



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 296326 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296326 has 144 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Phrux_34, 244_36, Stark_35, Gemini_37, PhatBacter_34, Elite2014_33, BugsBunny_32, FairyPath_34, Pumpkin_36, Harella_33, Misfit_34, MPhalcon_33, Elph10_35, Icee_33, Tarkin_36, Emmina_35, Moldemort_35, Ptowny_35, BaboJay_33, Simpliphy_35, PaddyBaddy_35, Gage_36, BadStone_33, Saints25_35, Bogg_34, Flypotenuse_32, HufflyPuff_33, Kimchi_36, Asriel_33, 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, Quallification_35, Paperbeatsrock_36, DrDrey_35, StolenFromERC_36, Easy2Say_36, Contagion_33, NonchalantPear_34, Tuco_35, Holt_35, MadamMonkfish_34, Palpatine_34, StellaBean_34, Thimble_34, ChosenOne_34, JeTaime_36, SirDuracell_33, Mindy_34, Cjw1_34, Nala_34, Hoonter_36, Traaww1_32, Tomaszewski_33, Mosby_33, Myrale_34, Ukulele_34, Lilac_36, Marshmallow_34, Becksu_34, TBrady12_36, Barbarian_33, Policronamos_34, Cookies_34, Phaux_33, Porky_34, YassJohnny_35, Rimmer_33, Filch_35, SophKB_34, Teaspoon_35, Sotrice96_34, Maxxinista_35, Highbury_35, Amao_34, FoghornLeghorn_33, NoSleep_35, xkcd_35, Czyszczon1_35, Cactus_35, Kanye_36, Murica_33, Adnama_37, RiverMonster_34, TeardropMSU_33, GooberAzure_36, GoldenSpark_36, IHOP_34, Thresher_35, Greep_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, StormChicken_34, Petra64142_36, NelitzaMV_34, MollyToe_34, BilboSwaggins_34, Manda_35, Daikon_33, TeamEdward_34, ShamWow_34, Buck_33, Kostya_35, Youngblood_34, BigBubba_35, Pat3_33, Toto_34, Brewer_34, Eureka_34
- Track 3 : Budgie_37

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 128 of the 128 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, Becksu_34, Bench_36, BigBubba_35, BilboSwaggins_34, Bogg_34, Brewer_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, FairyPath_34, Filch_35, FireRed_34, Flypotenuse_32, FoghornLeghorn_33, Gage_36, Gator_32, Gemini_37, Glexan_32, Goku_34, GoldenSpark_36, Goldilocks_35, GooberAzure_36, Greep_35, HanKaySha_35, Harella_33, Henry_35, Highbury_35, Holt_35, Hoonter_36, Hopey_36, HufflyPuff_33, IHOP_34, Icee_33, Inca_33, JeTaimie_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, MollyToe_34, Mosby_33, Murica_33, Murphy_35, Myrale_34, Nala_34, NelitzaMV_34, Nimrod_34, NoSleep_35, NonchalantPear_34, OrionPax_35, PaddyBaddy_35, Palpatine_34, Paperbeatsrock_36, Pat3_33, Petra64142_36, Phaja_34, Pharsalus_35, PhatBacter_34, Phaux_33, Phrux_34, Policronamos_34, Porky_34, Ptowny_35, 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, StormChicken_34, TBrady12_36, Tarkin_36, TeamEdward_34, TeardropMSU_33, Teaspoon_35, Terminus_34, Thimble_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:

- Budgie_37,

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

-

Summary by start number:

Start 1:

- Found in 144 of 144 (100.0%) of genes in pham
- Manual Annotations of this start: 128 of 128
- Called 99.3% 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), Becksu_34 (E), Bench_36 (E), BigBubba_35 (E), BilboSwaggins_34 (E), Bogg_34 (E), Brewer_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), FairyPath_34 (E), Filch_35 (E), FireRed_34 (E), Flypotenuse_32 (E), FoghornLeghorn_33 (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), Greep_35 (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), JeTaimie_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), MollyToe_34 (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), NonchalantPear_34 (E), OrionPax_35 (E), PaddyBaddy_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_34 (E), Porky_34 (E), Ptowny_35 (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), StormChicken_34 (E), TBrady12_36 (E), Tarkin_36 (E), TeamEdward_34 (E), TeardropMSU_33 (E), Teaspoon_35 (E), Terminus_34 (E), Thimble_34 (E), Thresher_35 (E), Tomaszewski_33 (E), Toto_34 (E), Traaww1_32 (E), Tuco_35 (E), Ukulele_34 (E), Wiggyn_37 (E), Willez_33 (E), Xandras_36 (E), YassJohnny_35 (E), Youngblood_34 (E), xkcd_35 (E),

Start 2:

- Found in 1 of 144 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Budgie_37 (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 128 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 128 MA's), (3, 31842), (6, 31998), (7, 32046), (9, 32094),

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

Candidate Starts for ABCat_33:

(Start: 1 @31515 has 128 MA's), (3, 31554), (6, 31710), (7, 31758), (9, 31806),

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

Candidate Starts for Adnama_37:

(Start: 1 @32030 has 128 MA's), (3, 32069), (6, 32225), (7, 32273), (9, 32321),

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

Candidate Starts for Amao_34:

(Start: 1 @30727 has 128 MA's), (3, 30766), (6, 30922), (7, 30970), (9, 31018),

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

Candidate Starts for AmericanBeauty_36:

(Start: 1 @31510 has 128 MA's), (3, 31549), (6, 31705), (7, 31753), (9, 31801),

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

Candidate Starts for Argent26_36:

(Start: 1 @31513 has 128 MA's), (3, 31552), (6, 31708), (7, 31756), (9, 31804),

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

Candidate Starts for Asriel_33:

(Start: 1 @30384 has 128 MA's), (3, 30423), (6, 30579), (7, 30627), (9, 30675),

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

Candidate Starts for BaboJay_33:

(Start: 1 @31073 has 128 MA's), (3, 31112), (6, 31268), (7, 31316), (9, 31364),

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

Candidate Starts for BadStone_33:

(Start: 1 @31515 has 128 MA's), (3, 31554), (6, 31710), (7, 31758), (9, 31806),

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

Candidate Starts for Balomoji_33:

(Start: 1 @31249 has 128 MA's), (3, 31288), (6, 31444), (7, 31492), (9, 31540),

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

Candidate Starts for Barbarian_33:

(Start: 1 @30384 has 128 MA's), (3, 30423), (6, 30579), (7, 30627), (9, 30675),

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

Candidate Starts for Bask21_34:

(Start: 1 @30701 has 128 MA's), (3, 30740), (6, 30896), (7, 30944), (9, 30992),

Gene: Becksu_34 Start: 31706, Stop: 32044, Start Num: 1

Candidate Starts for Becksu_34:

(Start: 1 @31706 has 128 MA's), (3, 31745), (6, 31901), (7, 31949), (9, 31997),

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

Candidate Starts for Bench_36:

(Start: 1 @31383 has 128 MA's), (3, 31422), (6, 31578), (7, 31626), (9, 31674),

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

Candidate Starts for BigBubba_35:

(Start: 1 @31286 has 128 MA's), (3, 31325), (6, 31481), (7, 31529), (8, 31553), (9, 31577),

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

Candidate Starts for BilboSwaggins_34:

(Start: 1 @31523 has 128 MA's), (3, 31562), (6, 31718), (7, 31766), (8, 31790), (9, 31814),

Gene: Bogg_34 Start: 30423, Stop: 30761, Start Num: 1

Candidate Starts for Bogg_34:

(Start: 1 @30423 has 128 MA's), (3, 30462), (6, 30618), (7, 30666), (9, 30714),

Gene: Brewer_34 Start: 31771, Stop: 32109, Start Num: 1

Candidate Starts for Brewer_34:

(Start: 1 @31771 has 128 MA's), (3, 31810), (6, 31966), (7, 32014), (8, 32038), (9, 32062),

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

Candidate Starts for Bruin_34:

(Start: 1 @31543 has 128 MA's), (3, 31582), (6, 31738), (7, 31786), (9, 31834),

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

Candidate Starts for Buck_33:

(Start: 1 @31479 has 128 MA's), (3, 31518), (6, 31674), (7, 31722), (8, 31746), (9, 31770),

Gene: Budgie_37 Start: 31097, Stop: 31408, Start Num: 2

Candidate Starts for Budgie_37:

(Start: 1 @31070 has 128 MA's), (2, 31097), (3, 31109), (4, 31133), (5, 31145), (6, 31265), (7, 31313), (8, 31337), (9, 31361),

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

Candidate Starts for BugsBunny_32:

(Start: 1 @31112 has 128 MA's), (3, 31151), (6, 31307), (7, 31355), (9, 31403),

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

Candidate Starts for Cactus_35:

(Start: 1 @30734 has 128 MA's), (3, 30773), (6, 30929), (7, 30977), (9, 31025),

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

Candidate Starts for ChosenOne_34:

(Start: 1 @30731 has 128 MA's), (3, 30770), (6, 30926), (7, 30974), (9, 31022),

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

Candidate Starts for ChotaBhai_34:

(Start: 1 @30769 has 128 MA's), (3, 30808), (6, 30964), (7, 31012), (8, 31036), (9, 31060),

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

Candidate Starts for Cjw1_34:

(Start: 1 @32283 has 128 MA's), (3, 32322), (6, 32478), (7, 32526), (9, 32574),

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

Candidate Starts for Command613_35:

(Start: 1 @31790 has 128 MA's), (3, 31829), (6, 31985), (7, 32033), (9, 32081),

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

Candidate Starts for Contagion_33:

(Start: 1 @31027 has 128 MA's), (3, 31066), (6, 31222), (7, 31270), (9, 31318),

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

Candidate Starts for Cookies_34:

(Start: 1 @31392 has 128 MA's), (3, 31431), (6, 31587), (7, 31635), (9, 31683),

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

Candidate Starts for CrystalP_34:

(Start: 1 @31523 has 128 MA's), (3, 31562), (6, 31718), (7, 31766), (8, 31790), (9, 31814),

Gene: Czyszczonek1_35 Start: 31268, Stop: 31606, Start Num: 1

Candidate Starts for Czyszczonek1_35:

(Start: 1 @31268 has 128 MA's), (3, 31307), (6, 31463), (7, 31511), (9, 31559),

Gene: Daikon_33 Start: 31261, Stop: 31599, Start Num: 1
Candidate Starts for Daikon_33:
(Start: 1 @31261 has 128 MA's), (3, 31300), (6, 31456), (7, 31504), (8, 31528), (9, 31552),

Gene: DoctorDiddles_34 Start: 30685, Stop: 31023, Start Num: 1
Candidate Starts for DoctorDiddles_34:
(Start: 1 @30685 has 128 MA's), (3, 30724), (6, 30880), (7, 30928), (9, 30976),

Gene: DrDrey_35 Start: 32015, Stop: 32353, Start Num: 1
Candidate Starts for DrDrey_35:
(Start: 1 @32015 has 128 MA's), (3, 32054), (6, 32210), (7, 32258), (9, 32306),

Gene: Dumbo_34 Start: 30990, Stop: 31328, Start Num: 1
Candidate Starts for Dumbo_34:
(Start: 1 @30990 has 128 MA's), (3, 31029), (6, 31185), (7, 31233), (9, 31281),

Gene: Dusk_33 Start: 31175, Stop: 31513, Start Num: 1
Candidate Starts for Dusk_33:
(Start: 1 @31175 has 128 MA's), (3, 31214), (6, 31370), (7, 31418), (9, 31466),

Gene: Easy2Say_36 Start: 32773, Stop: 33111, Start Num: 1
Candidate Starts for Easy2Say_36:
(Start: 1 @32773 has 128 MA's), (3, 32812), (6, 32968), (7, 33016), (9, 33064),

Gene: Elite2014_33 Start: 30730, Stop: 31068, Start Num: 1
Candidate Starts for Elite2014_33:
(Start: 1 @30730 has 128 MA's), (3, 30769), (6, 30925), (7, 30973), (9, 31021),

Gene: Elph10_35 Start: 30993, Stop: 31331, Start Num: 1
Candidate Starts for Elph10_35:
(Start: 1 @30993 has 128 MA's), (3, 31032), (6, 31188), (7, 31236), (9, 31284),

Gene: Emmina_35 Start: 31351, Stop: 31689, Start Num: 1
Candidate Starts for Emmina_35:
(Start: 1 @31351 has 128 MA's), (3, 31390), (6, 31546), (7, 31594), (9, 31642),

Gene: Eureka_34 Start: 31506, Stop: 31844, Start Num: 1
Candidate Starts for Eureka_34:
(Start: 1 @31506 has 128 MA's), (3, 31545), (6, 31701), (7, 31749), (8, 31773), (9, 31797),

Gene: FairyPath_34 Start: 31718, Stop: 32056, Start Num: 1
Candidate Starts for FairyPath_34:
(Start: 1 @31718 has 128 MA's), (3, 31757), (6, 31913), (7, 31961), (9, 32009),

Gene: Filch_35 Start: 31281, Stop: 31619, Start Num: 1
Candidate Starts for Filch_35:
(Start: 1 @31281 has 128 MA's), (3, 31320), (6, 31476), (7, 31524), (9, 31572),

Gene: FireRed_34 Start: 31551, Stop: 31889, Start Num: 1
Candidate Starts for FireRed_34:
(Start: 1 @31551 has 128 MA's), (3, 31590), (6, 31746), (7, 31794), (9, 31842),

Gene: Flypotenuse_32 Start: 31119, Stop: 31457, Start Num: 1
Candidate Starts for Flypotenuse_32:
(Start: 1 @31119 has 128 MA's), (3, 31158), (6, 31314), (7, 31362), (9, 31410),

Gene: FoghornLeghorn_33 Start: 31027, Stop: 31365, Start Num: 1
Candidate Starts for FoghornLeghorn_33:
(Start: 1 @31027 has 128 MA's), (3, 31066), (6, 31222), (7, 31270), (9, 31318),

Gene: Gage_36 Start: 31513, Stop: 31851, Start Num: 1
Candidate Starts for Gage_36:
(Start: 1 @31513 has 128 MA's), (3, 31552), (6, 31708), (7, 31756), (9, 31804),

Gene: Gator_32 Start: 31131, Stop: 31469, Start Num: 1
Candidate Starts for Gator_32:
(Start: 1 @31131 has 128 MA's), (3, 31170), (6, 31326), (7, 31374), (9, 31422),

Gene: Gemini_37 Start: 32030, Stop: 32368, Start Num: 1
Candidate Starts for Gemini_37:
(Start: 1 @32030 has 128 MA's), (3, 32069), (6, 32225), (7, 32273), (9, 32321),

Gene: Glexan_32 Start: 31119, Stop: 31457, Start Num: 1
Candidate Starts for Glexan_32:
(Start: 1 @31119 has 128 MA's), (3, 31158), (6, 31314), (7, 31362), (9, 31410),

Gene: Goku_34 Start: 31235, Stop: 31573, Start Num: 1
Candidate Starts for Goku_34:
(Start: 1 @31235 has 128 MA's), (3, 31274), (6, 31430), (7, 31478), (8, 31502), (9, 31526),

Gene: GoldenSpark_36 Start: 31513, Stop: 31851, Start Num: 1
Candidate Starts for GoldenSpark_36:
(Start: 1 @31513 has 128 MA's), (3, 31552), (6, 31708), (7, 31756), (9, 31804),

Gene: Goldilocks_35 Start: 30933, Stop: 31271, Start Num: 1
Candidate Starts for Goldilocks_35:
(Start: 1 @30933 has 128 MA's), (3, 30972), (6, 31128), (7, 31176), (9, 31224),

Gene: GooberAzure_36 Start: 31513, Stop: 31851, Start Num: 1
Candidate Starts for GooberAzure_36:
(Start: 1 @31513 has 128 MA's), (3, 31552), (6, 31708), (7, 31756), (9, 31804),

Gene: Greep_35 Start: 31843, Stop: 32181, Start Num: 1
Candidate Starts for Greep_35:
(Start: 1 @31843 has 128 MA's), (3, 31882), (6, 32038), (7, 32086), (9, 32134),

Gene: HanKaySha_35 Start: 31265, Stop: 31603, Start Num: 1
Candidate Starts for HanKaySha_35:
(Start: 1 @31265 has 128 MA's), (3, 31304), (6, 31460), (7, 31508), (9, 31556),

Gene: Harella_33 Start: 31635, Stop: 31973, Start Num: 1
Candidate Starts for Harella_33:
(Start: 1 @31635 has 128 MA's), (3, 31674), (6, 31830), (7, 31878), (9, 31926),

Gene: Henry_35 Start: 31523, Stop: 31861, Start Num: 1

Candidate Starts for Henry_35:

(Start: 1 @31523 has 128 MA's), (3, 31562), (6, 31718), (7, 31766), (9, 31814),

Gene: Highbury_35 Start: 31181, Stop: 31519, Start Num: 1

Candidate Starts for Highbury_35:

(Start: 1 @31181 has 128 MA's), (3, 31220), (6, 31376), (7, 31424), (9, 31472),

Gene: Holt_35 Start: 30800, Stop: 31138, Start Num: 1

Candidate Starts for Holt_35:

(Start: 1 @30800 has 128 MA's), (3, 30839), (6, 30995), (7, 31043), (9, 31091),

Gene: Hoonter_36 Start: 31513, Stop: 31851, Start Num: 1

Candidate Starts for Hoonter_36:

(Start: 1 @31513 has 128 MA's), (3, 31552), (6, 31708), (7, 31756), (9, 31804),

Gene: Hokey_36 Start: 31800, Stop: 32138, Start Num: 1

Candidate Starts for Hokey_36:

(Start: 1 @31800 has 128 MA's), (3, 31839), (6, 31995), (7, 32043), (9, 32091),

Gene: HufflyPuff_33 Start: 31507, Stop: 31845, Start Num: 1

Candidate Starts for HufflyPuff_33:

(Start: 1 @31507 has 128 MA's), (3, 31546), (6, 31702), (7, 31750), (9, 31798),

Gene: IHOP_34 Start: 31700, Stop: 32038, Start Num: 1

Candidate Starts for IHOP_34:

(Start: 1 @31700 has 128 MA's), (3, 31739), (6, 31895), (7, 31943), (9, 31991),

Gene: Icee_33 Start: 31181, Stop: 31519, Start Num: 1

Candidate Starts for Icee_33:

(Start: 1 @31181 has 128 MA's), (3, 31220), (6, 31376), (7, 31424), (9, 31472),

Gene: Inca_33 Start: 30202, Stop: 30540, Start Num: 1

Candidate Starts for Inca_33:

(Start: 1 @30202 has 128 MA's), (3, 30241), (6, 30397), (7, 30445), (9, 30493),

Gene: JeTaime_36 Start: 32324, Stop: 32662, Start Num: 1

Candidate Starts for JeTaime_36:

(Start: 1 @32324 has 128 MA's), (3, 32363), (6, 32519), (7, 32567), (9, 32615),

Gene: Kanye_36 Start: 32509, Stop: 32847, Start Num: 1

Candidate Starts for Kanye_36:

(Start: 1 @32509 has 128 MA's), (3, 32548), (6, 32704), (7, 32752), (9, 32800),

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

Candidate Starts for Kimchi_36:

(Start: 1 @31516 has 128 MA's), (3, 31555), (6, 31711), (7, 31759), (9, 31807),

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

Candidate Starts for Kostya_35:

(Start: 1 @31524 has 128 MA's), (3, 31563), (6, 31719), (7, 31767), (8, 31791), (9, 31815),

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

Candidate Starts for Lilac_36:

(Start: 1 @31020 has 128 MA's), (3, 31059), (6, 31215), (7, 31263), (9, 31311),

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

Candidate Starts for Lilizi_36:

(Start: 1 @31228 has 128 MA's), (3, 31267), (6, 31423), (7, 31471), (9, 31519),

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

Candidate Starts for Lilpickle_33:

(Start: 1 @30730 has 128 MA's), (3, 30769), (6, 30925), (7, 30973), (9, 31021),

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

Candidate Starts for MISSy_33:

(Start: 1 @31036 has 128 MA's), (3, 31075), (6, 31231), (7, 31279), (9, 31327),

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

Candidate Starts for MPhalcon_33:

(Start: 1 @31029 has 128 MA's), (3, 31068), (6, 31224), (7, 31272), (9, 31320),

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

Candidate Starts for MadamMonkfish_34:

(Start: 1 @30941 has 128 MA's), (3, 30980), (6, 31136), (7, 31184), (9, 31232),

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

Candidate Starts for Manda_35:

(Start: 1 @32008 has 128 MA's), (3, 32047), (6, 32203), (7, 32251), (8, 32275), (9, 32299),

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

Candidate Starts for Marshmallow_34:

(Start: 1 @31521 has 128 MA's), (3, 31560), (6, 31716), (7, 31764), (9, 31812),

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

Candidate Starts for Maxxinista_35:

(Start: 1 @30990 has 128 MA's), (3, 31029), (6, 31185), (7, 31233), (9, 31281),

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

Candidate Starts for Mindy_34:

(Start: 1 @31301 has 128 MA's), (3, 31340), (6, 31496), (7, 31544), (9, 31592),

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

Candidate Starts for Miniwave_34:

(Start: 1 @31720 has 128 MA's), (3, 31759), (6, 31915), (7, 31963), (9, 32011),

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

Candidate Starts for Misfit_34:

(Start: 1 @31610 has 128 MA's), (3, 31649), (6, 31805), (7, 31853), (9, 31901),

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

Candidate Starts for Moldemort_35:

(Start: 1 @31265 has 128 MA's), (3, 31304), (6, 31460), (7, 31508), (9, 31556),

Gene: MollyToe_34 Start: 31694, Stop: 32032, Start Num: 1

Candidate Starts for MollyToe_34:

(Start: 1 @31694 has 128 MA's), (3, 31733), (6, 31889), (7, 31937), (8, 31961), (9, 31985),

Gene: Mosby_33 Start: 31027, Stop: 31365, Start Num: 1
Candidate Starts for Mosby_33:
(Start: 1 @31027 has 128 MA's), (3, 31066), (6, 31222), (7, 31270), (9, 31318),

Gene: Murica_33 Start: 31507, Stop: 31845, Start Num: 1
Candidate Starts for Murica_33:
(Start: 1 @31507 has 128 MA's), (3, 31546), (6, 31702), (7, 31750), (9, 31798),

Gene: Murphy_35 Start: 31502, Stop: 31840, Start Num: 1
Candidate Starts for Murphy_35:
(Start: 1 @31502 has 128 MA's), (3, 31541), (6, 31697), (7, 31745), (9, 31793),

Gene: Myrale_34 Start: 31386, Stop: 31724, Start Num: 1
Candidate Starts for Myrale_34:
(Start: 1 @31386 has 128 MA's), (3, 31425), (6, 31581), (7, 31629), (9, 31677),

Gene: Nala_34 Start: 31541, Stop: 31879, Start Num: 1
Candidate Starts for Nala_34:
(Start: 1 @31541 has 128 MA's), (3, 31580), (6, 31736), (7, 31784), (9, 31832),

Gene: NelitzaMV_34 Start: 31591, Stop: 31929, Start Num: 1
Candidate Starts for NelitzaMV_34:
(Start: 1 @31591 has 128 MA's), (3, 31630), (6, 31786), (7, 31834), (8, 31858), (9, 31882),

Gene: Nimrod_34 Start: 31765, Stop: 32103, Start Num: 1
Candidate Starts for Nimrod_34:
(Start: 1 @31765 has 128 MA's), (3, 31804), (6, 31960), (7, 32008), (9, 32056),

Gene: NoSleep_35 Start: 31262, Stop: 31600, Start Num: 1
Candidate Starts for NoSleep_35:
(Start: 1 @31262 has 128 MA's), (3, 31301), (6, 31457), (7, 31505), (9, 31553),

Gene: NonchalantPear_34 Start: 31215, Stop: 31553, Start Num: 1
Candidate Starts for NonchalantPear_34:
(Start: 1 @31215 has 128 MA's), (3, 31254), (6, 31410), (7, 31458), (9, 31506),

Gene: OrionPax_35 Start: 31268, Stop: 31606, Start Num: 1
Candidate Starts for OrionPax_35:
(Start: 1 @31268 has 128 MA's), (3, 31307), (6, 31463), (7, 31511), (9, 31559),

Gene: PaddyBaddy_35 Start: 31278, Stop: 31616, Start Num: 1
Candidate Starts for PaddyBaddy_35:
(Start: 1 @31278 has 128 MA's), (3, 31317), (6, 31473), (7, 31521), (9, 31569),

Gene: Palpatine_34 Start: 31537, Stop: 31875, Start Num: 1
Candidate Starts for Palpatine_34:
(Start: 1 @31537 has 128 MA's), (3, 31576), (6, 31732), (7, 31780), (9, 31828),

Gene: Paperbeatsrock_36 Start: 32503, Stop: 32841, Start Num: 1
Candidate Starts for Paperbeatsrock_36:
(Start: 1 @32503 has 128 MA's), (3, 32542), (6, 32698), (7, 32746), (9, 32794),

Gene: Pat3_33 Start: 30249, Stop: 30587, Start Num: 1
Candidate Starts for Pat3_33:
(Start: 1 @30249 has 128 MA's), (3, 30288), (6, 30444), (7, 30492), (8, 30516), (9, 30540),

Gene: Petra64142_36 Start: 31983, Stop: 32321, Start Num: 1
Candidate Starts for Petra64142_36:
(Start: 1 @31983 has 128 MA's), (3, 32022), (6, 32178), (7, 32226), (8, 32250), (9, 32274),

Gene: Phaja_34 Start: 31699, Stop: 32037, Start Num: 1
Candidate Starts for Phaja_34:
(Start: 1 @31699 has 128 MA's), (3, 31738), (6, 31894), (7, 31942), (9, 31990),

Gene: Pharsalus_35 Start: 32303, Stop: 32641, Start Num: 1
Candidate Starts for Pharsalus_35:
(Start: 1 @32303 has 128 MA's), (3, 32342), (6, 32498), (7, 32546), (9, 32594),

Gene: PhatBacter_34 Start: 31551, Stop: 31889, Start Num: 1
Candidate Starts for PhatBacter_34:
(Start: 1 @31551 has 128 MA's), (3, 31590), (6, 31746), (7, 31794), (9, 31842),

Gene: Phaux_33 Start: 31549, Stop: 31887, Start Num: 1
Candidate Starts for Phaux_33:
(Start: 1 @31549 has 128 MA's), (3, 31588), (6, 31744), (7, 31792), (9, 31840),

Gene: Phrux_34 Start: 31264, Stop: 31602, Start Num: 1
Candidate Starts for Phrux_34:
(Start: 1 @31264 has 128 MA's), (3, 31303), (6, 31459), (7, 31507), (9, 31555),

Gene: Policronamos_34 Start: 31549, Stop: 31887, Start Num: 1
Candidate Starts for Policronamos_34:
(Start: 1 @31549 has 128 MA's), (3, 31588), (6, 31744), (7, 31792), (9, 31840),

Gene: Porky_34 Start: 31360, Stop: 31698, Start Num: 1
Candidate Starts for Porky_34:
(Start: 1 @31360 has 128 MA's), (3, 31399), (6, 31555), (7, 31603), (9, 31651),

Gene: Ptowny_35 Start: 30905, Stop: 31243, Start Num: 1
Candidate Starts for Ptowny_35:
(Start: 1 @30905 has 128 MA's), (3, 30944), (6, 31100), (7, 31148), (9, 31196),

Gene: Pumpkin_36 Start: 31600, Stop: 31938, Start Num: 1
Candidate Starts for Pumpkin_36:
(Start: 1 @31600 has 128 MA's), (3, 31639), (6, 31795), (7, 31843), (9, 31891),

Gene: Quallification_35 Start: 31729, Stop: 32067, Start Num: 1
Candidate Starts for Quallification_35:
(Start: 1 @31729 has 128 MA's), (3, 31768), (6, 31924), (7, 31972), (9, 32020),

Gene: Rakim_35 Start: 31629, Stop: 31967, Start Num: 1
Candidate Starts for Rakim_35:
(Start: 1 @31629 has 128 MA's), (3, 31668), (6, 31824), (7, 31872), (9, 31920),

Gene: Rimmer_33 Start: 31089, Stop: 31427, Start Num: 1

Candidate Starts for Rimmer_33:

(Start: 1 @31089 has 128 MA's), (3, 31128), (6, 31284), (7, 31332), (9, 31380),

Gene: RiverMonster_34 Start: 31278, Stop: 31616, Start Num: 1

Candidate Starts for RiverMonster_34:

(Start: 1 @31278 has 128 MA's), (3, 31317), (6, 31473), (7, 31521), (9, 31569),

Gene: Saints25_35 Start: 31181, Stop: 31519, Start Num: 1

Candidate Starts for Saints25_35:

(Start: 1 @31181 has 128 MA's), (3, 31220), (6, 31376), (7, 31424), (9, 31472),

Gene: Sassay_33 Start: 31027, Stop: 31365, Start Num: 1

Candidate Starts for Sassay_33:

(Start: 1 @31027 has 128 MA's), (3, 31066), (6, 31222), (7, 31270), (9, 31318),

Gene: ShamWow_34 Start: 31523, Stop: 31861, Start Num: 1

Candidate Starts for ShamWow_34:

(Start: 1 @31523 has 128 MA's), (3, 31562), (6, 31718), (7, 31766), (8, 31790), (9, 31814),

Gene: ShereKhan_36 Start: 32506, Stop: 32844, Start Num: 1

Candidate Starts for ShereKhan_36:

(Start: 1 @32506 has 128 MA's), (3, 32545), (6, 32701), (7, 32749), (9, 32797),

Gene: Simpliphy_35 Start: 31268, Stop: 31606, Start Num: 1

Candidate Starts for Simpliphy_35:

(Start: 1 @31268 has 128 MA's), (3, 31307), (6, 31463), (7, 31511), (9, 31559),

Gene: SirDuracell_33 Start: 30188, Stop: 30526, Start Num: 1

Candidate Starts for SirDuracell_33:

(Start: 1 @30188 has 128 MA's), (3, 30227), (6, 30383), (7, 30431), (9, 30479),

Gene: SophKB_34 Start: 31522, Stop: 31860, Start Num: 1

Candidate Starts for SophKB_34:

(Start: 1 @31522 has 128 MA's), (3, 31561), (6, 31717), (7, 31765), (9, 31813),

Gene: Sotrice96_34 Start: 31477, Stop: 31815, Start Num: 1

Candidate Starts for Sotrice96_34:

(Start: 1 @31477 has 128 MA's), (3, 31516), (6, 31672), (7, 31720), (9, 31768),

Gene: Stank_37 Start: 32029, Stop: 32367, Start Num: 1

Candidate Starts for Stank_37:

(Start: 1 @32029 has 128 MA's), (3, 32068), (6, 32224), (7, 32272), (9, 32320),

Gene: Stark_35 Start: 31281, Stop: 31619, Start Num: 1

Candidate Starts for Stark_35:

(Start: 1 @31281 has 128 MA's), (3, 31320), (6, 31476), (7, 31524), (9, 31572),

Gene: StellaBean_34 Start: 31522, Stop: 31860, Start Num: 1

Candidate Starts for StellaBean_34:

(Start: 1 @31522 has 128 MA's), (3, 31561), (6, 31717), (7, 31765), (9, 31813),

Gene: StolenFromERC_36 Start: 31513, Stop: 31851, Start Num: 1

Candidate Starts for StolenFromERC_36:

(Start: 1 @31513 has 128 MA's), (3, 31552), (6, 31708), (7, 31756), (9, 31804),

Gene: StormChicken_34 Start: 31697, Stop: 32035, Start Num: 1

Candidate Starts for StormChicken_34:

(Start: 1 @31697 has 128 MA's), (3, 31736), (6, 31892), (7, 31940), (8, 31964), (9, 31988),

Gene: TBrady12_36 Start: 31513, Stop: 31851, Start Num: 1

Candidate Starts for TBrady12_36:

(Start: 1 @31513 has 128 MA's), (3, 31552), (6, 31708), (7, 31756), (9, 31804),

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

Candidate Starts for Tarkin_36:

(Start: 1 @32512 has 128 MA's), (3, 32551), (6, 32707), (7, 32755), (9, 32803),

Gene: TeamEdward_34 Start: 31694, Stop: 32032, Start Num: 1

Candidate Starts for TeamEdward_34:

(Start: 1 @31694 has 128 MA's), (3, 31733), (6, 31889), (7, 31937), (8, 31961), (9, 31985),

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

Candidate Starts for TeardropMSU_33:

(Start: 1 @31423 has 128 MA's), (3, 31462), (6, 31618), (7, 31666), (9, 31714),

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

Candidate Starts for Teaspoon_35:

(Start: 1 @31476 has 128 MA's), (3, 31515), (6, 31671), (7, 31719), (9, 31767),

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

Candidate Starts for Terminus_34:

(Start: 1 @31610 has 128 MA's), (3, 31649), (6, 31805), (7, 31853), (9, 31901),

Gene: Thimble_34 Start: 30473, Stop: 30811, Start Num: 1

Candidate Starts for Thimble_34:

(Start: 1 @30473 has 128 MA's), (3, 30512), (6, 30668), (7, 30716), (9, 30764),

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

Candidate Starts for Thresher_35:

(Start: 1 @32277 has 128 MA's), (3, 32316), (6, 32472), (7, 32520), (9, 32568),

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

Candidate Starts for Tomaszewski_33:

(Start: 1 @31120 has 128 MA's), (3, 31159), (6, 31315), (7, 31363), (9, 31411),

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

Candidate Starts for Toto_34:

(Start: 1 @31523 has 128 MA's), (3, 31562), (6, 31718), (7, 31766), (8, 31790), (9, 31814),

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

Candidate Starts for Traaww1_32:

(Start: 1 @31161 has 128 MA's), (3, 31200), (6, 31356), (7, 31404), (9, 31452),

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

Candidate Starts for Tuco_35:

(Start: 1 @32031 has 128 MA's), (3, 32070), (6, 32226), (7, 32274), (9, 32322),

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

Candidate Starts for Ukulele_34:

(Start: 1 @31281 has 128 MA's), (3, 31320), (6, 31476), (7, 31524), (9, 31572),

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

Candidate Starts for Wiggin_37:

(Start: 1 @32027 has 128 MA's), (3, 32066), (6, 32222), (7, 32270), (9, 32318),

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

Candidate Starts for Willez_33:

(Start: 1 @31027 has 128 MA's), (3, 31066), (6, 31222), (7, 31270), (9, 31318),

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

Candidate Starts for Xandras_36:

(Start: 1 @31513 has 128 MA's), (3, 31552), (6, 31708), (7, 31756), (9, 31804),

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

Candidate Starts for YassJohnny_35:

(Start: 1 @32038 has 128 MA's), (3, 32077), (6, 32233), (7, 32281), (9, 32329),

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

Candidate Starts for Youngblood_34:

(Start: 1 @31683 has 128 MA's), (3, 31722), (6, 31878), (7, 31926), (8, 31950), (9, 31974),

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

Candidate Starts for xkcd_35:

(Start: 1 @31692 has 128 MA's), (3, 31731), (6, 31887), (7, 31935), (9, 31983),