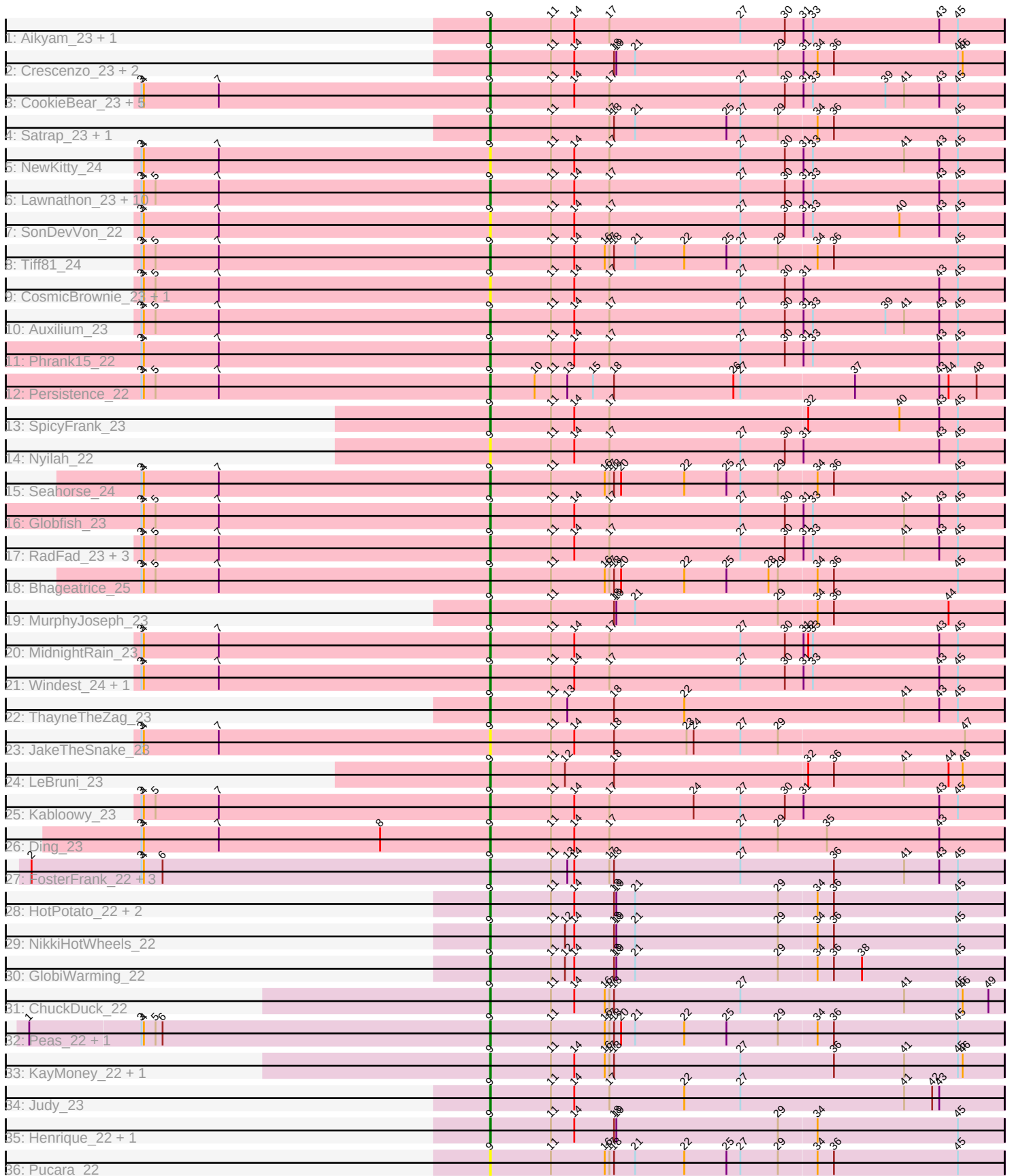




Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 330826 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330826 has 68 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Aikyam_23, MaterMagnus_23
- Track 2 : Crescenzo_23, DarwinJr_26, Anekin_22
- Track 3 : CookieBear_23, BasketStar_23, Lasker_23, BlueShadow_23, BenchScraper_23, Richie_23
- Track 4 : Satrap_23, Shukran_23
- Track 5 : NewKitty_24
- Track 6 : Lawnathon_23, JellyBread_23, Sporco_23, YoungHarleezy_23, Gorpy_23, Raphaella_23, Mapleville_22, AdaS_23, BillyTP_23, MUWow_22, Sakai_23
- Track 7 : SonDevVon_22
- Track 8 : Tiff81_24
- Track 9 : CosmicBrownie_23, GumGum_23
- Track 10 : Auxilium_23
- Track 11 : Phrank15_22
- Track 12 : Persistence_22
- Track 13 : SpicyFrank_23
- Track 14 : Nyilah_22
- Track 15 : Seahorse_24
- Track 16 : Globfish_23
- Track 17 : RadFad_23, Hestia_23, Vopal_24, Hillester_23
- Track 18 : Bhageatrice_25
- Track 19 : MurphyJoseph_23
- Track 20 : MidnightRain_23
- Track 21 : Windest_24, Isolde_23
- Track 22 : ThayneTheZag_23
- Track 23 : JakeTheSnake_23
- Track 24 : LeBruni_23
- Track 25 : Kabloowy_23
- Track 26 : Ding_23
- Track 27 : FosterFrank_22, PeggyLeg03_22, NidoQ_22, Constance_22
- Track 28 : HotPotato_22, Bridgette_22, Karkharias_22
- Track 29 : NikkiHotWheels_22
- Track 30 : GlobiWarming_22
- Track 31 : ChuckDuck_22
- Track 32 : Peas_22, Eileen_22
- Track 33 : KayMoney_22, LittleRon_22
- Track 34 : Judy_23
- Track 35 : Henrique_22, LilyBell_22

- Track 36 : Pucara_22

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 53 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS_23, Aikyam_23, Anekin_22, Auxilium_23, BasketStar_23, BenchScraper_23, Bhageatrice_25, BillyTP_23, BlueShadow_23, Bridgette_22, ChuckDuck_22, Constance_22, CookieBear_23, CosmicBrownie_23, Crescenzo_23, DarwinJr_26, Ding_23, Eileen_22, FosterFrank_22, Globfish_23, GlobiWarming_22, Gorpy_23, GumGum_23, Henrique_22, Hestia_23, Hillester_23, HotPotato_22, Isolde_23, JakeTheSnake_23, JellyBread_23, Judy_23, Kabloowy_23, Karkharias_22, KayMoney_22, Lasker_23, Lawnathon_23, LeBruni_23, LilyBell_22, LittleRon_22, MUWow_22, Mapleville_22, MaterMagnus_23, MidnightRain_23, MurphyJoseph_23, NewKitty_24, NidoQ_22, NikkiHotWheels_22, Nyilah_22, Peas_22, PeggyLeg03_22, Persistence_22, Phrank15_22, Pucara_22, RadFad_23, Raphaella_23, Richie_23, Sakai_23, Satrap_23, Seahorse_24, Shukran_23, SonDevVon_22, SpicyFrank_23, Sporco_23, ThayneTheZag_23, Tiff81_24, Vopal_24, Windest_24, YoungHarleezy_23,

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

-

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

-

Summary by start number:

Start 9:

- Found in 68 of 68 (100.0%) of genes in pham
- Manual Annotations of this start: 53 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AdaS_23 (AY), Aikyam_23 (AY), Anekin_22 (AY), Auxilium_23 (AY), BasketStar_23 (AY), BenchScraper_23 (AY), Bhageatrice_25 (AY), BillyTP_23 (AY), BlueShadow_23 (AY), Bridgette_22 (FA), ChuckDuck_22 (FA), Constance_22 (FA), CookieBear_23 (AY), CosmicBrownie_23 (AY), Crescenzo_23 (AY), DarwinJr_26 (AY), Ding_23 (AY), Eileen_22 (FA), FosterFrank_22 (FA), Globfish_23 (AY), GlobiWarming_22 (FA), Gorpy_23 (AY), GumGum_23 (AY), Henrique_22 (FA), Hestia_23 (AY), Hillester_23 (AY), HotPotato_22 (FA), Isolde_23 (AY), JakeTheSnake_23 (AY), JellyBread_23 (AY), Judy_23 (FA), Kabloowy_23 (AY), Karkharias_22 (FA), KayMoney_22 (FA), Lasker_23 (AY), Lawnathon_23 (AY), LeBruni_23 (AY), LilyBell_22 (FA), LittleRon_22 (FA), MUWow_22 (AY), Mapleville_22 (AY), MaterMagnus_23 (AY), MidnightRain_23 (AY), MurphyJoseph_23 (AY), NewKitty_24 (AY), NidoQ_22 (FA), NikkiHotWheels_22 (FA), Nyilah_22 (AY), Peas_22 (FA), PeggyLeg03_22 (FA), Persistence_22 (AY), Phrank15_22 (AY), Pucara_22 (FA), RadFad_23 (AY), Raphaella_23 (AY), Richie_23 (AY), Sakai_23 (AY), Satrap_23 (AY), Seahorse_24 (AY), Shukran_23 (AY), SonDevVon_22 (AY), SpicyFrank_23 (AY), Sporco_23 (AY), ThayneTheZag_23 (AY),

Tiff81_24 (AY), Vopal_24 (AY), Windest_24 (AY), YoungHarleezy_23 (AY),

Summary by clusters:

There are 2 clusters represented in this pham: AY, FA,

Info for manual annotations of cluster AY:

- Start number 9 was manually annotated 40 times for cluster AY.

Info for manual annotations of cluster FA:

- Start number 9 was manually annotated 13 times for cluster FA.

Gene Information:

Gene: AdaS_23 Start: 17892, Stop: 18551, Start Num: 9

Candidate Starts for AdaS_23:

(3, 17445), (4, 17448), (5, 17463), (7, 17544), (Start: 9 @17892 has 53 MA's), (11, 17970), (14, 18000), (17, 18045), (27, 18213), (30, 18270), (31, 18294), (33, 18306), (43, 18468), (45, 18492),

Gene: Aikyam_23 Start: 17893, Stop: 18552, Start Num: 9

Candidate Starts for Aikyam_23:

(Start: 9 @17893 has 53 MA's), (11, 17971), (14, 18001), (17, 18046), (27, 18214), (30, 18271), (31, 18295), (33, 18307), (43, 18469), (45, 18493),

Gene: Anekin_22 Start: 17858, Stop: 18514, Start Num: 9

Candidate Starts for Anekin_22:

(Start: 9 @17858 has 53 MA's), (11, 17936), (14, 17966), (18, 18017), (19, 18020), (21, 18044), (29, 18227), (31, 18257), (34, 18275), (36, 18296), (45, 18455), (46, 18461),

Gene: Auxilium_23 Start: 17892, Stop: 18551, Start Num: 9

Candidate Starts for Auxilium_23:

(3, 17445), (4, 17448), (5, 17463), (7, 17544), (Start: 9 @17892 has 53 MA's), (11, 17970), (14, 18000), (17, 18045), (27, 18213), (30, 18270), (31, 18294), (33, 18306), (39, 18399), (41, 18423), (43, 18468), (45, 18492),

Gene: BasketStar_23 Start: 17946, Stop: 18605, Start Num: 9

Candidate Starts for BasketStar_23:

(3, 17499), (4, 17502), (7, 17598), (Start: 9 @17946 has 53 MA's), (11, 18024), (14, 18054), (17, 18099), (27, 18267), (30, 18324), (31, 18348), (33, 18360), (39, 18453), (41, 18477), (43, 18522), (45, 18546),

Gene: BenchScraper_23 Start: 17907, Stop: 18566, Start Num: 9

Candidate Starts for BenchScraper_23:

(3, 17460), (4, 17463), (7, 17559), (Start: 9 @17907 has 53 MA's), (11, 17985), (14, 18015), (17, 18060), (27, 18228), (30, 18285), (31, 18309), (33, 18321), (39, 18414), (41, 18438), (43, 18483), (45, 18507),

Gene: Bhageatrice_25 Start: 19182, Stop: 19838, Start Num: 9

Candidate Starts for Bhageatrice_25:

(3, 18735), (4, 18738), (5, 18753), (7, 18834), (Start: 9 @19182 has 53 MA's), (11, 19260), (16, 19329), (17, 19335), (18, 19341), (20, 19350), (22, 19431), (25, 19485), (28, 19539), (29, 19551), (34, 19599),

(36, 19620), (45, 19779),

Gene: BillyTP_23 Start: 17676, Stop: 18335, Start Num: 9

Candidate Starts for BillyTP_23:

(3, 17229), (4, 17232), (5, 17247), (7, 17328), (Start: 9 @17676 has 53 MA's), (11, 17754), (14, 17784), (17, 17829), (27, 17997), (30, 18054), (31, 18078), (33, 18090), (43, 18252), (45, 18276),

Gene: BlueShadow_23 Start: 17892, Stop: 18551, Start Num: 9

Candidate Starts for BlueShadow_23:

(3, 17445), (4, 17448), (7, 17544), (Start: 9 @17892 has 53 MA's), (11, 17970), (14, 18000), (17, 18045), (27, 18213), (30, 18270), (31, 18294), (33, 18306), (39, 18399), (41, 18423), (43, 18468), (45, 18492),

Gene: Bridgette_22 Start: 17957, Stop: 18613, Start Num: 9

Candidate Starts for Bridgette_22:

(Start: 9 @17957 has 53 MA's), (11, 18035), (14, 18065), (18, 18116), (19, 18119), (21, 18143), (29, 18326), (34, 18374), (36, 18395), (45, 18554),

Gene: ChuckDuck_22 Start: 17793, Stop: 18452, Start Num: 9

Candidate Starts for ChuckDuck_22:

(Start: 9 @17793 has 53 MA's), (11, 17871), (14, 17901), (16, 17940), (17, 17946), (18, 17952), (27, 18114), (41, 18324), (45, 18393), (46, 18399), (49, 18432),

Gene: Constance_22 Start: 17933, Stop: 18592, Start Num: 9

Candidate Starts for Constance_22:

(2, 17345), (3, 17486), (4, 17489), (6, 17513), (Start: 9 @17933 has 53 MA's), (11, 18011), (13, 18032), (14, 18041), (17, 18086), (18, 18092), (27, 18254), (36, 18374), (41, 18464), (43, 18509), (45, 18533),

Gene: CookieBear_23 Start: 17892, Stop: 18551, Start Num: 9

Candidate Starts for CookieBear_23:

(3, 17445), (4, 17448), (7, 17544), (Start: 9 @17892 has 53 MA's), (11, 17970), (14, 18000), (17, 18045), (27, 18213), (30, 18270), (31, 18294), (33, 18306), (39, 18399), (41, 18423), (43, 18468), (45, 18492),

Gene: CosmicBrownie_23 Start: 17850, Stop: 18509, Start Num: 9

Candidate Starts for CosmicBrownie_23:

(3, 17403), (4, 17406), (5, 17421), (7, 17502), (Start: 9 @17850 has 53 MA's), (11, 17928), (14, 17958), (17, 18003), (27, 18171), (30, 18228), (31, 18252), (43, 18426), (45, 18450),

Gene: Crescenzo_23 Start: 17786, Stop: 18442, Start Num: 9

Candidate Starts for Crescenzo_23:

(Start: 9 @17786 has 53 MA's), (11, 17864), (14, 17894), (18, 17945), (19, 17948), (21, 17972), (29, 18155), (31, 18185), (34, 18203), (36, 18224), (45, 18383), (46, 18389),

Gene: DarwinJr_26 Start: 19090, Stop: 19746, Start Num: 9

Candidate Starts for DarwinJr_26:

(Start: 9 @19090 has 53 MA's), (11, 19168), (14, 19198), (18, 19249), (19, 19252), (21, 19276), (29, 19459), (31, 19489), (34, 19507), (36, 19528), (45, 19687), (46, 19693),

Gene: Ding_23 Start: 17958, Stop: 18617, Start Num: 9

Candidate Starts for Ding_23:

(3, 17511), (4, 17514), (7, 17610), (8, 17817), (Start: 9 @17958 has 53 MA's), (11, 18036), (14, 18066), (17, 18111), (27, 18279), (29, 18327), (35, 18390), (43, 18534),

Gene: Eileen_22 Start: 17895, Stop: 18551, Start Num: 9

Candidate Starts for Eileen_22:

(1, 17307), (3, 17448), (4, 17451), (5, 17466), (6, 17475), (Start: 9 @17895 has 53 MA's), (11, 17973), (16, 18042), (17, 18048), (18, 18054), (20, 18063), (21, 18081), (22, 18144), (25, 18198), (29, 18264), (34, 18312), (36, 18333), (45, 18492),

Gene: FosterFrank_22 Start: 17891, Stop: 18550, Start Num: 9

Candidate Starts for FosterFrank_22:

(2, 17303), (3, 17444), (4, 17447), (6, 17471), (Start: 9 @17891 has 53 MA's), (11, 17969), (13, 17990), (14, 17999), (17, 18044), (18, 18050), (27, 18212), (36, 18332), (41, 18422), (43, 18467), (45, 18491),

Gene: Globfish_23 Start: 17965, Stop: 18624, Start Num: 9

Candidate Starts for Globfish_23:

(3, 17518), (4, 17521), (5, 17536), (7, 17617), (Start: 9 @17965 has 53 MA's), (11, 18043), (14, 18073), (17, 18118), (27, 18286), (30, 18343), (31, 18367), (33, 18379), (41, 18496), (43, 18541), (45, 18565),

Gene: GlobiWarming_22 Start: 17893, Stop: 18549, Start Num: 9

Candidate Starts for GlobiWarming_22:

(Start: 9 @17893 has 53 MA's), (11, 17971), (12, 17989), (14, 18001), (18, 18052), (19, 18055), (21, 18079), (29, 18262), (34, 18310), (36, 18331), (38, 18367), (45, 18490),

Gene: Gorpy_23 Start: 17901, Stop: 18560, Start Num: 9

Candidate Starts for Gorpy_23:

(3, 17454), (4, 17457), (5, 17472), (7, 17553), (Start: 9 @17901 has 53 MA's), (11, 17979), (14, 18009), (17, 18054), (27, 18222), (30, 18279), (31, 18303), (33, 18315), (43, 18477), (45, 18501),

Gene: GumGum_23 Start: 17841, Stop: 18500, Start Num: 9

Candidate Starts for GumGum_23:

(3, 17394), (4, 17397), (5, 17412), (7, 17493), (Start: 9 @17841 has 53 MA's), (11, 17919), (14, 17949), (17, 17994), (27, 18162), (30, 18219), (31, 18243), (43, 18417), (45, 18441),

Gene: Henrique_22 Start: 17918, Stop: 18574, Start Num: 9

Candidate Starts for Henrique_22:

(Start: 9 @17918 has 53 MA's), (11, 17996), (14, 18026), (18, 18077), (19, 18080), (29, 18287), (34, 18335), (45, 18515),

Gene: Hestia_23 Start: 18070, Stop: 18729, Start Num: 9

Candidate Starts for Hestia_23:

(3, 17623), (4, 17626), (5, 17641), (7, 17722), (Start: 9 @18070 has 53 MA's), (11, 18148), (14, 18178), (17, 18223), (27, 18391), (30, 18448), (31, 18472), (33, 18484), (41, 18601), (43, 18646), (45, 18670),

Gene: Hillester_23 Start: 17892, Stop: 18551, Start Num: 9

Candidate Starts for Hillester_23:

(3, 17445), (4, 17448), (5, 17463), (7, 17544), (Start: 9 @17892 has 53 MA's), (11, 17970), (14, 18000), (17, 18045), (27, 18213), (30, 18270), (31, 18294), (33, 18306), (41, 18423), (43, 18468), (45, 18492),

Gene: HotPotato_22 Start: 17901, Stop: 18557, Start Num: 9

Candidate Starts for HotPotato_22:

(Start: 9 @17901 has 53 MA's), (11, 17979), (14, 18009), (18, 18060), (19, 18063), (21, 18087), (29, 18270), (34, 18318), (36, 18339), (45, 18498),

Gene: Isolde_23 Start: 17727, Stop: 18386, Start Num: 9

Candidate Starts for Isolde_23:

(3, 17280), (4, 17283), (7, 17379), (Start: 9 @17727 has 53 MA's), (11, 17805), (14, 17835), (17, 17880), (27, 18048), (30, 18105), (31, 18129), (33, 18141), (43, 18303), (45, 18327),

Gene: JakeTheSnake_23 Start: 17796, Stop: 18452, Start Num: 9

Candidate Starts for JakeTheSnake_23:

(3, 17349), (4, 17352), (7, 17448), (Start: 9 @17796 has 53 MA's), (11, 17874), (14, 17904), (18, 17955), (23, 18048), (24, 18057), (27, 18117), (29, 18165), (47, 18402),

Gene: JellyBread_23 Start: 17885, Stop: 18544, Start Num: 9

Candidate Starts for JellyBread_23:

(3, 17438), (4, 17441), (5, 17456), (7, 17537), (Start: 9 @17885 has 53 MA's), (11, 17963), (14, 17993), (17, 18038), (27, 18206), (30, 18263), (31, 18287), (33, 18299), (43, 18461), (45, 18485),

Gene: Judy_23 Start: 18204, Stop: 18863, Start Num: 9

Candidate Starts for Judy_23:

(Start: 9 @18204 has 53 MA's), (11, 18282), (14, 18312), (17, 18357), (22, 18453), (27, 18525), (41, 18735), (42, 18771), (43, 18780),

Gene: Kabloowy_23 Start: 18081, Stop: 18740, Start Num: 9

Candidate Starts for Kabloowy_23:

(3, 17634), (4, 17637), (5, 17652), (7, 17733), (Start: 9 @18081 has 53 MA's), (11, 18159), (14, 18189), (17, 18234), (24, 18342), (27, 18402), (30, 18459), (31, 18483), (43, 18657), (45, 18681),

Gene: Karkharias_22 Start: 17897, Stop: 18553, Start Num: 9

Candidate Starts for Karkharias_22:

(Start: 9 @17897 has 53 MA's), (11, 17975), (14, 18005), (18, 18056), (19, 18059), (21, 18083), (29, 18266), (34, 18314), (36, 18335), (45, 18494),

Gene: KayMoney_22 Start: 17795, Stop: 18454, Start Num: 9

Candidate Starts for KayMoney_22:

(Start: 9 @17795 has 53 MA's), (11, 17873), (14, 17903), (16, 17942), (17, 17948), (18, 17954), (27, 18116), (36, 18236), (41, 18326), (45, 18395), (46, 18401),

Gene: Lasker_23 Start: 17900, Stop: 18559, Start Num: 9

Candidate Starts for Lasker_23:

(3, 17453), (4, 17456), (7, 17552), (Start: 9 @17900 has 53 MA's), (11, 17978), (14, 18008), (17, 18053), (27, 18221), (30, 18278), (31, 18302), (33, 18314), (39, 18407), (41, 18431), (43, 18476), (45, 18500),

Gene: Lawnathon_23 Start: 17821, Stop: 18480, Start Num: 9

Candidate Starts for Lawnathon_23:

(3, 17374), (4, 17377), (5, 17392), (7, 17473), (Start: 9 @17821 has 53 MA's), (11, 17899), (14, 17929), (17, 17974), (27, 18142), (30, 18199), (31, 18223), (33, 18235), (43, 18397), (45, 18421),

Gene: LeBruni_23 Start: 17695, Stop: 18351, Start Num: 9

Candidate Starts for LeBruni_23:

(Start: 9 @17695 has 53 MA's), (11, 17773), (12, 17791), (18, 17854), (32, 18100), (36, 18133), (41, 18223), (44, 18280), (46, 18298),

Gene: LilyBell_22 Start: 17913, Stop: 18569, Start Num: 9

Candidate Starts for LilyBell_22:

(Start: 9 @17913 has 53 MA's), (11, 17991), (14, 18021), (18, 18072), (19, 18075), (29, 18282), (34, 18330), (45, 18510),

Gene: LittleRon_22 Start: 17765, Stop: 18424, Start Num: 9

Candidate Starts for LittleRon_22:

(Start: 9 @17765 has 53 MA's), (11, 17843), (14, 17873), (16, 17912), (17, 17918), (18, 17924), (27, 18086), (36, 18206), (41, 18296), (45, 18365), (46, 18371),

Gene: MUWow_22 Start: 17985, Stop: 18644, Start Num: 9

Candidate Starts for MUWow_22:

(3, 17538), (4, 17541), (5, 17556), (7, 17637), (Start: 9 @17985 has 53 MA's), (11, 18063), (14, 18093), (17, 18138), (27, 18306), (30, 18363), (31, 18387), (33, 18399), (43, 18561), (45, 18585),

Gene: Mapleville_22 Start: 17891, Stop: 18550, Start Num: 9

Candidate Starts for Mapleville_22:

(3, 17444), (4, 17447), (5, 17462), (7, 17543), (Start: 9 @17891 has 53 MA's), (11, 17969), (14, 17999), (17, 18044), (27, 18212), (30, 18269), (31, 18293), (33, 18305), (43, 18467), (45, 18491),

Gene: MaterMagnus_23 Start: 17893, Stop: 18552, Start Num: 9

Candidate Starts for MaterMagnus_23:

(Start: 9 @17893 has 53 MA's), (11, 17971), (14, 18001), (17, 18046), (27, 18214), (30, 18271), (31, 18295), (33, 18307), (43, 18469), (45, 18493),

Gene: MidnightRain_23 Start: 17891, Stop: 18550, Start Num: 9

Candidate Starts for MidnightRain_23:

(3, 17444), (4, 17447), (7, 17543), (Start: 9 @17891 has 53 MA's), (11, 17969), (14, 17999), (17, 18044), (27, 18212), (30, 18269), (31, 18293), (32, 18299), (33, 18305), (43, 18467), (45, 18491),

Gene: MurphyJoseph_23 Start: 17979, Stop: 18635, Start Num: 9

Candidate Starts for MurphyJoseph_23:

(Start: 9 @17979 has 53 MA's), (11, 18057), (18, 18138), (19, 18141), (21, 18165), (29, 18348), (34, 18396), (36, 18417), (44, 18564),

Gene: NewKitty_24 Start: 18122, Stop: 18781, Start Num: 9

Candidate Starts for NewKitty_24:

(3, 17675), (4, 17678), (7, 17774), (Start: 9 @18122 has 53 MA's), (11, 18200), (14, 18230), (17, 18275), (27, 18443), (30, 18500), (31, 18524), (33, 18536), (41, 18653), (43, 18698), (45, 18722),

Gene: NidoQ_22 Start: 17947, Stop: 18606, Start Num: 9

Candidate Starts for NidoQ_22:

(2, 17359), (3, 17500), (4, 17503), (6, 17527), (Start: 9 @17947 has 53 MA's), (11, 18025), (13, 18046), (14, 18055), (17, 18100), (18, 18106), (27, 18268), (36, 18388), (41, 18478), (43, 18523), (45, 18547),

Gene: NikkiHotWheels_22 Start: 17914, Stop: 18570, Start Num: 9

Candidate Starts for NikkiHotWheels_22:

(Start: 9 @17914 has 53 MA's), (11, 17992), (12, 18010), (14, 18022), (18, 18073), (19, 18076), (21, 18100), (29, 18283), (34, 18331), (36, 18352), (45, 18511),

Gene: Nyilah_22 Start: 17882, Stop: 18541, Start Num: 9

Candidate Starts for Nyilah_22:

(Start: 9 @17882 has 53 MA's), (11, 17960), (14, 17990), (17, 18035), (27, 18203), (30, 18260), (31, 18284), (43, 18458), (45, 18482),

Gene: Peas_22 Start: 17895, Stop: 18551, Start Num: 9

Candidate Starts for Peas_22:

(1, 17307), (3, 17448), (4, 17451), (5, 17466), (6, 17475), (Start: 9 @17895 has 53 MA's), (11, 17973), (16, 18042), (17, 18048), (18, 18054), (20, 18063), (21, 18081), (22, 18144), (25, 18198), (29, 18264), (34, 18312), (36, 18333), (45, 18492),

Gene: PeggyLeg03_22 Start: 17933, Stop: 18592, Start Num: 9

Candidate Starts for PeggyLeg03_22:

(2, 17345), (3, 17486), (4, 17489), (6, 17513), (Start: 9 @17933 has 53 MA's), (11, 18011), (13, 18032), (14, 18041), (17, 18086), (18, 18092), (27, 18254), (36, 18374), (41, 18464), (43, 18509), (45, 18533),

Gene: Persistence_22 Start: 17816, Stop: 18472, Start Num: 9

Candidate Starts for Persistence_22:

(3, 17369), (4, 17372), (5, 17387), (7, 17468), (Start: 9 @17816 has 53 MA's), (10, 17873), (11, 17894), (13, 17915), (15, 17948), (18, 17975), (26, 18128), (27, 18137), (37, 18281), (43, 18389), (44, 18401), (48, 18437),

Gene: Phrank15_22 Start: 17826, Stop: 18485, Start Num: 9

Candidate Starts for Phrank15_22:

(3, 17379), (4, 17382), (7, 17478), (Start: 9 @17826 has 53 MA's), (11, 17904), (14, 17934), (17, 17979), (27, 18147), (30, 18204), (31, 18228), (33, 18240), (43, 18402), (45, 18426),

Gene: Pucara_22 Start: 17894, Stop: 18550, Start Num: 9

Candidate Starts for Pucara_22:

(Start: 9 @17894 has 53 MA's), (11, 17972), (16, 18041), (17, 18047), (18, 18053), (21, 18080), (22, 18143), (25, 18197), (27, 18215), (29, 18263), (34, 18311), (36, 18332), (45, 18491),

Gene: RadFad_23 Start: 17892, Stop: 18551, Start Num: 9

Candidate Starts for RadFad_23:

(3, 17445), (4, 17448), (5, 17463), (7, 17544), (Start: 9 @17892 has 53 MA's), (11, 17970), (14, 18000), (17, 18045), (27, 18213), (30, 18270), (31, 18294), (33, 18306), (41, 18423), (43, 18468), (45, 18492),

Gene: Raphaella_23 Start: 17892, Stop: 18551, Start Num: 9

Candidate Starts for Raphaella_23:

(3, 17445), (4, 17448), (5, 17463), (7, 17544), (Start: 9 @17892 has 53 MA's), (11, 17970), (14, 18000), (17, 18045), (27, 18213), (30, 18270), (31, 18294), (33, 18306), (43, 18468), (45, 18492),

Gene: Richie_23 Start: 17907, Stop: 18566, Start Num: 9

Candidate Starts for Richie_23:

(3, 17460), (4, 17463), (7, 17559), (Start: 9 @17907 has 53 MA's), (11, 17985), (14, 18015), (17, 18060), (27, 18228), (30, 18285), (31, 18309), (33, 18321), (39, 18414), (41, 18438), (43, 18483), (45, 18507),

Gene: Sakai_23 Start: 17901, Stop: 18560, Start Num: 9

Candidate Starts for Sakai_23:

(3, 17454), (4, 17457), (5, 17472), (7, 17553), (Start: 9 @17901 has 53 MA's), (11, 17979), (14, 18009), (17, 18054), (27, 18222), (30, 18279), (31, 18303), (33, 18315), (43, 18477), (45, 18501),

Gene: Satrap_23 Start: 17816, Stop: 18472, Start Num: 9

Candidate Starts for Satrap_23:

(Start: 9 @17816 has 53 MA's), (11, 17894), (17, 17969), (18, 17975), (21, 18002), (25, 18119), (27, 18137), (29, 18185), (34, 18233), (36, 18254), (45, 18413),

Gene: Seahorse_24 Start: 18259, Stop: 18915, Start Num: 9

Candidate Starts for Seahorse_24:

(3, 17812), (4, 17815), (7, 17911), (Start: 9 @18259 has 53 MA's), (11, 18337), (16, 18406), (17, 18412), (18, 18418), (20, 18427), (22, 18508), (25, 18562), (27, 18580), (29, 18628), (34, 18676), (36, 18697), (45, 18856),

Gene: Shukran_23 Start: 17816, Stop: 18472, Start Num: 9

Candidate Starts for Shukran_23:

(Start: 9 @17816 has 53 MA's), (11, 17894), (17, 17969), (18, 17975), (21, 18002), (25, 18119), (27, 18137), (29, 18185), (34, 18233), (36, 18254), (45, 18413),

Gene: SonDevVon_22 Start: 17894, Stop: 18553, Start Num: 9

Candidate Starts for SonDevVon_22:

(3, 17447), (4, 17450), (7, 17546), (Start: 9 @17894 has 53 MA's), (11, 17972), (14, 18002), (17, 18047), (27, 18215), (30, 18272), (31, 18296), (33, 18308), (40, 18419), (43, 18470), (45, 18494),

Gene: SpicyFrank_23 Start: 17969, Stop: 18625, Start Num: 9

Candidate Starts for SpicyFrank_23:

(Start: 9 @17969 has 53 MA's), (11, 18047), (14, 18077), (17, 18122), (32, 18374), (40, 18491), (43, 18542), (45, 18566),

Gene: Sporco_23 Start: 17949, Stop: 18608, Start Num: 9

Candidate Starts for Sporco_23:

(3, 17502), (4, 17505), (5, 17520), (7, 17601), (Start: 9 @17949 has 53 MA's), (11, 18027), (14, 18057), (17, 18102), (27, 18270), (30, 18327), (31, 18351), (33, 18363), (43, 18525), (45, 18549),

Gene: ThayneTheZag_23 Start: 18063, Stop: 18722, Start Num: 9

Candidate Starts for ThayneTheZag_23:

(Start: 9 @18063 has 53 MA's), (11, 18141), (13, 18162), (18, 18222), (22, 18312), (41, 18594), (43, 18639), (45, 18663),

Gene: Tiff81_24 Start: 17987, Stop: 18643, Start Num: 9

Candidate Starts for Tiff81_24:

(3, 17540), (4, 17543), (5, 17558), (7, 17639), (Start: 9 @17987 has 53 MA's), (11, 18065), (14, 18095), (16, 18134), (17, 18140), (18, 18146), (21, 18173), (22, 18236), (25, 18290), (27, 18308), (29, 18356), (34, 18404), (36, 18425), (45, 18584),

Gene: Vopal_24 Start: 17964, Stop: 18623, Start Num: 9

Candidate Starts for Vopal_24:

(3, 17517), (4, 17520), (5, 17535), (7, 17616), (Start: 9 @17964 has 53 MA's), (11, 18042), (14, 18072), (17, 18117), (27, 18285), (30, 18342), (31, 18366), (33, 18378), (41, 18495), (43, 18540), (45, 18564),

Gene: Windest_24 Start: 17948, Stop: 18607, Start Num: 9

Candidate Starts for Windest_24:

(3, 17501), (4, 17504), (7, 17600), (Start: 9 @17948 has 53 MA's), (11, 18026), (14, 18056), (17, 18101), (27, 18269), (30, 18326), (31, 18350), (33, 18362), (43, 18524), (45, 18548),

Gene: YoungHarleezy_23 Start: 17905, Stop: 18564, Start Num: 9

Candidate Starts for YoungHarleezy_23:

(3, 17458), (4, 17461), (5, 17476), (7, 17557), (Start: 9 @17905 has 53 MA's), (11, 17983), (14, 18013), (17, 18058), (27, 18226), (30, 18283), (31, 18307), (33, 18319), (43, 18481), (45, 18505),