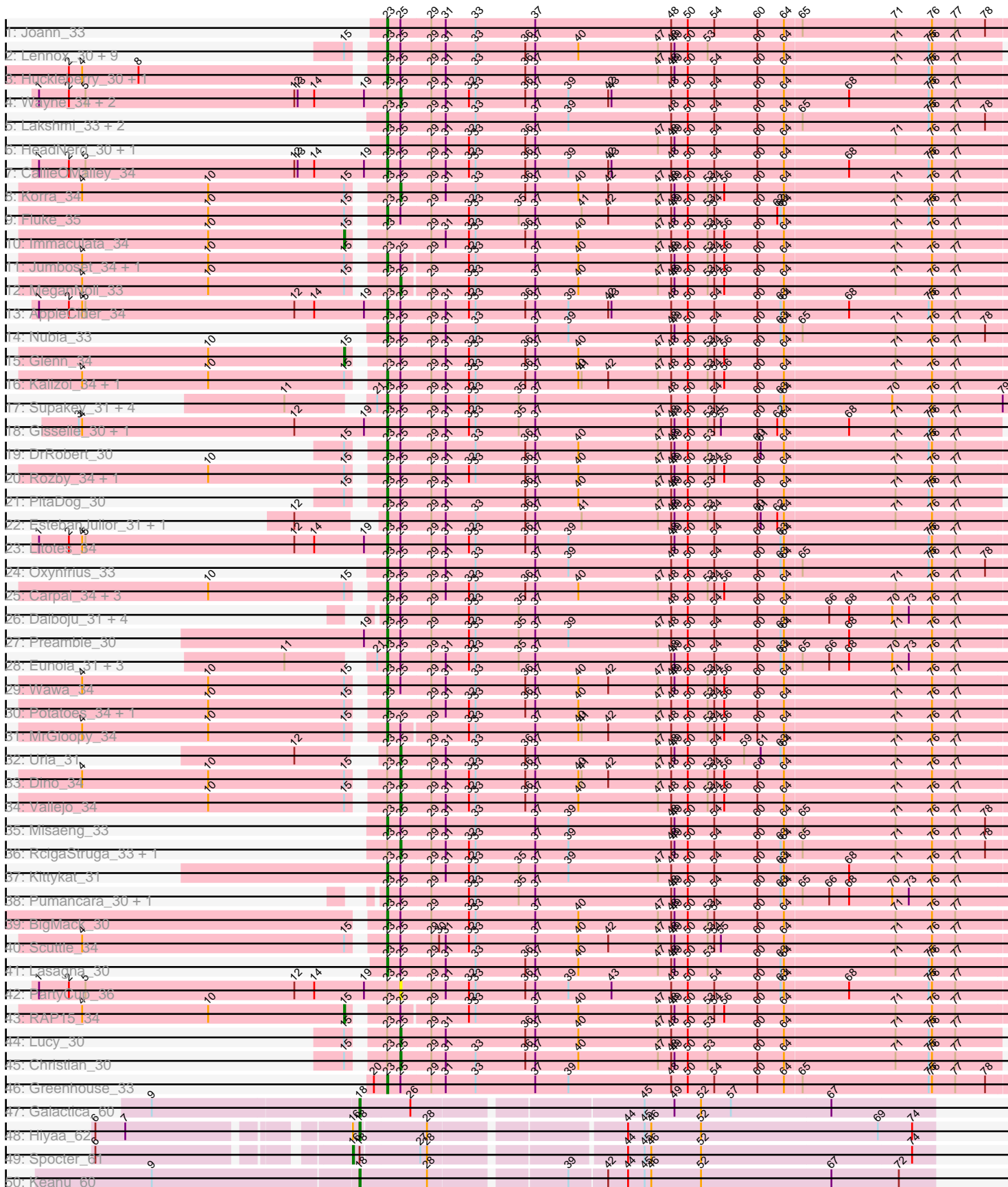
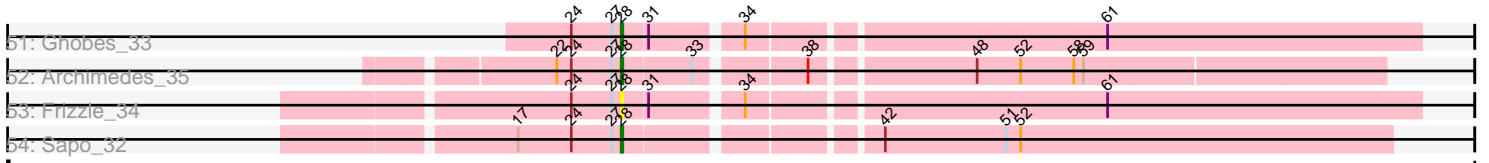


Pham 196447



Pham 196447



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 196447 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196447 has 91 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Joann_33
- Track 2 : Lennox_30, ChewChew_30, WonderBoy_29, Bodacious_30, Pterodactyl_30, Nancia_30, Makoto_30, CristinaYang_30, LilStuart_30, OurGirlNessie_30
- Track 3 : Huckleberry_30, Moki_30
- Track 4 : Wayne_34, Canowicakte_34, Suppi_34
- Track 5 : Lakshmi_33, GreenHearts_33, Albanese_33
- Track 6 : HeadNerd_30, Bennie_30
- Track 7 : CallieOMalley_34
- Track 8 : Korra_34
- Track 9 : Fluke_35
- Track 10 : Immaculata_34
- Track 11 : Jumboset_34, Savage2526_34
- Track 12 : MeganNoll_33
- Track 13 : AppleCider_34
- Track 14 : Nubia_33
- Track 15 : Glenn_34
- Track 16 : Kalizoi_34, Zorro_34
- Track 17 : Supakev_31, AustinPowers_31, Vulture_31, HunterDalle_31, Chridison_30
- Track 18 : Gisselle_30, DreamTeam_30
- Track 19 : DrRobert_30
- Track 20 : Rozby_34, BrotherBLo_34
- Track 21 : PitaDog_30
- Track 22 : EstebanJulior_31, MamaPearl_31
- Track 23 : Litotes_34
- Track 24 : Oxynfrius_33
- Track 25 : Carpal_34, Riverdale_34, Beethoven_34, TattModd_34
- Track 26 : Daiboju_31, Temper16_31, Herb_31, Sergei_31, KingBob_31
- Track 27 : Preamble_30
- Track 28 : Eunoia_31, Riovina_31, OMalley_31, Aledel_31
- Track 29 : Wawa_34
- Track 30 : Potatoes_34, Cholula_34
- Track 31 : MrGloopy_34
- Track 32 : Urla_31
- Track 33 : Dino_34
- Track 34 : Vallejo_34

- Track 35 : Misaeng_33
- Track 36 : RcigaStruga_33, Huntingdon_33
- Track 37 : Kittykat_31
- Track 38 : Pumancara_30, PinkFriday_30
- Track 39 : BigMack_30
- Track 40 : Scuttle_34
- Track 41 : Lasagna_30
- Track 42 : PartyCup_36
- Track 43 : RAP15_34
- Track 44 : Lucy_30
- Track 45 : Christian_30
- Track 46 : Greenhouse_33
- Track 47 : Galactica_60
- Track 48 : Hiyaa_62
- Track 49 : Spocter_61
- Track 50 : Keanu_60
- Track 51 : Ghobes_33
- Track 52 : Archimedes_35
- Track 53 : Frizzle_34
- Track 54 : Sapo_32

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

The start number called the most often in the published annotations is 23, it was called in 67 of the 89 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Albanese_33, Aledel_31, AppleCider_34, AustinPowers_31, Beethoven_34, Bennie_30, BigMack_30, Bodacious_30, BrotherBLo_34, CallieOMalley_34, Carpal_34, ChewChew_30, Cholula_34, Chridison_30, CristinaYang_30, Daiboju_31, DrRobert_30, DreamTeam_30, EstebanJulior_31, Eunoia_31, Fluke_35, Gisselle_30, GreenHearts_33, Greenhouse_33, HeadNerd_30, Herb_31, Huckleberry_30, HunterDalle_31, Joann_33, Jumboset_34, Kalizoi_34, KingBob_31, Kittykat_31, Lakshmi_33, Lasagna_30, Lennox_30, LilStuart_30, Litotes_34, Makoto_30, MamaPearl_31, Misaeng_33, Moki_30, MrGloopy_34, Nancia_30, Nubia_33, OMalley_31, OurGirlNessie_30, Oxyfnrius_33, PinkFriday_30, PitaDog_30, Potatoes_34, Preamble_30, Pterodactyl_30, Pumancara_30, Riovina_31, Riverdale_34, Rozby_34, Savage2526_34, Scuttle_34, Sergei_31, Supakev_31, TattModd_34, Temper16_31, Vulture_31, Wawa_34, WonderBoy_29, Zorro_34,

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

- Canowicakte_34, Christian_30, Dino_34, Glenn_34, Huntingdon_33, Immaculata_34, Korra_34, Lucy_30, MeganNoll_33, PartyCup_36, RAP15_34, RcigaStruga_33, Suppi_34, Urla_31, Vallejo_34, Wayne_34,

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

- Archimedes_35, Frizzle_34, Galactica_60, Ghobes_33, Hiyaa_62, Keanu_60, Sapo_32, Spocter_61,

Summary by start number:

Start 15:

- Found in 37 of 91 (40.7%) of genes in pham
- Manual Annotations of this start: 3 of 89
- Called 8.1% of time when present
- Phage (with cluster) where this start called: Glenn_34 (AK), Immaculata_34 (AK), RAP15_34 (AK),

Start 16:

- Found in 2 of 91 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 89
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Spocter_61 (BQ),

Start 18:

- Found in 4 of 91 (4.4%) of genes in pham
- Manual Annotations of this start: 3 of 89
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Galactica_60 (BQ), Hiyaa_62 (BQ), Keanu_60 (BQ),

Start 23:

- Found in 83 of 91 (91.2%) of genes in pham
- Manual Annotations of this start: 67 of 89
- Called 80.7% of time when present
- Phage (with cluster) where this start called: Albanese_33 (AK), Aledel_31 (AK), AppleCider_34 (AK), AustinPowers_31 (AK), Beethoven_34 (AK), Bennie_30 (AK), BigMack_30 (AK), Bodacious_30 (AK), BrotherBLo_34 (AK), CallieOMalley_34 (AK), Carpal_34 (AK), ChewChew_30 (AK), Cholula_34 (AK), Chridison_30 (AK), CristinaYang_30 (AK), Daiboju_31 (AK), DrRobert_30 (AK), DreamTeam_30 (AK), EstebanJulior_31 (AK), Eunoia_31 (AK), Fluke_35 (AK), Gisselle_30 (AK), GreenHearts_33 (AK), Greenhouse_33 (AK), HeadNerd_30 (AK), Herb_31 (AK), Huckleberry_30 (AK), HunterDalle_31 (AK), Joann_33 (AK), Jumboset_34 (AK), Kalizoi_34 (AK), KingBob_31 (AK), Kittykat_31 (AK), Lakshmi_33 (AK), Lasagna_30 (AK), Lennox_30 (AK), LilStuart_30 (AK), Litotes_34 (AK), Makoto_30 (AK), MamaPearl_31 (AK), Misaeng_33 (AK), Moki_30 (AK), MrGloopy_34 (AK), Nancia_30 (AK), Nubia_33 (AK), OMalley_31 (AK), OurGirlNessie_30 (AK), Oxynfrius_33 (AK), PinkFriday_30 (AK), PitaDog_30 (AK), Potatoes_34 (AK), Preamble_30 (AK), Pterodactyl_30 (AK), Pumancara_30 (AK), Riovina_31 (AK), Riverdale_34 (AK), Rozby_34 (AK), Savage2526_34 (AK), Scuttle_34 (AK), Sergei_31 (AK), Supakev_31 (AK), TattModd_34 (AK), Temper16_31 (AK), Vulture_31 (AK), Wawa_34 (AK), WonderBoy_29 (AK), Zorro_34 (AK),

Start 25:

- Found in 80 of 91 (87.9%) of genes in pham
- Manual Annotations of this start: 12 of 89
- Called 16.2% of time when present
- Phage (with cluster) where this start called: Canowicakte_34 (AK), Christian_30 (AK), Dino_34 (AK), Huntingdon_33 (AK), Korra_34 (AK), Lucy_30 (AK), MeganNoll_33 (AK), PartyCup_36 (AK), RcigaStruga_33 (AK), Suppi_34 (AK), Urla_31 (AK), Vallejo_34 (AK), Wayne_34 (AK),

Start 28:

- Found in 7 of 91 (7.7%) of genes in pham
- Manual Annotations of this start: 3 of 89
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Archimedes_35 (DA), Frizzle_34 (DA), Ghobes_33 (DA), Sapo_32 (DA),

Summary by clusters:

There are 3 clusters represented in this pham: AK, BQ, DA,

Info for manual annotations of cluster AK:

- Start number 15 was manually annotated 3 times for cluster AK.
- Start number 23 was manually annotated 67 times for cluster AK.
- Start number 25 was manually annotated 12 times for cluster AK.

Info for manual annotations of cluster BQ:

- Start number 16 was manually annotated 1 time for cluster BQ.
- Start number 18 was manually annotated 3 times for cluster BQ.

Info for manual annotations of cluster DA:

- Start number 28 was manually annotated 3 times for cluster DA.

Gene Information:

Gene: Albanese_33 Start: 25146, Stop: 25703, Start Num: 23

Candidate Starts for Albanese_33:

(Start: 23 @25146 has 67 MA's), (Start: 25 @25158 has 12 MA's), (29, 25185), (31, 25197), (33, 25224), (37, 25278), (39, 25308), (48, 25401), (50, 25416), (54, 25440), (60, 25479), (64, 25503), (65, 25518), (75, 25632), (76, 25635), (77, 25656), (78, 25683),

Gene: Aledel_31 Start: 24783, Stop: 25343, Start Num: 23

Candidate Starts for Aledel_31:

(11, 24711), (21, 24774), (Start: 23 @24783 has 67 MA's), (Start: 25 @24795 has 12 MA's), (29, 24822), (31, 24834), (32, 24855), (33, 24861), (35, 24900), (37, 24915), (48, 25038), (49, 25041), (50, 25053), (54, 25077), (60, 25116), (63, 25137), (64, 25140), (65, 25155), (66, 25179), (68, 25197), (70, 25236), (73, 25251), (76, 25272), (77, 25293),

Gene: AppleCider_34 Start: 25187, Stop: 25744, Start Num: 23

Candidate Starts for AppleCider_34:

(1, 24872), (2, 24899), (4, 24911), (5, 24914), (12, 25103), (14, 25121), (19, 25166), (Start: 23 @25187 has 67 MA's), (Start: 25 @25199 has 12 MA's), (29, 25226), (31, 25238), (32, 25259), (33, 25265), (36, 25310), (37, 25319), (39, 25349), (42, 25385), (43, 25388), (48, 25442), (50, 25457), (54, 25481), (60, 25520), (63, 25541), (64, 25544), (68, 25601), (75, 25673), (76, 25676), (77, 25697),

Gene: Archimedes_35 Start: 31428, Stop: 30985, Start Num: 28

Candidate Starts for Archimedes_35:

(22, 31467), (24, 31458), (27, 31434), (Start: 28 @31428 has 3 MA's), (33, 31386), (38, 31326), (48, 31233), (52, 31206), (58, 31173), (59, 31167),

Gene: AustinPowers_31 Start: 24781, Stop: 25341, Start Num: 23

Candidate Starts for AustinPowers_31:

(11, 24709), (21, 24772), (Start: 23 @24781 has 67 MA's), (Start: 25 @24793 has 12 MA's), (29, 24820), (31, 24832), (32, 24853), (33, 24859), (35, 24898), (37, 24913), (48, 25036), (50, 25051), (54, 25075), (60, 25114), (63, 25135), (64, 25138), (70, 25234), (76, 25270), (77, 25291), (79, 25333),

Gene: Beethoven_34 Start: 25166, Stop: 25723, Start Num: 23

Candidate Starts for Beethoven_34:

(10, 25019), (Start: 15 @25142 has 3 MA's), (Start: 23 @25166 has 67 MA's), (Start: 25 @25178 has 12 MA's), (29, 25205), (31, 25217), (32, 25238), (33, 25244), (36, 25289), (37, 25298), (40, 25337), (47, 25409), (48, 25421), (50, 25436), (53, 25454), (54, 25460), (56, 25469), (60, 25499), (64, 25523), (71, 25622), (76, 25655), (77, 25676),

Gene: Bennie_30 Start: 23623, Stop: 24180, Start Num: 23

Candidate Starts for Bennie_30:

(Start: 23 @23623 has 67 MA's), (Start: 25 @23635 has 12 MA's), (29, 23662), (31, 23674), (32, 23695), (33, 23701), (36, 23746), (37, 23755), (47, 23866), (48, 23878), (49, 23881), (50, 23893), (54, 23917), (60, 23956), (64, 23980), (71, 24079), (76, 24112), (77, 24133),

Gene: BigMack_30 Start: 23645, Stop: 24202, Start Num: 23

Candidate Starts for BigMack_30:

(Start: 23 @23645 has 67 MA's), (Start: 25 @23657 has 12 MA's), (29, 23684), (32, 23717), (33, 23723), (37, 23777), (40, 23816), (47, 23888), (48, 23900), (49, 23903), (50, 23915), (53, 23933), (54, 23939), (60, 23978), (64, 24002), (71, 24101), (76, 24134), (77, 24155),

Gene: Bodacious_30 Start: 23631, Stop: 24182, Start Num: 23

Candidate Starts for Bodacious_30:

(Start: 15 @23607 has 3 MA's), (Start: 23 @23631 has 67 MA's), (Start: 25 @23643 has 12 MA's), (29, 23670), (31, 23682), (33, 23709), (36, 23754), (37, 23763), (40, 23802), (47, 23874), (48, 23886), (49, 23889), (50, 23901), (53, 23919), (60, 23964), (64, 23988), (71, 24087), (75, 24117), (76, 24120), (77, 24141),

Gene: BrotherBLo_34 Start: 25191, Stop: 25748, Start Num: 23

Candidate Starts for BrotherBLo_34:

(10, 25044), (Start: 15 @25167 has 3 MA's), (Start: 23 @25191 has 67 MA's), (Start: 25 @25203 has 12 MA's), (29, 25230), (31, 25242), (32, 25263), (33, 25269), (36, 25314), (37, 25323), (40, 25362), (47, 25434), (48, 25446), (49, 25449), (50, 25461), (53, 25479), (54, 25485), (56, 25494), (60, 25524), (64, 25548), (71, 25647), (76, 25680), (77, 25701),

Gene: CallieOMalley_34 Start: 25187, Stop: 25744, Start Num: 23

Candidate Starts for CallieOMalley_34:

(1, 24872), (2, 24899), (5, 24914), (12, 25103), (13, 25106), (14, 25121), (19, 25166), (Start: 23 @25187 has 67 MA's), (Start: 25 @25199 has 12 MA's), (29, 25226), (31, 25238), (32, 25259), (33, 25265), (36, 25310), (37, 25319), (39, 25349), (42, 25385), (43, 25388), (48, 25442), (50, 25457), (54, 25481), (60, 25520), (64, 25544), (68, 25601), (75, 25673), (76, 25676), (77, 25697),

Gene: Canowicakte_34 Start: 25234, Stop: 25779, Start Num: 25

Candidate Starts for Canowicakte_34:

(1, 24907), (2, 24934), (5, 24949), (12, 25138), (13, 25141), (14, 25156), (19, 25201), (Start: 23 @25222 has 67 MA's), (Start: 25 @25234 has 12 MA's), (29, 25261), (31, 25273), (32, 25294), (33, 25300), (36, 25345), (37, 25354), (39, 25384), (42, 25420), (43, 25423), (48, 25477), (50, 25492), (54, 25516), (60, 25555), (64, 25579), (68, 25636), (75, 25708), (76, 25711), (77, 25732),

Gene: Carpal_34 Start: 25173, Stop: 25730, Start Num: 23

Candidate Starts for Carpal_34:

(10, 25026), (Start: 15 @25149 has 3 MA's), (Start: 23 @25173 has 67 MA's), (Start: 25 @25185 has 12 MA's), (29, 25212), (31, 25224), (32, 25245), (33, 25251), (36, 25296), (37, 25305), (40, 25344), (47, 25416), (48, 25428), (50, 25443), (53, 25461), (54, 25467), (56, 25476), (60, 25506), (64, 25530), (71, 25629), (76, 25662), (77, 25683),

Gene: ChewChew_30 Start: 23626, Stop: 24177, Start Num: 23

Candidate Starts for ChewChew_30:

(Start: 15 @23602 has 3 MA's), (Start: 23 @23626 has 67 MA's), (Start: 25 @23638 has 12 MA's), (29, 23665), (31, 23677), (33, 23704), (36, 23749), (37, 23758), (40, 23797), (47, 23869), (48, 23881), (49, 23884), (50, 23896), (53, 23914), (60, 23959), (64, 23983), (71, 24082), (75, 24112), (76, 24115), (77, 24136),

Gene: Cholula_34 Start: 25219, Stop: 25776, Start Num: 23

Candidate Starts for Cholula_34:

(10, 25072), (Start: 15 @25195 has 3 MA's), (Start: 23 @25219 has 67 MA's), (29, 25258), (31, 25270), (32, 25291), (33, 25297), (36, 25342), (37, 25351), (40, 25390), (47, 25462), (48, 25474), (50, 25489), (53, 25507), (54, 25513), (56, 25522), (60, 25552), (64, 25576), (71, 25675), (76, 25708), (77, 25729),

Gene: Chridison_30 Start: 24781, Stop: 25341, Start Num: 23

Candidate Starts for Chridison_30:

(11, 24709), (21, 24772), (Start: 23 @24781 has 67 MA's), (Start: 25 @24793 has 12 MA's), (29, 24820), (31, 24832), (32, 24853), (33, 24859), (35, 24898), (37, 24913), (48, 25036), (50, 25051), (54, 25075), (60, 25114), (63, 25135), (64, 25138), (70, 25234), (76, 25270), (77, 25291), (79, 25333),

Gene: Christian_30 Start: 23639, Stop: 24178, Start Num: 25

Candidate Starts for Christian_30:

(Start: 15 @23603 has 3 MA's), (Start: 23 @23627 has 67 MA's), (Start: 25 @23639 has 12 MA's), (29, 23666), (31, 23678), (33, 23705), (36, 23750), (37, 23759), (40, 23798), (47, 23870), (48, 23882), (49, 23885), (50, 23897), (53, 23915), (60, 23960), (64, 23984), (71, 24083), (75, 24113), (76, 24116), (77, 24137),

Gene: CristinaYang_30 Start: 23631, Stop: 24182, Start Num: 23

Candidate Starts for CristinaYang_30:

(Start: 15 @23607 has 3 MA's), (Start: 23 @23631 has 67 MA's), (Start: 25 @23643 has 12 MA's), (29, 23670), (31, 23682), (33, 23709), (36, 23754), (37, 23763), (40, 23802), (47, 23874), (48, 23886), (49, 23889), (50, 23901), (53, 23919), (60, 23964), (64, 23988), (71, 24087), (75, 24117), (76, 24120), (77, 24141),

Gene: Daiboju_31 Start: 24770, Stop: 25330, Start Num: 23

Candidate Starts for Daiboju_31:

(Start: 23 @24770 has 67 MA's), (Start: 25 @24782 has 12 MA's), (29, 24809), (32, 24842), (33, 24848), (35, 24887), (37, 24902), (48, 25025), (50, 25040), (54, 25064), (60, 25103), (64, 25127), (66, 25166), (68, 25184), (70, 25223), (73, 25238), (76, 25259), (77, 25280),

Gene: Dino_34 Start: 25199, Stop: 25744, Start Num: 25

Candidate Starts for Dino_34:

(4, 24926), (10, 25040), (Start: 15 @25163 has 3 MA's), (Start: 23 @25187 has 67 MA's), (Start: 25 @25199 has 12 MA's), (29, 25226), (31, 25238), (32, 25259), (33, 25265), (36, 25310), (37, 25319), (40, 25358), (41, 25361), (42, 25385), (47, 25430), (48, 25442), (50, 25457), (53, 25475), (54, 25481), (56, 25490), (60, 25520), (64, 25544), (71, 25643), (76, 25676), (77, 25697),

Gene: DrRobert_30 Start: 23627, Stop: 24184, Start Num: 23

Candidate Starts for DrRobert_30:

(Start: 15 @23603 has 3 MA's), (Start: 23 @23627 has 67 MA's), (Start: 25 @23639 has 12 MA's), (29, 23666), (31, 23678), (33, 23705), (36, 23750), (37, 23759), (40, 23798), (47, 23870), (48, 23882), (49, 23885), (50, 23897), (53, 23915), (60, 23960), (61, 23963), (64, 23984), (71, 24083), (75, 24113), (76, 24116), (77, 24137),

Gene: DreamTeam_30 Start: 23722, Stop: 24273, Start Num: 23

Candidate Starts for DreamTeam_30:

(3, 23443), (4, 23446), (12, 23638), (19, 23701), (Start: 23 @23722 has 67 MA's), (Start: 25 @23734 has 12 MA's), (29, 23761), (31, 23773), (32, 23794), (33, 23800), (35, 23839), (37, 23854), (47, 23965), (48, 23977), (49, 23980), (50, 23992), (53, 24010), (54, 24016), (55, 24022), (60, 24055), (62, 24073), (64, 24079), (68, 24136), (71, 24178), (75, 24208), (76, 24211), (77, 24232),

Gene: EstebanJulior_31 Start: 24817, Stop: 25374, Start Num: 23

Candidate Starts for EstebanJulior_31:

(12, 24760), (Start: 23 @24817 has 67 MA's), (Start: 25 @24829 has 12 MA's), (29, 24856), (31, 24868), (33, 24895), (36, 24940), (37, 24949), (41, 24991), (47, 25060), (48, 25072), (49, 25075), (50, 25087), (53, 25105), (54, 25111), (60, 25150), (61, 25153), (62, 25168), (64, 25174), (71, 25273), (76, 25306), (77, 25327),

Gene: Eunoia_31 Start: 24783, Stop: 25343, Start Num: 23

Candidate Starts for Eunoia_31:

(11, 24711), (21, 24774), (Start: 23 @24783 has 67 MA's), (Start: 25 @24795 has 12 MA's), (29, 24822), (31, 24834), (32, 24855), (33, 24861), (35, 24900), (37, 24915), (48, 25038), (49, 25041), (50, 25053), (54, 25077), (60, 25116), (63, 25137), (64, 25140), (65, 25155), (66, 25179), (68, 25197), (70, 25236), (73, 25251), (76, 25272), (77, 25293),

Gene: Fluke_35 Start: 25328, Stop: 25885, Start Num: 23

Candidate Starts for Fluke_35:

(10, 25181), (Start: 15 @25304 has 3 MA's), (Start: 23 @25328 has 67 MA's), (Start: 25 @25340 has 12 MA's), (29, 25367), (32, 25400), (33, 25406), (35, 25445), (37, 25460), (41, 25502), (42, 25526), (47, 25571), (48, 25583), (49, 25586), (50, 25598), (53, 25616), (54, 25622), (60, 25661), (62, 25679), (63, 25682), (64, 25685), (71, 25784), (75, 25814), (76, 25817), (77, 25838),

Gene: Frizzle_34 Start: 30551, Stop: 30084, Start Num: 28

Candidate Starts for Frizzle_34:

(24, 30581), (27, 30557), (Start: 28 @30551 has 3 MA's), (31, 30536), (34, 30485), (61, 30275),

Gene: Galactica_60 Start: 45960, Stop: 46460, Start Num: 18

Candidate Starts for Galactica_60:

(9, 45777), (Start: 18 @45960 has 3 MA's), (26, 46005), (45, 46200), (49, 46227), (52, 46251), (57, 46278), (67, 46368),

Gene: Ghobes_33 Start: 30552, Stop: 30085, Start Num: 28

Candidate Starts for Ghobes_33:

(24, 30582), (27, 30558), (Start: 28 @30552 has 3 MA's), (31, 30537), (34, 30486), (61, 30276),

Gene: Gisselle_30 Start: 23722, Stop: 24273, Start Num: 23

Candidate Starts for Gisselle_30:

(3, 23443), (4, 23446), (12, 23638), (19, 23701), (Start: 23 @23722 has 67 MA's), (Start: 25 @23734 has 12 MA's), (29, 23761), (31, 23773), (32, 23794), (33, 23800), (35, 23839), (37, 23854), (47, 23965), (48, 23977), (49, 23980), (50, 23992), (53, 24010), (54, 24016), (55, 24022), (60, 24055), (62, 24073), (64, 24079), (68, 24136), (71, 24178), (75, 24208), (76, 24211), (77, 24232),

Gene: Glenn_34 Start: 25199, Stop: 25780, Start Num: 15

Candidate Starts for Glenn_34:

(10, 25076), (Start: 15 @25199 has 3 MA's), (Start: 23 @25223 has 67 MA's), (Start: 25 @25235 has 12 MA's), (29, 25262), (31, 25274), (32, 25295), (33, 25301), (36, 25346), (37, 25355), (40, 25394), (47, 25466), (48, 25478), (50, 25493), (53, 25511), (54, 25517), (56, 25526), (60, 25556), (64, 25580), (71, 25679), (76, 25712), (77, 25733),

Gene: GreenHearts_33 Start: 25238, Stop: 25795, Start Num: 23

Candidate Starts for GreenHearts_33:

(Start: 23 @25238 has 67 MA's), (Start: 25 @25250 has 12 MA's), (29, 25277), (31, 25289), (33, 25316), (37, 25370), (39, 25400), (48, 25493), (50, 25508), (54, 25532), (60, 25571), (64, 25595), (65, 25610), (75, 25724), (76, 25727), (77, 25748), (78, 25775),

Gene: Greenhouse_33 Start: 25152, Stop: 25709, Start Num: 23

Candidate Starts for Greenhouse_33:

(20, 25140), (Start: 23 @25152 has 67 MA's), (Start: 25 @25164 has 12 MA's), (29, 25191), (31, 25203), (33, 25230), (37, 25284), (39, 25314), (48, 25407), (50, 25422), (54, 25446), (60, 25485), (64, 25509), (65, 25524), (75, 25638), (76, 25641), (77, 25662), (78, 25689),

Gene: HeadNerd_30 Start: 23623, Stop: 24180, Start Num: 23

Candidate Starts for HeadNerd_30:

(Start: 23 @23623 has 67 MA's), (Start: 25 @23635 has 12 MA's), (29, 23662), (31, 23674), (32, 23695), (33, 23701), (36, 23746), (37, 23755), (47, 23866), (48, 23878), (49, 23881), (50, 23893), (54, 23917), (60, 23956), (64, 23980), (71, 24079), (76, 24112), (77, 24133),

Gene: Herb_31 Start: 24769, Stop: 25329, Start Num: 23

Candidate Starts for Herb_31:

(Start: 23 @24769 has 67 MA's), (Start: 25 @24781 has 12 MA's), (29, 24808), (32, 24841), (33, 24847), (35, 24886), (37, 24901), (48, 25024), (50, 25039), (54, 25063), (60, 25102), (64, 25126), (66, 25165), (68, 25183), (70, 25222), (73, 25237), (76, 25258), (77, 25279),

Gene: Hiyaa_62 Start: 47242, Stop: 47736, Start Num: 18

Candidate Starts for Hiyaa_62:

(6, 47035), (7, 47062), (Start: 16 @47236 has 1 MA's), (Start: 18 @47242 has 3 MA's), (Start: 28 @47299 has 3 MA's), (44, 47461), (45, 47476), (46, 47482), (52, 47527), (69, 47686), (74, 47716),

Gene: Huckleberry_30 Start: 23611, Stop: 24168, Start Num: 23

Candidate Starts for Huckleberry_30:

(2, 23338), (4, 23350), (8, 23401), (Start: 23 @23611 has 67 MA's), (Start: 25 @23623 has 12 MA's), (29, 23650), (31, 23662), (33, 23689), (36, 23734), (37, 23743), (47, 23854), (48, 23866), (49, 23869), (50, 23881), (54, 23905), (60, 23944), (64, 23968), (71, 24067), (75, 24097), (76, 24100), (77, 24121),

Gene: HunterDalle_31 Start: 24780, Stop: 25340, Start Num: 23

Candidate Starts for HunterDalle_31:

(11, 24708), (21, 24771), (Start: 23 @24780 has 67 MA's), (Start: 25 @24792 has 12 MA's), (29, 24819), (31, 24831), (32, 24852), (33, 24858), (35, 24897), (37, 24912), (48, 25035), (50, 25050), (54, 25074), (60, 25113), (63, 25134), (64, 25137), (70, 25233), (76, 25269), (77, 25290), (79, 25332),

Gene: Huntingdon_33 Start: 25142, Stop: 25687, Start Num: 25

Candidate Starts for Huntingdon_33:

(Start: 23 @25130 has 67 MA's), (Start: 25 @25142 has 12 MA's), (29, 25169), (31, 25181), (32, 25202), (33, 25208), (37, 25262), (39, 25292), (48, 25385), (49, 25388), (50, 25400), (54, 25424), (60,

25463), (63, 25484), (64, 25487), (65, 25502), (71, 25586), (76, 25619), (77, 25640), (78, 25667),

Gene: Immaculata_34 Start: 25194, Stop: 25775, Start Num: 15

Candidate Starts for Immaculata_34:

(10, 25071), (Start: 15 @25194 has 3 MA's), (Start: 23 @25218 has 67 MA's), (29, 25257), (31, 25269), (32, 25290), (33, 25296), (36, 25341), (37, 25350), (40, 25389), (47, 25461), (48, 25473), (50, 25488), (53, 25506), (54, 25512), (56, 25521), (60, 25551), (64, 25575), (71, 25674), (76, 25707), (77, 25728),

Gene: Joann_33 Start: 25123, Stop: 25680, Start Num: 23

Candidate Starts for Joann_33:

(Start: 23 @25123 has 67 MA's), (Start: 25 @25135 has 12 MA's), (29, 25162), (31, 25174), (33, 25201), (37, 25255), (48, 25378), (50, 25393), (54, 25417), (60, 25456), (64, 25480), (65, 25495), (71, 25579), (76, 25612), (77, 25633), (78, 25660),

Gene: Jumboset_34 Start: 25166, Stop: 25720, Start Num: 23

Candidate Starts for Jumboset_34:

(4, 24905), (10, 25019), (Start: 15 @25142 has 3 MA's), (Start: 23 @25166 has 67 MA's), (Start: 25 @25178 has 12 MA's), (29, 25202), (32, 25235), (33, 25241), (37, 25295), (40, 25334), (47, 25406), (48, 25418), (49, 25421), (50, 25433), (53, 25451), (54, 25457), (56, 25466), (60, 25496), (64, 25520), (71, 25619), (76, 25652), (77, 25673),

Gene: Kalizoi_34 Start: 25165, Stop: 25722, Start Num: 23

Candidate Starts for Kalizoi_34:

(4, 24904), (10, 25018), (Start: 15 @25141 has 3 MA's), (Start: 23 @25165 has 67 MA's), (Start: 25 @25177 has 12 MA's), (29, 25204), (31, 25216), (32, 25237), (33, 25243), (36, 25288), (37, 25297), (40, 25336), (41, 25339), (42, 25363), (47, 25408), (48, 25420), (50, 25435), (53, 25453), (54, 25459), (56, 25468), (60, 25498), (64, 25522), (71, 25621), (76, 25654), (77, 25675),

Gene: Keanu_60 Start: 46991, Stop: 47491, Start Num: 18

Candidate Starts for Keanu_60:

(9, 46808), (Start: 18 @46991 has 3 MA's), (Start: 28 @47051 has 3 MA's), (39, 47165), (42, 47198), (44, 47216), (45, 47231), (46, 47237), (52, 47282), (67, 47399), (72, 47459),

Gene: KingBob_31 Start: 24770, Stop: 25330, Start Num: 23

Candidate Starts for KingBob_31:

(Start: 23 @24770 has 67 MA's), (Start: 25 @24782 has 12 MA's), (29, 24809), (32, 24842), (33, 24848), (35, 24887), (37, 24902), (48, 25025), (50, 25040), (54, 25064), (60, 25103), (64, 25127), (66, 25166), (68, 25184), (70, 25223), (73, 25238), (76, 25259), (77, 25280),

Gene: Kittykat_31 Start: 23824, Stop: 24381, Start Num: 23

Candidate Starts for Kittykat_31:

(Start: 23 @23824 has 67 MA's), (Start: 25 @23836 has 12 MA's), (29, 23863), (31, 23875), (32, 23896), (33, 23902), (35, 23941), (37, 23956), (39, 23986), (47, 24067), (48, 24079), (50, 24094), (54, 24118), (60, 24157), (63, 24178), (64, 24181), (68, 24238), (71, 24280), (76, 24313), (77, 24334),

Gene: Korra_34 Start: 25199, Stop: 25744, Start Num: 25

Candidate Starts for Korra_34:

(4, 24926), (10, 25040), (Start: 15 @25163 has 3 MA's), (Start: 23 @25187 has 67 MA's), (Start: 25 @25199 has 12 MA's), (29, 25226), (31, 25238), (33, 25265), (36, 25310), (37, 25319), (40, 25358), (42, 25385), (47, 25430), (48, 25442), (49, 25445), (50, 25457), (53, 25475), (54, 25481), (56, 25490), (60, 25520), (64, 25544), (71, 25643), (76, 25676), (77, 25697),

Gene: Lakshmi_33 Start: 25122, Stop: 25679, Start Num: 23

Candidate Starts for Lakshmi_33:

(Start: 23 @25122 has 67 MA's), (Start: 25 @25134 has 12 MA's), (29, 25161), (31, 25173), (33, 25200), (37, 25254), (39, 25284), (48, 25377), (50, 25392), (54, 25416), (60, 25455), (64, 25479), (65, 25494), (75, 25608), (76, 25611), (77, 25632), (78, 25659),

Gene: Lasagna_30 Start: 23642, Stop: 24199, Start Num: 23

Candidate Starts for Lasagna_30:

(Start: 23 @23642 has 67 MA's), (Start: 25 @23654 has 12 MA's), (29, 23681), (31, 23693), (33, 23720), (36, 23765), (37, 23774), (40, 23813), (47, 23885), (48, 23897), (49, 23900), (50, 23912), (53, 23930), (60, 23975), (63, 23996), (64, 23999), (71, 24098), (75, 24128), (76, 24131), (77, 24152),

Gene: Lennox_30 Start: 23615, Stop: 24166, Start Num: 23

Candidate Starts for Lennox_30:

(Start: 15 @23591 has 3 MA's), (Start: 23 @23615 has 67 MA's), (Start: 25 @23627 has 12 MA's), (29, 23654), (31, 23666), (33, 23693), (36, 23738), (37, 23747), (40, 23786), (47, 23858), (48, 23870), (49, 23873), (50, 23885), (53, 23903), (60, 23948), (64, 23972), (71, 24071), (75, 24101), (76, 24104), (77, 24125),

Gene: LilStuart_30 Start: 23619, Stop: 24170, Start Num: 23

Candidate Starts for LilStuart_30:

(Start: 15 @23595 has 3 MA's), (Start: 23 @23619 has 67 MA's), (Start: 25 @23631 has 12 MA's), (29, 23658), (31, 23670), (33, 23697), (36, 23742), (37, 23751), (40, 23790), (47, 23862), (48, 23874), (49, 23877), (50, 23889), (53, 23907), (60, 23952), (64, 23976), (71, 24075), (75, 24105), (76, 24108), (77, 24129),

Gene: Litotes_34 Start: 25172, Stop: 25729, Start Num: 23

Candidate Starts for Litotes_34:

(1, 24857), (2, 24884), (4, 24896), (5, 24899), (12, 25088), (14, 25106), (19, 25151), (Start: 23 @25172 has 67 MA's), (Start: 25 @25184 has 12 MA's), (29, 25211), (31, 25223), (32, 25244), (33, 25250), (36, 25295), (37, 25304), (39, 25334), (48, 25427), (49, 25430), (50, 25442), (54, 25466), (60, 25505), (63, 25526), (64, 25529), (75, 25658), (76, 25661), (77, 25682),

Gene: Lucy_30 Start: 23619, Stop: 24158, Start Num: 25

Candidate Starts for Lucy_30:

(Start: 15 @23583 has 3 MA's), (Start: 23 @23607 has 67 MA's), (Start: 25 @23619 has 12 MA's), (29, 23646), (31, 23658), (36, 23730), (37, 23739), (40, 23778), (47, 23850), (48, 23862), (50, 23877), (53, 23895), (60, 23940), (64, 23964), (71, 24063), (75, 24093), (76, 24096), (77, 24117),

Gene: Makoto_30 Start: 23627, Stop: 24178, Start Num: 23

Candidate Starts for Makoto_30:

(Start: 15 @23603 has 3 MA's), (Start: 23 @23627 has 67 MA's), (Start: 25 @23639 has 12 MA's), (29, 23666), (31, 23678), (33, 23705), (36, 23750), (37, 23759), (40, 23798), (47, 23870), (48, 23882), (49, 23885), (50, 23897), (53, 23915), (60, 23960), (64, 23984), (71, 24083), (75, 24113), (76, 24116), (77, 24137),

Gene: MamaPearl_31 Start: 24817, Stop: 25374, Start Num: 23

Candidate Starts for MamaPearl_31:

(12, 24760), (Start: 23 @24817 has 67 MA's), (Start: 25 @24829 has 12 MA's), (29, 24856), (31, 24868), (33, 24895), (36, 24940), (37, 24949), (41, 24991), (47, 25060), (48, 25072), (49, 25075), (50, 25087), (53, 25105), (54, 25111), (60, 25150), (61, 25153), (62, 25168), (64, 25174), (71, 25273), (76, 25306), (77, 25327),

Gene: MeganNoll_33 Start: 25235, Stop: 25777, Start Num: 25

Candidate Starts for MeganNoll_33:

(4, 24962), (10, 25076), (Start: 15 @25199 has 3 MA's), (Start: 23 @25223 has 67 MA's), (Start: 25 @25235 has 12 MA's), (29, 25259), (32, 25292), (33, 25298), (37, 25352), (40, 25391), (47, 25463), (48, 25475), (49, 25478), (50, 25490), (53, 25508), (54, 25514), (56, 25523), (60, 25553), (64, 25577), (71, 25676), (76, 25709), (77, 25730),

Gene: Misaeng_33 Start: 25361, Stop: 25918, Start Num: 23

Candidate Starts for Misaeng_33:

(Start: 23 @25361 has 67 MA's), (Start: 25 @25373 has 12 MA's), (29, 25400), (31, 25412), (33, 25439), (37, 25493), (39, 25523), (48, 25616), (49, 25619), (50, 25631), (54, 25655), (60, 25694), (64, 25718), (65, 25733), (71, 25817), (76, 25850), (77, 25871), (78, 25898),

Gene: Moki_30 Start: 23611, Stop: 24168, Start Num: 23

Candidate Starts for Moki_30:

(2, 23338), (4, 23350), (8, 23401), (Start: 23 @23611 has 67 MA's), (Start: 25 @23623 has 12 MA's), (29, 23650), (31, 23662), (33, 23689), (36, 23734), (37, 23743), (47, 23854), (48, 23866), (49, 23869), (50, 23881), (54, 23905), (60, 23944), (64, 23968), (71, 24067), (75, 24097), (76, 24100), (77, 24121),

Gene: MrGloopy_34 Start: 25157, Stop: 25711, Start Num: 23

Candidate Starts for MrGloopy_34:

(4, 24896), (10, 25010), (Start: 15 @25133 has 3 MA's), (Start: 23 @25157 has 67 MA's), (Start: 25 @25169 has 12 MA's), (29, 25193), (32, 25226), (33, 25232), (37, 25286), (40, 25325), (41, 25328), (42, 25352), (47, 25397), (48, 25409), (50, 25424), (53, 25442), (54, 25448), (56, 25457), (60, 25487), (64, 25511), (71, 25610), (76, 25643), (77, 25664),

Gene: Nancia_30 Start: 23631, Stop: 24182, Start Num: 23

Candidate Starts for Nancia_30:

(Start: 15 @23607 has 3 MA's), (Start: 23 @23631 has 67 MA's), (Start: 25 @23643 has 12 MA's), (29, 23670), (31, 23682), (33, 23709), (36, 23754), (37, 23763), (40, 23802), (47, 23874), (48, 23886), (49, 23889), (50, 23901), (53, 23919), (60, 23964), (64, 23988), (71, 24087), (75, 24117), (76, 24120), (77, 24141),

Gene: Nubia_33 Start: 25071, Stop: 25628, Start Num: 23

Candidate Starts for Nubia_33:

(Start: 23 @25071 has 67 MA's), (Start: 25 @25083 has 12 MA's), (29, 25110), (31, 25122), (33, 25149), (37, 25203), (39, 25233), (48, 25326), (49, 25329), (50, 25341), (54, 25365), (60, 25404), (63, 25425), (64, 25428), (65, 25443), (71, 25527), (76, 25560), (77, 25581), (78, 25608),

Gene: OMalley_31 Start: 24783, Stop: 25343, Start Num: 23

Candidate Starts for OMalley_31:

(11, 24711), (21, 24774), (Start: 23 @24783 has 67 MA's), (Start: 25 @24795 has 12 MA's), (29, 24822), (31, 24834), (32, 24855), (33, 24861), (35, 24900), (37, 24915), (48, 25038), (49, 25041), (50, 25053), (54, 25077), (60, 25116), (63, 25137), (64, 25140), (65, 25155), (66, 25179), (68, 25197), (70, 25236), (73, 25251), (76, 25272), (77, 25293),

Gene: OurGirlNessie_30 Start: 23608, Stop: 24165, Start Num: 23

Candidate Starts for OurGirlNessie_30:

(Start: 15 @23584 has 3 MA's), (Start: 23 @23608 has 67 MA's), (Start: 25 @23620 has 12 MA's), (29, 23647), (31, 23659), (33, 23686), (36, 23731), (37, 23740), (40, 23779), (47, 23851), (48, 23863), (49, 23866), (50, 23878), (53, 23896), (60, 23941), (64, 23965), (71, 24064), (75, 24094), (76, 24097), (77, 24118),

Gene: Oxynfrius_33 Start: 25096, Stop: 25653, Start Num: 23

Candidate Starts for Oxynfrius_33:

(Start: 23 @25096 has 67 MA's), (Start: 25 @25108 has 12 MA's), (29, 25135), (31, 25147), (33, 25174), (37, 25228), (39, 25258), (48, 25351), (50, 25366), (54, 25390), (60, 25429), (63, 25450), (64, 25453), (65, 25468), (75, 25582), (76, 25585), (77, 25606), (78, 25633),

Gene: PartyCup_36 Start: 25231, Stop: 25776, Start Num: 25

Candidate Starts for PartyCup_36:

(1, 24904), (2, 24931), (5, 24946), (12, 25135), (14, 25153), (19, 25198), (Start: 23 @25219 has 67 MA's), (Start: 25 @25231 has 12 MA's), (29, 25258), (31, 25270), (32, 25291), (33, 25297), (36, 25342), (37, 25351), (39, 25381), (43, 25420), (48, 25474), (50, 25489), (54, 25513), (60, 25552), (63, 25573), (64, 25576), (68, 25633), (75, 25705), (76, 25708), (77, 25729),

Gene: PinkFriday_30 Start: 23660, Stop: 24220, Start Num: 23

Candidate Starts for PinkFriday_30:

(Start: 23 @23660 has 67 MA's), (Start: 25 @23672 has 12 MA's), (29, 23699), (32, 23732), (33, 23738), (35, 23777), (37, 23792), (48, 23915), (49, 23918), (50, 23930), (54, 23954), (60, 23993), (63, 24014), (64, 24017), (65, 24032), (66, 24056), (68, 24074), (70, 24113), (73, 24128), (76, 24149), (77, 24170),

Gene: PitaDog_30 Start: 23618, Stop: 24169, Start Num: 23

Candidate Starts for PitaDog_30:

(Start: 15 @23594 has 3 MA's), (Start: 23 @23618 has 67 MA's), (Start: 25 @23630 has 12 MA's), (29, 23657), (31, 23669), (36, 23741), (37, 23750), (40, 23789), (47, 23861), (48, 23873), (49, 23876), (50, 23888), (53, 23906), (60, 23951), (64, 23975), (71, 24074), (75, 24104), (76, 24107), (77, 24128),

Gene: Potatoes_34 Start: 25219, Stop: 25776, Start Num: 23

Candidate Starts for Potatoes_34:

(10, 25072), (Start: 15 @25195 has 3 MA's), (Start: 23 @25219 has 67 MA's), (29, 25258), (31, 25270), (32, 25291), (33, 25297), (36, 25342), (37, 25351), (40, 25390), (47, 25462), (48, 25474), (50, 25489), (53, 25507), (54, 25513), (56, 25522), (60, 25552), (64, 25576), (71, 25675), (76, 25708), (77, 25729),

Gene: Preamble_30 Start: 23678, Stop: 24235, Start Num: 23

Candidate Starts for Preamble_30:

(19, 23657), (Start: 23 @23678 has 67 MA's), (Start: 25 @23690 has 12 MA's), (29, 23717), (32, 23750), (33, 23756), (35, 23795), (37, 23810), (39, 23840), (47, 23921), (48, 23933), (50, 23948), (54, 23972), (60, 24011), (63, 24032), (64, 24035), (68, 24092), (71, 24134), (76, 24167), (77, 24188),

Gene: Pterodactyl_30 Start: 23609, Stop: 24160, Start Num: 23

Candidate Starts for Pterodactyl_30:

(Start: 15 @23585 has 3 MA's), (Start: 23 @23609 has 67 MA's), (Start: 25 @23621 has 12 MA's), (29, 23648), (31, 23660), (33, 23687), (36, 23732), (37, 23741), (40, 23780), (47, 23852), (48, 23864), (49, 23867), (50, 23879), (53, 23897), (60, 23942), (64, 23966), (71, 24065), (75, 24095), (76, 24098), (77, 24119),

Gene: Pumancara_30 Start: 23579, Stop: 24139, Start Num: 23

Candidate Starts for Pumancara_30:

(Start: 23 @23579 has 67 MA's), (Start: 25 @23591 has 12 MA's), (29, 23618), (32, 23651), (33, 23657), (35, 23696), (37, 23711), (48, 23834), (49, 23837), (50, 23849), (54, 23873), (60, 23912), (63, 23933), (64, 23936), (65, 23951), (66, 23975), (68, 23993), (70, 24032), (73, 24047), (76, 24068), (77, 24089),

Gene: RAP15_34 Start: 25199, Stop: 25777, Start Num: 15

Candidate Starts for RAP15_34:

(4, 24962), (10, 25076), (Start: 15 @25199 has 3 MA's), (Start: 23 @25223 has 67 MA's), (Start: 25 @25235 has 12 MA's), (29, 25259), (32, 25292), (33, 25298), (37, 25352), (40, 25391), (47, 25463), (48, 25475), (49, 25478), (50, 25490), (53, 25508), (54, 25514), (56, 25523), (60, 25553), (64, 25577), (71, 25676), (76, 25709), (77, 25730),

Gene: RcigaStruga_33 Start: 25142, Stop: 25687, Start Num: 25

Candidate Starts for RcigaStruga_33:

(Start: 23 @25130 has 67 MA's), (Start: 25 @25142 has 12 MA's), (29, 25169), (31, 25181), (32, 25202), (33, 25208), (37, 25262), (39, 25292), (48, 25385), (49, 25388), (50, 25400), (54, 25424), (60, 25463), (63, 25484), (64, 25487), (65, 25502), (71, 25586), (76, 25619), (77, 25640), (78, 25667),

Gene: Riovina_31 Start: 24783, Stop: 25343, Start Num: 23

Candidate Starts for Riovina_31:

(11, 24711), (21, 24774), (Start: 23 @24783 has 67 MA's), (Start: 25 @24795 has 12 MA's), (29, 24822), (31, 24834), (32, 24855), (33, 24861), (35, 24900), (37, 24915), (48, 25038), (49, 25041), (50, 25053), (54, 25077), (60, 25116), (63, 25137), (64, 25140), (65, 25155), (66, 25179), (68, 25197), (70, 25236), (73, 25251), (76, 25272), (77, 25293),

Gene: Riverdale_34 Start: 25153, Stop: 25710, Start Num: 23

Candidate Starts for Riverdale_34:

(10, 25006), (Start: 15 @25129 has 3 MA's), (Start: 23 @25153 has 67 MA's), (Start: 25 @25165 has 12 MA's), (29, 25192), (31, 25204), (32, 25225), (33, 25231), (36, 25276), (37, 25285), (40, 25324), (47, 25396), (48, 25408), (50, 25423), (53, 25441), (54, 25447), (56, 25456), (60, 25486), (64, 25510), (71, 25609), (76, 25642), (77, 25663),

Gene: Rozby_34 Start: 25154, Stop: 25711, Start Num: 23

Candidate Starts for Rozby_34:

(10, 25007), (Start: 15 @25130 has 3 MA's), (Start: 23 @25154 has 67 MA's), (Start: 25 @25166 has 12 MA's), (29, 25193), (31, 25205), (32, 25226), (33, 25232), (36, 25277), (37, 25286), (40, 25325), (47, 25397), (48, 25409), (49, 25412), (50, 25424), (53, 25442), (54, 25448), (56, 25457), (60, 25487), (64, 25511), (71, 25610), (76, 25643), (77, 25664),

Gene: Sapo_32 Start: 30573, Stop: 30124, Start Num: 28

Candidate Starts for Sapo_32:

(17, 30636), (24, 30603), (27, 30579), (Start: 28 @30573 has 3 MA's), (42, 30435), (51, 30360), (52, 30351),

Gene: Savage2526_34 Start: 25217, Stop: 25771, Start Num: 23

Candidate Starts for Savage2526_34:

(4, 24956), (10, 25070), (Start: 15 @25193 has 3 MA's), (Start: 23 @25217 has 67 MA's), (Start: 25 @25229 has 12 MA's), (29, 25253), (32, 25286), (33, 25292), (37, 25346), (40, 25385), (47, 25457), (48, 25469), (49, 25472), (50, 25484), (53, 25502), (54, 25508), (56, 25517), (60, 25547), (64, 25571), (71, 25670), (76, 25703), (77, 25724),

Gene: Scuttle_34 Start: 25238, Stop: 25795, Start Num: 23

Candidate Starts for Scuttle_34:

(4, 24977), (Start: 15 @25214 has 3 MA's), (Start: 23 @25238 has 67 MA's), (Start: 25 @25250 has 12 MA's), (29, 25277), (30, 25283), (31, 25289), (32, 25310), (33, 25316), (37, 25370), (40, 25409), (42, 25436), (47, 25481), (48, 25493), (49, 25496), (50, 25508), (53, 25526), (54, 25532), (55, 25538), (60, 25571), (64, 25595), (71, 25694), (76, 25727), (77, 25748),

Gene: Sergei_31 Start: 24770, Stop: 25330, Start Num: 23

Candidate Starts for Sergei_31:

(Start: 23 @24770 has 67 MA's), (Start: 25 @24782 has 12 MA's), (29, 24809), (32, 24842), (33, 24848), (35, 24887), (37, 24902), (48, 25025), (50, 25040), (54, 25064), (60, 25103), (64, 25127), (66, 25166), (68, 25184), (70, 25223), (73, 25238), (76, 25259), (77, 25280),

Gene: Spocter_61 Start: 47277, Stop: 47777, Start Num: 16

Candidate Starts for Spocter_61:

(6, 47076), (Start: 16 @47277 has 1 MA's), (Start: 18 @47283 has 3 MA's), (27, 47334), (Start: 28 @47340 has 3 MA's), (44, 47502), (45, 47517), (46, 47523), (52, 47568), (74, 47757),

Gene: Supakev_31 Start: 24783, Stop: 25343, Start Num: 23

Candidate Starts for Supakev_31:

(11, 24711), (21, 24774), (Start: 23 @24783 has 67 MA's), (Start: 25 @24795 has 12 MA's), (29, 24822), (31, 24834), (32, 24855), (33, 24861), (35, 24900), (37, 24915), (48, 25038), (50, 25053), (54, 25077), (60, 25116), (63, 25137), (64, 25140), (70, 25236), (76, 25272), (77, 25293), (79, 25335),

Gene: Suppi_34 Start: 25234, Stop: 25779, Start Num: 25

Candidate Starts for Suppi_34:

(1, 24907), (2, 24934), (5, 24949), (12, 25138), (13, 25141), (14, 25156), (19, 25201), (Start: 23 @25222 has 67 MA's), (Start: 25 @25234 has 12 MA's), (29, 25261), (31, 25273), (32, 25294), (33, 25300), (36, 25345), (37, 25354), (39, 25384), (42, 25420), (43, 25423), (48, 25477), (50, 25492), (54, 25516), (60, 25555), (64, 25579), (68, 25636), (75, 25708), (76, 25711), (77, 25732),

Gene: TattModd_34 Start: 25216, Stop: 25773, Start Num: 23

Candidate Starts for TattModd_34:

(10, 25069), (Start: 15 @25192 has 3 MA's), (Start: 23 @25216 has 67 MA's), (Start: 25 @25228 has 12 MA's), (29, 25255), (31, 25267), (32, 25288), (33, 25294), (36, 25339), (37, 25348), (40, 25387), (47, 25459), (48, 25471), (50, 25486), (53, 25504), (54, 25510), (56, 25519), (60, 25549), (64, 25573), (71, 25672), (76, 25705), (77, 25726),

Gene: Temper16_31 Start: 24770, Stop: 25330, Start Num: 23

Candidate Starts for Temper16_31:

(Start: 23 @24770 has 67 MA's), (Start: 25 @24782 has 12 MA's), (29, 24809), (32, 24842), (33, 24848), (35, 24887), (37, 24902), (48, 25025), (50, 25040), (54, 25064), (60, 25103), (64, 25127), (66, 25166), (68, 25184), (70, 25223), (73, 25238), (76, 25259), (77, 25280),

Gene: Urla_31 Start: 24836, Stop: 25381, Start Num: 25

Candidate Starts for Urla_31:

(12, 24767), (Start: 23 @24824 has 67 MA's), (Start: 25 @24836 has 12 MA's), (29, 24863), (31, 24875), (33, 24902), (36, 24947), (37, 24956), (47, 25067), (48, 25079), (49, 25082), (50, 25094), (54, 25118), (59, 25145), (61, 25160), (63, 25178), (64, 25181), (71, 25280), (76, 25313), (77, 25334),

Gene: Vallejo_34 Start: 25168, Stop: 25713, Start Num: 25

Candidate Starts for Vallejo_34:

(10, 25009), (Start: 15 @25132 has 3 MA's), (Start: 23 @25156 has 67 MA's), (Start: 25 @25168 has 12 MA's), (29, 25195), (31, 25207), (32, 25228), (33, 25234), (36, 25279), (37, 25288), (40, 25327), (47, 25399), (48, 25411), (50, 25426), (53, 25444), (54, 25450), (56, 25459), (60, 25489), (64, 25513), (71, 25612), (76, 25645), (77, 25666),

Gene: Vulture_31 Start: 24780, Stop: 25340, Start Num: 23

Candidate Starts for Vulture_31:

(11, 24708), (21, 24771), (Start: 23 @24780 has 67 MA's), (Start: 25 @24792 has 12 MA's), (29, 24819), (31, 24831), (32, 24852), (33, 24858), (35, 24897), (37, 24912), (48, 25035), (50, 25050), (54, 25074), (60, 25113), (63, 25134), (64, 25137), (70, 25233), (76, 25269), (77, 25290), (79, 25332),

Gene: Wawa_34 Start: 25208, Stop: 25765, Start Num: 23

Candidate Starts for Wawa_34:

(4, 24947), (10, 25061), (Start: 15 @25184 has 3 MA's), (Start: 23 @25208 has 67 MA's), (Start: 25 @25220 has 12 MA's), (29, 25247), (31, 25259), (33, 25286), (36, 25331), (37, 25340), (40, 25379), (42, 25406), (47, 25451), (48, 25463), (49, 25466), (50, 25478), (53, 25496), (54, 25502), (56, 25511), (60, 25541), (64, 25565), (71, 25664), (76, 25697), (77, 25718),

Gene: Wayne_34 Start: 25280, Stop: 25825, Start Num: 25

Candidate Starts for Wayne_34:

(1, 24953), (2, 24980), (5, 24995), (12, 25184), (13, 25187), (14, 25202), (19, 25247), (Start: 23 @25268 has 67 MA's), (Start: 25 @25280 has 12 MA's), (29, 25307), (31, 25319), (32, 25340), (33, 25346), (36, 25391), (37, 25400), (39, 25430), (42, 25466), (43, 25469), (48, 25523), (50, 25538), (54, 25562), (60, 25601), (64, 25625), (68, 25682), (75, 25754), (76, 25757), (77, 25778),

Gene: WonderBoy_29 Start: 23599, Stop: 24150, Start Num: 23

Candidate Starts for WonderBoy_29:

(Start: 15 @23575 has 3 MA's), (Start: 23 @23599 has 67 MA's), (Start: 25 @23611 has 12 MA's), (29, 23638), (31, 23650), (33, 23677), (36, 23722), (37, 23731), (40, 23770), (47, 23842), (48, 23854), (49, 23857), (50, 23869), (53, 23887), (60, 23932), (64, 23956), (71, 24055), (75, 24085), (76, 24088), (77, 24109),

Gene: Zorro_34 Start: 25187, Stop: 25744, Start Num: 23

Candidate Starts for Zorro_34:

(4, 24926), (10, 25040), (Start: 15 @25163 has 3 MA's), (Start: 23 @25187 has 67 MA's), (Start: 25 @25199 has 12 MA's), (29, 25226), (31, 25238), (32, 25259), (33, 25265), (36, 25310), (37, 25319), (40, 25358), (41, 25361), (42, 25385), (47, 25430), (48, 25442), (50, 25457), (53, 25475), (54, 25481), (56, 25490), (60, 25520), (64, 25544), (71, 25643), (76, 25676), (77, 25697),