

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 187927 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 187927 has 164 members, 30 are drafts.

Phages represented in each track:

- Track 1 : DanielleIgnace_16
- Track 2 : Kitkat_24, BeatusComedenti_23, KelleEzio_23
- Track 3 : Auxilium_7, BenchScraper_7, Faja_7, SpicyFrank_7, BillyTP_7, YoungHarleezy_7, Gorpy_7, Richie_7, Raphaella_7, Sakai_7, Aikyam_7, CookieBear_7
- Track 4 : Isolde_8
- Track 5 : Sashimi_8, EvePickles_7
- Track 6 : MidnightRain_7, RadFad_7, Phrank15_6, Hillester_7
- Track 7 : Hestia_7, Tiff81_8
- Track 8 : Persistence_6, Anekin_6
- Track 9 : Lawnathon_7
- Track 10 : Seahorse_8
- Track 11 : Globfish_7
- Track 12 : ThayneTheZag_7
- Track 13 : SPB78_6
- Track 14 : VWB_6
- Track 15 : Culver_34, Miskis_36, Geeche_33, Dusty_32, Lozinak_34, Abscondus_33, Smoothie_35, Cucurbita_36, Engineer_35, Bachita_36, Toniann_34, PhinkBoden_34, Norvs_35, ClubL_34
- Track 16 : WilliamBoone_34
- Track 17 : Aphelion_34
- Track 18 : OneUp_28, BrutonGaster_22
- Track 19 : Apiary_32, Polyuyuki_32, Maselop_32, CoffeeBean_32, Braxoaddie_32
- Track 20 : MacGully_36
- Track 21 : GuyFagieri_32
- Track 22 : GTE5_19, Flapper_32, Turuncu_32
- Track 23 : Dalilpop_33, GRU1_18
- Track 24 : SuperSulley_29, NosilaM_31, Bonum_31, Kabluna_31, Buggaboo_29
- Track 25 : Wheezy_28, GrootJr_30, Arti_28, NovumRegina_28
- Track 26 : Jifall16_27, Foxboro_29, NatB6_28, Kurt_28, KidneyBean_28, Phomeo_27, Emianna_28, Tracker_28
- Track 27 : Outis_29, MerCougar_29, StarStruck_29
- Track 28 : GTE8_17

- Track 29 : Commandaria_30
- Track 30 : Lollipop1437_33, Patio_31, Ennea_34, Float294_30, Skysand_30
- Track 31 : NadineRae_28
- Track 32 : Sukkupi_30, BiPauneto_31, Marietta_30, IDyn_29, Yndexa_30, WhoseManz_30, HubbaBubba_27
- Track 33 : Fury_37, Pleakley_37
- Track 34 : Jablanski_6, Bradissa_6, Pytheas_6
- Track 35 : Posh_6, Confidence_6, BeeGee_6
- Track 36 : LonelyBoi_6
- Track 37 : Marteena_6, EnalisNailo_6, Cashline_6, Angelique_6, EMSquaredA_6, Wrigley_6, Floral_6, BritBrat_6, Lilas_6, Pollux_6
- Track 38 : JonJames_34, Cardigan_34, Yvonnestic_32
- Track 39 : DatBoi_17
- Track 40 : Bantam_16, SpeedDemon_170
- Track 41 : Mollymur_17
- Track 42 : Daredevil_16
- Track 43 : BearBQ_6, MortyNRick_6, Apricot_6, Kuwabara_6, Crater_6, Birdsong_6
- Track 44 : TChen_6, Toron_6, LunaStella_6, ThetaBob_6, Renaud18_6
- Track 45 : Cornie_5
- Track 46 : Bauer_8, Zucker_7
- Track 47 : BlackSpider_6
- Track 48 : Gattaca_38, RedRaider77_39, FeliMaine_39, Corazon_37, Clarkson_40, Poise_39, Tesla_38, Raela_39, Pringar_39, JoieB_40, LittleLaf_39, Beelzebub_43, Lilbit_40, Huphlepuuff_41, Marvin_37, VasuNzinga_39, MosMoris_37, Caprice_36, Blackbeetle_39
- Track 49 : ChewyVIII_42
- Track 50 : LilSpotty_6
- Track 51 : TPA4_7
- Track 52 : GAL1_8
- Track 53 : Samy_9

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

The start number called the most often in the published annotations is 4, it was called in 113 of the 134 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus_33, Aikyam_7, Anekin_6, Aphelion_34, Apiary_32, Apricot_6, Arti_28, Auxilium_7, Bachita_36, Bantam_16, BearBQ_6, BeatusComedenti_23, Beelzebub_43, BenchScraper_7, BiPauneto_31, BillyTP_7, Birdsong_6, Blackbeetle_39, Bonum_31, Braxoaddie_32, BrutonGaster_22, Buggaboo_29, Caprice_36, Cardigan_34, ChewyVIII_42, Clarkson_40, ClubL_34, CoffeeBean_32, Commandaria_30, CookieBear_7, Corazon_37, Crater_6, Cucurbita_36, Culver_34, Dalilpop_33, DaniellEgnace_16, Daredevil_16, DatBoi_17, Dusty_32, Emianna_28, Engineer_35, Ennea_34, EvePickles_7, Faja_7, FeliMaine_39, Flapper_32, Float294_30, Foxboro_29, Fury_37, GRU1_18, GTE5_19, GTE8_17, Gattaca_38, Geeche_33, Globfish_7, Gorpy_7, GrootJr_30, GuyFagieri_32, Hestia_7, Hillester_7, HubbaBubba_27, Huphlepuuff_41, IDyn_29, Isolde_8, Jifall16_27, JoieB_40, JonJames_34, Kabluna_31, KellEzio_23, KidneyBean_28, Kitkat_24, Kurt_28, Kuwabara_6, Lawnathon_7, LilSpotty_6, Lilbit_40, LittleLaf_39, Lollipop1437_33,

Lozinak_34, LunaStella_6, MacGully_36, Marietta_30, Marvin_37, Maselop_32, MerCougar_29, MidnightRain_7, Miskis_36, Mollymur_17, MortyNRick_6, MosMoris_37, NadineRae_28, NatB6_28, Norvs_35, NosilaM_31, NovumRegina_28, OneUp_28, Outis_29, Patio_31, Persistence_6, PhinkBoden_34, Phomeo_27, Phrank15_6, Pleakley_37, Poise_39, Polyuyki_32, Pringar_39, RadFad_7, Raela_39, Raphaella_7, RedRaider77_39, Renaud18_6, Richie_7, Sakai_7, Sashimi_8, Seahorse_8, Skysand_30, Smoothie_35, SpeedDemon_170, SpicyFrank_7, StarStruck_29, Sukkupi_30, SuperSulley_29, TChen_6, TPA4_7, Tesla_38, ThayneTheZag_7, ThetaBob_6, Tiff81_8, Toniann_34, Toron_6, Tracker_28, Turuncu_32, VasuNzinga_39, Wheezy_28, WhoseManz_30, WilliamBoone_34, Yndexa_30, YoungHarleezy_7, Yvonnetastic_32,

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

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

- Angelique_6, Bauer_8, BeeGee_6, BlackSpider_6, Bradissa_6, BritBrat_6, Cashline_6, Confidence_6, Cornie_5, EMSquaredA_6, EnalisNailo_6, Floral_6, GAL1_8, Jablanski_6, Lilas_6, LonelyBoi_6, Marteena_6, Pollux_6, Posh_6, Pytheas_6, SPB78_6, Samy_9, VWB_6, Wrigley_6, Zucker_7,

Summary by start number:

Start 3:

- Found in 2 of 164 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cornie_5 (F5), GAL1_8 (singleton),

Start 4:

- Found in 139 of 164 (84.8%) of genes in pham
- Manual Annotations of this start: 113 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus_33 (CQ1), Aikyam_7 (AY), Anekin_6 (AY), Aphelion_34 (CQ1), Apiary_32 (CR), Apricot_6 (DN3), Arti_28 (CR2), Auxilium_7 (AY), Bachita_36 (CQ1), Bantam_16 (DL), BearBQ_6 (DN), BeatusComedenti_23 (AT), Beelzebub_43 (S), BenchScraper_7 (AY), BiPauneto_31 (CR4), BillyTP_7 (AY), Birdsong_6 (DN), Blackbeetle_39 (S), Bonum_31 (CR2), Braxoaddie_32 (CR), BrutonGaster_22 (CQ2), Buggaboo_29 (CR2), Caprice_36 (S), Cardigan_34 (DD), ChewyVIII_42 (singleton), Clarkson_40 (S), ClubL_34 (CQ1), CoffeeBean_32 (CR), Commandaria_30 (CR2), CookieBear_7 (AY), Corazon_37 (S), Crater_6 (DN3), Cucurbita_36 (CQ1), Culver_34 (CQ1), Dalilpop_33 (CR1), DanielleIgnace_16 (AT), Daredevil_16 (DL), DatBoi_17 (DL), Dusty_32 (CQ1), Emianna_28 (CR2), Engineer_35 (CQ1), Ennea_34 (CR3), EvePickles_7 (AY), Faja_7 (AY), FeliMaine_39 (S), Flapper_32 (CR1), Float294_30 (CR3), Foxboro_29 (CR2), Fury_37 (CR5), GRU1_18 (CR1), GTE5_19 (CR1), GTE8_17 (CR2), Gattaca_38 (S), Geeche_33 (CQ1), Globfish_7 (AY), Gorpy_7 (AY), GrootJr_30 (CR2), GuyFagieri_32 (CR), Hestia_7 (AY), Hillester_7 (AY), HubbaBubba_27 (CR4), Huphlepuuff_41 (S), IDyn_29 (CR4), Isolde_8 (AY), Jifall16_27 (CR2), JoieB_40 (S), JonJames_34 (DD), Kabluna_31 (CR2), KellEzio_23 (AT), KidneyBean_28 (CR2), Kitkat_24 (AT), Kurt_28 (CR2), Kuwabara_6 (DN4), Lawnathon_7 (AY), LilSpotty_6 (singleton), Lilbit_40 (S), LittleLaf_39 (S), Lollipop1437_33 (CR3), Lozinak_34 (CQ1), LunaStella_6 (F4), MacGully_36 (CR), Marietta_30 (CR4), Marvin_37 (S),

Maselop_32 (CR), MerCougar_29 (CR2), MidnightRain_7 (AY), Miskis_36 (CQ1), Mollymur_17 (DL), MortyNRick_6 (DN), MosMoris_37 (S), NadineRae_28 (CR4), NatB6_28 (CR2), Norvs_35 (CQ1), NosilaM_31 (CR2), NovumRegina_28 (CR2), OneUp_28 (CQ2), Outis_29 (CR2), Patio_31 (CR3), Persistence_6 (AY), PhinkBoden_34 (CQ1), Phomeo_27 (CR2), Phrank15_6 (AY), Pleakley_37 (CR5), Poise_39 (S), Polyuyuki_32 (CR), Pringar_39 (S), RadFad_7 (AY), Raela_39 (S), Raphaella_7 (AY), RedRaider77_39 (S), Renaud18_6 (F4), Richie_7 (AY), Sakai_7 (AY), Sashimi_8 (AY), Seahorse_8 (AY), Skysand_30 (CR3), Smoothie_35 (CQ1), SpeedDemon_170 (DL), SpicyFrank_7 (AY), StarStruck_29 (CR2), Sukkupi_30 (CR4), SuperSulley_29 (CR2), TChen_6 (F4), TPA4_7 (singleton), Tesla_38 (S), ThayneTheZag_7 (AY), ThetaBob_6 (F4), Tiff81_8 (AY), Toniann_34 (CQ1), Toron_6 (F6), Tracker_28 (CR2), Turuncu_32 (CR1), VasuNzinga_39 (S), Wheezy_28 (CR2), WhoseManz_30 (CR4), WilliamBoone_34 (CQ1), Yndexa_30 (CR4), YoungHarleezy_7 (AY), Yvonnestic_32 (DD),

Start 6:

- Found in 17 of 164 (10.4%) of genes in pham
- Manual Annotations of this start: 17 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique_6 (CY1), BeeGee_6 (CY), Bradissa_6 (CY1), BritBrat_6 (CY2), Cashline_6 (CY), Confidence_6 (CY1), EMSquaredA_6 (CY1), EnalisNailo_6 (CY1), Floral_6 (CY1), Jablanski_6 (CY), Lilas_6 (CY1), LonelyBoi_6 (CY), Marteena_6 (CY1), Pollux_6 (CY1), Posh_6 (CY), Pytheas_6 (CY), Wrigley_6 (CY),

Start 7:

- Found in 3 of 164 (1.8%) of genes in pham
- Manual Annotations of this start: 1 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SPB78_6 (BA), Samy_9 (singleton), VWB_6 (BA),

Start 10:

- Found in 3 of 164 (1.8%) of genes in pham
- Manual Annotations of this start: 2 of 134
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bauer_8 (FN), BlackSpider_6 (FN), Zucker_7 (FN),

Summary by clusters:

There are 25 clusters represented in this pham: DN, singleton, BA, DD, DL, FN, DN4, DN3, CQ2, CQ1, CY2, CY1, CY, AT, AY, CR, F5, CR2, CR3, CR1, F4, F6, CR4, CR5, S,

Info for manual annotations of cluster AT:

- Start number 4 was manually annotated 4 times for cluster AT.

Info for manual annotations of cluster AY:

- Start number 4 was manually annotated 17 times for cluster AY.

Info for manual annotations of cluster CQ1:

- Start number 4 was manually annotated 12 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 4 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CR:

- Start number 4 was manually annotated 7 times for cluster CR.

Info for manual annotations of cluster CR1:

- Start number 4 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 4 was manually annotated 20 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 4 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 4 was manually annotated 7 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 4 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster CY:

- Start number 6 was manually annotated 7 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 6 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 6 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DD:

- Start number 4 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 4 was manually annotated 5 times for cluster DL.

Info for manual annotations of cluster DN:

- Start number 4 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN3:

- Start number 4 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 4 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster F4:

- Start number 4 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster F5:

- Start number 3 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster FN:

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

Info for manual annotations of cluster S:

- Start number 4 was manually annotated 16 times for cluster S.

Gene Information:

Gene: Abscondus_33 Start: 13642, Stop: 14040, Start Num: 4

Candidate Starts for Abscondus_33:

(Start: 4 @13642 has 113 MA's), (42, 13912), (49, 13936),

Gene: Aikyam_7 Start: 5476, Stop: 5871, Start Num: 4

Candidate Starts for Aikyam_7:

(Start: 4 @5476 has 113 MA's), (52, 5779), (54, 5794),

Gene: Anekin_6 Start: 5629, Stop: 6024, Start Num: 4

Candidate Starts for Anekin_6:

(Start: 4 @5629 has 113 MA's), (52, 5932), (54, 5947),

Gene: Angelique_6 Start: 5300, Stop: 5683, Start Num: 6

Candidate Starts for Angelique_6:

(Start: 6 @5300 has 17 MA's), (21, 5387), (28, 5468), (32, 5483), (54, 5603),

Gene: Aphelion_34 Start: 13889, Stop: 14287, Start Num: 4

Candidate Starts for Aphelion_34:

(Start: 4 @13889 has 113 MA's), (37, 14138), (42, 14159), (49, 14183),

Gene: Apiary_32 Start: 19572, Stop: 19976, Start Num: 4

Candidate Starts for Apiary_32:

(Start: 4 @19572 has 113 MA's), (25, 19722), (38, 19821), (56, 19908), (58, 19923), (66, 19950),

Gene: Apricot_6 Start: 4848, Stop: 5222, Start Num: 4

Candidate Starts for Apricot_6:

(Start: 4 @4848 has 113 MA's), (20, 4926), (28, 5013), (32, 5028), (34, 5064), (41, 5097),

Gene: Arti_28 Start: 17591, Stop: 18016, Start Num: 4

Candidate Starts for Arti_28:

(Start: 4 @17591 has 113 MA's), (9, 17600), (18, 17666), (47, 17900), (54, 17936), (66, 17984),

Gene: Auxilium_7 Start: 5490, Stop: 5885, Start Num: 4

Candidate Starts for Auxilium_7:

(Start: 4 @5490 has 113 MA's), (52, 5793), (54, 5808),

Gene: Bachita_36 Start: 14322, Stop: 14720, Start Num: 4

Candidate Starts for Bachita_36:

(Start: 4 @14322 has 113 MA's), (42, 14592), (49, 14616),

Gene: Bantam_16 Start: 11161, Stop: 11574, Start Num: 4

Candidate Starts for Bantam_16:

(Start: 4 @11161 has 113 MA's), (21, 11257), (66, 11542),

Gene: Bauer_8 Start: 5911, Stop: 6297, Start Num: 10

Candidate Starts for Bauer_8:

(Start: 10 @5911 has 2 MA's), (27, 6067), (30, 6085),

Gene: BearBQ_6 Start: 4848, Stop: 5222, Start Num: 4

Candidate Starts for BearBQ_6:

(Start: 4 @4848 has 113 MA's), (20, 4926), (28, 5013), (32, 5028), (34, 5064), (41, 5097),

Gene: BeatusComedenti_23 Start: 12436, Stop: 12837, Start Num: 4

Candidate Starts for BeatusComedenti_23:

(Start: 4 @12436 has 113 MA's), (18, 12523), (42, 12712),

Gene: BeeGee_6 Start: 5303, Stop: 5686, Start Num: 6

Candidate Starts for BeeGee_6:

(Start: 6 @5303 has 17 MA's), (21, 5390), (27, 5462), (28, 5471), (32, 5486), (54, 5606), (56, 5612),

Gene: Beelzebub_43 Start: 16130, Stop: 16534, Start Num: 4

Candidate Starts for Beelzebub_43:

(Start: 4 @16130 has 113 MA's), (18, 16208), (23, 16262), (27, 16292), (32, 16322), (40, 16385), (43, 16397), (71, 16520),

Gene: BenchScraper_7 Start: 5490, Stop: 5885, Start Num: 4

Candidate Starts for BenchScraper_7:

(Start: 4 @5490 has 113 MA's), (52, 5793), (54, 5808),

Gene: BiPauneto_31 Start: 17447, Stop: 17893, Start Num: 4

Candidate Starts for BiPauneto_31:

(Start: 4 @17447 has 113 MA's), (9, 17456), (40, 17720), (44, 17738), (45, 17747), (58, 17813), (72, 17867),

Gene: BillyTP_7 Start: 5484, Stop: 5879, Start Num: 4

Candidate Starts for BillyTP_7:

(Start: 4 @5484 has 113 MA's), (52, 5787), (54, 5802),

Gene: Birdsong_6 Start: 4848, Stop: 5222, Start Num: 4

Candidate Starts for Birdsong_6:

(Start: 4 @4848 has 113 MA's), (20, 4926), (28, 5013), (32, 5028), (34, 5064), (41, 5097),

Gene: BlackSpider_6 Start: 4970, Stop: 5356, Start Num: 10

Candidate Starts for BlackSpider_6:

(Start: 10 @4970 has 2 MA's), (30, 5144),

Gene: Blackbeetle_39 Start: 15149, Stop: 15553, Start Num: 4

Candidate Starts for Blackbeetle_39:

(Start: 4 @15149 has 113 MA's), (18, 15227), (23, 15281), (27, 15311), (32, 15341), (40, 15404), (43, 15416), (71, 15539),

Gene: Bonum_31 Start: 17932, Stop: 18351, Start Num: 4

Candidate Starts for Bonum_31:

(Start: 4 @17932 has 113 MA's), (9, 17941), (15, 17989), (38, 18196), (45, 18232), (54, 18277), (66, 18325),

Gene: Bradissa_6 Start: 5307, Stop: 5690, Start Num: 6

Candidate Starts for Bradissa_6:

(Start: 6 @5307 has 17 MA's), (21, 5394), (28, 5475), (32, 5490), (41, 5559), (54, 5610),

Gene: Braxoaddie_32 Start: 19561, Stop: 19965, Start Num: 4

Candidate Starts for Braxoaddie_32:

(Start: 4 @19561 has 113 MA's), (25, 19711), (38, 19810), (56, 19897), (58, 19912), (66, 19939),

Gene: BritBrat_6 Start: 5309, Stop: 5692, Start Num: 6

Candidate Starts for BritBrat_6:

(Start: 6 @5309 has 17 MA's), (21, 5396), (28, 5477), (32, 5492), (54, 5612),

Gene: BrutonGaster_22 Start: 10580, Stop: 10981, Start Num: 4

Candidate Starts for BrutonGaster_22:

(Start: 4 @10580 has 113 MA's), (25, 10730), (58, 10925),

Gene: Buggaboo_29 Start: 18417, Stop: 18836, Start Num: 4

Candidate Starts for Buggaboo_29:

(Start: 4 @18417 has 113 MA's), (9, 18426), (15, 18474), (38, 18681), (45, 18717), (54, 18762), (66, 18810),

Gene: Caprice_36 Start: 15219, Stop: 15623, Start Num: 4

Candidate Starts for Caprice_36:

(Start: 4 @15219 has 113 MA's), (18, 15297), (23, 15351), (27, 15381), (32, 15411), (40, 15474), (43, 15486), (71, 15609),

Gene: Cardigan_34 Start: 15847, Stop: 16248, Start Num: 4

Candidate Starts for Cardigan_34:

(Start: 4 @15847 has 113 MA's), (11, 15868), (21, 15943),

Gene: Cashline_6 Start: 5156, Stop: 5539, Start Num: 6

Candidate Starts for Cashline_6:

(Start: 6 @5156 has 17 MA's), (21, 5243), (28, 5324), (32, 5339), (54, 5459),

Gene: ChewyVIII_42 Start: 25136, Stop: 25552, Start Num: 4

Candidate Starts for ChewyVIII_42:

(Start: 4 @25136 has 113 MA's), (12, 25172),

Gene: Clarkson_40 Start: 15831, Stop: 16235, Start Num: 4

Candidate Starts for Clarkson_40:

(Start: 4 @15831 has 113 MA's), (18, 15909), (23, 15963), (27, 15993), (32, 16023), (40, 16086), (43, 16098), (71, 16221),

Gene: ClubL_34 Start: 13823, Stop: 14221, Start Num: 4

Candidate Starts for ClubL_34:

(Start: 4 @13823 has 113 MA's), (42, 14093), (49, 14117),

Gene: CoffeeBean_32 Start: 19516, Stop: 19920, Start Num: 4

Candidate Starts for CoffeeBean_32:

(Start: 4 @19516 has 113 MA's), (25, 19666), (38, 19765), (56, 19852), (58, 19867), (66, 19894),

Gene: Commandaria_30 Start: 18882, Stop: 19346, Start Num: 4

Candidate Starts for Commandaria_30:

(Start: 4 @18882 has 113 MA's), (9, 18891), (47, 19191), (54, 19227), (61, 19257), (65, 19272), (73, 19320),

Gene: Confidence_6 Start: 5303, Stop: 5686, Start Num: 6

Candidate Starts for Confidence_6:

(Start: 6 @5303 has 17 MA's), (21, 5390), (27, 5462), (28, 5471), (32, 5486), (54, 5606), (56, 5612),

Gene: CookieBear_7 Start: 5490, Stop: 5885, Start Num: 4

Candidate Starts for CookieBear_7:

(Start: 4 @5490 has 113 MA's), (52, 5793), (54, 5808),

Gene: Corazon_37 Start: 15784, Stop: 16188, Start Num: 4

Candidate Starts for Corazon_37:

(Start: 4 @15784 has 113 MA's), (18, 15862), (23, 15916), (27, 15946), (32, 15976), (40, 16039), (43, 16051), (71, 16174),

Gene: Cornie_5 Start: 4459, Stop: 4863, Start Num: 3

Candidate Starts for Cornie_5:

(Start: 3 @4459 has 1 MA's), (17, 4534), (19, 4540), (21, 4552), (28, 4633), (34, 4690), (40, 4717), (42, 4726), (54, 4789), (67, 4846),

Gene: Crater_6 Start: 4848, Stop: 5222, Start Num: 4

Candidate Starts for Crater_6:

(Start: 4 @4848 has 113 MA's), (20, 4926), (28, 5013), (32, 5028), (34, 5064), (41, 5097),

Gene: Cucurbita_36 Start: 15181, Stop: 15579, Start Num: 4

Candidate Starts for Cucurbita_36:

(Start: 4 @15181 has 113 MA's), (42, 15451), (49, 15475),

Gene: Culver_34 Start: 13642, Stop: 14040, Start Num: 4

Candidate Starts for Culver_34:

(Start: 4 @13642 has 113 MA's), (42, 13912), (49, 13936),

Gene: Dalilpop_33 Start: 19952, Stop: 20371, Start Num: 4

Candidate Starts for Dalilpop_33:

(Start: 4 @19952 has 113 MA's), (29, 20138), (62, 20330),

Gene: DanielleIgnace_16 Start: 11672, Stop: 12079, Start Num: 4

Candidate Starts for DanielleIgnace_16:

(Start: 4 @11672 has 113 MA's), (14, 11735), (18, 11756), (25, 11834), (39, 11942), (42, 11954),

Gene: Daredevil_16 Start: 10047, Stop: 10457, Start Num: 4

Candidate Starts for Daredevil_16:

(Start: 4 @10047 has 113 MA's), (28, 10224), (48, 10338), (64, 10419),

Gene: DatBoi_17 Start: 11997, Stop: 12410, Start Num: 4

Candidate Starts for DatBoi_17:

(Start: 4 @11997 has 113 MA's), (21, 12093),

Gene: Dusty_32 Start: 13642, Stop: 14040, Start Num: 4

Candidate Starts for Dusty_32:

(Start: 4 @13642 has 113 MA's), (42, 13912), (49, 13936),

Gene: EMSquaredA_6 Start: 5309, Stop: 5692, Start Num: 6
Candidate Starts for EMSquaredA_6:
(Start: 6 @5309 has 17 MA's), (21, 5396), (28, 5477), (32, 5492), (54, 5612),

Gene: Emianna_28 Start: 18630, Stop: 19055, Start Num: 4
Candidate Starts for Emianna_28:
(Start: 4 @18630 has 113 MA's), (9, 18639), (18, 18705), (47, 18939), (54, 18975), (66, 19023),

Gene: EnalisNailo_6 Start: 5309, Stop: 5692, Start Num: 6
Candidate Starts for EnalisNailo_6:
(Start: 6 @5309 has 17 MA's), (21, 5396), (28, 5477), (32, 5492), (54, 5612),

Gene: Engineer_35 Start: 13837, Stop: 14235, Start Num: 4
Candidate Starts for Engineer_35:
(Start: 4 @13837 has 113 MA's), (42, 14107), (49, 14131),

Gene: Ennea_34 Start: 19252, Stop: 19671, Start Num: 4
Candidate Starts for Ennea_34:
(Start: 4 @19252 has 113 MA's), (15, 19309), (58, 19618),

Gene: EvePickles_7 Start: 5532, Stop: 5927, Start Num: 4
Candidate Starts for EvePickles_7:
(Start: 4 @5532 has 113 MA's), (34, 5757), (52, 5835), (54, 5850),

Gene: Faja_7 Start: 5476, Stop: 5871, Start Num: 4
Candidate Starts for Faja_7:
(Start: 4 @5476 has 113 MA's), (52, 5779), (54, 5794),

Gene: FeliMaine_39 Start: 15832, Stop: 16236, Start Num: 4
Candidate Starts for FeliMaine_39:
(Start: 4 @15832 has 113 MA's), (18, 15910), (23, 15964), (27, 15994), (32, 16024), (40, 16087), (43, 16099), (71, 16222),

Gene: Flapper_32 Start: 19033, Stop: 19452, Start Num: 4
Candidate Starts for Flapper_32:
(Start: 4 @19033 has 113 MA's), (62, 19411),

Gene: Float294_30 Start: 18694, Stop: 19113, Start Num: 4
Candidate Starts for Float294_30:
(Start: 4 @18694 has 113 MA's), (15, 18751), (58, 19060),

Gene: Floral_6 Start: 5309, Stop: 5692, Start Num: 6
Candidate Starts for Floral_6:
(Start: 6 @5309 has 17 MA's), (21, 5396), (28, 5477), (32, 5492), (54, 5612),

Gene: Foxboro_29 Start: 19136, Stop: 19561, Start Num: 4
Candidate Starts for Foxboro_29:
(Start: 4 @19136 has 113 MA's), (9, 19145), (18, 19211), (47, 19445), (54, 19481), (66, 19529),

Gene: Fury_37 Start: 18318, Stop: 18737, Start Num: 4
Candidate Starts for Fury_37:

(Start: 4 @18318 has 113 MA's), (9, 18327), (31, 18525), (38, 18582), (44, 18609), (50, 18645), (58, 18684),

Gene: GAL1_8 Start: 6396, Stop: 6800, Start Num: 3

Candidate Starts for GAL1_8:

(Start: 3 @6396 has 1 MA's), (13, 6435), (16, 6456), (19, 6477), (21, 6489), (36, 6633), (46, 6687), (48, 6696), (70, 6789),

Gene: GRU1_18 Start: 10918, Stop: 11337, Start Num: 4

Candidate Starts for GRU1_18:

(Start: 4 @10918 has 113 MA's), (29, 11104), (62, 11296),

Gene: GTE5_19 Start: 11921, Stop: 12340, Start Num: 4

Candidate Starts for GTE5_19:

(Start: 4 @11921 has 113 MA's), (62, 12299),

Gene: GTE8_17 Start: 11895, Stop: 12320, Start Num: 4

Candidate Starts for GTE8_17:

(Start: 4 @11895 has 113 MA's), (9, 11904), (18, 11970), (54, 12240), (55, 12243), (66, 12288),

Gene: Gattaca_38 Start: 15011, Stop: 15415, Start Num: 4

Candidate Starts for Gattaca_38:

(Start: 4 @15011 has 113 MA's), (18, 15089), (23, 15143), (27, 15173), (32, 15203), (40, 15266), (43, 15278), (71, 15401),

Gene: Geeche_33 Start: 13711, Stop: 14109, Start Num: 4

Candidate Starts for Geeche_33:

(Start: 4 @13711 has 113 MA's), (42, 13981), (49, 14005),

Gene: Globfish_7 Start: 5535, Stop: 5930, Start Num: 4

Candidate Starts for Globfish_7:

(Start: 4 @5535 has 113 MA's), (33, 5745), (54, 5853),

Gene: Gorpy_7 Start: 5484, Stop: 5879, Start Num: 4

Candidate Starts for Gorpy_7:

(Start: 4 @5484 has 113 MA's), (52, 5787), (54, 5802),

Gene: GrootJr_30 Start: 17986, Stop: 18411, Start Num: 4

Candidate Starts for GrootJr_30:

(Start: 4 @17986 has 113 MA's), (9, 17995), (18, 18061), (47, 18295), (54, 18331), (66, 18379),

Gene: GuyFagieri_32 Start: 19354, Stop: 19767, Start Num: 4

Candidate Starts for GuyFagieri_32:

(Start: 4 @19354 has 113 MA's), (27, 19522), (56, 19690), (58, 19705), (63, 19726),

Gene: Hestia_7 Start: 5623, Stop: 6018, Start Num: 4

Candidate Starts for Hestia_7:

(Start: 4 @5623 has 113 MA's), (33, 5833), (34, 5848), (52, 5926), (54, 5941),

Gene: Hillester_7 Start: 5476, Stop: 5871, Start Num: 4

Candidate Starts for Hillester_7:

(Start: 4 @5476 has 113 MA's), (34, 5701), (52, 5779), (54, 5794),

Gene: HubbaBubba_27 Start: 14465, Stop: 14911, Start Num: 4
Candidate Starts for HubbaBubba_27:
(Start: 4 @14465 has 113 MA's), (9, 14474), (40, 14738), (44, 14756), (45, 14765), (58, 14831), (72, 14885),

Gene: Huphlepuuff_41 Start: 15636, Stop: 16040, Start Num: 4
Candidate Starts for Huphlepuuff_41:
(Start: 4 @15636 has 113 MA's), (18, 15714), (23, 15768), (27, 15798), (32, 15828), (40, 15891), (43, 15903), (71, 16026),

Gene: IDyn_29 Start: 15861, Stop: 16307, Start Num: 4
Candidate Starts for IDyn_29:
(Start: 4 @15861 has 113 MA's), (9, 15870), (40, 16134), (44, 16152), (45, 16161), (58, 16227), (72, 16281),

Gene: Isolde_8 Start: 5547, Stop: 5942, Start Num: 4
Candidate Starts for Isolde_8:
(Start: 4 @5547 has 113 MA's), (34, 5772), (35, 5775), (53, 5862), (54, 5865),

Gene: Jablanski_6 Start: 5156, Stop: 5539, Start Num: 6
Candidate Starts for Jablanski_6:
(Start: 6 @5156 has 17 MA's), (21, 5243), (28, 5324), (32, 5339), (41, 5408), (54, 5459),

Gene: Jifall16_27 Start: 18266, Stop: 18691, Start Num: 4
Candidate Starts for Jifall16_27:
(Start: 4 @18266 has 113 MA's), (9, 18275), (18, 18341), (47, 18575), (54, 18611), (66, 18659),

Gene: JoieB_40 Start: 15855, Stop: 16259, Start Num: 4
Candidate Starts for JoieB_40:
(Start: 4 @15855 has 113 MA's), (18, 15933), (23, 15987), (27, 16017), (32, 16047), (40, 16110), (43, 16122), (71, 16245),

Gene: JonJames_34 Start: 18062, Stop: 18463, Start Num: 4
Candidate Starts for JonJames_34:
(Start: 4 @18062 has 113 MA's), (11, 18083), (21, 18158),

Gene: Kabluna_31 Start: 17332, Stop: 17751, Start Num: 4
Candidate Starts for Kabluna_31:
(Start: 4 @17332 has 113 MA's), (9, 17341), (15, 17389), (38, 17596), (45, 17632), (54, 17677), (66, 17725),

Gene: KellEzio_23 Start: 12438, Stop: 12839, Start Num: 4
Candidate Starts for KellEzio_23:
(Start: 4 @12438 has 113 MA's), (18, 12525), (42, 12714),

Gene: KidneyBean_28 Start: 18378, Stop: 18803, Start Num: 4
Candidate Starts for KidneyBean_28:
(Start: 4 @18378 has 113 MA's), (9, 18387), (18, 18453), (47, 18687), (54, 18723), (66, 18771),

Gene: Kitkat_24 Start: 12556, Stop: 12957, Start Num: 4
Candidate Starts for Kitkat_24:
(Start: 4 @12556 has 113 MA's), (18, 12643), (42, 12832),

Gene: Kurt_28 Start: 18645, Stop: 19070, Start Num: 4
Candidate Starts for Kurt_28:
(Start: 4 @18645 has 113 MA's), (9, 18654), (18, 18720), (47, 18954), (54, 18990), (66, 19038),

Gene: Kuwabara_6 Start: 4848, Stop: 5222, Start Num: 4
Candidate Starts for Kuwabara_6:
(Start: 4 @4848 has 113 MA's), (20, 4926), (28, 5013), (32, 5028), (34, 5064), (41, 5097),

Gene: Lawnathon_7 Start: 5559, Stop: 5954, Start Num: 4
Candidate Starts for Lawnathon_7:
(Start: 4 @5559 has 113 MA's), (24, 5688), (34, 5784), (52, 5862), (54, 5877),

Gene: LilSpotty_6 Start: 4547, Stop: 4921, Start Num: 4
Candidate Starts for LilSpotty_6:
(Start: 4 @4547 has 113 MA's), (8, 4556), (22, 4643), (28, 4712), (32, 4727), (45, 4817), (51, 4832),
(57, 4862),

Gene: Lilas_6 Start: 5309, Stop: 5692, Start Num: 6
Candidate Starts for Lilas_6:
(Start: 6 @5309 has 17 MA's), (21, 5396), (28, 5477), (32, 5492), (54, 5612),

Gene: Lilbit_40 Start: 15832, Stop: 16236, Start Num: 4
Candidate Starts for Lilbit_40:
(Start: 4 @15832 has 113 MA's), (18, 15910), (23, 15964), (27, 15994), (32, 16024), (40, 16087), (43,
16099), (71, 16222),

Gene: LittleLaf_39 Start: 15561, Stop: 15965, Start Num: 4
Candidate Starts for LittleLaf_39:
(Start: 4 @15561 has 113 MA's), (18, 15639), (23, 15693), (27, 15723), (32, 15753), (40, 15816), (43,
15828), (71, 15951),

Gene: Lollipop1437_33 Start: 19240, Stop: 19659, Start Num: 4
Candidate Starts for Lollipop1437_33:
(Start: 4 @19240 has 113 MA's), (15, 19297), (58, 19606),

Gene: LonelyBoi_6 Start: 5156, Stop: 5539, Start Num: 6
Candidate Starts for LonelyBoi_6:
(Start: 6 @5156 has 17 MA's), (21, 5243), (27, 5315), (28, 5324), (32, 5339), (54, 5459),

Gene: Lozinak_34 Start: 13892, Stop: 14290, Start Num: 4
Candidate Starts for Lozinak_34:
(Start: 4 @13892 has 113 MA's), (42, 14162), (49, 14186),

Gene: LunaStella_6 Start: 5099, Stop: 5473, Start Num: 4
Candidate Starts for LunaStella_6:
(Start: 4 @5099 has 113 MA's), (32, 5279), (34, 5315), (45, 5369), (68, 5459), (69, 5462),

Gene: MacGully_36 Start: 19536, Stop: 19943, Start Num: 4
Candidate Starts for MacGully_36:
(Start: 4 @19536 has 113 MA's), (66, 19914),

Gene: Marietta_30 Start: 15781, Stop: 16227, Start Num: 4
Candidate Starts for Marietta_30:

(Start: 4 @15781 has 113 MA's), (9, 15790), (40, 16054), (44, 16072), (45, 16081), (58, 16147), (72, 16201),

Gene: Marteena_6 Start: 5309, Stop: 5692, Start Num: 6

Candidate Starts for Marteena_6:

(Start: 6 @5309 has 17 MA's), (21, 5396), (28, 5477), (32, 5492), (54, 5612),

Gene: Marvin_37 Start: 15831, Stop: 16235, Start Num: 4

Candidate Starts for Marvin_37:

(Start: 4 @15831 has 113 MA's), (18, 15909), (23, 15963), (27, 15993), (32, 16023), (40, 16086), (43, 16098), (71, 16221),

Gene: Maselop_32 Start: 19592, Stop: 19996, Start Num: 4

Candidate Starts for Maselop_32:

(Start: 4 @19592 has 113 MA's), (25, 19742), (38, 19841), (56, 19928), (58, 19943), (66, 19970),

Gene: MerCougar_29 Start: 18538, Stop: 18957, Start Num: 4

Candidate Starts for MerCougar_29:

(Start: 4 @18538 has 113 MA's), (9, 18547), (15, 18595), (26, 18700), (38, 18802), (45, 18838), (54, 18883), (59, 18907), (66, 18931),

Gene: MidnightRain_7 Start: 5476, Stop: 5871, Start Num: 4

Candidate Starts for MidnightRain_7:

(Start: 4 @5476 has 113 MA's), (34, 5701), (52, 5779), (54, 5794),

Gene: Miskis_36 Start: 13667, Stop: 14065, Start Num: 4

Candidate Starts for Miskis_36:

(Start: 4 @13667 has 113 MA's), (42, 13937), (49, 13961),

Gene: Mollymur_17 Start: 12082, Stop: 12492, Start Num: 4

Candidate Starts for Mollymur_17:

(Start: 4 @12082 has 113 MA's), (26, 12244), (48, 12373), (64, 12454),

Gene: MortyNRick_6 Start: 4848, Stop: 5222, Start Num: 4

Candidate Starts for MortyNRick_6:

(Start: 4 @4848 has 113 MA's), (20, 4926), (28, 5013), (32, 5028), (34, 5064), (41, 5097),

Gene: MosMoris_37 Start: 15011, Stop: 15415, Start Num: 4

Candidate Starts for MosMoris_37:

(Start: 4 @15011 has 113 MA's), (18, 15089), (23, 15143), (27, 15173), (32, 15203), (40, 15266), (43, 15278), (71, 15401),

Gene: NadineRae_28 Start: 15027, Stop: 15473, Start Num: 4

Candidate Starts for NadineRae_28:

(Start: 4 @15027 has 113 MA's), (9, 15036), (40, 15300), (44, 15318), (45, 15327), (58, 15393),

Gene: NatB6_28 Start: 17654, Stop: 18079, Start Num: 4

Candidate Starts for NatB6_28:

(Start: 4 @17654 has 113 MA's), (9, 17663), (18, 17729), (47, 17963), (54, 17999), (66, 18047),

Gene: Norvs_35 Start: 13894, Stop: 14292, Start Num: 4

Candidate Starts for Norvs_35:

(Start: 4 @13894 has 113 MA's), (42, 14164), (49, 14188),

Gene: NosilaM_31 Start: 18229, Stop: 18648, Start Num: 4

Candidate Starts for NosilaM_31:

(Start: 4 @18229 has 113 MA's), (9, 18238), (15, 18286), (38, 18493), (45, 18529), (54, 18574), (66, 18622),

Gene: NovumRegina_28 Start: 17985, Stop: 18410, Start Num: 4

Candidate Starts for NovumRegina_28:

(Start: 4 @17985 has 113 MA's), (9, 17994), (18, 18060), (47, 18294), (54, 18330), (66, 18378),

Gene: OneUp_28 Start: 11666, Stop: 12067, Start Num: 4

Candidate Starts for OneUp_28:

(Start: 4 @11666 has 113 MA's), (25, 11816), (58, 12011),

Gene: Outis_29 Start: 18232, Stop: 18651, Start Num: 4

Candidate Starts for Outis_29:

(Start: 4 @18232 has 113 MA's), (9, 18241), (15, 18289), (26, 18394), (38, 18496), (45, 18532), (54, 18577), (59, 18601), (66, 18625),

Gene: Patio_31 Start: 18476, Stop: 18895, Start Num: 4

Candidate Starts for Patio_31:

(Start: 4 @18476 has 113 MA's), (15, 18533), (58, 18842),

Gene: Persistence_6 Start: 5584, Stop: 5979, Start Num: 4

Candidate Starts for Persistence_6:

(Start: 4 @5584 has 113 MA's), (52, 5887), (54, 5902),

Gene: PhinkBoden_34 Start: 14275, Stop: 14673, Start Num: 4

Candidate Starts for PhinkBoden_34:

(Start: 4 @14275 has 113 MA's), (42, 14545), (49, 14569),

Gene: Phomeo_27 Start: 18280, Stop: 18705, Start Num: 4

Candidate Starts for Phomeo_27:

(Start: 4 @18280 has 113 MA's), (9, 18289), (18, 18355), (47, 18589), (54, 18625), (66, 18673),

Gene: Phrank15_6 Start: 5630, Stop: 6025, Start Num: 4

Candidate Starts for Phrank15_6:

(Start: 4 @5630 has 113 MA's), (34, 5855), (52, 5933), (54, 5948),

Gene: Pleakley_37 Start: 18319, Stop: 18738, Start Num: 4

Candidate Starts for Pleakley_37:

(Start: 4 @18319 has 113 MA's), (9, 18328), (31, 18526), (38, 18583), (44, 18610), (50, 18646), (58, 18685),

Gene: Poise_39 Start: 15149, Stop: 15553, Start Num: 4

Candidate Starts for Poise_39:

(Start: 4 @15149 has 113 MA's), (18, 15227), (23, 15281), (27, 15311), (32, 15341), (40, 15404), (43, 15416), (71, 15539),

Gene: Pollux_6 Start: 5309, Stop: 5692, Start Num: 6

Candidate Starts for Pollux_6:

(Start: 6 @5309 has 17 MA's), (21, 5396), (28, 5477), (32, 5492), (54, 5612),

Gene: Polyuyki_32 Start: 19584, Stop: 19988, Start Num: 4

Candidate Starts for Polyuyki_32:

(Start: 4 @19584 has 113 MA's), (25, 19734), (38, 19833), (56, 19920), (58, 19935), (66, 19962),

Gene: Posh_6 Start: 5303, Stop: 5686, Start Num: 6

Candidate Starts for Posh_6:

(Start: 6 @5303 has 17 MA's), (21, 5390), (27, 5462), (28, 5471), (32, 5486), (54, 5606), (56, 5612),

Gene: Pringar_39 Start: 15461, Stop: 15865, Start Num: 4

Candidate Starts for Pringar_39:

(Start: 4 @15461 has 113 MA's), (18, 15539), (23, 15593), (27, 15623), (32, 15653), (40, 15716), (43, 15728), (71, 15851),

Gene: Pytheas_6 Start: 5156, Stop: 5539, Start Num: 6

Candidate Starts for Pytheas_6:

(Start: 6 @5156 has 17 MA's), (21, 5243), (28, 5324), (32, 5339), (41, 5408), (54, 5459),

Gene: RadFad_7 Start: 5476, Stop: 5871, Start Num: 4

Candidate Starts for RadFad_7:

(Start: 4 @5476 has 113 MA's), (34, 5701), (52, 5779), (54, 5794),

Gene: Raela_39 Start: 15704, Stop: 16108, Start Num: 4

Candidate Starts for Raela_39:

(Start: 4 @15704 has 113 MA's), (18, 15782), (23, 15836), (27, 15866), (32, 15896), (40, 15959), (43, 15971), (71, 16094),

Gene: Raphaella_7 Start: 5490, Stop: 5885, Start Num: 4

Candidate Starts for Raphaella_7:

(Start: 4 @5490 has 113 MA's), (52, 5793), (54, 5808),

Gene: RedRaider77_39 Start: 15605, Stop: 16009, Start Num: 4

Candidate Starts for RedRaider77_39:

(Start: 4 @15605 has 113 MA's), (18, 15683), (23, 15737), (27, 15767), (32, 15797), (40, 15860), (43, 15872), (71, 15995),

Gene: Renaud18_6 Start: 4979, Stop: 5353, Start Num: 4

Candidate Starts for Renaud18_6:

(Start: 4 @4979 has 113 MA's), (32, 5159), (34, 5195), (45, 5249), (68, 5339), (69, 5342),

Gene: Richie_7 Start: 5490, Stop: 5885, Start Num: 4

Candidate Starts for Richie_7:

(Start: 4 @5490 has 113 MA's), (52, 5793), (54, 5808),

Gene: SPB78_6 Start: 5176, Stop: 5565, Start Num: 7

Candidate Starts for SPB78_6:

(1, 4432), (2, 5038), (5, 5170), (Start: 7 @5176 has 1 MA's), (54, 5488),

Gene: Sakai_7 Start: 5484, Stop: 5879, Start Num: 4

Candidate Starts for Sakai_7:

(Start: 4 @5484 has 113 MA's), (52, 5787), (54, 5802),

Gene: Samy_9 Start: 6526, Stop: 6921, Start Num: 7

Candidate Starts for Samy_9:

(Start: 7 @6526 has 1 MA's), (21, 6613), (36, 6757), (45, 6799), (50, 6826),

Gene: Sashimi_8 Start: 5649, Stop: 6044, Start Num: 4

Candidate Starts for Sashimi_8:

(Start: 4 @5649 has 113 MA's), (34, 5874), (52, 5952), (54, 5967),

Gene: Seahorse_8 Start: 5761, Stop: 6156, Start Num: 4

Candidate Starts for Seahorse_8:

(Start: 4 @5761 has 113 MA's), (34, 5986), (37, 6001), (54, 6079),

Gene: Skysand_30 Start: 18696, Stop: 19115, Start Num: 4

Candidate Starts for Skysand_30:

(Start: 4 @18696 has 113 MA's), (15, 18753), (58, 19062),

Gene: Smoothie_35 Start: 13892, Stop: 14290, Start Num: 4

Candidate Starts for Smoothie_35:

(Start: 4 @13892 has 113 MA's), (42, 14162), (49, 14186),

Gene: SpeedDemon_170 Start: 11467, Stop: 11880, Start Num: 4

Candidate Starts for SpeedDemon_170:

(Start: 4 @11467 has 113 MA's), (21, 11563), (66, 11848),

Gene: SpicyFrank_7 Start: 5538, Stop: 5933, Start Num: 4

Candidate Starts for SpicyFrank_7:

(Start: 4 @5538 has 113 MA's), (52, 5841), (54, 5856),

Gene: StarStruck_29 Start: 18232, Stop: 18651, Start Num: 4

Candidate Starts for StarStruck_29:

(Start: 4 @18232 has 113 MA's), (9, 18241), (15, 18289), (26, 18394), (38, 18496), (45, 18532), (54, 18577), (59, 18601), (66, 18625),

Gene: Sukkupi_30 Start: 17338, Stop: 17784, Start Num: 4

Candidate Starts for Sukkupi_30:

(Start: 4 @17338 has 113 MA's), (9, 17347), (40, 17611), (44, 17629), (45, 17638), (58, 17704), (72, 17758),

Gene: SuperSulley_29 Start: 18417, Stop: 18836, Start Num: 4

Candidate Starts for SuperSulley_29:

(Start: 4 @18417 has 113 MA's), (9, 18426), (15, 18474), (38, 18681), (45, 18717), (54, 18762), (66, 18810),

Gene: TChen_6 Start: 5099, Stop: 5473, Start Num: 4

Candidate Starts for TChen_6:

(Start: 4 @5099 has 113 MA's), (32, 5279), (34, 5315), (45, 5369), (68, 5459), (69, 5462),

Gene: TPA4_7 Start: 5997, Stop: 6371, Start Num: 4

Candidate Starts for TPA4_7:

(Start: 4 @5997 has 113 MA's), (34, 6213), (41, 6246),

Gene: Tesla_38 Start: 15454, Stop: 15858, Start Num: 4

Candidate Starts for Tesla_38:

(Start: 4 @15454 has 113 MA's), (18, 15532), (23, 15586), (27, 15616), (32, 15646), (40, 15709), (43, 15721), (71, 15844),

Gene: ThayneTheZag_7 Start: 5512, Stop: 5907, Start Num: 4
Candidate Starts for ThayneTheZag_7:
(Start: 4 @5512 has 113 MA's), (33, 5722), (41, 5770), (54, 5830),

Gene: ThetaBob_6 Start: 4979, Stop: 5353, Start Num: 4
Candidate Starts for ThetaBob_6:
(Start: 4 @4979 has 113 MA's), (32, 5159), (34, 5195), (45, 5249), (68, 5339), (69, 5342),

Gene: Tiff81_8 Start: 5647, Stop: 6042, Start Num: 4
Candidate Starts for Tiff81_8:
(Start: 4 @5647 has 113 MA's), (33, 5857), (34, 5872), (52, 5950), (54, 5965),

Gene: Toniann_34 Start: 13837, Stop: 14235, Start Num: 4
Candidate Starts for Toniann_34:
(Start: 4 @13837 has 113 MA's), (42, 14107), (49, 14131),

Gene: Toron_6 Start: 5099, Stop: 5473, Start Num: 4
Candidate Starts for Toron_6:
(Start: 4 @5099 has 113 MA's), (32, 5279), (34, 5315), (45, 5369), (68, 5459), (69, 5462),

Gene: Tracker_28 Start: 17408, Stop: 17833, Start Num: 4
Candidate Starts for Tracker_28:
(Start: 4 @17408 has 113 MA's), (9, 17417), (18, 17483), (47, 17717), (54, 17753), (66, 17801),

Gene: Turuncu_32 Start: 18728, Stop: 19147, Start Num: 4
Candidate Starts for Turuncu_32:
(Start: 4 @18728 has 113 MA's), (62, 19106),

Gene: VWB_6 Start: 5231, Stop: 5620, Start Num: 7
Candidate Starts for VWB_6:
(Start: 7 @5231 has 1 MA's), (50, 5525), (60, 5570),

Gene: VasuNzinga_39 Start: 15038, Stop: 15442, Start Num: 4
Candidate Starts for VasuNzinga_39:
(Start: 4 @15038 has 113 MA's), (18, 15116), (23, 15170), (27, 15200), (32, 15230), (40, 15293), (43, 15305), (71, 15428),

Gene: Wheezy_28 Start: 17611, Stop: 18036, Start Num: 4
Candidate Starts for Wheezy_28:
(Start: 4 @17611 has 113 MA's), (9, 17620), (18, 17686), (47, 17920), (54, 17956), (66, 18004),

Gene: WhoseManz_30 Start: 15392, Stop: 15838, Start Num: 4
Candidate Starts for WhoseManz_30:
(Start: 4 @15392 has 113 MA's), (9, 15401), (40, 15665), (44, 15683), (45, 15692), (58, 15758), (72, 15812),

Gene: WilliamBoone_34 Start: 13226, Stop: 13624, Start Num: 4
Candidate Starts for WilliamBoone_34:
(Start: 4 @13226 has 113 MA's), (42, 13496),

Gene: Wrigley_6 Start: 5153, Stop: 5536, Start Num: 6
Candidate Starts for Wrigley_6:

(Start: 6 @5153 has 17 MA's), (21, 5240), (28, 5321), (32, 5336), (54, 5456),

Gene: Yndexa_30 Start: 17338, Stop: 17784, Start Num: 4

Candidate Starts for Yndexa_30:

(Start: 4 @17338 has 113 MA's), (9, 17347), (40, 17611), (44, 17629), (45, 17638), (58, 17704), (72, 17758),

Gene: YoungHarleezy_7 Start: 5488, Stop: 5883, Start Num: 4

Candidate Starts for YoungHarleezy_7:

(Start: 4 @5488 has 113 MA's), (52, 5791), (54, 5806),

Gene: Yvonnetastic_32 Start: 15611, Stop: 16012, Start Num: 4

Candidate Starts for Yvonnetastic_32:

(Start: 4 @15611 has 113 MA's), (11, 15632), (21, 15707),

Gene: Zucker_7 Start: 5223, Stop: 5609, Start Num: 10

Candidate Starts for Zucker_7:

(Start: 10 @5223 has 2 MA's), (27, 5379), (30, 5397),