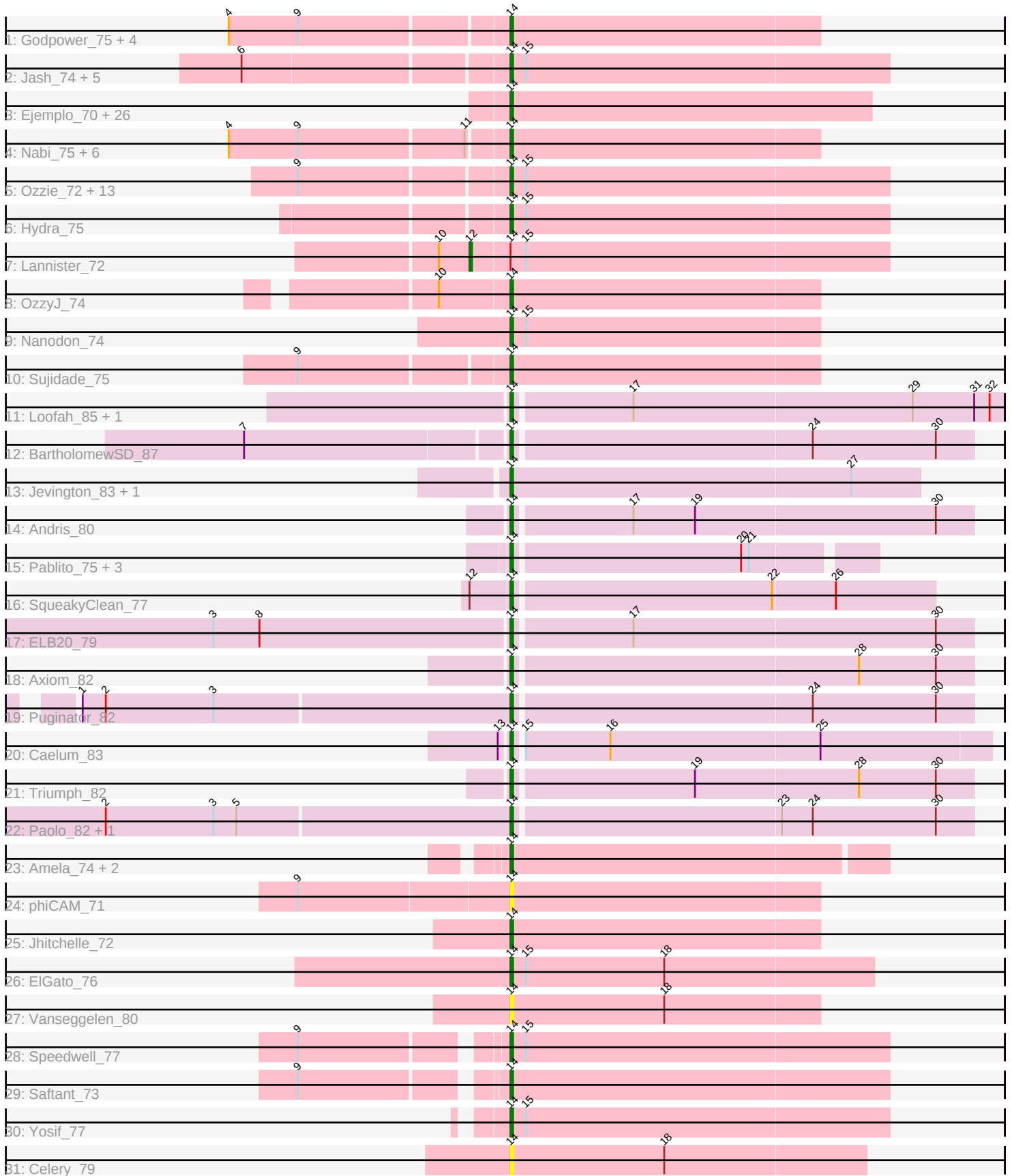


Pham 321274



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 321274 Report

This analysis was run 09/05/26 on database version 662.

Pham number 321274 has 93 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Godpower_75, Lika_74, Toma_75, Goby_75, Dattran_76
- Track 2 : Jash_74, Rusticus_74, Izzy_74, Bovely_72, BryanRecycles_74, Eddasa_75
- Track 3 : Ejemplo_70, RedBear_72, Dwayne_72, BarryBee_75, Maneekul_72, TagePhighter_74, Triste_73, South40_71, Whatever_72, SarahRose_72, Kaine_75, Katalie_71, Asten_72, Emaanora_75, Provolone_76, Sudan_75, Snorlax_72, Werner_72, ZamZam_75, Dexers_73, TuanPN_70, Yasdnil_72, Pavo_76, Chucky_72, Conan_76, Hippo_72, Alsaber_75
- Track 4 : Nabi_75, Rana_75, Celeste_75, Zemlya_75, Danzina_75, Lorelei_74, Brataylor_76
- Track 5 : Ozzie_72, Phettuccine_72, Unstoppable_72, Aaronocolus_72, Indigo_71, Oliynyk_74, Legacy_72, Nerdos_71, Caliburn_71, BeardedLady_73, EnochSoames_76, Esperer_73, Leviticus_73, SunsetPointe_72
- Track 6 : Hydra_75
- Track 7 : Lannister_72
- Track 8 : OzzyJ_74
- Track 9 : Nanodon_74
- Track 10 : Sujidade_75
- Track 11 : Loofah_85, Paedore_82
- Track 12 : BartholomewSD_87
- Track 13 : Jevington_83, Marav_83
- Track 14 : Andris_80
- Track 15 : Pablito_75, Janus_77, GirlDinner_76, Animus_76
- Track 16 : SqueakyClean_77
- Track 17 : ELB20_79
- Track 18 : Axiom_82
- Track 19 : Puginator_82
- Track 20 : Caelum_83
- Track 21 : Triumph_82
- Track 22 : Paolo_82, Zainub_83
- Track 23 : Amela_74, Verse_75, SunkenRoot_74
- Track 24 : phiCAM_71
- Track 25 : Jhitchelle_72
- Track 26 : ElGato_76
- Track 27 : Vanseggelen_80
- Track 28 : Speedwell_77
- Track 29 : Saftant_73

- Track 30 : Yosif_77
- Track 31 : Celery_79

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

The start number called the most often in the published annotations is 14, it was called in 88 of the 89 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aaronocolus_72, Alsaber_75, Amela_74, Andris_80, Animus_76, Asten_72, Axiom_82, BarryBee_75, BartholomewSD_87, BeardedLady_73, Bovely_72, Brataylor_76, BryanRecycles_74, Caelum_83, Caliburn_71, Celery_79, Celeste_75, Chucky_72, Conan_76, Danzina_75, Dattran_76, Dexers_73, Dwayne_72, ELB20_79, Eddasa_75, Ejemplo_70, ElGato_76, Emaanora_75, EnochSoames_76, Esperer_73, GirlDinner_76, Goby_75, Godpower_75, Hippo_72, Hydra_75, Indigo_71, Izzy_74, Janus_77, Jash_74, Jevington_83, Jhitchelle_72, Kaine_75, Katalie_71, Legacy_72, Leviticus_73, Lika_74, Loofah_85, Lorelei_74, Maneekul_72, Marav_83, Nabi_75, Nanodon_74, Nerdos_71, Oliynyk_74, Ozzie_72, OzzyJ_74, Pablito_75, Paedore_82, Paolo_82, Pavo_76, Phettuccine_72, Provolone_76, Puginator_82, Rana_75, RedBear_72, Rusticus_74, Saftant_73, SarahRose_72, Snorlax_72, South40_71, Speedwell_77, SqueakyClean_77, Sudan_75, Sujidade_75, SunkenRoot_74, SunsetPointe_72, TagerPhighter_74, Toma_75, Triste_73, Triumph_82, TuanPN_70, Unstoppable_72, Vanseggelen_80, Verse_75, Werner_72, Whatever_72, Yasdnil_72, Yosif_77, Zainub_83, ZamZam_75, Zemlya_75, phiCAM_71,

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

- Lannister_72,

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

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Summary by start number:

Start 12:

- Found in 2 of 93 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 89
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Lannister_72 (BD1),

Start 14:

- Found in 93 of 93 (100.0%) of genes in pham
- Manual Annotations of this start: 88 of 89
- Called 98.9% of time when present
- Phage (with cluster) where this start called: Aaronocolus_72 (BD1), Alsaber_75 (BD3), Amela_74 (BD3), Andris_80 (BD2), Animus_76 (BD2), Asten_72 (BD1), Axiom_82 (BD2), BarryBee_75 (BD1), BartholomewSD_87 (BD2), BeardedLady_73 (BD1), Bovely_72 (BD1), Brataylor_76 (BD1), BryanRecycles_74 (BD1), Caelum_83 (BD2), Caliburn_71 (BD1), Celery_79 (BD3), Celeste_75 (BD1), Chucky_72 (BD1), Conan_76 (BD3), Danzina_75 (BD1), Dattran_76 (BD1), Dexers_73 (BD3),

Dwayne_72 (BD1), ELB20_79 (BD2), Eddasa_75 (BD1), Ejemplo_70 (BD1), ElGato_76 (BD3), Emaanora_75 (BD1), EnochSoames_76 (BD1), Esperer_73 (BD1), GirlDinner_76 (BD2), Goby_75 (BD1), Godpower_75 (BD1), Hippo_72 (BD1), Hydra_75 (BD1), Indigo_71 (BD1), Izzy_74 (BD1), Janus_77 (BD2), Jash_74 (BD1), Jevington_83 (BD2), Jhitchelle_72 (BD3), Kaine_75 (BD3), Katalie_71 (BD1), Legacy_72 (BD1), Leviticus_73 (BD1), Lika_74 (BD1), Loofah_85 (BD2), Lorelei_74 (BD1), Maneekul_72 (BD1), Marav_83 (BD2), Nabi_75 (BD1), Nanodon_74 (BD1), Nerdos_71 (BD1), Oliynyk_74 (BD1), Ozzie_72 (BD1), OzzyJ_74 (BD1), Pablito_75 (BD2), Paedore_82 (BD2), Paolo_82 (BD2), Pavo_76 (BD3), Phettuccine_72 (BD1), Provolone_76 (BD3), Puginator_82 (BD2), Rana_75 (BD1), RedBear_72 (BD1), Rusticus_74 (BD1), Saftant_73 (BD3), SarahRose_72 (BD1), Snorlax_72 (BD1), South40_71 (BD1), Speedwell_77 (BD3), SqueakyClean_77 (BD2), Sudan_75 (BD3), Sujidade_75 (BD1), SunkenRoot_74 (BD3), SunsetPointe_72 (BD1), TagePhighter_74 (BD1), Toma_75 (BD1), Triste_73 (BD1), Triumph_82 (BD2), TuanPN_70 (BD1), Unstoppable_72 (BD1), Vanseggelen_80 (BD3), Verse_75 (BD3), Werner_72 (BD1), Whatever_72 (BD1), Yasdnil_72 (BD1), Yosif_77 (BD3), Zainub_83 (BD2), ZamZam_75 (BD3), Zemlya_75 (BD1), phiCAM_71 (BD3),

Summary by clusters:

There are 3 clusters represented in this pham: BD1, BD3, BD2,

Info for manual annotations of cluster BD1:

- Start number 12 was manually annotated 1 time for cluster BD1.
- Start number 14 was manually annotated 54 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 14 was manually annotated 18 times for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 14 was manually annotated 16 times for cluster BD3.

Gene Information:

Gene: Aaronocolus_72 Start: 48130, Stop: 47984, Start Num: 14

Candidate Starts for Aaronocolus_72:

(9, 48208), (Start: 14 @48130 has 88 MA's), (15, 48124),

Gene: Alsaber_75 Start: 47405, Stop: 47259, Start Num: 14

Candidate Starts for Alsaber_75:

(Start: 14 @47405 has 88 MA's),

Gene: Amela_74 Start: 48160, Stop: 48017, Start Num: 14

Candidate Starts for Amela_74:

(Start: 14 @48160 has 88 MA's),

Gene: Andris_80 Start: 48874, Stop: 48698, Start Num: 14

Candidate Starts for Andris_80:

(Start: 14 @48874 has 88 MA's), (17, 48829), (19, 48805), (30, 48712),

Gene: Animus_76 Start: 49223, Stop: 49089, Start Num: 14

Candidate Starts for Animus_76:
(Start: 14 @49223 has 88 MA's), (20, 49136), (21, 49133),

Gene: Asten_72 Start: 50265, Stop: 50125, Start Num: 14
Candidate Starts for Asten_72:
(Start: 14 @50265 has 88 MA's),

Gene: Axiom_82 Start: 49884, Stop: 49708, Start Num: 14
Candidate Starts for Axiom_82:
(Start: 14 @49884 has 88 MA's), (28, 49752), (30, 49722),

Gene: BarryBee_75 Start: 50238, Stop: 50098, Start Num: 14
Candidate Starts for BarryBee_75:
(Start: 14 @50238 has 88 MA's),

Gene: BartholomewSD_87 Start: 50496, Stop: 50320, Start Num: 14
Candidate Starts for BartholomewSD_87:
(7, 50595), (Start: 14 @50496 has 88 MA's), (24, 50382), (30, 50334),

Gene: BeardedLady_73 Start: 48510, Stop: 48364, Start Num: 14
Candidate Starts for BeardedLady_73:
(9, 48588), (Start: 14 @48510 has 88 MA's), (15, 48504),

Gene: Bovely_72 Start: 48133, Stop: 47987, Start Num: 14
Candidate Starts for Bovely_72:
(6, 48232), (Start: 14 @48133 has 88 MA's), (15, 48127),

Gene: Brataylor_76 Start: 49765, Stop: 49646, Start Num: 14
Candidate Starts for Brataylor_76:
(4, 49870), (9, 49843), (11, 49780), (Start: 14 @49765 has 88 MA's),

Gene: BryanRecycles_74 Start: 48636, Stop: 48490, Start Num: 14
Candidate Starts for BryanRecycles_74:
(6, 48735), (Start: 14 @48636 has 88 MA's), (15, 48630),

Gene: Caelum_83 Start: 48893, Stop: 48711, Start Num: 14
Candidate Starts for Caelum_83:
(13, 48896), (Start: 14 @48893 has 88 MA's), (15, 48890), (16, 48857), (25, 48776),

Gene: Caliburn_71 Start: 48518, Stop: 48372, Start Num: 14
Candidate Starts for Caliburn_71:
(9, 48596), (Start: 14 @48518 has 88 MA's), (15, 48512),

Gene: Celery_79 Start: 47205, Stop: 47068, Start Num: 14
Candidate Starts for Celery_79:
(Start: 14 @47205 has 88 MA's), (18, 47145),

Gene: Celeste_75 Start: 49233, Stop: 49114, Start Num: 14
Candidate Starts for Celeste_75:
(4, 49338), (9, 49311), (11, 49248), (Start: 14 @49233 has 88 MA's),

Gene: Chucky_72 Start: 50300, Stop: 50160, Start Num: 14
Candidate Starts for Chucky_72:

(Start: 14 @50300 has 88 MA's),

Gene: Conan_76 Start: 47657, Stop: 47511, Start Num: 14

Candidate Starts for Conan_76:

(Start: 14 @47657 has 88 MA's),

Gene: Danzina_75 Start: 49471, Stop: 49352, Start Num: 14

Candidate Starts for Danzina_75:

(4, 49576), (9, 49549), (11, 49486), (Start: 14 @49471 has 88 MA's),

Gene: Dattran_76 Start: 49683, Stop: 49564, Start Num: 14

Candidate Starts for Dattran_76:

(4, 49788), (9, 49761), (Start: 14 @49683 has 88 MA's),

Gene: Dexers_73 Start: 47623, Stop: 47477, Start Num: 14

Candidate Starts for Dexers_73:

(Start: 14 @47623 has 88 MA's),

Gene: Dwayne_72 Start: 50288, Stop: 50148, Start Num: 14

Candidate Starts for Dwayne_72:

(Start: 14 @50288 has 88 MA's),

Gene: ELB20_79 Start: 49457, Stop: 49281, Start Num: 14

Candidate Starts for ELB20_79:

(3, 49571), (8, 49553), (Start: 14 @49457 has 88 MA's), (17, 49412), (30, 49295),

Gene: Eddasa_75 Start: 49175, Stop: 49029, Start Num: 14

Candidate Starts for Eddasa_75:

(6, 49274), (Start: 14 @49175 has 88 MA's), (15, 49169),

Gene: Ejemplo_70 Start: 50226, Stop: 50086, Start Num: 14

Candidate Starts for Ejemplo_70:

(Start: 14 @50226 has 88 MA's),

Gene: ElGato_76 Start: 47511, Stop: 47371, Start Num: 14

Candidate Starts for ElGato_76:

(Start: 14 @47511 has 88 MA's), (15, 47505), (18, 47451),

Gene: Emaanora_75 Start: 50212, Stop: 50072, Start Num: 14

Candidate Starts for Emaanora_75:

(Start: 14 @50212 has 88 MA's),

Gene: EnochSoames_76 Start: 48342, Stop: 48196, Start Num: 14

Candidate Starts for EnochSoames_76:

(9, 48420), (Start: 14 @48342 has 88 MA's), (15, 48336),

Gene: Esperer_73 Start: 48476, Stop: 48330, Start Num: 14

Candidate Starts for Esperer_73:

(9, 48554), (Start: 14 @48476 has 88 MA's), (15, 48470),

Gene: GirlDinner_76 Start: 48721, Stop: 48587, Start Num: 14

Candidate Starts for GirlDinner_76:

(Start: 14 @48721 has 88 MA's), (20, 48634), (21, 48631),

Gene: Goby_75 Start: 50100, Stop: 49981, Start Num: 14
Candidate Starts for Goby_75:
(4, 50205), (9, 50178), (Start: 14 @50100 has 88 MA's),

Gene: Godpower_75 Start: 49394, Stop: 49275, Start Num: 14
Candidate Starts for Godpower_75:
(4, 49499), (9, 49472), (Start: 14 @49394 has 88 MA's),

Gene: Hippo_72 Start: 50274, Stop: 50134, Start Num: 14
Candidate Starts for Hippo_72:
(Start: 14 @50274 has 88 MA's),

Gene: Hydra_75 Start: 49290, Stop: 49144, Start Num: 14
Candidate Starts for Hydra_75:
(Start: 14 @49290 has 88 MA's), (15, 49284),

Gene: Indigo_71 Start: 48126, Stop: 47980, Start Num: 14
Candidate Starts for Indigo_71:
(9, 48204), (Start: 14 @48126 has 88 MA's), (15, 48120),

Gene: Izzy_74 Start: 48683, Stop: 48537, Start Num: 14
Candidate Starts for Izzy_74:
(6, 48782), (Start: 14 @48683 has 88 MA's), (15, 48677),

Gene: Janus_77 Start: 49058, Stop: 48924, Start Num: 14
Candidate Starts for Janus_77:
(Start: 14 @49058 has 88 MA's), (20, 48971), (21, 48968),

Gene: Jash_74 Start: 48636, Stop: 48490, Start Num: 14
Candidate Starts for Jash_74:
(6, 48735), (Start: 14 @48636 has 88 MA's), (15, 48630),

Gene: Jevington_83 Start: 49837, Stop: 49679, Start Num: 14
Candidate Starts for Jevington_83:
(Start: 14 @49837 has 88 MA's), (27, 49705),

Gene: Jhitchelle_72 Start: 46825, Stop: 46706, Start Num: 14
Candidate Starts for Jhitchelle_72:
(Start: 14 @46825 has 88 MA's),

Gene: Kaine_75 Start: 47429, Stop: 47283, Start Num: 14
Candidate Starts for Kaine_75:
(Start: 14 @47429 has 88 MA's),

Gene: Katalie_71 Start: 49994, Stop: 49854, Start Num: 14
Candidate Starts for Katalie_71:
(Start: 14 @49994 has 88 MA's),

Gene: Lannister_72 Start: 48875, Stop: 48714, Start Num: 12
Candidate Starts for Lannister_72:
(10, 48887), (Start: 12 @48875 has 1 MA's), (Start: 14 @48860 has 88 MA's), (15, 48854),

Gene: Legacy_72 Start: 48509, Stop: 48363, Start Num: 14

Candidate Starts for Legacy_72:

(9, 48587), (Start: 14 @48509 has 88 MA's), (15, 48503),

Gene: Leviticus_73 Start: 48663, Stop: 48517, Start Num: 14

Candidate Starts for Leviticus_73:

(9, 48741), (Start: 14 @48663 has 88 MA's), (15, 48657),

Gene: Lika_74 Start: 49947, Stop: 49828, Start Num: 14

Candidate Starts for Lika_74:

(4, 50052), (9, 50025), (Start: 14 @49947 has 88 MA's),

Gene: Loofah_85 Start: 50694, Stop: 50506, Start Num: 14

Candidate Starts for Loofah_85:

(Start: 14 @50694 has 88 MA's), (17, 50649), (29, 50541), (31, 50517), (32, 50511),

Gene: Lorelei_74 Start: 49244, Stop: 49125, Start Num: 14

Candidate Starts for Lorelei_74:

(4, 49349), (9, 49322), (11, 49259), (Start: 14 @49244 has 88 MA's),

Gene: Maneekul_72 Start: 50305, Stop: 50165, Start Num: 14

Candidate Starts for Maneekul_72:

(Start: 14 @50305 has 88 MA's),

Gene: Marav_83 Start: 49863, Stop: 49705, Start Num: 14

Candidate Starts for Marav_83:

(Start: 14 @49863 has 88 MA's), (27, 49731),

Gene: Nabi_75 Start: 49813, Stop: 49694, Start Num: 14

Candidate Starts for Nabi_75:

(4, 49918), (9, 49891), (11, 49828), (Start: 14 @49813 has 88 MA's),

Gene: Nanodon_74 Start: 48794, Stop: 48675, Start Num: 14

Candidate Starts for Nanodon_74:

(Start: 14 @48794 has 88 MA's), (15, 48788),

Gene: Nerdos_71 Start: 48125, Stop: 47979, Start Num: 14

Candidate Starts for Nerdos_71:

(9, 48203), (Start: 14 @48125 has 88 MA's), (15, 48119),

Gene: Oliynyk_74 Start: 48545, Stop: 48399, Start Num: 14

Candidate Starts for Oliynyk_74:

(9, 48623), (Start: 14 @48545 has 88 MA's), (15, 48539),

Gene: Ozzie_72 Start: 48518, Stop: 48372, Start Num: 14

Candidate Starts for Ozzie_72:

(9, 48596), (Start: 14 @48518 has 88 MA's), (15, 48512),

Gene: OzzyJ_74 Start: 50171, Stop: 50052, Start Num: 14

Candidate Starts for OzzyJ_74:

(10, 50198), (Start: 14 @50171 has 88 MA's),

Gene: Pablito_75 Start: 47878, Stop: 47744, Start Num: 14

Candidate Starts for Pablito_75:
(Start: 14 @47878 has 88 MA's), (20, 47791), (21, 47788),

Gene: Paedore_82 Start: 50863, Stop: 50675, Start Num: 14
Candidate Starts for Paedore_82:
(Start: 14 @50863 has 88 MA's), (17, 50818), (29, 50710), (31, 50686), (32, 50680),

Gene: Paolo_82 Start: 49702, Stop: 49526, Start Num: 14
Candidate Starts for Paolo_82:
(2, 49858), (3, 49816), (5, 49807), (Start: 14 @49702 has 88 MA's), (23, 49600), (24, 49588), (30, 49540),

Gene: Pavo_76 Start: 47605, Stop: 47459, Start Num: 14
Candidate Starts for Pavo_76:
(Start: 14 @47605 has 88 MA's),

Gene: Phettuccine_72 Start: 48096, Stop: 47950, Start Num: 14
Candidate Starts for Phettuccine_72:
(9, 48174), (Start: 14 @48096 has 88 MA's), (15, 48090),

Gene: Provolone_76 Start: 47746, Stop: 47600, Start Num: 14
Candidate Starts for Provolone_76:
(Start: 14 @47746 has 88 MA's),

Gene: Puginator_82 Start: 49772, Stop: 49596, Start Num: 14
Candidate Starts for Puginator_82:
(1, 49937), (2, 49928), (3, 49886), (Start: 14 @49772 has 88 MA's), (24, 49658), (30, 49610),

Gene: Rana_75 Start: 49666, Stop: 49547, Start Num: 14
Candidate Starts for Rana_75:
(4, 49771), (9, 49744), (11, 49681), (Start: 14 @49666 has 88 MA's),

Gene: RedBear_72 Start: 49994, Stop: 49854, Start Num: 14
Candidate Starts for RedBear_72:
(Start: 14 @49994 has 88 MA's),

Gene: Rusticus_74 Start: 48636, Stop: 48490, Start Num: 14
Candidate Starts for Rusticus_74:
(6, 48735), (Start: 14 @48636 has 88 MA's), (15, 48630),

Gene: Saftant_73 Start: 47439, Stop: 47293, Start Num: 14
Candidate Starts for Saftant_73:
(9, 47511), (Start: 14 @47439 has 88 MA's),

Gene: SarahRose_72 Start: 50275, Stop: 50135, Start Num: 14
Candidate Starts for SarahRose_72:
(Start: 14 @50275 has 88 MA's),

Gene: Snorlax_72 Start: 50300, Stop: 50160, Start Num: 14
Candidate Starts for Snorlax_72:
(Start: 14 @50300 has 88 MA's),

Gene: South40_71 Start: 49994, Stop: 49854, Start Num: 14

Candidate Starts for South40_71:
(Start: 14 @49994 has 88 MA's),

Gene: Speedwell_77 Start: 48345, Stop: 48199, Start Num: 14
Candidate Starts for Speedwell_77:
(9, 48417), (Start: 14 @48345 has 88 MA's), (15, 48339),

Gene: SqueakyClean_77 Start: 49262, Stop: 49101, Start Num: 14
Candidate Starts for SqueakyClean_77:
(Start: 12 @49277 has 1 MA's), (Start: 14 @49262 has 88 MA's), (22, 49163), (26, 49139),

Gene: Sudan_75 Start: 47412, Stop: 47266, Start Num: 14
Candidate Starts for Sudan_75:
(Start: 14 @47412 has 88 MA's),

Gene: Sujidade_75 Start: 50244, Stop: 50125, Start Num: 14
Candidate Starts for Sujidade_75:
(9, 50322), (Start: 14 @50244 has 88 MA's),

Gene: SunkenRoot_74 Start: 47934, Stop: 47791, Start Num: 14
Candidate Starts for SunkenRoot_74:
(Start: 14 @47934 has 88 MA's),

Gene: SunsetPointe_72 Start: 48525, Stop: 48379, Start Num: 14
Candidate Starts for SunsetPointe_72:
(9, 48603), (Start: 14 @48525 has 88 MA's), (15, 48519),

Gene: TagePhighter_74 Start: 50275, Stop: 50135, Start Num: 14
Candidate Starts for TagePhighter_74:
(Start: 14 @50275 has 88 MA's),

Gene: Toma_75 Start: 50103, Stop: 49984, Start Num: 14
Candidate Starts for Toma_75:
(4, 50208), (9, 50181), (Start: 14 @50103 has 88 MA's),

Gene: Triste_73 Start: 50274, Stop: 50134, Start Num: 14
Candidate Starts for Triste_73:
(Start: 14 @50274 has 88 MA's),

Gene: Triumph_82 Start: 49644, Stop: 49468, Start Num: 14
Candidate Starts for Triumph_82:
(Start: 14 @49644 has 88 MA's), (19, 49575), (28, 49512), (30, 49482),

Gene: TuanPN_70 Start: 50226, Stop: 50086, Start Num: 14
Candidate Starts for TuanPN_70:
(Start: 14 @50226 has 88 MA's),

Gene: Unstoppable_72 Start: 48124, Stop: 47978, Start Num: 14
Candidate Starts for Unstoppable_72:
(9, 48202), (Start: 14 @48124 has 88 MA's), (15, 48118),

Gene: Vanseggelen_80 Start: 47398, Stop: 47279, Start Num: 14
Candidate Starts for Vanseggelen_80:

(Start: 14 @47398 has 88 MA's), (18, 47338),

Gene: Verse_75 Start: 48198, Stop: 48055, Start Num: 14

Candidate Starts for Verse_75:

(Start: 14 @48198 has 88 MA's),

Gene: Werner_72 Start: 50272, Stop: 50132, Start Num: 14

Candidate Starts for Werner_72:

(Start: 14 @50272 has 88 MA's),

Gene: Whatever_72 Start: 50297, Stop: 50157, Start Num: 14

Candidate Starts for Whatever_72:

(Start: 14 @50297 has 88 MA's),

Gene: Yasdnil_72 Start: 50324, Stop: 50184, Start Num: 14

Candidate Starts for Yasdnil_72:

(Start: 14 @50324 has 88 MA's),

Gene: Yosif_77 Start: 48741, Stop: 48595, Start Num: 14

Candidate Starts for Yosif_77:

(Start: 14 @48741 has 88 MA's), (15, 48735),

Gene: Zainub_83 Start: 49882, Stop: 49706, Start Num: 14

Candidate Starts for Zainub_83:

(2, 50038), (3, 49996), (5, 49987), (Start: 14 @49882 has 88 MA's), (23, 49780), (24, 49768), (30, 49720),

Gene: ZamZam_75 Start: 47749, Stop: 47603, Start Num: 14

Candidate Starts for ZamZam_75:

(Start: 14 @47749 has 88 MA's),

Gene: Zemlya_75 Start: 49774, Stop: 49655, Start Num: 14

Candidate Starts for Zemlya_75:

(4, 49879), (9, 49852), (11, 49789), (Start: 14 @49774 has 88 MA's),

Gene: phiCAM_71 Start: 48995, Stop: 48876, Start Num: 14

Candidate Starts for phiCAM_71:

(9, 49076), (Start: 14 @48995 has 88 MA's),