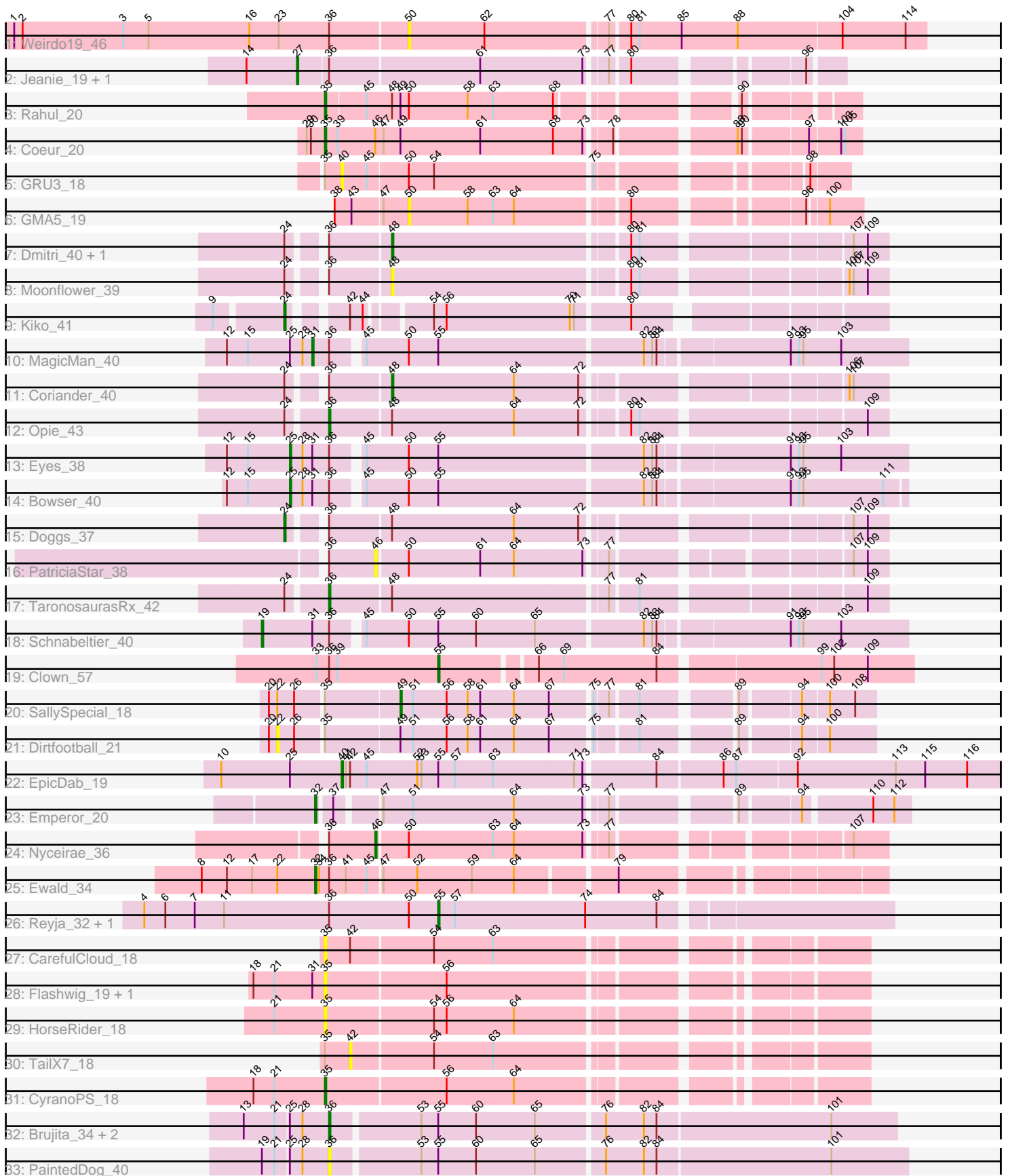


Pham 305150



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 305150 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305150 has 39 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Weirdo19_46
- Track 2 : Jeanie_19, McGonagall_19
- Track 3 : Rahul_20
- Track 4 : Coeur_20
- Track 5 : GRU3_18
- Track 6 : GMA5_19
- Track 7 : Dmitri_40, Chipko_45
- Track 8 : Moonflower_39
- Track 9 : Kiko_41
- Track 10 : MagicMan_40
- Track 11 : Coriander_40
- Track 12 : Opie_43
- Track 13 : Eyes_38
- Track 14 : Bowser_40
- Track 15 : Doggs_37
- Track 16 : PatriciaStar_38
- Track 17 : TaronosaurusRx_42
- Track 18 : Schnabeltier_40
- Track 19 : Clown_57
- Track 20 : SallySpecial_18
- Track 21 : Dirtfootball_21
- Track 22 : EpicDab_19
- Track 23 : Emperor_20
- Track 24 : Nyceirae_36
- Track 25 : Ewald_34
- Track 26 : Reyja_32, DinoNuggs_32
- Track 27 : CarefulCloud_18
- Track 28 : Flashwig_19, Jalloh_18
- Track 29 : HorseRider_18
- Track 30 : TailX7_18
- Track 31 : CyranoPS_18
- Track 32 : Brujita_34, Island3_34, Babsiella_34
- Track 33 : PaintedDog_40

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

The start number called the most often in the published annotations is 36, it was called in 5 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Babsiella_34, Brujita_34, Island3_34, Opie_43, PaintedDog_40, TaronosaurusRx_42,

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

- Bowser_40, Chipko_45, Clown_57, Coriander_40, DinoNuggs_32, Dmitri_40, Doggs_37, Ewald_34, Eyes_38, Jeanie_19, MagicMan_40, McGonagall_19, Moonflower_39, Nyceirae_36, PatriciaStar_38, Reyja_32, Schnabeltier_40, Weirdo19_46,

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

- CarefulCloud_18, Coeur_20, CyranoPS_18, Dirtfootball_21, Emperor_20, EpicDab_19, Flashwig_19, GMA5_19, GRU3_18, HorseRider_18, Jalloh_18, Kiko_41, Rahul_20, SallySpecial_18, TailX7_18,

Summary by start number:

Start 19:

- Found in 2 of 39 (5.1%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Schnabeltier_40 (DB),

Start 22:

- Found in 3 of 39 (7.7%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Dirtfootball_21 (DM),

Start 24:

- Found in 8 of 39 (20.5%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Doggs_37 (DB), Kiko_41 (DB),

Start 25:

- Found in 8 of 39 (20.5%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Bowser_40 (DB), Eyes_38 (DB),

Start 27:

- Found in 2 of 39 (5.1%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jeanie_19 (CW1), McGonagall_19 (CW1),

Start 31:

- Found in 6 of 39 (15.4%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 16.7% of time when present
- Phage (with cluster) where this start called: MagicMan_40 (DB),

Start 32:

- Found in 2 of 39 (5.1%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Emperor_20 (DM), Ewald_34 (DT),

Start 35:

- Found in 11 of 39 (28.2%) of genes in pham
- Manual Annotations of this start: 3 of 25
- Called 63.6% of time when present
- Phage (with cluster) where this start called: CarefulCloud_18 (ER), Coeur_20 (CW2), CyranoPS_18 (ER), Flashwig_19 (ER), HorseRider_18 (ER), Jalloh_18 (ER), Rahul_20 (CW2),

Start 36:

- Found in 24 of 39 (61.5%) of genes in pham
- Manual Annotations of this start: 5 of 25
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Babsiella_34 (I1), Brujita_34 (I1), Island3_34 (I1), Opie_43 (DB), PaintedDog_40 (I1), TaronosaurusRx_42 (DB),

Start 40:

- Found in 2 of 39 (5.1%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EpicDab_19 (DM), GRU3_18 (CW2),

Start 42:

- Found in 4 of 39 (10.3%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: TailX7_18 (ER),

Start 46:

- Found in 3 of 39 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Nyceirae_36 (DT), PatriciaStar_38 (DB),

Start 48:

- Found in 8 of 39 (20.5%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Chipko_45 (DB), Coriander_40 (DB), Dmitri_40 (DB), Moonflower_39 (DB),

Start 49:

- Found in 4 of 39 (10.3%) of genes in pham

- Manual Annotations of this start: 1 of 25
- Called 25.0% of time when present
- Phage (with cluster) where this start called: SallySpecial_18 (DM),

Start 50:

- Found in 12 of 39 (30.8%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: GMA5_19 (CW2), Weirido19_46 (AH),

Start 55:

- Found in 12 of 39 (30.8%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Clown_57 (DC2), DinoNuggs_32 (DY), Reyja_32 (DY),

Summary by clusters:

There are 10 clusters represented in this pham: DM, CW1, AH, CW2, DB, I1, DY, DT, DC2, ER,

Info for manual annotations of cluster CW1:

- Start number 27 was manually annotated 2 times for cluster CW1.

Info for manual annotations of cluster CW2:

- Start number 35 was manually annotated 2 times for cluster CW2.

Info for manual annotations of cluster DB:

- Start number 19 was manually annotated 1 time for cluster DB.
- Start number 24 was manually annotated 2 times for cluster DB.
- Start number 25 was manually annotated 2 times for cluster DB.
- Start number 31 was manually annotated 1 time for cluster DB.
- Start number 36 was manually annotated 2 times for cluster DB.
- Start number 48 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster DC2:

- Start number 55 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DM:

- Start number 32 was manually annotated 1 time for cluster DM.
- Start number 40 was manually annotated 1 time for cluster DM.
- Start number 49 was manually annotated 1 time for cluster DM.

Info for manual annotations of cluster DT:

- Start number 32 was manually annotated 1 time for cluster DT.
- Start number 46 was manually annotated 1 time for cluster DT.

Info for manual annotations of cluster DY:

- Start number 55 was manually annotated 1 time for cluster DY.

Info for manual annotations of cluster ER:

- Start number 35 was manually annotated 1 time for cluster ER.

Info for manual annotations of cluster I1:

- Start number 36 was manually annotated 3 times for cluster I1.

Gene Information:

Gene: Babsiella_34 Start: 28570, Stop: 28175, Start Num: 36

Candidate Starts for Babsiella_34:

(13, 28627), (21, 28606), (Start: 25 @28597 has 2 MA's), (28, 28588), (Start: 36 @28570 has 5 MA's), (53, 28510), (Start: 55 @28498 has 2 MA's), (60, 28471), (65, 28429), (76, 28384), (82, 28357), (84, 28348), (101, 28228),

Gene: Bowser_40 Start: 32553, Stop: 32140, Start Num: 25

Candidate Starts for Bowser_40:

(12, 32598), (15, 32583), (Start: 25 @32553 has 2 MA's), (28, 32544), (Start: 31 @32538 has 1 MA's), (Start: 36 @32526 has 5 MA's), (45, 32508), (50, 32478), (Start: 55 @32457 has 2 MA's), (82, 32316), (83, 32310), (84, 32307), (91, 32220), (93, 32214), (95, 32211), (111, 32154),

Gene: Brujita_34 Start: 29468, Stop: 29082, Start Num: 36

Candidate Starts for Brujita_34:

(13, 29525), (21, 29504), (Start: 25 @29495 has 2 MA's), (28, 29486), (Start: 36 @29468 has 5 MA's), (53, 29408), (Start: 55 @29396 has 2 MA's), (60, 29369), (65, 29327), (76, 29282), (82, 29255), (84, 29246), (101, 29126),

Gene: CarefulCloud_18 Start: 12700, Stop: 12353, Start Num: 35

Candidate Starts for CarefulCloud_18:

(Start: 35 @12700 has 3 MA's), (42, 12682), (54, 12625), (63, 12583),

Gene: Chipko_45 Start: 34209, Stop: 33889, Start Num: 48

Candidate Starts for Chipko_45:

(Start: 24 @34269 has 2 MA's), (Start: 36 @34251 has 5 MA's), (Start: 48 @34209 has 2 MA's), (80, 34050), (81, 34044), (107, 33912), (109, 33903),

Gene: Clown_57 Start: 43040, Stop: 42723, Start Num: 55

Candidate Starts for Clown_57:

(33, 43127), (Start: 36 @43118 has 5 MA's), (39, 43112), (Start: 55 @43040 has 2 MA's), (66, 42977), (69, 42959), (84, 42893), (99, 42788), (102, 42779), (109, 42755),

Gene: Coeur_20 Start: 14347, Stop: 13994, Start Num: 35

Candidate Starts for Coeur_20:

(29, 14356), (30, 14353), (Start: 35 @14347 has 3 MA's), (39, 14338), (Start: 46 @14311 has 1 MA's), (47, 14305), (Start: 49 @14293 has 1 MA's), (61, 14236), (68, 14185), (73, 14164), (78, 14149), (88, 14074), (90, 14071), (97, 14029), (103, 14008), (105, 14005),

Gene: Coriander_40 Start: 31779, Stop: 31459, Start Num: 48

Candidate Starts for Coriander_40:

(Start: 24 @31839 has 2 MA's), (Start: 36 @31821 has 5 MA's), (Start: 48 @31779 has 2 MA's), (64, 31692), (72, 31647), (106, 31485), (107, 31482),

Gene: CyranoPS_18 Start: 12709, Stop: 12362, Start Num: 35

Candidate Starts for CyranoPS_18:

(18, 12760), (21, 12745), (Start: 35 @12709 has 3 MA's), (56, 12625), (64, 12577),

Gene: DinoNuggs_32 Start: 26445, Stop: 26137, Start Num: 55

Candidate Starts for DinoNuggs_32:

(4, 26655), (6, 26640), (7, 26619), (11, 26598), (Start: 36 @26523 has 5 MA's), (50, 26466), (Start: 55 @26445 has 2 MA's), (57, 26433), (74, 26340), (84, 26289),

Gene: Dirtfootball_21 Start: 14352, Stop: 13966, Start Num: 22

Candidate Starts for Dirtfootball_21:

(20, 14358), (22, 14352), (26, 14340), (Start: 35 @14322 has 3 MA's), (Start: 49 @14271 has 1 MA's), (51, 14262), (56, 14238), (58, 14223), (61, 14214), (64, 14190), (67, 14166), (75, 14139), (81, 14112), (89, 14055), (94, 14016), (100, 13998),

Gene: Dmitri_40 Start: 33369, Stop: 33049, Start Num: 48

Candidate Starts for Dmitri_40:

(Start: 24 @33429 has 2 MA's), (Start: 36 @33411 has 5 MA's), (Start: 48 @33369 has 2 MA's), (80, 33210), (81, 33204), (107, 33072), (109, 33063),

Gene: Doggs_37 Start: 32568, Stop: 32188, Start Num: 24

Candidate Starts for Doggs_37:

(Start: 24 @32568 has 2 MA's), (Start: 36 @32550 has 5 MA's), (Start: 48 @32508 has 2 MA's), (64, 32421), (72, 32376), (107, 32211), (109, 32202),

Gene: Emperor_20 Start: 14847, Stop: 14473, Start Num: 32

Candidate Starts for Emperor_20:

(Start: 32 @14847 has 2 MA's), (37, 14838), (47, 14811), (51, 14790), (64, 14718), (73, 14670), (77, 14658), (89, 14583), (94, 14544), (110, 14499), (112, 14484),

Gene: EpicDab_19 Start: 14735, Stop: 14277, Start Num: 40

Candidate Starts for EpicDab_19:

(10, 14819), (Start: 25 @14771 has 2 MA's), (Start: 40 @14735 has 1 MA's), (41, 14732), (42, 14729), (45, 14717), (52, 14681), (53, 14678), (Start: 55 @14666 has 2 MA's), (57, 14654), (63, 14627), (71, 14570), (73, 14564), (84, 14516), (86, 14471), (87, 14462), (92, 14420), (113, 14351), (115, 14330), (116, 14300),

Gene: Ewald_34 Start: 29912, Stop: 29541, Start Num: 32

Candidate Starts for Ewald_34:

(8, 29993), (12, 29975), (17, 29957), (22, 29939), (Start: 32 @29912 has 2 MA's), (34, 29909), (Start: 36 @29903 has 5 MA's), (41, 29891), (45, 29876), (47, 29867), (52, 29843), (59, 29804), (64, 29774), (79, 29708),

Gene: Eyes_38 Start: 32329, Stop: 31913, Start Num: 25

Candidate Starts for Eyes_38:

(12, 32374), (15, 32359), (Start: 25 @32329 has 2 MA's), (28, 32320), (Start: 31 @32314 has 1 MA's), (Start: 36 @32302 has 5 MA's), (45, 32284), (50, 32254), (Start: 55 @32233 has 2 MA's), (82, 32092), (83, 32086), (84, 32083), (91, 31996), (93, 31990), (95, 31987), (103, 31960),

Gene: Flashwig_19 Start: 13296, Stop: 12949, Start Num: 35

Candidate Starts for Flashwig_19:

(18, 13347), (21, 13332), (Start: 31 @13305 has 1 MA's), (Start: 35 @13296 has 3 MA's), (56, 13212),

Gene: GMA5_19 Start: 14633, Stop: 14346, Start Num: 50

Candidate Starts for GMA5_19:

(38, 14684), (43, 14672), (47, 14651), (50, 14633), (58, 14591), (63, 14573), (64, 14558), (80, 14486), (96, 14381), (100, 14369),

Gene: GRU3_18 Start: 14485, Stop: 14162, Start Num: 40

Candidate Starts for GRU3_18:

(Start: 35 @14497 has 3 MA's), (Start: 40 @14485 has 1 MA's), (45, 14467), (50, 14440), (54, 14422), (75, 14314), (98, 14188),

Gene: HorseRider_18 Start: 12756, Stop: 12409, Start Num: 35

Candidate Starts for HorseRider_18:

(21, 12792), (Start: 35 @12756 has 3 MA's), (54, 12681), (56, 12672), (64, 12624),

Gene: Island3_34 Start: 29468, Stop: 29082, Start Num: 36

Candidate Starts for Island3_34:

(13, 29525), (21, 29504), (Start: 25 @29495 has 2 MA's), (28, 29486), (Start: 36 @29468 has 5 MA's), (53, 29408), (Start: 55 @29396 has 2 MA's), (60, 29369), (65, 29327), (76, 29282), (82, 29255), (84, 29246), (101, 29126),

Gene: Jalloh_18 Start: 12552, Stop: 12205, Start Num: 35

Candidate Starts for Jalloh_18:

(18, 12603), (21, 12588), (Start: 31 @12561 has 1 MA's), (Start: 35 @12552 has 3 MA's), (56, 12468),

Gene: Jeanie_19 Start: 13938, Stop: 13588, Start Num: 27

Candidate Starts for Jeanie_19:

(14, 13974), (Start: 27 @13938 has 2 MA's), (Start: 36 @13917 has 5 MA's), (61, 13812), (73, 13740), (77, 13728), (80, 13716), (96, 13611),

Gene: Kiko_41 Start: 32143, Stop: 31775, Start Num: 24

Candidate Starts for Kiko_41:

(9, 32188), (Start: 24 @32143 has 2 MA's), (42, 32113), (44, 32104), (54, 32065), (56, 32056), (70, 31969), (71, 31966), (80, 31930),

Gene: MagicMan_40 Start: 32861, Stop: 32460, Start Num: 31

Candidate Starts for MagicMan_40:

(12, 32921), (15, 32906), (Start: 25 @32876 has 2 MA's), (28, 32867), (Start: 31 @32861 has 1 MA's), (Start: 36 @32849 has 5 MA's), (45, 32831), (50, 32801), (Start: 55 @32780 has 2 MA's), (82, 32639), (83, 32633), (84, 32630), (91, 32543), (93, 32537), (95, 32534), (103, 32507),

Gene: McGonagall_19 Start: 13938, Stop: 13588, Start Num: 27

Candidate Starts for McGonagall_19:

(14, 13974), (Start: 27 @13938 has 2 MA's), (Start: 36 @13917 has 5 MA's), (61, 13812), (73, 13740), (77, 13728), (80, 13716), (96, 13611),

Gene: Moonflower_39 Start: 33232, Stop: 32912, Start Num: 48

Candidate Starts for Moonflower_39:

(Start: 24 @33292 has 2 MA's), (Start: 36 @33274 has 5 MA's), (Start: 48 @33232 has 2 MA's), (80, 33073), (81, 33067), (106, 32938), (107, 32935), (109, 32926),

Gene: Nyceirae_36 Start: 30000, Stop: 29677, Start Num: 46

Candidate Starts for Nyceirae_36:

(Start: 36 @30033 has 5 MA's), (Start: 46 @30000 has 1 MA's), (50, 29979), (63, 29919), (64, 29904), (73, 29856), (77, 29844), (107, 29700),

Gene: Opie_43 Start: 33208, Stop: 32843, Start Num: 36

Candidate Starts for Opie_43:

(Start: 24 @33226 has 2 MA's), (Start: 36 @33208 has 5 MA's), (Start: 48 @33166 has 2 MA's), (64, 33079), (72, 33034), (80, 33007), (81, 33001), (109, 32857),

Gene: PaintedDog_40 Start: 31112, Stop: 30717, Start Num: 36

Candidate Starts for PaintedDog_40:

(Start: 19 @31157 has 1 MA's), (21, 31148), (Start: 25 @31139 has 2 MA's), (28, 31130), (Start: 36 @31112 has 5 MA's), (53, 31052), (Start: 55 @31040 has 2 MA's), (60, 31013), (65, 30971), (76, 30926), (82, 30899), (84, 30890), (101, 30770),

Gene: PatriciaStar_38 Start: 32187, Stop: 31864, Start Num: 46

Candidate Starts for PatriciaStar_38:

(Start: 36 @32220 has 5 MA's), (Start: 46 @32187 has 1 MA's), (50, 32166), (61, 32115), (64, 32091), (73, 32043), (77, 32031), (107, 31887), (109, 31878),

Gene: Rahul_20 Start: 14354, Stop: 14019, Start Num: 35

Candidate Starts for Rahul_20:

(Start: 35 @14354 has 3 MA's), (45, 14327), (Start: 48 @14309 has 2 MA's), (Start: 49 @14303 has 1 MA's), (50, 14297), (58, 14255), (63, 14237), (68, 14195), (90, 14090),

Gene: Reyja_32 Start: 26445, Stop: 26137, Start Num: 55

Candidate Starts for Reyja_32:

(4, 26655), (6, 26640), (7, 26619), (11, 26598), (Start: 36 @26523 has 5 MA's), (50, 26466), (Start: 55 @26445 has 2 MA's), (57, 26433), (74, 26340), (84, 26289),

Gene: SallySpecial_18 Start: 14300, Stop: 13995, Start Num: 49

Candidate Starts for SallySpecial_18:

(20, 14387), (22, 14381), (26, 14369), (Start: 35 @14351 has 3 MA's), (Start: 49 @14300 has 1 MA's), (51, 14291), (56, 14267), (58, 14252), (61, 14243), (64, 14219), (67, 14195), (75, 14168), (77, 14159), (81, 14141), (89, 14084), (94, 14045), (100, 14027), (108, 14009),

Gene: Schnabeltier_40 Start: 32529, Stop: 32092, Start Num: 19

Candidate Starts for Schnabeltier_40:

(Start: 19 @32529 has 1 MA's), (Start: 31 @32493 has 1 MA's), (Start: 36 @32481 has 5 MA's), (45, 32463), (50, 32433), (Start: 55 @32412 has 2 MA's), (60, 32385), (65, 32343), (82, 32271), (83, 32265), (84, 32262), (91, 32175), (93, 32169), (95, 32166), (103, 32139),

Gene: TailX7_18 Start: 12830, Stop: 12501, Start Num: 42

Candidate Starts for TailX7_18:

(Start: 35 @12848 has 3 MA's), (42, 12830), (54, 12773), (63, 12731),

Gene: TaronosaurusRx_42 Start: 31610, Stop: 31248, Start Num: 36

Candidate Starts for TaronosaurusRx_42:

(Start: 24 @31628 has 2 MA's), (Start: 36 @31610 has 5 MA's), (Start: 48 @31568 has 2 MA's), (77, 31421), (81, 31403), (109, 31262),

Gene: Weirdo19_46 Start: 34933, Stop: 34580, Start Num: 50

Candidate Starts for Weirdo19_46:

(1, 35212), (2, 35206), (3, 35134), (5, 35116), (16, 35044), (23, 35023), (Start: 36 @34987 has 5 MA's), (50, 34933), (62, 34879), (77, 34798), (80, 34786), (81, 34780), (85, 34750), (88, 34711), (104, 34639), (114, 34594),

