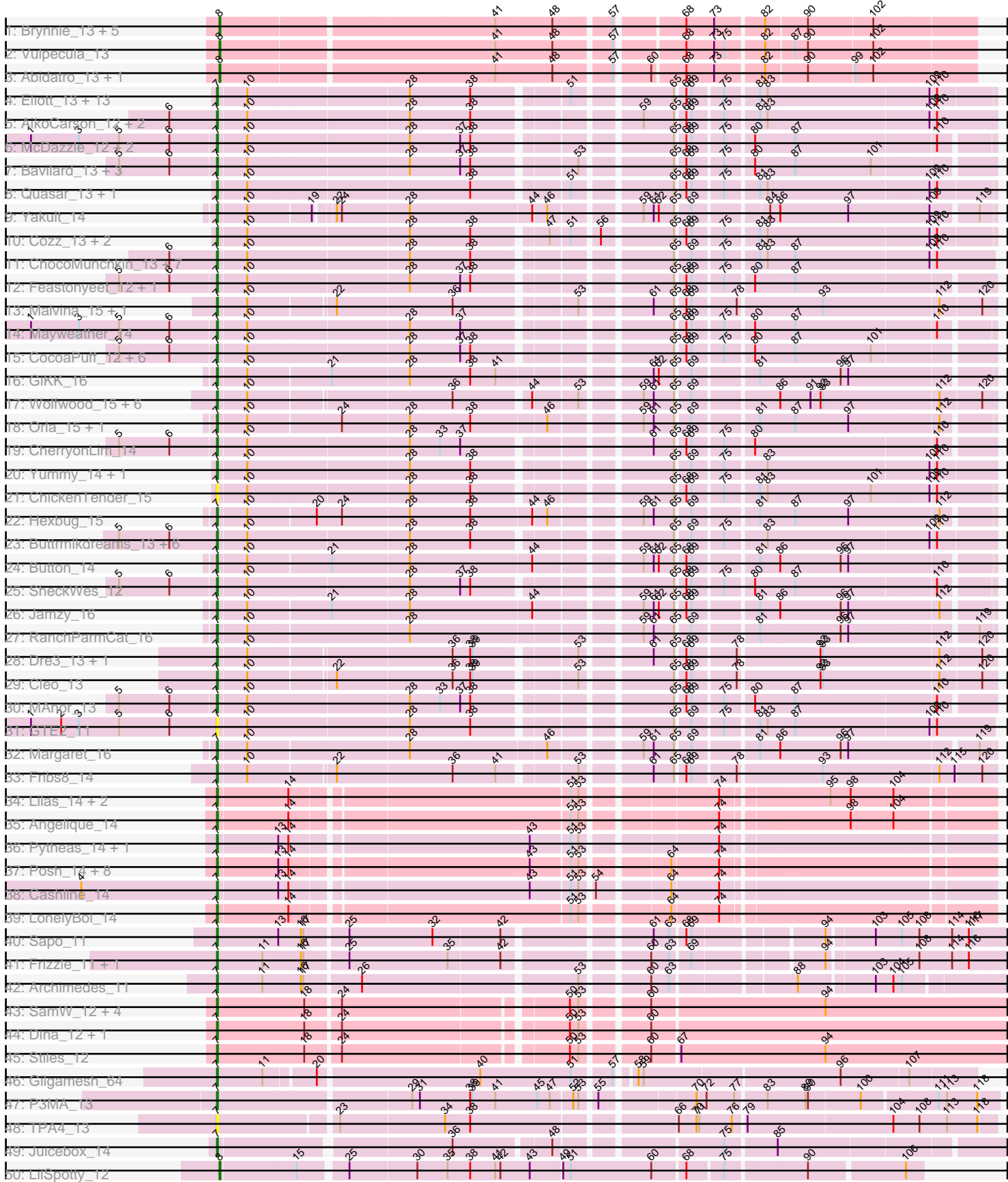
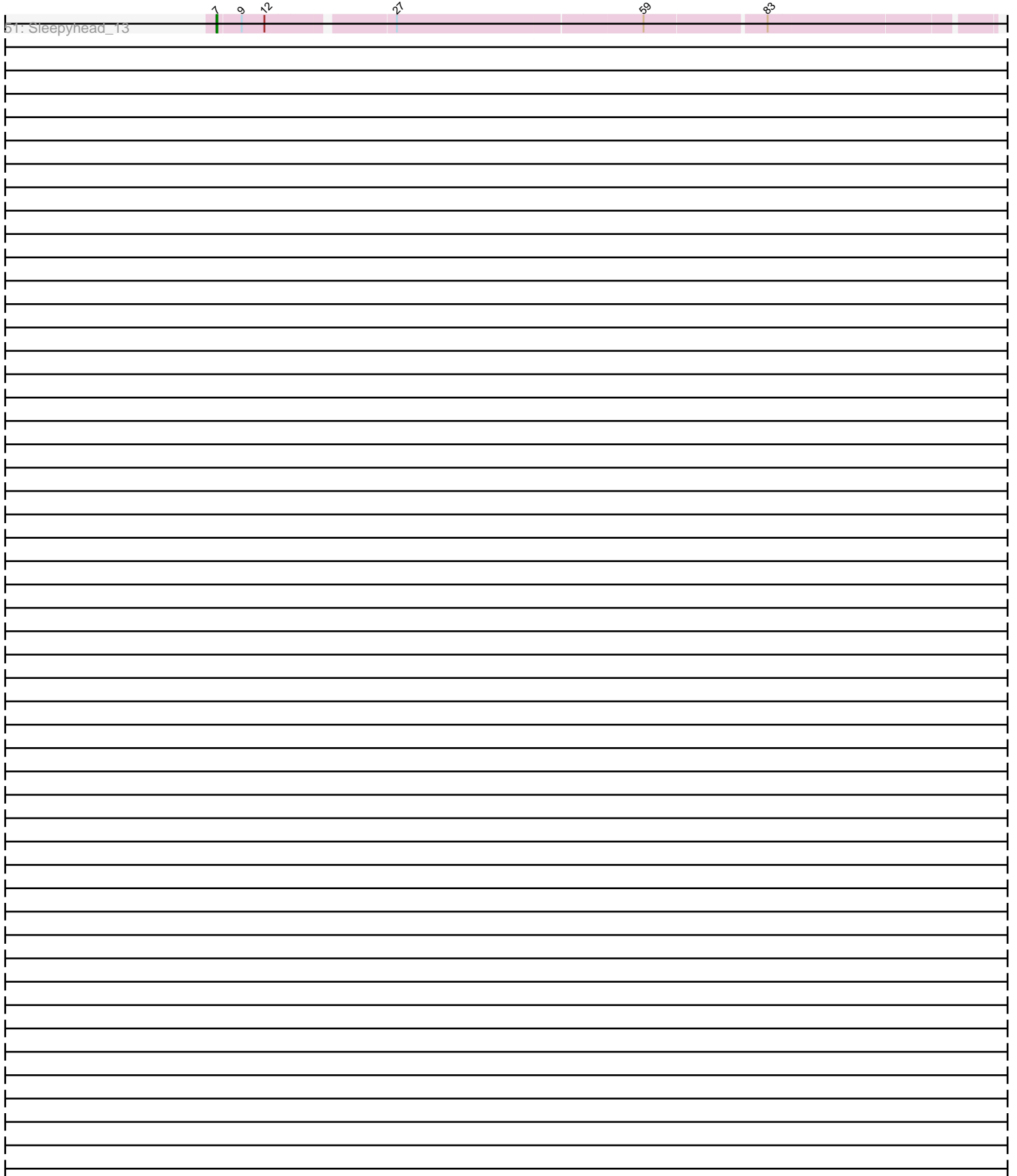


Pham 311367





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 311367 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311367 has 127 members, 21 are drafts.

Phages represented in each track:

- Track 1 : Brynnie_13, Ruchi_13, Jamun_13, WileyE_12, Basilisk_13, Chickaboom_12
- Track 2 : Vulpecula_13
- Track 3 : Abidatro_13, Galaxy_13
- Track 4 : Elliott_13, Agatha_13, PsychoKiller_13, RSchmailzl_14, Starburst_14, GoldHunter_14, Carsonalex_14, MunkgeeRoachy_13, Typhonmarchy_13, RedBaron_15, RADical_14, Socotra_14, Sopespian_13, Burnsey_13
- Track 5 : AikoCarson_12, Amok_12, Emalyn_12
- Track 6 : McDazzle_12, ElJefes_12, Pons_13
- Track 7 : Bavidard_13, KayGee_13, Elinal_14, Yucky_13
- Track 8 : Quasar_13, Nina_14
- Track 9 : Yakult_14
- Track 10 : Cozz_13, Bubble_13, Axym_13
- Track 11 : ChocoMunchkin_13, SteamedHams_15, Tolls_15, BillDoor_15, Yarn_12, CanesSauce_13, AndPeggy_12, CaramelLatte_13
- Track 12 : Feastonyeet_12, BigChungus_12
- Track 13 : Malvina_15, HippoPololi_15
- Track 14 : Mayweather_14
- Track 15 : CocoaPuff_12, Vine_14, PotPie_13, Tarnish_13, Balloona_12, SummitAcademy_12, Lauer_12
- Track 16 : GiKK_16
- Track 17 : Wolfwood_15, MaVan_15, Wallaby_17, Survivors_15, Nibbles_15, Zareef_15, Azira_15
- Track 18 : Orla_15, Nodigi_15
- Track 19 : CherryonLim_14
- Track 20 : Yummy_14, Horseradish_14
- Track 21 : ChickenTender_15
- Track 22 : Hexbug_15
- Track 23 : Buttrmilkdreams_13, Biskit_14, SweatNTears_15, Troje_13, SketchMex_12, MScarn_15, Blondies_14
- Track 24 : Button_14
- Track 25 : SheckWes_12
- Track 26 : Jamzy_16
- Track 27 : RanchParmCat_16
- Track 28 : Dre3_13, Gibbous_13
- Track 29 : Cleo_13
- Track 30 : MAnor_13

- Track 31 : GTE2_11
- Track 32 : Margaret_16
- Track 33 : Fribs8_14
- Track 34 : Lilas_14, Bradissa_14, EnalisNailo_14
- Track 35 : Angelique_14
- Track 36 : Pytheas_14, Jablanski_14
- Track 37 : Posh_14, Wrigley_14, Pollux_14, BritBrat_14, Floral_14, EMSquaredA_14, Confidence_14, Marteena_14, BeeGee_14
- Track 38 : Cashline_14
- Track 39 : LonelyBoi_14
- Track 40 : Sapo_11
- Track 41 : Frizzle_11, Ghobes_11
- Track 42 : Archimedes_11
- Track 43 : SamW_12, Lederberg_12, Troy_12, Bran_12, Adelaide_12
- Track 44 : Dina_12, StAB_12
- Track 45 : Stiles_12
- Track 46 : Gilgamesh_64
- Track 47 : P3MA_13
- Track 48 : TPA4_13
- Track 49 : Juicebox_14
- Track 50 : LilSpotty_12
- Track 51 : Sleepyhead_13

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

The start number called the most often in the published annotations is 7, it was called in 96 of the 106 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adelaide_12, Agatha_13, AikoCarson_12, Amok_12, AndPeggy_12, Angelique_14, Archimedes_11, Axym_13, Azira_15, Balloona_12, Bavidard_13, BeeGee_14, BigChungus_12, BillDoor_15, Biskit_14, Blondies_14, Bradissa_14, Bran_12, BritBrat_14, Bubble_13, Burnsey_13, Button_14, Buttrmlkdreams_13, CanesSauce_13, CaramelLatte_13, Carsonalex_14, Cashline_14, CherryonLim_14, ChickenTender_15, ChocoMunchkin_13, Cleo_13, CocoaPuff_12, Confidence_14, Cozz_13, Dina_12, Dre3_13, EMSquaredA_14, ElJefes_12, Elinal_14, Elliott_13, Emalyn_12, EnalisNailo_14, Feastonyeet_12, Floral_14, Fribs8_14, Frizzle_11, GTE2_11, Ghobes_11, GiKK_16, Gibbous_13, Gilgamesh_64, GoldHunter_14, Hexbug_15, HippoPololi_15, Horseradish_14, Jablanski_14, Jamzy_16, Juicebox_14, KayGee_13, Lauer_12, Lederberg_12, Lilas_14, LonelyBoi_14, MAnor_13, MScarn_15, MaVan_15, Malvina_15, Margaret_16, Marteena_14, Mayweather_14, McDazzle_12, MunkgeeRoachy_13, Nibbles_15, Nina_14, Nodigi_15, Orla_15, P3MA_13, Pollux_14, Pons_13, Posh_14, PotPie_13, PsychoKiller_13, Pytheas_14, Quasar_13, RADical_14, RSchmailzl_14, RanchParmCat_16, RedBaron_15, SamW_12, Sapo_11, SheckWes_12, SketchMex_12, Sleepyhead_13, Socotra_14, Sopespian_13, StAB_12, Starburst_14, SteamedHams_15, Stiles_12, SummitAcademy_12, Survivors_15, SweatNTears_15, TPA4_13, Tarnish_13, Tolls_15, Troje_13, Troy_12, Typhonomachy_13, Vine_14, Wallaby_17, Wolfwood_15, Wrigley_14, Yakult_14, Yarn_12, Yucky_13, Yummy_14, Zareef_15,

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

-

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

- Abidatro_13, Basilisk_13, Brynnie_13, Chickaboom_12, Galaxy_13, Jamun_13, LilSpotty_12, Ruchi_13, Vulpecula_13, WileyE_12,

Summary by start number:

Start 7:

- Found in 117 of 127 (92.1%) of genes in pham
- Manual Annotations of this start: 96 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adelaide_12 (EP), Agatha_13 (CT), AikoCarson_12 (CT), Amok_12 (CT), AndPeggy_12 (CT), Angelique_14 (CY1), Archimedes_11 (DA), Axym_13 (CT), Azira_15 (CT), Balloona_12 (CT), Bavilard_13 (CT), BeeGee_14 (CY5), BigChungus_12 (CT), BillDoor_15 (CT), Biskit_14 (CT), Blondies_14 (CT), Bradissa_14 (CY1), Bran_12 (EP), BritBrat_14 (CY2), Bubble_13 (CT), Burnsey_13 (CT), Button_14 (CT), Buttrmlkdreams_13 (CT), CanesSauce_13 (CT), CaramelLatte_13 (CT), Carsonalex_14 (CT), Cashline_14 (CY6), CherryonLim_14 (CT), ChickenTender_15 (CT), ChocoMunchkin_13 (CT), Cleo_13 (CT), CocoaPuff_12 (CT), Confidence_14 (CY1), Cozz_13 (CT), Dina_12 (EP), Dre3_13 (CT), EMsquaredA_14 (CY1), ElJefes_12 (CT), Elinal_14 (CT), Elliott_13 (CT), Emalyn_12 (CT), EnalisNailo_14 (CY1), Feastonyeet_12 (CT), Floral_14 (CY1), Fribs8_14 (CT), Frizzle_11 (DA), GTE2_11 (CT), Ghobes_11 (DA), GiKK_16 (CT), Gibbous_13 (CT), Gilgamesh_64 (singleton), GoldHunter_14 (CT), Hexbug_15 (CT), HippoPololi_15 (CT), Horseradish_14 (CT), Jablanski_14 (CY3), Jamzy_16 (CT), Juicebox_14 (singleton), KayGee_13 (CT), Lauer_12 (CT), Lederberg_12 (EP), Lilas_14 (CY1), LonelyBoi_14 (CY7), MAnor_13 (CT), MScarn_15 (CT), MaVan_15 (CT), Malvina_15 (CT), Margaret_16 (CT), Marteena_14 (CY1), Mayweather_14 (CT), McDazzle_12 (CT), MunkgeeRoachy_13 (CT), Nibbles_15 (CT), Nina_14 (CT), Nodigi_15 (CT), Orla_15 (CT), P3MA_13 (singleton), Pollux_14 (CY1), Pons_13 (CT), Posh_14 (CY4), PotPie_13 (CT), PsychoKiller_13 (CT), Pytheas_14 (CY3), Quasar_13 (CT), RADical_14 (CT), RSchmailzl_14 (CT), RanchParmCat_16 (CT), RedBaron_15 (CT), SamW_12 (EP), Sapo_11 (DA), SheckWes_12 (CT), SketchMex_12 (CT), Sleepyhead_13 (singleton), Socotra_14 (CT), Sopespian_13 (CT), StAB_12 (EP), Starburst_14 (CT), SteamedHams_15 (CT), Stiles_12 (EP), SummitAcademy_12 (CT), Survivors_15 (CT), SweatNTears_15 (CT), TPA4_13 (singleton), Tarnish_13 (CT), Tolls_15 (CT), Troje_13 (CT), Troy_12 (EP), Typhonomachy_13 (CT), Vine_14 (CT), Wallaby_17 (CT), Wolfwood_15 (CT), Wrigley_14 (CY4), Yakult_14 (CT), Yarn_12 (CT), Yucky_13 (CT), Yummy_14 (CT), Zareef_15 (CT),

Start 8:

- Found in 10 of 127 (7.9%) of genes in pham
- Manual Annotations of this start: 10 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro_13 (AS1), Basilisk_13 (AS1), Brynnie_13 (AS1), Chickaboom_12 (AS1), Galaxy_13 (AS1), Jamun_13 (AS1), LilSpotty_12 (singleton), Ruchi_13 (AS1), Vulpecula_13 (AS1), WileyE_12 (AS1),

Summary by clusters:

There are 12 clusters represented in this pham: CY3, CY2, CY1, CY7, CY6, CY5, CY4, singleton, DA, AS1, EP, CT,

Info for manual annotations of cluster AS1:

- Start number 8 was manually annotated 9 times for cluster AS1.

Info for manual annotations of cluster CT:

- Start number 7 was manually annotated 63 times for cluster CT.

Info for manual annotations of cluster CY1:

- Start number 7 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 7 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:

- Start number 7 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 7 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 7 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:

- Start number 7 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 7 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster DA:

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

Info for manual annotations of cluster EP:

- Start number 7 was manually annotated 8 times for cluster EP.

Gene Information:

Gene: Abidatro_13 Start: 8801, Stop: 9631, Start Num: 8

Candidate Starts for Abidatro_13:

(Start: 8 @8801 has 10 MA's), (41, 9110), (48, 9176), (57, 9233), (60, 9269), (68, 9305), (73, 9338), (82, 9392), (90, 9437), (99, 9491), (102, 9512),

Gene: Adelaide_12 Start: 7964, Stop: 8869, Start Num: 7

Candidate Starts for Adelaide_12:

(Start: 7 @7964 has 96 MA's), (18, 8066), (24, 8102), (50, 8351), (53, 8360), (60, 8426), (94, 8627),

Gene: Agatha_13 Start: 7939, Stop: 8781, Start Num: 7

Candidate Starts for Agatha_13:

(Start: 7 @7939 has 96 MA's), (10, 7972), (28, 8158), (38, 8230), (51, 8329), (65, 8431), (68, 8440), (69, 8446), (75, 8479), (81, 8515), (83, 8524), (109, 8710), (110, 8716),

Gene: AikoCarson_12 Start: 7662, Stop: 8510, Start Num: 7

Candidate Starts for AikoCarson_12:

(6, 7605), (Start: 7 @7662 has 96 MA's), (10, 7695), (28, 7881), (38, 7953), (59, 8118), (65, 8154), (68, 8163), (69, 8169), (75, 8202), (81, 8238), (83, 8247), (109, 8433), (110, 8439),

Gene: Amok_12 Start: 7662, Stop: 8510, Start Num: 7

Candidate Starts for Amok_12:

(6, 7605), (Start: 7 @7662 has 96 MA's), (10, 7695), (28, 7881), (38, 7953), (59, 8118), (65, 8154), (68, 8163), (69, 8169), (75, 8202), (81, 8238), (83, 8247), (109, 8433), (110, 8439),

Gene: AndPeggy_12 Start: 7953, Stop: 8798, Start Num: 7

Candidate Starts for AndPeggy_12:

(6, 7896), (Start: 7 @7953 has 96 MA's), (10, 7986), (28, 8172), (38, 8244), (65, 8445), (69, 8460), (75, 8493), (81, 8529), (83, 8538), (87, 8568), (109, 8724), (110, 8730),

Gene: Angelique_14 Start: 8715, Stop: 9560, Start Num: 7

Candidate Starts for Angelique_14:

(Start: 7 @8715 has 96 MA's), (14, 8796), (51, 9105), (53, 9114), (74, 9255), (98, 9396), (104, 9447),

Gene: Archimedes_11 Start: 7355, Stop: 8200, Start Num: 7

Candidate Starts for Archimedes_11:

(Start: 7 @7355 has 96 MA's), (11, 7409), (16, 7451), (17, 7454), (26, 7517), (53, 7760), (60, 7826), (63, 7847), (88, 7976), (103, 8060), (104, 8081), (105, 8090),

Gene: Axym_13 Start: 7939, Stop: 8781, Start Num: 7

Candidate Starts for Axym_13:

(Start: 7 @7939 has 96 MA's), (10, 7972), (28, 8158), (38, 8230), (47, 8308), (51, 8329), (56, 8356), (65, 8431), (68, 8440), (69, 8446), (75, 8479), (81, 8515), (83, 8524), (109, 8710), (110, 8716),

Gene: Azira_15 Start: 8878, Stop: 9717, Start Num: 7

Candidate Starts for Azira_15:

(Start: 7 @8878 has 96 MA's), (10, 8911), (36, 9139), (44, 9220), (53, 9268), (59, 9325), (61, 9337), (65, 9361), (69, 9376), (86, 9469), (91, 9502), (92, 9514), (93, 9517), (112, 9652), (120, 9700),

Gene: Balloona_12 Start: 7701, Stop: 8540, Start Num: 7

Candidate Starts for Balloona_12:

(5, 7587), (6, 7647), (Start: 7 @7701 has 96 MA's), (10, 7734), (28, 7920), (37, 7980), (38, 7992), (65, 8193), (68, 8202), (69, 8208), (75, 8241), (80, 8271), (87, 8316), (101, 8406),

Gene: Basilisk_13 Start: 9125, Stop: 9955, Start Num: 8

Candidate Starts for Basilisk_13:

(Start: 8 @9125 has 10 MA's), (41, 9434), (48, 9500), (57, 9557), (68, 9629), (73, 9662), (82, 9716), (90, 9761), (102, 9836),

Gene: Bavilard_13 Start: 8481, Stop: 9320, Start Num: 7

Candidate Starts for Bavilard_13:

(5, 8367), (6, 8427), (Start: 7 @8481 has 96 MA's), (10, 8514), (28, 8700), (37, 8760), (38, 8772), (53, 8880), (65, 8973), (68, 8982), (69, 8988), (75, 9021), (80, 9051), (87, 9096), (101, 9186),

Gene: BeeGee_14 Start: 8711, Stop: 9556, Start Num: 7

Candidate Starts for BeeGee_14:

(Start: 7 @8711 has 96 MA's), (13, 8780), (14, 8792), (43, 9056), (51, 9101), (53, 9110), (64, 9197), (74, 9251),

Gene: BigChungus_12 Start: 7726, Stop: 8565, Start Num: 7

Candidate Starts for BigChungus_12:

(5, 7612), (6, 7672), (Start: 7 @7726 has 96 MA's), (10, 7759), (28, 7945), (37, 8005), (38, 8017), (65, 8218), (68, 8227), (69, 8233), (75, 8266), (80, 8296), (87, 8341),

Gene: BillDoor_15 Start: 7918, Stop: 8763, Start Num: 7

Candidate Starts for BillDoor_15:

(6, 7861), (Start: 7 @7918 has 96 MA's), (10, 7951), (28, 8137), (38, 8209), (65, 8410), (69, 8425), (75, 8458), (81, 8494), (83, 8503), (87, 8533), (109, 8689), (110, 8695),

Gene: Biskit_14 Start: 7925, Stop: 8770, Start Num: 7

Candidate Starts for Biskit_14:

(5, 7808), (6, 7868), (Start: 7 @7925 has 96 MA's), (10, 7958), (28, 8144), (38, 8216), (65, 8417), (69, 8432), (75, 8465), (83, 8510), (109, 8696), (110, 8702),

Gene: Blondies_14 Start: 7911, Stop: 8756, Start Num: 7

Candidate Starts for Blondies_14:

(5, 7794), (6, 7854), (Start: 7 @7911 has 96 MA's), (10, 7944), (28, 8130), (38, 8202), (65, 8403), (69, 8418), (75, 8451), (83, 8496), (109, 8682), (110, 8688),

Gene: Bradissa_14 Start: 8715, Stop: 9560, Start Num: 7

Candidate Starts for Bradissa_14:

(Start: 7 @8715 has 96 MA's), (14, 8796), (51, 9105), (53, 9114), (74, 9255), (95, 9372), (98, 9396), (104, 9447),

Gene: Bran_12 Start: 7969, Stop: 8874, Start Num: 7

Candidate Starts for Bran_12:

(Start: 7 @7969 has 96 MA's), (18, 8071), (24, 8107), (50, 8356), (53, 8365), (60, 8431), (94, 8632),

Gene: BritBrat_14 Start: 8717, Stop: 9562, Start Num: 7

Candidate Starts for BritBrat_14:

(Start: 7 @8717 has 96 MA's), (13, 8786), (14, 8798), (43, 9062), (51, 9107), (53, 9116), (64, 9203), (74, 9257),

Gene: Brynnie_13 Start: 8937, Stop: 9767, Start Num: 8

Candidate Starts for Brynnie_13:

(Start: 8 @8937 has 10 MA's), (41, 9246), (48, 9312), (57, 9369), (68, 9441), (73, 9474), (82, 9528), (90, 9573), (102, 9648),

Gene: Bubble_13 Start: 7939, Stop: 8781, Start Num: 7

Candidate Starts for Bubble_13:

(Start: 7 @7939 has 96 MA's), (10, 7972), (28, 8158), (38, 8230), (47, 8308), (51, 8329), (56, 8356), (65, 8431), (68, 8440), (69, 8446), (75, 8479), (81, 8515), (83, 8524), (109, 8710), (110, 8716),

Gene: Burnsey_13 Start: 7940, Stop: 8782, Start Num: 7

Candidate Starts for Burnsey_13:

(Start: 7 @7940 has 96 MA's), (10, 7973), (28, 8159), (38, 8231), (51, 8330), (65, 8432), (68, 8441), (69, 8447), (75, 8480), (81, 8516), (83, 8525), (109, 8711), (110, 8717),

Gene: Button_14 Start: 7947, Stop: 8795, Start Num: 7

Candidate Starts for Button_14:

(Start: 7 @7947 has 96 MA's), (10, 7980), (21, 8076), (28, 8166), (44, 8307), (59, 8412), (61, 8424), (62, 8430), (65, 8448), (68, 8457), (69, 8463), (81, 8532), (86, 8556), (96, 8625), (97, 8634),

Gene: Buttrmilkdreams_13 Start: 7910, Stop: 8755, Start Num: 7

Candidate Starts for Buttrmilkdreams_13:

(5, 7793), (6, 7853), (Start: 7 @7910 has 96 MA's), (10, 7943), (28, 8129), (38, 8201), (65, 8402), (69, 8417), (75, 8450), (83, 8495), (109, 8681), (110, 8687),

Gene: CanesSauce_13 Start: 7954, Stop: 8799, Start Num: 7

Candidate Starts for CanesSauce_13:

(6, 7897), (Start: 7 @7954 has 96 MA's), (10, 7987), (28, 8173), (38, 8245), (65, 8446), (69, 8461), (75, 8494), (81, 8530), (83, 8539), (87, 8569), (109, 8725), (110, 8731),

Gene: Caramellatte_13 Start: 7954, Stop: 8799, Start Num: 7

Candidate Starts for Caramellatte_13:

(6, 7897), (Start: 7 @7954 has 96 MA's), (10, 7987), (28, 8173), (38, 8245), (65, 8446), (69, 8461), (75, 8494), (81, 8530), (83, 8539), (87, 8569), (109, 8725), (110, 8731),

Gene: Carsonalex_14 Start: 7996, Stop: 8838, Start Num: 7

Candidate Starts for Carsonalex_14:

(Start: 7 @7996 has 96 MA's), (10, 8029), (28, 8215), (38, 8287), (51, 8386), (65, 8488), (68, 8497), (69, 8503), (75, 8536), (81, 8572), (83, 8581), (109, 8767), (110, 8773),

Gene: Cashline_14 Start: 8571, Stop: 9416, Start Num: 7

Candidate Starts for Cashline_14:

(4, 8409), (Start: 7 @8571 has 96 MA's), (13, 8640), (14, 8652), (43, 8916), (51, 8961), (53, 8970), (54, 8982), (64, 9057), (74, 9111),

Gene: CherryonLim_14 Start: 8452, Stop: 9291, Start Num: 7

Candidate Starts for CherryonLim_14:

(5, 8338), (6, 8398), (Start: 7 @8452 has 96 MA's), (10, 8485), (28, 8671), (33, 8707), (37, 8731), (61, 8920), (65, 8944), (68, 8953), (69, 8959), (75, 8992), (80, 9022), (110, 9229),

Gene: Chickaboom_12 Start: 8482, Stop: 9312, Start Num: 8

Candidate Starts for Chickaboom_12:

(Start: 8 @8482 has 10 MA's), (41, 8791), (48, 8857), (57, 8914), (68, 8986), (73, 9019), (82, 9073), (90, 9118), (102, 9193),

Gene: ChickenTender_15 Start: 7982, Stop: 8830, Start Num: 7

Candidate Starts for ChickenTender_15:

(Start: 7 @7982 has 96 MA's), (10, 8015), (28, 8201), (38, 8273), (65, 8474), (68, 8483), (69, 8489), (75, 8522), (81, 8558), (83, 8567), (101, 8687), (109, 8756), (110, 8762),

Gene: ChocoMunchkin_13 Start: 7954, Stop: 8799, Start Num: 7

Candidate Starts for ChocoMunchkin_13:

(6, 7897), (Start: 7 @7954 has 96 MA's), (10, 7987), (28, 8173), (38, 8245), (65, 8446), (69, 8461), (75, 8494), (81, 8530), (83, 8539), (87, 8569), (109, 8725), (110, 8731),

Gene: Cleo_13 Start: 8168, Stop: 9007, Start Num: 7

Candidate Starts for Cleo_13:

(Start: 7 @8168 has 96 MA's), (10, 8201), (22, 8294), (36, 8429), (38, 8450), (39, 8453), (53, 8558), (65, 8651), (68, 8660), (69, 8666), (78, 8714), (92, 8804), (93, 8807), (112, 8942), (120, 8990),

Gene: CocoaPuff_12 Start: 7701, Stop: 8540, Start Num: 7

Candidate Starts for CocoaPuff_12:

(5, 7587), (6, 7647), (Start: 7 @7701 has 96 MA's), (10, 7734), (28, 7920), (37, 7980), (38, 7992), (65, 8193), (68, 8202), (69, 8208), (75, 8241), (80, 8271), (87, 8316), (101, 8406),

Gene: Confidence_14 Start: 8711, Stop: 9556, Start Num: 7

Candidate Starts for Confidence_14:

(Start: 7 @8711 has 96 MA's), (13, 8780), (14, 8792), (43, 9056), (51, 9101), (53, 9110), (64, 9197), (74, 9251),

Gene: Cozz_13 Start: 7940, Stop: 8782, Start Num: 7

Candidate Starts for Cozz_13:

(Start: 7 @7940 has 96 MA's), (10, 7973), (28, 8159), (38, 8231), (47, 8309), (51, 8330), (56, 8357), (65, 8432), (68, 8441), (69, 8447), (75, 8480), (81, 8516), (83, 8525), (109, 8711), (110, 8717),

Gene: Dina_12 Start: 7952, Stop: 8857, Start Num: 7

Candidate Starts for Dina_12:

(Start: 7 @7952 has 96 MA's), (18, 8054), (24, 8090), (50, 8339), (53, 8348), (60, 8414),

Gene: Dre3_13 Start: 8115, Stop: 8954, Start Num: 7

Candidate Starts for Dre3_13:

(Start: 7 @8115 has 96 MA's), (10, 8148), (36, 8376), (38, 8397), (39, 8400), (53, 8505), (61, 8574), (65, 8598), (68, 8607), (69, 8613), (78, 8661), (92, 8751), (93, 8754), (112, 8889), (120, 8937),

Gene: EMsquaredA_14 Start: 8717, Stop: 9562, Start Num: 7

Candidate Starts for EMsquaredA_14:

(Start: 7 @8717 has 96 MA's), (13, 8786), (14, 8798), (43, 9062), (51, 9107), (53, 9116), (64, 9203), (74, 9257),

Gene: ElJefes_12 Start: 8178, Stop: 9014, Start Num: 7

Candidate Starts for ElJefes_12:

(1, 7959), (3, 8016), (5, 8064), (6, 8124), (Start: 7 @8178 has 96 MA's), (10, 8211), (28, 8397), (37, 8457), (38, 8469), (65, 8670), (68, 8679), (69, 8685), (75, 8718), (80, 8748), (87, 8793), (110, 8955),

Gene: Elinal_14 Start: 7707, Stop: 8546, Start Num: 7

Candidate Starts for Elinal_14:

(5, 7593), (6, 7653), (Start: 7 @7707 has 96 MA's), (10, 7740), (28, 7926), (37, 7986), (38, 7998), (53, 8106), (65, 8199), (68, 8208), (69, 8214), (75, 8247), (80, 8277), (87, 8322), (101, 8412),

Gene: Elliott_13 Start: 7939, Stop: 8781, Start Num: 7

Candidate Starts for Elliott_13:

(Start: 7 @7939 has 96 MA's), (10, 7972), (28, 8158), (38, 8230), (51, 8329), (65, 8431), (68, 8440), (69, 8446), (75, 8479), (81, 8515), (83, 8524), (109, 8710), (110, 8716),

Gene: Emalyn_12 Start: 7661, Stop: 8509, Start Num: 7

Candidate Starts for Emalyn_12:

(6, 7604), (Start: 7 @7661 has 96 MA's), (10, 7694), (28, 7880), (38, 7952), (59, 8117), (65, 8153), (68, 8162), (69, 8168), (75, 8201), (81, 8237), (83, 8246), (109, 8432), (110, 8438),

Gene: EnalisNailo_14 Start: 8717, Stop: 9562, Start Num: 7

Candidate Starts for EnalisNailo_14:

(Start: 7 @8717 has 96 MA's), (14, 8798), (51, 9107), (53, 9116), (74, 9257), (95, 9374), (98, 9398), (104, 9449),

Gene: Feastonyeet_12 Start: 7726, Stop: 8565, Start Num: 7

Candidate Starts for Feastonyeet_12:

(5, 7612), (6, 7672), (Start: 7 @7726 has 96 MA's), (10, 7759), (28, 7945), (37, 8005), (38, 8017), (65, 8218), (68, 8227), (69, 8233), (75, 8266), (80, 8296), (87, 8341),

Gene: Floral_14 Start: 8717, Stop: 9562, Start Num: 7

Candidate Starts for Floral_14:

(Start: 7 @8717 has 96 MA's), (13, 8786), (14, 8798), (43, 9062), (51, 9107), (53, 9116), (64, 9203), (74, 9257),

Gene: Fribs8_14 Start: 8691, Stop: 9530, Start Num: 7

Candidate Starts for Fribs8_14:

(Start: 7 @8691 has 96 MA's), (10, 8724), (22, 8817), (36, 8952), (41, 9003), (53, 9081), (61, 9150), (65, 9174), (68, 9183), (69, 9189), (78, 9237), (93, 9330), (112, 9465), (115, 9483), (120, 9513),

Gene: Frizzle_11 Start: 7439, Stop: 8287, Start Num: 7

Candidate Starts for Frizzle_11:

(Start: 7 @7439 has 96 MA's), (11, 7493), (16, 7535), (17, 7538), (25, 7586), (35, 7703), (42, 7763), (60, 7910), (63, 7931), (69, 7952), (94, 8087), (108, 8189), (114, 8228), (116, 8246),

Gene: GTE2_11 Start: 7614, Stop: 8459, Start Num: 7

Candidate Starts for GTE2_11:

(1, 7392), (2, 7428), (3, 7449), (5, 7497), (6, 7557), (Start: 7 @7614 has 96 MA's), (10, 7647), (28, 7833), (38, 7905), (65, 8106), (69, 8121), (75, 8154), (81, 8190), (83, 8199), (87, 8229), (109, 8385), (110, 8391),

Gene: Galaxy_13 Start: 8808, Stop: 9638, Start Num: 8

Candidate Starts for Galaxy_13:

(Start: 8 @8808 has 10 MA's), (41, 9117), (48, 9183), (57, 9240), (60, 9276), (68, 9312), (73, 9345), (82, 9399), (90, 9444), (99, 9498), (102, 9519),

Gene: Ghobes_11 Start: 7439, Stop: 8287, Start Num: 7

Candidate Starts for Ghobes_11:

(Start: 7 @7439 has 96 MA's), (11, 7493), (16, 7535), (17, 7538), (25, 7586), (35, 7703), (42, 7763), (60, 7910), (63, 7931), (69, 7952), (94, 8087), (108, 8189), (114, 8228), (116, 8246),

Gene: GiKK_16 Start: 8250, Stop: 9098, Start Num: 7

Candidate Starts for GiKK_16:

(Start: 7 @8250 has 96 MA's), (10, 8283), (21, 8379), (28, 8469), (38, 8541), (41, 8571), (61, 8727), (62, 8733), (65, 8751), (69, 8766), (81, 8835), (96, 8928), (97, 8937),

Gene: Gibbous_13 Start: 8115, Stop: 8954, Start Num: 7

Candidate Starts for Gibbous_13:

(Start: 7 @8115 has 96 MA's), (10, 8148), (36, 8376), (38, 8397), (39, 8400), (53, 8505), (61, 8574), (65, 8598), (68, 8607), (69, 8613), (78, 8661), (92, 8751), (93, 8754), (112, 8889), (120, 8937),

Gene: Gilgamesh_64 Start: 56918, Stop: 57751, Start Num: 7

Candidate Starts for Gilgamesh_64:

(Start: 7 @56918 has 96 MA's), (11, 56972), (20, 57023), (40, 57206), (51, 57311), (57, 57350), (58, 57365), (59, 57371), (96, 57596), (107, 57674),

Gene: GoldHunter_14 Start: 7940, Stop: 8782, Start Num: 7

Candidate Starts for GoldHunter_14:

(Start: 7 @7940 has 96 MA's), (10, 7973), (28, 8159), (38, 8231), (51, 8330), (65, 8432), (68, 8441), (69, 8447), (75, 8480), (81, 8516), (83, 8525), (109, 8711), (110, 8717),

Gene: Hexbug_15 Start: 8936, Stop: 9784, Start Num: 7

Candidate Starts for Hexbug_15:

(Start: 7 @8936 has 96 MA's), (10, 8969), (20, 9047), (24, 9077), (28, 9155), (38, 9227), (44, 9296), (46, 9311), (59, 9401), (61, 9413), (65, 9437), (69, 9452), (81, 9521), (87, 9560), (97, 9623), (112, 9728),

Gene: HippoPololi_15 Start: 8768, Stop: 9607, Start Num: 7

Candidate Starts for HippoPololi_15:

(Start: 7 @8768 has 96 MA's), (10, 8801), (22, 8894), (36, 9029), (53, 9158), (61, 9227), (65, 9251), (68, 9260), (69, 9266), (78, 9314), (93, 9407), (112, 9542), (120, 9590),

Gene: Horseradish_14 Start: 7821, Stop: 8666, Start Num: 7

Candidate Starts for Horseradish_14:

(Start: 7 @7821 has 96 MA's), (10, 7854), (28, 8040), (38, 8112), (65, 8313), (69, 8328), (75, 8361), (83, 8406), (109, 8592), (110, 8598),

Gene: Jablanski_14 Start: 8564, Stop: 9409, Start Num: 7

Candidate Starts for Jablanski_14:

(Start: 7 @8564 has 96 MA's), (13, 8633), (14, 8645), (43, 8909), (51, 8954), (53, 8963), (74, 9104),

Gene: Jamun_13 Start: 9149, Stop: 9979, Start Num: 8

Candidate Starts for Jamun_13:

(Start: 8 @9149 has 10 MA's), (41, 9458), (48, 9524), (57, 9581), (68, 9653), (73, 9686), (82, 9740), (90, 9785), (102, 9860),

Gene: Jamzy_16 Start: 8260, Stop: 9108, Start Num: 7

Candidate Starts for Jamzy_16:

(Start: 7 @8260 has 96 MA's), (10, 8293), (21, 8389), (28, 8479), (44, 8620), (59, 8725), (61, 8737), (62, 8743), (65, 8761), (68, 8770), (69, 8776), (81, 8845), (86, 8869), (96, 8938), (97, 8947), (112, 9052),

Gene: Juicebox_14 Start: 9288, Stop: 10136, Start Num: 7

Candidate Starts for Juicebox_14:

(Start: 7 @9288 has 96 MA's), (36, 9543), (48, 9648), (75, 9822), (85, 9879),

Gene: KayGee_13 Start: 7707, Stop: 8546, Start Num: 7

Candidate Starts for KayGee_13:

(5, 7593), (6, 7653), (Start: 7 @7707 has 96 MA's), (10, 7740), (28, 7926), (37, 7986), (38, 7998), (53, 8106), (65, 8199), (68, 8208), (69, 8214), (75, 8247), (80, 8277), (87, 8322), (101, 8412),

Gene: Lauer_12 Start: 7756, Stop: 8595, Start Num: 7

Candidate Starts for Lauer_12:

(5, 7642), (6, 7702), (Start: 7 @7756 has 96 MA's), (10, 7789), (28, 7975), (37, 8035), (38, 8047), (65, 8248), (68, 8257), (69, 8263), (75, 8296), (80, 8326), (87, 8371), (101, 8461),

Gene: Lederberg_12 Start: 7952, Stop: 8857, Start Num: 7

Candidate Starts for Lederberg_12:

(Start: 7 @7952 has 96 MA's), (18, 8054), (24, 8090), (50, 8339), (53, 8348), (60, 8414), (94, 8615),

Gene: LilSpotty_12 Start: 7545, Stop: 8324, Start Num: 8

Candidate Starts for LilSpotty_12:

(Start: 8 @7545 has 10 MA's), (15, 7632), (25, 7683), (30, 7761), (35, 7797), (38, 7824), (41, 7854), (42, 7860), (43, 7893), (49, 7929), (51, 7938), (60, 8034), (68, 8070), (75, 8109), (90, 8196), (106, 8304),

Gene: Lilas_14 Start: 8717, Stop: 9562, Start Num: 7

Candidate Starts for Lilas_14:

(Start: 7 @8717 has 96 MA's), (14, 8798), (51, 9107), (53, 9116), (74, 9257), (95, 9374), (98, 9398), (104, 9449),

Gene: LonelyBoi_14 Start: 8564, Stop: 9409, Start Num: 7

Candidate Starts for LonelyBoi_14:

(Start: 7 @8564 has 96 MA's), (14, 8645), (51, 8954), (53, 8963), (64, 9050), (74, 9104),

Gene: MAnor_13 Start: 7697, Stop: 8536, Start Num: 7

Candidate Starts for MAnor_13:

(5, 7583), (6, 7643), (Start: 7 @7697 has 96 MA's), (10, 7730), (28, 7916), (33, 7952), (37, 7976), (38, 7988), (65, 8189), (68, 8198), (69, 8204), (75, 8237), (80, 8267), (87, 8312), (110, 8474),

Gene: MScarn_15 Start: 7910, Stop: 8755, Start Num: 7

Candidate Starts for MScarn_15:

(5, 7793), (6, 7853), (Start: 7 @7910 has 96 MA's), (10, 7943), (28, 8129), (38, 8201), (65, 8402), (69, 8417), (75, 8450), (83, 8495), (109, 8681), (110, 8687),

Gene: MaVan_15 Start: 8878, Stop: 9717, Start Num: 7

Candidate Starts for MaVan_15:

(Start: 7 @8878 has 96 MA's), (10, 8911), (36, 9139), (44, 9220), (53, 9268), (59, 9325), (61, 9337), (65, 9361), (69, 9376), (86, 9469), (91, 9502), (92, 9514), (93, 9517), (112, 9652), (120, 9700),

Gene: Malvina_15 Start: 8771, Stop: 9610, Start Num: 7

Candidate Starts for Malvina_15:

(Start: 7 @8771 has 96 MA's), (10, 8804), (22, 8897), (36, 9032), (53, 9161), (61, 9230), (65, 9254), (68, 9263), (69, 9269), (78, 9317), (93, 9410), (112, 9545), (120, 9593),

Gene: Margaret_16 Start: 8645, Stop: 9493, Start Num: 7

Candidate Starts for Margaret_16:

(Start: 7 @8645 has 96 MA's), (10, 8678), (28, 8864), (46, 9020), (59, 9110), (61, 9122), (65, 9146), (69, 9161), (81, 9230), (86, 9254), (96, 9323), (97, 9332), (119, 9476),

Gene: Marteena_14 Start: 8717, Stop: 9562, Start Num: 7

Candidate Starts for Marteena_14:

(Start: 7 @8717 has 96 MA's), (13, 8786), (14, 8798), (43, 9062), (51, 9107), (53, 9116), (64, 9203), (74, 9257),

Gene: Mayweather_14 Start: 8330, Stop: 9166, Start Num: 7

Candidate Starts for Mayweather_14:

(1, 8111), (3, 8168), (5, 8216), (6, 8276), (Start: 7 @8330 has 96 MA's), (10, 8363), (28, 8549), (37, 8609), (65, 8822), (68, 8831), (69, 8837), (75, 8870), (80, 8900), (87, 8945), (110, 9107),

Gene: McDazzle_12 Start: 8172, Stop: 9008, Start Num: 7

Candidate Starts for McDazzle_12:

(1, 7953), (3, 8010), (5, 8058), (6, 8118), (Start: 7 @8172 has 96 MA's), (10, 8205), (28, 8391), (37, 8451), (38, 8463), (65, 8664), (68, 8673), (69, 8679), (75, 8712), (80, 8742), (87, 8787), (110, 8949),

Gene: MunkgeeRoachy_13 Start: 7987, Stop: 8829, Start Num: 7

Candidate Starts for MunkgeeRoachy_13:

(Start: 7 @7987 has 96 MA's), (10, 8020), (28, 8206), (38, 8278), (51, 8377), (65, 8479), (68, 8488), (69, 8494), (75, 8527), (81, 8563), (83, 8572), (109, 8758), (110, 8764),

Gene: Nibbles_15 Start: 8878, Stop: 9717, Start Num: 7

Candidate Starts for Nibbles_15:

(Start: 7 @8878 has 96 MA's), (10, 8911), (36, 9139), (44, 9220), (53, 9268), (59, 9325), (61, 9337), (65, 9361), (69, 9376), (86, 9469), (91, 9502), (92, 9514), (93, 9517), (112, 9652), (120, 9700),

Gene: Nina_14 Start: 8973, Stop: 9815, Start Num: 7

Candidate Starts for Nina_14:

(Start: 7 @8973 has 96 MA's), (10, 9006), (38, 9264), (51, 9363), (65, 9465), (68, 9474), (69, 9480), (75, 9513), (81, 9549), (83, 9558), (109, 9744), (110, 9750),

Gene: Nodigi_15 Start: 8929, Stop: 9777, Start Num: 7

Candidate Starts for Nodigi_15:

(Start: 7 @8929 has 96 MA's), (10, 8962), (24, 9070), (28, 9148), (38, 9220), (46, 9304), (59, 9394), (61, 9406), (65, 9430), (69, 9445), (81, 9514), (87, 9553), (97, 9616), (112, 9721),

Gene: Orla_15 Start: 8933, Stop: 9781, Start Num: 7

Candidate Starts for Orla_15:

(Start: 7 @8933 has 96 MA's), (10, 8966), (24, 9074), (28, 9152), (38, 9224), (46, 9308), (59, 9398), (61, 9410), (65, 9434), (69, 9449), (81, 9518), (87, 9557), (97, 9620), (112, 9725),

Gene: P3MA_13 Start: 8229, Stop: 9089, Start Num: 7

Candidate Starts for P3MA_13:

(Start: 7 @8229 has 96 MA's), (29, 8448), (31, 8457), (38, 8517), (39, 8520), (41, 8547), (45, 8595), (47, 8610), (52, 8634), (53, 8640), (55, 8655), (70, 8754), (72, 8766), (77, 8799), (83, 8832), (89, 8874), (90, 8877), (100, 8937), (111, 9021), (113, 9030), (118, 9066),

Gene: Pollux_14 Start: 8717, Stop: 9562, Start Num: 7

Candidate Starts for Pollux_14:

(Start: 7 @8717 has 96 MA's), (13, 8786), (14, 8798), (43, 9062), (51, 9107), (53, 9116), (64, 9203), (74, 9257),

Gene: Pons_13 Start: 7709, Stop: 8545, Start Num: 7

Candidate Starts for Pons_13:

(1, 7490), (3, 7547), (5, 7595), (6, 7655), (Start: 7 @7709 has 96 MA's), (10, 7742), (28, 7928), (37, 7988), (38, 8000), (65, 8201), (68, 8210), (69, 8216), (75, 8249), (80, 8279), (87, 8324), (110, 8486),

Gene: Posh_14 Start: 8717, Stop: 9562, Start Num: 7

Candidate Starts for Posh_14:

(Start: 7 @8717 has 96 MA's), (13, 8786), (14, 8798), (43, 9062), (51, 9107), (53, 9116), (64, 9203), (74, 9257),

Gene: PotPie_13 Start: 8560, Stop: 9399, Start Num: 7

Candidate Starts for PotPie_13:

(5, 8446), (6, 8506), (Start: 7 @8560 has 96 MA's), (10, 8593), (28, 8779), (37, 8839), (38, 8851), (65, 9052), (68, 9061), (69, 9067), (75, 9100), (80, 9130), (87, 9175), (101, 9265),

Gene: PsychoKiller_13 Start: 7939, Stop: 8781, Start Num: 7

Candidate Starts for PsychoKiller_13:

(Start: 7 @7939 has 96 MA's), (10, 7972), (28, 8158), (38, 8230), (51, 8329), (65, 8431), (68, 8440), (69, 8446), (75, 8479), (81, 8515), (83, 8524), (109, 8710), (110, 8716),

Gene: Pytheas_14 Start: 8564, Stop: 9409, Start Num: 7

Candidate Starts for Pytheas_14:

(Start: 7 @8564 has 96 MA's), (13, 8633), (14, 8645), (43, 8909), (51, 8954), (53, 8963), (74, 9104),

Gene: Quasar_13 Start: 8548, Stop: 9390, Start Num: 7

Candidate Starts for Quasar_13:

(Start: 7 @8548 has 96 MA's), (10, 8581), (38, 8839), (51, 8938), (65, 9040), (68, 9049), (69, 9055), (75, 9088), (81, 9124), (83, 9133), (109, 9319), (110, 9325),

Gene: RADical_14 Start: 7940, Stop: 8782, Start Num: 7

Candidate Starts for RADical_14:

(Start: 7 @7940 has 96 MA's), (10, 7973), (28, 8159), (38, 8231), (51, 8330), (65, 8432), (68, 8441), (69, 8447), (75, 8480), (81, 8516), (83, 8525), (109, 8711), (110, 8717),

Gene: RSchmailzl_14 Start: 8080, Stop: 8925, Start Num: 7

Candidate Starts for RSchmailzl_14:

(Start: 7 @8080 has 96 MA's), (10, 8113), (28, 8299), (38, 8371), (51, 8470), (65, 8572), (68, 8581), (69, 8587), (75, 8620), (81, 8656), (83, 8665), (109, 8851), (110, 8857),

Gene: RanchParmCat_16 Start: 8645, Stop: 9493, Start Num: 7

Candidate Starts for RanchParmCat_16:

(Start: 7 @8645 has 96 MA's), (10, 8678), (28, 8864), (59, 9110), (61, 9122), (65, 9146), (69, 9161), (81, 9230), (96, 9323), (97, 9332), (119, 9476),

Gene: RedBaron_15 Start: 7984, Stop: 8826, Start Num: 7

Candidate Starts for RedBaron_15:

(Start: 7 @7984 has 96 MA's), (10, 8017), (28, 8203), (38, 8275), (51, 8374), (65, 8476), (68, 8485), (69, 8491), (75, 8524), (81, 8560), (83, 8569), (109, 8755), (110, 8761),

Gene: Ruchi_13 Start: 9071, Stop: 9901, Start Num: 8

Candidate Starts for Ruchi_13:

(Start: 8 @9071 has 10 MA's), (41, 9380), (48, 9446), (57, 9503), (68, 9575), (73, 9608), (82, 9662), (90, 9707), (102, 9782),

Gene: SamW_12 Start: 7952, Stop: 8857, Start Num: 7

Candidate Starts for SamW_12:

(Start: 7 @7952 has 96 MA's), (18, 8054), (24, 8090), (50, 8339), (53, 8348), (60, 8414), (94, 8615),

Gene: Sapo_11 Start: 7428, Stop: 8276, Start Num: 7

Candidate Starts for Sapo_11:

(Start: 7 @7428 has 96 MA's), (13, 7500), (16, 7524), (17, 7527), (25, 7575), (32, 7674), (42, 7752), (61, 7902), (63, 7920), (68, 7935), (69, 7941), (94, 8076), (103, 8127), (105, 8157), (108, 8178), (114, 8217), (116, 8235), (117, 8238),

Gene: SheckWes_12 Start: 7697, Stop: 8533, Start Num: 7

Candidate Starts for SheckWes_12:

(5, 7583), (6, 7643), (Start: 7 @7697 has 96 MA's), (10, 7730), (28, 7916), (37, 7976), (38, 7988), (65, 8189), (68, 8198), (69, 8204), (75, 8237), (80, 8267), (87, 8312), (110, 8474),

Gene: SketchMex_12 Start: 7925, Stop: 8770, Start Num: 7

Candidate Starts for SketchMex_12:

(5, 7808), (6, 7868), (Start: 7 @7925 has 96 MA's), (10, 7958), (28, 8144), (38, 8216), (65, 8417), (69, 8432), (75, 8465), (83, 8510), (109, 8696), (110, 8702),

Gene: Sleepyhead_13 Start: 8334, Stop: 9200, Start Num: 7

Candidate Starts for Sleepyhead_13:

(Start: 7 @8334 has 96 MA's), (9, 8361), (12, 8388), (27, 8526), (59, 8811), (83, 8949),

Gene: Socotra_14 Start: 7939, Stop: 8781, Start Num: 7

Candidate Starts for Socotra_14:

(Start: 7 @7939 has 96 MA's), (10, 7972), (28, 8158), (38, 8230), (51, 8329), (65, 8431), (68, 8440), (69, 8446), (75, 8479), (81, 8515), (83, 8524), (109, 8710), (110, 8716),

Gene: Sopespian_13 Start: 7939, Stop: 8781, Start Num: 7

Candidate Starts for Sopespian_13:

(Start: 7 @7939 has 96 MA's), (10, 7972), (28, 8158), (38, 8230), (51, 8329), (65, 8431), (68, 8440), (69, 8446), (75, 8479), (81, 8515), (83, 8524), (109, 8710), (110, 8716),

Gene: StAB_12 Start: 7957, Stop: 8862, Start Num: 7

Candidate Starts for StAB_12:

(Start: 7 @7957 has 96 MA's), (18, 8059), (24, 8095), (50, 8344), (53, 8353), (60, 8419),

Gene: Starburst_14 Start: 7939, Stop: 8781, Start Num: 7

Candidate Starts for Starburst_14:

(Start: 7 @7939 has 96 MA's), (10, 7972), (28, 8158), (38, 8230), (51, 8329), (65, 8431), (68, 8440), (69, 8446), (75, 8479), (81, 8515), (83, 8524), (109, 8710), (110, 8716),

Gene: SteamedHams_15 Start: 7954, Stop: 8799, Start Num: 7

Candidate Starts for SteamedHams_15:

(6, 7897), (Start: 7 @7954 has 96 MA's), (10, 7987), (28, 8173), (38, 8245), (65, 8446), (69, 8461), (75, 8494), (81, 8530), (83, 8539), (87, 8569), (109, 8725), (110, 8731),

Gene: Stiles_12 Start: 7951, Stop: 8856, Start Num: 7

Candidate Starts for Stiles_12:

(Start: 7 @7951 has 96 MA's), (18, 8053), (24, 8089), (50, 8338), (53, 8347), (60, 8413), (67, 8443), (94, 8614),

Gene: SummitAcademy_12 Start: 7775, Stop: 8614, Start Num: 7

Candidate Starts for SummitAcademy_12:

(5, 7661), (6, 7721), (Start: 7 @7775 has 96 MA's), (10, 7808), (28, 7994), (37, 8054), (38, 8066), (65, 8267), (68, 8276), (69, 8282), (75, 8315), (80, 8345), (87, 8390), (101, 8480),

Gene: Survivors_15 Start: 8732, Stop: 9571, Start Num: 7

Candidate Starts for Survivors_15:

(Start: 7 @8732 has 96 MA's), (10, 8765), (36, 8993), (44, 9074), (53, 9122), (59, 9179), (61, 9191), (65, 9215), (69, 9230), (86, 9323), (91, 9356), (92, 9368), (93, 9371), (112, 9506), (120, 9554),

Gene: SweatNTears_15 Start: 8436, Stop: 9281, Start Num: 7

Candidate Starts for SweatNTears_15:

(5, 8319), (6, 8379), (Start: 7 @8436 has 96 MA's), (10, 8469), (28, 8655), (38, 8727), (65, 8928), (69, 8943), (75, 8976), (83, 9021), (109, 9207), (110, 9213),

Gene: TPA4_13 Start: 9127, Stop: 9984, Start Num: 7

Candidate Starts for TPA4_13:

(Start: 7 @9127 has 96 MA's), (23, 9256), (34, 9376), (38, 9406), (66, 9625), (70, 9646), (71, 9649), (76, 9688), (79, 9700), (104, 9868), (108, 9898), (113, 9928), (118, 9964),

Gene: Tarnish_13 Start: 8074, Stop: 8913, Start Num: 7

Candidate Starts for Tarnish_13:

(5, 7960), (6, 8020), (Start: 7 @8074 has 96 MA's), (10, 8107), (28, 8293), (37, 8353), (38, 8365), (65, 8566), (68, 8575), (69, 8581), (75, 8614), (80, 8644), (87, 8689), (101, 8779),

Gene: Tolls_15 Start: 7957, Stop: 8802, Start Num: 7

Candidate Starts for Tolls_15:

(6, 7900), (Start: 7 @7957 has 96 MA's), (10, 7990), (28, 8176), (38, 8248), (65, 8449), (69, 8464), (75, 8497), (81, 8533), (83, 8542), (87, 8572), (109, 8728), (110, 8734),

Gene: Troje_13 Start: 7910, Stop: 8755, Start Num: 7

Candidate Starts for Troje_13:

(5, 7793), (6, 7853), (Start: 7 @7910 has 96 MA's), (10, 7943), (28, 8129), (38, 8201), (65, 8402), (69, 8417), (75, 8450), (83, 8495), (109, 8681), (110, 8687),

Gene: Troy_12 Start: 7952, Stop: 8857, Start Num: 7

Candidate Starts for Troy_12:

(Start: 7 @7952 has 96 MA's), (18, 8054), (24, 8090), (50, 8339), (53, 8348), (60, 8414), (94, 8615),

Gene: Typhonomachy_13 Start: 7939, Stop: 8781, Start Num: 7

Candidate Starts for Typhonomachy_13:

(Start: 7 @7939 has 96 MA's), (10, 7972), (28, 8158), (38, 8230), (51, 8329), (65, 8431), (68, 8440), (69, 8446), (75, 8479), (81, 8515), (83, 8524), (109, 8710), (110, 8716),

Gene: Vine_14 Start: 8704, Stop: 9543, Start Num: 7

Candidate Starts for Vine_14:

(5, 8590), (6, 8650), (Start: 7 @8704 has 96 MA's), (10, 8737), (28, 8923), (37, 8983), (38, 8995), (65, 9196), (68, 9205), (69, 9211), (75, 9244), (80, 9274), (87, 9319), (101, 9409),

Gene: Vulpecula_13 Start: 9147, Stop: 9977, Start Num: 8

Candidate Starts for Vulpecula_13:

(Start: 8 @9147 has 10 MA's), (41, 9456), (48, 9522), (57, 9579), (68, 9651), (73, 9684), (75, 9696), (82, 9738), (87, 9768), (90, 9783), (102, 9858),

Gene: Wallaby_17 Start: 8877, Stop: 9716, Start Num: 7

Candidate Starts for Wallaby_17:

(Start: 7 @8877 has 96 MA's), (10, 8910), (36, 9138), (44, 9219), (53, 9267), (59, 9324), (61, 9336), (65, 9360), (69, 9375), (86, 9468), (91, 9501), (92, 9513), (93, 9516), (112, 9651), (120, 9699),

Gene: WileyE_12 Start: 8482, Stop: 9312, Start Num: 8

Candidate Starts for WileyE_12:

(Start: 8 @8482 has 10 MA's), (41, 8791), (48, 8857), (57, 8914), (68, 8986), (73, 9019), (82, 9073), (90, 9118), (102, 9193),

Gene: Wolfwood_15 Start: 8877, Stop: 9716, Start Num: 7

Candidate Starts for Wolfwood_15:

(Start: 7 @8877 has 96 MA's), (10, 8910), (36, 9138), (44, 9219), (53, 9267), (59, 9324), (61, 9336), (65, 9360), (69, 9375), (86, 9468), (91, 9501), (92, 9513), (93, 9516), (112, 9651), (120, 9699),

Gene: Wrigley_14 Start: 8561, Stop: 9406, Start Num: 7

Candidate Starts for Wrigley_14:

(Start: 7 @8561 has 96 MA's), (13, 8630), (14, 8642), (43, 8906), (51, 8951), (53, 8960), (64, 9047), (74, 9101),

Gene: Yakult_14 Start: 7841, Stop: 8674, Start Num: 7

Candidate Starts for Yakult_14:

(Start: 7 @7841 has 96 MA's), (10, 7874), (19, 7946), (22, 7964), (24, 7970), (28, 8048), (44, 8189), (46, 8204), (59, 8294), (61, 8306), (62, 8312), (65, 8330), (69, 8345), (84, 8423), (86, 8435), (97, 8513), (109, 8609), (119, 8657),

Gene: Yarn_12 Start: 7947, Stop: 8792, Start Num: 7

Candidate Starts for Yarn_12:

(6, 7890), (Start: 7 @7947 has 96 MA's), (10, 7980), (28, 8166), (38, 8238), (65, 8439), (69, 8454), (75, 8487), (81, 8523), (83, 8532), (87, 8562), (109, 8718), (110, 8724),

Gene: Yucky_13 Start: 8564, Stop: 9403, Start Num: 7

Candidate Starts for Yucky_13:

(5, 8450), (6, 8510), (Start: 7 @8564 has 96 MA's), (10, 8597), (28, 8783), (37, 8843), (38, 8855), (53, 8963), (65, 9056), (68, 9065), (69, 9071), (75, 9104), (80, 9134), (87, 9179), (101, 9269),

Gene: Yummy_14 Start: 7821, Stop: 8666, Start Num: 7

Candidate Starts for Yummy_14:

(Start: 7 @7821 has 96 MA's), (10, 7854), (28, 8040), (38, 8112), (65, 8313), (69, 8328), (75, 8361), (83, 8406), (109, 8592), (110, 8598),

Gene: Zareef_15 Start: 8879, Stop: 9718, Start Num: 7

Candidate Starts for Zareef_15:

(Start: 7 @8879 has 96 MA's), (10, 8912), (36, 9140), (44, 9221), (53, 9269), (59, 9326), (61, 9338), (65, 9362), (69, 9377), (86, 9470), (91, 9503), (92, 9515), (93, 9518), (112, 9653), (120, 9701),