



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 192367 Report

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

Pham number 192367 has 130 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Phrux_34, 244_36, Stark_35, Gemini_37, PhatBacter_34, Elite2014_33, BugsBunny_32, Cjw1_34, Pumpkin_36, Harella_33, Misfit_34, Maxxinsta_35, Elph10_35, Icee_33, Tarkin_36, Emmina_35, Moldemort_35, BaboJay_33, Simpliphy_35, Gage_36, BadStone_33, Saints25_35, Flypotenuse_32, HufflyPuff_33, Kimchi_36, ChosenOne_34, HanKaySha_35, Glexan_32, ShereKhan_36, Lilpickle_33, DoctorDiddles_34, Henry_35, Phaja_34, FireRed_34, Bask21_34, Bruin_34, ABCat_33, Argent26_36, Wiggin_37, Xandras_36, Rakim_35, Willez_33, MISSy_33, Nimrod_34, Dumbo_34, Qualification_35, Paperbeatsrock_36, DrDrey_35, StolenFromERC_36, Easy2Say_36, Contagion_33, Tuco_35, Holt_35, MadamMonkfish_34, Palpatine_34, StellaBean_34, Asriel_33, JeTaime_36, SirDuracell_33, Mindy_34, Nala_34, Hoonter_36, Traaww1_32, Tomaszewski_33, Mosby_33, Myrale_34, Ukulele_34, Lilac_36, Marshmallow_34, TBrady12_36, Barbarian_33, Murica_33, Cookies_34, Policronamos_35, Phaux_33, Porky_34, YassJohnny_35, Rimmer_33, Filch_35, SophKB_34, Teaspoon_35, Sotrice96_34, MPhalcon_33, Highbury_35, Amao_34, NoSleep_35, xkcd_35, Czystczon1_35, Cactus_35, Kanye_36, Adnama_37, RiverMonster_34, TeardropMSU_33, GooberAzure_36, GoldenSpark_36, IHOP_34, Thresher_35, Lilizi_36, Hopey_36, OrionPax_35, AmericanBeauty_36, Stank_37, Terminus_34, Goldilocks_35, Sassay_33, Balomoji_33, Dusk_33, Bench_36, Pharsalus_35, Murphy_35, Command613_35, Inca_33, Miniwave_34, Gator_32
- Track 2 : CrystalP_34, ChotaBhai_34, Goku_34, Petra64142_36, NelitzaMV_34, BilboSwaggins_34, Manda_35, Daikon_33, Buck_33, Kostya_35, Youngblood_34, BigBubba_35, Pat3_33, ShamWow_34, Toto_34, Eureka_34

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

The start number called the most often in the published annotations is 1, it was called in 123 of the 123 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_36, ABCat_33, Adnama_37, Amao_34, AmericanBeauty_36, Argent26_36, Asriel_33, BaboJay_33, BadStone_33, Balomoji_33, Barbarian_33, Bask21_34, Bench_36, BigBubba_35, BilboSwaggins_34, Bruin_34, Buck_33, BugsBunny_32, Cactus_35, ChosenOne_34, ChotaBhai_34, Cjw1_34, Command613_35,

Contagion_33, Cookies_34, CrystalP_34, Czyszczone1_35, Daikon_33, DoctorDiddles_34, DrDrey_35, Dumbo_34, Dusk_33, Easy2Say_36, Elite2014_33, Elph10_35, Emmina_35, Eureka_34, Filch_35, FireRed_34, Flypotenuse_32, Gage_36, Gator_32, Gemini_37, Glexan_32, Goku_34, GoldenSpark_36, Goldilocks_35, GooberAzure_36, HanKaySha_35, Harella_33, Henry_35, Highbury_35, Holt_35, Hoonter_36, Hopey_36, HufflyPuff_33, IHOP_34, Icee_33, Inca_33, JeTaime_36, Kanye_36, Kimchi_36, Kostya_35, Lilac_36, Lilizi_36, Lilpickle_33, MISSy_33, MPhalcon_33, MadamMonkfish_34, Manda_35, Marshmallow_34, Maxxinista_35, Mindy_34, Miniwave_34, Misfit_34, Moldemort_35, Mosby_33, Murica_33, Murphy_35, Myrale_34, Nala_34, NelitzaMV_34, Nimrod_34, NoSleep_35, OrionPax_35, Palpatine_34, Paperbeatsrock_36, Pat3_33, Petra64142_36, Phaja_34, Pharsalus_35, PhatBacter_34, Phaux_33, Phrux_34, Policronamos_35, Porky_34, Pumpkin_36, Quallification_35, Rakim_35, Rimmer_33, RiverMonster_34, Saints25_35, Sassay_33, ShamWow_34, ShereKhan_36, Simpliphy_35, SirDuracell_33, SophKB_34, Sotrice96_34, Stank_37, Stark_35, StellaBean_34, StolenFromERC_36, TBrady12_36, Tarkin_36, TeardropMSU_33, Teaspoon_35, Terminus_34, Thresher_35, Tomaszewski_33, Toto_34, Traaww1_32, Tuco_35, Ukulele_34, Wiggin_37, Willez_33, Xandras_36, YassJohnny_35, Youngblood_34, xkcd_35,

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

-

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

-

Summary by start number:

Start 1:

- Found in 130 of 130 (100.0%) of genes in pham
- Manual Annotations of this start: 123 of 123
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 244_36 (E), ABCat_33 (E), Adnama_37 (E), Amao_34 (E), AmericanBeauty_36 (E), Argent26_36 (E), Asriel_33 (E), BaboJay_33 (E), BadStone_33 (E), Balomoji_33 (E), Barbarian_33 (E), Bask21_34 (E), Bench_36 (E), BigBubba_35 (E), BilboSwaggins_34 (E), Bruin_34 (E), Buck_33 (E), BugsBunny_32 (E), Cactus_35 (E), ChosenOne_34 (E), ChotaBhai_34 (E), Cjw1_34 (E), Command613_35 (E), Contagion_33 (E), Cookies_34 (E), CrystalP_34 (E), Czyszczone1_35 (E), Daikon_33 (E), DoctorDiddles_34 (E), DrDrey_35 (E), Dumbo_34 (E), Dusk_33 (E), Easy2Say_36 (E), Elite2014_33 (E), Elph10_35 (E), Emmina_35 (E), Eureka_34 (E), Filch_35 (E), FireRed_34 (E), Flypotenuse_32 (E), Gage_36 (E), Gator_32 (E), Gemini_37 (E), Glexan_32 (E), Goku_34 (E), GoldenSpark_36 (E), Goldilocks_35 (E), GooberAzure_36 (E), HanKaySha_35 (E), Harella_33 (E), Henry_35 (E), Highbury_35 (E), Holt_35 (E), Hoonter_36 (E), Hopey_36 (E), HufflyPuff_33 (E), IHOP_34 (E), Icee_33 (E), Inca_33 (E), JeTaime_36 (E), Kanye_36 (E), Kimchi_36 (E), Kostya_35 (E), Lilac_36 (E), Lilizi_36 (E), Lilpickle_33 (E), MISSy_33 (E), MPhalcon_33 (E), MadamMonkfish_34 (E), Manda_35 (E), Marshmallow_34 (E), Maxxinista_35 (E), Mindy_34 (E), Miniwave_34 (E), Misfit_34 (E), Moldemort_35 (E), Mosby_33 (E), Murica_33 (E), Murphy_35 (E), Myrale_34 (E), Nala_34 (E), NelitzaMV_34 (E), Nimrod_34 (E), NoSleep_35 (E), OrionPax_35 (E), Palpatine_34 (E), Paperbeatsrock_36 (E), Pat3_33 (E), Petra64142_36 (E), Phaja_34 (E), Pharsalus_35 (E), PhatBacter_34 (E), Phaux_33 (E), Phrux_34 (E), Policronamos_35 (E), Porky_34 (E), Pumpkin_36 (E),

Quallification_35 (E), Rakim_35 (E), Rimmer_33 (E), RiverMonster_34 (E), Saints25_35 (E), Sassay_33 (E), ShamWow_34 (E), ShereKhan_36 (E), Simpliphy_35 (E), SirDuracell_33 (E), SophKB_34 (E), Sotrice96_34 (E), Stank_37 (E), Stark_35 (E), StellaBean_34 (E), StolenFromERC_36 (E), TBrady12_36 (E), Tarkin_36 (E), TeardropMSU_33 (E), Teaspoon_35 (E), Terminus_34 (E), Thresher_35 (E), Tomaszewski_33 (E), Toto_34 (E), Traaww1_32 (E), Tuco_35 (E), Ukulele_34 (E), Wiggin_37 (E), Willez_33 (E), Xandras_36 (E), YassJohnny_35 (E), Youngblood_34 (E), xkcd_35 (E),

Summary by clusters:

There is one cluster represented in this pham: E

Info for manual annotations of cluster E:

•Start number 1 was manually annotated 123 times for cluster E.

Gene Information:

Gene: 244_36 Start: 31803, Stop: 32141, Start Num: 1

Candidate Starts for 244_36:

(Start: 1 @31803 has 123 MA's), (2, 31842), (3, 31998), (4, 32046), (6, 32094),

Gene: ABCat_33 Start: 31515, Stop: 31853, Start Num: 1

Candidate Starts for ABCat_33:

(Start: 1 @31515 has 123 MA's), (2, 31554), (3, 31710), (4, 31758), (6, 31806),

Gene: Adnama_37 Start: 32030, Stop: 32368, Start Num: 1

Candidate Starts for Adnama_37:

(Start: 1 @32030 has 123 MA's), (2, 32069), (3, 32225), (4, 32273), (6, 32321),

Gene: Amao_34 Start: 30727, Stop: 31065, Start Num: 1

Candidate Starts for Amao_34:

(Start: 1 @30727 has 123 MA's), (2, 30766), (3, 30922), (4, 30970), (6, 31018),

Gene: AmericanBeauty_36 Start: 31510, Stop: 31848, Start Num: 1

Candidate Starts for AmericanBeauty_36:

(Start: 1 @31510 has 123 MA's), (2, 31549), (3, 31705), (4, 31753), (6, 31801),

Gene: Argent26_36 Start: 31513, Stop: 31851, Start Num: 1

Candidate Starts for Argent26_36:

(Start: 1 @31513 has 123 MA's), (2, 31552), (3, 31708), (4, 31756), (6, 31804),

Gene: Asriel_33 Start: 30384, Stop: 30722, Start Num: 1

Candidate Starts for Asriel_33:

(Start: 1 @30384 has 123 MA's), (2, 30423), (3, 30579), (4, 30627), (6, 30675),

Gene: BaboJay_33 Start: 31073, Stop: 31411, Start Num: 1

Candidate Starts for BaboJay_33:

(Start: 1 @31073 has 123 MA's), (2, 31112), (3, 31268), (4, 31316), (6, 31364),

Gene: BadStone_33 Start: 31515, Stop: 31853, Start Num: 1

Candidate Starts for BadStone_33:

(Start: 1 @31515 has 123 MA's), (2, 31554), (3, 31710), (4, 31758), (6, 31806),

Gene: Balomoji_33 Start: 31249, Stop: 31587, Start Num: 1

Candidate Starts for Balomoji_33:

(Start: 1 @31249 has 123 MA's), (2, 31288), (3, 31444), (4, 31492), (6, 31540),

Gene: Barbarian_33 Start: 30384, Stop: 30722, Start Num: 1

Candidate Starts for Barbarian_33:

(Start: 1 @30384 has 123 MA's), (2, 30423), (3, 30579), (4, 30627), (6, 30675),

Gene: Bask21_34 Start: 30701, Stop: 31039, Start Num: 1

Candidate Starts for Bask21_34:

(Start: 1 @30701 has 123 MA's), (2, 30740), (3, 30896), (4, 30944), (6, 30992),

Gene: Bench_36 Start: 31383, Stop: 31721, Start Num: 1

Candidate Starts for Bench_36:

(Start: 1 @31383 has 123 MA's), (2, 31422), (3, 31578), (4, 31626), (6, 31674),

Gene: BigBubba_35 Start: 31286, Stop: 31624, Start Num: 1

Candidate Starts for BigBubba_35:

(Start: 1 @31286 has 123 MA's), (2, 31325), (3, 31481), (4, 31529), (5, 31553), (6, 31577),

Gene: BilboSwaggins_34 Start: 31523, Stop: 31861, Start Num: 1

Candidate Starts for BilboSwaggins_34:

(Start: 1 @31523 has 123 MA's), (2, 31562), (3, 31718), (4, 31766), (5, 31790), (6, 31814),

Gene: Bruin_34 Start: 31543, Stop: 31881, Start Num: 1

Candidate Starts for Bruin_34:

(Start: 1 @31543 has 123 MA's), (2, 31582), (3, 31738), (4, 31786), (6, 31834),

Gene: Buck_33 Start: 31479, Stop: 31817, Start Num: 1

Candidate Starts for Buck_33:

(Start: 1 @31479 has 123 MA's), (2, 31518), (3, 31674), (4, 31722), (5, 31746), (6, 31770),

Gene: BugsBunny_32 Start: 31112, Stop: 31450, Start Num: 1

Candidate Starts for BugsBunny_32:

(Start: 1 @31112 has 123 MA's), (2, 31151), (3, 31307), (4, 31355), (6, 31403),

Gene: Cactus_35 Start: 30734, Stop: 31072, Start Num: 1

Candidate Starts for Cactus_35:

(Start: 1 @30734 has 123 MA's), (2, 30773), (3, 30929), (4, 30977), (6, 31025),

Gene: ChosenOne_34 Start: 30731, Stop: 31069, Start Num: 1

Candidate Starts for ChosenOne_34:

(Start: 1 @30731 has 123 MA's), (2, 30770), (3, 30926), (4, 30974), (6, 31022),

Gene: ChotaBhai_34 Start: 30769, Stop: 31107, Start Num: 1

Candidate Starts for ChotaBhai_34:

(Start: 1 @30769 has 123 MA's), (2, 30808), (3, 30964), (4, 31012), (5, 31036), (6, 31060),

Gene: Cjw1_34 Start: 32283, Stop: 32621, Start Num: 1

Candidate Starts for Cjw1_34:

(Start: 1 @32283 has 123 MA's), (2, 32322), (3, 32478), (4, 32526), (6, 32574),

Gene: Command613_35 Start: 31790, Stop: 32128, Start Num: 1

Candidate Starts for Command613_35:

(Start: 1 @31790 has 123 MA's), (2, 31829), (3, 31985), (4, 32033), (6, 32081),

Gene: Contagion_33 Start: 31027, Stop: 31365, Start Num: 1

Candidate Starts for Contagion_33:

(Start: 1 @31027 has 123 MA's), (2, 31066), (3, 31222), (4, 31270), (6, 31318),

Gene: Cookies_34 Start: 31392, Stop: 31730, Start Num: 1

Candidate Starts for Cookies_34:

(Start: 1 @31392 has 123 MA's), (2, 31431), (3, 31587), (4, 31635), (6, 31683),

Gene: CrystalP_34 Start: 31523, Stop: 31861, Start Num: 1

Candidate Starts for CrystalP_34:

(Start: 1 @31523 has 123 MA's), (2, 31562), (3, 31718), (4, 31766), (5, 31790), (6, 31814),

Gene: Czyszczone1_35 Start: 31268, Stop: 31606, Start Num: 1

Candidate Starts for Czyszczone1_35:

(Start: 1 @31268 has 123 MA's), (2, 31307), (3, 31463), (4, 31511), (6, 31559),

Gene: Daikon_33 Start: 31261, Stop: 31599, Start Num: 1

Candidate Starts for Daikon_33:

(Start: 1 @31261 has 123 MA's), (2, 31300), (3, 31456), (4, 31504), (5, 31528), (6, 31552),

Gene: DoctorDiddles_34 Start: 30685, Stop: 31023, Start Num: 1

Candidate Starts for DoctorDiddles_34:

(Start: 1 @30685 has 123 MA's), (2, 30724), (3, 30880), (4, 30928), (6, 30976),

Gene: DrDrey_35 Start: 32015, Stop: 32353, Start Num: 1

Candidate Starts for DrDrey_35:

(Start: 1 @32015 has 123 MA's), (2, 32054), (3, 32210), (4, 32258), (6, 32306),

Gene: Dumbo_34 Start: 30990, Stop: 31328, Start Num: 1

Candidate Starts for Dumbo_34:

(Start: 1 @30990 has 123 MA's), (2, 31029), (3, 31185), (4, 31233), (6, 31281),

Gene: Dusk_33 Start: 31175, Stop: 31513, Start Num: 1

Candidate Starts for Dusk_33:

(Start: 1 @31175 has 123 MA's), (2, 31214), (3, 31370), (4, 31418), (6, 31466),

Gene: Easy2Say_36 Start: 32773, Stop: 33111, Start Num: 1

Candidate Starts for Easy2Say_36:

(Start: 1 @32773 has 123 MA's), (2, 32812), (3, 32968), (4, 33016), (6, 33064),

Gene: Elite2014_33 Start: 30730, Stop: 31068, Start Num: 1

Candidate Starts for Elite2014_33:

(Start: 1 @30730 has 123 MA's), (2, 30769), (3, 30925), (4, 30973), (6, 31021),

Gene: Elph10_35 Start: 30993, Stop: 31331, Start Num: 1

Candidate Starts for Elph10_35:

(Start: 1 @30993 has 123 MA's), (2, 31032), (3, 31188), (4, 31236), (6, 31284),

Gene: Emmina_35 Start: 31351, Stop: 31689, Start Num: 1

Candidate Starts for Emmina_35:

(Start: 1 @31351 has 123 MA's), (2, 31390), (3, 31546), (4, 31594), (6, 31642),

Gene: Eureka_34 Start: 31506, Stop: 31844, Start Num: 1

Candidate Starts for Eureka_34:

(Start: 1 @31506 has 123 MA's), (2, 31545), (3, 31701), (4, 31749), (5, 31773), (6, 31797),

Gene: Filch_35 Start: 31281, Stop: 31619, Start Num: 1

Candidate Starts for Filch_35:

(Start: 1 @31281 has 123 MA's), (2, 31320), (3, 31476), (4, 31524), (6, 31572),

Gene: FireRed_34 Start: 31551, Stop: 31889, Start Num: 1

Candidate Starts for FireRed_34:

(Start: 1 @31551 has 123 MA's), (2, 31590), (3, 31746), (4, 31794), (6, 31842),

Gene: Flypotenuse_32 Start: 31119, Stop: 31457, Start Num: 1

Candidate Starts for Flypotenuse_32:

(Start: 1 @31119 has 123 MA's), (2, 31158), (3, 31314), (4, 31362), (6, 31410),

Gene: Gage_36 Start: 31513, Stop: 31851, Start Num: 1

Candidate Starts for Gage_36:

(Start: 1 @31513 has 123 MA's), (2, 31552), (3, 31708), (4, 31756), (6, 31804),

Gene: Gator_32 Start: 31131, Stop: 31469, Start Num: 1

Candidate Starts for Gator_32:

(Start: 1 @31131 has 123 MA's), (2, 31170), (3, 31326), (4, 31374), (6, 31422),

Gene: Gemini_37 Start: 32030, Stop: 32368, Start Num: 1

Candidate Starts for Gemini_37:

(Start: 1 @32030 has 123 MA's), (2, 32069), (3, 32225), (4, 32273), (6, 32321),

Gene: Glexan_32 Start: 31119, Stop: 31457, Start Num: 1

Candidate Starts for Glexan_32:

(Start: 1 @31119 has 123 MA's), (2, 31158), (3, 31314), (4, 31362), (6, 31410),

Gene: Goku_34 Start: 31235, Stop: 31573, Start Num: 1

Candidate Starts for Goku_34:

(Start: 1 @31235 has 123 MA's), (2, 31274), (3, 31430), (4, 31478), (5, 31502), (6, 31526),

Gene: GoldenSpark_36 Start: 31513, Stop: 31851, Start Num: 1

Candidate Starts for GoldenSpark_36:

(Start: 1 @31513 has 123 MA's), (2, 31552), (3, 31708), (4, 31756), (6, 31804),

Gene: Goldilocks_35 Start: 30933, Stop: 31271, Start Num: 1

Candidate Starts for Goldilocks_35:

(Start: 1 @30933 has 123 MA's), (2, 30972), (3, 31128), (4, 31176), (6, 31224),

Gene: GooberAzure_36 Start: 31513, Stop: 31851, Start Num: 1

Candidate Starts for GooberAzure_36:

(Start: 1 @31513 has 123 MA's), (2, 31552), (3, 31708), (4, 31756), (6, 31804),

Gene: HanKaySha_35 Start: 31265, Stop: 31603, Start Num: 1
Candidate Starts for HanKaySha_35:
(Start: 1 @31265 has 123 MA's), (2, 31304), (3, 31460), (4, 31508), (6, 31556),

Gene: Harella_33 Start: 31635, Stop: 31973, Start Num: 1
Candidate Starts for Harella_33:
(Start: 1 @31635 has 123 MA's), (2, 31674), (3, 31830), (4, 31878), (6, 31926),

Gene: Henry_35 Start: 31523, Stop: 31861, Start Num: 1
Candidate Starts for Henry_35:
(Start: 1 @31523 has 123 MA's), (2, 31562), (3, 31718), (4, 31766), (6, 31814),

Gene: Highbury_35 Start: 31181, Stop: 31519, Start Num: 1
Candidate Starts for Highbury_35:
(Start: 1 @31181 has 123 MA's), (2, 31220), (3, 31376), (4, 31424), (6, 31472),

Gene: Holt_35 Start: 30800, Stop: 31138, Start Num: 1
Candidate Starts for Holt_35:
(Start: 1 @30800 has 123 MA's), (2, 30839), (3, 30995), (4, 31043), (6, 31091),

Gene: Hoonter_36 Start: 31513, Stop: 31851, Start Num: 1
Candidate Starts for Hoonter_36:
(Start: 1 @31513 has 123 MA's), (2, 31552), (3, 31708), (4, 31756), (6, 31804),

Gene: Hokey_36 Start: 31800, Stop: 32138, Start Num: 1
Candidate Starts for Hokey_36:
(Start: 1 @31800 has 123 MA's), (2, 31839), (3, 31995), (4, 32043), (6, 32091),

Gene: HufflyPuff_33 Start: 31507, Stop: 31845, Start Num: 1
Candidate Starts for HufflyPuff_33:
(Start: 1 @31507 has 123 MA's), (2, 31546), (3, 31702), (4, 31750), (6, 31798),

Gene: IHOP_34 Start: 31700, Stop: 32038, Start Num: 1
Candidate Starts for IHOP_34:
(Start: 1 @31700 has 123 MA's), (2, 31739), (3, 31895), (4, 31943), (6, 31991),

Gene: Icee_33 Start: 31181, Stop: 31519, Start Num: 1
Candidate Starts for Icee_33:
(Start: 1 @31181 has 123 MA's), (2, 31220), (3, 31376), (4, 31424), (6, 31472),

Gene: Inca_33 Start: 30202, Stop: 30540, Start Num: 1
Candidate Starts for Inca_33:
(Start: 1 @30202 has 123 MA's), (2, 30241), (3, 30397), (4, 30445), (6, 30493),

Gene: JeTaime_36 Start: 32324, Stop: 32662, Start Num: 1
Candidate Starts for JeTaime_36:
(Start: 1 @32324 has 123 MA's), (2, 32363), (3, 32519), (4, 32567), (6, 32615),

Gene: Kanye_36 Start: 32509, Stop: 32847, Start Num: 1
Candidate Starts for Kanye_36:
(Start: 1 @32509 has 123 MA's), (2, 32548), (3, 32704), (4, 32752), (6, 32800),

Gene: Kimchi_36 Start: 31516, Stop: 31854, Start Num: 1

Candidate Starts for Kimchi_36:

(Start: 1 @31516 has 123 MA's), (2, 31555), (3, 31711), (4, 31759), (6, 31807),

Gene: Kostya_35 Start: 31524, Stop: 31862, Start Num: 1

Candidate Starts for Kostya_35:

(Start: 1 @31524 has 123 MA's), (2, 31563), (3, 31719), (4, 31767), (5, 31791), (6, 31815),

Gene: Lilac_36 Start: 31020, Stop: 31358, Start Num: 1

Candidate Starts for Lilac_36:

(Start: 1 @31020 has 123 MA's), (2, 31059), (3, 31215), (4, 31263), (6, 31311),

Gene: Lilizi_36 Start: 31228, Stop: 31566, Start Num: 1

Candidate Starts for Lilizi_36:

(Start: 1 @31228 has 123 MA's), (2, 31267), (3, 31423), (4, 31471), (6, 31519),

Gene: Lilpickle_33 Start: 30730, Stop: 31068, Start Num: 1

Candidate Starts for Lilpickle_33:

(Start: 1 @30730 has 123 MA's), (2, 30769), (3, 30925), (4, 30973), (6, 31021),

Gene: MISSy_33 Start: 31036, Stop: 31374, Start Num: 1

Candidate Starts for MISSy_33:

(Start: 1 @31036 has 123 MA's), (2, 31075), (3, 31231), (4, 31279), (6, 31327),

Gene: MPhalcon_33 Start: 31029, Stop: 31367, Start Num: 1

Candidate Starts for MPhalcon_33:

(Start: 1 @31029 has 123 MA's), (2, 31068), (3, 31224), (4, 31272), (6, 31320),

Gene: MadamMonkfish_34 Start: 30941, Stop: 31279, Start Num: 1

Candidate Starts for MadamMonkfish_34:

(Start: 1 @30941 has 123 MA's), (2, 30980), (3, 31136), (4, 31184), (6, 31232),

Gene: Manda_35 Start: 32008, Stop: 32346, Start Num: 1

Candidate Starts for Manda_35:

(Start: 1 @32008 has 123 MA's), (2, 32047), (3, 32203), (4, 32251), (5, 32275), (6, 32299),

Gene: Marshmallow_34 Start: 31521, Stop: 31859, Start Num: 1

Candidate Starts for Marshmallow_34:

(Start: 1 @31521 has 123 MA's), (2, 31560), (3, 31716), (4, 31764), (6, 31812),

Gene: Maxxinista_35 Start: 30990, Stop: 31328, Start Num: 1

Candidate Starts for Maxxinista_35:

(Start: 1 @30990 has 123 MA's), (2, 31029), (3, 31185), (4, 31233), (6, 31281),

Gene: Mindy_34 Start: 31301, Stop: 31639, Start Num: 1

Candidate Starts for Mindy_34:

(Start: 1 @31301 has 123 MA's), (2, 31340), (3, 31496), (4, 31544), (6, 31592),

Gene: Miniwave_34 Start: 31720, Stop: 32058, Start Num: 1

Candidate Starts for Miniwave_34:

(Start: 1 @31720 has 123 MA's), (2, 31759), (3, 31915), (4, 31963), (6, 32011),

Gene: Misfit_34 Start: 31610, Stop: 31948, Start Num: 1

Candidate Starts for Misfit_34:

(Start: 1 @31610 has 123 MA's), (2, 31649), (3, 31805), (4, 31853), (6, 31901),

Gene: Moldemort_35 Start: 31265, Stop: 31603, Start Num: 1

Candidate Starts for Moldemort_35:

(Start: 1 @31265 has 123 MA's), (2, 31304), (3, 31460), (4, 31508), (6, 31556),

Gene: Mosby_33 Start: 31027, Stop: 31365, Start Num: 1

Candidate Starts for Mosby_33:

(Start: 1 @31027 has 123 MA's), (2, 31066), (3, 31222), (4, 31270), (6, 31318),

Gene: Murica_33 Start: 31507, Stop: 31845, Start Num: 1

Candidate Starts for Murica_33:

(Start: 1 @31507 has 123 MA's), (2, 31546), (3, 31702), (4, 31750), (6, 31798),

Gene: Murphy_35 Start: 31502, Stop: 31840, Start Num: 1

Candidate Starts for Murphy_35:

(Start: 1 @31502 has 123 MA's), (2, 31541), (3, 31697), (4, 31745), (6, 31793),

Gene: Myrale_34 Start: 31386, Stop: 31724, Start Num: 1

Candidate Starts for Myrale_34:

(Start: 1 @31386 has 123 MA's), (2, 31425), (3, 31581), (4, 31629), (6, 31677),

Gene: Nala_34 Start: 31541, Stop: 31879, Start Num: 1

Candidate Starts for Nala_34:

(Start: 1 @31541 has 123 MA's), (2, 31580), (3, 31736), (4, 31784), (6, 31832),

Gene: NelitzaMV_34 Start: 31591, Stop: 31929, Start Num: 1

Candidate Starts for NelitzaMV_34:

(Start: 1 @31591 has 123 MA's), (2, 31630), (3, 31786), (4, 31834), (5, 31858), (6, 31882),

Gene: Nimrod_34 Start: 31765, Stop: 32103, Start Num: 1

Candidate Starts for Nimrod_34:

(Start: 1 @31765 has 123 MA's), (2, 31804), (3, 31960), (4, 32008), (6, 32056),

Gene: NoSleep_35 Start: 31262, Stop: 31600, Start Num: 1

Candidate Starts for NoSleep_35:

(Start: 1 @31262 has 123 MA's), (2, 31301), (3, 31457), (4, 31505), (6, 31553),

Gene: OrionPax_35 Start: 31268, Stop: 31606, Start Num: 1

Candidate Starts for OrionPax_35:

(Start: 1 @31268 has 123 MA's), (2, 31307), (3, 31463), (4, 31511), (6, 31559),

Gene: Palpatine_34 Start: 31537, Stop: 31875, Start Num: 1

Candidate Starts for Palpatine_34:

(Start: 1 @31537 has 123 MA's), (2, 31576), (3, 31732), (4, 31780), (6, 31828),

Gene: Paperbeatsrock_36 Start: 32503, Stop: 32841, Start Num: 1

Candidate Starts for Paperbeatsrock_36:

(Start: 1 @32503 has 123 MA's), (2, 32542), (3, 32698), (4, 32746), (6, 32794),

Gene: Pat3_33 Start: 30249, Stop: 30587, Start Num: 1

Candidate Starts for Pat3_33:

(Start: 1 @30249 has 123 MA's), (2, 30288), (3, 30444), (4, 30492), (5, 30516), (6, 30540),

Gene: Petra64142_36 Start: 31983, Stop: 32321, Start Num: 1
Candidate Starts for Petra64142_36:
(Start: 1 @31983 has 123 MA's), (2, 32022), (3, 32178), (4, 32226), (5, 32250), (6, 32274),

Gene: Phaja_34 Start: 31699, Stop: 32037, Start Num: 1
Candidate Starts for Phaja_34:
(Start: 1 @31699 has 123 MA's), (2, 31738), (3, 31894), (4, 31942), (6, 31990),

Gene: Pharsalus_35 Start: 32303, Stop: 32641, Start Num: 1
Candidate Starts for Pharsalus_35:
(Start: 1 @32303 has 123 MA's), (2, 32342), (3, 32498), (4, 32546), (6, 32594),

Gene: PhatBacter_34 Start: 31551, Stop: 31889, Start Num: 1
Candidate Starts for PhatBacter_34:
(Start: 1 @31551 has 123 MA's), (2, 31590), (3, 31746), (4, 31794), (6, 31842),

Gene: Phaux_33 Start: 31549, Stop: 31887, Start Num: 1
Candidate Starts for Phaux_33:
(Start: 1 @31549 has 123 MA's), (2, 31588), (3, 31744), (4, 31792), (6, 31840),

Gene: Phrux_34 Start: 31264, Stop: 31602, Start Num: 1
Candidate Starts for Phrux_34:
(Start: 1 @31264 has 123 MA's), (2, 31303), (3, 31459), (4, 31507), (6, 31555),

Gene: Policronamos_35 Start: 31549, Stop: 31887, Start Num: 1
Candidate Starts for Policronamos_35:
(Start: 1 @31549 has 123 MA's), (2, 31588), (3, 31744), (4, 31792), (6, 31840),

Gene: Porky_34 Start: 31360, Stop: 31698, Start Num: 1
Candidate Starts for Porky_34:
(Start: 1 @31360 has 123 MA's), (2, 31399), (3, 31555), (4, 31603), (6, 31651),

Gene: Pumpkin_36 Start: 31600, Stop: 31938, Start Num: 1
Candidate Starts for Pumpkin_36:
(Start: 1 @31600 has 123 MA's), (2, 31639), (3, 31795), (4, 31843), (6, 31891),

Gene: Quallification_35 Start: 31729, Stop: 32067, Start Num: 1
Candidate Starts for Quallification_35:
(Start: 1 @31729 has 123 MA's), (2, 31768), (3, 31924), (4, 31972), (6, 32020),

Gene: Rakim_35 Start: 31629, Stop: 31967, Start Num: 1
Candidate Starts for Rakim_35:
(Start: 1 @31629 has 123 MA's), (2, 31668), (3, 31824), (4, 31872), (6, 31920),

Gene: Rimmer_33 Start: 31089, Stop: 31427, Start Num: 1
Candidate Starts for Rimmer_33:
(Start: 1 @31089 has 123 MA's), (2, 31128), (3, 31284), (4, 31332), (6, 31380),

Gene: RiverMonster_34 Start: 31278, Stop: 31616, Start Num: 1
Candidate Starts for RiverMonster_34:
(Start: 1 @31278 has 123 MA's), (2, 31317), (3, 31473), (4, 31521), (6, 31569),

Gene: Saints25_35 Start: 31181, Stop: 31519, Start Num: 1
Candidate Starts for Saints25_35:
(Start: 1 @31181 has 123 MA's), (2, 31220), (3, 31376), (4, 31424), (6, 31472),

Gene: Sassay_33 Start: 31027, Stop: 31365, Start Num: 1
Candidate Starts for Sassay_33:
(Start: 1 @31027 has 123 MA's), (2, 31066), (3, 31222), (4, 31270), (6, 31318),

Gene: ShamWow_34 Start: 31523, Stop: 31861, Start Num: 1
Candidate Starts for ShamWow_34:
(Start: 1 @31523 has 123 MA's), (2, 31562), (3, 31718), (4, 31766), (5, 31790), (6, 31814),

Gene: ShereKhan_36 Start: 32506, Stop: 32844, Start Num: 1
Candidate Starts for ShereKhan_36:
(Start: 1 @32506 has 123 MA's), (2, 32545), (3, 32701), (4, 32749), (6, 32797),

Gene: Simpliphy_35 Start: 31268, Stop: 31606, Start Num: 1
Candidate Starts for Simpliphy_35:
(Start: 1 @31268 has 123 MA's), (2, 31307), (3, 31463), (4, 31511), (6, 31559),

Gene: SirDuracell_33 Start: 30188, Stop: 30526, Start Num: 1
Candidate Starts for SirDuracell_33:
(Start: 1 @30188 has 123 MA's), (2, 30227), (3, 30383), (4, 30431), (6, 30479),

Gene: SophKB_34 Start: 31522, Stop: 31860, Start Num: 1
Candidate Starts for SophKB_34:
(Start: 1 @31522 has 123 MA's), (2, 31561), (3, 31717), (4, 31765), (6, 31813),

Gene: Sotrice96_34 Start: 31477, Stop: 31815, Start Num: 1
Candidate Starts for Sotrice96_34:
(Start: 1 @31477 has 123 MA's), (2, 31516), (3, 31672), (4, 31720), (6, 31768),

Gene: Stank_37 Start: 32029, Stop: 32367, Start Num: 1
Candidate Starts for Stank_37:
(Start: 1 @32029 has 123 MA's), (2, 32068), (3, 32224), (4, 32272), (6, 32320),

Gene: Stark_35 Start: 31281, Stop: 31619, Start Num: 1
Candidate Starts for Stark_35:
(Start: 1 @31281 has 123 MA's), (2, 31320), (3, 31476), (4, 31524), (6, 31572),

Gene: StellaBean_34 Start: 31522, Stop: 31860, Start Num: 1
Candidate Starts for StellaBean_34:
(Start: 1 @31522 has 123 MA's), (2, 31561), (3, 31717), (4, 31765), (6, 31813),

Gene: StolenFromERC_36 Start: 31513, Stop: 31851, Start Num: 1
Candidate Starts for StolenFromERC_36:
(Start: 1 @31513 has 123 MA's), (2, 31552), (3, 31708), (4, 31756), (6, 31804),

Gene: TBrady12_36 Start: 31513, Stop: 31851, Start Num: 1
Candidate Starts for TBrady12_36:
(Start: 1 @31513 has 123 MA's), (2, 31552), (3, 31708), (4, 31756), (6, 31804),

Gene: Tarkin_36 Start: 32512, Stop: 32850, Start Num: 1

Candidate Starts for Tarkin_36:

(Start: 1 @32512 has 123 MA's), (2, 32551), (3, 32707), (4, 32755), (6, 32803),

Gene: TeardropMSU_33 Start: 31423, Stop: 31761, Start Num: 1

Candidate Starts for TeardropMSU_33:

(Start: 1 @31423 has 123 MA's), (2, 31462), (3, 31618), (4, 31666), (6, 31714),

Gene: Teaspoon_35 Start: 31476, Stop: 31814, Start Num: 1

Candidate Starts for Teaspoon_35:

(Start: 1 @31476 has 123 MA's), (2, 31515), (3, 31671), (4, 31719), (6, 31767),

Gene: Terminus_34 Start: 31610, Stop: 31948, Start Num: 1

Candidate Starts for Terminus_34:

(Start: 1 @31610 has 123 MA's), (2, 31649), (3, 31805), (4, 31853), (6, 31901),

Gene: Thresher_35 Start: 32277, Stop: 32615, Start Num: 1

Candidate Starts for Thresher_35:

(Start: 1 @32277 has 123 MA's), (2, 32316), (3, 32472), (4, 32520), (6, 32568),

Gene: Tomaszewski_33 Start: 31120, Stop: 31458, Start Num: 1

Candidate Starts for Tomaszewski_33:

(Start: 1 @31120 has 123 MA's), (2, 31159), (3, 31315), (4, 31363), (6, 31411),

Gene: Toto_34 Start: 31523, Stop: 31861, Start Num: 1

Candidate Starts for Toto_34:

(Start: 1 @31523 has 123 MA's), (2, 31562), (3, 31718), (4, 31766), (5, 31790), (6, 31814),

Gene: Traaww1_32 Start: 31161, Stop: 31499, Start Num: 1

Candidate Starts for Traaww1_32:

(Start: 1 @31161 has 123 MA's), (2, 31200), (3, 31356), (4, 31404), (6, 31452),

Gene: Tuco_35 Start: 32031, Stop: 32369, Start Num: 1

Candidate Starts for Tuco_35:

(Start: 1 @32031 has 123 MA's), (2, 32070), (3, 32226), (4, 32274), (6, 32322),

Gene: Ukulele_34 Start: 31281, Stop: 31619, Start Num: 1

Candidate Starts for Ukulele_34:

(Start: 1 @31281 has 123 MA's), (2, 31320), (3, 31476), (4, 31524), (6, 31572),

Gene: Wiggin_37 Start: 32027, Stop: 32365, Start Num: 1

Candidate Starts for Wiggin_37:

(Start: 1 @32027 has 123 MA's), (2, 32066), (3, 32222), (4, 32270), (6, 32318),

Gene: Willez_33 Start: 31027, Stop: 31365, Start Num: 1

Candidate Starts for Willez_33:

(Start: 1 @31027 has 123 MA's), (2, 31066), (3, 31222), (4, 31270), (6, 31318),

Gene: Xandras_36 Start: 31513, Stop: 31851, Start Num: 1

Candidate Starts for Xandras_36:

(Start: 1 @31513 has 123 MA's), (2, 31552), (3, 31708), (4, 31756), (6, 31804),

Gene: YassJohnny_35 Start: 32038, Stop: 32376, Start Num: 1

Candidate Starts for YassJohnny_35:

(Start: 1 @32038 has 123 MA's), (2, 32077), (3, 32233), (4, 32281), (6, 32329),

Gene: Youngblood_34 Start: 31683, Stop: 32021, Start Num: 1

Candidate Starts for Youngblood_34:

(Start: 1 @31683 has 123 MA's), (2, 31722), (3, 31878), (4, 31926), (5, 31950), (6, 31974),

Gene: xkcd_35 Start: 31692, Stop: 32030, Start Num: 1

Candidate Starts for xkcd_35:

(Start: 1 @31692 has 123 MA's), (2, 31731), (3, 31887), (4, 31935), (6, 31983),