clusters represented in this pham: EL, EA11, EF, EA, EC, EI, EA5, EA6,

Info for manual annotations of cluster EA:

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

Info for manual annotations of cluster EA11:

- Start number 24 was manually annotated 3 times for cluster EA11.
- Start number 27 was manually annotated 1 time for cluster EA11.

Info for manual annotations of cluster EA5:

- Start number 24 was manually annotated 12 times for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 24 was manually annotated 5 times for cluster EA6.

Info for manual annotations of cluster EC:

- Start number 26 was manually annotated 29 times for cluster EC.
- Start number 29 was manually annotated 4 times for cluster EC.

Info for manual annotations of cluster EF:

- Start number 28 was manually annotated 4 times for cluster EF.

Info for manual annotations of cluster EI:

- Start number 26 was manually annotated 4 times for cluster EI.

Info for manual annotations of cluster EL:

- Start number 28 was manually annotated 1 time for cluster EL.

Gene Information:

Gene: Ajin_48 Start: 30967, Stop: 31113, Start Num: 28

Candidate Starts for Ajin_48:

(22, 30898), (Start: 27 @30964 has 1 MA's), (Start: 28 @30967 has 5 MA's), (40, 31033),

Gene: Alakazam_3 Start: 2071, Stop: 2229, Start Num: 24

Candidate Starts for Alakazam_3:

(23, 2065), (Start: 24 @2071 has 21 MA's), (Start: 27 @2083 has 1 MA's), (37, 2137), (40, 2152),

Gene: Antares_63 Start: 40647, Stop: 40802, Start Num: 26

Candidate Starts for Antares_63:

(25, 40644), (Start: 26 @40647 has 33 MA's), (40, 40719),

Gene: BrazzalePHS_62 Start: 40409, Stop: 40564, Start Num: 26

Candidate Starts for BrazzalePHS_62:

(25, 40406), (Start: 26 @40409 has 33 MA's), (40, 40481),

Gene: Busephilis_62 Start: 40354, Stop: 40509, Start Num: 26

Candidate Starts for Busephilis_62:

(25, 40351), (Start: 26 @40354 has 33 MA's), (40, 40426),

Gene: CaptainRex_3 Start: 1963, Stop: 2109, Start Num: 24

Candidate Starts for CaptainRex_3:

(Start: 24 @1963 has 21 MA's), (40, 2029),

Gene: Chepli_3 Start: 2101, Stop: 2247, Start Num: 24

Candidate Starts for Chepli_3:

(Start: 24 @2101 has 21 MA's), (38, 2155), (40, 2167),

Gene: Cinna_39 Start: 31034, Stop: 31174, Start Num: 26

Candidate Starts for Cinna_39:

(Start: 26 @31034 has 33 MA's), (39, 31103),

Gene: ClearAsMud_67 Start: 40937, Stop: 41092, Start Num: 26

Candidate Starts for ClearAsMud_67:

(6, 40664), (16, 40811), (Start: 26 @40937 has 33 MA's), (32, 40955), (34, 40976), (36, 40991), (37, 40994), (40, 41009),

Gene: Clock_3 Start: 2104, Stop: 2262, Start Num: 24

Candidate Starts for Clock_3:

(9, 1921), (13, 1969), (Start: 24 @2104 has 21 MA's), (38, 2173), (40, 2185), (44, 2218),

Gene: Count_81 Start: 55860, Stop: 56000, Start Num: 28

Candidate Starts for Count_81:

(21, 55776), (Start: 28 @55860 has 5 MA's), (38, 55914), (42, 55935),

Gene: Cranjis_64 Start: 40602, Stop: 40757, Start Num: 26

Candidate Starts for Cranjis_64:

(25, 40599), (Start: 26 @40602 has 33 MA's), (40, 40674),

Gene: Cressida_41 Start: 30483, Stop: 30641, Start Num: 26

Candidate Starts for Cressida_41:

(1, 29526), (2, 29640), (3, 29778), (14, 30348), (Start: 26 @30483 has 33 MA's), (39, 30552), (41, 30561), (46, 30606),

Gene: Crisis_64 Start: 40417, Stop: 40572, Start Num: 26
Candidate Starts for Crisis_64:
(6, 40159), (10, 40258), (15, 40303), (Start: 26 @40417 has 33 MA's), (40, 40489),

Gene: EarickHC_64 Start: 40339, Stop: 40494, Start Num: 26
Candidate Starts for EarickHC_64:
(6, 40081), (10, 40180), (15, 40225), (Start: 26 @40339 has 33 MA's), (40, 40411),

Gene: Fireman_16 Start: 6897, Stop: 7046, Start Num: 29
Candidate Starts for Fireman_16:
(17, 6774), (18, 6777), (19, 6792), (22, 6813), (Start: 29 @6897 has 4 MA's), (31, 6903), (40, 6963),
(47, 7020),

Gene: Fulton_3 Start: 1963, Stop: 2109, Start Num: 24
Candidate Starts for Fulton_3:
(Start: 24 @1963 has 21 MA's), (40, 2029),

Gene: Ganandorf_62 Start: 40435, Stop: 40590, Start Num: 26
Candidate Starts for Ganandorf_62:
(25, 40432), (Start: 26 @40435 has 33 MA's), (40, 40507),

Gene: Greenlvy_3 Start: 1963, Stop: 2109, Start Num: 24
Candidate Starts for Greenlvy_3:
(Start: 24 @1963 has 21 MA's), (40, 2029),

Gene: Hasitha_3 Start: 1963, Stop: 2109, Start Num: 24
Candidate Starts for Hasitha_3:
(Start: 24 @1963 has 21 MA's), (40, 2029),

Gene: HerculesXL_3 Start: 1952, Stop: 2107, Start Num: 24
Candidate Starts for HerculesXL_3:
(Start: 24 @1952 has 21 MA's), (40, 2018),

Gene: Hermeonysus_63 Start: 40330, Stop: 40485, Start Num: 26
Candidate Starts for Hermeonysus_63:
(25, 40327), (Start: 26 @40330 has 33 MA's), (40, 40402),

Gene: Honeyfin_64 Start: 40590, Stop: 40745, Start Num: 26
Candidate Starts for Honeyfin_64:
(25, 40587), (Start: 26 @40590 has 33 MA's), (40, 40662),

Gene: Ixel_4 Start: 2216, Stop: 2365, Start Num: 27
Candidate Starts for Ixel_4:
(Start: 27 @2216 has 1 MA's), (35, 2261), (43, 2309),

Gene: Ixel_3 Start: 2066, Stop: 2212, Start Num: 24
Candidate Starts for Ixel_3:
(Start: 24 @2066 has 21 MA's), (30, 2072), (40, 2132),

Gene: Jefe_63 Start: 40388, Stop: 40543, Start Num: 26
Candidate Starts for Jefe_63:
(25, 40385), (Start: 26 @40388 has 33 MA's), (40, 40460),

Gene: Jemerald_3 Start: 2077, Stop: 2223, Start Num: 24
Candidate Starts for Jemerald_3:
(5, 1798), (11, 1930), (12, 1933), (18, 1981), (20, 2014), (Start: 24 @2077 has 21 MA's), (32, 2089),
(33, 2107), (40, 2143),

Gene: Jollipop_64 Start: 40770, Stop: 40925, Start Num: 26
Candidate Starts for Jollipop_64:
(25, 40767), (Start: 26 @40770 has 33 MA's), (40, 40842),

Gene: Juicer_3 Start: 2077, Stop: 2223, Start Num: 24
Candidate Starts for Juicer_3:
(5, 1798), (11, 1930), (12, 1933), (18, 1981), (20, 2014), (Start: 24 @2077 has 21 MA's), (32, 2089),
(33, 2107), (40, 2143),

Gene: KaiHaiDragon_64 Start: 40339, Stop: 40494, Start Num: 26
Candidate Starts for KaiHaiDragon_64:
(6, 40081), (10, 40180), (15, 40225), (Start: 26 @40339 has 33 MA's), (40, 40411),

Gene: KatChan_3 Start: 2101, Stop: 2247, Start Num: 24
Candidate Starts for KatChan_3:
(Start: 24 @2101 has 21 MA's), (40, 2167),

Gene: Kors_49 Start: 31044, Stop: 31190, Start Num: 28
Candidate Starts for Kors_49:
(22, 30975), (Start: 27 @31041 has 1 MA's), (Start: 28 @31044 has 5 MA's), (40, 31110),

Gene: Kowalski_62 Start: 40404, Stop: 40559, Start Num: 26
Candidate Starts for Kowalski_62:
(25, 40401), (Start: 26 @40404 has 33 MA's), (40, 40476),

Gene: Librie_3 Start: 1963, Stop: 2109, Start Num: 24
Candidate Starts for Librie_3:
(Start: 24 @1963 has 21 MA's), (40, 2029),

Gene: LilTerminator_3 Start: 1963, Stop: 2109, Start Num: 24
Candidate Starts for LilTerminator_3:
(Start: 24 @1963 has 21 MA's), (40, 2029),

Gene: LittleFortune_65 Start: 40695, Stop: 40850, Start Num: 26
Candidate Starts for LittleFortune_65:
(25, 40692), (Start: 26 @40695 has 33 MA's), (40, 40767),

Gene: Luna18_3 Start: 2101, Stop: 2247, Start Num: 24
Candidate Starts for Luna18_3:
(Start: 24 @2101 has 21 MA's), (40, 2167),

Gene: Matzah_40 Start: 30974, Stop: 31114, Start Num: 26
Candidate Starts for Matzah_40:
(3, 30272), (4, 30299), (7, 30749), (14, 30839), (Start: 26 @30974 has 33 MA's), (39, 31043),

Gene: MementoMori_40 Start: 30722, Stop: 30862, Start Num: 26
Candidate Starts for MementoMori_40:
(Start: 26 @30722 has 33 MA's), (39, 30791),

Gene: Mercedes_3 Start: 1955, Stop: 2101, Start Num: 24
Candidate Starts for Mercedes_3:
(Start: 24 @1955 has 21 MA's), (40, 2021), (43, 2042), (45, 2057), (48, 2081),

Gene: Metamorphoo_17 Start: 7070, Stop: 7219, Start Num: 29
Candidate Starts for Metamorphoo_17:
(17, 6947), (18, 6950), (19, 6965), (22, 6986), (Start: 29 @7070 has 4 MA's), (31, 7076), (34, 7103),
(40, 7136),

Gene: Nebulous_3 Start: 2113, Stop: 2271, Start Num: 24
Candidate Starts for Nebulous_3:
(9, 1930), (13, 1978), (Start: 24 @2113 has 21 MA's), (38, 2182), (40, 2194), (44, 2227),

Gene: Neferthema_3 Start: 2107, Stop: 2265, Start Num: 24
Candidate Starts for Neferthema_3:
(8, 1906), (9, 1924), (13, 1972), (Start: 24 @2107 has 21 MA's), (38, 2176), (40, 2188), (44, 2221),

Gene: NoodlelyBoi_64 Start: 41186, Stop: 41341, Start Num: 26
Candidate Starts for NoodlelyBoi_64:
(Start: 26 @41186 has 33 MA's), (32, 41204), (34, 41225), (36, 41240), (37, 41243), (40, 41258),

Gene: Onika_62 Start: 40413, Stop: 40568, Start Num: 26
Candidate Starts for Onika_62:
(25, 40410), (Start: 26 @40413 has 33 MA's), (40, 40485),

Gene: Paschalis_63 Start: 40435, Stop: 40590, Start Num: 26
Candidate Starts for Paschalis_63:
(6, 40177), (10, 40276), (15, 40321), (Start: 26 @40435 has 33 MA's), (40, 40507),

Gene: Phrancesco_63 Start: 40544, Stop: 40699, Start Num: 26
Candidate Starts for Phrancesco_63:
(25, 40541), (Start: 26 @40544 has 33 MA's), (40, 40616),

Gene: PierreOrion_63 Start: 40644, Stop: 40799, Start Num: 26
Candidate Starts for PierreOrion_63:
(6, 40386), (10, 40485), (15, 40530), (Start: 26 @40644 has 33 MA's), (40, 40716),

Gene: PiperSansNom_64 Start: 40726, Stop: 40881, Start Num: 26
Candidate Starts for PiperSansNom_64:
(25, 40723), (Start: 26 @40726 has 33 MA's), (40, 40798),

Gene: Piperis_64 Start: 40346, Stop: 40501, Start Num: 26
Candidate Starts for Piperis_64:
(25, 40343), (Start: 26 @40346 has 33 MA's), (40, 40418),

Gene: Pulchra_65 Start: 40742, Stop: 40897, Start Num: 26
Candidate Starts for Pulchra_65:
(25, 40739), (Start: 26 @40742 has 33 MA's), (40, 40814),

Gene: QuadZero_3 Start: 1963, Stop: 2109, Start Num: 24
Candidate Starts for QuadZero_3:
(Start: 24 @1963 has 21 MA's), (40, 2029),

Gene: Quhwah_67 Start: 41034, Stop: 41189, Start Num: 26

Candidate Starts for Quhwah_67:

(25, 41031), (Start: 26 @41034 has 33 MA's), (40, 41106),

Gene: Ramiel05_62 Start: 40404, Stop: 40559, Start Num: 26

Candidate Starts for Ramiel05_62:

(25, 40401), (Start: 26 @40404 has 33 MA's), (40, 40476),

Gene: RikSengupta_48 Start: 31081, Stop: 31227, Start Num: 28

Candidate Starts for RikSengupta_48:

(22, 31012), (Start: 27 @31078 has 1 MA's), (Start: 28 @31081 has 5 MA's), (40, 31147),

Gene: RobsFeet_17 Start: 6912, Stop: 7061, Start Num: 29

Candidate Starts for RobsFeet_17:

(Start: 29 @6912 has 4 MA's), (34, 6945), (40, 6978),

Gene: Savannah_62 Start: 40464, Stop: 40619, Start Num: 26

Candidate Starts for Savannah_62:

(25, 40461), (Start: 26 @40464 has 33 MA's), (40, 40536),

Gene: Scumberland_65 Start: 40659, Stop: 40814, Start Num: 26

Candidate Starts for Scumberland_65:

(25, 40656), (Start: 26 @40659 has 33 MA's), (40, 40731),

Gene: Selwyn23_64 Start: 40576, Stop: 40731, Start Num: 26

Candidate Starts for Selwyn23_64:

(25, 40573), (Start: 26 @40576 has 33 MA's), (40, 40648),

Gene: Shotgun_63 Start: 40340, Stop: 40495, Start Num: 26

Candidate Starts for Shotgun_63:

(25, 40337), (Start: 26 @40340 has 33 MA's), (40, 40412),

Gene: Sparcetus_48 Start: 30958, Stop: 31104, Start Num: 28

Candidate Starts for Sparcetus_48:

(22, 30889), (Start: 27 @30955 has 1 MA's), (Start: 28 @30958 has 5 MA's), (40, 31024),

Gene: TinyMiny_48 Start: 30979, Stop: 31125, Start Num: 28

Candidate Starts for TinyMiny_48:

(22, 30910), (Start: 27 @30976 has 1 MA's), (Start: 28 @30979 has 5 MA's), (40, 31045),

Gene: Tinyman4_3 Start: 1952, Stop: 2107, Start Num: 24

Candidate Starts for Tinyman4_3:

(Start: 24 @1952 has 21 MA's), (40, 2018),

Gene: Tyrumbra_15 Start: 6388, Stop: 6537, Start Num: 29

Candidate Starts for Tyrumbra_15:

(17, 6265), (18, 6268), (19, 6283), (22, 6304), (Start: 29 @6388 has 4 MA's), (31, 6394), (40, 6454),
(47, 6511),

Gene: Yeti_65 Start: 40378, Stop: 40533, Start Num: 26

Candidate Starts for Yeti_65:

(25, 40375), (Start: 26 @40378 has 33 MA's), (40, 40450),

Gene: Zayuliv_3 Start: 1963, Stop: 2109, Start Num: 24
Candidate Starts for Zayuliv_3:
(Start: 24 @1963 has 21 MA's), (40, 2029),

Gene: Zepp_3 Start: 1963, Stop: 2109, Start Num: 24
Candidate Starts for Zepp_3:
(Start: 24 @1963 has 21 MA's), (32, 1975), (40, 2029),