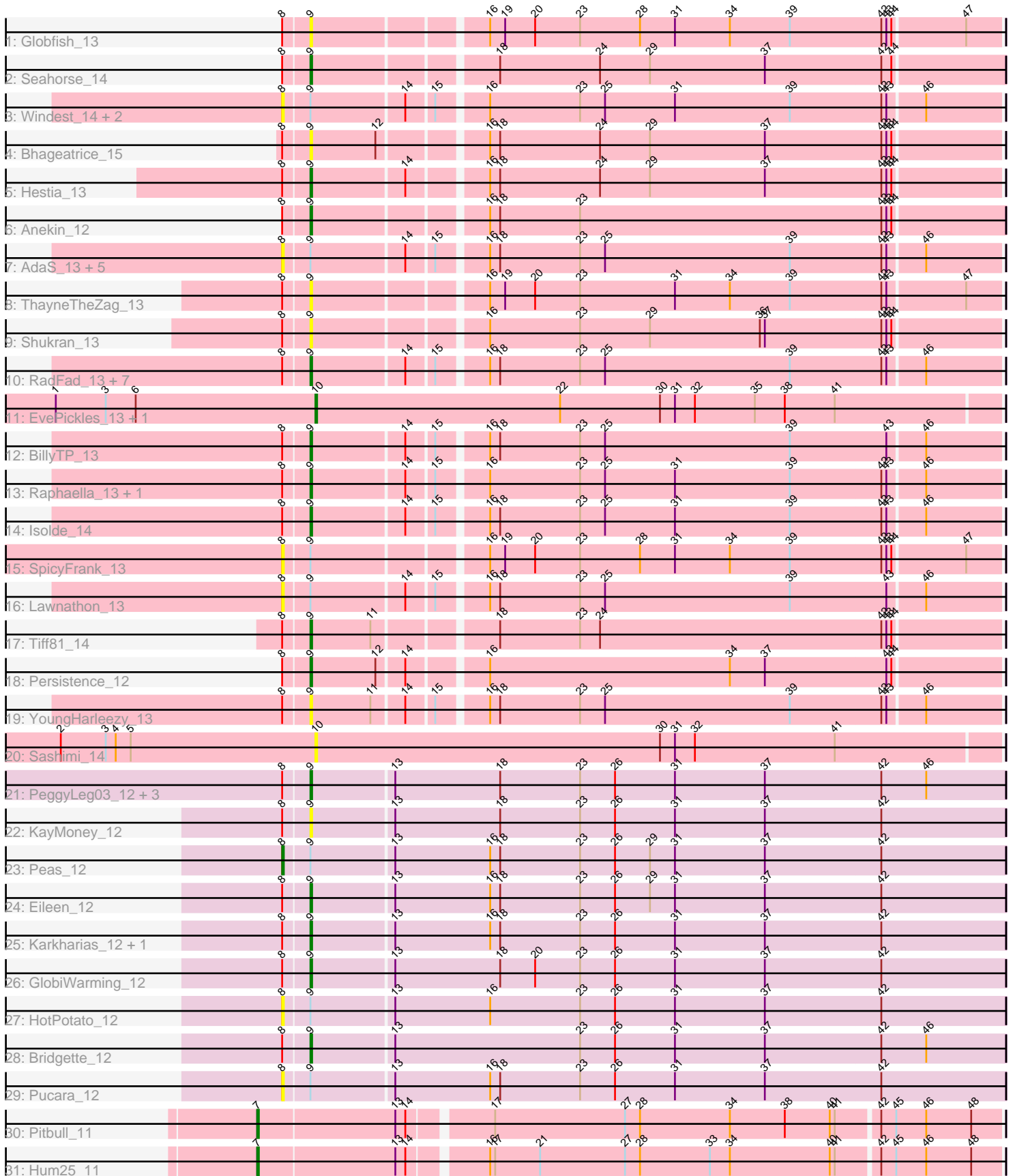


Pham 223200



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 223200 Report

This analysis was run 03/28/25 on database version 593.

Pham number 223200 has 51 members, 22 are drafts.

Phages represented in each track:

- Track 1 : Globfish_13
- Track 2 : Seahorse_14
- Track 3 : Windest_14, CookieBear_14, JellyBread_13
- Track 4 : Bhageatrice_15
- Track 5 : Hestia_13
- Track 6 : Anekin_12
- Track 7 : AdaS_13, MaterMagnus_13, Vopal_14, Hillester_13, Aikyam_13, BlueShadow_14
- Track 8 : ThayneTheZag_13
- Track 9 : Shukran_13
- Track 10 : RadFad_13, MUWow_12, BenchScraper_13, Phrank15_12, Sakai_13, MidnightRain_13, Richie_13, Gorpy_13
- Track 11 : EvePickles_13, Faja_13
- Track 12 : BillyTP_13
- Track 13 : Raphaella_13, Auxilium_13
- Track 14 : Isolde_14
- Track 15 : SpicyFrank_13
- Track 16 : Lawnathon_13
- Track 17 : Tiff81_14
- Track 18 : Persistence_12
- Track 19 : YoungHarleezy_13
- Track 20 : Sashimi_14
- Track 21 : PeggyLeg03_12, Constance_12, Judy_12, FosterFrank_12
- Track 22 : KayMoney_12
- Track 23 : Peas_12
- Track 24 : Eileen_12
- Track 25 : Karkharias_12, ChuckDuck_12
- Track 26 : GlobiWarming_12
- Track 27 : HotPotato_12
- Track 28 : Bridgette_12
- Track 29 : Pucara_12
- Track 30 : Pitbull_11
- Track 31 : Hum25_11

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

The start number called the most often in the published annotations is 9, it was called in 24 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anekin_12, Auxilium_13, BenchScraper_13, Bhageatrice_15, BillyTP_13, Bridgette_12, ChuckDuck_12, Constance_12, Eileen_12, FosterFrank_12, Globfish_13, GlobiWarming_12, Gorpy_13, Hestia_13, Isolde_14, Judy_12, Karkharias_12, KayMoney_12, MUWow_12, MidnightRain_13, PeggyLeg03_12, Persistence_12, Phrank15_12, RadFad_13, Raphaella_13, Richie_13, Sakai_13, Seahorse_14, Shukran_13, ThayneTheZag_13, Tiff81_14, YoungHarleezy_13,

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

- AdaS_13, Aikyam_13, BlueShadow_14, CookieBear_14, Hillester_13, HotPotato_12, JellyBread_13, Lawnathon_13, MaterMagnus_13, Peas_12, Pucara_12, SpicyFrank_13, Vopal_14, Windest_14,

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

- EvePickles_13, Faja_13, Hum25_11, Pitbull_11, Sashimi_14,

Summary by start number:

Start 7:

- Found in 2 of 51 (3.9%) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hum25_11 (FQ), Pitbull_11 (FQ),

Start 8:

- Found in 46 of 51 (90.2%) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 30.4% of time when present
- Phage (with cluster) where this start called: AdaS_13 (AY), Aikyam_13 (AY), BlueShadow_14 (AY), CookieBear_14 (AY), Hillester_13 (AY), HotPotato_12 (FA), JellyBread_13 (AY), Lawnathon_13 (AY), MaterMagnus_13 (AY), Peas_12 (FA), Pucara_12 (FA), SpicyFrank_13 (AY), Vopal_14 (AY), Windest_14 (AY),

Start 9:

- Found in 46 of 51 (90.2%) of genes in pham
- Manual Annotations of this start: 24 of 29
- Called 69.6% of time when present
- Phage (with cluster) where this start called: Anekin_12 (AY), Auxilium_13 (AY), BenchScraper_13 (AY), Bhageatrice_15 (AY), BillyTP_13 (AY), Bridgette_12 (FA), ChuckDuck_12 (FA), Constance_12 (FA), Eileen_12 (FA), FosterFrank_12 (FA), Globfish_13 (AY), GlobiWarming_12 (FA), Gorpy_13 (AY), Hestia_13 (AY), Isolde_14 (AY), Judy_12 (FA), Karkharias_12 (FA), KayMoney_12 (FA), MUWow_12 (AY), MidnightRain_13 (AY), PeggyLeg03_12 (FA), Persistence_12 (AY), Phrank15_12 (AY), RadFad_13 (AY), Raphaella_13 (AY), Richie_13 (AY), Sakai_13 (AY), Seahorse_14 (AY), Shukran_13 (AY), ThayneTheZag_13 (AY), Tiff81_14 (AY), YoungHarleezy_13 (AY),

Start 10:

- Found in 3 of 51 (5.9%) of genes in pham

- Manual Annotations of this start: 2 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EvePickles_13 (AY), Faja_13 (AY), Sashimi_14 (AY),

Summary by clusters:

There are 3 clusters represented in this pham: AY, FA, FQ,

Info for manual annotations of cluster AY:

- Start number 9 was manually annotated 16 times for cluster AY.
- Start number 10 was manually annotated 2 times for cluster AY.

Info for manual annotations of cluster FA:

- Start number 8 was manually annotated 1 time for cluster FA.
- Start number 9 was manually annotated 8 times for cluster FA.

Info for manual annotations of cluster FQ:

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

Gene Information:

Gene: AdaS_13 Start: 8408, Stop: 8821, Start Num: 8

Candidate Starts for AdaS_13:

(Start: 8 @8408 has 1 MA's), (Start: 9 @8423 has 24 MA's), (14, 8477), (15, 8492), (16, 8519), (18, 8525), (23, 8573), (25, 8588), (39, 8699), (42, 8753), (43, 8756), (46, 8777),

Gene: Aikyam_13 Start: 8409, Stop: 8822, Start Num: 8

Candidate Starts for Aikyam_13:

(Start: 8 @8409 has 1 MA's), (Start: 9 @8424 has 24 MA's), (14, 8478), (15, 8493), (16, 8520), (18, 8526), (23, 8574), (25, 8589), (39, 8700), (42, 8754), (43, 8757), (46, 8778),

Gene: Anekin_12 Start: 8536, Stop: 8937, Start Num: 9

Candidate Starts for Anekin_12:

(Start: 8 @8521 has 1 MA's), (Start: 9 @8536 has 24 MA's), (16, 8632), (18, 8638), (23, 8686), (42, 8866), (43, 8869), (44, 8872),

Gene: Auxilium_13 Start: 8423, Stop: 8821, Start Num: 9

Candidate Starts for Auxilium_13:

(Start: 8 @8408 has 1 MA's), (Start: 9 @8423 has 24 MA's), (14, 8477), (15, 8492), (16, 8519), (23, 8573), (25, 8588), (31, 8630), (39, 8699), (42, 8753), (43, 8756), (46, 8777),

Gene: BenchScraper_13 Start: 8438, Stop: 8836, Start Num: 9

Candidate Starts for BenchScraper_13:

(Start: 8 @8423 has 1 MA's), (Start: 9 @8438 has 24 MA's), (14, 8492), (15, 8507), (16, 8534), (18, 8540), (23, 8588), (25, 8603), (39, 8714), (42, 8768), (43, 8771), (46, 8792),

Gene: Bhageatrice_15 Start: 9633, Stop: 10031, Start Num: 9

Candidate Starts for Bhageatrice_15:

(Start: 8 @9618 has 1 MA's), (Start: 9 @9633 has 24 MA's), (12, 9672), (16, 9729), (18, 9735), (24, 9795), (29, 9825), (37, 9894), (42, 9963), (43, 9966), (44, 9969),

Gene: BillyTP_13 Start: 8429, Stop: 8827, Start Num: 9

Candidate Starts for BillyTP_13:

(Start: 8 @8414 has 1 MA's), (Start: 9 @8429 has 24 MA's), (14, 8483), (15, 8498), (16, 8525), (18, 8531), (23, 8579), (25, 8594), (39, 8705), (43, 8762), (46, 8783),

Gene: BlueShadow_14 Start: 8408, Stop: 8821, Start Num: 8

Candidate Starts for BlueShadow_14:

(Start: 8 @8408 has 1 MA's), (Start: 9 @8423 has 24 MA's), (14, 8477), (15, 8492), (16, 8519), (18, 8525), (23, 8573), (25, 8588), (39, 8699), (42, 8753), (43, 8756), (46, 8777),

Gene: Bridgette_12 Start: 8575, Stop: 8988, Start Num: 9

Candidate Starts for Bridgette_12:

(Start: 8 @8560 has 1 MA's), (Start: 9 @8575 has 24 MA's), (13, 8623), (23, 8734), (26, 8755), (31, 8791), (37, 8845), (42, 8914), (46, 8941),

Gene: ChuckDuck_12 Start: 8531, Stop: 8944, Start Num: 9

Candidate Starts for ChuckDuck_12:

(Start: 8 @8516 has 1 MA's), (Start: 9 @8531 has 24 MA's), (13, 8579), (16, 8636), (18, 8642), (23, 8690), (26, 8711), (31, 8747), (37, 8801), (42, 8870),

Gene: Constance_12 Start: 8577, Stop: 8990, Start Num: 9

Candidate Starts for Constance_12:

(Start: 8 @8562 has 1 MA's), (Start: 9 @8577 has 24 MA's), (13, 8625), (18, 8688), (23, 8736), (26, 8757), (31, 8793), (37, 8847), (42, 8916), (46, 8943),

Gene: CookieBear_14 Start: 8408, Stop: 8821, Start Num: 8

Candidate Starts for CookieBear_14:

(Start: 8 @8408 has 1 MA's), (Start: 9 @8423 has 24 MA's), (14, 8477), (15, 8492), (16, 8519), (23, 8573), (25, 8588), (31, 8630), (39, 8699), (42, 8753), (43, 8756), (46, 8777),

Gene: Eileen_12 Start: 8540, Stop: 8953, Start Num: 9

Candidate Starts for Eileen_12:

(Start: 8 @8525 has 1 MA's), (Start: 9 @8540 has 24 MA's), (13, 8588), (16, 8645), (18, 8651), (23, 8699), (26, 8720), (29, 8741), (31, 8756), (37, 8810), (42, 8879),

Gene: EvePickles_13 Start: 8481, Stop: 8888, Start Num: 10

Candidate Starts for EvePickles_13:

(1, 8325), (3, 8355), (6, 8373), (Start: 10 @8481 has 2 MA's), (22, 8628), (30, 8688), (31, 8697), (32, 8709), (35, 8745), (38, 8763), (41, 8793),

Gene: Faja_13 Start: 8425, Stop: 8832, Start Num: 10

Candidate Starts for Faja_13:

(1, 8269), (3, 8299), (6, 8317), (Start: 10 @8425 has 2 MA's), (22, 8572), (30, 8632), (31, 8641), (32, 8653), (35, 8689), (38, 8707), (41, 8737),

Gene: FosterFrank_12 Start: 8535, Stop: 8948, Start Num: 9

Candidate Starts for FosterFrank_12:

(Start: 8 @8520 has 1 MA's), (Start: 9 @8535 has 24 MA's), (13, 8583), (18, 8646), (23, 8694), (26, 8715), (31, 8751), (37, 8805), (42, 8874), (46, 8901),

Gene: Globfish_13 Start: 8486, Stop: 8884, Start Num: 9

Candidate Starts for Globfish_13:

(Start: 8 @8471 has 1 MA's), (Start: 9 @8486 has 24 MA's), (16, 8582), (19, 8591), (20, 8609), (23, 8636), (28, 8672), (31, 8693), (34, 8726), (39, 8762), (42, 8816), (43, 8819), (44, 8822), (47, 8864),

Gene: GlobiWarming_12 Start: 8532, Stop: 8945, Start Num: 9

Candidate Starts for GlobiWarming_12:

(Start: 8 @8517 has 1 MA's), (Start: 9 @8532 has 24 MA's), (13, 8580), (18, 8643), (20, 8664), (23, 8691), (26, 8712), (31, 8748), (37, 8802), (42, 8871),

Gene: Gorpy_13 Start: 8432, Stop: 8830, Start Num: 9

Candidate Starts for Gorpy_13:

(Start: 8 @8417 has 1 MA's), (Start: 9 @8432 has 24 MA's), (14, 8486), (15, 8501), (16, 8528), (18, 8534), (23, 8582), (25, 8597), (39, 8708), (42, 8762), (43, 8765), (46, 8786),

Gene: Hestia_13 Start: 8536, Stop: 8934, Start Num: 9

Candidate Starts for Hestia_13:

(Start: 8 @8521 has 1 MA's), (Start: 9 @8536 has 24 MA's), (14, 8590), (16, 8632), (18, 8638), (24, 8698), (29, 8728), (37, 8797), (42, 8866), (43, 8869), (44, 8872),

Gene: Hillester_13 Start: 8408, Stop: 8821, Start Num: 8

Candidate Starts for Hillester_13:

(Start: 8 @8408 has 1 MA's), (Start: 9 @8423 has 24 MA's), (14, 8477), (15, 8492), (16, 8519), (18, 8525), (23, 8573), (25, 8588), (39, 8699), (42, 8753), (43, 8756), (46, 8777),

Gene: HotPotato_12 Start: 8525, Stop: 8953, Start Num: 8

Candidate Starts for HotPotato_12:

(Start: 8 @8525 has 1 MA's), (Start: 9 @8540 has 24 MA's), (13, 8588), (16, 8645), (23, 8699), (26, 8720), (31, 8756), (37, 8810), (42, 8879),

Gene: Hum25_11 Start: 7272, Stop: 7703, Start Num: 7

Candidate Starts for Hum25_11:

(Start: 7 @7272 has 2 MA's), (13, 7353), (14, 7359), (16, 7401), (17, 7404), (21, 7431), (27, 7482), (28, 7491), (33, 7533), (34, 7545), (40, 7605), (41, 7608), (42, 7632), (45, 7641), (46, 7659), (48, 7686),

Gene: Isolde_14 Start: 8494, Stop: 8892, Start Num: 9

Candidate Starts for Isolde_14:

(Start: 8 @8479 has 1 MA's), (Start: 9 @8494 has 24 MA's), (14, 8548), (15, 8563), (16, 8590), (18, 8596), (23, 8644), (25, 8659), (31, 8701), (39, 8770), (42, 8824), (43, 8827), (46, 8848),

Gene: JellyBread_13 Start: 8401, Stop: 8814, Start Num: 8

Candidate Starts for JellyBread_13:

(Start: 8 @8401 has 1 MA's), (Start: 9 @8416 has 24 MA's), (14, 8470), (15, 8485), (16, 8512), (23, 8566), (25, 8581), (31, 8623), (39, 8692), (42, 8746), (43, 8749), (46, 8770),

Gene: Judy_12 Start: 8576, Stop: 8989, Start Num: 9

Candidate Starts for Judy_12:

(Start: 8 @8561 has 1 MA's), (Start: 9 @8576 has 24 MA's), (13, 8624), (18, 8687), (23, 8735), (26, 8756), (31, 8792), (37, 8846), (42, 8915), (46, 8942),

Gene: Karkharias_12 Start: 8536, Stop: 8949, Start Num: 9

Candidate Starts for Karkharias_12:

(Start: 8 @8521 has 1 MA's), (Start: 9 @8536 has 24 MA's), (13, 8584), (16, 8641), (18, 8647), (23, 8695), (26, 8716), (31, 8752), (37, 8806), (42, 8875),

Gene: KayMoney_12 Start: 8533, Stop: 8946, Start Num: 9

Candidate Starts for KayMoney_12:

(Start: 8 @8518 has 1 MA's), (Start: 9 @8533 has 24 MA's), (13, 8581), (18, 8644), (23, 8692), (26, 8713), (31, 8749), (37, 8803), (42, 8872),

Gene: Lawnathon_13 Start: 8559, Stop: 8972, Start Num: 8

Candidate Starts for Lawnathon_13:

(Start: 8 @8559 has 1 MA's), (Start: 9 @8574 has 24 MA's), (14, 8628), (15, 8643), (16, 8670), (18, 8676), (23, 8724), (25, 8739), (39, 8850), (43, 8907), (46, 8928),

Gene: MUWow_12 Start: 8516, Stop: 8914, Start Num: 9

Candidate Starts for MUWow_12:

(Start: 8 @8501 has 1 MA's), (Start: 9 @8516 has 24 MA's), (14, 8570), (15, 8585), (16, 8612), (18, 8618), (23, 8666), (25, 8681), (39, 8792), (42, 8846), (43, 8849), (46, 8870),

Gene: MaterMagnus_13 Start: 8409, Stop: 8822, Start Num: 8

Candidate Starts for MaterMagnus_13:

(Start: 8 @8409 has 1 MA's), (Start: 9 @8424 has 24 MA's), (14, 8478), (15, 8493), (16, 8520), (18, 8526), (23, 8574), (25, 8589), (39, 8700), (42, 8754), (43, 8757), (46, 8778),

Gene: MidnightRain_13 Start: 8423, Stop: 8821, Start Num: 9

Candidate Starts for MidnightRain_13:

(Start: 8 @8408 has 1 MA's), (Start: 9 @8423 has 24 MA's), (14, 8477), (15, 8492), (16, 8519), (18, 8525), (23, 8573), (25, 8588), (39, 8699), (42, 8753), (43, 8756), (46, 8777),

Gene: Peas_12 Start: 8525, Stop: 8953, Start Num: 8

Candidate Starts for Peas_12:

(Start: 8 @8525 has 1 MA's), (Start: 9 @8540 has 24 MA's), (13, 8588), (16, 8645), (18, 8651), (23, 8699), (26, 8720), (29, 8741), (31, 8756), (37, 8810), (42, 8879),

Gene: PeggyLeg03_12 Start: 8577, Stop: 8990, Start Num: 9

Candidate Starts for PeggyLeg03_12:

(Start: 8 @8562 has 1 MA's), (Start: 9 @8577 has 24 MA's), (13, 8625), (18, 8688), (23, 8736), (26, 8757), (31, 8793), (37, 8847), (42, 8916), (46, 8943),

Gene: Persistence_12 Start: 8494, Stop: 8892, Start Num: 9

Candidate Starts for Persistence_12:

(Start: 8 @8479 has 1 MA's), (Start: 9 @8494 has 24 MA's), (12, 8533), (14, 8548), (16, 8590), (34, 8734), (37, 8755), (43, 8827), (44, 8830),

Gene: Phrank15_12 Start: 8576, Stop: 8974, Start Num: 9

Candidate Starts for Phrank15_12:

(Start: 8 @8561 has 1 MA's), (Start: 9 @8576 has 24 MA's), (14, 8630), (15, 8645), (16, 8672), (18, 8678), (23, 8726), (25, 8741), (39, 8852), (42, 8906), (43, 8909), (46, 8930),

Gene: Pitbull_11 Start: 6902, Stop: 7333, Start Num: 7

Candidate Starts for Pitbull_11:

(Start: 7 @6902 has 2 MA's), (13, 6983), (14, 6989), (17, 7034), (27, 7112), (28, 7121), (34, 7175), (38, 7208), (40, 7235), (41, 7238), (42, 7262), (45, 7271), (46, 7289), (48, 7316),

Gene: Pucara_12 Start: 8524, Stop: 8952, Start Num: 8

Candidate Starts for Pucara_12:

(Start: 8 @8524 has 1 MA's), (Start: 9 @8539 has 24 MA's), (13, 8587), (16, 8644), (18, 8650), (23, 8698), (26, 8719), (31, 8755), (37, 8809), (42, 8878),

Gene: RadFad_13 Start: 8423, Stop: 8821, Start Num: 9

Candidate Starts for RadFad_13:

(Start: 8 @8408 has 1 MA's), (Start: 9 @8423 has 24 MA's), (14, 8477), (15, 8492), (16, 8519), (18, 8525), (23, 8573), (25, 8588), (39, 8699), (42, 8753), (43, 8756), (46, 8777),

Gene: Raphaella_13 Start: 8423, Stop: 8821, Start Num: 9

Candidate Starts for Raphaella_13:

(Start: 8 @8408 has 1 MA's), (Start: 9 @8423 has 24 MA's), (14, 8477), (15, 8492), (16, 8519), (23, 8573), (25, 8588), (31, 8630), (39, 8699), (42, 8753), (43, 8756), (46, 8777),

Gene: Richie_13 Start: 8438, Stop: 8836, Start Num: 9

Candidate Starts for Richie_13:

(Start: 8 @8423 has 1 MA's), (Start: 9 @8438 has 24 MA's), (14, 8492), (15, 8507), (16, 8534), (18, 8540), (23, 8588), (25, 8603), (39, 8714), (42, 8768), (43, 8771), (46, 8792),

Gene: Sakai_13 Start: 8432, Stop: 8830, Start Num: 9

Candidate Starts for Sakai_13:

(Start: 8 @8417 has 1 MA's), (Start: 9 @8432 has 24 MA's), (14, 8486), (15, 8501), (16, 8528), (18, 8534), (23, 8582), (25, 8597), (39, 8708), (42, 8762), (43, 8765), (46, 8786),

Gene: Sashimi_14 Start: 8540, Stop: 8947, Start Num: 10

Candidate Starts for Sashimi_14:

(2, 8387), (3, 8414), (4, 8420), (5, 8429), (Start: 10 @8540 has 2 MA's), (30, 8747), (31, 8756), (32, 8768), (41, 8852),

Gene: Seahorse_14 Start: 8675, Stop: 9076, Start Num: 9

Candidate Starts for Seahorse_14:

(Start: 8 @8660 has 1 MA's), (Start: 9 @8675 has 24 MA's), (18, 8777), (24, 8837), (29, 8867), (37, 8936), (42, 9005), (44, 9011),

Gene: Shukran_13 Start: 8378, Stop: 8776, Start Num: 9

Candidate Starts for Shukran_13:

(Start: 8 @8363 has 1 MA's), (Start: 9 @8378 has 24 MA's), (16, 8474), (23, 8528), (29, 8570), (36, 8636), (37, 8639), (42, 8708), (43, 8711), (44, 8714),

Gene: SpicyFrank_13 Start: 8486, Stop: 8899, Start Num: 8

Candidate Starts for SpicyFrank_13:

(Start: 8 @8486 has 1 MA's), (Start: 9 @8501 has 24 MA's), (16, 8597), (19, 8606), (20, 8624), (23, 8651), (28, 8687), (31, 8708), (34, 8741), (39, 8777), (42, 8831), (43, 8834), (44, 8837), (47, 8879),

Gene: ThayneTheZag_13 Start: 8478, Stop: 8876, Start Num: 9

Candidate Starts for ThayneTheZag_13:

(Start: 8 @8463 has 1 MA's), (Start: 9 @8478 has 24 MA's), (16, 8574), (19, 8583), (20, 8601), (23, 8628), (31, 8685), (34, 8718), (39, 8754), (42, 8808), (43, 8811), (47, 8856),

Gene: Tiff81_14 Start: 8648, Stop: 9046, Start Num: 9

Candidate Starts for Tiff81_14:

(Start: 8 @8633 has 1 MA's), (Start: 9 @8648 has 24 MA's), (11, 8684), (18, 8750), (23, 8798), (24, 8810), (42, 8978), (43, 8981), (44, 8984),

Gene: Vopal_14 Start: 8480, Stop: 8893, Start Num: 8

Candidate Starts for Vopal_14:

(Start: 8 @8480 has 1 MA's), (Start: 9 @8495 has 24 MA's), (14, 8549), (15, 8564), (16, 8591), (18, 8597), (23, 8645), (25, 8660), (39, 8771), (42, 8825), (43, 8828), (46, 8849),

Gene: Windest_14 Start: 8465, Stop: 8878, Start Num: 8

Candidate Starts for Windest_14:

(Start: 8 @8465 has 1 MA's), (Start: 9 @8480 has 24 MA's), (14, 8534), (15, 8549), (16, 8576), (23, 8630), (25, 8645), (31, 8687), (39, 8756), (42, 8810), (43, 8813), (46, 8834),

Gene: YoungHarleezy_13 Start: 8436, Stop: 8834, Start Num: 9

Candidate Starts for YoungHarleezy_13:

(Start: 8 @8421 has 1 MA's), (Start: 9 @8436 has 24 MA's), (11, 8472), (14, 8490), (15, 8505), (16, 8532), (18, 8538), (23, 8586), (25, 8601), (39, 8712), (42, 8766), (43, 8769), (46, 8790),