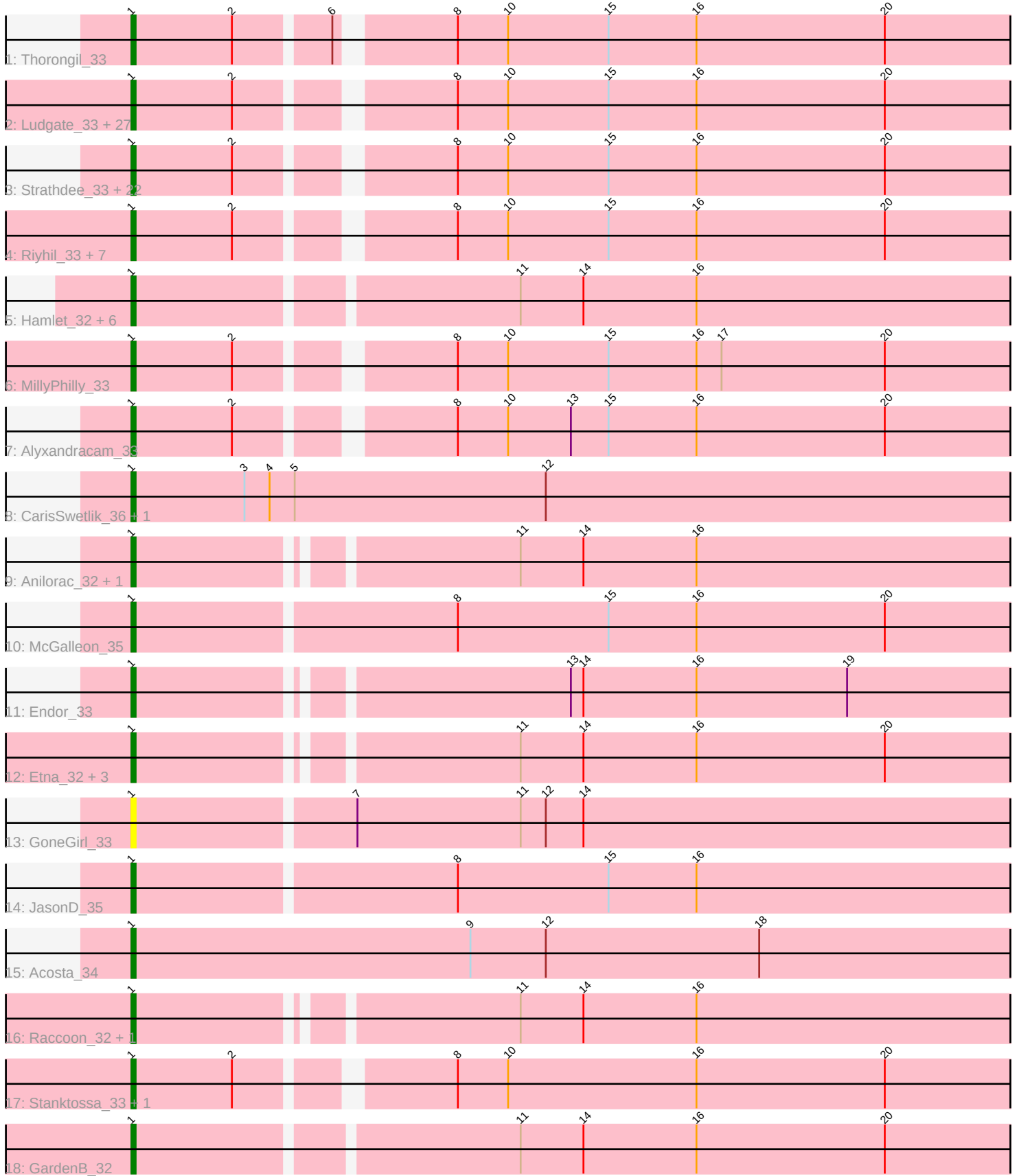


Pham 280324



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 280324 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280324 has 87 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Thorongil_33
- Track 2 : Ludgate_33, Phiderman_33, MrWorldwide_33, Inventa_33, Robinson_33, Kurt1_33, Antoinette_33, TatarkaPM_33, TinSulphur_33, Teagan_33, Superfresh_33, ParleG_33, Pherferi_33, SolidSnake_34, Byron23_33, Shee_33, Rapheph_33, Nagem_33, Peep_33, NickSell_33, Martin_34, AlexAdler_33, Bandik_33, Dave_33, SJay_33, PhredFlintston_33, Zada_33, Renzie_33
- Track 3 : Strathdee_33, BeautPeep30_33, Velene_33, BonesMcCoy_33, Raptor_33, Phireproof_33, GoingMerry_33, AxiPup_33, Gargoyle_33, Blage_33, ShaiHulud_33, BigRedClifford_33, PuppyEggo_33, Vispistious_33, Convict_33, Oxtober96_33, Den3_33, WildNOut_33, Ioannes_33, Thompsons_33, Knox_33, Lovelyunicorn_33, Greys_33
- Track 4 : Riyhil_33, MaeLinda_33, Phriends_33, Delphidian_33, OldNelly_33, Merida02_34, Figueroism_33, SoilGremlin_33
- Track 5 : Hamlet_32, Peppino_32, Redfield_32, PhillyPhantom_32, BeeBee8_33, Schnapsidee_32, Balsa_32
- Track 6 : MillyPhilly_33
- Track 7 : Alyxandracham_33
- Track 8 : CarisSwetlik_36, Jenos_36
- Track 9 : Anilorac_32, Agente005_33
- Track 10 : McGalleon_35
- Track 11 : Endor_33
- Track 12 : Etna_32, KingJulien_32, Stormbreaker8_32, Soror1_32
- Track 13 : GoneGirl_33
- Track 14 : JasonD_35
- Track 15 : Acosta_34
- Track 16 : Raccoon_32, Leafus_32
- Track 17 : Stanktossa_33, Dothraki_33
- Track 18 : GardenB_32

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

The start number called the most often in the published annotations is 1, it was called in 79 of the 79 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acosta_34, Agente005_33, AlexAdler_33, Alyxandracam_33, Anilorac_32, Antoinette_33, AxiPup_33, Balsa_32, Bandik_33, BeautPeep30_33, BeeBee8_33, BigRedClifford_33, Blage_33, BonesMcCoy_33, Byron23_33, CarisSwetlik_36, Convict_33, Dave_33, Delphidian_33, Den3_33, Dothraki_33, Endor_33, Etna_32, Figueroism_33, GardenB_32, Gargoyle_33, GoingMerry_33, GoneGirl_33, Greys_33, Hamlet_32, Inventa_33, Ioannes_33, JasonD_35, Jenos_36, KingJulien_32, Knox_33, Kurt1_33, Leafus_32, Lovelyunicorn_33, Ludgate_33, MaeLinda_33, Martin_34, McGalleon_35, Merida02_34, MillyPhilly_33, MrWorldwide_33, Nagem_33, NickSell_33, OldNelly_33, Oxtober96_33, ParleG_33, Peep_33, Peppino_32, Pherferi_33, Phiderman_33, PhillyPhantom_32, Phireproof_33, PhredFlintston_33, Phriends_33, PuppyEggo_33, Raccoon_32, Rapheph_33, Raptor_33, Redfield_32, Renzie_33, Riyhil_33, Robinson_33, SJay_33, Schnapsidee_32, ShaiHulud_33, Shee_33, SoilGremlin_33, SolidSnake_34, Soror1_32, Stanktossa_33, Stormbreaker8_32, Strathdee_33, Superfresh_33, TatarkaPM_33, Teagan_33, Thompsons_33, Thorongil_33, TinSulphur_33, Velene_33, Vispistious_33, WildNOOut_33, Zada_33,

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

-

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

-

Summary by start number:

Start 1:

- Found in 87 of 87 (100.0%) of genes in pham
- Manual Annotations of this start: 79 of 79
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acosta_34 (EA1), Agente005_33 (EA1), AlexAdler_33 (EA1), Alyxandracam_33 (EA1), Anilorac_32 (EA1), Antoinette_33 (EA1), AxiPup_33 (EA1), Balsa_32 (EA1), Bandik_33 (EA1), BeautPeep30_33 (EA1), BeeBee8_33 (EA1), BigRedClifford_33 (EA1), Blage_33 (EA1), BonesMcCoy_33 (EA1), Byron23_33 (EA1), CarisSwetlik_36 (EA1), Convict_33 (EA1), Dave_33 (EA1), Delphidian_33 (EA1), Den3_33 (EA1), Dothraki_33 (EA1), Endor_33 (EA1), Etna_32 (EA1), Figueroism_33 (EA1), GardenB_32 (EA1), Gargoyle_33 (EA1), GoingMerry_33 (EA1), GoneGirl_33 (EA1), Greys_33 (EA1), Hamlet_32 (EA1), Inventa_33 (EA1), Ioannes_33 (EA1), JasonD_35 (EA1), Jenos_36 (EA1), KingJulien_32 (EA1), Knox_33 (EA1), Kurt1_33 (EA1), Leafus_32 (EA1), Lovelyunicorn_33 (EA1), Ludgate_33 (EA1), MaeLinda_33 (EA1), Martin_34 (EA1), McGalleon_35 (EA1), Merida02_34 (EA1), MillyPhilly_33 (EA1), MrWorldwide_33 (EA1), Nagem_33 (EA1), NickSell_33 (EA1), OldNelly_33 (EA1), Oxtober96_33 (EA1), ParleG_33 (EA1), Peep_33 (EA1), Peppino_32 (EA1), Pherferi_33 (EA1), Phiderman_33 (EA1), PhillyPhantom_32 (EA1), Phireproof_33 (EA1), PhredFlintston_33 (EA1), Phriends_33 (EA1), PuppyEggo_33 (EA1), Raccoon_32 (EA1), Rapheph_33 (EA1), Raptor_33 (EA1), Redfield_32 (EA1), Renzie_33 (EA1), Riyhil_33 (EA1), Robinson_33 (EA1), SJay_33 (EA1), Schnapsidee_32 (EA1), ShaiHulud_33 (EA1), Shee_33 (EA1), SoilGremlin_33 (EA1), SolidSnake_34 (EA1), Soror1_32 (EA1), Stanktossa_33 (EA1), Stormbreaker8_32 (EA1), Strathdee_33 (EA1), Superfresh_33 (EA1), TatarkaPM_33 (EA1), Teagan_33 (EA1), Thompsons_33 (EA1), Thorongil_33 (EA1), TinSulphur_33 (EA1), Velene_33 (EA1), Vispistious_33 (EA1), WildNOOut_33 (EA1), Zada_33 (EA1),

Summary by clusters:

There is one cluster represented in this pham: EA1

Info for manual annotations of cluster EA1:

- Start number 1 was manually annotated 79 times for cluster EA1.

Gene Information:

Gene: Acosta_34 Start: 22806, Stop: 22555, Start Num: 1

Candidate Starts for Acosta_34:

(Start: 1 @22806 has 79 MA's), (9, 22725), (12, 22707), (18, 22656),

Gene: Agente005_33 Start: 22618, Stop: 22376, Start Num: 1

Candidate Starts for Agente005_33:

(Start: 1 @22618 has 79 MA's), (11, 22534), (14, 22519), (16, 22492),

Gene: AlexAdler_33 Start: 22421, Stop: 22179, Start Num: 1

Candidate Starts for AlexAdler_33:

(Start: 1 @22421 has 79 MA's), (2, 22397), (8, 22352), (10, 22340), (15, 22316), (16, 22295), (20, 22250),

Gene: Alyxandracam_33 Start: 22430, Stop: 22188, Start Num: 1

Candidate Starts for Alyxandracam_33:

(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (13, 22334), (15, 22325), (16, 22304), (20, 22259),

Gene: Anilorac_32 Start: 22462, Stop: 22220, Start Num: 1

Candidate Starts for Anilorac_32:

(Start: 1 @22462 has 79 MA's), (11, 22378), (14, 22363), (16, 22336),

Gene: Antoinette_33 Start: 22418, Stop: 22176, Start Num: 1

Candidate Starts for Antoinette_33:

(Start: 1 @22418 has 79 MA's), (2, 22394), (8, 22349), (10, 22337), (15, 22313), (16, 22292), (20, 22247),

Gene: AxiPup_33 Start: 22430, Stop: 22188, Start Num: 1

Candidate Starts for AxiPup_33:

(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: Balsa_32 Start: 22463, Stop: 22218, Start Num: 1

Candidate Starts for Balsa_32:

(Start: 1 @22463 has 79 MA's), (11, 22376), (14, 22361), (16, 22334),

Gene: Bandik_33 Start: 22426, Stop: 22184, Start Num: 1

Candidate Starts for Bandik_33:

(Start: 1 @22426 has 79 MA's), (2, 22402), (8, 22357), (10, 22345), (15, 22321), (16, 22300), (20, 22255),

Gene: BeautPeep30_33 Start: 22432, Stop: 22190, Start Num: 1
Candidate Starts for BeautPeep30_33:
(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: BeeBee8_33 Start: 22630, Stop: 22385, Start Num: 1
Candidate Starts for BeeBee8_33:
(Start: 1 @22630 has 79 MA's), (11, 22543), (14, 22528), (16, 22501),

Gene: BigRedClifford_33 Start: 22430, Stop: 22188, Start Num: 1
Candidate Starts for BigRedClifford_33:
(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: Blage_33 Start: 22430, Stop: 22188, Start Num: 1
Candidate Starts for Blage_33:
(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: BonesMcCoy_33 Start: 22430, Stop: 22188, Start Num: 1
Candidate Starts for BonesMcCoy_33:
(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: Byron23_33 Start: 22435, Stop: 22193, Start Num: 1
Candidate Starts for Byron23_33:
(Start: 1 @22435 has 79 MA's), (2, 22411), (8, 22366), (10, 22354), (15, 22330), (16, 22309), (20, 22264),

Gene: CarisSwetlik_36 Start: 23301, Stop: 23050, Start Num: 1
Candidate Starts for CarisSwetlik_36:
(Start: 1 @23301 has 79 MA's), (3, 23274), (4, 23268), (5, 23262), (12, 23202),

Gene: Convict_33 Start: 22430, Stop: 22188, Start Num: 1
Candidate Starts for Convict_33:
(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: Dave_33 Start: 22418, Stop: 22176, Start Num: 1
Candidate Starts for Dave_33:
(Start: 1 @22418 has 79 MA's), (2, 22394), (8, 22349), (10, 22337), (15, 22313), (16, 22292), (20, 22247),

Gene: Delphidian_33 Start: 22429, Stop: 22187, Start Num: 1
Candidate Starts for Delphidian_33:
(Start: 1 @22429 has 79 MA's), (2, 22405), (8, 22360), (10, 22348), (15, 22324), (16, 22303), (20, 22258),

Gene: Den3_33 Start: 22435, Stop: 22193, Start Num: 1
Candidate Starts for Den3_33:
(Start: 1 @22435 has 79 MA's), (2, 22411), (8, 22366), (10, 22354), (15, 22330), (16, 22309), (20, 22264),

Gene: Dothraki_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for Dothraki_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (16, 22306), (20, 22261),

Gene: Endor_33 Start: 22735, Stop: 22493, Start Num: 1

Candidate Starts for Endor_33:

(Start: 1 @22735 has 79 MA's), (13, 22639), (14, 22636), (16, 22609), (19, 22573),

Gene: Etna_32 Start: 22465, Stop: 22223, Start Num: 1

Candidate Starts for Etna_32:

(Start: 1 @22465 has 79 MA's), (11, 22381), (14, 22366), (16, 22339), (20, 22294),

Gene: Figueroism_33 Start: 22417, Stop: 22175, Start Num: 1

Candidate Starts for Figueroism_33:

(Start: 1 @22417 has 79 MA's), (2, 22393), (8, 22348), (10, 22336), (15, 22312), (16, 22291), (20, 22246),

Gene: GardenB_32 Start: 22466, Stop: 22221, Start Num: 1

Candidate Starts for GardenB_32:

(Start: 1 @22466 has 79 MA's), (11, 22379), (14, 22364), (16, 22337), (20, 22292),

Gene: Gargoyle_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for Gargoyle_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: GoingMerry_33 Start: 22440, Stop: 22198, Start Num: 1

Candidate Starts for GoingMerry_33:

(Start: 1 @22440 has 79 MA's), (2, 22416), (8, 22371), (10, 22359), (15, 22335), (16, 22314), (20, 22269),

Gene: GoneGirl_33 Start: 22507, Stop: 22259, Start Num: 1

Candidate Starts for GoneGirl_33:

(Start: 1 @22507 has 79 MA's), (7, 22456), (11, 22417), (12, 22411), (14, 22402),

Gene: Greys_33 Start: 22428, Stop: 22186, Start Num: 1

Candidate Starts for Greys_33:

(Start: 1 @22428 has 79 MA's), (2, 22404), (8, 22359), (10, 22347), (15, 22323), (16, 22302), (20, 22257),

Gene: Hamlet_32 Start: 22463, Stop: 22218, Start Num: 1

Candidate Starts for Hamlet_32:

(Start: 1 @22463 has 79 MA's), (11, 22376), (14, 22361), (16, 22334),

Gene: Inventa_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for Inventa_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: Ioannes_33 Start: 22430, Stop: 22188, Start Num: 1

Candidate Starts for Ioannes_33:

(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: JasonD_35 Start: 22938, Stop: 22690, Start Num: 1

Candidate Starts for JasonD_35:

(Start: 1 @22938 has 79 MA's), (8, 22863), (15, 22827), (16, 22806),

Gene: Jenos_36 Start: 23598, Stop: 23347, Start Num: 1

Candidate Starts for Jenos_36:

(Start: 1 @23598 has 79 MA's), (3, 23571), (4, 23565), (5, 23559), (12, 23499),

Gene: KingJulien_32 Start: 22456, Stop: 22214, Start Num: 1

Candidate Starts for KingJulien_32:

(Start: 1 @22456 has 79 MA's), (11, 22372), (14, 22357), (16, 22330), (20, 22285),

Gene: Knox_33 Start: 22430, Stop: 22188, Start Num: 1

Candidate Starts for Knox_33:

(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: Kurt1_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for Kurt1_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: Leafus_32 Start: 22598, Stop: 22356, Start Num: 1

Candidate Starts for Leafus_32:

(Start: 1 @22598 has 79 MA's), (11, 22514), (14, 22499), (16, 22472),

Gene: Lovelyunicorn_33 Start: 22431, Stop: 22189, Start Num: 1

Candidate Starts for Lovelyunicorn_33:

(Start: 1 @22431 has 79 MA's), (2, 22407), (8, 22362), (10, 22350), (15, 22326), (16, 22305), (20, 22260),

Gene: Ludgate_33 Start: 22426, Stop: 22184, Start Num: 1

Candidate Starts for Ludgate_33:

(Start: 1 @22426 has 79 MA's), (2, 22402), (8, 22357), (10, 22345), (15, 22321), (16, 22300), (20, 22255),

Gene: MaeLinda_33 Start: 22433, Stop: 22191, Start Num: 1

Candidate Starts for MaeLinda_33:

(Start: 1 @22433 has 79 MA's), (2, 22409), (8, 22364), (10, 22352), (15, 22328), (16, 22307), (20, 22262),

Gene: Martin_34 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for Martin_34:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: McGalleon_35 Start: 23815, Stop: 23567, Start Num: 1

Candidate Starts for McGalleon_35:

(Start: 1 @23815 has 79 MA's), (8, 23740), (15, 23704), (16, 23683), (20, 23638),

Gene: Merida02_34 Start: 22429, Stop: 22187, Start Num: 1

Candidate Starts for Merida02_34:

(Start: 1 @22429 has 79 MA's), (2, 22405), (8, 22360), (10, 22348), (15, 22324), (16, 22303), (20, 22258),

Gene: MillyPhilly_33 Start: 22429, Stop: 22187, Start Num: 1

Candidate Starts for MillyPhilly_33:

(Start: 1 @22429 has 79 MA's), (2, 22405), (8, 22360), (10, 22348), (15, 22324), (16, 22303), (17, 22297), (20, 22258),

Gene: MrWorldwide_33 Start: 22433, Stop: 22191, Start Num: 1

Candidate Starts for MrWorldwide_33:

(Start: 1 @22433 has 79 MA's), (2, 22409), (8, 22364), (10, 22352), (15, 22328), (16, 22307), (20, 22262),

Gene: Nagem_33 Start: 22426, Stop: 22184, Start Num: 1

Candidate Starts for Nagem_33:

(Start: 1 @22426 has 79 MA's), (2, 22402), (8, 22357), (10, 22345), (15, 22321), (16, 22300), (20, 22255),

Gene: NickSell_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for NickSell_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: OldNelly_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for OldNelly_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: Oxtober96_33 Start: 22431, Stop: 22189, Start Num: 1

Candidate Starts for Oxtober96_33:

(Start: 1 @22431 has 79 MA's), (2, 22407), (8, 22362), (10, 22350), (15, 22326), (16, 22305), (20, 22260),

Gene: ParleG_33 Start: 22433, Stop: 22191, Start Num: 1

Candidate Starts for ParleG_33:

(Start: 1 @22433 has 79 MA's), (2, 22409), (8, 22364), (10, 22352), (15, 22328), (16, 22307), (20, 22262),

Gene: Peep_33 Start: 22418, Stop: 22176, Start Num: 1

Candidate Starts for Peep_33:

(Start: 1 @22418 has 79 MA's), (2, 22394), (8, 22349), (10, 22337), (15, 22313), (16, 22292), (20, 22247),

Gene: Peppino_32 Start: 22455, Stop: 22210, Start Num: 1

Candidate Starts for Peppino_32:

(Start: 1 @22455 has 79 MA's), (11, 22368), (14, 22353), (16, 22326),

Gene: Pherferi_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for Pherferi_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: Phiderman_33 Start: 22429, Stop: 22187, Start Num: 1

Candidate Starts for Phiderman_33:

(Start: 1 @22429 has 79 MA's), (2, 22405), (8, 22360), (10, 22348), (15, 22324), (16, 22303), (20, 22258),

Gene: PhillyPhantom_32 Start: 22436, Stop: 22191, Start Num: 1

Candidate Starts for PhillyPhantom_32:

(Start: 1 @22436 has 79 MA's), (11, 22349), (14, 22334), (16, 22307),

Gene: Phireproof_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for Phireproof_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: PhredFlintston_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for PhredFlintston_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: Phriends_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for Phriends_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: PuppyEggo_33 Start: 22430, Stop: 22188, Start Num: 1

Candidate Starts for PuppyEggo_33:

(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: Raccoon_32 Start: 22421, Stop: 22179, Start Num: 1

Candidate Starts for Raccoon_32:

(Start: 1 @22421 has 79 MA's), (11, 22337), (14, 22322), (16, 22295),

Gene: Rapheph_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for Rapheph_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: Raptor_33 Start: 22430, Stop: 22188, Start Num: 1

Candidate Starts for Raptor_33:

(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: Redfield_32 Start: 22462, Stop: 22217, Start Num: 1

Candidate Starts for Redfield_32:

(Start: 1 @22462 has 79 MA's), (11, 22375), (14, 22360), (16, 22333),

Gene: Renzie_33 Start: 22418, Stop: 22176, Start Num: 1

Candidate Starts for Renzie_33:

(Start: 1 @22418 has 79 MA's), (2, 22394), (8, 22349), (10, 22337), (15, 22313), (16, 22292), (20, 22247),

Gene: Riyhil_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for Riyhil_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: Robinson_33 Start: 22424, Stop: 22182, Start Num: 1

Candidate Starts for Robinson_33:

(Start: 1 @22424 has 79 MA's), (2, 22400), (8, 22355), (10, 22343), (15, 22319), (16, 22298), (20, 22253),

Gene: SJay_33 Start: 22427, Stop: 22185, Start Num: 1

Candidate Starts for SJay_33:

(Start: 1 @22427 has 79 MA's), (2, 22403), (8, 22358), (10, 22346), (15, 22322), (16, 22301), (20, 22256),

Gene: Schnapsidee_32 Start: 22456, Stop: 22211, Start Num: 1

Candidate Starts for Schnapsidee_32:

(Start: 1 @22456 has 79 MA's), (11, 22369), (14, 22354), (16, 22327),

Gene: ShaiHulud_33 Start: 22430, Stop: 22188, Start Num: 1

Candidate Starts for ShaiHulud_33:

(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: Shee_33 Start: 22429, Stop: 22187, Start Num: 1

Candidate Starts for Shee_33:

(Start: 1 @22429 has 79 MA's), (2, 22405), (8, 22360), (10, 22348), (15, 22324), (16, 22303), (20, 22258),

Gene: SoilGremlin_33 Start: 22429, Stop: 22187, Start Num: 1

Candidate Starts for SoilGremlin_33:

(Start: 1 @22429 has 79 MA's), (2, 22405), (8, 22360), (10, 22348), (15, 22324), (16, 22303), (20, 22258),

Gene: SolidSnake_34 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for SolidSnake_34:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: Soror1_32 Start: 22465, Stop: 22223, Start Num: 1

Candidate Starts for Soror1_32:

(Start: 1 @22465 has 79 MA's), (11, 22381), (14, 22366), (16, 22339), (20, 22294),

Gene: Stanktossa_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for Stanktossa_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (16, 22306), (20, 22261),

Gene: Stormbreaker8_32 Start: 22456, Stop: 22214, Start Num: 1

Candidate Starts for Stormbreaker8_32:

(Start: 1 @22456 has 79 MA's), (11, 22372), (14, 22357), (16, 22330), (20, 22285),

Gene: Strathdee_33 Start: 22431, Stop: 22189, Start Num: 1

Candidate Starts for Strathdee_33:

(Start: 1 @22431 has 79 MA's), (2, 22407), (8, 22362), (10, 22350), (15, 22326), (16, 22305), (20, 22260),

Gene: Superfresh_33 Start: 22418, Stop: 22176, Start Num: 1

Candidate Starts for Superfresh_33:

(Start: 1 @22418 has 79 MA's), (2, 22394), (8, 22349), (10, 22337), (15, 22313), (16, 22292), (20, 22247),

Gene: TatarkaPM_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for TatarkaPM_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: Teagan_33 Start: 22426, Stop: 22184, Start Num: 1

Candidate Starts for Teagan_33:

(Start: 1 @22426 has 79 MA's), (2, 22402), (8, 22357), (10, 22345), (15, 22321), (16, 22300), (20, 22255),

Gene: Thompsone_33 Start: 22430, Stop: 22188, Start Num: 1

Candidate Starts for Thompsone_33:

(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: Thorongil_33 Start: 22430, Stop: 22188, Start Num: 1

Candidate Starts for Thorongil_33:

(Start: 1 @22430 has 79 MA's), (2, 22406), (6, 22385), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: TinSulphur_33 Start: 22432, Stop: 22190, Start Num: 1

Candidate Starts for TinSulphur_33:

(Start: 1 @22432 has 79 MA's), (2, 22408), (8, 22363), (10, 22351), (15, 22327), (16, 22306), (20, 22261),

Gene: Velene_33 Start: 22431, Stop: 22189, Start Num: 1

Candidate Starts for Velene_33:

(Start: 1 @22431 has 79 MA's), (2, 22407), (8, 22362), (10, 22350), (15, 22326), (16, 22305), (20, 22260),

Gene: Vispistious_33 Start: 22430, Stop: 22188, Start Num: 1

Candidate Starts for Vispistious_33:

(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: WildNOut_33 Start: 22430, Stop: 22188, Start Num: 1

Candidate Starts for WildNOut_33:

(Start: 1 @22430 has 79 MA's), (2, 22406), (8, 22361), (10, 22349), (15, 22325), (16, 22304), (20, 22259),

Gene: Zada_33 Start: 22411, Stop: 22169, Start Num: 1

Candidate Starts for Zada_33:

(Start: 1 @22411 has 79 MA's), (2, 22387), (8, 22342), (10, 22330), (15, 22306), (16, 22285), (20, 22240),