

Pham 280218



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 280218 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280218 has 123 members, 24 are drafts.

Phages represented in each track:

- Track 1 : AikoCarson_10, Emalyn_10, Amok_10, BillDoor_13, Yarn_10, Yakult_12, AndPeggy_10
- Track 2 : Agatha_11, GoldHunter_12, Burnsey_11
- Track 3 : Elliott_11, Cozz_11, Bubble_11, Nina_12, PsychoKiller_11, RSchmailzl_12, Starburst_12, Carsonalex_12, MunkgeeRoachy_11, Typhonomachy_11, Sopespian_11, RADical_12, RedBaron_12, Socotra_12, Axym_11
- Track 4 : Nodigi_13, Hexbug_13, Orla_13
- Track 5 : Bavidard_11, Feastonyeet_10, Vine_12, KayGee_11, Balloona_10, Yucky_11, BigChungus_10, Elinal_12
- Track 6 : Quasar_11
- Track 7 : ChocoMunchkin_11, CanesSauce_11, Caramellatte_11
- Track 8 : Wolfwood_15, Survivors_13, Zareef_13, Nibbles_13, MaVan_13, Azira_13
- Track 9 : McDazzle_10, Mayweather_12, ElJefes_10, CherryonLim_12, SheckWes_10, MAnor_11, Pons_11
- Track 10 : SteamedHams_13, Tolls_13, GTE2_09
- Track 11 : CocoaPuff_10, PotPie_11, SummitAcademy_10
- Track 12 : GiKK_14, Jamzy_14, Button_12
- Track 13 : Yummy_12, Biskit_12, SweatNTears_13, Buttrmlkdreams_11, Troje_11, SketchMex_10, MScarn_13, Horseradish_12, Blondies_12
- Track 14 : ChickenTender_13
- Track 15 : RanchParmCat_14, Margaret_14
- Track 16 : Dre3_11, Cleo_11, Gibbous_11
- Track 17 : HippoPololi_13
- Track 18 : Lauer_10
- Track 19 : Fribs8_12
- Track 20 : Pollux_12, Bradissa_12, Floral_12, BritBrat_12, EMSquaredA_12, Lilas_12, EnalisNailo_12, Confidence_12, Marteena_12
- Track 21 : Angelique_12
- Track 22 : Posh_12, Wrigley_12, Pytheas_12, LonelyBoi_12, Jablanski_12, BeeGee_12
- Track 23 : Cashline_12
- Track 24 : PhorbesPhlower_10, Morkie_10, Lucky10_10
- Track 25 : BearBQ_11, MortyNRick_11, Birdsong_11
- Track 26 : Keelan_41
- Track 27 : Guey18_48, Volt_45, Fryberger_43, Ronaldo_46, Ziko_46
- Track 28 : Jabbawokkie_13, Avani_12, SilverChicken_12, Yoshi_12, Soul22_12, Che9d_12, Demsculpinboyz_12, Zapner_13, Blarby_13

- Track 29 : Agamotto_14
- Track 30 : Juicebox_12
- Track 31 : LilSpotty_10
- Track 32 : Sleepyhead_11
- Track 33 : DS6A_14

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

The start number called the most often in the published annotations is 18, it was called in 59 of the 99 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agamotto_14, Agatha_11, AikoCarson_10, Amok_10, AndPeggy_10, Axym_11, Azira_13, Balloona_10, Bavidard_11, BigChungus_10, BillDoor_13, Biskit_12, Blondies_12, Bubble_11, Burnsey_11, Button_12, Buttrmlkdreams_11, Carsonalex_12, CherryonLim_12, ChickenTender_13, Cleo_11, CocoaPuff_10, Cozz_11, Dre3_11, ElJefes_10, Elinal_12, Elliott_11, Emalyn_10, Feastonyeet_10, Fribs8_12, GTE2_09, GiKK_14, Gibbous_11, GoldHunter_12, Hexbug_13, HippoPololi_13, Horseradish_12, Jamzy_14, KayGee_11, MAnor_11, MScarn_13, MaVan_13, Margaret_14, Mayweather_12, McDazzle_10, MunkgeeRoachy_11, Nibbles_13, Nina_12, Nodigi_13, Orla_13, Pons_11, PotPie_11, PsychoKiller_11, Quasar_11, RADical_12, RSchmailzl_12, RanchParmCat_14, RedBaron_12, SheckWes_10, SketchMex_10, Sleepyhead_11, Socotra_12, Sopespian_11, Starburst_12, SteamedHams_13, SummitAcademy_10, Survivors_13, SweatNTears_13, Tolls_13, Troje_11, Typhonomachy_11, Vine_12, Wolfwood_15, Yakult_12, Yarn_10, Yucky_11, Yummy_12, Zareef_13,

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

- CanesSauce_11, CaramellLatte_11, ChocoMunchkin_11, Lauer_10,

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

- Angelique_12, Avani_12, BearBQ_11, BeeGee_12, Birdsong_11, Blarby_13, Bradissa_12, BritBrat_12, Cashline_12, Che9d_12, Confidence_12, DS6A_14, Demsculpinboyz_12, EMSquaredA_12, EnalisNailo_12, Floral_12, Fryberger_43, Guey18_48, Jabbawokkie_13, Jablanski_12, Juicebox_12, Keelan_41, LilSpotty_10, Lilas_12, LonelyBoi_12, Lucky10_10, Marteena_12, Morkie_10, MortyNRick_11, PhorbesPhlower_10, Pollux_12, Posh_12, Pytheas_12, Ronaldo_46, SilverChicken_12, Soul22_12, Volt_45, Wrigley_12, Yoshi_12, Zapner_13, Ziko_46,

Summary by start number:

Start 11:

- Found in 1 of 123 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 99
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DS6A_14 (singleton),

Start 12:

- Found in 1 of 123 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 99

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lauer_10 (CT),

Start 16:

- Found in 6 of 123 (4.9%) of genes in pham
- Manual Annotations of this start: 6 of 99
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fryberger_43 (DP), Guey18_48 (DP), Keelan_41 (DP), Ronaldo_46 (DP), Volt_45 (DP), Ziko_46 (DP),

Start 18:

- Found in 82 of 123 (66.7%) of genes in pham
- Manual Annotations of this start: 59 of 99
- Called 95.1% of time when present
- Phage (with cluster) where this start called: Agamotto_14 (FR), Agatha_11 (CT), AikoCarson_10 (CT), Amok_10 (CT), AndPeggy_10 (CT), Axym_11 (CT), Azira_13 (CT), Balloona_10 (CT), Bavidard_11 (CT), BigChungus_10 (CT), BillDoor_13 (CT), Biskit_12 (CT), Blondies_12 (CT), Bubble_11 (CT), Burnsey_11 (CT), Button_12 (CT), Buttrmlkdreams_11 (CT), Carsonalex_12 (CT), CherryonLim_12 (CT), ChickenTender_13 (CT), Cleo_11 (CT), CocoaPuff_10 (CT), Cozz_11 (CT), Dre3_11 (CT), ElJefes_10 (CT), Elinal_12 (CT), Elliott_11 (CT), Emalyn_10 (CT), Featonyeet_10 (CT), Fribs8_12 (CT), GTE2_09 (CT), GiKK_14 (CT), Gibbous_11 (CT), GoldHunter_12 (CT), Hexbug_13 (CT), HippoPololi_13 (CT), Horseradish_12 (CT), Jamzy_14 (CT), KayGee_11 (CT), MAor_11 (CT), MScarn_13 (CT), MaVan_13 (CT), Margaret_14 (CT), Mayweather_12 (CT), McDazzle_10 (CT), MunkgeeRoachy_11 (CT), Nibbles_13 (CT), Nina_12 (CT), Nodigi_13 (CT), Orla_13 (CT), Pons_11 (CT), PotPie_11 (CT), PsychoKiller_11 (CT), Quasar_11 (CT), RADical_12 (CT), RSchmailz_12 (CT), RanchParmCat_14 (CT), RedBaron_12 (CT), SheckWes_10 (CT), SketchMex_10 (CT), Sleepyhead_11 (singleton), Socotra_12 (CT), Sopespian_11 (CT), Starburst_12 (CT), SteamedHams_13 (CT), SummitAcademy_10 (CT), Survivors_13 (CT), SweatNTears_13 (CT), Tolls_13 (CT), Troje_11 (CT), Typhonmacy_11 (CT), Vine_12 (CT), Wolfwood_15 (CT), Yakult_12 (CT), Yarn_10 (CT), Yucky_11 (CT), Yummy_12 (CT), Zareef_13 (CT),

Start 19:

- Found in 34 of 123 (27.6%) of genes in pham
- Manual Annotations of this start: 32 of 99
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angelique_12 (CY1), Avani_12 (F2), BearBQ_11 (DN), BeeGee_12 (CY5), Birdsong_11 (DN), Blarby_13 (F), Bradissa_12 (CY1), BritBrat_12 (CY2), Cashline_12 (CY6), Che9d_12 (F2), Confidence_12 (CY1), Demsculpinboyz_12 (F2), EMSquaredA_12 (CY1), EnalisNailo_12 (CY1), Floral_12 (CY1), Jabbawokkie_13 (F2), Jablanski_12 (CY3), Juicebox_12 (singleton), LilSpotty_10 (singleton), Lilas_12 (CY1), LonelyBoi_12 (CY7), Lucky10_10 (DH), Marteen_12 (CY1), Morkie_10 (DH), MortyNRick_11 (DN), PhorbesPhlower_10 (DH), Pollux_12 (CY1), Posh_12 (CY4), Pytheas_12 (CY3), SilverChicken_12 (F2), Soul22_12 (F2), Wrigley_12 (CY4), Yoshi_12 (F2), Zapner_13 (F2),

Start 27:

- Found in 24 of 123 (19.5%) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present

- Phage (with cluster) where this start called: CanesSauce_11 (CT), CaramelLatte_11 (CT), ChocoMunchkin_11 (CT),

Summary by clusters:

There are 15 clusters represented in this pham: DN, CY3, F2, CY7, CY6, DH, CY4, FR, F, CY1, CY5, singleton, CY2, DP, CT,

Info for manual annotations of cluster CT:

- Start number 12 was manually annotated 1 time for cluster CT.
- Start number 18 was manually annotated 58 times for cluster CT.

Info for manual annotations of cluster CY1:

- Start number 19 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 19 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:

- Start number 19 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 19 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 19 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:

- Start number 19 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 19 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster DH:

- Start number 19 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 19 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DP:

- Start number 16 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster F2:

- Start number 19 was manually annotated 7 times for cluster F2.

Gene Information:

Gene: Agamotto_14 Start: 10531, Stop: 10791, Start Num: 18

Candidate Starts for Agamotto_14:

(Start: 18 @10531 has 59 MA's), (31, 10630), (40, 10711), (41, 10714),

Gene: Agatha_11 Start: 7257, Stop: 7538, Start Num: 18

Candidate Starts for Agatha_11:

(Start: 18 @7257 has 59 MA's),

Gene: AikoCarson_10 Start: 6987, Stop: 7256, Start Num: 18

Candidate Starts for AikoCarson_10:

(Start: 18 @6987 has 59 MA's),

Gene: Amok_10 Start: 6987, Stop: 7256, Start Num: 18

Candidate Starts for Amok_10:

(Start: 18 @6987 has 59 MA's),

Gene: AndPeggy_10 Start: 7275, Stop: 7547, Start Num: 18

Candidate Starts for AndPeggy_10:

(Start: 18 @7275 has 59 MA's),

Gene: Angelique_12 Start: 8007, Stop: 8264, Start Num: 19

Candidate Starts for Angelique_12:

(Start: 19 @8007 has 32 MA's), (29, 8088), (47, 8256),

Gene: Avani_12 Start: 6948, Stop: 7220, Start Num: 19

Candidate Starts for Avani_12:

(Start: 19 @6948 has 32 MA's), (26, 7008), (27, 7011), (30, 7041), (32, 7065), (35, 7095), (42, 7155),

Gene: Axym_11 Start: 7257, Stop: 7538, Start Num: 18

Candidate Starts for Axym_11:

(5, 7134), (Start: 18 @7257 has 59 MA's),

Gene: Azira_13 Start: 8163, Stop: 8462, Start Num: 18

Candidate Starts for Azira_13:

(17, 8160), (Start: 18 @8163 has 59 MA's), (30, 8265), (36, 8334), (40, 8376), (46, 8436), (47, 8439), (48, 8442),

Gene: Balloona_10 Start: 7029, Stop: 7301, Start Num: 18

Candidate Starts for Balloona_10:

(17, 7026), (Start: 18 @7029 has 59 MA's), (39, 7212), (40, 7218), (43, 7242),

Gene: Bavilard_11 Start: 7809, Stop: 8081, Start Num: 18

Candidate Starts for Bavilard_11:

(17, 7806), (Start: 18 @7809 has 59 MA's), (39, 7992), (40, 7998), (43, 8022),

Gene: BearBQ_11 Start: 7129, Stop: 7386, Start Num: 19

Candidate Starts for BearBQ_11:

(13, 7096), (Start: 19 @7129 has 32 MA's), (34, 7264), (39, 7309), (40, 7315), (41, 7318), (43, 7339),

Gene: BeeGee_12 Start: 8009, Stop: 8266, Start Num: 19

Candidate Starts for BeeGee_12:

(Start: 19 @8009 has 32 MA's), (44, 8219), (47, 8258),

Gene: BigChungus_10 Start: 7054, Stop: 7326, Start Num: 18

Candidate Starts for BigChungus_10:

(17, 7051), (Start: 18 @7054 has 59 MA's), (39, 7237), (40, 7243), (43, 7267),

Gene: BillDoor_13 Start: 7240, Stop: 7512, Start Num: 18

Candidate Starts for BillDoor_13:

(Start: 18 @7240 has 59 MA's),

Gene: Birdsong_11 Start: 7129, Stop: 7386, Start Num: 19

Candidate Starts for Birdsong_11:

(13, 7096), (Start: 19 @7129 has 32 MA's), (34, 7264), (39, 7309), (40, 7315), (41, 7318), (43, 7339),

Gene: Biskit_12 Start: 7241, Stop: 7519, Start Num: 18

Candidate Starts for Biskit_12:

(Start: 18 @7241 has 59 MA's), (27, 7310), (33, 7382),

Gene: Blarby_13 Start: 7472, Stop: 7744, Start Num: 19

Candidate Starts for Blarby_13:

(Start: 19 @7472 has 32 MA's), (26, 7532), (27, 7535), (30, 7565), (32, 7589), (35, 7619), (42, 7679),

Gene: Blondies_12 Start: 7236, Stop: 7505, Start Num: 18

Candidate Starts for Blondies_12:

(Start: 18 @7236 has 59 MA's), (27, 7296), (33, 7368),

Gene: Bradissa_12 Start: 8013, Stop: 8270, Start Num: 19

Candidate Starts for Bradissa_12:

(Start: 19 @8013 has 32 MA's), (44, 8223), (47, 8262),

Gene: BritBrat_12 Start: 8015, Stop: 8272, Start Num: 19

Candidate Starts for BritBrat_12:

(Start: 19 @8015 has 32 MA's), (44, 8225), (47, 8264),

Gene: Bubble_11 Start: 7257, Stop: 7538, Start Num: 18

Candidate Starts for Bubble_11:

(5, 7134), (Start: 18 @7257 has 59 MA's),

Gene: Burnsey_11 Start: 7258, Stop: 7539, Start Num: 18

Candidate Starts for Burnsey_11:

(Start: 18 @7258 has 59 MA's),

Gene: Button_12 Start: 7274, Stop: 7543, Start Num: 18

Candidate Starts for Button_12:

(Start: 18 @7274 has 59 MA's), (22, 7289), (26, 7331), (45, 7514),

Gene: Buttrmlkdreams_11 Start: 7235, Stop: 7504, Start Num: 18

Candidate Starts for Buttrmlkdreams_11:

(Start: 18 @7235 has 59 MA's), (27, 7295), (33, 7367),

Gene: CanesSauce_11 Start: 7339, Stop: 7548, Start Num: 27

Candidate Starts for CanesSauce_11:

(Start: 18 @7276 has 59 MA's), (27, 7339),

Gene: CaramelLatte_11 Start: 7339, Stop: 7548, Start Num: 27

Candidate Starts for CaramelLatte_11:

(Start: 18 @7276 has 59 MA's), (27, 7339),

Gene: Carsonalex_12 Start: 7314, Stop: 7595, Start Num: 18

Candidate Starts for Carsonalex_12:

(5, 7191), (Start: 18 @7314 has 59 MA's),

Gene: Cashline_12 Start: 7862, Stop: 8119, Start Num: 19

Candidate Starts for Cashline_12:

(8, 7793), (Start: 19 @7862 has 32 MA's), (44, 8072), (47, 8111),

Gene: Che9d_12 Start: 6957, Stop: 7229, Start Num: 19

Candidate Starts for Che9d_12:

(Start: 19 @6957 has 32 MA's), (26, 7017), (27, 7020), (30, 7050), (32, 7074), (35, 7104), (42, 7164),

Gene: CherryonLim_12 Start: 7780, Stop: 8052, Start Num: 18

Candidate Starts for CherryonLim_12:

(Start: 18 @7780 has 59 MA's), (21, 7792), (22, 7798), (39, 7963), (40, 7969), (43, 7993),

Gene: ChickenTender_13 Start: 7300, Stop: 7581, Start Num: 18

Candidate Starts for ChickenTender_13:

(5, 7177), (17, 7297), (Start: 18 @7300 has 59 MA's),

Gene: ChocoMunchkin_11 Start: 7339, Stop: 7548, Start Num: 27

Candidate Starts for ChocoMunchkin_11:

(Start: 18 @7276 has 59 MA's), (27, 7339),

Gene: Cleo_11 Start: 7463, Stop: 7762, Start Num: 18

Candidate Starts for Cleo_11:

(Start: 18 @7463 has 59 MA's), (48, 7742),

Gene: CocoaPuff_10 Start: 7029, Stop: 7301, Start Num: 18

Candidate Starts for CocoaPuff_10:

(17, 7026), (Start: 18 @7029 has 59 MA's), (21, 7041), (22, 7047), (39, 7212), (40, 7218), (43, 7242),

Gene: Confidence_12 Start: 8009, Stop: 8266, Start Num: 19

Candidate Starts for Confidence_12:

(Start: 19 @8009 has 32 MA's), (44, 8219), (47, 8258),

Gene: Cozz_11 Start: 7258, Stop: 7539, Start Num: 18

Candidate Starts for Cozz_11:

(5, 7135), (Start: 18 @7258 has 59 MA's),

Gene: DS6A_14 Start: 10056, Stop: 10361, Start Num: 11

Candidate Starts for DS6A_14:

(Start: 11 @10056 has 1 MA's), (14, 10074), (24, 10134), (25, 10143), (34, 10224), (43, 10302),

Gene: Demsculpinboyz_12 Start: 6948, Stop: 7220, Start Num: 19

Candidate Starts for Demsculpinboyz_12:

(Start: 19 @6948 has 32 MA's), (26, 7008), (27, 7011), (30, 7041), (32, 7065), (35, 7095), (42, 7155),

Gene: Dre3_11 Start: 7410, Stop: 7709, Start Num: 18

Candidate Starts for Dre3_11:

(Start: 18 @7410 has 59 MA's), (48, 7689),

Gene: EMSquaredA_12 Start: 8015, Stop: 8272, Start Num: 19

Candidate Starts for EMSquaredA_12:

(Start: 19 @8015 has 32 MA's), (44, 8225), (47, 8264),

Gene: ElJefes_10 Start: 7506, Stop: 7778, Start Num: 18

Candidate Starts for ElJefes_10:

(Start: 18 @7506 has 59 MA's), (21, 7518), (22, 7524), (39, 7689), (40, 7695), (43, 7719),

Gene: Elinal_12 Start: 7035, Stop: 7307, Start Num: 18

Candidate Starts for Elinal_12:

(17, 7032), (Start: 18 @7035 has 59 MA's), (39, 7218), (40, 7224), (43, 7248),

Gene: Eliott_11 Start: 7257, Stop: 7538, Start Num: 18

Candidate Starts for Eliott_11:

(5, 7134), (Start: 18 @7257 has 59 MA's),

Gene: Emalyn_10 Start: 6986, Stop: 7255, Start Num: 18

Candidate Starts for Emalyn_10:

(Start: 18 @6986 has 59 MA's),

Gene: EnalisNailo_12 Start: 8015, Stop: 8272, Start Num: 19

Candidate Starts for EnalisNailo_12:

(Start: 19 @8015 has 32 MA's), (44, 8225), (47, 8264),

Gene: Feastonyeet_10 Start: 7054, Stop: 7326, Start Num: 18

Candidate Starts for Feastonyeet_10:

(17, 7051), (Start: 18 @7054 has 59 MA's), (39, 7237), (40, 7243), (43, 7267),

Gene: Floral_12 Start: 8015, Stop: 8272, Start Num: 19

Candidate Starts for Floral_12:

(Start: 19 @8015 has 32 MA's), (44, 8225), (47, 8264),

Gene: Fribs8_12 Start: 7976, Stop: 8275, Start Num: 18

Candidate Starts for Fribs8_12:

(Start: 18 @7976 has 59 MA's), (30, 8078), (40, 8189), (46, 8249), (47, 8252), (48, 8255),

Gene: Fryberger_43 Start: 16293, Stop: 16577, Start Num: 16

Candidate Starts for Fryberger_43:

(15, 16287), (Start: 16 @16293 has 6 MA's), (25, 16350), (28, 16377), (37, 16458), (38, 16464),

Gene: GTE2_09 Start: 6936, Stop: 7208, Start Num: 18

Candidate Starts for GTE2_09:

(Start: 18 @6936 has 59 MA's), (27, 6999),

Gene: GiKK_14 Start: 7577, Stop: 7846, Start Num: 18

Candidate Starts for GiKK_14:

(Start: 18 @7577 has 59 MA's), (22, 7592), (26, 7634), (45, 7817),

Gene: Gibbous_11 Start: 7410, Stop: 7709, Start Num: 18

Candidate Starts for Gibbous_11:

(Start: 18 @7410 has 59 MA's), (48, 7689),

Gene: GoldHunter_12 Start: 7258, Stop: 7539, Start Num: 18

Candidate Starts for GoldHunter_12:

(Start: 18 @7258 has 59 MA's),

Gene: Guey18_48 Start: 17486, Stop: 17770, Start Num: 16

Candidate Starts for Guey18_48:

(15, 17480), (Start: 16 @17486 has 6 MA's), (25, 17543), (28, 17570), (37, 17651), (38, 17657),

Gene: Hexbug_13 Start: 8263, Stop: 8532, Start Num: 18

Candidate Starts for Hexbug_13:

(Start: 18 @8263 has 59 MA's), (26, 8320),

Gene: HippoPololi_13 Start: 8062, Stop: 8361, Start Num: 18

Candidate Starts for HippoPololi_13:

(Start: 18 @8062 has 59 MA's), (21, 8083), (43, 8299), (48, 8341),

Gene: Horseradish_12 Start: 7139, Stop: 7417, Start Num: 18

Candidate Starts for Horseradish_12:

(Start: 18 @7139 has 59 MA's), (27, 7208), (33, 7280),

Gene: Jabbawokkie_13 Start: 7471, Stop: 7743, Start Num: 19

Candidate Starts for Jabbawokkie_13:

(Start: 19 @7471 has 32 MA's), (26, 7531), (27, 7534), (30, 7564), (32, 7588), (35, 7618), (42, 7678),

Gene: Jablanski_12 Start: 7862, Stop: 8119, Start Num: 19

Candidate Starts for Jablanski_12:

(Start: 19 @7862 has 32 MA's), (44, 8072), (47, 8111),

Gene: Jamzy_14 Start: 7587, Stop: 7856, Start Num: 18

Candidate Starts for Jamzy_14:

(Start: 18 @7587 has 59 MA's), (22, 7602), (26, 7644), (45, 7827),

Gene: Juicebox_12 Start: 8597, Stop: 8833, Start Num: 19

Candidate Starts for Juicebox_12:

(Start: 19 @8597 has 32 MA's), (23, 8615), (28, 8660), (40, 8753),

Gene: KayGee_11 Start: 7035, Stop: 7307, Start Num: 18

Candidate Starts for KayGee_11:

(17, 7032), (Start: 18 @7035 has 59 MA's), (39, 7218), (40, 7224), (43, 7248),

Gene: Keelan_41 Start: 16268, Stop: 16552, Start Num: 16

Candidate Starts for Keelan_41:

(Start: 16 @16268 has 6 MA's), (25, 16325), (28, 16352), (37, 16433), (38, 16439),

Gene: Lauer_10 Start: 7057, Stop: 7356, Start Num: 12

Candidate Starts for Lauer_10:

(1, 6820), (2, 6886), (3, 6907), (4, 6922), (5, 6961), (6, 7000), (7, 7015), (9, 7024), (Start: 12 @7057 has 1 MA's), (17, 7081), (Start: 18 @7084 has 59 MA's), (39, 7267), (40, 7273), (43, 7297),

Gene: LilSpotty_10 Start: 6830, Stop: 7105, Start Num: 19

Candidate Starts for LilSpotty_10:

(10, 6785), (Start: 19 @6830 has 32 MA's), (20, 6839), (34, 6968), (40, 7019), (43, 7043),

Gene: Lilas_12 Start: 8015, Stop: 8272, Start Num: 19

Candidate Starts for Lilas_12:

(Start: 19 @8015 has 32 MA's), (44, 8225), (47, 8264),

Gene: LonelyBoi_12 Start: 7862, Stop: 8119, Start Num: 19

Candidate Starts for LonelyBoi_12:

(Start: 19 @7862 has 32 MA's), (44, 8072), (47, 8111),

Gene: Lucky10_10 Start: 6338, Stop: 6595, Start Num: 19

Candidate Starts for Lucky10_10:

(13, 6305), (Start: 19 @6338 has 32 MA's), (40, 6524), (43, 6548),

Gene: MAnor_11 Start: 7025, Stop: 7297, Start Num: 18

Candidate Starts for MAnor_11:

(Start: 18 @7025 has 59 MA's), (21, 7037), (22, 7043), (39, 7208), (40, 7214), (43, 7238),

Gene: MScarn_13 Start: 7235, Stop: 7504, Start Num: 18

Candidate Starts for MScarn_13:

(Start: 18 @7235 has 59 MA's), (27, 7295), (33, 7367),

Gene: MaVan_13 Start: 8163, Stop: 8462, Start Num: 18

Candidate Starts for MaVan_13:

(17, 8160), (Start: 18 @8163 has 59 MA's), (30, 8265), (36, 8334), (40, 8376), (46, 8436), (47, 8439), (48, 8442),

Gene: Margaret_14 Start: 7972, Stop: 8241, Start Num: 18

Candidate Starts for Margaret_14:

(Start: 18 @7972 has 59 MA's), (22, 7987), (26, 8029),

Gene: Marteena_12 Start: 8015, Stop: 8272, Start Num: 19

Candidate Starts for Marteena_12:

(Start: 19 @8015 has 32 MA's), (44, 8225), (47, 8264),

Gene: Mayweather_12 Start: 7658, Stop: 7930, Start Num: 18

Candidate Starts for Mayweather_12:

(Start: 18 @7658 has 59 MA's), (21, 7670), (22, 7676), (39, 7841), (40, 7847), (43, 7871),

Gene: McDazzle_10 Start: 7500, Stop: 7772, Start Num: 18

Candidate Starts for McDazzle_10:

(Start: 18 @7500 has 59 MA's), (21, 7512), (22, 7518), (39, 7683), (40, 7689), (43, 7713),

Gene: Morkie_10 Start: 6300, Stop: 6557, Start Num: 19

Candidate Starts for Morkie_10:

(13, 6267), (Start: 19 @6300 has 32 MA's), (40, 6486), (43, 6510),

Gene: MortyNRick_11 Start: 7129, Stop: 7386, Start Num: 19

Candidate Starts for MortyNRick_11:

(13, 7096), (Start: 19 @7129 has 32 MA's), (34, 7264), (39, 7309), (40, 7315), (41, 7318), (43, 7339),

Gene: MunkgeeRoachy_11 Start: 7305, Stop: 7586, Start Num: 18

Candidate Starts for MunkgeeRoachy_11:

(5, 7182), (Start: 18 @7305 has 59 MA's),

Gene: Nibbles_13 Start: 8163, Stop: 8462, Start Num: 18

Candidate Starts for Nibbles_13:

(17, 8160), (Start: 18 @8163 has 59 MA's), (30, 8265), (36, 8334), (40, 8376), (46, 8436), (47, 8439), (48, 8442),

Gene: Nina_12 Start: 8291, Stop: 8572, Start Num: 18

Candidate Starts for Nina_12:

(5, 8168), (Start: 18 @8291 has 59 MA's),

Gene: Nodigi_13 Start: 8256, Stop: 8525, Start Num: 18

Candidate Starts for Nodigi_13:

(Start: 18 @8256 has 59 MA's), (26, 8313),

Gene: Orla_13 Start: 8260, Stop: 8529, Start Num: 18

Candidate Starts for Orla_13:

(Start: 18 @8260 has 59 MA's), (26, 8317),

Gene: PhorbesPhlower_10 Start: 6300, Stop: 6557, Start Num: 19

Candidate Starts for PhorbesPhlower_10:

(13, 6267), (Start: 19 @6300 has 32 MA's), (40, 6486), (43, 6510),

Gene: Pollux_12 Start: 8015, Stop: 8272, Start Num: 19

Candidate Starts for Pollux_12:

(Start: 19 @8015 has 32 MA's), (44, 8225), (47, 8264),

Gene: Pons_11 Start: 7037, Stop: 7309, Start Num: 18

Candidate Starts for Pons_11:

(Start: 18 @7037 has 59 MA's), (21, 7049), (22, 7055), (39, 7220), (40, 7226), (43, 7250),

Gene: Posh_12 Start: 8009, Stop: 8266, Start Num: 19

Candidate Starts for Posh_12:

(Start: 19 @8009 has 32 MA's), (44, 8219), (47, 8258),

Gene: PotPie_11 Start: 7888, Stop: 8160, Start Num: 18

Candidate Starts for PotPie_11:

(17, 7885), (Start: 18 @7888 has 59 MA's), (21, 7900), (22, 7906), (39, 8071), (40, 8077), (43, 8101),

Gene: PsychoKiller_11 Start: 7257, Stop: 7538, Start Num: 18

Candidate Starts for PsychoKiller_11:

(5, 7134), (Start: 18 @7257 has 59 MA's),

Gene: Pytheas_12 Start: 7862, Stop: 8119, Start Num: 19

Candidate Starts for Pytheas_12:

(Start: 19 @7862 has 32 MA's), (44, 8072), (47, 8111),

Gene: Quasar_11 Start: 7872, Stop: 8147, Start Num: 18

Candidate Starts for Quasar_11:

(5, 7749), (Start: 18 @7872 has 59 MA's),

Gene: RADical_12 Start: 7258, Stop: 7539, Start Num: 18

Candidate Starts for RADical_12:

(5, 7135), (Start: 18 @7258 has 59 MA's),

Gene: RSchmailzl_12 Start: 7398, Stop: 7679, Start Num: 18

Candidate Starts for RSchmailzl_12:
(5, 7275), (Start: 18 @7398 has 59 MA's),

Gene: RanchParmCat_14 Start: 7972, Stop: 8241, Start Num: 18
Candidate Starts for RanchParmCat_14:
(Start: 18 @7972 has 59 MA's), (22, 7987), (26, 8029),

Gene: RedBaron_12 Start: 7302, Stop: 7583, Start Num: 18
Candidate Starts for RedBaron_12:
(5, 7179), (Start: 18 @7302 has 59 MA's),

Gene: Ronaldo_46 Start: 17223, Stop: 17507, Start Num: 16
Candidate Starts for Ronaldo_46:
(15, 17217), (Start: 16 @17223 has 6 MA's), (25, 17280), (28, 17307), (37, 17388), (38, 17394),

Gene: SheckWes_10 Start: 7025, Stop: 7297, Start Num: 18
Candidate Starts for SheckWes_10:
(Start: 18 @7025 has 59 MA's), (21, 7037), (22, 7043), (39, 7208), (40, 7214), (43, 7238),

Gene: SilverChicken_12 Start: 6948, Stop: 7220, Start Num: 19
Candidate Starts for SilverChicken_12:
(Start: 19 @6948 has 32 MA's), (26, 7008), (27, 7011), (30, 7041), (32, 7065), (35, 7095), (42, 7155),

Gene: SketchMex_10 Start: 7241, Stop: 7519, Start Num: 18
Candidate Starts for SketchMex_10:
(Start: 18 @7241 has 59 MA's), (27, 7310), (33, 7382),

Gene: Sleepyhead_11 Start: 7625, Stop: 7879, Start Num: 18
Candidate Starts for Sleepyhead_11:
(Start: 18 @7625 has 59 MA's), (25, 7667), (29, 7706), (30, 7718),

Gene: Socotra_12 Start: 7257, Stop: 7538, Start Num: 18
Candidate Starts for Socotra_12:
(5, 7134), (Start: 18 @7257 has 59 MA's),

Gene: Sopespian_11 Start: 7257, Stop: 7538, Start Num: 18
Candidate Starts for Sopespian_11:
(5, 7134), (Start: 18 @7257 has 59 MA's),

Gene: Soul22_12 Start: 6947, Stop: 7219, Start Num: 19
Candidate Starts for Soul22_12:
(Start: 19 @6947 has 32 MA's), (26, 7007), (27, 7010), (30, 7040), (32, 7064), (35, 7094), (42, 7154),

Gene: Starburst_12 Start: 7257, Stop: 7538, Start Num: 18
Candidate Starts for Starburst_12:
(5, 7134), (Start: 18 @7257 has 59 MA's),

Gene: SteamedHams_13 Start: 7276, Stop: 7548, Start Num: 18
Candidate Starts for SteamedHams_13:
(Start: 18 @7276 has 59 MA's), (27, 7339),

Gene: SummitAcademy_10 Start: 7103, Stop: 7375, Start Num: 18
Candidate Starts for SummitAcademy_10:

(17, 7100), (Start: 18 @7103 has 59 MA's), (21, 7115), (22, 7121), (39, 7286), (40, 7292), (43, 7316),

Gene: Survivors_13 Start: 8017, Stop: 8316, Start Num: 18

Candidate Starts for Survivors_13:

(17, 8014), (Start: 18 @8017 has 59 MA's), (30, 8119), (36, 8188), (40, 8230), (46, 8290), (47, 8293), (48, 8296),

Gene: SweatNTears_13 Start: 7761, Stop: 8030, Start Num: 18

Candidate Starts for SweatNTears_13:

(Start: 18 @7761 has 59 MA's), (27, 7821), (33, 7893),

Gene: Tolls_13 Start: 7279, Stop: 7551, Start Num: 18

Candidate Starts for Tolls_13:

(Start: 18 @7279 has 59 MA's), (27, 7342),

Gene: Troje_11 Start: 7235, Stop: 7504, Start Num: 18

Candidate Starts for Troje_11:

(Start: 18 @7235 has 59 MA's), (27, 7295), (33, 7367),

Gene: Typhonomachy_11 Start: 7257, Stop: 7538, Start Num: 18

Candidate Starts for Typhonomachy_11:

(5, 7134), (Start: 18 @7257 has 59 MA's),

Gene: Vine_12 Start: 8032, Stop: 8304, Start Num: 18

Candidate Starts for Vine_12:

(17, 8029), (Start: 18 @8032 has 59 MA's), (39, 8215), (40, 8221), (43, 8245),

Gene: Volt_45 Start: 17223, Stop: 17507, Start Num: 16

Candidate Starts for Volt_45:

(15, 17217), (Start: 16 @17223 has 6 MA's), (25, 17280), (28, 17307), (37, 17388), (38, 17394),

Gene: Wolfwood_15 Start: 8162, Stop: 8461, Start Num: 18

Candidate Starts for Wolfwood_15:

(17, 8159), (Start: 18 @8162 has 59 MA's), (30, 8264), (36, 8333), (40, 8375), (46, 8435), (47, 8438), (48, 8441),

Gene: Wrigley_12 Start: 7859, Stop: 8116, Start Num: 19

Candidate Starts for Wrigley_12:

(Start: 19 @7859 has 32 MA's), (44, 8069), (47, 8108),

Gene: Yakult_12 Start: 7168, Stop: 7437, Start Num: 18

Candidate Starts for Yakult_12:

(Start: 18 @7168 has 59 MA's),

Gene: Yarn_10 Start: 7269, Stop: 7541, Start Num: 18

Candidate Starts for Yarn_10:

(Start: 18 @7269 has 59 MA's),

Gene: Yoshi_12 Start: 6947, Stop: 7219, Start Num: 19

Candidate Starts for Yoshi_12:

(Start: 19 @6947 has 32 MA's), (26, 7007), (27, 7010), (30, 7040), (32, 7064), (35, 7094), (42, 7154),

Gene: Yucky_11 Start: 7892, Stop: 8164, Start Num: 18

Candidate Starts for Yucky_11:

(17, 7889), (Start: 18 @7892 has 59 MA's), (39, 8075), (40, 8081), (43, 8105),

Gene: Yummy_12 Start: 7139, Stop: 7417, Start Num: 18

Candidate Starts for Yummy_12:

(Start: 18 @7139 has 59 MA's), (27, 7208), (33, 7280),

Gene: Zapner_13 Start: 7472, Stop: 7744, Start Num: 19

Candidate Starts for Zapner_13:

(Start: 19 @7472 has 32 MA's), (26, 7532), (27, 7535), (30, 7565), (32, 7589), (35, 7619), (42, 7679),

Gene: Zareef_13 Start: 8164, Stop: 8463, Start Num: 18

Candidate Starts for Zareef_13:

(17, 8161), (Start: 18 @8164 has 59 MA's), (30, 8266), (36, 8335), (40, 8377), (46, 8437), (47, 8440), (48, 8443),

Gene: Ziko_46 Start: 17163, Stop: 17447, Start Num: 16

Candidate Starts for Ziko_46:

(15, 17157), (Start: 16 @17163 has 6 MA's), (25, 17220), (28, 17247), (37, 17328), (38, 17334),