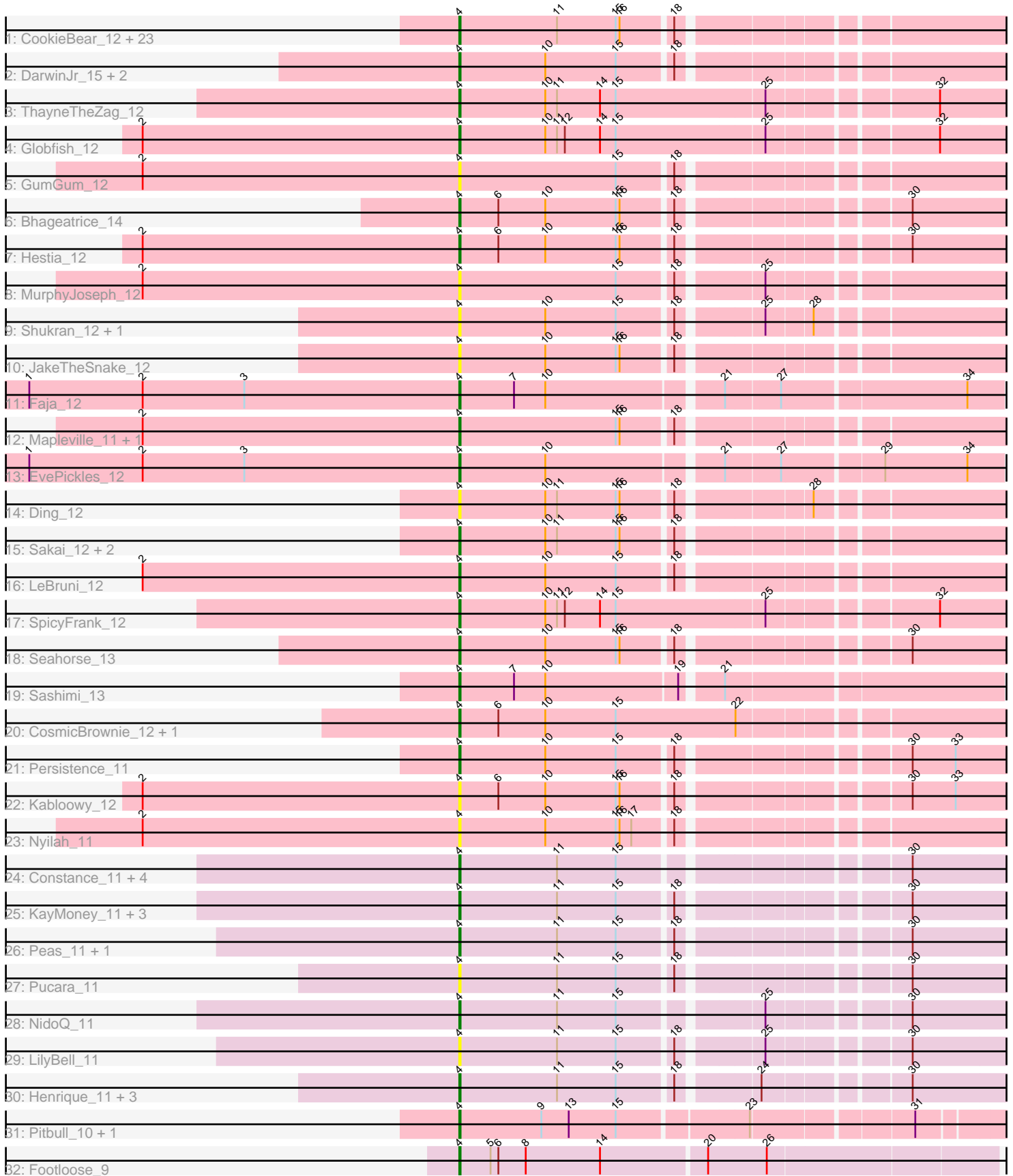


Pham 308521



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 308521 Report

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

Pham number 308521 has 74 members, 20 are drafts.

Phages represented in each track:

- Track 1 : CookieBear_12, Vopal_13, AdaS_12, SonDevVon_11, Lasker_12, MUWow_11, BillyTP_12, BenchScraper_12, Raphaella_12, Phrank15_11, Isolde_13, Aikyam_12, NewKitty_13, BasketStar_12, MaterMagnus_12, Hillester_12, JellyBread_12, MidnightRain_12, Sporco_13, Auxilium_12, BlueShadow_12, YoungHarleezy_12, RadFad_12, Richie_12
- Track 2 : DarwinJr_15, Anekin_11, Crescenzo_12
- Track 3 : ThayneTheZag_12
- Track 4 : Globfish_12
- Track 5 : GumGum_12
- Track 6 : Bhageatrice_14
- Track 7 : Hestia_12
- Track 8 : MurphyJoseph_12
- Track 9 : Shukran_12, Satrap_12
- Track 10 : JakeTheSnake_12
- Track 11 : Faja_12
- Track 12 : Mapleville_11, Lawnathon_12
- Track 13 : EvePickles_12
- Track 14 : Ding_12
- Track 15 : Sakai_12, Gorpy_12, Windest_13
- Track 16 : LeBruni_12
- Track 17 : SpicyFrank_12
- Track 18 : Seahorse_13
- Track 19 : Sashimi_13
- Track 20 : CosmicBrownie_12, Tiff81_13
- Track 21 : Persistence_11
- Track 22 : Kabloowy_12
- Track 23 : Nyilah_11
- Track 24 : Constance_11, PeggyLeg03_11, NikkiHotWheels_11, FosterFrank_11, Judy_11
- Track 25 : KayMoney_11, LittleRon_11, GlobiWarming_11, ChuckDuck_11
- Track 26 : Peas_11, Eileen_11
- Track 27 : Pucara_11
- Track 28 : NidoQ_11
- Track 29 : LilyBell_11
- Track 30 : Henrique_11, Karkharias_11, HotPotato_11, Bridgette_11
- Track 31 : Pitbull_10, Hum25_10
- Track 32 : Footloose_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 54 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS_12, Aikyam_12, Anekin_11, Auxilium_12, BasketStar_12, BenchScraper_12, Bhageatrice_14, BillyTP_12, BlueShadow_12, Bridgette_11, ChuckDuck_11, Constance_11, CookieBear_12, CosmicBrownie_12, Crescenzo_12, DarwinJr_15, Ding_12, Eileen_11, EvePickles_12, Faja_12, Footloose_9, FosterFrank_11, Globfish_12, GlobiWarming_11, Gorpy_12, GumGum_12, Henrique_11, Hestia_12, Hillester_12, HotPotato_11, Hum25_10, Isolde_13, JakeTheSnake_12, JellyBread_12, Judy_11, Kabloowy_12, Karkharias_11, KayMoney_11, Lasker_12, Lawnathon_12, LeBruni_12, LilyBell_11, LittleRon_11, MUWow_11, Mapleville_11, MaterMagnus_12, MidnightRain_12, MurphyJoseph_12, NewKitty_13, NidoQ_11, NikkiHotWheels_11, Nyilah_11, Peas_11, PeggyLeg03_11, Persistence_11, Phrank15_11, Pitbull_10, Pucara_11, RadFad_12, Raphaella_12, Richie_12, Sakai_12, Sashimi_13, Satrap_12, Seahorse_13, Shukran_12, SonDevVon_11, SpicyFrank_12, Sporco_13, ThayneTheZag_12, Tiff81_13, Vopal_13, Windest_13, YoungHarleezy_12,

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

-

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

-

Summary by start number:

Start 4:

- Found in 74 of 74 (100.0%) of genes in pham
- Manual Annotations of this start: 54 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AdaS_12 (AY), Aikyam_12 (AY), Anekin_11 (AY), Auxilium_12 (AY), BasketStar_12 (AY), BenchScraper_12 (AY), Bhageatrice_14 (AY), BillyTP_12 (AY), BlueShadow_12 (AY), Bridgette_11 (FA), ChuckDuck_11 (FA), Constance_11 (FA), CookieBear_12 (AY), CosmicBrownie_12 (AY), Crescenzo_12 (AY), DarwinJr_15 (AY), Ding_12 (AY), Eileen_11 (FA), EvePickles_12 (AY), Faja_12 (AY), Footloose_9 (singleton), FosterFrank_11 (FA), Globfish_12 (AY), GlobiWarming_11 (FA), Gorpy_12 (AY), GumGum_12 (AY), Henrique_11 (FA), Hestia_12 (AY), Hillester_12 (AY), HotPotato_11 (FA), Hum25_10 (FQ1), Isolde_13 (AY), JakeTheSnake_12 (AY), JellyBread_12 (AY), Judy_11 (FA), Kabloowy_12 (AY), Karkharias_11 (FA), KayMoney_11 (FA), Lasker_12 (AY), Lawnathon_12 (AY), LeBruni_12 (AY), LilyBell_11 (FA), LittleRon_11 (FA), MUWow_11 (AY), Mapleville_11 (AY), MaterMagnus_12 (AY), MidnightRain_12 (AY), MurphyJoseph_12 (AY), NewKitty_13 (AY), NidoQ_11 (FA), NikkiHotWheels_11 (FA), Nyilah_11 (AY), Peas_11 (FA), PeggyLeg03_11 (FA), Persistence_11 (AY), Phrank15_11 (AY), Pitbull_10 (FQ1), Pucara_11 (FA), RadFad_12 (AY), Raphaella_12 (AY), Richie_12 (AY), Sakai_12 (AY), Sashimi_13 (AY), Satrap_12

(AY), Seahorse_13 (AY), Shukran_12 (AY), SonDevVon_11 (AY), SpicyFrank_12 (AY), Sporco_13 (AY), ThayneTheZag_12 (AY), Tiff81_13 (AY), Vopal_13 (AY), Windest_13 (AY), YoungHarleezy_12 (AY),

Summary by clusters:

There are 4 clusters represented in this pham: AY, FA, singleton, FQ1,

Info for manual annotations of cluster AY:

•Start number 4 was manually annotated 38 times for cluster AY.

Info for manual annotations of cluster FA:

•Start number 4 was manually annotated 13 times for cluster FA.

Info for manual annotations of cluster FQ1:

•Start number 4 was manually annotated 2 times for cluster FQ1.

Gene Information:

Gene: AdaS_12 Start: 8043, Stop: 8426, Start Num: 4

Candidate Starts for AdaS_12:

(Start: 4 @8043 has 54 MA's), (11, 8118), (15, 8163), (16, 8166), (18, 8202),

Gene: Aikyam_12 Start: 8044, Stop: 8427, Start Num: 4

Candidate Starts for Aikyam_12:

(Start: 4 @8044 has 54 MA's), (11, 8119), (15, 8164), (16, 8167), (18, 8203),

Gene: Anekin_11 Start: 8156, Stop: 8539, Start Num: 4

Candidate Starts for Anekin_11:

(Start: 4 @8156 has 54 MA's), (10, 8222), (15, 8276), (18, 8315),

Gene: Auxilium_12 Start: 8043, Stop: 8426, Start Num: 4

Candidate Starts for Auxilium_12:

(Start: 4 @8043 has 54 MA's), (11, 8118), (15, 8163), (16, 8166), (18, 8202),

Gene: BasketStar_12 Start: 8097, Stop: 8480, Start Num: 4

Candidate Starts for BasketStar_12:

(Start: 4 @8097 has 54 MA's), (11, 8172), (15, 8217), (16, 8220), (18, 8256),

Gene: BenchScraper_12 Start: 8058, Stop: 8441, Start Num: 4

Candidate Starts for BenchScraper_12:

(Start: 4 @8058 has 54 MA's), (11, 8133), (15, 8178), (16, 8181), (18, 8217),

Gene: Bhageatrice_14 Start: 9253, Stop: 9636, Start Num: 4

Candidate Starts for Bhageatrice_14:

(Start: 4 @9253 has 54 MA's), (6, 9283), (10, 9319), (15, 9373), (16, 9376), (18, 9412), (30, 9565),

Gene: BillyTP_12 Start: 8049, Stop: 8432, Start Num: 4

Candidate Starts for BillyTP_12:

(Start: 4 @8049 has 54 MA's), (11, 8124), (15, 8169), (16, 8172), (18, 8208),

Gene: BlueShadow_12 Start: 8043, Stop: 8426, Start Num: 4
Candidate Starts for BlueShadow_12:
(Start: 4 @8043 has 54 MA's), (11, 8118), (15, 8163), (16, 8166), (18, 8202),

Gene: Bridgette_11 Start: 8195, Stop: 8578, Start Num: 4
Candidate Starts for Bridgette_11:
(Start: 4 @8195 has 54 MA's), (11, 8270), (15, 8315), (18, 8354), (24, 8408), (30, 8507),

Gene: ChuckDuck_11 Start: 8151, Stop: 8534, Start Num: 4
Candidate Starts for ChuckDuck_11:
(Start: 4 @8151 has 54 MA's), (11, 8226), (15, 8271), (18, 8310), (30, 8463),

Gene: Constance_11 Start: 8197, Stop: 8580, Start Num: 4
Candidate Starts for Constance_11:
(Start: 4 @8197 has 54 MA's), (11, 8272), (15, 8317), (30, 8509),

Gene: CookieBear_12 Start: 8043, Stop: 8426, Start Num: 4
Candidate Starts for CookieBear_12:
(Start: 4 @8043 has 54 MA's), (11, 8118), (15, 8163), (16, 8166), (18, 8202),

Gene: CosmicBrownie_12 Start: 8115, Stop: 8513, Start Num: 4
Candidate Starts for CosmicBrownie_12:
(Start: 4 @8115 has 54 MA's), (6, 8145), (10, 8181), (15, 8235), (22, 8325),

Gene: Crescenzo_12 Start: 8084, Stop: 8467, Start Num: 4
Candidate Starts for Crescenzo_12:
(Start: 4 @8084 has 54 MA's), (10, 8150), (15, 8204), (18, 8243),

Gene: DarwinJr_15 Start: 9387, Stop: 9770, Start Num: 4
Candidate Starts for DarwinJr_15:
(Start: 4 @9387 has 54 MA's), (10, 9453), (15, 9507), (18, 9546),

Gene: Ding_12 Start: 8017, Stop: 8400, Start Num: 4
Candidate Starts for Ding_12:
(Start: 4 @8017 has 54 MA's), (10, 8083), (11, 8092), (15, 8137), (16, 8140), (18, 8176), (28, 8266),

Gene: Eileen_11 Start: 8160, Stop: 8543, Start Num: 4
Candidate Starts for Eileen_11:
(Start: 4 @8160 has 54 MA's), (11, 8235), (15, 8280), (18, 8319), (30, 8472),

Gene: EvePickles_12 Start: 8096, Stop: 8488, Start Num: 4
Candidate Starts for EvePickles_12:
(1, 7766), (2, 7853), (3, 7931), (Start: 4 @8096 has 54 MA's), (10, 8162), (21, 8288), (27, 8327), (29, 8399), (34, 8462),

Gene: Faja_12 Start: 8040, Stop: 8432, Start Num: 4
Candidate Starts for Faja_12:
(1, 7710), (2, 7797), (3, 7875), (Start: 4 @8040 has 54 MA's), (7, 8082), (10, 8106), (21, 8232), (27, 8271), (34, 8406),

Gene: Footloose_9 Start: 6630, Stop: 7031, Start Num: 4
Candidate Starts for Footloose_9:
(Start: 4 @6630 has 54 MA's), (5, 6654), (6, 6660), (8, 6681), (14, 6738), (20, 6816), (26, 6861),

Gene: FosterFrank_11 Start: 8155, Stop: 8538, Start Num: 4

Candidate Starts for FosterFrank_11:

(Start: 4 @8155 has 54 MA's), (11, 8230), (15, 8275), (30, 8467),

Gene: Globfish_12 Start: 8091, Stop: 8489, Start Num: 4

Candidate Starts for Globfish_12:

(2, 7848), (Start: 4 @8091 has 54 MA's), (10, 8157), (11, 8166), (12, 8172), (14, 8199), (15, 8211), (25, 8322), (32, 8439),

Gene: GlobiWarming_11 Start: 8152, Stop: 8535, Start Num: 4

Candidate Starts for GlobiWarming_11:

(Start: 4 @8152 has 54 MA's), (11, 8227), (15, 8272), (18, 8311), (30, 8464),

Gene: Gorpy_12 Start: 8052, Stop: 8435, Start Num: 4

Candidate Starts for Gorpy_12:

(Start: 4 @8052 has 54 MA's), (10, 8118), (11, 8127), (15, 8172), (16, 8175), (18, 8211),

Gene: GumGum_12 Start: 8121, Stop: 8504, Start Num: 4

Candidate Starts for GumGum_12:

(2, 7878), (Start: 4 @8121 has 54 MA's), (15, 8241), (18, 8280),

Gene: Henrique_11 Start: 8156, Stop: 8539, Start Num: 4

Candidate Starts for Henrique_11:

(Start: 4 @8156 has 54 MA's), (11, 8231), (15, 8276), (18, 8315), (24, 8369), (30, 8468),

Gene: Hestia_12 Start: 8156, Stop: 8539, Start Num: 4

Candidate Starts for Hestia_12:

(2, 7913), (Start: 4 @8156 has 54 MA's), (6, 8186), (10, 8222), (15, 8276), (16, 8279), (18, 8315), (30, 8468),

Gene: Hillester_12 Start: 8043, Stop: 8426, Start Num: 4

Candidate Starts for Hillester_12:

(Start: 4 @8043 has 54 MA's), (11, 8118), (15, 8163), (16, 8166), (18, 8202),

Gene: HotPotato_11 Start: 8160, Stop: 8543, Start Num: 4

Candidate Starts for HotPotato_11:

(Start: 4 @8160 has 54 MA's), (11, 8235), (15, 8280), (18, 8319), (24, 8373), (30, 8472),

Gene: Hum25_10 Start: 6886, Stop: 7275, Start Num: 4

Candidate Starts for Hum25_10:

(Start: 4 @6886 has 54 MA's), (9, 6949), (13, 6970), (15, 7006), (23, 7099), (31, 7213),

Gene: Isolde_13 Start: 8114, Stop: 8497, Start Num: 4

Candidate Starts for Isolde_13:

(Start: 4 @8114 has 54 MA's), (11, 8189), (15, 8234), (16, 8237), (18, 8273),

Gene: JakeTheSnake_12 Start: 8046, Stop: 8429, Start Num: 4

Candidate Starts for JakeTheSnake_12:

(Start: 4 @8046 has 54 MA's), (10, 8112), (15, 8166), (16, 8169), (18, 8205),

Gene: JellyBread_12 Start: 8036, Stop: 8419, Start Num: 4

Candidate Starts for JellyBread_12:

(Start: 4 @8036 has 54 MA's), (11, 8111), (15, 8156), (16, 8159), (18, 8195),

Gene: Judy_11 Start: 8196, Stop: 8579, Start Num: 4

Candidate Starts for Judy_11:

(Start: 4 @8196 has 54 MA's), (11, 8271), (15, 8316), (30, 8508),

Gene: Kabloowy_12 Start: 8133, Stop: 8516, Start Num: 4

Candidate Starts for Kabloowy_12:

(2, 7890), (Start: 4 @8133 has 54 MA's), (6, 8163), (10, 8199), (15, 8253), (16, 8256), (18, 8292), (30, 8445), (33, 8478),

Gene: Karkharias_11 Start: 8156, Stop: 8539, Start Num: 4

Candidate Starts for Karkharias_11:

(Start: 4 @8156 has 54 MA's), (11, 8231), (15, 8276), (18, 8315), (24, 8369), (30, 8468),

Gene: KayMoney_11 Start: 8153, Stop: 8536, Start Num: 4

Candidate Starts for KayMoney_11:

(Start: 4 @8153 has 54 MA's), (11, 8228), (15, 8273), (18, 8312), (30, 8465),

Gene: Lasker_12 Start: 8051, Stop: 8434, Start Num: 4

Candidate Starts for Lasker_12:

(Start: 4 @8051 has 54 MA's), (11, 8126), (15, 8171), (16, 8174), (18, 8210),

Gene: Lawnathon_12 Start: 8194, Stop: 8577, Start Num: 4

Candidate Starts for Lawnathon_12:

(2, 7951), (Start: 4 @8194 has 54 MA's), (15, 8314), (16, 8317), (18, 8353),

Gene: LeBruni_12 Start: 8066, Stop: 8449, Start Num: 4

Candidate Starts for LeBruni_12:

(2, 7823), (Start: 4 @8066 has 54 MA's), (10, 8132), (15, 8186), (18, 8225),

Gene: LilyBell_11 Start: 8171, Stop: 8554, Start Num: 4

Candidate Starts for LilyBell_11:

(Start: 4 @8171 has 54 MA's), (11, 8246), (15, 8291), (18, 8330), (25, 8387), (30, 8483),

Gene: LittleRon_11 Start: 8151, Stop: 8534, Start Num: 4

Candidate Starts for LittleRon_11:

(Start: 4 @8151 has 54 MA's), (11, 8226), (15, 8271), (18, 8310), (30, 8463),

Gene: MUWow_11 Start: 8136, Stop: 8519, Start Num: 4

Candidate Starts for MUWow_11:

(Start: 4 @8136 has 54 MA's), (11, 8211), (15, 8256), (16, 8259), (18, 8295),

Gene: Mapleville_11 Start: 8264, Stop: 8647, Start Num: 4

Candidate Starts for Mapleville_11:

(2, 8021), (Start: 4 @8264 has 54 MA's), (15, 8384), (16, 8387), (18, 8423),

Gene: MaterMagnus_12 Start: 8044, Stop: 8427, Start Num: 4

Candidate Starts for MaterMagnus_12:

(Start: 4 @8044 has 54 MA's), (11, 8119), (15, 8164), (16, 8167), (18, 8203),

Gene: MidnightRain_12 Start: 8043, Stop: 8426, Start Num: 4

Candidate Starts for MidnightRain_12:

(Start: 4 @8043 has 54 MA's), (11, 8118), (15, 8163), (16, 8166), (18, 8202),

Gene: MurphyJoseph_12 Start: 8047, Stop: 8430, Start Num: 4

Candidate Starts for MurphyJoseph_12:

(2, 7804), (Start: 4 @8047 has 54 MA's), (15, 8167), (18, 8206), (25, 8263),

Gene: NewKitty_13 Start: 8273, Stop: 8656, Start Num: 4

Candidate Starts for NewKitty_13:

(Start: 4 @8273 has 54 MA's), (11, 8348), (15, 8393), (16, 8396), (18, 8432),

Gene: NidoQ_11 Start: 8214, Stop: 8597, Start Num: 4

Candidate Starts for NidoQ_11:

(Start: 4 @8214 has 54 MA's), (11, 8289), (15, 8334), (25, 8430), (30, 8526),

Gene: NikkiHotWheels_11 Start: 8154, Stop: 8537, Start Num: 4

Candidate Starts for NikkiHotWheels_11:

(Start: 4 @8154 has 54 MA's), (11, 8229), (15, 8274), (30, 8466),

Gene: Nyilah_11 Start: 8165, Stop: 8548, Start Num: 4

Candidate Starts for Nyilah_11:

(2, 7922), (Start: 4 @8165 has 54 MA's), (10, 8231), (15, 8285), (16, 8288), (17, 8297), (18, 8324),

Gene: Peas_11 Start: 8160, Stop: 8543, Start Num: 4

Candidate Starts for Peas_11:

(Start: 4 @8160 has 54 MA's), (11, 8235), (15, 8280), (18, 8319), (30, 8472),

Gene: PeggyLeg03_11 Start: 8197, Stop: 8580, Start Num: 4

Candidate Starts for PeggyLeg03_11:

(Start: 4 @8197 has 54 MA's), (11, 8272), (15, 8317), (30, 8509),

Gene: Persistence_11 Start: 8114, Stop: 8497, Start Num: 4

Candidate Starts for Persistence_11:

(Start: 4 @8114 has 54 MA's), (10, 8180), (15, 8234), (18, 8273), (30, 8426), (33, 8459),

Gene: Phrank15_11 Start: 8196, Stop: 8579, Start Num: 4

Candidate Starts for Phrank15_11:

(Start: 4 @8196 has 54 MA's), (11, 8271), (15, 8316), (16, 8319), (18, 8355),

Gene: Pitbull_10 Start: 6516, Stop: 6905, Start Num: 4

Candidate Starts for Pitbull_10:

(Start: 4 @6516 has 54 MA's), (9, 6579), (13, 6600), (15, 6636), (23, 6729), (31, 6843),

Gene: Pucara_11 Start: 8159, Stop: 8542, Start Num: 4

Candidate Starts for Pucara_11:

(Start: 4 @8159 has 54 MA's), (11, 8234), (15, 8279), (18, 8318), (30, 8471),

Gene: RadFad_12 Start: 8043, Stop: 8426, Start Num: 4

Candidate Starts for RadFad_12:

(Start: 4 @8043 has 54 MA's), (11, 8118), (15, 8163), (16, 8166), (18, 8202),

Gene: Raphaella_12 Start: 8043, Stop: 8426, Start Num: 4

Candidate Starts for Raphaella_12:

(Start: 4 @8043 has 54 MA's), (11, 8118), (15, 8163), (16, 8166), (18, 8202),

Gene: Richie_12 Start: 8058, Stop: 8441, Start Num: 4
Candidate Starts for Richie_12:
(Start: 4 @8058 has 54 MA's), (11, 8133), (15, 8178), (16, 8181), (18, 8217),

Gene: Sakai_12 Start: 8052, Stop: 8435, Start Num: 4
Candidate Starts for Sakai_12:
(Start: 4 @8052 has 54 MA's), (10, 8118), (11, 8127), (15, 8172), (16, 8175), (18, 8211),

Gene: Sashimi_13 Start: 8155, Stop: 8547, Start Num: 4
Candidate Starts for Sashimi_13:
(Start: 4 @8155 has 54 MA's), (7, 8197), (10, 8221), (19, 8320), (21, 8347),

Gene: Satrap_12 Start: 7998, Stop: 8381, Start Num: 4
Candidate Starts for Satrap_12:
(Start: 4 @7998 has 54 MA's), (10, 8064), (15, 8118), (18, 8157), (25, 8214), (28, 8247),

Gene: Seahorse_13 Start: 8295, Stop: 8678, Start Num: 4
Candidate Starts for Seahorse_13:
(Start: 4 @8295 has 54 MA's), (10, 8361), (15, 8415), (16, 8418), (18, 8454), (30, 8607),

Gene: Shukran_12 Start: 7998, Stop: 8381, Start Num: 4
Candidate Starts for Shukran_12:
(Start: 4 @7998 has 54 MA's), (10, 8064), (15, 8118), (18, 8157), (25, 8214), (28, 8247),

Gene: SonDevVon_11 Start: 8045, Stop: 8428, Start Num: 4
Candidate Starts for SonDevVon_11:
(Start: 4 @8045 has 54 MA's), (11, 8120), (15, 8165), (16, 8168), (18, 8204),

Gene: SpicyFrank_12 Start: 8106, Stop: 8504, Start Num: 4
Candidate Starts for SpicyFrank_12:
(Start: 4 @8106 has 54 MA's), (10, 8172), (11, 8181), (12, 8187), (14, 8214), (15, 8226), (25, 8337),
(32, 8454),

Gene: Sporco_13 Start: 8100, Stop: 8483, Start Num: 4
Candidate Starts for Sporco_13:
(Start: 4 @8100 has 54 MA's), (11, 8175), (15, 8220), (16, 8223), (18, 8259),

Gene: ThayneTheZag_12 Start: 8083, Stop: 8481, Start Num: 4
Candidate Starts for ThayneTheZag_12:
(Start: 4 @8083 has 54 MA's), (10, 8149), (11, 8158), (14, 8191), (15, 8203), (25, 8314), (32, 8431),

Gene: Tiff81_13 Start: 8253, Stop: 8651, Start Num: 4
Candidate Starts for Tiff81_13:
(Start: 4 @8253 has 54 MA's), (6, 8283), (10, 8319), (15, 8373), (22, 8463),

Gene: Vopal_13 Start: 8115, Stop: 8498, Start Num: 4
Candidate Starts for Vopal_13:
(Start: 4 @8115 has 54 MA's), (11, 8190), (15, 8235), (16, 8238), (18, 8274),

Gene: Windest_13 Start: 8100, Stop: 8483, Start Num: 4
Candidate Starts for Windest_13:
(Start: 4 @8100 has 54 MA's), (10, 8166), (11, 8175), (15, 8220), (16, 8223), (18, 8259),

Gene: YoungHarleezy_12 Start: 8056, Stop: 8439, Start Num: 4
Candidate Starts for YoungHarleezy_12:
(Start: 4 @8056 has 54 MA's), (11, 8131), (15, 8176), (16, 8179), (18, 8215),