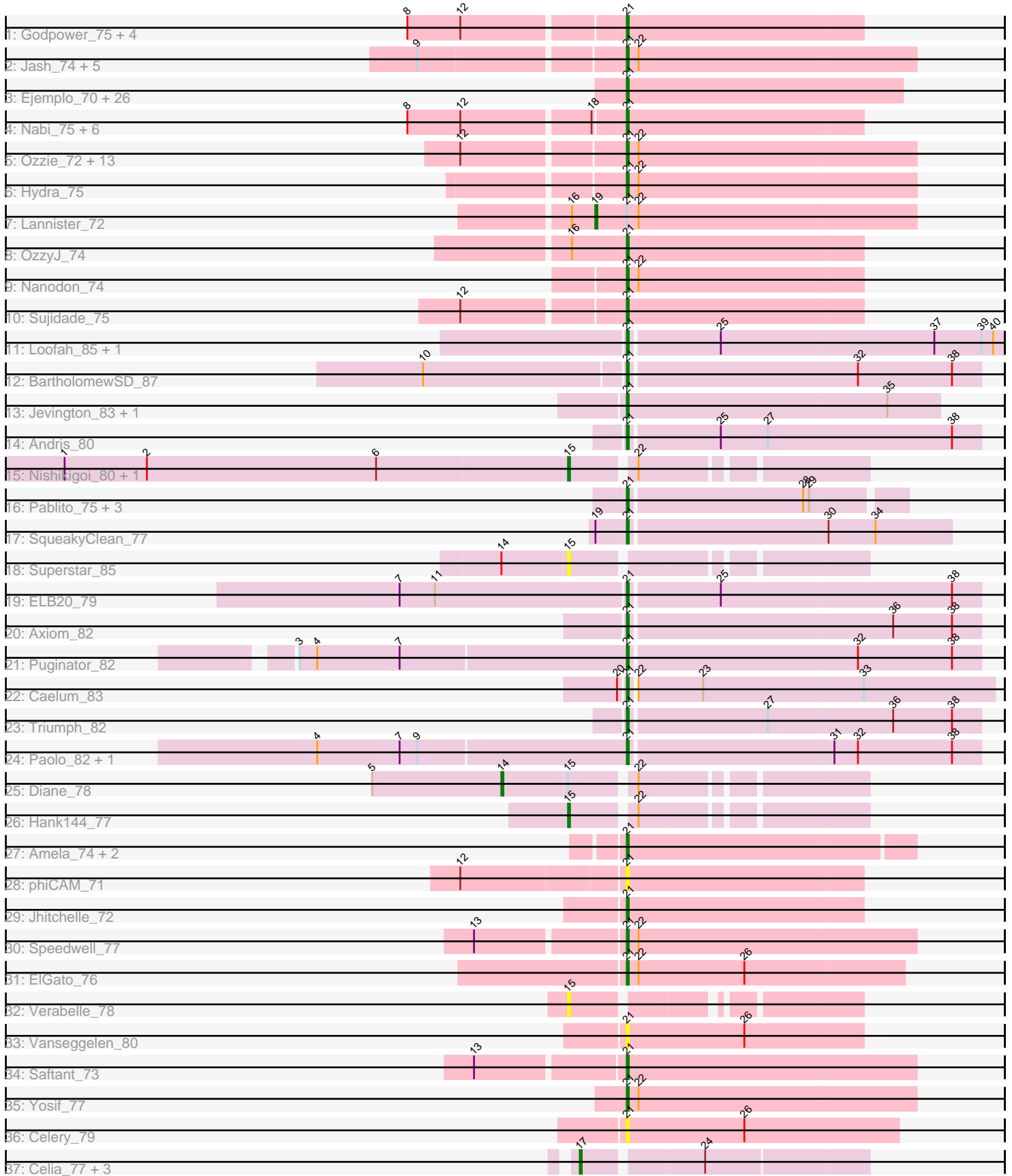


Pham 301244



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 301244 Report

This analysis was run 06/08/26 on database version 649.

Pham number 301244 has 103 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Godpower_75, Lika_74, Goby_75, Dattran_76, Toma_75
- Track 2 : Jash_74, Izzy_74, Bovely_72, BryanRecycles_74, Eddasa_75, Rusticus_74
- Track 3 : Ejemplo_70, RedBear_72, Dwayne_72, BarryBee_75, Maneekul_72, TagePghter_74, SarahRose_72, Triste_73, South40_71, Kaine_75, Katalie_71, Asten_72, Emaanora_75, Provolone_76, Sudan_75, Snorlax_72, Werner_72, ZamZam_75, Dexers_73, TuanPN_70, Yasdnil_72, Whatever_72, Pavo_76, Chucky_72, Conan_76, Hippo_72, Alsaber_75
- Track 4 : Nabi_75, Rana_75, Celeste_75, Zemlya_75, Danzina_75, Brataylor_76, Lorelei_74
- Track 5 : Ozzie_72, Aaronocolus_72, Phettuccine_72, Unstoppable_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 : Nishikigoi_80, Haizum_79
- Track 16 : Pablito_75, Janus_77, GirlDinner_76, Animus_76
- Track 17 : SqueakyClean_77
- Track 18 : Superstar_85
- Track 19 : ELB20_79
- Track 20 : Axiom_82
- Track 21 : Puginator_82
- Track 22 : Caelum_83
- Track 23 : Triumph_82
- Track 24 : Paolo_82, Zainub_83
- Track 25 : Diane_78
- Track 26 : Hank144_77
- Track 27 : Amela_74, Verse_75, SunkenRoot_76
- Track 28 : phiCAM_71
- Track 29 : Jhitchelle_72

- Track 30 : Speedwell_77
- Track 31 : ElGato_76
- Track 32 : Verabelle_78
- Track 33 : Vanseggelen_80
- Track 34 : Saftant_73
- Track 35 : Yosif_77
- Track 36 : Celery_79
- Track 37 : Celia_77, Urza_79, VieEnRose_78, Itza_80

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

The start number called the most often in the published annotations is 21, it was called in 87 of the 96 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_76, SunsetPointe_72, TaguePhighter_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:

- Celia_77, Diane_78, Haizum_79, Hank144_77, Itza_80, Nishikigoi_80, Superstar_85, Urza_79, Verabelle_78, VieEnRose_78,

Summary by start number:

Start 14:

- Found in 2 of 103 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 96
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Diane_78 (BD2),

Start 15:

- Found in 6 of 103 (5.8%) of genes in pham
- Manual Annotations of this start: 3 of 96

- Called 83.3% of time when present
- Phage (with cluster) where this start called: Haizum_79 (BD2), Hank144_77 (BD2), Nishikigoi_80 (BD2), Superstar_85 (BD2), Verabelle_78 (BD3),

Start 17:

- Found in 4 of 103 (3.9%) of genes in pham
- Manual Annotations of this start: 4 of 96
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Celia_77 (BD6), Itza_80 (BD6), Urza_79 (BD6), VieEnRose_78 (BD6),

Start 19:

- Found in 2 of 103 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 96
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Lannister_72 (BD1),

Start 21:

- Found in 93 of 103 (90.3%) of genes in pham
- Manual Annotations of this start: 87 of 96
- 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_76 (BD3), SunsetPointe_72 (BD1), TAgePghter_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 4 clusters represented in this pham: BD6, BD1, BD3, BD2,

Info for manual annotations of cluster BD1:

- Start number 19 was manually annotated 1 time for cluster BD1.
- Start number 21 was manually annotated 54 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 14 was manually annotated 1 time for cluster BD2.
- Start number 15 was manually annotated 3 times for cluster BD2.
- Start number 21 was manually annotated 18 times for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 21 was manually annotated 15 times for cluster BD3.

Info for manual annotations of cluster BD6:

- Start number 17 was manually annotated 4 times for cluster BD6.

Gene Information:

Gene: Aaronocolus_72 Start: 48130, Stop: 47984, Start Num: 21

Candidate Starts for Aaronocolus_72:

(12, 48208), (Start: 21 @48130 has 87 MA's), (22, 48124),

Gene: Alsaber_75 Start: 47405, Stop: 47259, Start Num: 21

Candidate Starts for Alsaber_75:

(Start: 21 @47405 has 87 MA's),

Gene: Amela_74 Start: 48160, Stop: 48017, Start Num: 21

Candidate Starts for Amela_74:

(Start: 21 @48160 has 87 MA's),

Gene: Andris_80 Start: 48874, Stop: 48698, Start Num: 21

Candidate Starts for Andris_80:

(Start: 21 @48874 has 87 MA's), (25, 48829), (27, 48805), (38, 48712),

Gene: Animus_76 Start: 49223, Stop: 49089, Start Num: 21

Candidate Starts for Animus_76:

(Start: 21 @49223 has 87 MA's), (28, 49136), (29, 49133),

Gene: Asten_72 Start: 50265, Stop: 50125, Start Num: 21

Candidate Starts for Asten_72:

(Start: 21 @50265 has 87 MA's),

Gene: Axiom_82 Start: 49884, Stop: 49708, Start Num: 21

Candidate Starts for Axiom_82:

(Start: 21 @49884 has 87 MA's), (36, 49752), (38, 49722),

Gene: BarryBee_75 Start: 50238, Stop: 50098, Start Num: 21

Candidate Starts for BarryBee_75:

(Start: 21 @50238 has 87 MA's),

Gene: BartholomewSD_87 Start: 50496, Stop: 50320, Start Num: 21

Candidate Starts for BartholomewSD_87:

(10, 50595), (Start: 21 @50496 has 87 MA's), (32, 50382), (38, 50334),

Gene: BeardedLady_73 Start: 48510, Stop: 48364, Start Num: 21

Candidate Starts for BeardedLady_73:

(12, 48588), (Start: 21 @48510 has 87 MA's), (22, 48504),

Gene: Bovely_72 Start: 48133, Stop: 47987, Start Num: 21

Candidate Starts for Bovely_72:

(9, 48232), (Start: 21 @48133 has 87 MA's), (22, 48127),

Gene: Brataylor_76 Start: 49765, Stop: 49646, Start Num: 21

Candidate Starts for Brataylor_76:

(8, 49870), (12, 49843), (18, 49780), (Start: 21 @49765 has 87 MA's),

Gene: BryanRecycles_74 Start: 48636, Stop: 48490, Start Num: 21

Candidate Starts for BryanRecycles_74:

(9, 48735), (Start: 21 @48636 has 87 MA's), (22, 48630),

Gene: Caelum_83 Start: 48893, Stop: 48711, Start Num: 21

Candidate Starts for Caelum_83:

(20, 48896), (Start: 21 @48893 has 87 MA's), (22, 48890), (23, 48857), (33, 48776),

Gene: Caliburn_71 Start: 48518, Stop: 48372, Start Num: 21

Candidate Starts for Caliburn_71:

(12, 48596), (Start: 21 @48518 has 87 MA's), (22, 48512),

Gene: Celery_79 Start: 47205, Stop: 47068, Start Num: 21

Candidate Starts for Celery_79:

(Start: 21 @47205 has 87 MA's), (26, 47145),

Gene: Celeste_75 Start: 49233, Stop: 49114, Start Num: 21

Candidate Starts for Celeste_75:

(8, 49338), (12, 49311), (18, 49248), (Start: 21 @49233 has 87 MA's),

Gene: Celia_77 Start: 48939, Stop: 48802, Start Num: 17

Candidate Starts for Celia_77:

(Start: 17 @48939 has 4 MA's), (24, 48882),

Gene: Chucky_72 Start: 50300, Stop: 50160, Start Num: 21

Candidate Starts for Chucky_72:

(Start: 21 @50300 has 87 MA's),

Gene: Conan_76 Start: 47657, Stop: 47511, Start Num: 21

Candidate Starts for Conan_76:

(Start: 21 @47657 has 87 MA's),

Gene: Danzina_75 Start: 49471, Stop: 49352, Start Num: 21

Candidate Starts for Danzina_75:

(8, 49576), (12, 49549), (18, 49486), (Start: 21 @49471 has 87 MA's),

Gene: Dattran_76 Start: 49683, Stop: 49564, Start Num: 21

Candidate Starts for Dattran_76:

(8, 49788), (12, 49761), (Start: 21 @49683 has 87 MA's),

Gene: Dexers_73 Start: 47623, Stop: 47477, Start Num: 21

Candidate Starts for Dexers_73:

(Start: 21 @47623 has 87 MA's),

Gene: Diane_78 Start: 49046, Stop: 48879, Start Num: 14
Candidate Starts for Diane_78:
(5, 49112), (Start: 14 @49046 has 1 MA's), (Start: 15 @49013 has 3 MA's), (22, 48983),

Gene: Dwayne_72 Start: 50288, Stop: 50148, Start Num: 21
Candidate Starts for Dwayne_72:
(Start: 21 @50288 has 87 MA's),

Gene: ELB20_79 Start: 49457, Stop: 49281, Start Num: 21
Candidate Starts for ELB20_79:
(7, 49571), (11, 49553), (Start: 21 @49457 has 87 MA's), (25, 49412), (38, 49295),

Gene: Eddasa_75 Start: 49175, Stop: 49029, Start Num: 21
Candidate Starts for Eddasa_75:
(9, 49274), (Start: 21 @49175 has 87 MA's), (22, 49169),

Gene: Ejemplo_70 Start: 50226, Stop: 50086, Start Num: 21
Candidate Starts for Ejemplo_70:
(Start: 21 @50226 has 87 MA's),

Gene: ElGato_76 Start: 47511, Stop: 47371, Start Num: 21
Candidate Starts for ElGato_76:
(Start: 21 @47511 has 87 MA's), (22, 47505), (26, 47451),

Gene: Emaanora_75 Start: 50212, Stop: 50072, Start Num: 21
Candidate Starts for Emaanora_75:
(Start: 21 @50212 has 87 MA's),

Gene: EnochSoames_76 Start: 48342, Stop: 48196, Start Num: 21
Candidate Starts for EnochSoames_76:
(12, 48420), (Start: 21 @48342 has 87 MA's), (22, 48336),

Gene: Esperer_73 Start: 48476, Stop: 48330, Start Num: 21
Candidate Starts for Esperer_73:
(12, 48554), (Start: 21 @48476 has 87 MA's), (22, 48470),

Gene: GirlDinner_76 Start: 48721, Stop: 48587, Start Num: 21
Candidate Starts for GirlDinner_76:
(Start: 21 @48721 has 87 MA's), (28, 48634), (29, 48631),

Gene: Goby_75 Start: 50100, Stop: 49981, Start Num: 21
Candidate Starts for Goby_75:
(8, 50205), (12, 50178), (Start: 21 @50100 has 87 MA's),

Gene: Godpower_75 Start: 49394, Stop: 49275, Start Num: 21
Candidate Starts for Godpower_75:
(8, 49499), (12, 49472), (Start: 21 @49394 has 87 MA's),

Gene: Haizum_79 Start: 49013, Stop: 48879, Start Num: 15
Candidate Starts for Haizum_79:
(1, 49268), (2, 49226), (6, 49109), (Start: 15 @49013 has 3 MA's), (22, 48983),

Gene: Hank144_77 Start: 49050, Stop: 48916, Start Num: 15
Candidate Starts for Hank144_77:
(Start: 15 @49050 has 3 MA's), (22, 49020),

Gene: Hippo_72 Start: 50274, Stop: 50134, Start Num: 21
Candidate Starts for Hippo_72:
(Start: 21 @50274 has 87 MA's),

Gene: Hydra_75 Start: 49290, Stop: 49144, Start Num: 21
Candidate Starts for Hydra_75:
(Start: 21 @49290 has 87 MA's), (22, 49284),

Gene: Indigo_71 Start: 48126, Stop: 47980, Start Num: 21
Candidate Starts for Indigo_71:
(12, 48204), (Start: 21 @48126 has 87 MA's), (22, 48120),

Gene: Itza_80 Start: 48872, Stop: 48735, Start Num: 17
Candidate Starts for Itza_80:
(Start: 17 @48872 has 4 MA's), (24, 48815),

Gene: Izzy_74 Start: 48683, Stop: 48537, Start Num: 21
Candidate Starts for Izzy_74:
(9, 48782), (Start: 21 @48683 has 87 MA's), (22, 48677),

Gene: Janus_77 Start: 49058, Stop: 48924, Start Num: 21
Candidate Starts for Janus_77:
(Start: 21 @49058 has 87 MA's), (28, 48971), (29, 48968),

Gene: Jash_74 Start: 48636, Stop: 48490, Start Num: 21
Candidate Starts for Jash_74:
(9, 48735), (Start: 21 @48636 has 87 MA's), (22, 48630),

Gene: Jevington_83 Start: 49837, Stop: 49679, Start Num: 21
Candidate Starts for Jevington_83:
(Start: 21 @49837 has 87 MA's), (35, 49705),

Gene: Jhitchelle_72 Start: 46825, Stop: 46706, Start Num: 21
Candidate Starts for Jhitchelle_72:
(Start: 21 @46825 has 87 MA's),

Gene: Kaine_75 Start: 47429, Stop: 47283, Start Num: 21
Candidate Starts for Kaine_75:
(Start: 21 @47429 has 87 MA's),

Gene: Katalie_71 Start: 49994, Stop: 49854, Start Num: 21
Candidate Starts for Katalie_71:
(Start: 21 @49994 has 87 MA's),

Gene: Lannister_72 Start: 48875, Stop: 48714, Start Num: 19
Candidate Starts for Lannister_72:
(16, 48887), (Start: 19 @48875 has 1 MA's), (Start: 21 @48860 has 87 MA's), (22, 48854),

Gene: Legacy_72 Start: 48509, Stop: 48363, Start Num: 21

Candidate Starts for Legacy_72:
(12, 48587), (Start: 21 @48509 has 87 MA's), (22, 48503),

Gene: Leviticus_73 Start: 48663, Stop: 48517, Start Num: 21
Candidate Starts for Leviticus_73:
(12, 48741), (Start: 21 @48663 has 87 MA's), (22, 48657),

Gene: Lika_74 Start: 49947, Stop: 49828, Start Num: 21
Candidate Starts for Lika_74:
(8, 50052), (12, 50025), (Start: 21 @49947 has 87 MA's),

Gene: Loofah_85 Start: 50694, Stop: 50506, Start Num: 21
Candidate Starts for Loofah_85:
(Start: 21 @50694 has 87 MA's), (25, 50649), (37, 50541), (39, 50517), (40, 50511),

Gene: Lorelei_74 Start: 49244, Stop: 49125, Start Num: 21
Candidate Starts for Lorelei_74:
(8, 49349), (12, 49322), (18, 49259), (Start: 21 @49244 has 87 MA's),

Gene: Maneekul_72 Start: 50305, Stop: 50165, Start Num: 21
Candidate Starts for Maneekul_72:
(Start: 21 @50305 has 87 MA's),

Gene: Marav_83 Start: 49863, Stop: 49705, Start Num: 21
Candidate Starts for Marav_83:
(Start: 21 @49863 has 87 MA's), (35, 49731),

Gene: Nabi_75 Start: 49813, Stop: 49694, Start Num: 21
Candidate Starts for Nabi_75:
(8, 49918), (12, 49891), (18, 49828), (Start: 21 @49813 has 87 MA's),

Gene: Nanodon_74 Start: 48794, Stop: 48675, Start Num: 21
Candidate Starts for Nanodon_74:
(Start: 21 @48794 has 87 MA's), (22, 48788),

Gene: Nerdos_71 Start: 48125, Stop: 47979, Start Num: 21
Candidate Starts for Nerdos_71:
(12, 48203), (Start: 21 @48125 has 87 MA's), (22, 48119),

Gene: Nishikigoi_80 Start: 49013, Stop: 48879, Start Num: 15
Candidate Starts for Nishikigoi_80:
(1, 49268), (2, 49226), (6, 49109), (Start: 15 @49013 has 3 MA's), (22, 48983),

Gene: Oliynyk_74 Start: 48545, Stop: 48399, Start Num: 21
Candidate Starts for Oliynyk_74:
(12, 48623), (Start: 21 @48545 has 87 MA's), (22, 48539),

Gene: Ozzie_72 Start: 48518, Stop: 48372, Start Num: 21
Candidate Starts for Ozzie_72:
(12, 48596), (Start: 21 @48518 has 87 MA's), (22, 48512),

Gene: OzzyJ_74 Start: 50171, Stop: 50052, Start Num: 21
Candidate Starts for OzzyJ_74:

(16, 50198), (Start: 21 @50171 has 87 MA's),

Gene: Pablito_75 Start: 47878, Stop: 47744, Start Num: 21

Candidate Starts for Pablito_75:

(Start: 21 @47878 has 87 MA's), (28, 47791), (29, 47788),

Gene: Paedore_82 Start: 50863, Stop: 50675, Start Num: 21

Candidate Starts for Paedore_82:

(Start: 21 @50863 has 87 MA's), (25, 50818), (37, 50710), (39, 50686), (40, 50680),

Gene: Paolo_82 Start: 49702, Stop: 49526, Start Num: 21

Candidate Starts for Paolo_82:

(4, 49858), (7, 49816), (9, 49807), (Start: 21 @49702 has 87 MA's), (31, 49600), (32, 49588), (38, 49540),

Gene: Pavo_76 Start: 47605, Stop: 47459, Start Num: 21

Candidate Starts for Pavo_76:

(Start: 21 @47605 has 87 MA's),

Gene: Phettuccine_72 Start: 48096, Stop: 47950, Start Num: 21

Candidate Starts for Phettuccine_72:

(12, 48174), (Start: 21 @48096 has 87 MA's), (22, 48090),

Gene: Provolone_76 Start: 47746, Stop: 47600, Start Num: 21

Candidate Starts for Provolone_76:

(Start: 21 @47746 has 87 MA's),

Gene: Puginator_82 Start: 49772, Stop: 49596, Start Num: 21

Candidate Starts for Puginator_82:

(3, 49937), (4, 49928), (7, 49886), (Start: 21 @49772 has 87 MA's), (32, 49658), (38, 49610),

Gene: Rana_75 Start: 49666, Stop: 49547, Start Num: 21

Candidate Starts for Rana_75:

(8, 49771), (12, 49744), (18, 49681), (Start: 21 @49666 has 87 MA's),

Gene: RedBear_72 Start: 49994, Stop: 49854, Start Num: 21

Candidate Starts for RedBear_72:

(Start: 21 @49994 has 87 MA's),

Gene: Rusticus_74 Start: 48636, Stop: 48490, Start Num: 21

Candidate Starts for Rusticus_74:

(9, 48735), (Start: 21 @48636 has 87 MA's), (22, 48630),

Gene: Saftant_73 Start: 47439, Stop: 47293, Start Num: 21

Candidate Starts for Saftant_73:

(13, 47511), (Start: 21 @47439 has 87 MA's),

Gene: SarahRose_72 Start: 50275, Stop: 50135, Start Num: 21

Candidate Starts for SarahRose_72:

(Start: 21 @50275 has 87 MA's),

Gene: Snorlax_72 Start: 50300, Stop: 50160, Start Num: 21

Candidate Starts for Snorlax_72:

(Start: 21 @50300 has 87 MA's),

Gene: South40_71 Start: 49994, Stop: 49854, Start Num: 21

Candidate Starts for South40_71:

(Start: 21 @49994 has 87 MA's),

Gene: Speedwell_77 Start: 48345, Stop: 48199, Start Num: 21

Candidate Starts for Speedwell_77:

(13, 48417), (Start: 21 @48345 has 87 MA's), (22, 48339),

Gene: SqueakyClean_77 Start: 49262, Stop: 49101, Start Num: 21

Candidate Starts for SqueakyClean_77:

(Start: 19 @49277 has 1 MA's), (Start: 21 @49262 has 87 MA's), (30, 49163), (34, 49139),

Gene: Sudan_75 Start: 47412, Stop: 47266, Start Num: 21

Candidate Starts for Sudan_75:

(Start: 21 @47412 has 87 MA's),

Gene: Sujidade_75 Start: 50244, Stop: 50125, Start Num: 21

Candidate Starts for Sujidade_75:

(12, 50322), (Start: 21 @50244 has 87 MA's),

Gene: SunkenRoot_76 Start: 47934, Stop: 47791, Start Num: 21

Candidate Starts for SunkenRoot_76:

(Start: 21 @47934 has 87 MA's),

Gene: SunsetPointe_72 Start: 48525, Stop: 48379, Start Num: 21

Candidate Starts for SunsetPointe_72:

(12, 48603), (Start: 21 @48525 has 87 MA's), (22, 48519),

Gene: Superstar_85 Start: 48841, Stop: 48707, Start Num: 15

Candidate Starts for Superstar_85:

(Start: 14 @48874 has 1 MA's), (Start: 15 @48841 has 3 MA's),

Gene: TagePhighter_74 Start: 50275, Stop: 50135, Start Num: 21

Candidate Starts for TagePhighter_74:

(Start: 21 @50275 has 87 MA's),

Gene: Toma_75 Start: 50103, Stop: 49984, Start Num: 21

Candidate Starts for Toma_75:

(8, 50208), (12, 50181), (Start: 21 @50103 has 87 MA's),

Gene: Triste_73 Start: 50274, Stop: 50134, Start Num: 21

Candidate Starts for Triste_73:

(Start: 21 @50274 has 87 MA's),

Gene: Triumph_82 Start: 49644, Stop: 49468, Start Num: 21

Candidate Starts for Triumph_82:

(Start: 21 @49644 has 87 MA's), (27, 49575), (36, 49512), (38, 49482),

Gene: TuanPN_70 Start: 50226, Stop: 50086, Start Num: 21

Candidate Starts for TuanPN_70:

(Start: 21 @50226 has 87 MA's),

Gene: Unstoppable_72 Start: 48124, Stop: 47978, Start Num: 21
Candidate Starts for Unstoppable_72:
(12, 48202), (Start: 21 @48124 has 87 MA's), (22, 48118),

Gene: Urza_79 Start: 48894, Stop: 48757, Start Num: 17
Candidate Starts for Urza_79:
(Start: 17 @48894 has 4 MA's), (24, 48837),

Gene: Vanseggelen_80 Start: 47398, Stop: 47279, Start Num: 21
Candidate Starts for Vanseggelen_80:
(Start: 21 @47398 has 87 MA's), (26, 47338),

Gene: Verabelle_78 Start: 46871, Stop: 46743, Start Num: 15
Candidate Starts for Verabelle_78:
(Start: 15 @46871 has 3 MA's),

Gene: Verse_75 Start: 48198, Stop: 48055, Start Num: 21
Candidate Starts for Verse_75:
(Start: 21 @48198 has 87 MA's),

Gene: VieEnRose_78 Start: 48631, Stop: 48494, Start Num: 17
Candidate Starts for VieEnRose_78:
(Start: 17 @48631 has 4 MA's), (24, 48574),

Gene: Werner_72 Start: 50272, Stop: 50132, Start Num: 21
Candidate Starts for Werner_72:
(Start: 21 @50272 has 87 MA's),

Gene: Whatever_72 Start: 50297, Stop: 50157, Start Num: 21
Candidate Starts for Whatever_72:
(Start: 21 @50297 has 87 MA's),

Gene: Yasdniil_72 Start: 50324, Stop: 50184, Start Num: 21
Candidate Starts for Yasdniil_72:
(Start: 21 @50324 has 87 MA's),

Gene: Yosif_77 Start: 48741, Stop: 48595, Start Num: 21
Candidate Starts for Yosif_77:
(Start: 21 @48741 has 87 MA's), (22, 48735),

Gene: Zainub_83 Start: 49882, Stop: 49706, Start Num: 21
Candidate Starts for Zainub_83:
(4, 50038), (7, 49996), (9, 49987), (Start: 21 @49882 has 87 MA's), (31, 49780), (32, 49768), (38, 49720),

Gene: ZamZam_75 Start: 47749, Stop: 47603, Start Num: 21
Candidate Starts for ZamZam_75:
(Start: 21 @47749 has 87 MA's),

Gene: Zemlya_75 Start: 49774, Stop: 49655, Start Num: 21
Candidate Starts for Zemlya_75:
(8, 49879), (12, 49852), (18, 49789), (Start: 21 @49774 has 87 MA's),

Gene: phiCAM_71 Start: 48995, Stop: 48876, Start Num: 21
Candidate Starts for phiCAM_71:
(12, 49076), (Start: 21 @48995 has 87 MA's),