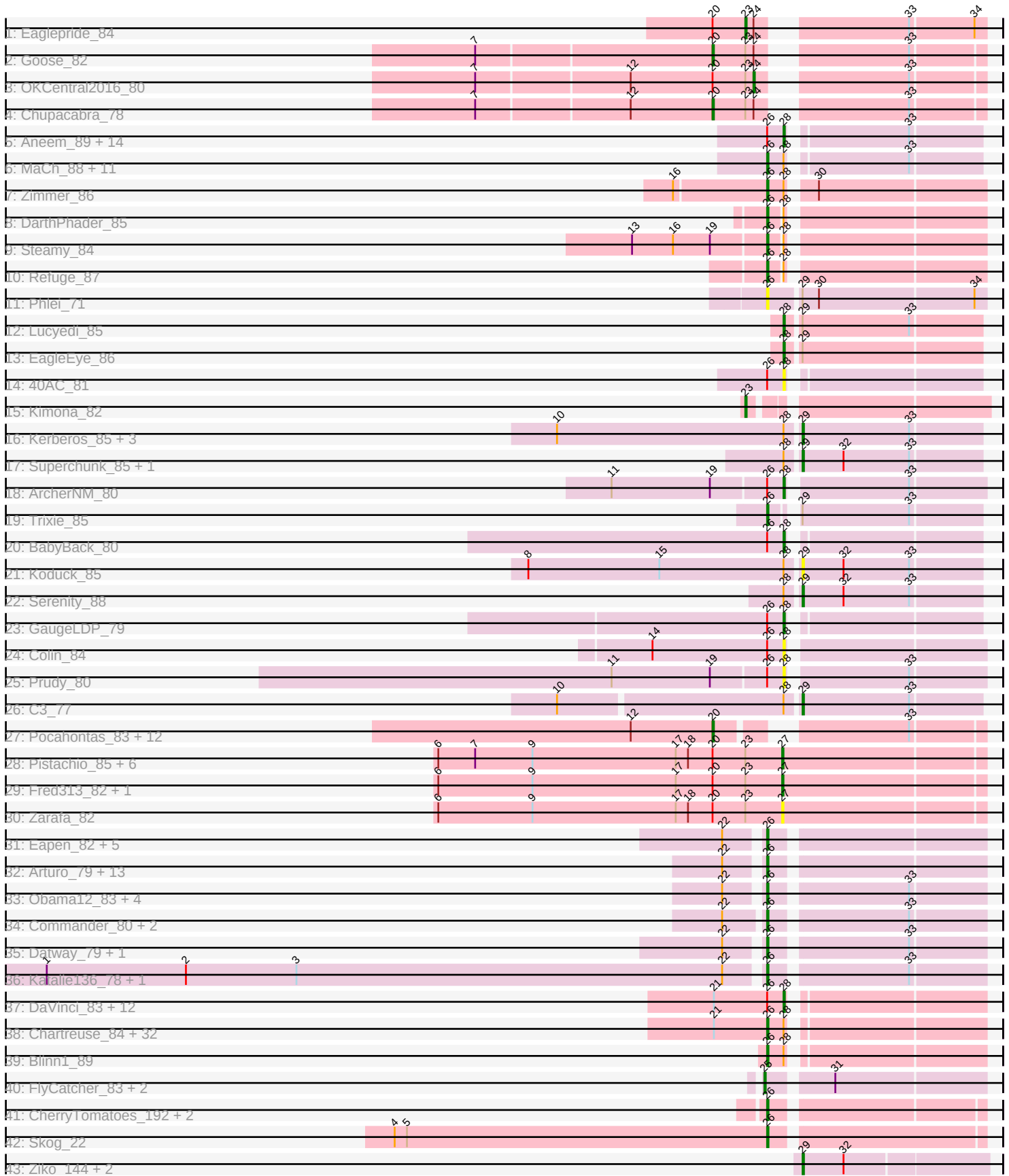


Pham 280140



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 280140 Report

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

Pham number 280140 has 167 members, 25 are drafts.

Phages represented in each track:

- Track 1 : Eaglepride_84
- Track 2 : Goose_82
- Track 3 : OKCentral2016_80
- Track 4 : Chupacabra_78
- Track 5 : Aneem_89, Salz_84, Munch_87, Bowtie_84, Joselito_86, Kimba_85, Et2Brutus_88, Lucivia_89, Bachome_86, Insomnia_88, Ebony_87, Wolpertinger_88, Petersenfast_82, Saskia_85, Timothy_88
- Track 6 : MaCh_88, Jabith_88, TinyTimmy_86, Sham4_85, Mulciber_87, Orange_88, Gilberta_86, Hutc2_85, Flaverint_89, Fibonacci_88, Snape_88, Mabel_88
- Track 7 : Zimmer_86
- Track 8 : DarthPhader_85
- Track 9 : Steamy_84
- Track 10 : Refuge_87
- Track 11 : Phlei_71
- Track 12 : Lucyedi_85
- Track 13 : EagleEye_86
- Track 14 : 40AC_81
- Track 15 : Kimona_82
- Track 16 : Kerberos_85, Tomathan_85, Pomar16_85, DBQu4n_85
- Track 17 : Superchunk_85, Caraxes_86
- Track 18 : ArcherNM_80
- Track 19 : Trixie_85
- Track 20 : BabyBack_80
- Track 21 : Koduck_85
- Track 22 : Serenity_88
- Track 23 : GaugeLDP_79
- Track 24 : Colin_84
- Track 25 : Prudy_80
- Track 26 : C3_77
- Track 27 : Pocahontas_83, Hookmount_84, Caviar_73, Popcicle_84, Todacoro_84, ResDef_82, Noella_85, Veracruz_81, Margo_84, Norbert_80, QuinnKiro_83, Lambert1_84, Texage_82
- Track 28 : Pistachio_85, Giroux_88, SaturnRing_86, Clammy_86, BlueBird_87, Puppy_86, Bugatti_86
- Track 29 : Fred313_82, Marchesa_84
- Track 30 : Zarafa_82

- Track 31 : Eapen_82, KekoraPapaka_79, NorthStar_79, SheldonCooper_82, Relief_81, Skipitt_81
- Track 32 : Arturo_79, Huxley_71, Eagle_81, Avle17_82, Gadost_82, Nemo27_81, Kingmustik0402_82, MeeZee_81, NotAPhaseMom_81, Houdini22_81, Sultana_82, Cocoaberry_82, TygerBlood_82, SteMason_78
- Track 33 : Obama12_83, Deano_79, AvatarAhPeg_82, Stink_82, Rosa24_78
- Track 34 : Commander_80, RockieBear_79, Eros_82
- Track 35 : Datway_79, Cindaradix_77
- Track 36 : Katalie136_78, Badger_77
- Track 37 : DaVinci_83, Pmask_84, McFly_85, Yokurt_86, Zaka_87, Isiphiwo_81, Candra_83, SuperCallie99_81, ToneTone_84, Artemis2UCLA_86, Priamo_86, Garak_88, Tucker_87
- Track 38 : Chartreuse_84, CloudWang3_87, Indra_90, Cookiedough_85, Hammer_87, Roksolana_87, Hexamo_86, Kazan_86, Zulu_88, Dorothea_85, EricB_83, Rifter_87, Neeharika16_84, BlessJoy_87, Jordennis_83, Koko_88, Gruunaga_86, SuperAwesome_85, Hoot_80, Wiks_86, SmellyB_85, Blue7_88, BABullseye_78, WunderPhul_87, Lilbunny_86, Kipper29_85, BennyP_86, Gladiator_83, JewelBug_77, Helmet_89, Temprado_88, Newrala_84, VohminGhazi_85
- Track 39 : Blinn1_89
- Track 40 : FlyCatcher_83, Sheen_80, Toro_81
- Track 41 : CherryTomatoes_192, Pupper_190, SCentae_189
- Track 42 : Skog_22
- Track 43 : Ziko_144, Volt_145, Ronaldo_142

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 81 of the 142 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arturo_79, AvatarAhPeg_82, Avle17_82, BABullseye_78, Badger_77, BennyP_86, BlessJoy_87, Blinn1_89, Blue7_88, Chartreuse_84, CherryTomatoes_192, Cindaradix_77, CloudWang3_87, Cocoaberry_82, Commander_80, Cookiedough_85, DarthPhader_85, Datway_79, Deano_79, Dorothea_85, Eagle_81, Eapen_82, EricB_83, Eros_82, Fibonacci_88, Flaverint_89, Gadost_82, Gilberta_86, Gladiator_83, Gruunaga_86, Hammer_87, Helmet_89, Hexamo_86, Hoot_80, Houdini22_81, Hut2_85, Huxley_71, Indra_90, Jabith_88, JewelBug_77, Jordennis_83, Katalie136_78, Kazan_86, KekoraPapaka_79, Kingmustik0402_82, Kipper29_85, Koko_88, Lilbunny_86, MaCh_88, Mabel_88, MeeZee_81, Mulciber_87, Neeharika16_84, Nemo27_81, Newrala_84, NorthStar_79, NotAPhaseMom_81, Obama12_83, Orange_88, Phlei_71, Pupper_190, Refuge_87, Relief_81, Rifter_87, RockieBear_79, Roksolana_87, Rosa24_78, SCentae_189, Sham4_85, SheldonCooper_82, Skipitt_81, Skog_22, SmellyB_85, Snape_88, SteMason_78, Steamy_84, Stink_82, Sultana_82, SuperAwesome_85, Temprado_88, TinyTimmy_86, Trixie_85, TygerBlood_82, VohminGhazi_85, Wiks_86, WunderPhul_87, Zimmer_86, Zulu_88,

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

- 40AC_81, Aneem_89, ArcherNM_80, Artemis2UCLA_86, BabyBack_80, Bachome_86, Bowtie_84, Candra_83, Colin_84, DaVinci_83, Ebony_87, Et2Brutus_88, Garak_88, GaugeLDP_79, Insomnia_88, Isiphiwo_81, Joselito_86, Kimba_85, Lucivia_89, McFly_85, Munch_87, Petersenfast_82, Pmask_84, Priamo_86, Prudy_80, Salz_84, Saskia_85, SuperCallie99_81, Timothy_88, ToneTone_84, Tucker_87, Wolpertinger_88, Yokurt_86, Zaka_87,

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

- BlueBird_87, Bugatti_86, C3_77, Caraxes_86, Caviar_73, Chupacabra_78, Clammy_86, DBQu4n_85, EagleEye_86, Eaglepride_84, FlyCatcher_83, Fred313_82, Giroux_88, Goose_82, Hookmount_84, Kerberos_85, Kimona_82, Koduck_85, Lambert1_84, Lucyedi_85, Marchesa_84, Margo_84, Noella_85, Norbert_80, OKCentral2016_80, Pistachio_85, Pocahontas_83, Pomar16_85, Popcicle_84, Puppy_86, QuinnKiro_83, ResDef_82, Ronaldo_142, SaturnRing_86, Serenity_88, Sheen_80, Superchunk_85, Texage_82, Todacoro_84, Tomathan_85, Toro_81, Veracruz_81, Volt_145, Zarafa_82, Ziko_144,

Summary by start number:

Start 20:

- Found in 27 of 167 (16.2%) of genes in pham
- Manual Annotations of this start: 15 of 142
- Called 55.6% of time when present
- Phage (with cluster) where this start called: Caviar_73 (A3), Chupacabra_78 (A10), Goose_82 (A10), Hookmount_84 (A3), Lambert1_84 (A3), Margo_84 (A3), Noella_85 (A3), Norbert_80 (A3), Pocahontas_83 (A3), Popcicle_84 (A3), QuinnKiro_83 (A3), ResDef_82 (A3), Texage_82 (A3), Todacoro_84 (A3), Veracruz_81 (A3),

Start 23:

- Found in 15 of 167 (9.0%) of genes in pham
- Manual Annotations of this start: 2 of 142
- Called 13.3% of time when present
- Phage (with cluster) where this start called: Eaglepride_84 (A10), Kimona_82 (A19),

Start 24:

- Found in 4 of 167 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 142
- Called 25.0% of time when present
- Phage (with cluster) where this start called: OKCentral2016_80 (A10),

Start 25:

- Found in 3 of 167 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 142
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FlyCatcher_83 (A7), Sheen_80 (A7), Toro_81 (A7),

Start 26:

- Found in 122 of 167 (73.1%) of genes in pham
- Manual Annotations of this start: 81 of 142
- Called 72.1% of time when present
- Phage (with cluster) where this start called: Arturo_79 (A4), AvatarAhPeg_82 (A4), Avle17_82 (A4), BABullseye_78 (A6), Badger_77 (A4), BennyP_86 (A6),

BlessJoy_87 (A6), Blinn1_89 (A6), Blue7_88 (A6), Chartreuse_84 (A6), CherryTomatoes_192 (D0), Cindaradix_77 (A4), CloudWang3_87 (A6), CocoaBerry_82 (A4), Commander_80 (A4), Cookiedough_85 (A6), DarthPhader_85 (A12), Datway_79 (A4), Deano_79 (A4), Dorothea_85 (A6), Eagle_81 (A4), Eapen_82 (A4), EricB_83 (A6), Eros_82 (A4), Fibonacci_88 (A11), Flaverint_89 (A11), Gadost_82 (A4), Gilberta_86 (A11), Gladiator_83 (A6), Gruunaga_86 (A6), Hammer_87 (A6), Helmet_89 (A6), Hexamo_86 (A6), Hoot_80 (A6), Houdini22_81 (A4), Hut2_85 (A11), Huxley_71 (A4), Indra_90 (A6), Jabith_88 (A11), JewelBug_77 (A6), Jordennis_83 (A6), Katalie136_78 (A4), Kazan_86 (A6), KekoraPapaka_79 (A4), Kingmustik0402_82 (A4), Kipper29_85 (A6), Koko_88 (A6), Lilbunny_86 (A6), MaCh_88 (A11), Mabel_88 (A11), MeeZee_81 (A4), Mulciber_87 (A11), Neeharika16_84 (A6), Nemo27_81 (A4), Newrala_84 (A6), NorthStar_79 (A4), NotAPhaseMom_81 (A4), Obama12_83 (A4), Orange_88 (A11), Phlei_71 (A13), Pupper_190 (D0), Refuge_87 (A12), Relief_81 (A4), Rifter_87 (A6), RockieBear_79 (A4), Roksolana_87 (A6), Rosa24_78 (A4), SCentae_189 (D0), Sham4_85 (A11), SheldonCooper_82 (A4), Skipitt_81 (A4), Skog_22 (D0), SmellyB_85 (A6), Snape_88 (A11), SteMason_78 (A4), Steamy_84 (A12), Stink_82 (A4), Sultana_82 (A4), SuperAwesome_85 (A6), Temprado_88 (A6), TinyTimmy_86 (A11), Trixie_85 (A2), TygerBlood_82 (A4), VohminGhazi_85 (A6), Wiks_86 (A6), WunderPhul_87 (A6), Zimmer_86 (A12), Zulu_88 (A6),

Start 27:

- Found in 10 of 167 (6.0%) of genes in pham
- Manual Annotations of this start: 5 of 142
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueBird_87 (A3), Bugatti_86 (A3), Clammy_86 (A3), Fred313_82 (A3), Giroux_88 (A3), Marchesa_84 (A3), Pistachio_85 (A3), Puppy_86 (A3), SaturnRing_86 (A3), Zarafa_82 (A3),

Start 28:

- Found in 95 of 167 (56.9%) of genes in pham
- Manual Annotations of this start: 27 of 142
- Called 37.9% of time when present
- Phage (with cluster) where this start called: 40AC_81 (A17), Aneem_89 (A11), ArcherNM_80 (A2), Artemis2UCLA_86 (A6), BabyBack_80 (A2), Bachome_86 (A11), Bowtie_84 (A11), Candra_83 (A6), Colin_84 (A2), DaVinci_83 (A6), EagleEye_86 (A16), Ebony_87 (A11), Et2Brutus_88 (A11), Garak_88 (A6), GaugeLDP_79 (A2), Insomnia_88 (A11), Isiphiwo_81 (A6), Joselito_86 (A11), Kimba_85 (A11), Lucivia_89 (A11), Lucyedi_85 (A16), McFly_85 (A6), Munch_87 (A11), Petersenfast_82 (A11), Pmask_84 (A6), Priamo_86 (A6), Prudy_80 (A2), Salz_84 (A11), Saskia_85 (A11), SuperCallie99_81 (A6), Timothy_88 (A11), ToneTone_84 (A6), Tucker_87 (A6), Wolpertinger_88 (A11), Yokurt_86 (A6), Zaka_87 (A6),

Start 29:

- Found in 16 of 167 (9.6%) of genes in pham
- Manual Annotations of this start: 10 of 142
- Called 75.0% of time when present
- Phage (with cluster) where this start called: C3_77 (A2), Caraxes_86 (A2), DBQu4n_85 (A2), Kerberos_85 (A2), Koduck_85 (A2), Pomar16_85 (A2), Ronaldo_142 (DP), Serenity_88 (A2), Superchunk_85 (A2), Tomathan_85 (A2), Volt_145 (DP), Ziko_144 (DP),

Summary by clusters:

There are 14 clusters represented in this pham: DO, A17, A16, A11, A10, A13, A12, A19, A3, A2, A4, A7, A6, DP,

Info for manual annotations of cluster A10:

- Start number 20 was manually annotated 2 times for cluster A10.
- Start number 23 was manually annotated 1 time for cluster A10.
- Start number 24 was manually annotated 1 time for cluster A10.

Info for manual annotations of cluster A11:

- Start number 26 was manually annotated 12 times for cluster A11.
- Start number 28 was manually annotated 11 times for cluster A11.

Info for manual annotations of cluster A12:

- Start number 26 was manually annotated 4 times for cluster A12.

Info for manual annotations of cluster A16:

- Start number 28 was manually annotated 2 times for cluster A16.

Info for manual annotations of cluster A19:

- Start number 23 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:

- Start number 26 was manually annotated 1 time for cluster A2.
- Start number 28 was manually annotated 3 times for cluster A2.
- Start number 29 was manually annotated 7 times for cluster A2.

Info for manual annotations of cluster A3:

- Start number 20 was manually annotated 13 times for cluster A3.
- Start number 27 was manually annotated 5 times for cluster A3.

Info for manual annotations of cluster A4:

- Start number 26 was manually annotated 27 times for cluster A4.

Info for manual annotations of cluster A6:

- Start number 26 was manually annotated 33 times for cluster A6.
- Start number 28 was manually annotated 11 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 25 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster DO:

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

Info for manual annotations of cluster DP:

- Start number 29 was manually annotated 3 times for cluster DP.

Gene Information:

Gene: 40AC_81 Start: 48267, Stop: 48139, Start Num: 28
Candidate Starts for 40AC_81:
(Start: 26 @48279 has 81 MA's), (Start: 28 @48267 has 27 MA's),

Gene: Aneem_89 Start: 48093, Stop: 47965, Start Num: 28
Candidate Starts for Aneem_89:
(Start: 26 @48105 has 81 MA's), (Start: 28 @48093 has 27 MA's), (33, 48015),

Gene: ArcherNM_80 Start: 48138, Stop: 48004, Start Num: 28
Candidate Starts for ArcherNM_80:
(11, 48261), (19, 48189), (Start: 26 @48150 has 81 MA's), (Start: 28 @48138 has 27 MA's), (33, 48057),

Gene: Artemis2UCLA_86 Start: 46158, Stop: 46027, Start Num: 28
Candidate Starts for Artemis2UCLA_86:
(21, 46209), (Start: 26 @46170 has 81 MA's), (Start: 28 @46158 has 27 MA's),

Gene: Arturo_79 Start: 48170, Stop: 48024, Start Num: 26
Candidate Starts for Arturo_79:
(22, 48194), (Start: 26 @48170 has 81 MA's),

Gene: AvatarAhPeg_82 Start: 48295, Stop: 48149, Start Num: 26
Candidate Starts for AvatarAhPeg_82:
(22, 48319), (Start: 26 @48295 has 81 MA's), (33, 48202),

Gene: Avle17_82 Start: 48036, Stop: 47890, Start Num: 26
Candidate Starts for Avle17_82:
(22, 48060), (Start: 26 @48036 has 81 MA's),

Gene: BABullseye_78 Start: 44490, Stop: 44347, Start Num: 26
Candidate Starts for BABullseye_78:
(21, 44529), (Start: 26 @44490 has 81 MA's), (Start: 28 @44478 has 27 MA's),

Gene: BabyBack_80 Start: 48059, Stop: 47931, Start Num: 28
Candidate Starts for BabyBack_80:
(Start: 26 @48071 has 81 MA's), (Start: 28 @48059 has 27 MA's),

Gene: Bachome_86 Start: 46976, Stop: 46848, Start Num: 28
Candidate Starts for Bachome_86:
(Start: 26 @46988 has 81 MA's), (Start: 28 @46976 has 27 MA's), (33, 46898),

Gene: Badger_77 Start: 47660, Stop: 47514, Start Num: 26
Candidate Starts for Badger_77:
(1, 48179), (2, 48077), (3, 47996), (22, 47684), (Start: 26 @47660 has 81 MA's), (33, 47567),

Gene: BennyP_86 Start: 46335, Stop: 46192, Start Num: 26
Candidate Starts for BennyP_86:
(21, 46374), (Start: 26 @46335 has 81 MA's), (Start: 28 @46323 has 27 MA's),

Gene: BlessJoy_87 Start: 46691, Stop: 46548, Start Num: 26
Candidate Starts for BlessJoy_87:
(21, 46730), (Start: 26 @46691 has 81 MA's), (Start: 28 @46679 has 27 MA's),

Gene: Blinn1_89 Start: 47148, Stop: 47005, Start Num: 26
Candidate Starts for Blinn1_89:
(Start: 26 @47148 has 81 MA's), (Start: 28 @47136 has 27 MA's),

Gene: Blue7_88 Start: 46389, Stop: 46246, Start Num: 26
Candidate Starts for Blue7_88:
(21, 46428), (Start: 26 @46389 has 81 MA's), (Start: 28 @46377 has 27 MA's),

Gene: BlueBird_87 Start: 47517, Stop: 47374, Start Num: 27
Candidate Starts for BlueBird_87:
(6, 47769), (7, 47742), (9, 47700), (17, 47595), (18, 47586), (Start: 20 @47568 has 15 MA's), (Start: 23 @47544 has 2 MA's), (Start: 27 @47517 has 5 MA's),

Gene: Bowtie_84 Start: 46700, Stop: 46572, Start Num: 28
Candidate Starts for Bowtie_84:
(Start: 26 @46712 has 81 MA's), (Start: 28 @46700 has 27 MA's), (33, 46622),

Gene: Bugatti_86 Start: 47517, Stop: 47374, Start Num: 27
Candidate Starts for Bugatti_86:
(6, 47769), (7, 47742), (9, 47700), (17, 47595), (18, 47586), (Start: 20 @47568 has 15 MA's), (Start: 23 @47544 has 2 MA's), (Start: 27 @47517 has 5 MA's),

Gene: C3_77 Start: 47036, Stop: 46908, Start Num: 29
Candidate Starts for C3_77:
(10, 47204), (Start: 28 @47045 has 27 MA's), (Start: 29 @47036 has 10 MA's), (33, 46958),

Gene: Candra_83 Start: 46183, Stop: 46052, Start Num: 28
Candidate Starts for Candra_83:
(21, 46234), (Start: 26 @46195 has 81 MA's), (Start: 28 @46183 has 27 MA's),

Gene: Caraxes_86 Start: 47335, Stop: 47207, Start Num: 29
Candidate Starts for Caraxes_86:
(Start: 28 @47344 has 27 MA's), (Start: 29 @47335 has 10 MA's), (32, 47305), (33, 47257),

Gene: Caviar_73 Start: 44224, Stop: 44060, Start Num: 20
Candidate Starts for Caviar_73:
(12, 44284), (Start: 20 @44224 has 15 MA's), (33, 44110),

Gene: Chartreuse_84 Start: 45496, Stop: 45353, Start Num: 26
Candidate Starts for Chartreuse_84:
(21, 45535), (Start: 26 @45496 has 81 MA's), (Start: 28 @45484 has 27 MA's),

Gene: CherryTomatoes_192 Start: 134867, Stop: 135010, Start Num: 26
Candidate Starts for CherryTomatoes_192:
(Start: 26 @134867 has 81 MA's),

Gene: Chupacabra_78 Start: 47676, Stop: 47506, Start Num: 20
Candidate Starts for Chupacabra_78:
(7, 47844), (12, 47736), (Start: 20 @47676 has 15 MA's), (Start: 23 @47652 has 2 MA's), (Start: 24 @47646 has 1 MA's), (33, 47556),

Gene: Cindaradix_77 Start: 48255, Stop: 48109, Start Num: 26
Candidate Starts for Cindaradix_77:

(22, 48279), (Start: 26 @48255 has 81 MA's), (33, 48162),

Gene: Clammy_86 Start: 47517, Stop: 47374, Start Num: 27

Candidate Starts for Clammy_86:

(6, 47769), (7, 47742), (9, 47700), (17, 47595), (18, 47586), (Start: 20 @47568 has 15 MA's), (Start: 23 @47544 has 2 MA's), (Start: 27 @47517 has 5 MA's),

Gene: CloudWang3_87 Start: 46699, Stop: 46556, Start Num: 26

Candidate Starts for CloudWang3_87:

(21, 46738), (Start: 26 @46699 has 81 MA's), (Start: 28 @46687 has 27 MA's),

Gene: Cocoaberry_82 Start: 48043, Stop: 47897, Start Num: 26

Candidate Starts for Cocoaberry_82:

(22, 48067), (Start: 26 @48043 has 81 MA's),

Gene: Colin_84 Start: 49181, Stop: 49047, Start Num: 28

Candidate Starts for Colin_84:

(14, 49277), (Start: 26 @49193 has 81 MA's), (Start: 28 @49181 has 27 MA's),

Gene: Commander_80 Start: 48043, Stop: 47897, Start Num: 26

Candidate Starts for Commander_80:

(22, 48070), (Start: 26 @48043 has 81 MA's), (33, 47950),

Gene: Cookiedough_85 Start: 46803, Stop: 46660, Start Num: 26

Candidate Starts for Cookiedough_85:

(21, 46842), (Start: 26 @46803 has 81 MA's), (Start: 28 @46791 has 27 MA's),

Gene: DBQu4n_85 Start: 48081, Stop: 47953, Start Num: 29

Candidate Starts for DBQu4n_85:

(10, 48255), (Start: 28 @48090 has 27 MA's), (Start: 29 @48081 has 10 MA's), (33, 48003),

Gene: DaVinci_83 Start: 45538, Stop: 45407, Start Num: 28

Candidate Starts for DaVinci_83:

(21, 45589), (Start: 26 @45550 has 81 MA's), (Start: 28 @45538 has 27 MA's),

Gene: DARTHPhader_85 Start: 49743, Stop: 49600, Start Num: 26

Candidate Starts for DARTHPhader_85:

(Start: 26 @49743 has 81 MA's), (Start: 28 @49734 has 27 MA's),

Gene: Datway_79 Start: 47853, Stop: 47707, Start Num: 26

Candidate Starts for Datway_79:

(22, 47877), (Start: 26 @47853 has 81 MA's), (33, 47760),

Gene: Deano_79 Start: 48050, Stop: 47904, Start Num: 26

Candidate Starts for Deano_79:

(22, 48074), (Start: 26 @48050 has 81 MA's), (33, 47957),

Gene: Dorothea_85 Start: 46796, Stop: 46653, Start Num: 26

Candidate Starts for Dorothea_85:

(21, 46835), (Start: 26 @46796 has 81 MA's), (Start: 28 @46784 has 27 MA's),

Gene: Eagle_81 Start: 48104, Stop: 47958, Start Num: 26

Candidate Starts for Eagle_81:

(22, 48128), (Start: 26 @48104 has 81 MA's),

Gene: EagleEye_86 Start: 47944, Stop: 47807, Start Num: 28

Candidate Starts for EagleEye_86:

(Start: 28 @47944 has 27 MA's), (Start: 29 @47935 has 10 MA's),

Gene: Eaglepride_84 Start: 47732, Stop: 47583, Start Num: 23

Candidate Starts for Eaglepride_84:

(Start: 20 @47756 has 15 MA's), (Start: 23 @47732 has 2 MA's), (Start: 24 @47726 has 1 MA's), (33, 47636), (34, 47591),

Gene: Eapen_82 Start: 48037, Stop: 47891, Start Num: 26

Candidate Starts for Eapen_82:

(22, 48061), (Start: 26 @48037 has 81 MA's),

Gene: Ebony_87 Start: 47664, Stop: 47536, Start Num: 28

Candidate Starts for Ebony_87:

(Start: 26 @47676 has 81 MA's), (Start: 28 @47664 has 27 MA's), (33, 47586),

Gene: EricB_83 Start: 45693, Stop: 45550, Start Num: 26

Candidate Starts for EricB_83:

(21, 45732), (Start: 26 @45693 has 81 MA's), (Start: 28 @45681 has 27 MA's),

Gene: Eros_82 Start: 48047, Stop: 47901, Start Num: 26

Candidate Starts for Eros_82:

(22, 48074), (Start: 26 @48047 has 81 MA's), (33, 47954),

Gene: Et2Brutus_88 Start: 47941, Stop: 47813, Start Num: 28

Candidate Starts for Et2Brutus_88:

(Start: 26 @47953 has 81 MA's), (Start: 28 @47941 has 27 MA's), (33, 47863),

Gene: Fibonacci_88 Start: 47959, Stop: 47819, Start Num: 26

Candidate Starts for Fibonacci_88:

(Start: 26 @47959 has 81 MA's), (Start: 28 @47947 has 27 MA's), (33, 47869),

Gene: Flaverint_89 Start: 48103, Stop: 47963, Start Num: 26

Candidate Starts for Flaverint_89:

(Start: 26 @48103 has 81 MA's), (Start: 28 @48091 has 27 MA's), (33, 48013),

Gene: FlyCatcher_83 Start: 50768, Stop: 50619, Start Num: 25

Candidate Starts for FlyCatcher_83:

(Start: 25 @50768 has 1 MA's), (31, 50726),

Gene: Fred313_82 Start: 47147, Stop: 47004, Start Num: 27

Candidate Starts for Fred313_82:

(6, 47399), (9, 47330), (17, 47225), (Start: 20 @47198 has 15 MA's), (Start: 23 @47174 has 2 MA's), (Start: 27 @47147 has 5 MA's),

Gene: Gadost_82 Start: 48043, Stop: 47897, Start Num: 26

Candidate Starts for Gadost_82:

(22, 48067), (Start: 26 @48043 has 81 MA's),

Gene: Garak_88 Start: 46620, Stop: 46489, Start Num: 28

Candidate Starts for Garak_88:

(21, 46671), (Start: 26 @46632 has 81 MA's), (Start: 28 @46620 has 27 MA's),

Gene: GaugeLDP_79 Start: 47615, Stop: 47487, Start Num: 28

Candidate Starts for GaugeLDP_79:

(Start: 26 @47627 has 81 MA's), (Start: 28 @47615 has 27 MA's),

Gene: Gilberta_86 Start: 46979, Stop: 46839, Start Num: 26

Candidate Starts for Gilberta_86:

(Start: 26 @46979 has 81 MA's), (Start: 28 @46967 has 27 MA's), (33, 46889),

Gene: Giroux_88 Start: 47516, Stop: 47373, Start Num: 27

Candidate Starts for Giroux_88:

(6, 47768), (7, 47741), (9, 47699), (17, 47594), (18, 47585), (Start: 20 @47567 has 15 MA's), (Start: 23 @47543 has 2 MA's), (Start: 27 @47516 has 5 MA's),

Gene: Gladiator_83 Start: 46355, Stop: 46212, Start Num: 26

Candidate Starts for Gladiator_83:

(21, 46394), (Start: 26 @46355 has 81 MA's), (Start: 28 @46343 has 27 MA's),

Gene: Goose_82 Start: 47487, Stop: 47317, Start Num: 20

Candidate Starts for Goose_82:

(7, 47655), (Start: 20 @47487 has 15 MA's), (Start: 23 @47463 has 2 MA's), (Start: 24 @47457 has 1 MA's), (33, 47367),

Gene: Gruunaga_86 Start: 46310, Stop: 46167, Start Num: 26

Candidate Starts for Gruunaga_86:

(21, 46349), (Start: 26 @46310 has 81 MA's), (Start: 28 @46298 has 27 MA's),

Gene: Hammer_87 Start: 46017, Stop: 45874, Start Num: 26

Candidate Starts for Hammer_87:

(21, 46056), (Start: 26 @46017 has 81 MA's), (Start: 28 @46005 has 27 MA's),

Gene: Helmet_89 Start: 46632, Stop: 46489, Start Num: 26

Candidate Starts for Helmet_89:

(21, 46671), (Start: 26 @46632 has 81 MA's), (Start: 28 @46620 has 27 MA's),

Gene: Hexamo_86 Start: 46185, Stop: 46042, Start Num: 26

Candidate Starts for Hexamo_86:

(21, 46224), (Start: 26 @46185 has 81 MA's), (Start: 28 @46173 has 27 MA's),

Gene: Hookmount_84 Start: 47227, Stop: 47063, Start Num: 20

Candidate Starts for Hookmount_84:

(12, 47287), (Start: 20 @47227 has 15 MA's), (33, 47113),

Gene: Hoot_80 Start: 44010, Stop: 43867, Start Num: 26

Candidate Starts for Hoot_80:

(21, 44049), (Start: 26 @44010 has 81 MA's), (Start: 28 @43998 has 27 MA's),

Gene: Houdini22_81 Start: 48043, Stop: 47897, Start Num: 26

Candidate Starts for Houdini22_81:

(22, 48067), (Start: 26 @48043 has 81 MA's),

Gene: Hutc2_85 Start: 46843, Stop: 46703, Start Num: 26

Candidate Starts for Hutc2_85:

(Start: 26 @46843 has 81 MA's), (Start: 28 @46831 has 27 MA's), (33, 46753),

Gene: Huxley_71 Start: 45935, Stop: 45789, Start Num: 26

Candidate Starts for Huxley_71:

(22, 45959), (Start: 26 @45935 has 81 MA's),

Gene: Indra_90 Start: 46633, Stop: 46490, Start Num: 26

Candidate Starts for Indra_90:

(21, 46672), (Start: 26 @46633 has 81 MA's), (Start: 28 @46621 has 27 MA's),

Gene: Insomnia_88 Start: 48125, Stop: 47997, Start Num: 28

Candidate Starts for Insomnia_88:

(Start: 26 @48137 has 81 MA's), (Start: 28 @48125 has 27 MA's), (33, 48047),

Gene: Isiphiwo_81 Start: 45709, Stop: 45578, Start Num: 28

Candidate Starts for Isiphiwo_81:

(21, 45760), (Start: 26 @45721 has 81 MA's), (Start: 28 @45709 has 27 MA's),

Gene: Jabith_88 Start: 48151, Stop: 48011, Start Num: 26

Candidate Starts for Jabith_88:

(Start: 26 @48151 has 81 MA's), (Start: 28 @48139 has 27 MA's), (33, 48061),

Gene: JewelBug_77 Start: 44488, Stop: 44333, Start Num: 26

Candidate Starts for JewelBug_77:

(21, 44527), (Start: 26 @44488 has 81 MA's), (Start: 28 @44476 has 27 MA's),

Gene: Jordennis_83 Start: 46392, Stop: 46249, Start Num: 26

Candidate Starts for Jordennis_83:

(21, 46431), (Start: 26 @46392 has 81 MA's), (Start: 28 @46380 has 27 MA's),

Gene: Joselito_86 Start: 47845, Stop: 47717, Start Num: 28

Candidate Starts for Joselito_86:

(Start: 26 @47857 has 81 MA's), (Start: 28 @47845 has 27 MA's), (33, 47767),

Gene: Katalie136_78 Start: 47660, Stop: 47514, Start Num: 26

Candidate Starts for Katalie136_78:

(1, 48179), (2, 48077), (3, 47996), (22, 47684), (Start: 26 @47660 has 81 MA's), (33, 47567),

Gene: Kazan_86 Start: 46165, Stop: 46022, Start Num: 26

Candidate Starts for Kazan_86:

(21, 46204), (Start: 26 @46165 has 81 MA's), (Start: 28 @46153 has 27 MA's),

Gene: KekoraPapaka_79 Start: 48042, Stop: 47896, Start Num: 26

Candidate Starts for KekoraPapaka_79:

(22, 48066), (Start: 26 @48042 has 81 MA's),

Gene: Kerberos_85 Start: 48101, Stop: 47973, Start Num: 29

Candidate Starts for Kerberos_85:

(10, 48275), (Start: 28 @48110 has 27 MA's), (Start: 29 @48101 has 10 MA's), (33, 48023),

Gene: Kimba_85 Start: 47148, Stop: 47020, Start Num: 28

Candidate Starts for Kimba_85:

(Start: 26 @47160 has 81 MA's), (Start: 28 @47148 has 27 MA's), (33, 47070),

Gene: Kimona_82 Start: 46840, Stop: 46682, Start Num: 23

Candidate Starts for Kimona_82:

(Start: 23 @46840 has 2 MA's),

Gene: Kingmustik0402_82 Start: 48031, Stop: 47885, Start Num: 26

Candidate Starts for Kingmustik0402_82:

(22, 48055), (Start: 26 @48031 has 81 MA's),

Gene: Kipper29_85 Start: 46168, Stop: 46025, Start Num: 26

Candidate Starts for Kipper29_85:

(21, 46207), (Start: 26 @46168 has 81 MA's), (Start: 28 @46156 has 27 MA's),

Gene: Koduck_85 Start: 47288, Stop: 47160, Start Num: 29

Candidate Starts for Koduck_85:

(8, 47483), (15, 47387), (Start: 28 @47297 has 27 MA's), (Start: 29 @47288 has 10 MA's), (32, 47258), (33, 47210),

Gene: Koko_88 Start: 47022, Stop: 46879, Start Num: 26

Candidate Starts for Koko_88:

(21, 47061), (Start: 26 @47022 has 81 MA's), (Start: 28 @47010 has 27 MA's),

Gene: Lambert1_84 Start: 47228, Stop: 47064, Start Num: 20

Candidate Starts for Lambert1_84:

(12, 47288), (Start: 20 @47228 has 15 MA's), (33, 47114),

Gene: Lilbunny_86 Start: 46264, Stop: 46121, Start Num: 26

Candidate Starts for Lilbunny_86:

(21, 46303), (Start: 26 @46264 has 81 MA's), (Start: 28 @46252 has 27 MA's),

Gene: Lucivia_89 Start: 48124, Stop: 47996, Start Num: 28

Candidate Starts for Lucivia_89:

(Start: 26 @48136 has 81 MA's), (Start: 28 @48124 has 27 MA's), (33, 48046),

Gene: Lucyedi_85 Start: 48143, Stop: 48006, Start Num: 28

Candidate Starts for Lucyedi_85:

(Start: 28 @48143 has 27 MA's), (Start: 29 @48134 has 10 MA's), (33, 48056),

Gene: MaCh_88 Start: 48100, Stop: 47960, Start Num: 26

Candidate Starts for MaCh_88:

(Start: 26 @48100 has 81 MA's), (Start: 28 @48088 has 27 MA's), (33, 48010),

Gene: Mabel_88 Start: 48101, Stop: 47961, Start Num: 26

Candidate Starts for Mabel_88:

(Start: 26 @48101 has 81 MA's), (Start: 28 @48089 has 27 MA's), (33, 48011),

Gene: Marchesa_84 Start: 47349, Stop: 47203, Start Num: 27

Candidate Starts for Marchesa_84:

(6, 47601), (9, 47532), (17, 47427), (Start: 20 @47400 has 15 MA's), (Start: 23 @47376 has 2 MA's), (Start: 27 @47349 has 5 MA's),

Gene: Margo_84 Start: 47253, Stop: 47089, Start Num: 20

Candidate Starts for Margo_84:

(12, 47313), (Start: 20 @47253 has 15 MA's), (33, 47139),

Gene: McFly_85 Start: 46492, Stop: 46361, Start Num: 28

Candidate Starts for McFly_85:

(21, 46543), (Start: 26 @46504 has 81 MA's), (Start: 28 @46492 has 27 MA's),

Gene: MeeZee_81 Start: 48036, Stop: 47890, Start Num: 26

Candidate Starts for MeeZee_81:

(22, 48060), (Start: 26 @48036 has 81 MA's),

Gene: Mulciber_87 Start: 47956, Stop: 47816, Start Num: 26

Candidate Starts for Mulciber_87:

(Start: 26 @47956 has 81 MA's), (Start: 28 @47944 has 27 MA's), (33, 47866),

Gene: Munch_87 Start: 48093, Stop: 47965, Start Num: 28

Candidate Starts for Munch_87:

(Start: 26 @48105 has 81 MA's), (Start: 28 @48093 has 27 MA's), (33, 48015),

Gene: Neeharika16_84 Start: 46254, Stop: 46111, Start Num: 26

Candidate Starts for Neeharika16_84:

(21, 46293), (Start: 26 @46254 has 81 MA's), (Start: 28 @46242 has 27 MA's),

Gene: Nemo27_81 Start: 48038, Stop: 47892, Start Num: 26

Candidate Starts for Nemo27_81:

(22, 48062), (Start: 26 @48038 has 81 MA's),

Gene: Newrala_84 Start: 46600, Stop: 46457, Start Num: 26

Candidate Starts for Newrala_84:

(21, 46639), (Start: 26 @46600 has 81 MA's), (Start: 28 @46588 has 27 MA's),

Gene: Noella_85 Start: 47229, Stop: 47065, Start Num: 20

Candidate Starts for Noella_85:

(12, 47289), (Start: 20 @47229 has 15 MA's), (33, 47115),

Gene: Norbert_80 Start: 47226, Stop: 47062, Start Num: 20

Candidate Starts for Norbert_80:

(12, 47286), (Start: 20 @47226 has 15 MA's), (33, 47112),

Gene: NorthStar_79 Start: 48042, Stop: 47896, Start Num: 26

Candidate Starts for NorthStar_79:

(22, 48066), (Start: 26 @48042 has 81 MA's),

Gene: NotAPhaseMom_81 Start: 48043, Stop: 47897, Start Num: 26

Candidate Starts for NotAPhaseMom_81:

(22, 48067), (Start: 26 @48043 has 81 MA's),

Gene: OKCentral2016_80 Start: 46884, Stop: 46744, Start Num: 24

Candidate Starts for OKCentral2016_80:

(7, 47082), (12, 46974), (Start: 20 @46914 has 15 MA's), (Start: 23 @46890 has 2 MA's), (Start: 24 @46884 has 1 MA's), (33, 46794),

Gene: Obama12_83 Start: 48466, Stop: 48320, Start Num: 26

Candidate Starts for Obama12_83:

(22, 48490), (Start: 26 @48466 has 81 MA's), (33, 48373),

Gene: Orange_88 Start: 47655, Stop: 47515, Start Num: 26

Candidate Starts for Orange_88:

(Start: 26 @47655 has 81 MA's), (Start: 28 @47643 has 27 MA's), (33, 47565),

Gene: Petersenfast_82 Start: 46524, Stop: 46396, Start Num: 28

Candidate Starts for Petersenfast_82:

(Start: 26 @46536 has 81 MA's), (Start: 28 @46524 has 27 MA's), (33, 46446),

Gene: Phlei_71 Start: 45865, Stop: 45713, Start Num: 26

Candidate Starts for Phlei_71:

(Start: 26 @45865 has 81 MA's), (Start: 29 @45844 has 10 MA's), (30, 45832), (34, 45721),

Gene: Pistachio_85 Start: 47064, Stop: 46921, Start Num: 27

Candidate Starts for Pistachio_85:

(6, 47316), (7, 47289), (9, 47247), (17, 47142), (18, 47133), (Start: 20 @47115 has 15 MA's), (Start: 23 @47091 has 2 MA's), (Start: 27 @47064 has 5 MA's),

Gene: Pmask_84 Start: 46789, Stop: 46658, Start Num: 28

Candidate Starts for Pmask_84:

(21, 46840), (Start: 26 @46801 has 81 MA's), (Start: 28 @46789 has 27 MA's),

Gene: Pocahontas_83 Start: 47224, Stop: 47060, Start Num: 20

Candidate Starts for Pocahontas_83:

(12, 47284), (Start: 20 @47224 has 15 MA's), (33, 47110),

Gene: Pomar16_85 Start: 48174, Stop: 48046, Start Num: 29

Candidate Starts for Pomar16_85:

(10, 48348), (Start: 28 @48183 has 27 MA's), (Start: 29 @48174 has 10 MA's), (33, 48096),

Gene: Popcicle_84 Start: 47224, Stop: 47060, Start Num: 20

Candidate Starts for Popcicle_84:

(12, 47284), (Start: 20 @47224 has 15 MA's), (33, 47110),

Gene: Priamo_86 Start: 46033, Stop: 45902, Start Num: 28

Candidate Starts for Priamo_86:

(21, 46084), (Start: 26 @46045 has 81 MA's), (Start: 28 @46033 has 27 MA's),

Gene: Prudy_80 Start: 48638, Stop: 48504, Start Num: 28

Candidate Starts for Prudy_80:

(11, 48761), (19, 48689), (Start: 26 @48650 has 81 MA's), (Start: 28 @48638 has 27 MA's), (33, 48557),

Gene: Pupper_190 Start: 134729, Stop: 134872, Start Num: 26

Candidate Starts for Pupper_190:

(Start: 26 @134729 has 81 MA's),

Gene: Puppy_86 Start: 47134, Stop: 46991, Start Num: 27

Candidate Starts for Puppy_86:

(6, 47386), (7, 47359), (9, 47317), (17, 47212), (18, 47203), (Start: 20 @47185 has 15 MA's), (Start: 23 @47161 has 2 MA's), (Start: 27 @47134 has 5 MA's),

Gene: QuinnKiro_83 Start: 47227, Stop: 47063, Start Num: 20
Candidate Starts for QuinnKiro_83:
(12, 47287), (Start: 20 @47227 has 15 MA's), (33, 47113),

Gene: Refuge_87 Start: 50587, Stop: 50444, Start Num: 26
Candidate Starts for Refuge_87:
(Start: 26 @50587 has 81 MA's), (Start: 28 @50578 has 27 MA's),

Gene: Relief_81 Start: 48039, Stop: 47893, Start Num: 26
Candidate Starts for Relief_81:
(22, 48063), (Start: 26 @48039 has 81 MA's),

Gene: ResDef_82 Start: 47230, Stop: 47066, Start Num: 20
Candidate Starts for ResDef_82:
(12, 47290), (Start: 20 @47230 has 15 MA's), (33, 47116),

Gene: Rifter_87 Start: 45812, Stop: 45669, Start Num: 26
Candidate Starts for Rifter_87:
(21, 45851), (Start: 26 @45812 has 81 MA's), (Start: 28 @45800 has 27 MA's),

Gene: RockieBear_79 Start: 48044, Stop: 47898, Start Num: 26
Candidate Starts for RockieBear_79:
(22, 48071), (Start: 26 @48044 has 81 MA's), (33, 47951),

Gene: Roksolana_87 Start: 46528, Stop: 46385, Start Num: 26
Candidate Starts for Roksolana_87:
(21, 46567), (Start: 26 @46528 has 81 MA's), (Start: 28 @46516 has 27 MA's),

Gene: Ronaldo_142 Start: 66482, Stop: 66613, Start Num: 29
Candidate Starts for Ronaldo_142:
(Start: 29 @66482 has 10 MA's), (32, 66512),

Gene: Rosa24_78 Start: 48070, Stop: 47924, Start Num: 26
Candidate Starts for Rosa24_78:
(22, 48094), (Start: 26 @48070 has 81 MA's), (33, 47977),

Gene: SCentae_189 Start: 134921, Stop: 135064, Start Num: 26
Candidate Starts for SCentae_189:
(Start: 26 @134921 has 81 MA's),

Gene: Salz_84 Start: 46753, Stop: 46625, Start Num: 28
Candidate Starts for Salz_84:
(Start: 26 @46765 has 81 MA's), (Start: 28 @46753 has 27 MA's), (33, 46675),

Gene: Saskia_85 Start: 46990, Stop: 46862, Start Num: 28
Candidate Starts for Saskia_85:
(Start: 26 @47002 has 81 MA's), (Start: 28 @46990 has 27 MA's), (33, 46912),

Gene: SaturnRing_86 Start: 47517, Stop: 47374, Start Num: 27
Candidate Starts for SaturnRing_86:

(6, 47769), (7, 47742), (9, 47700), (17, 47595), (18, 47586), (Start: 20 @47568 has 15 MA's), (Start: 23 @47544 has 2 MA's), (Start: 27 @47517 has 5 MA's),

Gene: Serenity_88 Start: 47747, Stop: 47619, Start Num: 29

Candidate Starts for Serenity_88:

(Start: 28 @47756 has 27 MA's), (Start: 29 @47747 has 10 MA's), (32, 47717), (33, 47669),

Gene: Sham4_85 Start: 46851, Stop: 46711, Start Num: 26

Candidate Starts for Sham4_85:

(Start: 26 @46851 has 81 MA's), (Start: 28 @46839 has 27 MA's), (33, 46761),

Gene: Sheen_80 Start: 50105, Stop: 49956, Start Num: 25

Candidate Starts for Sheen_80:

(Start: 25 @50105 has 1 MA's), (31, 50063),

Gene: SheldonCooper_82 Start: 48480, Stop: 48334, Start Num: 26

Candidate Starts for SheldonCooper_82:

(22, 48504), (Start: 26 @48480 has 81 MA's),

Gene: Skipitt_81 Start: 48036, Stop: 47890, Start Num: 26

Candidate Starts for Skipitt_81:

(22, 48060), (Start: 26 @48036 has 81 MA's),

Gene: Skog_22 Start: 10918, Stop: 11064, Start Num: 26

Candidate Starts for Skog_22:

(4, 10645), (5, 10654), (Start: 26 @10918 has 81 MA's),

Gene: SmellyB_85 Start: 46159, Stop: 46016, Start Num: 26

Candidate Starts for SmellyB_85:

(21, 46198), (Start: 26 @46159 has 81 MA's), (Start: 28 @46147 has 27 MA's),

Gene: Snape_88 Start: 47644, Stop: 47504, Start Num: 26

Candidate Starts for Snape_88:

(Start: 26 @47644 has 81 MA's), (Start: 28 @47632 has 27 MA's), (33, 47554),

Gene: SteMason_78 Start: 48039, Stop: 47893, Start Num: 26

Candidate Starts for SteMason_78:

(22, 48063), (Start: 26 @48039 has 81 MA's),

Gene: Steamy_84 Start: 49557, Stop: 49414, Start Num: 26

Candidate Starts for Steamy_84:

(13, 49653), (16, 49623), (19, 49596), (Start: 26 @49557 has 81 MA's), (Start: 28 @49548 has 27 MA's),

Gene: Stink_82 Start: 48266, Stop: 48120, Start Num: 26

Candidate Starts for Stink_82:

(22, 48290), (Start: 26 @48266 has 81 MA's), (33, 48173),

Gene: Sultana_82 Start: 48039, Stop: 47893, Start Num: 26

Candidate Starts for Sultana_82:

(22, 48063), (Start: 26 @48039 has 81 MA's),

Gene: SuperAwesome_85 Start: 46840, Stop: 46697, Start Num: 26

Candidate Starts for SuperAwesome_85:

(21, 46879), (Start: 26 @46840 has 81 MA's), (Start: 28 @46828 has 27 MA's),

Gene: SuperCallie99_81 Start: 46210, Stop: 46079, Start Num: 28

Candidate Starts for SuperCallie99_81:

(21, 46261), (Start: 26 @46222 has 81 MA's), (Start: 28 @46210 has 27 MA's),

Gene: Superchunk_85 Start: 47335, Stop: 47207, Start Num: 29

Candidate Starts for Superchunk_85:

(Start: 28 @47344 has 27 MA's), (Start: 29 @47335 has 10 MA's), (32, 47305), (33, 47257),

Gene: Temprado_88 Start: 46632, Stop: 46489, Start Num: 26

Candidate Starts for Temprado_88:

(21, 46671), (Start: 26 @46632 has 81 MA's), (Start: 28 @46620 has 27 MA's),

Gene: Texage_82 Start: 47228, Stop: 47064, Start Num: 20

Candidate Starts for Texage_82:

(12, 47288), (Start: 20 @47228 has 15 MA's), (33, 47114),

Gene: Timothy_88 Start: 47609, Stop: 47481, Start Num: 28

Candidate Starts for Timothy_88:

(Start: 26 @47621 has 81 MA's), (Start: 28 @47609 has 27 MA's), (33, 47531),

Gene: TinyTimmy_86 Start: 47350, Stop: 47210, Start Num: 26

Candidate Starts for TinyTimmy_86:

(Start: 26 @47350 has 81 MA's), (Start: 28 @47338 has 27 MA's), (33, 47260),

Gene: Todacoro_84 Start: 47227, Stop: 47063, Start Num: 20

Candidate Starts for Todacoro_84:

(12, 47287), (Start: 20 @47227 has 15 MA's), (33, 47113),

Gene: Tomathan_85 Start: 48214, Stop: 48086, Start Num: 29

Candidate Starts for Tomathan_85:

(10, 48388), (Start: 28 @48223 has 27 MA's), (Start: 29 @48214 has 10 MA's), (33, 48136),

Gene: ToneTone_84 Start: 46180, Stop: 46049, Start Num: 28

Candidate Starts for ToneTone_84:

(21, 46231), (Start: 26 @46192 has 81 MA's), (Start: 28 @46180 has 27 MA's),

Gene: Toro_81 Start: 50768, Stop: 50619, Start Num: 25

Candidate Starts for Toro_81:

(Start: 25 @50768 has 1 MA's), (31, 50726),

Gene: Trixie_85 Start: 49116, Stop: 48976, Start Num: 26

Candidate Starts for Trixie_85:

(Start: 26 @49116 has 81 MA's), (Start: 29 @49104 has 10 MA's), (33, 49026),

Gene: Tucker_87 Start: 46383, Stop: 46252, Start Num: 28

Candidate Starts for Tucker_87:

(21, 46434), (Start: 26 @46395 has 81 MA's), (Start: 28 @46383 has 27 MA's),

Gene: TygerBlood_82 Start: 48042, Stop: 47896, Start Num: 26

Candidate Starts for TygerBlood_82:

(22, 48066), (Start: 26 @48042 has 81 MA's),

Gene: Veracruz_81 Start: 47228, Stop: 47064, Start Num: 20

Candidate Starts for Veracruz_81:

(12, 47288), (Start: 20 @47228 has 15 MA's), (33, 47114),

Gene: VohminGhazi_85 Start: 46160, Stop: 46017, Start Num: 26

Candidate Starts for VohminGhazi_85:

(21, 46199), (Start: 26 @46160 has 81 MA's), (Start: 28 @46148 has 27 MA's),

Gene: Volt_145 Start: 66646, Stop: 66777, Start Num: 29

Candidate Starts for Volt_145:

(Start: 29 @66646 has 10 MA's), (32, 66676),

Gene: Wiks_86 Start: 46263, Stop: 46120, Start Num: 26

Candidate Starts for Wiks_86:

(21, 46302), (Start: 26 @46263 has 81 MA's), (Start: 28 @46251 has 27 MA's),

Gene: Wolpertinger_88 Start: 47958, Stop: 47830, Start Num: 28

Candidate Starts for Wolpertinger_88:

(Start: 26 @47970 has 81 MA's), (Start: 28 @47958 has 27 MA's), (33, 47880),

Gene: WunderPhul_87 Start: 46261, Stop: 46118, Start Num: 26

Candidate Starts for WunderPhul_87:

(21, 46300), (Start: 26 @46261 has 81 MA's), (Start: 28 @46249 has 27 MA's),

Gene: Yokurt_86 Start: 46251, Stop: 46120, Start Num: 28

Candidate Starts for Yokurt_86:

(21, 46302), (Start: 26 @46263 has 81 MA's), (Start: 28 @46251 has 27 MA's),

Gene: Zaka_87 Start: 46251, Stop: 46120, Start Num: 28

Candidate Starts for Zaka_87:

(21, 46302), (Start: 26 @46263 has 81 MA's), (Start: 28 @46251 has 27 MA's),

Gene: Zarafa_82 Start: 47363, Stop: 47220, Start Num: 27

Candidate Starts for Zarafa_82:

(6, 47615), (9, 47546), (17, 47441), (18, 47432), (Start: 20 @47414 has 15 MA's), (Start: 23 @47390 has 2 MA's), (Start: 27 @47363 has 5 MA's),

Gene: Ziko_144 Start: 66950, Stop: 67081, Start Num: 29

Candidate Starts for Ziko_144:

(Start: 29 @66950 has 10 MA's), (32, 66980),

Gene: Zimmer_86 Start: 50022, Stop: 49876, Start Num: 26

Candidate Starts for Zimmer_86:

(16, 50088), (Start: 26 @50022 has 81 MA's), (Start: 28 @50010 has 27 MA's), (30, 49995),

Gene: Zulu_88 Start: 46641, Stop: 46498, Start Num: 26

Candidate Starts for Zulu_88:

(21, 46680), (Start: 26 @46641 has 81 MA's), (Start: 28 @46629 has 27 MA's),