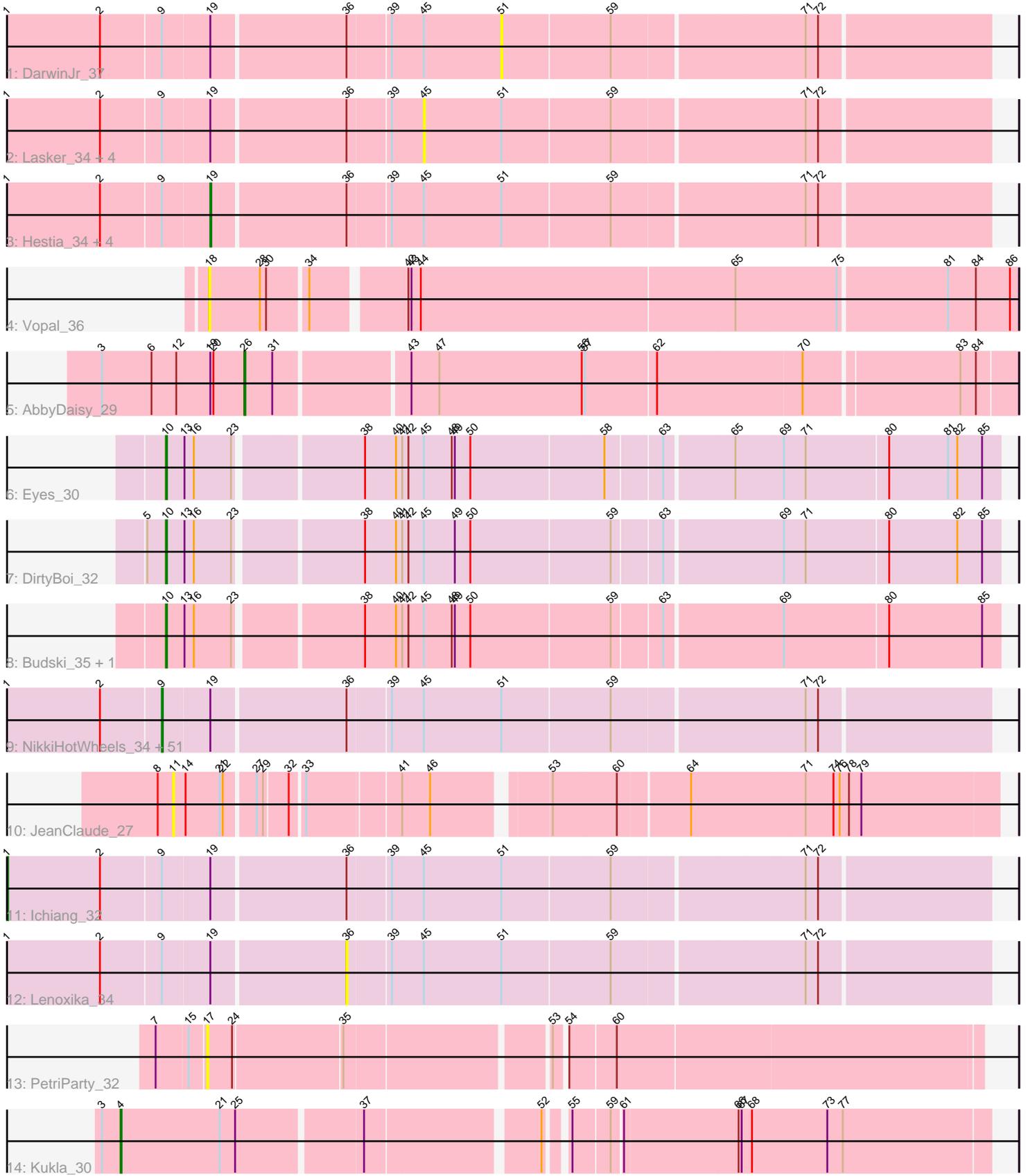


Pham 283754



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 283754 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283754 has 74 members, 27 are drafts.

Phages represented in each track:

- Track 1 : DarwinJr_37
- Track 2 : Lasker_34, LilyBell_32, Mapleville_34, Satrap_34, ToastyOats_37
- Track 3 : Hestia_34, Raphaella_34, Schism_34, Dirdigger_34, MillySue_34
- Track 4 : Vopal_36
- Track 5 : AbbyDaisy_29
- Track 6 : Eyes_30
- Track 7 : DirtyBoi_32
- Track 8 : Budski_35, Matteo_26
- Track 9 : NikkiHotWheels_34, Constance_32, PeggyLeg03_32, Toodles_35, BellaJr_31, KayMoney_33, Halloween_32, Yonex_34, Shukran_34, ThayneTheZag_34, MidnightRain_34, Bauer_30, FosterFrank_33, Ryan_34, Hillester_34, Popper_32, Kihatsu_35, Henrique_33, BigSherm_33, GlobiWarming_33, Sakai_34, MUWow_33, Kabloowy_34, BlackSpider_29, BenchScraper_34, Isolde_34, Richie_34, Zaheer_34, RadFad_34, Cole_32, CookieBear_34, Guinevere_34, Nandita_34, Gusanita_32, Lawnathon_34, Judy_33, GumGum_34, SonDevVon_33, Sporco_35, Globfish_34, Bridgette_32, Karkharias_32, YoungHarleezy_34, QuinnAvery_34, MaterMagnus_34, Donatella_33, CosmicBrownie_34, BasketStar_34, BlueShadow_34, ChuckDuck_33, GoodLuckBabe_34, SpicyFrank_34
- Track 10 : JeanClaude_27
- Track 11 : Ichiang_32
- Track 12 : Lenoxika_34
- Track 13 : PetriParty_32
- Track 14 : Kukla_30

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 37 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BasketStar_34, Bauer_30, BellaJr_31, BenchScraper_34, BigSherm_33, BlackSpider_29, BlueShadow_34, Bridgette_32, ChuckDuck_33, Cole_32, Constance_32, CookieBear_34, CosmicBrownie_34, Donatella_33, FosterFrank_33,

Globfish_34, GlobiWarming_33, GoodLuckBabe_34, Guinevere_34, GumGum_34, Gusanita_32, Halloweekend_32, Henrique_33, Hillester_34, Isolde_34, Judy_33, Kabloowy_34, Karkharias_32, KayMoney_33, Kihatsu_35, Lawnathon_34, MUWow_33, MaterMagnus_34, MidnightRain_34, Nandita_34, NikkiHotWheels_34, PeggyLeg03_32, Popper_32, QuinnAvery_34, RadFad_34, Richie_34, Ryan_34, Sakai_34, Shukran_34, SonDevVon_33, SpicyFrank_34, Sporco_35, ThayneTheZag_34, Toodles_35, Yonex_34, YoungHarleezy_34, Zaheer_34,

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

- DarwinJr_37, Dirdigger_34, Hestia_34, Ichiang_32, Lasker_34, Lenoxika_34, LilyBell_32, Mapleville_34, MillySue_34, Raphaella_34, Satrap_34, Schism_34, ToastyOats_37,

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

- AbbyDaisy_29, Budski_35, DirtyBoi_32, Eyes_30, JeanClaude_27, Kukla_30, Matteo_26, PetriParty_32, Vopal_36,

Summary by start number:

Start 1:

- Found in 65 of 74 (87.8%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 1.5% of time when present
- Phage (with cluster) where this start called: Ichiang_32 (FF),

Start 4:

- Found in 1 of 74 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kukla_30 (FJ),

Start 9:

- Found in 65 of 74 (87.8%) of genes in pham
- Manual Annotations of this start: 37 of 47
- Called 80.0% of time when present
- Phage (with cluster) where this start called: BasketStar_34 (AY), Bauer_30 (FN), BellaJr_31 (FN), BenchScraper_34 (AY), BigSherm_33 (FF), BlackSpider_29 (FN), BlueShadow_34 (AY), Bridgette_32 (FA), ChuckDuck_33 (FA), Cole_32 (FF), Constance_32 (FA), CookieBear_34 (AY), CosmicBrownie_34 (AY), Donatella_33 (FF), FosterFrank_33 (FA), Globfish_34 (AY), GlobiWarming_33 (FA), GoodLuckBabe_34 (FF), Guinevere_34 (FF), GumGum_34 (AY), Gusanita_32 (FF), Halloweekend_32 (FF), Henrique_33 (FA), Hillester_34 (AY), Isolde_34 (AY), Judy_33 (FA), Kabloowy_34 (AY), Karkharias_32 (FA), KayMoney_33 (FA), Kihatsu_35 (FF), Lawnathon_34 (AY), MUWow_33 (AY), MaterMagnus_34 (AY), MidnightRain_34 (AY), Nandita_34 (FF), NikkiHotWheels_34 (FA), PeggyLeg03_32 (FA), Popper_32 (FF), QuinnAvery_34 (FF), RadFad_34 (AY), Richie_34 (AY), Ryan_34 (FF), Sakai_34 (AY), Shukran_34 (AY), SonDevVon_33 (AY), SpicyFrank_34 (AY), Sporco_35 (AY), ThayneTheZag_34 (AY), Toodles_35 (FF), Yonex_34 (FF), YoungHarleezy_34 (AY), Zaheer_34 (FF),

Start 10:

- Found in 4 of 74 (5.4%) of genes in pham
- Manual Annotations of this start: 4 of 47

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Budski_35 (DN), DirtyBoi_32 (DB), Eyes_30 (DB), Matteo_26 (CZ2),

Start 11:

- Found in 1 of 74 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JeanClaude_27 (FB),

Start 17:

- Found in 1 of 74 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PetriParty_32 (FJ),

Start 18:

- Found in 1 of 74 (1.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Vopal_36 (AY),

Start 19:

- Found in 66 of 74 (89.2%) of genes in pham
- Manual Annotations of this start: 3 of 47
- Called 7.6% of time when present
- Phage (with cluster) where this start called: Dirtdigger_34 (FF), Hestia_34 (AY), MillySue_34 (FF), Raphaella_34 (AY), Schism_34 (FF),

Start 26:

- Found in 1 of 74 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_29 (AY),

Start 36:

- Found in 65 of 74 (87.8%) of genes in pham
- No Manual Annotations of this start.
- Called 1.5% of time when present
- Phage (with cluster) where this start called: Lenoxika_34 (FF),

Start 45:

- Found in 69 of 74 (93.2%) of genes in pham
- No Manual Annotations of this start.
- Called 7.2% of time when present
- Phage (with cluster) where this start called: Lasker_34 (AY), LilyBell_32 (FA), Mapleville_34 (AY), Satrap_34 (AY), ToastyOats_37 (FF),

Start 51:

- Found in 65 of 74 (87.8%) of genes in pham
- No Manual Annotations of this start.
- Called 1.5% of time when present
- Phage (with cluster) where this start called: DarwinJr_37 (AY),

Summary by clusters:

There are 9 clusters represented in this pham: DN, CZ2, DB, FA, FB, FF, AY, FJ, FN,

Info for manual annotations of cluster AY:

- Start number 9 was manually annotated 16 times for cluster AY.
- Start number 19 was manually annotated 2 times for cluster AY.
- Start number 26 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CZ2:

- Start number 10 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster DB:

- Start number 10 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster DN:

- Start number 10 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster FA:

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

Info for manual annotations of cluster FF:

- Start number 1 was manually annotated 1 time for cluster FF.
- Start number 9 was manually annotated 11 times for cluster FF.
- Start number 19 was manually annotated 1 time for cluster FF.

Info for manual annotations of cluster FJ:

- Start number 4 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FN:

- Start number 9 was manually annotated 2 times for cluster FN.

Gene Information:

Gene: AbbyDaisy_29 Start: 23243, Stop: 22524, Start Num: 26

Candidate Starts for AbbyDaisy_29:

(3, 23381), (6, 23333), (12, 23309), (Start: 19 @23276 has 3 MA's), (20, 23273), (Start: 26 @23243 has 1 MA's), (31, 23216), (43, 23093), (47, 23066), (56, 22928), (57, 22925), (62, 22859), (70, 22721), (83, 22577), (84, 22562),

Gene: BasketStar_34 Start: 23905, Stop: 23138, Start Num: 9

Candidate Starts for BasketStar_34:

(Start: 1 @24052 has 1 MA's), (2, 23962), (Start: 9 @23905 has 37 MA's), (Start: 19 @23860 has 3 MA's), (36, 23734), (39, 23695), (45, 23665), (51, 23590), (59, 23488), (71, 23311), (72, 23299),

Gene: Bauer_30 Start: 23423, Stop: 22656, Start Num: 9

Candidate Starts for Bauer_30:

(Start: 1 @23570 has 1 MA's), (2, 23480), (Start: 9 @23423 has 37 MA's), (Start: 19 @23378 has 3 MA's), (36, 23252), (39, 23213), (45, 23183), (51, 23108), (59, 23006), (71, 22829), (72, 22817),

Gene: BellaJr_31 Start: 24401, Stop: 23634, Start Num: 9

Candidate Starts for BellaJr_31:

(Start: 1 @24548 has 1 MA's), (2, 24458), (Start: 9 @24401 has 37 MA's), (Start: 19 @24356 has 3 MA's), (36, 24230), (39, 24191), (45, 24161), (51, 24086), (59, 23984), (71, 23807), (72, 23795),

Gene: BenchScraper_34 Start: 23866, Stop: 23099, Start Num: 9

Candidate Starts for BenchScraper_34:

(Start: 1 @24013 has 1 MA's), (2, 23923), (Start: 9 @23866 has 37 MA's), (Start: 19 @23821 has 3 MA's), (36, 23695), (39, 23656), (45, 23626), (51, 23551), (59, 23449), (71, 23272), (72, 23260),

Gene: BigSherm_33 Start: 25638, Stop: 24871, Start Num: 9

Candidate Starts for BigSherm_33:

(Start: 1 @25785 has 1 MA's), (2, 25695), (Start: 9 @25638 has 37 MA's), (Start: 19 @25593 has 3 MA's), (36, 25467), (39, 25428), (45, 25398), (51, 25323), (59, 25221), (71, 25044), (72, 25032),

Gene: BlackSpider_29 Start: 23313, Stop: 22546, Start Num: 9

Candidate Starts for BlackSpider_29:

(Start: 1 @23460 has 1 MA's), (2, 23370), (Start: 9 @23313 has 37 MA's), (Start: 19 @23268 has 3 MA's), (36, 23142), (39, 23103), (45, 23073), (51, 22998), (59, 22896), (71, 22719), (72, 22707),

Gene: BlueShadow_34 Start: 23851, Stop: 23084, Start Num: 9

Candidate Starts for BlueShadow_34:

(Start: 1 @23998 has 1 MA's), (2, 23908), (Start: 9 @23851 has 37 MA's), (Start: 19 @23806 has 3 MA's), (36, 23680), (39, 23641), (45, 23611), (51, 23536), (59, 23434), (71, 23257), (72, 23245),

Gene: Bridgette_32 Start: 23917, Stop: 23150, Start Num: 9

Candidate Starts for Bridgette_32:

(Start: 1 @24064 has 1 MA's), (2, 23974), (Start: 9 @23917 has 37 MA's), (Start: 19 @23872 has 3 MA's), (36, 23746), (39, 23707), (45, 23677), (51, 23602), (59, 23500), (71, 23323), (72, 23311),

Gene: Budski_35 Start: 29279, Stop: 28509, Start Num: 10

Candidate Starts for Budski_35:

(Start: 10 @29279 has 4 MA's), (13, 29261), (16, 29252), (23, 29216), (38, 29102), (40, 29072), (41, 29066), (42, 29060), (45, 29045), (48, 29018), (49, 29015), (50, 29000), (59, 28868), (63, 28823), (69, 28715), (80, 28616), (85, 28526),

Gene: ChuckDuck_33 Start: 23685, Stop: 22918, Start Num: 9

Candidate Starts for ChuckDuck_33:

(Start: 1 @23832 has 1 MA's), (2, 23742), (Start: 9 @23685 has 37 MA's), (Start: 19 @23640 has 3 MA's), (36, 23514), (39, 23475), (45, 23445), (51, 23370), (59, 23268), (71, 23091), (72, 23079),

Gene: Cole_32 Start: 25385, Stop: 24618, Start Num: 9

Candidate Starts for Cole_32:

(Start: 1 @25532 has 1 MA's), (2, 25442), (Start: 9 @25385 has 37 MA's), (Start: 19 @25340 has 3 MA's), (36, 25214), (39, 25175), (45, 25145), (51, 25070), (59, 24968), (71, 24791), (72, 24779),

Gene: Constance_32 Start: 24157, Stop: 23390, Start Num: 9

Candidate Starts for Constance_32:

(Start: 1 @24304 has 1 MA's), (2, 24214), (Start: 9 @24157 has 37 MA's), (Start: 19 @24112 has 3 MA's), (36, 23986), (39, 23947), (45, 23917), (51, 23842), (59, 23740), (71, 23563), (72, 23551),

Gene: CookieBear_34 Start: 23851, Stop: 23084, Start Num: 9

Candidate Starts for CookieBear_34:

(Start: 1 @23998 has 1 MA's), (2, 23908), (Start: 9 @23851 has 37 MA's), (Start: 19 @23806 has 3 MA's), (36, 23680), (39, 23641), (45, 23611), (51, 23536), (59, 23434), (71, 23257), (72, 23245),

Gene: CosmicBrownie_34 Start: 23670, Stop: 22903, Start Num: 9

Candidate Starts for CosmicBrownie_34:

(Start: 1 @23817 has 1 MA's), (2, 23727), (Start: 9 @23670 has 37 MA's), (Start: 19 @23625 has 3 MA's), (36, 23499), (39, 23460), (45, 23430), (51, 23355), (59, 23253), (71, 23076), (72, 23064),

Gene: DarwinJr_37 Start: 24947, Stop: 24495, Start Num: 51

Candidate Starts for DarwinJr_37:

(Start: 1 @25409 has 1 MA's), (2, 25319), (Start: 9 @25262 has 37 MA's), (Start: 19 @25217 has 3 MA's), (36, 25091), (39, 25052), (45, 25022), (51, 24947), (59, 24845), (71, 24668), (72, 24656),

Gene: Dirdigger_34 Start: 25414, Stop: 24692, Start Num: 19

Candidate Starts for Dirdigger_34:

(Start: 1 @25606 has 1 MA's), (2, 25516), (Start: 9 @25459 has 37 MA's), (Start: 19 @25414 has 3 MA's), (36, 25288), (39, 25249), (45, 25219), (51, 25144), (59, 25042), (71, 24865), (72, 24853),

Gene: DirtyBoi_32 Start: 28002, Stop: 27232, Start Num: 10

Candidate Starts for DirtyBoi_32:

(5, 28020), (Start: 10 @28002 has 4 MA's), (13, 27984), (16, 27975), (23, 27939), (38, 27825), (40, 27795), (41, 27789), (42, 27783), (45, 27768), (49, 27738), (50, 27723), (59, 27591), (63, 27546), (69, 27438), (71, 27417), (80, 27339), (82, 27273), (85, 27249),

Gene: Donatella_33 Start: 25849, Stop: 25082, Start Num: 9

Candidate Starts for Donatella_33:

(Start: 1 @25996 has 1 MA's), (2, 25906), (Start: 9 @25849 has 37 MA's), (Start: 19 @25804 has 3 MA's), (36, 25678), (39, 25639), (45, 25609), (51, 25534), (59, 25432), (71, 25255), (72, 25243),

Gene: Eyes_30 Start: 27021, Stop: 26251, Start Num: 10

Candidate Starts for Eyes_30:

(Start: 10 @27021 has 4 MA's), (13, 27003), (16, 26994), (23, 26958), (38, 26844), (40, 26814), (41, 26808), (42, 26802), (45, 26787), (48, 26760), (49, 26757), (50, 26742), (58, 26616), (63, 26565), (65, 26502), (69, 26457), (71, 26436), (80, 26358), (81, 26301), (82, 26292), (85, 26268),

Gene: FosterFrank_33 Start: 23759, Stop: 22992, Start Num: 9

Candidate Starts for FosterFrank_33:

(Start: 1 @23906 has 1 MA's), (2, 23816), (Start: 9 @23759 has 37 MA's), (Start: 19 @23714 has 3 MA's), (36, 23588), (39, 23549), (45, 23519), (51, 23444), (59, 23342), (71, 23165), (72, 23153),

Gene: Globfish_34 Start: 24085, Stop: 23318, Start Num: 9

Candidate Starts for Globfish_34:

(Start: 1 @24232 has 1 MA's), (2, 24142), (Start: 9 @24085 has 37 MA's), (Start: 19 @24040 has 3 MA's), (36, 23914), (39, 23875), (45, 23845), (51, 23770), (59, 23668), (71, 23491), (72, 23479),

Gene: GlobiWarming_33 Start: 23600, Stop: 22833, Start Num: 9

Candidate Starts for GlobiWarming_33:

(Start: 1 @23747 has 1 MA's), (2, 23657), (Start: 9 @23600 has 37 MA's), (Start: 19 @23555 has 3 MA's), (36, 23429), (39, 23390), (45, 23360), (51, 23285), (59, 23183), (71, 23006), (72, 22994),

Gene: GoodLuckBabe_34 Start: 25967, Stop: 25200, Start Num: 9

Candidate Starts for GoodLuckBabe_34:

(Start: 1 @26114 has 1 MA's), (2, 26024), (Start: 9 @25967 has 37 MA's), (Start: 19 @25922 has 3 MA's), (36, 25796), (39, 25757), (45, 25727), (51, 25652), (59, 25550), (71, 25373), (72, 25361),

Gene: Guinevere_34 Start: 25557, Stop: 24790, Start Num: 9

Candidate Starts for Guinevere_34:

(Start: 1 @25704 has 1 MA's), (2, 25614), (Start: 9 @25557 has 37 MA's), (Start: 19 @25512 has 3 MA's), (36, 25386), (39, 25347), (45, 25317), (51, 25242), (59, 25140), (71, 24963), (72, 24951),

Gene: GumGum_34 Start: 24014, Stop: 23247, Start Num: 9

Candidate Starts for GumGum_34:

(Start: 1 @24161 has 1 MA's), (2, 24071), (Start: 9 @24014 has 37 MA's), (Start: 19 @23969 has 3 MA's), (36, 23843), (39, 23804), (45, 23774), (51, 23699), (59, 23597), (71, 23420), (72, 23408),

Gene: Gusanita_32 Start: 25320, Stop: 24553, Start Num: 9

Candidate Starts for Gusanita_32:

(Start: 1 @25467 has 1 MA's), (2, 25377), (Start: 9 @25320 has 37 MA's), (Start: 19 @25275 has 3 MA's), (36, 25149), (39, 25110), (45, 25080), (51, 25005), (59, 24903), (71, 24726), (72, 24714),

Gene: Halloweekend_32 Start: 25264, Stop: 24497, Start Num: 9

Candidate Starts for Halloweekend_32:

(Start: 1 @25411 has 1 MA's), (2, 25321), (Start: 9 @25264 has 37 MA's), (Start: 19 @25219 has 3 MA's), (36, 25093), (39, 25054), (45, 25024), (51, 24949), (59, 24847), (71, 24670), (72, 24658),

Gene: Henrique_33 Start: 23628, Stop: 22861, Start Num: 9

Candidate Starts for Henrique_33:

(Start: 1 @23775 has 1 MA's), (2, 23685), (Start: 9 @23628 has 37 MA's), (Start: 19 @23583 has 3 MA's), (36, 23457), (39, 23418), (45, 23388), (51, 23313), (59, 23211), (71, 23034), (72, 23022),

Gene: Hestia_34 Start: 23845, Stop: 23123, Start Num: 19

Candidate Starts for Hestia_34:

(Start: 1 @24037 has 1 MA's), (2, 23947), (Start: 9 @23890 has 37 MA's), (Start: 19 @23845 has 3 MA's), (36, 23719), (39, 23680), (45, 23650), (51, 23575), (59, 23473), (71, 23296), (72, 23284),

Gene: Hillester_34 Start: 23851, Stop: 23084, Start Num: 9

Candidate Starts for Hillester_34:

(Start: 1 @23998 has 1 MA's), (2, 23908), (Start: 9 @23851 has 37 MA's), (Start: 19 @23806 has 3 MA's), (36, 23680), (39, 23641), (45, 23611), (51, 23536), (59, 23434), (71, 23257), (72, 23245),

Gene: Ichiang_32 Start: 25430, Stop: 24516, Start Num: 1

Candidate Starts for Ichiang_32:

(Start: 1 @25430 has 1 MA's), (2, 25340), (Start: 9 @25283 has 37 MA's), (Start: 19 @25238 has 3 MA's), (36, 25112), (39, 25073), (45, 25043), (51, 24968), (59, 24866), (71, 24689), (72, 24677),

Gene: Isolde_34 Start: 23620, Stop: 22853, Start Num: 9

Candidate Starts for Isolde_34:

(Start: 1 @23767 has 1 MA's), (2, 23677), (Start: 9 @23620 has 37 MA's), (Start: 19 @23575 has 3 MA's), (36, 23449), (39, 23410), (45, 23380), (51, 23305), (59, 23203), (71, 23026), (72, 23014),

Gene: JeanClaude_27 Start: 21332, Stop: 20589, Start Num: 11

Candidate Starts for JeanClaude_27:

(8, 21347), (11, 21332), (14, 21320), (21, 21287), (22, 21284), (27, 21257), (29, 21251), (32, 21230), (33, 21218), (41, 21134), (46, 21107), (53, 21008), (60, 20948), (64, 20882), (71, 20774), (74, 20747), (76, 20741), (78, 20732), (79, 20720),

Gene: Judy_33 Start: 24168, Stop: 23401, Start Num: 9

Candidate Starts for Judy_33:

(Start: 1 @24315 has 1 MA's), (2, 24225), (Start: 9 @24168 has 37 MA's), (Start: 19 @24123 has 3 MA's), (36, 23997), (39, 23958), (45, 23928), (51, 23853), (59, 23751), (71, 23574), (72, 23562),

Gene: Kabloowy_34 Start: 24031, Stop: 23264, Start Num: 9

Candidate Starts for Kabloowy_34:

(Start: 1 @24178 has 1 MA's), (2, 24088), (Start: 9 @24031 has 37 MA's), (Start: 19 @23986 has 3 MA's), (36, 23860), (39, 23821), (45, 23791), (51, 23716), (59, 23614), (71, 23437), (72, 23425),

Gene: Karkharias_32 Start: 23545, Stop: 22778, Start Num: 9

Candidate Starts for Karkharias_32:

(Start: 1 @23692 has 1 MA's), (2, 23602), (Start: 9 @23545 has 37 MA's), (Start: 19 @23500 has 3 MA's), (36, 23374), (39, 23335), (45, 23305), (51, 23230), (59, 23128), (71, 22951), (72, 22939),

Gene: KayMoney_33 Start: 23689, Stop: 22922, Start Num: 9

Candidate Starts for KayMoney_33:

(Start: 1 @23836 has 1 MA's), (2, 23746), (Start: 9 @23689 has 37 MA's), (Start: 19 @23644 has 3 MA's), (36, 23518), (39, 23479), (45, 23449), (51, 23374), (59, 23272), (71, 23095), (72, 23083),

Gene: Kihatsu_35 Start: 25903, Stop: 25136, Start Num: 9

Candidate Starts for Kihatsu_35:

(Start: 1 @26050 has 1 MA's), (2, 25960), (Start: 9 @25903 has 37 MA's), (Start: 19 @25858 has 3 MA's), (36, 25732), (39, 25693), (45, 25663), (51, 25588), (59, 25486), (71, 25309), (72, 25297),

Gene: Kukla_30 Start: 24104, Stop: 23319, Start Num: 4

Candidate Starts for Kukla_30:

(3, 24122), (Start: 4 @24104 has 1 MA's), (21, 24008), (25, 23993), (37, 23879), (52, 23723), (55, 23708), (59, 23675), (61, 23666), (66, 23558), (67, 23555), (68, 23546), (73, 23474), (77, 23459),

Gene: Lasker_34 Start: 23619, Stop: 23092, Start Num: 45

Candidate Starts for Lasker_34:

(Start: 1 @24006 has 1 MA's), (2, 23916), (Start: 9 @23859 has 37 MA's), (Start: 19 @23814 has 3 MA's), (36, 23688), (39, 23649), (45, 23619), (51, 23544), (59, 23442), (71, 23265), (72, 23253),

Gene: Lawnathon_34 Start: 23714, Stop: 22947, Start Num: 9

Candidate Starts for Lawnathon_34:

(Start: 1 @23861 has 1 MA's), (2, 23771), (Start: 9 @23714 has 37 MA's), (Start: 19 @23669 has 3 MA's), (36, 23543), (39, 23504), (45, 23474), (51, 23399), (59, 23297), (71, 23120), (72, 23108),

Gene: Lenoxika_34 Start: 25382, Stop: 24786, Start Num: 36

Candidate Starts for Lenoxika_34:

(Start: 1 @25700 has 1 MA's), (2, 25610), (Start: 9 @25553 has 37 MA's), (Start: 19 @25508 has 3 MA's), (36, 25382), (39, 25343), (45, 25313), (51, 25238), (59, 25136), (71, 24959), (72, 24947),

Gene: LilyBell_32 Start: 23317, Stop: 22790, Start Num: 45

Candidate Starts for LilyBell_32:

(Start: 1 @23704 has 1 MA's), (2, 23614), (Start: 9 @23557 has 37 MA's), (Start: 19 @23512 has 3 MA's), (36, 23386), (39, 23347), (45, 23317), (51, 23242), (59, 23140), (71, 22963), (72, 22951),

Gene: MUWow_33 Start: 23878, Stop: 23111, Start Num: 9

Candidate Starts for MUWow_33:

(Start: 1 @24025 has 1 MA's), (2, 23935), (Start: 9 @23878 has 37 MA's), (Start: 19 @23833 has 3 MA's), (36, 23707), (39, 23668), (45, 23638), (51, 23563), (59, 23461), (71, 23284), (72, 23272),

Gene: Mapleville_34 Start: 23544, Stop: 23017, Start Num: 45

Candidate Starts for Mapleville_34:

(Start: 1 @23931 has 1 MA's), (2, 23841), (Start: 9 @23784 has 37 MA's), (Start: 19 @23739 has 3 MA's), (36, 23613), (39, 23574), (45, 23544), (51, 23469), (59, 23367), (71, 23190), (72, 23178),

Gene: MaterMagnus_34 Start: 23861, Stop: 23094, Start Num: 9

Candidate Starts for MaterMagnus_34:

(Start: 1 @24008 has 1 MA's), (2, 23918), (Start: 9 @23861 has 37 MA's), (Start: 19 @23816 has 3 MA's), (36, 23690), (39, 23651), (45, 23621), (51, 23546), (59, 23444), (71, 23267), (72, 23255),

Gene: Matteo_26 Start: 23698, Stop: 22928, Start Num: 10

Candidate Starts for Matteo_26:

(Start: 10 @23698 has 4 MA's), (13, 23680), (16, 23671), (23, 23635), (38, 23521), (40, 23491), (41, 23485), (42, 23479), (45, 23464), (48, 23437), (49, 23434), (50, 23419), (59, 23287), (63, 23242), (69, 23134), (80, 23035), (85, 22945),

Gene: MidnightRain_34 Start: 23850, Stop: 23083, Start Num: 9

Candidate Starts for MidnightRain_34:

(Start: 1 @23997 has 1 MA's), (2, 23907), (Start: 9 @23850 has 37 MA's), (Start: 19 @23805 has 3 MA's), (36, 23679), (39, 23640), (45, 23610), (51, 23535), (59, 23433), (71, 23256), (72, 23244),

Gene: MillySue_34 Start: 25421, Stop: 24699, Start Num: 19

Candidate Starts for MillySue_34:

(Start: 1 @25613 has 1 MA's), (2, 25523), (Start: 9 @25466 has 37 MA's), (Start: 19 @25421 has 3 MA's), (36, 25295), (39, 25256), (45, 25226), (51, 25151), (59, 25049), (71, 24872), (72, 24860),

Gene: Nandita_34 Start: 25557, Stop: 24790, Start Num: 9

Candidate Starts for Nandita_34:

(Start: 1 @25704 has 1 MA's), (2, 25614), (Start: 9 @25557 has 37 MA's), (Start: 19 @25512 has 3 MA's), (36, 25386), (39, 25347), (45, 25317), (51, 25242), (59, 25140), (71, 24963), (72, 24951),

Gene: NikkiHotWheels_34 Start: 23621, Stop: 22854, Start Num: 9

Candidate Starts for NikkiHotWheels_34:

(Start: 1 @23768 has 1 MA's), (2, 23678), (Start: 9 @23621 has 37 MA's), (Start: 19 @23576 has 3 MA's), (36, 23450), (39, 23411), (45, 23381), (51, 23306), (59, 23204), (71, 23027), (72, 23015),

Gene: PeggyLeg03_32 Start: 24157, Stop: 23390, Start Num: 9

Candidate Starts for PeggyLeg03_32:

(Start: 1 @24304 has 1 MA's), (2, 24214), (Start: 9 @24157 has 37 MA's), (Start: 19 @24112 has 3 MA's), (36, 23986), (39, 23947), (45, 23917), (51, 23842), (59, 23740), (71, 23563), (72, 23551),

Gene: PetriParty_32 Start: 25425, Stop: 24727, Start Num: 17

Candidate Starts for PetriParty_32:

(7, 25470), (15, 25440), (17, 25425), (24, 25401), (35, 25299), (53, 25116), (54, 25107), (60, 25065),

Gene: Popper_32 Start: 25470, Stop: 24703, Start Num: 9

Candidate Starts for Popper_32:

(Start: 1 @25617 has 1 MA's), (2, 25527), (Start: 9 @25470 has 37 MA's), (Start: 19 @25425 has 3 MA's), (36, 25299), (39, 25260), (45, 25230), (51, 25155), (59, 25053), (71, 24876), (72, 24864),

Gene: QuinnAvery_34 Start: 25647, Stop: 24880, Start Num: 9

Candidate Starts for QuinnAvery_34:

(Start: 1 @25794 has 1 MA's), (2, 25704), (Start: 9 @25647 has 37 MA's), (Start: 19 @25602 has 3 MA's), (36, 25476), (39, 25437), (45, 25407), (51, 25332), (59, 25230), (71, 25053), (72, 25041),

Gene: RadFad_34 Start: 23851, Stop: 23084, Start Num: 9

Candidate Starts for RadFad_34:

(Start: 1 @23998 has 1 MA's), (2, 23908), (Start: 9 @23851 has 37 MA's), (Start: 19 @23806 has 3 MA's), (36, 23680), (39, 23641), (45, 23611), (51, 23536), (59, 23434), (71, 23257), (72, 23245),

Gene: Raphaella_34 Start: 23740, Stop: 23018, Start Num: 19

Candidate Starts for Raphaella_34:

(Start: 1 @23932 has 1 MA's), (2, 23842), (Start: 9 @23785 has 37 MA's), (Start: 19 @23740 has 3 MA's), (36, 23614), (39, 23575), (45, 23545), (51, 23470), (59, 23368), (71, 23191), (72, 23179),

Gene: Richie_34 Start: 23866, Stop: 23099, Start Num: 9

Candidate Starts for Richie_34:

(Start: 1 @24013 has 1 MA's), (2, 23923), (Start: 9 @23866 has 37 MA's), (Start: 19 @23821 has 3 MA's), (36, 23695), (39, 23656), (45, 23626), (51, 23551), (59, 23449), (71, 23272), (72, 23260),

Gene: Ryan_34 Start: 26168, Stop: 25401, Start Num: 9

Candidate Starts for Ryan_34:

(Start: 1 @26315 has 1 MA's), (2, 26225), (Start: 9 @26168 has 37 MA's), (Start: 19 @26123 has 3 MA's), (36, 25997), (39, 25958), (45, 25928), (51, 25853), (59, 25751), (71, 25574), (72, 25562),

Gene: Sakai_34 Start: 23794, Stop: 23027, Start Num: 9

Candidate Starts for Sakai_34:

(Start: 1 @23941 has 1 MA's), (2, 23851), (Start: 9 @23794 has 37 MA's), (Start: 19 @23749 has 3 MA's), (36, 23623), (39, 23584), (45, 23554), (51, 23479), (59, 23377), (71, 23200), (72, 23188),

Gene: Satrap_34 Start: 23720, Stop: 23193, Start Num: 45

Candidate Starts for Satrap_34:

(Start: 1 @24107 has 1 MA's), (2, 24017), (Start: 9 @23960 has 37 MA's), (Start: 19 @23915 has 3 MA's), (36, 23789), (39, 23750), (45, 23720), (51, 23645), (59, 23543), (71, 23366), (72, 23354),

Gene: Schism_34 Start: 25512, Stop: 24790, Start Num: 19

Candidate Starts for Schism_34:

(Start: 1 @25704 has 1 MA's), (2, 25614), (Start: 9 @25557 has 37 MA's), (Start: 19 @25512 has 3 MA's), (36, 25386), (39, 25347), (45, 25317), (51, 25242), (59, 25140), (71, 24963), (72, 24951),

Gene: Shukran_34 Start: 23960, Stop: 23193, Start Num: 9

Candidate Starts for Shukran_34:

(Start: 1 @24107 has 1 MA's), (2, 24017), (Start: 9 @23960 has 37 MA's), (Start: 19 @23915 has 3 MA's), (36, 23789), (39, 23750), (45, 23720), (51, 23645), (59, 23543), (71, 23366), (72, 23354),

Gene: SonDevVon_33 Start: 23787, Stop: 23020, Start Num: 9

Candidate Starts for SonDevVon_33:

(Start: 1 @23934 has 1 MA's), (2, 23844), (Start: 9 @23787 has 37 MA's), (Start: 19 @23742 has 3 MA's), (36, 23616), (39, 23577), (45, 23547), (51, 23472), (59, 23370), (71, 23193), (72, 23181),

Gene: SpicyFrank_34 Start: 24086, Stop: 23319, Start Num: 9

Candidate Starts for SpicyFrank_34:

(Start: 1 @24233 has 1 MA's), (2, 24143), (Start: 9 @24086 has 37 MA's), (Start: 19 @24041 has 3 MA's), (36, 23915), (39, 23876), (45, 23846), (51, 23771), (59, 23669), (71, 23492), (72, 23480),

Gene: Sporco_35 Start: 23842, Stop: 23075, Start Num: 9

Candidate Starts for Sporco_35:

(Start: 1 @23989 has 1 MA's), (2, 23899), (Start: 9 @23842 has 37 MA's), (Start: 19 @23797 has 3 MA's), (36, 23671), (39, 23632), (45, 23602), (51, 23527), (59, 23425), (71, 23248), (72, 23236),

Gene: ThayneTheZag_34 Start: 24005, Stop: 23238, Start Num: 9

Candidate Starts for ThayneTheZag_34:

(Start: 1 @24152 has 1 MA's), (2, 24062), (Start: 9 @24005 has 37 MA's), (Start: 19 @23960 has 3 MA's), (36, 23834), (39, 23795), (45, 23765), (51, 23690), (59, 23588), (71, 23411), (72, 23399),

Gene: ToastyOats_37 Start: 25948, Stop: 25421, Start Num: 45

Candidate Starts for ToastyOats_37:

(Start: 1 @26335 has 1 MA's), (2, 26245), (Start: 9 @26188 has 37 MA's), (Start: 19 @26143 has 3 MA's), (36, 26017), (39, 25978), (45, 25948), (51, 25873), (59, 25771), (71, 25594), (72, 25582),

Gene: Toodles_35 Start: 26018, Stop: 25251, Start Num: 9

Candidate Starts for Toodles_35:

(Start: 1 @26165 has 1 MA's), (2, 26075), (Start: 9 @26018 has 37 MA's), (Start: 19 @25973 has 3 MA's), (36, 25847), (39, 25808), (45, 25778), (51, 25703), (59, 25601), (71, 25424), (72, 25412),

Gene: Vopal_36 Start: 25596, Stop: 24844, Start Num: 18

Candidate Starts for Vopal_36:

(18, 25596), (28, 25548), (30, 25542), (34, 25506), (42, 25422), (43, 25419), (44, 25410), (65, 25110), (75, 25014), (81, 24912), (84, 24885), (86, 24852),

Gene: Yonex_34 Start: 26168, Stop: 25401, Start Num: 9

Candidate Starts for Yonex_34:

(Start: 1 @26315 has 1 MA's), (2, 26225), (Start: 9 @26168 has 37 MA's), (Start: 19 @26123 has 3 MA's), (36, 25997), (39, 25958), (45, 25928), (51, 25853), (59, 25751), (71, 25574), (72, 25562),

Gene: YoungHarleezy_34 Start: 23864, Stop: 23097, Start Num: 9

Candidate Starts for YoungHarleezy_34:

(Start: 1 @24011 has 1 MA's), (2, 23921), (Start: 9 @23864 has 37 MA's), (Start: 19 @23819 has 3 MA's), (36, 23693), (39, 23654), (45, 23624), (51, 23549), (59, 23447), (71, 23270), (72, 23258),

Gene: Zaheer_34 Start: 26257, Stop: 25490, Start Num: 9

Candidate Starts for Zaheer_34:

(Start: 1 @26404 has 1 MA's), (2, 26314), (Start: 9 @26257 has 37 MA's), (Start: 19 @26212 has 3 MA's), (36, 26086), (39, 26047), (45, 26017), (51, 25942), (59, 25840), (71, 25663), (72, 25651),