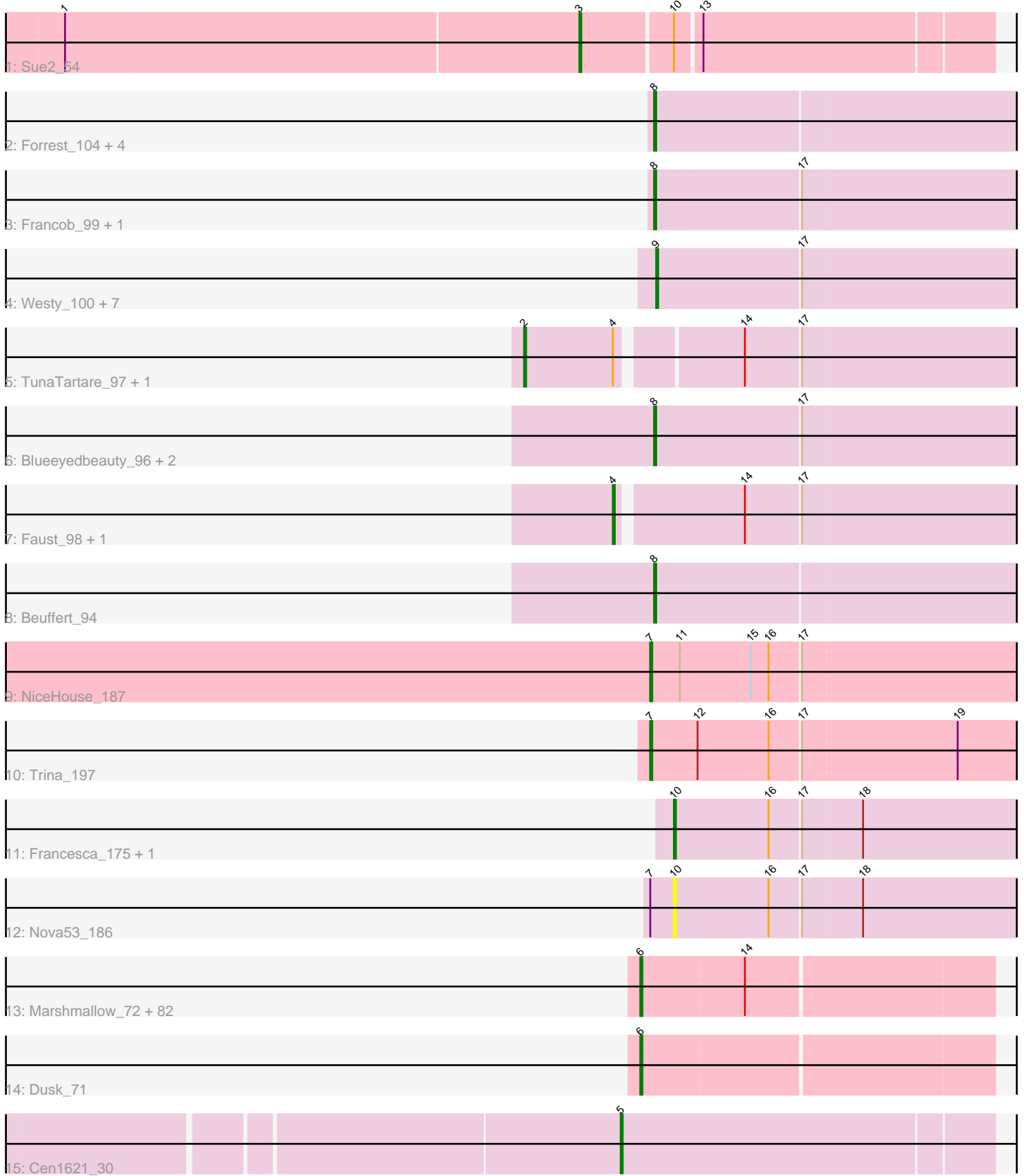


Pham 215987



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 215987 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215987 has 114 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Sue2_54
- Track 2 : Forrest_104, Gilson_101, Jada_101, Phredrick_100, Emma1919_102
- Track 3 : Francob_99, Kenrey_102
- Track 4 : Westy_100, SparkleGoddess_99, Karp_97, Comrade_98, Moab_100, Stigma_98, Patelgo_99, Belfort_101
- Track 5 : TunaTartare_97, Sham_94
- Track 6 : Blueeyedbeauty_96, Annadreamy_94, Limpid_93
- Track 7 : Faust_98, SeresaTree_98
- Track 8 : Beuffert_94
- Track 9 : NiceHouse_187
- Track 10 : Trina_197
- Track 11 : Francesca_175, Dorin_173
- Track 12 : Nova53_186
- Track 13 : Marshmallow_72, Mindy_73, Myrale_74, Dumbo_74, Flypotenuse_70, Hoonter_77, TBrady12_77, Manda_75, Daikon_76, Easy2Say_75, FoghornLeghorn_68, Rimmer_75, OrionPax_73, Teaspoon_75, ShamWow_74, Buck_75, Porky_73, Kostya_74, Amao_74, Highbury_73, SophKB_71, Ukulele_69, Cactus_77, NelitzaMV_72, NoSleep_75, Glexan_73, Eureka_72, Nala_76, xkcd_77, SirDuracell_73, AmericanBeauty_78, TeardropMSU_70, Pat3_72, Sotrice96_75, GoldenSpark_78, IHOP_72, Cookies_71, GooberAzure_77, Goldilocks_77, Harella_74, Icee_75, Murica_77, ChotaBhai_74, Inca_71, Toto_72, Balomoji_74, Kanye_71, Command613_76, Saints25_73, Gemini_79, 244_75, CrystalP_73, StormChicken_76, FairyPath_74, Elite2014_73, Cjw1_74, JeTaime_74, Nimrod_75, ChosenOne_74, HufflyPuff_77, Emmina_74, Gage_76, Goku_72, Simpliphy_73, Kimchi_78, BadStone_71, BaboJay_71, ABCat_71, DoctorDiddles_73, Argent26_78, Henry_72, Bask21_74, Petra64142_78, FireRed_78, ShereKhan_73, Tuco_75, StolenFromERC_77, Holt_79, Qualification_75, Lilpickle_73, MadamMonkfish_74, BilboSwaggins_73, Stank_77
- Track 14 : Dusk_71
- Track 15 : Cen1621_30

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

The start number called the most often in the published annotations is 6, it was called in 77 of the 104 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_75, ABCat_71, Amao_74, AmericanBeauty_78, Argent26_78, BaboJay_71, BadStone_71, Balomoji_74, Bask21_74, BilboSwaggins_73, Buck_75, Cactus_77, ChosenOne_74, ChotaBhai_74, Cjw1_74, Command613_76, Cookies_71, CrystalP_73, Daikon_76, DoctorDiddles_73, Dumbo_74, Dusk_71, Easy2Say_75, Elite2014_73, Emmina_74, Eureka_72, FairyPath_74, FireRed_78, Flypotenuse_70, FoghornLeghorn_68, Gage_76, Gemini_79, Glexan_73, Goku_72, GoldenSpark_78, Goldilocks_77, GooberAzure_77, Harella_74, Henry_72, Highbury_73, Holt_79, Hoonter_77, HuffyPuff_77, IHOP_72, Icee_75, Inca_71, JeTaime_74, Kanye_71, Kimchi_78, Kostya_74, Lilpickle_73, MadamMonkfish_74, Manda_75, Marshmallow_72, Mindy_73, Murica_77, Myrale_74, Nala_76, NelitzaMV_72, Nimrod_75, NoSleep_75, OrionPax_73, Pat3_72, Petra64142_78, Porky_73, Quallification_75, Rimmer_75, Saints25_73, ShamWow_74, ShereKhan_73, Simpliphy_73, SirDuracell_73, SophKB_71, Sotrice96_75, Stank_77, StolenFromERC_77, StormChicken_76, TBrady12_77, TeardropMSU_70, Teaspoon_75, Toto_72, Tuco_75, Ukulele_69, xkcd_77,

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

-

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

- Annadreamy_94, Belfort_101, Beuffert_94, Blueeyedbeauty_96, Cen1621_30, Comrade_98, Dorin_173, Emma1919_102, Faust_98, Forrest_104, Francesca_175, Francob_99, Gilson_101, Jada_101, Karp_97, Kenrey_102, Limpid_93, Moab_100, NiceHouse_187, Nova53_186, Patelgo_99, Phredrick_100, SeresaTree_98, Sham_94, SparkleGoddess_99, Stigma_98, Sue2_54, Trina_197, TunaTartare_97, Westy_100,

Summary by start number:

Start 2:

- Found in 2 of 114 (1.8%) of genes in pham
- Manual Annotations of this start: 2 of 104
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sham_94 (BK1), TunaTartare_97 (BK1),

Start 3:

- Found in 1 of 114 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 104
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sue2_54 (AZ1),

Start 4:

- Found in 4 of 114 (3.5%) of genes in pham
- Manual Annotations of this start: 1 of 104
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Faust_98 (BK1), SeresaTree_98 (BK1),

Start 5:

- Found in 1 of 114 (0.9%) of genes in pham

- Manual Annotations of this start: 1 of 104
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cen1621_30 (EH),

Start 6:

- Found in 84 of 114 (73.7%) of genes in pham
- Manual Annotations of this start: 77 of 104
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 244_75 (E), ABCat_71 (E), Amao_74 (E), AmericanBeauty_78 (E), Argent26_78 (E), BaboJay_71 (E), BadStone_71 (E), Balomoji_74 (E), Bask21_74 (E), BilboSwaggins_73 (E), Buck_75 (E), Cactus_77 (E), ChosenOne_74 (E), ChotaBhai_74 (E), Cjw1_74 (E), Command613_76 (E), Cookies_71 (E), CrystalP_73 (E), Daikon_76 (E), DoctorDiddles_73 (E), Dumbo_74 (E), Dusk_71 (E), Easy2Say_75 (E), Elite2014_73 (E), Emmina_74 (E), Eureka_72 (E), FairyPath_74 (E), FireRed_78 (E), Flypotenuse_70 (E), FoghornLeghorn_68 (E), Gage_76 (E), Gemini_79 (E), Glexan_73 (E), Goku_72 (E), GoldenSpark_78 (E), Goldilocks_77 (E), GooberAzure_77 (E), Harella_74 (E), Henry_72 (E), Highbury_73 (E), Holt_79 (E), Hoonter_77 (E), HuffyPuff_77 (E), IHOP_72 (E), Icee_75 (E), Inca_71 (E), JeTaime_74 (E), Kanye_71 (E), Kimchi_78 (E), Kostya_74 (E), Lilpickle_73 (E), MadamMonkfish_74 (E), Manda_75 (E), Marshmallow_72 (E), Mindy_73 (E), Murica_77 (E), Myrale_74 (E), Nala_76 (E), NelitzaMV_72 (E), Nimrod_75 (E), NoSleep_75 (E), OrionPax_73 (E), Pat3_72 (E), Petra64142_78 (E), Porky_73 (E), Quallification_75 (E), Rimmer_75 (E), Saints25_73 (E), ShamWow_74 (E), ShereKhan_73 (E), Simpliphy_73 (E), SirDuracell_73 (E), SophKB_71 (E), Sotrice96_75 (E), Stank_77 (E), StolenFromERC_77 (E), StormChicken_76 (E), TBrady12_77 (E), TeardropMSU_70 (E), Teaspoon_75 (E), Toto_72 (E), Tuco_75 (E), Ukulele_69 (E), xkcd_77 (E),

Start 7:

- Found in 3 of 114 (2.6%) of genes in pham
- Manual Annotations of this start: 2 of 104
- Called 66.7% of time when present
- Phage (with cluster) where this start called: NiceHouse_187 (CE), Trina_197 (CE),

Start 8:

- Found in 11 of 114 (9.6%) of genes in pham
- Manual Annotations of this start: 11 of 104
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Annadreamy_94 (BK1), Beuffert_94 (BK1), Blueeyedbeauty_96 (BK1), Emma1919_102 (BK1), Forrest_104 (BK1), Francob_99 (BK1), Gilson_101 (BK1), Jada_101 (BK1), Kenrey_102 (BK1), Limpid_93 (BK1), Phredrick_100 (BK1),

Start 9:

- Found in 8 of 114 (7.0%) of genes in pham
- Manual Annotations of this start: 7 of 104
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belfort_101 (BK1), Comrade_98 (BK1), Karp_97 (BK1), Moab_100 (BK1), Patelgo_99 (BK1), SparkleGoddess_99 (BK1), Stigma_98 (BK1), Westy_100 (BK1),

Start 10:

- Found in 4 of 114 (3.5%) of genes in pham

- Manual Annotations of this start: 2 of 104
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Dorin_173 (CG), Francesca_175 (CG), Nova53_186 (CG),

Summary by clusters:

There are 6 clusters represented in this pham: E, EH, CG, CE, BK1, AZ1,

Info for manual annotations of cluster AZ1:

- Start number 3 was manually annotated 1 time for cluster AZ1.

Info for manual annotations of cluster BK1:

- Start number 2 was manually annotated 2 times for cluster BK1.
- Start number 4 was manually annotated 1 time for cluster BK1.
- Start number 8 was manually annotated 11 times for cluster BK1.
- Start number 9 was manually annotated 7 times for cluster BK1.

Info for manual annotations of cluster CE:

- Start number 7 was manually annotated 2 times for cluster CE.

Info for manual annotations of cluster CG:

- Start number 10 was manually annotated 2 times for cluster CG.

Info for manual annotations of cluster E:

- Start number 6 was manually annotated 77 times for cluster E.

Info for manual annotations of cluster EH:

- Start number 5 was manually annotated 1 time for cluster EH.

Gene Information:

Gene: 244_75 Start: 47793, Stop: 47966, Start Num: 6

Candidate Starts for 244_75:

(Start: 6 @47793 has 77 MA's), (14, 47844),

Gene: ABCat_71 Start: 48146, Stop: 48319, Start Num: 6

Candidate Starts for ABCat_71:

(Start: 6 @48146 has 77 MA's), (14, 48197),

Gene: Amao_74 Start: 47566, Stop: 47739, Start Num: 6

Candidate Starts for Amao_74:

(Start: 6 @47566 has 77 MA's), (14, 47617),

Gene: AmericanBeauty_78 Start: 48315, Stop: 48488, Start Num: 6

Candidate Starts for AmericanBeauty_78:

(Start: 6 @48315 has 77 MA's), (14, 48366),

Gene: Annadreamy_94 Start: 66362, Stop: 66547, Start Num: 8

Candidate Starts for Annadreamy_94:

(Start: 8 @66362 has 11 MA's), (17, 66434),

Gene: Argent26_78 Start: 47953, Stop: 48126, Start Num: 6
Candidate Starts for Argent26_78:
(Start: 6 @47953 has 77 MA's), (14, 48004),

Gene: BaboJay_71 Start: 47346, Stop: 47519, Start Num: 6
Candidate Starts for BaboJay_71:
(Start: 6 @47346 has 77 MA's), (14, 47397),

Gene: BadStone_71 Start: 47715, Stop: 47888, Start Num: 6
Candidate Starts for BadStone_71:
(Start: 6 @47715 has 77 MA's), (14, 47766),

Gene: Balomoji_74 Start: 48276, Stop: 48449, Start Num: 6
Candidate Starts for Balomoji_74:
(Start: 6 @48276 has 77 MA's), (14, 48327),

Gene: Bask21_74 Start: 47129, Stop: 47302, Start Num: 6
Candidate Starts for Bask21_74:
(Start: 6 @47129 has 77 MA's), (14, 47180),

Gene: Belfort_101 Start: 68605, Stop: 68790, Start Num: 9
Candidate Starts for Belfort_101:
(Start: 9 @68605 has 7 MA's), (17, 68677),

Gene: Beuffert_94 Start: 66921, Stop: 67106, Start Num: 8
Candidate Starts for Beuffert_94:
(Start: 8 @66921 has 11 MA's),

Gene: BilboSwaggins_73 Start: 48154, Stop: 48327, Start Num: 6
Candidate Starts for BilboSwaggins_73:
(Start: 6 @48154 has 77 MA's), (14, 48205),

Gene: Blueeyedbeauty_96 Start: 66320, Stop: 66505, Start Num: 8
Candidate Starts for Blueeyedbeauty_96:
(Start: 8 @66320 has 11 MA's), (17, 66392),

Gene: Buck_75 Start: 48394, Stop: 48567, Start Num: 6
Candidate Starts for Buck_75:
(Start: 6 @48394 has 77 MA's), (14, 48445),

Gene: Cactus_77 Start: 47170, Stop: 47343, Start Num: 6
Candidate Starts for Cactus_77:
(Start: 6 @47170 has 77 MA's), (14, 47221),

Gene: Cen1621_30 Start: 22502, Stop: 22687, Start Num: 5
Candidate Starts for Cen1621_30:
(Start: 5 @22502 has 1 MA's),

Gene: ChosenOne_74 Start: 47170, Stop: 47343, Start Num: 6
Candidate Starts for ChosenOne_74:
(Start: 6 @47170 has 77 MA's), (14, 47221),

Gene: ChotaBhai_74 Start: 47494, Stop: 47667, Start Num: 6
Candidate Starts for ChotaBhai_74:
(Start: 6 @47494 has 77 MA's), (14, 47545),

Gene: Cjw1_74 Start: 48867, Stop: 49040, Start Num: 6
Candidate Starts for Cjw1_74:
(Start: 6 @48867 has 77 MA's), (14, 48918),

Gene: Command613_76 Start: 48209, Stop: 48382, Start Num: 6
Candidate Starts for Command613_76:
(Start: 6 @48209 has 77 MA's), (14, 48260),

Gene: Comrade_98 Start: 67922, Stop: 68107, Start Num: 9
Candidate Starts for Comrade_98:
(Start: 9 @67922 has 7 MA's), (17, 67994),

Gene: Cookies_71 Start: 47351, Stop: 47524, Start Num: 6
Candidate Starts for Cookies_71:
(Start: 6 @47351 has 77 MA's), (14, 47402),

Gene: CrystalP_73 Start: 48154, Stop: 48327, Start Num: 6
Candidate Starts for CrystalP_73:
(Start: 6 @48154 has 77 MA's), (14, 48205),

Gene: Daikon_76 Start: 48297, Stop: 48470, Start Num: 6
Candidate Starts for Daikon_76:
(Start: 6 @48297 has 77 MA's), (14, 48348),

Gene: DoctorDiddles_73 Start: 47538, Stop: 47711, Start Num: 6
Candidate Starts for DoctorDiddles_73:
(Start: 6 @47538 has 77 MA's), (14, 47589),

Gene: Dorin_173 Start: 95195, Stop: 95365, Start Num: 10
Candidate Starts for Dorin_173:
(Start: 10 @95195 has 2 MA's), (16, 95243), (17, 95258), (18, 95288),

Gene: Dumbo_74 Start: 47075, Stop: 47248, Start Num: 6
Candidate Starts for Dumbo_74:
(Start: 6 @47075 has 77 MA's), (14, 47126),

Gene: Dusk_71 Start: 47375, Stop: 47548, Start Num: 6
Candidate Starts for Dusk_71:
(Start: 6 @47375 has 77 MA's),

Gene: Easy2Say_75 Start: 48619, Stop: 48792, Start Num: 6
Candidate Starts for Easy2Say_75:
(Start: 6 @48619 has 77 MA's), (14, 48670),

Gene: Elite2014_73 Start: 47169, Stop: 47342, Start Num: 6
Candidate Starts for Elite2014_73:
(Start: 6 @47169 has 77 MA's), (14, 47220),

Gene: Emma1919_102 Start: 67382, Stop: 67567, Start Num: 8

Candidate Starts for Emma1919_102:

(Start: 8 @67382 has 11 MA's),

Gene: Emmina_74 Start: 47076, Stop: 47249, Start Num: 6

Candidate Starts for Emmina_74:

(Start: 6 @47076 has 77 MA's), (14, 47127),

Gene: Eureka_72 Start: 47640, Stop: 47813, Start Num: 6

Candidate Starts for Eureka_72:

(Start: 6 @47640 has 77 MA's), (14, 47691),

Gene: FairyPath_74 Start: 48288, Stop: 48461, Start Num: 6

Candidate Starts for FairyPath_74:

(Start: 6 @48288 has 77 MA's), (14, 48339),

Gene: Faust_98 Start: 68011, Stop: 68205, Start Num: 4

Candidate Starts for Faust_98:

(Start: 4 @68011 has 1 MA's), (14, 68071), (17, 68098),

Gene: FireRed_78 Start: 48663, Stop: 48836, Start Num: 6

Candidate Starts for FireRed_78:

(Start: 6 @48663 has 77 MA's), (14, 48714),

Gene: Flypotenuse_70 Start: 47160, Stop: 47333, Start Num: 6

Candidate Starts for Flypotenuse_70:

(Start: 6 @47160 has 77 MA's), (14, 47211),

Gene: FoghornLeghorn_68 Start: 46173, Stop: 46346, Start Num: 6

Candidate Starts for FoghornLeghorn_68:

(Start: 6 @46173 has 77 MA's), (14, 46224),

Gene: Forrest_104 Start: 69125, Stop: 69310, Start Num: 8

Candidate Starts for Forrest_104:

(Start: 8 @69125 has 11 MA's),

Gene: Francesca_175 Start: 96114, Stop: 96284, Start Num: 10

Candidate Starts for Francesca_175:

(Start: 10 @96114 has 2 MA's), (16, 96162), (17, 96177), (18, 96207),

Gene: Francob_99 Start: 67565, Stop: 67750, Start Num: 8

Candidate Starts for Francob_99:

(Start: 8 @67565 has 11 MA's), (17, 67637),

Gene: Gage_76 Start: 47953, Stop: 48126, Start Num: 6

Candidate Starts for Gage_76:

(Start: 6 @47953 has 77 MA's), (14, 48004),

Gene: Gemini_79 Start: 48470, Stop: 48643, Start Num: 6

Candidate Starts for Gemini_79:

(Start: 6 @48470 has 77 MA's), (14, 48521),

Gene: Gilson_101 Start: 67344, Stop: 67529, Start Num: 8

Candidate Starts for Gilson_101:

(Start: 8 @67344 has 11 MA's),

Gene: Glexan_73 Start: 48290, Stop: 48463, Start Num: 6

Candidate Starts for Glexan_73:

(Start: 6 @48290 has 77 MA's), (14, 48341),

Gene: Goku_72 Start: 47369, Stop: 47542, Start Num: 6

Candidate Starts for Goku_72:

(Start: 6 @47369 has 77 MA's), (14, 47420),

Gene: GoldenSpark_78 Start: 47953, Stop: 48126, Start Num: 6

Candidate Starts for GoldenSpark_78:

(Start: 6 @47953 has 77 MA's), (14, 48004),

Gene: Goldilocks_77 Start: 47451, Stop: 47624, Start Num: 6

Candidate Starts for Goldilocks_77:

(Start: 6 @47451 has 77 MA's), (14, 47502),

Gene: GooberAzure_77 Start: 47953, Stop: 48126, Start Num: 6

Candidate Starts for GooberAzure_77:

(Start: 6 @47953 has 77 MA's), (14, 48004),

Gene: Harella_74 Start: 48806, Stop: 48979, Start Num: 6

Candidate Starts for Harella_74:

(Start: 6 @48806 has 77 MA's), (14, 48857),

Gene: Henry_72 Start: 47594, Stop: 47767, Start Num: 6

Candidate Starts for Henry_72:

(Start: 6 @47594 has 77 MA's), (14, 47645),

Gene: Highbury_73 Start: 47242, Stop: 47415, Start Num: 6

Candidate Starts for Highbury_73:

(Start: 6 @47242 has 77 MA's), (14, 47293),

Gene: Holt_79 Start: 48367, Stop: 48540, Start Num: 6

Candidate Starts for Holt_79:

(Start: 6 @48367 has 77 MA's), (14, 48418),

Gene: Hoonter_77 Start: 47953, Stop: 48126, Start Num: 6

Candidate Starts for Hoonter_77:

(Start: 6 @47953 has 77 MA's), (14, 48004),

Gene: HufflyPuff_77 Start: 48619, Stop: 48792, Start Num: 6

Candidate Starts for HufflyPuff_77:

(Start: 6 @48619 has 77 MA's), (14, 48670),

Gene: IHOP_72 Start: 47718, Stop: 47891, Start Num: 6

Candidate Starts for IHOP_72:

(Start: 6 @47718 has 77 MA's), (14, 47769),

Gene: Icee_75 Start: 47617, Stop: 47790, Start Num: 6

Candidate Starts for Icee_75:

(Start: 6 @47617 has 77 MA's), (14, 47668),

Gene: Inca_71 Start: 46243, Stop: 46416, Start Num: 6
Candidate Starts for Inca_71:
(Start: 6 @46243 has 77 MA's), (14, 46294),

Gene: Jada_101 Start: 67857, Stop: 68042, Start Num: 8
Candidate Starts for Jada_101:
(Start: 8 @67857 has 11 MA's),

Gene: JeTaime_74 Start: 48435, Stop: 48608, Start Num: 6
Candidate Starts for JeTaime_74:
(Start: 6 @48435 has 77 MA's), (14, 48486),

Gene: Kanye_71 Start: 47299, Stop: 47472, Start Num: 6
Candidate Starts for Kanye_71:
(Start: 6 @47299 has 77 MA's), (14, 47350),

Gene: Karp_97 Start: 67879, Stop: 68064, Start Num: 9
Candidate Starts for Karp_97:
(Start: 9 @67879 has 7 MA's), (17, 67951),

Gene: Kenrey_102 Start: 67572, Stop: 67757, Start Num: 8
Candidate Starts for Kenrey_102:
(Start: 8 @67572 has 11 MA's), (17, 67644),

Gene: Kimchi_78 Start: 47956, Stop: 48129, Start Num: 6
Candidate Starts for Kimchi_78:
(Start: 6 @47956 has 77 MA's), (14, 48007),

Gene: Kostya_74 Start: 47817, Stop: 47990, Start Num: 6
Candidate Starts for Kostya_74:
(Start: 6 @47817 has 77 MA's), (14, 47868),

Gene: Lilpickle_73 Start: 47169, Stop: 47342, Start Num: 6
Candidate Starts for Lilpickle_73:
(Start: 6 @47169 has 77 MA's), (14, 47220),

Gene: Limpid_93 Start: 66361, Stop: 66546, Start Num: 8
Candidate Starts for Limpid_93:
(Start: 8 @66361 has 11 MA's), (17, 66433),

Gene: MadamMonkfish_74 Start: 46893, Stop: 47066, Start Num: 6
Candidate Starts for MadamMonkfish_74:
(Start: 6 @46893 has 77 MA's), (14, 46944),

Gene: Manda_75 Start: 48755, Stop: 48928, Start Num: 6
Candidate Starts for Manda_75:
(Start: 6 @48755 has 77 MA's), (14, 48806),

Gene: Marshmallow_72 Start: 48448, Stop: 48621, Start Num: 6
Candidate Starts for Marshmallow_72:
(Start: 6 @48448 has 77 MA's), (14, 48499),

Gene: Mindy_73 Start: 46760, Stop: 46933, Start Num: 6
Candidate Starts for Mindy_73:
(Start: 6 @46760 has 77 MA's), (14, 46811),

Gene: Moab_100 Start: 69731, Stop: 69916, Start Num: 9
Candidate Starts for Moab_100:
(Start: 9 @69731 has 7 MA's), (17, 69803),

Gene: Murica_77 Start: 48619, Stop: 48792, Start Num: 6
Candidate Starts for Murica_77:
(Start: 6 @48619 has 77 MA's), (14, 48670),

Gene: Myrale_74 Start: 48313, Stop: 48486, Start Num: 6
Candidate Starts for Myrale_74:
(Start: 6 @48313 has 77 MA's), (14, 48364),

Gene: Nala_76 Start: 48177, Stop: 48350, Start Num: 6
Candidate Starts for Nala_76:
(Start: 6 @48177 has 77 MA's), (14, 48228),

Gene: NelitzaMV_72 Start: 47259, Stop: 47432, Start Num: 6
Candidate Starts for NelitzaMV_72:
(Start: 6 @47259 has 77 MA's), (14, 47310),

Gene: NiceHouse_187 Start: 105087, Stop: 105269, Start Num: 7
Candidate Starts for NiceHouse_187:
(Start: 7 @105087 has 2 MA's), (11, 105102), (15, 105138), (16, 105147), (17, 105162),

Gene: Nimrod_75 Start: 48880, Stop: 49053, Start Num: 6
Candidate Starts for Nimrod_75:
(Start: 6 @48880 has 77 MA's), (14, 48931),

Gene: NoSleep_75 Start: 47514, Stop: 47687, Start Num: 6
Candidate Starts for NoSleep_75:
(Start: 6 @47514 has 77 MA's), (14, 47565),

Gene: Nova53_186 Start: 97990, Stop: 98160, Start Num: 10
Candidate Starts for Nova53_186:
(Start: 7 @97978 has 2 MA's), (Start: 10 @97990 has 2 MA's), (16, 98038), (17, 98053), (18, 98083),

Gene: OrionPax_73 Start: 47265, Stop: 47438, Start Num: 6
Candidate Starts for OrionPax_73:
(Start: 6 @47265 has 77 MA's), (14, 47316),

Gene: Pat3_72 Start: 46423, Stop: 46596, Start Num: 6
Candidate Starts for Pat3_72:
(Start: 6 @46423 has 77 MA's), (14, 46474),

Gene: Patelgo_99 Start: 68817, Stop: 69002, Start Num: 9
Candidate Starts for Patelgo_99:
(Start: 9 @68817 has 7 MA's), (17, 68889),

Gene: Petra64142_78 Start: 49110, Stop: 49283, Start Num: 6

Candidate Starts for Petra64142_78:
(Start: 6 @49110 has 77 MA's), (14, 49161),

Gene: Phredrick_100 Start: 66672, Stop: 66857, Start Num: 8
Candidate Starts for Phredrick_100:
(Start: 8 @66672 has 11 MA's),

Gene: Porky_73 Start: 47084, Stop: 47257, Start Num: 6
Candidate Starts for Porky_73:
(Start: 6 @47084 has 77 MA's), (14, 47135),

Gene: Quallification_75 Start: 48299, Stop: 48472, Start Num: 6
Candidate Starts for Quallification_75:
(Start: 6 @48299 has 77 MA's), (14, 48350),

Gene: Rimmer_75 Start: 48004, Stop: 48177, Start Num: 6
Candidate Starts for Rimmer_75:
(Start: 6 @48004 has 77 MA's), (14, 48055),

Gene: Saints25_73 Start: 47242, Stop: 47415, Start Num: 6
Candidate Starts for Saints25_73:
(Start: 6 @47242 has 77 MA's), (14, 47293),

Gene: SeresaTree_98 Start: 67393, Stop: 67587, Start Num: 4
Candidate Starts for SeresaTree_98:
(Start: 4 @67393 has 1 MA's), (14, 67453), (17, 67480),

Gene: Sham_94 Start: 67538, Stop: 67780, Start Num: 2
Candidate Starts for Sham_94:
(Start: 2 @67538 has 2 MA's), (Start: 4 @67583 has 1 MA's), (14, 67640), (17, 67667),

Gene: ShamWow_74 Start: 48154, Stop: 48327, Start Num: 6
Candidate Starts for ShamWow_74:
(Start: 6 @48154 has 77 MA's), (14, 48205),

Gene: ShereKhan_73 Start: 48223, Stop: 48396, Start Num: 6
Candidate Starts for ShereKhan_73:
(Start: 6 @48223 has 77 MA's), (14, 48274),

Gene: Simpliphy_73 Start: 47232, Stop: 47405, Start Num: 6
Candidate Starts for Simpliphy_73:
(Start: 6 @47232 has 77 MA's), (14, 47283),

Gene: SirDuracell_73 Start: 46518, Stop: 46691, Start Num: 6
Candidate Starts for SirDuracell_73:
(Start: 6 @46518 has 77 MA's), (14, 46569),

Gene: SophKB_71 Start: 46910, Stop: 47083, Start Num: 6
Candidate Starts for SophKB_71:
(Start: 6 @46910 has 77 MA's), (14, 46961),

Gene: Sotrice96_75 Start: 47913, Stop: 48086, Start Num: 6
Candidate Starts for Sotrice96_75:

(Start: 6 @47913 has 77 MA's), (14, 47964),

Gene: SparkleGoddess_99 Start: 68222, Stop: 68407, Start Num: 9

Candidate Starts for SparkleGoddess_99:

(Start: 9 @68222 has 7 MA's), (17, 68294),

Gene: Stank_77 Start: 48171, Stop: 48344, Start Num: 6

Candidate Starts for Stank_77:

(Start: 6 @48171 has 77 MA's), (14, 48222),

Gene: Stigma_98 Start: 68230, Stop: 68415, Start Num: 9

Candidate Starts for Stigma_98:

(Start: 9 @68230 has 7 MA's), (17, 68302),

Gene: StolenFromERC_77 Start: 47953, Stop: 48126, Start Num: 6

Candidate Starts for StolenFromERC_77:

(Start: 6 @47953 has 77 MA's), (14, 48004),

Gene: StormChicken_76 Start: 48611, Stop: 48784, Start Num: 6

Candidate Starts for StormChicken_76:

(Start: 6 @48611 has 77 MA's), (14, 48662),

Gene: Sue2_54 Start: 38086, Stop: 38286, Start Num: 3

Candidate Starts for Sue2_54:

(1, 37828), (Start: 3 @38086 has 1 MA's), (Start: 10 @38131 has 2 MA's), (13, 38143),

Gene: TBrady12_77 Start: 47652, Stop: 47825, Start Num: 6

Candidate Starts for TBrady12_77:

(Start: 6 @47652 has 77 MA's), (14, 47703),

Gene: TeardropMSU_70 Start: 46900, Stop: 47073, Start Num: 6

Candidate Starts for TeardropMSU_70:

(Start: 6 @46900 has 77 MA's), (14, 46951),

Gene: Teaspoon_75 Start: 47794, Stop: 47967, Start Num: 6

Candidate Starts for Teaspoon_75:

(Start: 6 @47794 has 77 MA's), (14, 47845),

Gene: Toto_72 Start: 48154, Stop: 48327, Start Num: 6

Candidate Starts for Toto_72:

(Start: 6 @48154 has 77 MA's), (14, 48205),

Gene: Trina_197 Start: 106567, Stop: 106749, Start Num: 7

Candidate Starts for Trina_197:

(Start: 7 @106567 has 2 MA's), (12, 106591), (16, 106627), (17, 106642), (19, 106720),

Gene: Tuco_75 Start: 48662, Stop: 48835, Start Num: 6

Candidate Starts for Tuco_75:

(Start: 6 @48662 has 77 MA's), (14, 48713),

Gene: TunaTartare_97 Start: 68701, Stop: 68943, Start Num: 2

Candidate Starts for TunaTartare_97:

(Start: 2 @68701 has 2 MA's), (Start: 4 @68746 has 1 MA's), (14, 68803), (17, 68830),

Gene: Ukulele_69 Start: 47045, Stop: 47218, Start Num: 6
Candidate Starts for Ukulele_69:
(Start: 6 @47045 has 77 MA's), (14, 47096),

Gene: Westy_100 Start: 69242, Stop: 69427, Start Num: 9
Candidate Starts for Westy_100:
(Start: 9 @69242 has 7 MA's), (17, 69314),

Gene: xkcd_77 Start: 48804, Stop: 48977, Start Num: 6
Candidate Starts for xkcd_77:
(Start: 6 @48804 has 77 MA's), (14, 48855),