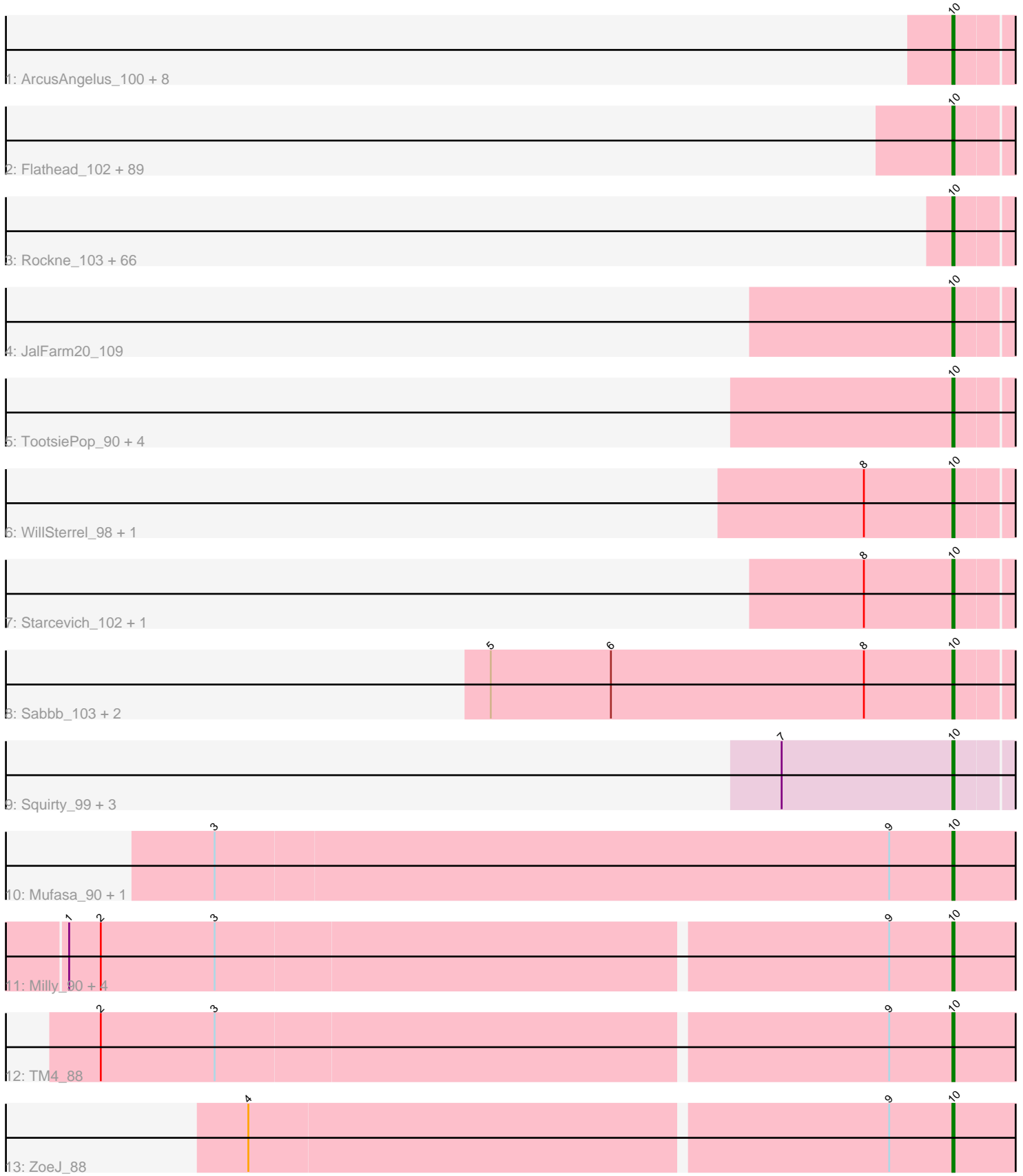


Pham 193751



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 193751 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193751 has 192 members, 8 are drafts.

Phages represented in each track:

- Track 1 : ArcusAngelus_100, Galactic_104, QuickMath_101, Che8_107, Chevrolet_104, Hades_97, MadMen_105, EleanorGeorge_104, MinionDave_98
- Track 2 : Flathead_102, Brocalys_92, CaptainTrips_102, Guppsters_95, AlpineSix_98, Llama_107, DotProduct_94, KristaRAM_108, Hlubikazi_98, DosHalletts_97, BobaPhett_102, Hamulus_100, Eish_105, Mandlovu_98, Girr_99, DLane_100, Tootsieroll_94, IMpilo_98, MilleniumForce_100, Ochi17_106, Bubbles123_94, Karhdo_95, PhesterPhotato_104, Seabastian_107, MilanaBonita_93, Phalconet_101, DeadP_100, Filuzino_100, IbOuu_96, ShowerHandel_101, Sarma624_102, Ramsey_105, Ardmore_84, Ms6_102, Coco12_101, Mozy_104, Rita_100, Philus_104, Seagreen_101, Chuckly_97, Aubs_100, LastJedi_91, Jinglebell_107, LittleShirley_108, Pippy_98, Firehouse51_94, Cerasum_99, Bipolar_102, Batiatus_100, SG4_101, Cabrinians_97, Burwell21_94, Lizziana_101, OfUltron_107, Mutaforma13_101, Mova_102, Kingsley_109, Royals2015_104, Hegedechwinu_108, VRedHorse_101, Oksu_104, XFactor_91, Taj_106, Strokeseat_98, Clifton_92, James_104, Maravista_97, SwagPiggett_102, Priscilla_101, NormanBulbieJr_98, Velveteen_97, BigPhil_97, Blexus_97, MisterCuddles_100, Martik_99, Wee_103, Melissauren88_90, Phanphagia_105, Whatsapiecost_94, Cornucopia_100, Koella_93, Kenuha5_92, Fruitloop_98, Tweety_101, Emma_105, Zerg_98, Dante_98, Zizzle_103, Akhila_94, Shauna1_102
- Track 3 : Rockne_103, RitaG_99, LilMoolah_103, BuzzLyseyear_107, OgoPogo_104, BodEinwohner17_110, Mattes_101, Gorge_99, Saal_98, Madiba_99, Moonbeam_103, Donkeykong_106, Empress_100, Daenerys_98, Nitzel_94, Juice456_99, Latretium_103, Sassafra_102, Inventum_98, Plumbus_99, RedBird_101, ByChance_91, Alexphander_101, Fancypants_107, Quico_109, DillTech15_106, KingMidas_100, ShiLan_103, Nimbo_92, Florinda_112, Dorothy_101, Doomphist_105, Lij_95, JoeyJr_103, Leperchaun_102, PHappiness_100, StAnnes_104, BlueCrab_103, Girafales_109, Radiance_98, OldBen_97, Deb65_93, DRBy19_100, Spoonbill_100, Jarcob_103, Spartacus_107, Krakatau_93, Totinger_103, Poenanya_104, Gandolph_100, TDanisky_108, Minnie_95, ShroomBoi_98, GUmbie_99, Pollywog_102, Polka14_104, Nivrat_100, Drago_99, PMC_99, Geralt_93, DaddyRickover_102, Yorick_96, Scottish_100, Job42_101, Estave1_108, Sparkdehliyl_107, Rialto_105
- Track 4 : JalFarm20_109
- Track 5 : TootsiePop_90, Misha28_90, Awesomesauce_91, Piper2020_95, Beakin_92
- Track 6 : WillSterrel_98, IrishSherpFalk_100

- Track 7 : Starcevich_102, Stap_95
- Track 8 : Sabbb_103, Crumble_95, OlympiaSaint_104
- Track 9 : Squirty_99, ChickenDinner_94, DocMcStuffins_88, MulchSalad_102
- Track 10 : Mufasa_90, BoostSeason_90
- Track 11 : Milly_90, Strobilo_91, DismalFunk_90, DismalStressor_90, Findley_90
- Track 12 : TM4_88
- Track 13 : ZoeJ_88

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

The start number called the most often in the published annotations is 10, it was called in 184 of the 184 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_94, Alexphander_101, AlpineSix_98, ArcusAngelus_100, Ardmore_84, Aubs_100, Awesomesauce_91, Batiatus_100, Beakin_92, BigPhil_97, Bipolar_102, Blexus_97, BlueCrab_103, BobaPhett_102, BodEinwohner17_110, BoostSeason_90, Brocalys_92, Bubbles123_94, Burwell21_94, BuzzLyseyear_107, ByChance_91, Cabrinians_97, CaptainTrips_102, Cerasum_99, Che8_107, Chevrolet_104, ChickenDinner_94, Chuckly_97, Clifton_92, Coco12_101, Cornucopia_100, Crumble_95, DLane_100, DRBy19_100, DaddyRickover_102, Daenerys_98, Dante_98, DeadP_100, Deb65_93, DillTech15_106, DismalFunk_90, DismalStressor_90, DocMcStuffins_88, Donkeykong_106, Doomphist_105, Dorothy_101, DosHalletts_97, DotProduct_94, Drago_99, Eish_105, EleanorGeorge_104, Emma_105, Empress_100, Estave1_108, Fancypants_107, Filuzino_100, Findley_90, Firehouse51_94, Flathead_102, Florinda_112, Fruitloop_98, GUmbe_99, Galactic_104, Gandolph_100, Geralt_93, Girafales_109, Girr_99, Gorge_99, Guppsters_95, Hades_97, Hamulus_100, Hegedechwinu_108, Hlubikazi_98, IMpilo_98, IbOuu_96, Inventum_98, IrishSherpFalk_100, JalFarm20_109, James_104, Jarcob_103, Jinglebell_107, Job42_101, JoeyJr_103, Juice456_99, Karhdo_95, Kenuha5_92, KingMidas_100, Kingsley_109, Koella_93, Krakatau_93, KristaRAM_108, LastJedi_91, Latretium_103, Leperchaun_102, LilMoolah_103, LittleShirley_108, Lizziana_101, Llama_107, Llij_95, MadMen_105, Madiba_99, Mandlovu_98, Maravista_97, Martik_99, Mattes_101, Melissauren88_90, MilanaBonita_93, MilleniumForce_100, Milly_90, MinionDave_98, Minnie_95, Misha28_90, MisterCuddles_100, Moonbeam_103, Mova_102, Mozy_104, Ms6_102, Mufasa_90, MulchSalad_102, Mutaforma13_101, Nimbo_92, Nitzel_94, Nivrat_100, NormanBulbieJr_98, Ochi17_106, OfUltron_107, Ogotogo_104, Oksu_104, OldBen_97, OlympiaSaint_104, PHappiness_100, PMC_99, Phalconet_101, Phanphagia_105, PhesterPotato_104, Philus_104, Piper2020_95, Pippy_98, Plumbus_99, Poenanya_104, Polka14_104, Pollywog_102, Priscilla_101, QuickMath_101, Quico_109, Radiance_98, Ramsey_105, RedBird_101, Rialto_105, RitaG_99, Rita_100, Rockne_103, Royals2015_104, SG4_101, Saal_98, Sabbb_103, Sarma624_102, Sassafras_102, Scottish_100, Seabastian_107, Seagreen_101, Shauna1_102, ShiLan_103, ShowerHandel_101, ShroomBoi_98, Sparkdehilly_107, Spartacus_107, Spoonbill_100, Squirty_99, StAnnes_104, Stap_95, Starcevich_102, Strobilo_91, Strokeseat_98, SwagPiggett_102, TDanisky_108, TM4_88, Taj_106, TootsiePop_90, Tootsieroll_94, Totinger_103, Tweety_101, VRedHorse_101, Velveteen_97, Wee_103, Whatsapiecost_94, WillSterrel_98, XFactor_91, Yorick_96, Zerg_98, Zizzle_103, ZoeJ_88,

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 10:

- Found in 192 of 192 (100.0%) of genes in pham
- Manual Annotations of this start: 184 of 184
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Akhila_94 (F1), Alexphander_101 (F1), AlpineSix_98 (F1), ArcusAngelus_100 (F1), Ardmore_84 (F1), Aubs_100 (F1), Awesomesauce_91 (F1), Batiatus_100 (F1), Beakin_92 (F1), BigPhil_97 (F1), Bipolar_102 (F1), Blexus_97 (F1), BlueCrab_103 (F1), BobaPhett_102 (F1), BodEinwohner17_110 (F1), BoostSeason_90 (K2), Brocalys_92 (F1), Bubbles123_94 (F1), Burwell21_94 (F1), BuzzLyseyear_107 (F1), ByChance_91 (F1), Cabrinians_97 (F1), CaptainTrips_102 (F1), Cerasum_99 (F1), Che8_107 (F1), Chevrolet_104 (F1), ChickenDinner_94 (F1), Chuckly_97 (F1), Clifton_92 (F1), Coco12_101 (F1), Cornucopia_100 (F1), Crumble_95 (F1), DLane_100 (F1), DRBy19_100 (F1), DaddyRickover_102 (F1), Daenerys_98 (F1), Dante_98 (F1), DeadP_100 (F1), Deb65_93 (F1), DillTech15_106 (F1), DismalFunk_90 (K2), DismalStressor_90 (K2), DocMcStuffins_88 (F1), Donkeykong_106 (F1), Doomphist_105 (F1), Dorothy_101 (F1), DosHalletts_97 (F1), DotProduct_94 (F1), Drago_99 (F1), Eish_105 (F1), EleanorGeorge_104 (F1), Emma_105 (F1), Empress_100 (F1), Estave1_108 (F1), Fancypants_107 (F1), Filuzino_100 (F1), Findley_90 (K2), Firehouse51_94 (F1), Flathead_102 (F1), Florinda_112 (F1), Fruitloop_98 (F1), GUmbie_99 (F1), Galactic_104 (F1), Gandalph_100 (F1), Geralt_93 (F1), Girafales_109 (F1), Girr_99 (F1), Gorge_99 (F1), Guppsters_95 (F1), Hades_97 (F1), Hamulus_100 (F1), Hegedechwinu_108 (F1), Hlubikazi_98 (F1), IMpilo_98 (F1), IbOuu_96 (F1), Inventum_98 (F1), IrishSherpFalk_100 (F1), JalFarm20_109 (F1), James_104 (F1), Jarcob_103 (F1), Jinglebell_107 (F1), Job42_101 (F1), JoeyJr_103 (F1), Juice456_99 (F1), Karhdo_95 (F1), Kenuha5_92 (F1), KingMidas_100 (F1), Kingsley_109 (F1), Koella_93 (F1), Krakatau_93 (F1), KristaRAM_108 (F1), LastJedi_91 (F1), Latretium_103 (F1), Leperchaun_102 (F1), LilMoolah_103 (F1), LittleShirley_108 (F1), Lizziana_101 (F1), Llama_107 (F1), Llij_95 (F1), MadMen_105 (F1), Madiba_99 (F1), Mandlovu_98 (F1), Maravista_97 (F1), Martik_99 (F1), Mattes_101 (F1), Melissauren88_90 (F1), MilanaBonita_93 (F1), MilleniumForce_100 (F1), Milly_90 (K2), MinionDave_98 (F1), Minnie_95 (F1), Misha28_90 (F1), MisterCuddles_100 (F1), Moonbeam_103 (F1), Mova_102 (F1), Mozy_104 (F1), Ms6_102 (F1), Mufasa_90 (K2), MulchSalad_102 (F), Mutaforma13_101 (F1), Nimbo_92 (F1), Nitzel_94 (F1), Nivrat_100 (F1), NormanBulbieJr_98 (F1), Ochi17_106 (F1), OfUltron_107 (F1), Ogopogo_104 (F1), Oksu_104 (F1), OldBen_97 (F1), OlympiaSaint_104 (F1), PHappiness_100 (F1), PMC_99 (F1), Phalconet_101 (F1), Phanphagia_105 (F1), PhesterPhotato_104 (F1), Philus_104 (F1), Piper2020_95 (F1), Pippy_98 (F1), Plumbus_99 (F1), Poenanya_104 (F1), Polka14_104 (F1), Pollywog_102 (F1), Priscilla_101 (F1), QuickMath_101 (F1), Quico_109 (F1), Radiance_98 (F1), Ramsey_105 (F1), RedBird_101 (F1), Rialto_105 (F1), RitaG_99 (F1), Rita_100 (F1), Rockne_103 (F1), Royals2015_104 (F1), SG4_101 (F1), Saal_98 (F1), Sabbb_103 (F1), Sarma624_102 (F1), Sassafra_102 (F1), Scottish_100 (F1), Seabastian_107 (F1), Seagreen_101 (F1), Shauna1_102

(F1), ShiLan_103 (F1), ShowerHandel_101 (F1), ShroomBoi_98 (F1), Sparkdehlily_107 (F1), Spartacus_107 (F1), Spoonbill_100 (F1), Squirty_99 (F3), StAnnes_104 (F1), Stap_95 (F1), Starceovich_102 (F1), Strobilo_91 (K2), Strokeseat_98 (F1), SwagPigglett_102 (F1), TDanisky_108 (F1), TM4_88 (K2), Taj_106 (F1), TootsiePop_90 (F1), Tootsieroll_94 (F1), Totinger_103 (F1), Tweety_101 (F1), VRedHorse_101 (F1), Velveteen_97 (F1), Wee_103 (F1), Whatsapiecost_94 (F1), WillSterrel_98 (F1), XFactor_91 (F1), Yorick_96 (F1), Zerg_98 (F1), Zizzle_103 (F1), ZoeJ_88 (K2),

Summary by clusters:

There are 4 clusters represented in this pham: F1, F, F3, K2,

Info for manual annotations of cluster F1:

- Start number 10 was manually annotated 174 times for cluster F1.

Info for manual annotations of cluster F3:

- Start number 10 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster K2:

- Start number 10 was manually annotated 9 times for cluster K2.

Gene Information:

Gene: Akhila_94 Start: 52864, Stop: 53025, Start Num: 10

Candidate Starts for Akhila_94:

(Start: 10 @52864 has 184 MA's),

Gene: Alexphander_101 Start: 55198, Stop: 55359, Start Num: 10

Candidate Starts for Alexphander_101:

(Start: 10 @55198 has 184 MA's),

Gene: AlpineSix_98 Start: 53582, Stop: 53743, Start Num: 10

Candidate Starts for AlpineSix_98:

(Start: 10 @53582 has 184 MA's),

Gene: ArcusAngelus_100 Start: 55168, Stop: 55329, Start Num: 10

Candidate Starts for ArcusAngelus_100:

(Start: 10 @55168 has 184 MA's),

Gene: Ardmore_84 Start: 48753, Stop: 48914, Start Num: 10

Candidate Starts for Ardmore_84:

(Start: 10 @48753 has 184 MA's),

Gene: Aubs_100 Start: 55755, Stop: 55916, Start Num: 10

Candidate Starts for Aubs_100:

(Start: 10 @55755 has 184 MA's),

Gene: Awesomesauce_91 Start: 54238, Stop: 54399, Start Num: 10

Candidate Starts for Awesomesauce_91:

(Start: 10 @54238 has 184 MA's),

Gene: Batiatus_100 Start: 54303, Stop: 54464, Start Num: 10

Candidate Starts for Batiatus_100:

(Start: 10 @54303 has 184 MA's),

Gene: Beakin_92 Start: 51276, Stop: 51437, Start Num: 10

Candidate Starts for Beakin_92:

(Start: 10 @51276 has 184 MA's),

Gene: BigPhil_97 Start: 51095, Stop: 51256, Start Num: 10

Candidate Starts for BigPhil_97:

(Start: 10 @51095 has 184 MA's),

Gene: Bipolar_102 Start: 56072, Stop: 56233, Start Num: 10

Candidate Starts for Bipolar_102:

(Start: 10 @56072 has 184 MA's),

Gene: Blexus_97 Start: 54682, Stop: 54843, Start Num: 10

Candidate Starts for Blexus_97:

(Start: 10 @54682 has 184 MA's),

Gene: BlueCrab_103 Start: 55675, Stop: 55836, Start Num: 10

Candidate Starts for BlueCrab_103:

(Start: 10 @55675 has 184 MA's),

Gene: BobaPhett_102 Start: 56361, Stop: 56522, Start Num: 10

Candidate Starts for BobaPhett_102:

(Start: 10 @56361 has 184 MA's),

Gene: BodEinwohner17_110 Start: 56731, Stop: 56892, Start Num: 10

Candidate Starts for BodEinwohner17_110:

(Start: 10 @56731 has 184 MA's),

Gene: BoostSeason_90 Start: 56740, Stop: 56907, Start Num: 10

Candidate Starts for BoostSeason_90:

(3, 56392), (9, 56710), (Start: 10 @56740 has 184 MA's),

Gene: Brocalys_92 Start: 51840, Stop: 52001, Start Num: 10

Candidate Starts for Brocalys_92:

(Start: 10 @51840 has 184 MA's),

Gene: Bubbles123_94 Start: 54115, Stop: 54276, Start Num: 10

Candidate Starts for Bubbles123_94:

(Start: 10 @54115 has 184 MA's),

Gene: Burwell21_94 Start: 54126, Stop: 54287, Start Num: 10

Candidate Starts for Burwell21_94:

(Start: 10 @54126 has 184 MA's),

Gene: BuzzLyseyear_107 Start: 56886, Stop: 57047, Start Num: 10

Candidate Starts for BuzzLyseyear_107:

(Start: 10 @56886 has 184 MA's),

Gene: ByChance_91 Start: 50198, Stop: 50359, Start Num: 10
Candidate Starts for ByChance_91:
(Start: 10 @50198 has 184 MA's),

Gene: Cabrinians_97 Start: 53761, Stop: 53922, Start Num: 10
Candidate Starts for Cabrinians_97:
(Start: 10 @53761 has 184 MA's),

Gene: CaptainTrips_102 Start: 53941, Stop: 54102, Start Num: 10
Candidate Starts for CaptainTrips_102:
(Start: 10 @53941 has 184 MA's),

Gene: Cerasum_99 Start: 51113, Stop: 51274, Start Num: 10
Candidate Starts for Cerasum_99:
(Start: 10 @51113 has 184 MA's),

Gene: Che8_107 Start: 55993, Stop: 56154, Start Num: 10
Candidate Starts for Che8_107:
(Start: 10 @55993 has 184 MA's),

Gene: Chevrolet_104 Start: 55169, Stop: 55330, Start Num: 10
Candidate Starts for Chevrolet_104:
(Start: 10 @55169 has 184 MA's),

Gene: ChickenDinner_94 Start: 54002, Stop: 54163, Start Num: 10
Candidate Starts for ChickenDinner_94:
(7, 53921), (Start: 10 @54002 has 184 MA's),

Gene: Chuckly_97 Start: 50983, Stop: 51144, Start Num: 10
Candidate Starts for Chuckly_97:
(Start: 10 @50983 has 184 MA's),

Gene: Clifton_92 Start: 52815, Stop: 52976, Start Num: 10
Candidate Starts for Clifton_92:
(Start: 10 @52815 has 184 MA's),

Gene: Coco12_101 Start: 55170, Stop: 55331, Start Num: 10
Candidate Starts for Coco12_101:
(Start: 10 @55170 has 184 MA's),

Gene: Cornucopia_100 Start: 52241, Stop: 52402, Start Num: 10
Candidate Starts for Cornucopia_100:
(Start: 10 @52241 has 184 MA's),

Gene: Crumble_95 Start: 50509, Stop: 50670, Start Num: 10
Candidate Starts for Crumble_95:
(5, 50290), (6, 50347), (8, 50467), (Start: 10 @50509 has 184 MA's),

Gene: DLane_100 Start: 55223, Stop: 55384, Start Num: 10
Candidate Starts for DLane_100:
(Start: 10 @55223 has 184 MA's),

Gene: DRBy19_100 Start: 55442, Stop: 55603, Start Num: 10
Candidate Starts for DRBy19_100:
(Start: 10 @55442 has 184 MA's),

Gene: DaddyRickover_102 Start: 54925, Stop: 55086, Start Num: 10
Candidate Starts for DaddyRickover_102:
(Start: 10 @54925 has 184 MA's),

Gene: Daenerys_98 Start: 55092, Stop: 55253, Start Num: 10
Candidate Starts for Daenerys_98:
(Start: 10 @55092 has 184 MA's),

Gene: Dante_98 Start: 55573, Stop: 55734, Start Num: 10
Candidate Starts for Dante_98:
(Start: 10 @55573 has 184 MA's),

Gene: DeadP_100 Start: 52801, Stop: 52962, Start Num: 10
Candidate Starts for DeadP_100:
(Start: 10 @52801 has 184 MA's),

Gene: Deb65_93 Start: 52816, Stop: 52977, Start Num: 10
Candidate Starts for Deb65_93:
(Start: 10 @52816 has 184 MA's),

Gene: DillTech15_106 Start: 54398, Stop: 54559, Start Num: 10
Candidate Starts for DillTech15_106:
(Start: 10 @54398 has 184 MA's),

Gene: DismalFunk_90 Start: 56788, Stop: 56955, Start Num: 10
Candidate Starts for DismalFunk_90:
(1, 56377), (2, 56392), (3, 56446), (9, 56758), (Start: 10 @56788 has 184 MA's),

Gene: DismalStressor_90 Start: 56788, Stop: 56955, Start Num: 10
Candidate Starts for DismalStressor_90:
(1, 56377), (2, 56392), (3, 56446), (9, 56758), (Start: 10 @56788 has 184 MA's),

Gene: DocMcStuffins_88 Start: 55632, Stop: 55793, Start Num: 10
Candidate Starts for DocMcStuffins_88:
(7, 55551), (Start: 10 @55632 has 184 MA's),

Gene: Donkeykong_106 Start: 56558, Stop: 56719, Start Num: 10
Candidate Starts for Donkeykong_106:
(Start: 10 @56558 has 184 MA's),

Gene: Doomphist_105 Start: 55745, Stop: 55906, Start Num: 10
Candidate Starts for Doomphist_105:
(Start: 10 @55745 has 184 MA's),

Gene: Dorothy_101 Start: 55914, Stop: 56075, Start Num: 10
Candidate Starts for Dorothy_101:
(Start: 10 @55914 has 184 MA's),

Gene: DosHalletts_97 Start: 54563, Stop: 54724, Start Num: 10

Candidate Starts for DosHalletts_97:
(Start: 10 @54563 has 184 MA's),

Gene: DotProduct_94 Start: 51930, Stop: 52091, Start Num: 10
Candidate Starts for DotProduct_94:
(Start: 10 @51930 has 184 MA's),

Gene: Drago_99 Start: 51641, Stop: 51802, Start Num: 10
Candidate Starts for Drago_99:
(Start: 10 @51641 has 184 MA's),

Gene: Eish_105 Start: 55239, Stop: 55400, Start Num: 10
Candidate Starts for Eish_105:
(Start: 10 @55239 has 184 MA's),

Gene: EleanorGeorge_104 Start: 56559, Stop: 56720, Start Num: 10
Candidate Starts for EleanorGeorge_104:
(Start: 10 @56559 has 184 MA's),

Gene: Emma_105 Start: 53507, Stop: 53668, Start Num: 10
Candidate Starts for Emma_105:
(Start: 10 @53507 has 184 MA's),

Gene: Empress_100 Start: 54008, Stop: 54169, Start Num: 10
Candidate Starts for Empress_100:
(Start: 10 @54008 has 184 MA's),

Gene: Estave1_108 Start: 57801, Stop: 57962, Start Num: 10
Candidate Starts for Estave1_108:
(Start: 10 @57801 has 184 MA's),

Gene: Fancypants_107 Start: 57307, Stop: 57468, Start Num: 10
Candidate Starts for Fancypants_107:
(Start: 10 @57307 has 184 MA's),

Gene: Filuzino_100 Start: 55918, Stop: 56079, Start Num: 10
Candidate Starts for Filuzino_100:
(Start: 10 @55918 has 184 MA's),

Gene: Findley_90 Start: 56807, Stop: 56974, Start Num: 10
Candidate Starts for Findley_90:
(1, 56396), (2, 56411), (3, 56465), (9, 56777), (Start: 10 @56807 has 184 MA's),

Gene: Firehouse51_94 Start: 54735, Stop: 54896, Start Num: 10
Candidate Starts for Firehouse51_94:
(Start: 10 @54735 has 184 MA's),

Gene: Flathead_102 Start: 54239, Stop: 54400, Start Num: 10
Candidate Starts for Flathead_102:
(Start: 10 @54239 has 184 MA's),

Gene: Florinda_112 Start: 56324, Stop: 56485, Start Num: 10
Candidate Starts for Florinda_112:

(Start: 10 @56324 has 184 MA's),

Gene: Fruitloop_98 Start: 55083, Stop: 55244, Start Num: 10

Candidate Starts for Fruitloop_98:

(Start: 10 @55083 has 184 MA's),

Gene: GUmble_99 Start: 53944, Stop: 54105, Start Num: 10

Candidate Starts for GUmble_99:

(Start: 10 @53944 has 184 MA's),

Gene: Galactic_104 Start: 54420, Stop: 54581, Start Num: 10

Candidate Starts for Galactic_104:

(Start: 10 @54420 has 184 MA's),

Gene: Gandolph_100 Start: 52050, Stop: 52211, Start Num: 10

Candidate Starts for Gandolph_100:

(Start: 10 @52050 has 184 MA's),

Gene: Geralt_93 Start: 52814, Stop: 52975, Start Num: 10

Candidate Starts for Geralt_93:

(Start: 10 @52814 has 184 MA's),

Gene: Girafales_109 Start: 55929, Stop: 56090, Start Num: 10

Candidate Starts for Girafales_109:

(Start: 10 @55929 has 184 MA's),

Gene: Girr_99 Start: 54813, Stop: 54974, Start Num: 10

Candidate Starts for Girr_99:

(Start: 10 @54813 has 184 MA's),

Gene: Gorge_99 Start: 55034, Stop: 55195, Start Num: 10

Candidate Starts for Gorge_99:

(Start: 10 @55034 has 184 MA's),

Gene: Guppsters_95 Start: 51924, Stop: 52085, Start Num: 10

Candidate Starts for Guppsters_95:

(Start: 10 @51924 has 184 MA's),

Gene: Hades_97 Start: 51586, Stop: 51747, Start Num: 10

Candidate Starts for Hades_97:

(Start: 10 @51586 has 184 MA's),

Gene: Hamulus_100 Start: 53768, Stop: 53929, Start Num: 10

Candidate Starts for Hamulus_100:

(Start: 10 @53768 has 184 MA's),

Gene: Hegedechwinu_108 Start: 54304, Stop: 54465, Start Num: 10

Candidate Starts for Hegedechwinu_108:

(Start: 10 @54304 has 184 MA's),

Gene: Hlubikazi_98 Start: 52547, Stop: 52708, Start Num: 10

Candidate Starts for Hlubikazi_98:

(Start: 10 @52547 has 184 MA's),

Gene: IMpilo_98 Start: 52546, Stop: 52707, Start Num: 10
Candidate Starts for IMpilo_98:
(Start: 10 @52546 has 184 MA's),

Gene: lbOuu_96 Start: 51910, Stop: 52071, Start Num: 10
Candidate Starts for lbOuu_96:
(Start: 10 @51910 has 184 MA's),

Gene: Inventum_98 Start: 54102, Stop: 54263, Start Num: 10
Candidate Starts for Inventum_98:
(Start: 10 @54102 has 184 MA's),

Gene: IrishSherpFalk_100 Start: 54437, Stop: 54598, Start Num: 10
Candidate Starts for IrishSherpFalk_100:
(8, 54395), (Start: 10 @54437 has 184 MA's),

Gene: JalFarm20_109 Start: 56245, Stop: 56406, Start Num: 10
Candidate Starts for JalFarm20_109:
(Start: 10 @56245 has 184 MA's),

Gene: James_104 Start: 56416, Stop: 56577, Start Num: 10
Candidate Starts for James_104:
(Start: 10 @56416 has 184 MA's),

Gene: Jarcob_103 Start: 56015, Stop: 56176, Start Num: 10
Candidate Starts for Jarcob_103:
(Start: 10 @56015 has 184 MA's),

Gene: Jinglebell_107 Start: 55692, Stop: 55853, Start Num: 10
Candidate Starts for Jinglebell_107:
(Start: 10 @55692 has 184 MA's),

Gene: Job42_101 Start: 56590, Stop: 56751, Start Num: 10
Candidate Starts for Job42_101:
(Start: 10 @56590 has 184 MA's),

Gene: JoeyJr_103 Start: 56010, Stop: 56171, Start Num: 10
Candidate Starts for JoeyJr_103:
(Start: 10 @56010 has 184 MA's),

Gene: Juice456_99 Start: 53720, Stop: 53881, Start Num: 10
Candidate Starts for Juice456_99:
(Start: 10 @53720 has 184 MA's),

Gene: Karhdo_95 Start: 52179, Stop: 52340, Start Num: 10
Candidate Starts for Karhdo_95:
(Start: 10 @52179 has 184 MA's),

Gene: Kenuha5_92 Start: 53592, Stop: 53753, Start Num: 10
Candidate Starts for Kenuha5_92:
(Start: 10 @53592 has 184 MA's),

Gene: KingMidas_100 Start: 54239, Stop: 54400, Start Num: 10
Candidate Starts for KingMidas_100:
(Start: 10 @54239 has 184 MA's),

Gene: Kingsley_109 Start: 57777, Stop: 57938, Start Num: 10
Candidate Starts for Kingsley_109:
(Start: 10 @57777 has 184 MA's),

Gene: Koella_93 Start: 51178, Stop: 51339, Start Num: 10
Candidate Starts for Koella_93:
(Start: 10 @51178 has 184 MA's),

Gene: Krakatau_93 Start: 50137, Stop: 50298, Start Num: 10
Candidate Starts for Krakatau_93:
(Start: 10 @50137 has 184 MA's),

Gene: KristaRAM_108 Start: 55500, Stop: 55661, Start Num: 10
Candidate Starts for KristaRAM_108:
(Start: 10 @55500 has 184 MA's),

Gene: LastJedi_91 Start: 52235, Stop: 52396, Start Num: 10
Candidate Starts for LastJedi_91:
(Start: 10 @52235 has 184 MA's),

Gene: Latretium_103 Start: 55281, Stop: 55442, Start Num: 10
Candidate Starts for Latretium_103:
(Start: 10 @55281 has 184 MA's),

Gene: Leperchaun_102 Start: 55244, Stop: 55405, Start Num: 10
Candidate Starts for Leperchaun_102:
(Start: 10 @55244 has 184 MA's),

Gene: LilMoolah_103 Start: 55215, Stop: 55376, Start Num: 10
Candidate Starts for LilMoolah_103:
(Start: 10 @55215 has 184 MA's),

Gene: LittleShirley_108 Start: 55612, Stop: 55773, Start Num: 10
Candidate Starts for LittleShirley_108:
(Start: 10 @55612 has 184 MA's),

Gene: Lizziana_101 Start: 55483, Stop: 55644, Start Num: 10
Candidate Starts for Lizziana_101:
(Start: 10 @55483 has 184 MA's),

Gene: Llama_107 Start: 55335, Stop: 55496, Start Num: 10
Candidate Starts for Llama_107:
(Start: 10 @55335 has 184 MA's),

Gene: Llij_95 Start: 53166, Stop: 53327, Start Num: 10
Candidate Starts for Llij_95:
(Start: 10 @53166 has 184 MA's),

Gene: MadMen_105 Start: 54834, Stop: 54995, Start Num: 10

Candidate Starts for MadMen_105:
(Start: 10 @54834 has 184 MA's),

Gene: Madiba_99 Start: 53523, Stop: 53684, Start Num: 10
Candidate Starts for Madiba_99:
(Start: 10 @53523 has 184 MA's),

Gene: Mandlovu_98 Start: 52489, Stop: 52650, Start Num: 10
Candidate Starts for Mandlovu_98:
(Start: 10 @52489 has 184 MA's),

Gene: Maravista_97 Start: 56143, Stop: 56304, Start Num: 10
Candidate Starts for Maravista_97:
(Start: 10 @56143 has 184 MA's),

Gene: Martik_99 Start: 55946, Stop: 56107, Start Num: 10
Candidate Starts for Martik_99:
(Start: 10 @55946 has 184 MA's),

Gene: Mattes_101 Start: 55152, Stop: 55313, Start Num: 10
Candidate Starts for Mattes_101:
(Start: 10 @55152 has 184 MA's),

Gene: Melissauren88_90 Start: 50968, Stop: 51129, Start Num: 10
Candidate Starts for Melissauren88_90:
(Start: 10 @50968 has 184 MA's),

Gene: MilanaBonita_93 Start: 52864, Stop: 53025, Start Num: 10
Candidate Starts for MilanaBonita_93:
(Start: 10 @52864 has 184 MA's),

Gene: MilleniumForce_100 Start: 54671, Stop: 54832, Start Num: 10
Candidate Starts for MilleniumForce_100:
(Start: 10 @54671 has 184 MA's),

Gene: Milly_90 Start: 56870, Stop: 57037, Start Num: 10
Candidate Starts for Milly_90:
(1, 56459), (2, 56474), (3, 56528), (9, 56840), (Start: 10 @56870 has 184 MA's),

Gene: MinionDave_98 Start: 54626, Stop: 54787, Start Num: 10
Candidate Starts for MinionDave_98:
(Start: 10 @54626 has 184 MA's),

Gene: Minnie_95 Start: 55564, Stop: 55725, Start Num: 10
Candidate Starts for Minnie_95:
(Start: 10 @55564 has 184 MA's),

Gene: Misha28_90 Start: 54937, Stop: 55098, Start Num: 10
Candidate Starts for Misha28_90:
(Start: 10 @54937 has 184 MA's),

Gene: MisterCuddles_100 Start: 54813, Stop: 54974, Start Num: 10
Candidate Starts for MisterCuddles_100:

(Start: 10 @54813 has 184 MA's),

Gene: Moonbeam_103 Start: 55059, Stop: 55220, Start Num: 10

Candidate Starts for Moonbeam_103:

(Start: 10 @55059 has 184 MA's),

Gene: Mova_102 Start: 54601, Stop: 54762, Start Num: 10

Candidate Starts for Mova_102:

(Start: 10 @54601 has 184 MA's),

Gene: Mozy_104 Start: 54236, Stop: 54397, Start Num: 10

Candidate Starts for Mozy_104:

(Start: 10 @54236 has 184 MA's),

Gene: Ms6_102 Start: 50859, Stop: 51020, Start Num: 10

Candidate Starts for Ms6_102:

(Start: 10 @50859 has 184 MA's),

Gene: Mufasa_90 Start: 56727, Stop: 56894, Start Num: 10

Candidate Starts for Mufasa_90:

(3, 56379), (9, 56697), (Start: 10 @56727 has 184 MA's),

Gene: MulchSalad_102 Start: 55492, Stop: 55653, Start Num: 10

Candidate Starts for MulchSalad_102:

(7, 55411), (Start: 10 @55492 has 184 MA's),

Gene: Mutaforma13_101 Start: 54270, Stop: 54431, Start Num: 10

Candidate Starts for Mutaforma13_101:

(Start: 10 @54270 has 184 MA's),

Gene: Nimbo_92 Start: 52816, Stop: 52977, Start Num: 10

Candidate Starts for Nimbo_92:

(Start: 10 @52816 has 184 MA's),

Gene: Nitzel_94 Start: 51429, Stop: 51590, Start Num: 10

Candidate Starts for Nitzel_94:

(Start: 10 @51429 has 184 MA's),

Gene: Nivrat_100 Start: 55088, Stop: 55249, Start Num: 10

Candidate Starts for Nivrat_100:

(Start: 10 @55088 has 184 MA's),

Gene: NormanBulbieJr_98 Start: 55192, Stop: 55353, Start Num: 10

Candidate Starts for NormanBulbieJr_98:

(Start: 10 @55192 has 184 MA's),

Gene: Ochi17_106 Start: 54930, Stop: 55091, Start Num: 10

Candidate Starts for Ochi17_106:

(Start: 10 @54930 has 184 MA's),

Gene: OfUltron_107 Start: 55479, Stop: 55640, Start Num: 10

Candidate Starts for OfUltron_107:

(Start: 10 @55479 has 184 MA's),

Gene: Ogotogo_104 Start: 53421, Stop: 53582, Start Num: 10
Candidate Starts for Ogotogo_104:
(Start: 10 @53421 has 184 MA's),

Gene: Oksu_104 Start: 56569, Stop: 56730, Start Num: 10
Candidate Starts for Oksu_104:
(Start: 10 @56569 has 184 MA's),

Gene: OldBen_97 Start: 54208, Stop: 54369, Start Num: 10
Candidate Starts for OldBen_97:
(Start: 10 @54208 has 184 MA's),

Gene: OlympiaSaint_104 Start: 55382, Stop: 55543, Start Num: 10
Candidate Starts for OlympiaSaint_104:
(5, 55163), (6, 55220), (8, 55340), (Start: 10 @55382 has 184 MA's),

Gene: PHappiness_100 Start: 55037, Stop: 55198, Start Num: 10
Candidate Starts for PHappiness_100:
(Start: 10 @55037 has 184 MA's),

Gene: PMC_99 Start: 53252, Stop: 53413, Start Num: 10
Candidate Starts for PMC_99:
(Start: 10 @53252 has 184 MA's),

Gene: Phalconet_101 Start: 54261, Stop: 54422, Start Num: 10
Candidate Starts for Phalconet_101:
(Start: 10 @54261 has 184 MA's),

Gene: Phanphagia_105 Start: 56016, Stop: 56177, Start Num: 10
Candidate Starts for Phanphagia_105:
(Start: 10 @56016 has 184 MA's),

Gene: PhesterPhotato_104 Start: 54235, Stop: 54396, Start Num: 10
Candidate Starts for PhesterPhotato_104:
(Start: 10 @54235 has 184 MA's),

Gene: Philus_104 Start: 56323, Stop: 56484, Start Num: 10
Candidate Starts for Philus_104:
(Start: 10 @56323 has 184 MA's),

Gene: Piper2020_95 Start: 55185, Stop: 55346, Start Num: 10
Candidate Starts for Piper2020_95:
(Start: 10 @55185 has 184 MA's),

Gene: Pippy_98 Start: 53463, Stop: 53624, Start Num: 10
Candidate Starts for Pippy_98:
(Start: 10 @53463 has 184 MA's),

Gene: Plumbus_99 Start: 51933, Stop: 52094, Start Num: 10
Candidate Starts for Plumbus_99:
(Start: 10 @51933 has 184 MA's),

Gene: Poenanya_104 Start: 55745, Stop: 55906, Start Num: 10
Candidate Starts for Poenanya_104:
(Start: 10 @55745 has 184 MA's),

Gene: Polka14_104 Start: 55806, Stop: 55967, Start Num: 10
Candidate Starts for Polka14_104:
(Start: 10 @55806 has 184 MA's),

Gene: Pollywog_102 Start: 55864, Stop: 56025, Start Num: 10
Candidate Starts for Pollywog_102:
(Start: 10 @55864 has 184 MA's),

Gene: Priscilla_101 Start: 55290, Stop: 55451, Start Num: 10
Candidate Starts for Priscilla_101:
(Start: 10 @55290 has 184 MA's),

Gene: QuickMath_101 Start: 54125, Stop: 54286, Start Num: 10
Candidate Starts for QuickMath_101:
(Start: 10 @54125 has 184 MA's),

Gene: Quico_109 Start: 56144, Stop: 56305, Start Num: 10
Candidate Starts for Quico_109:
(Start: 10 @56144 has 184 MA's),

Gene: Radiance_98 Start: 54149, Stop: 54310, Start Num: 10
Candidate Starts for Radiance_98:
(Start: 10 @54149 has 184 MA's),

Gene: Ramsey_105 Start: 56045, Stop: 56206, Start Num: 10
Candidate Starts for Ramsey_105:
(Start: 10 @56045 has 184 MA's),

Gene: RedBird_101 Start: 55784, Stop: 55945, Start Num: 10
Candidate Starts for RedBird_101:
(Start: 10 @55784 has 184 MA's),

Gene: Rialto_105 Start: 55400, Stop: 55561, Start Num: 10
Candidate Starts for Rialto_105:
(Start: 10 @55400 has 184 MA's),

Gene: Rita_100 Start: 55860, Stop: 56021, Start Num: 10
Candidate Starts for Rita_100:
(Start: 10 @55860 has 184 MA's),

Gene: RitaG_99 Start: 54839, Stop: 55000, Start Num: 10
Candidate Starts for RitaG_99:
(Start: 10 @54839 has 184 MA's),

Gene: Rockne_103 Start: 53264, Stop: 53425, Start Num: 10
Candidate Starts for Rockne_103:
(Start: 10 @53264 has 184 MA's),

Gene: Royals2015_104 Start: 53395, Stop: 53556, Start Num: 10

Candidate Starts for Royals2015_104:
(Start: 10 @53395 has 184 MA's),

Gene: SG4_101 Start: 55629, Stop: 55790, Start Num: 10
Candidate Starts for SG4_101:
(Start: 10 @55629 has 184 MA's),

Gene: Saal_98 Start: 54854, Stop: 55015, Start Num: 10
Candidate Starts for Saal_98:
(Start: 10 @54854 has 184 MA's),

Gene: Sabbb_103 Start: 52820, Stop: 52981, Start Num: 10
Candidate Starts for Sabbb_103:
(5, 52601), (6, 52658), (8, 52778), (Start: 10 @52820 has 184 MA's),

Gene: Sarma624_102 Start: 51789, Stop: 51950, Start Num: 10
Candidate Starts for Sarma624_102:
(Start: 10 @51789 has 184 MA's),

Gene: Sassafras_102 Start: 54101, Stop: 54262, Start Num: 10
Candidate Starts for Sassafras_102:
(Start: 10 @54101 has 184 MA's),

Gene: Scottish_100 Start: 53678, Stop: 53839, Start Num: 10
Candidate Starts for Scottish_100:
(Start: 10 @53678 has 184 MA's),

Gene: Seabastian_107 Start: 55480, Stop: 55641, Start Num: 10
Candidate Starts for Seabastian_107:
(Start: 10 @55480 has 184 MA's),

Gene: Seagreen_101 Start: 54767, Stop: 54928, Start Num: 10
Candidate Starts for Seagreen_101:
(Start: 10 @54767 has 184 MA's),

Gene: Shauna1_102 Start: 55632, Stop: 55793, Start Num: 10
Candidate Starts for Shauna1_102:
(Start: 10 @55632 has 184 MA's),

Gene: ShiLan_103 Start: 56871, Stop: 57032, Start Num: 10
Candidate Starts for ShiLan_103:
(Start: 10 @56871 has 184 MA's),

Gene: ShowerHandel_101 Start: 54136, Stop: 54297, Start Num: 10
Candidate Starts for ShowerHandel_101:
(Start: 10 @54136 has 184 MA's),

Gene: ShroomBoi_98 Start: 54184, Stop: 54345, Start Num: 10
Candidate Starts for ShroomBoi_98:
(Start: 10 @54184 has 184 MA's),

Gene: Sparkdehlily_107 Start: 53349, Stop: 53510, Start Num: 10
Candidate Starts for Sparkdehlily_107:

(Start: 10 @53349 has 184 MA's),

Gene: Spartacus_107 Start: 57463, Stop: 57624, Start Num: 10

Candidate Starts for Spartacus_107:

(Start: 10 @57463 has 184 MA's),

Gene: Spoonbill_100 Start: 52784, Stop: 52945, Start Num: 10

Candidate Starts for Spoonbill_100:

(Start: 10 @52784 has 184 MA's),

Gene: Squirty_99 Start: 57753, Stop: 57914, Start Num: 10

Candidate Starts for Squirty_99:

(7, 57672), (Start: 10 @57753 has 184 MA's),

Gene: StAnnes_104 Start: 55680, Stop: 55841, Start Num: 10

Candidate Starts for StAnnes_104:

(Start: 10 @55680 has 184 MA's),

Gene: Stap_95 Start: 51396, Stop: 51557, Start Num: 10

Candidate Starts for Stap_95:

(8, 51354), (Start: 10 @51396 has 184 MA's),

Gene: Starcevich_102 Start: 55513, Stop: 55674, Start Num: 10

Candidate Starts for Starcevich_102:

(8, 55471), (Start: 10 @55513 has 184 MA's),

Gene: Strobilo_91 Start: 56785, Stop: 56952, Start Num: 10

Candidate Starts for Strobilo_91:

(1, 56374), (2, 56389), (3, 56443), (9, 56755), (Start: 10 @56785 has 184 MA's),

Gene: Strokeseat_98 Start: 52546, Stop: 52707, Start Num: 10

Candidate Starts for Strokeseat_98:

(Start: 10 @52546 has 184 MA's),

Gene: SwagPiggett_102 Start: 55990, Stop: 56151, Start Num: 10

Candidate Starts for SwagPiggett_102:

(Start: 10 @55990 has 184 MA's),

Gene: TDanisky_108 Start: 53349, Stop: 53510, Start Num: 10

Candidate Starts for TDanisky_108:

(Start: 10 @53349 has 184 MA's),

Gene: TM4_88 Start: 51459, Stop: 51626, Start Num: 10

Candidate Starts for TM4_88:

(2, 51063), (3, 51117), (9, 51429), (Start: 10 @51459 has 184 MA's),

Gene: Taj_106 Start: 55638, Stop: 55799, Start Num: 10

Candidate Starts for Taj_106:

(Start: 10 @55638 has 184 MA's),

Gene: TootsiePop_90 Start: 54937, Stop: 55098, Start Num: 10

Candidate Starts for TootsiePop_90:

(Start: 10 @54937 has 184 MA's),

Gene: Tootsieroll_94 Start: 54782, Stop: 54943, Start Num: 10
Candidate Starts for Tootsieroll_94:
(Start: 10 @54782 has 184 MA's),

Gene: Totinger_103 Start: 54913, Stop: 55074, Start Num: 10
Candidate Starts for Totinger_103:
(Start: 10 @54913 has 184 MA's),

Gene: Tweety_101 Start: 55032, Stop: 55193, Start Num: 10
Candidate Starts for Tweety_101:
(Start: 10 @55032 has 184 MA's),

Gene: VRedHorse_101 Start: 51888, Stop: 52049, Start Num: 10
Candidate Starts for VRedHorse_101:
(Start: 10 @51888 has 184 MA's),

Gene: Velveteen_97 Start: 51789, Stop: 51950, Start Num: 10
Candidate Starts for Velveteen_97:
(Start: 10 @51789 has 184 MA's),

Gene: Wee_103 Start: 55714, Stop: 55875, Start Num: 10
Candidate Starts for Wee_103:
(Start: 10 @55714 has 184 MA's),

Gene: Whatsapiecost_94 Start: 49439, Stop: 49600, Start Num: 10
Candidate Starts for Whatsapiecost_94:
(Start: 10 @49439 has 184 MA's),

Gene: WillSterrel_98 Start: 54470, Stop: 54631, Start Num: 10
Candidate Starts for WillSterrel_98:
(8, 54428), (Start: 10 @54470 has 184 MA's),

Gene: XFactor_91 Start: 52230, Stop: 52391, Start Num: 10
Candidate Starts for XFactor_91:
(Start: 10 @52230 has 184 MA's),

Gene: Yorick_96 Start: 55531, Stop: 55692, Start Num: 10
Candidate Starts for Yorick_96:
(Start: 10 @55531 has 184 MA's),

Gene: Zerg_98 Start: 54105, Stop: 54266, Start Num: 10
Candidate Starts for Zerg_98:
(Start: 10 @54105 has 184 MA's),

Gene: Zizzle_103 Start: 56181, Stop: 56342, Start Num: 10
Candidate Starts for Zizzle_103:
(Start: 10 @56181 has 184 MA's),

Gene: ZoeJ_88 Start: 55979, Stop: 56146, Start Num: 10
Candidate Starts for ZoeJ_88:
(4, 55652), (9, 55949), (Start: 10 @55979 has 184 MA's),