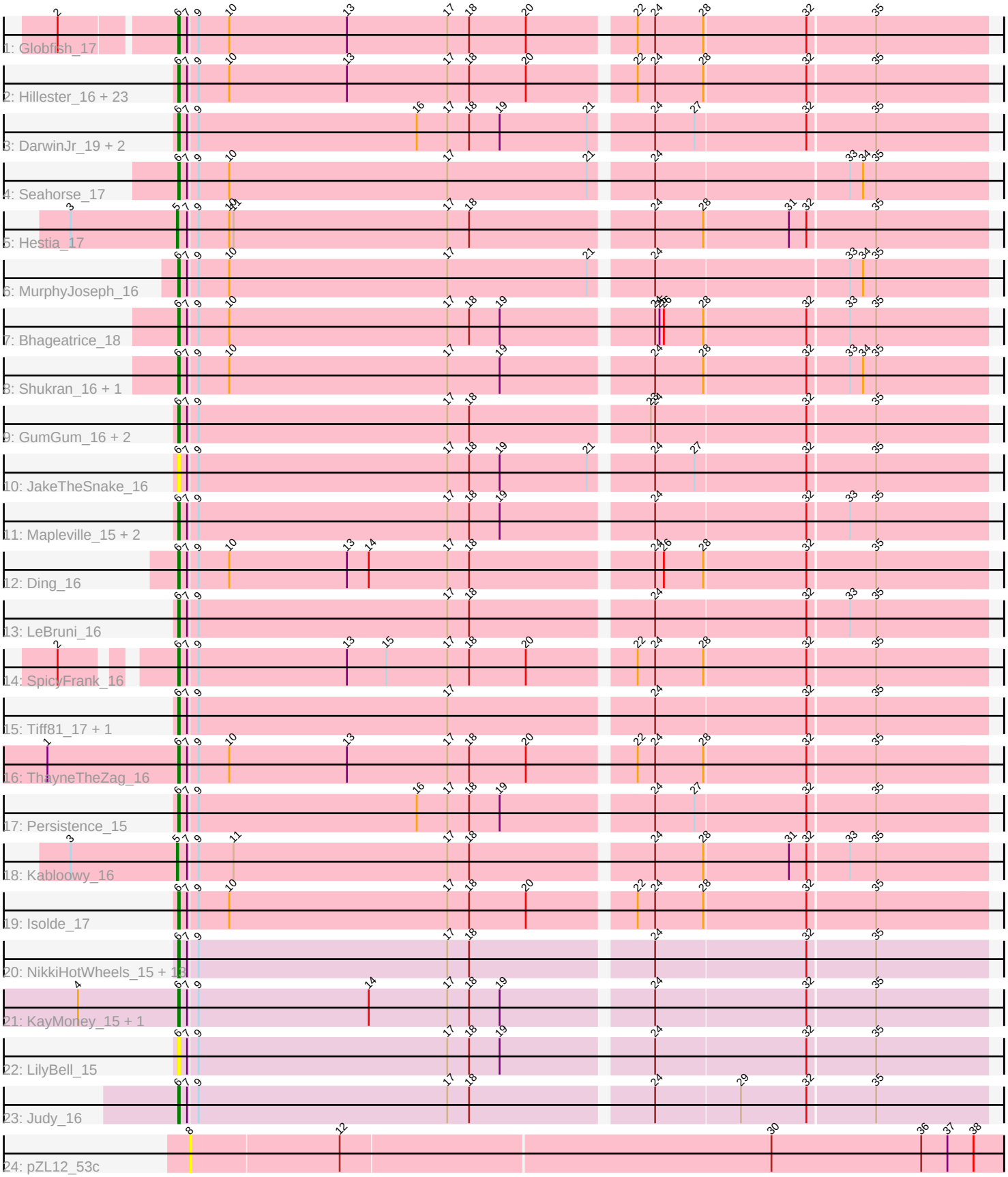
Pham 347581


1: Globfish_17
2: Hillester_16 + 23
3: DarwinJr_19 + 2
4: Seahorse_17
5: Hestia_17
6: MurphyJoseph_16
7: Bhageatrice_18
8: Shukran_16 + 1
9: GumGum_16 + 2
10: JakeTheSnake_16
11: Mapleville_15 + 2
12: Ding_16
13: LeBruni_16
14: SpicyFrank_16
15: Tiff81_17 + 1
16: ThayneTheZag_16
17: Persistence_15
18: Kabloowy_16
19: Isolde_17
20: NikkiHotWheels_15 + 1
21: KayMoney_15 + 1
22: LilyBell_15
23: Judy_16
24: pZL12_53c

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 347581 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347581 has 69 members, 15 are drafts.

Phages represented in each track:
• Track 1 : Globfish_17
• Track 2 : Hillester_16, RadFad_16, AdaS_16, MaterMagnus_16, JellyBread_16, SonDevVon_15, MUWow_15, Lasker_16, Raphaella_16, Aikyam_16, NewKitty_17, Richie_16, Vopal_17, BenchScraper_16, Sporco_16, Auxilium_16, MidnightRain_16, BlueShadow_16, YoungHarleezy_16, CookieBear_16, Gorpy_16, BasketStar_16, Sakai_16, Windest_17
• Track 3 : DarwinJr_19, Crescenzo_16, Anekin_15
• Track 4 : Seahorse_17
• Track 5 : Hestia_17
• Track 6 : MurphyJoseph_16
• Track 7 : Bhageatrice_18
• Track 8 : Shukran_16, Satrap_16
• Track 9 : GumGum_16, Phrank15_15, CosmicBrownie_16
• Track 10 : JakeTheSnake_16
• Track 11 : Mapleville_15, Lawnathon_16, BillyTP_16
• Track 12 : Ding_16
• Track 13 : LeBruni_16
• Track 14 : SpicyFrank_16
• Track 15 : Tiff81_17, Nyilah_15
• Track 16 : ThayneTheZag_16
• Track 17 : Persistence_15
• Track 18 : Kabloowy_16
• Track 19 : Isolde_17
• Track 20 : NikkiHotWheels_15, Peas_16, Eileen_15, LittleRon_15, NidoQ_15, Pucara_15, GlobiWarming_15, Henrique_15, Constance_15, HotPotato_15, FosterFrank_15, Bridgette_15, PeggyLeg03_15, Karkharias_15
• Track 21 : KayMoney_15, ChuckDuck_15
• Track 22 : LilyBell_15
• Track 23 : Judy_16
• Track 24 : pZL12_53c

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

The start number called the most often in the published annotations is 6, it was called in 52 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AdaS_16, Aikyam_16, Anekin_15, Auxilium_16, BasketStar_16, BenchScraper_16, Bhageatrice_18, BillyTP_16, BlueShadow_16, Bridgette_15, ChuckDuck_15, Constance_15, CookieBear_16, CosmicBrownie_16, Crescenzo_16, DarwinJr_19, Ding_16, Eileen_15, FosterFrank_15, Globfish_17, GlobiWarming_15, Gorpy_16, GumGum_16, Henrique_15, Hillester_16, HotPotato_15, Isolde_17, JakeTheSnake_16, JellyBread_16, Judy_16, Karkharias_15, KayMoney_15, Lasker_16, Lawnathon_16, LeBruni_16, LilyBell_15, LittleRon_15, MUWow_15, Mapleville_15, MaterMagnus_16, MidnightRain_16, MurphyJoseph_16, NewKitty_17, NidoQ_15, NikkiHotWheels_15, Nyilah_15, Peas_16, PeggyLeg03_15, Persistence_15, Phrank15_15, Pucara_15, RadFad_16, Raphaella_16, Richie_16, Sakai_16, Satrap_16, Seahorse_17, Shukran_16, SonDevVon_15, SpicyFrank_16, Sporco_16, ThayneTheZag_16, Tiff81_17, Vopal_17, Windest_17, YoungHarleezy_16,

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

Genes that do not have the "Most Annotated" start:
• Hestia_17, Kabloowy_16, pZL12_53c,

Summary by start number:

Start 5:
• Found in 2 of 69 (2.9%) of genes in pham
• Manual Annotations of this start: 2 of 54
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hestia_17 (AY), Kabloowy_16 (AY),

Start 6:
• Found in 66 of 69 (95.7%) of genes in pham
• Manual Annotations of this start: 52 of 54
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AdaS_16 (AY), Aikyam_16 (AY), Anekin_15 (AY), Auxilium_16 (AY), BasketStar_16 (AY), BenchScraper_16 (AY), Bhageatrice_18 (AY), BillyTP_16 (AY), BlueShadow_16 (AY), Bridgette_15 (FA), ChuckDuck_15 (FA), Constance_15 (FA), CookieBear_16 (AY), CosmicBrownie_16 (AY), Crescenzo_16 (AY), DarwinJr_19 (AY), Ding_16 (AY), Eileen_15 (FA), FosterFrank_15 (FA), Globfish_17 (AY), GlobiWarming_15 (FA), Gorpy_16 (AY), GumGum_16 (AY), Henrique_15 (FA), Hillester_16 (AY), HotPotato_15 (FA), Isolde_17 (AY), JakeTheSnake_16 (AY), JellyBread_16 (AY), Judy_16 (FA), Karkharias_15 (FA), KayMoney_15 (FA), Lasker_16 (AY), Lawnathon_16 (AY), LeBruni_16 (AY), LilyBell_15 (FA), LittleRon_15 (FA), MUWow_15 (AY), Mapleville_15 (AY), MaterMagnus_16 (AY), MidnightRain_16 (AY), MurphyJoseph_16 (AY), NewKitty_17 (AY), NidoQ_15 (FA), NikkiHotWheels_15 (FA), Nyilah_15 (AY), Peas_16 (FA), PeggyLeg03_15 (FA), Persistence_15 (AY), Phrank15_15 (AY), Pucara_15 (FA), RadFad_16 (AY), Raphaella_16 (AY), Richie_16 (AY), Sakai_16 (AY), Satrap_16 (AY), Seahorse_17 (AY), Shukran_16 (AY), SonDevVon_15 (AY), SpicyFrank_16 (AY), Sporco_16 (AY), ThayneTheZag_16 (AY), Tiff81_17 (AY), Vopal_17 (AY), Windest_17 (AY), YoungHarleezy_16 (AY),

Start 8:
• Found in 1 of 69 (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: pZL12_53c (singleton),

Summary by clusters:

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

Info for manual annotations of cluster AY:
•Start number 5 was manually annotated 2 times for cluster AY.
•Start number 6 was manually annotated 39 times for cluster AY.

Info for manual annotations of cluster FA:
•Start number 6 was manually annotated 13 times for cluster FA.

Gene Information:

Gene: AdaS_16 Start: 9651, Stop: 10187, Start Num: 6
Candidate Starts for AdaS_16:
(Start: 6 @9651 has 52 MA's), (7, 9657), (9, 9663), (10, 9684), (13, 9765), (17, 9834), (18, 9849), (20, 9888), (22, 9954), (24, 9966), (28, 9999), (32, 10068), (35, 10113),

Gene: Aikyam_16 Start: 9652, Stop: 10188, Start Num: 6
Candidate Starts for Aikyam_16:
(Start: 6 @9652 has 52 MA's), (7, 9658), (9, 9664), (10, 9685), (13, 9766), (17, 9835), (18, 9850), (20, 9889), (22, 9955), (24, 9967), (28, 10000), (32, 10069), (35, 10114),

Gene: Anekin_15 Start: 9771, Stop: 10307, Start Num: 6
Candidate Starts for Anekin_15:
(Start: 6 @9771 has 52 MA's), (7, 9777), (9, 9783), (16, 9933), (17, 9954), (18, 9969), (19, 9990), (21, 10050), (24, 10086), (27, 10113), (32, 10188), (35, 10233),

Gene: Auxilium_16 Start: 9651, Stop: 10187, Start Num: 6
Candidate Starts for Auxilium_16:
(Start: 6 @9651 has 52 MA's), (7, 9657), (9, 9663), (10, 9684), (13, 9765), (17, 9834), (18, 9849), (20, 9888), (22, 9954), (24, 9966), (28, 9999), (32, 10068), (35, 10113),

Gene: BasketStar_16 Start: 9705, Stop: 10241, Start Num: 6
Candidate Starts for BasketStar_16:
(Start: 6 @9705 has 52 MA's), (7, 9711), (9, 9717), (10, 9738), (13, 9819), (17, 9888), (18, 9903), (20, 9942), (22, 10008), (24, 10020), (28, 10053), (32, 10122), (35, 10167),

Gene: BenchScraper_16 Start: 9666, Stop: 10202, Start Num: 6
Candidate Starts for BenchScraper_16:
(Start: 6 @9666 has 52 MA's), (7, 9672), (9, 9678), (10, 9699), (13, 9780), (17, 9849), (18, 9864), (20, 9903), (22, 9969), (24, 9981), (28, 10014), (32, 10083), (35, 10128),

Gene: Bhageatrice_18 Start: 10868, Stop: 11404, Start Num: 6

Candidate Starts for Bhageatrice_18:
(Start: 6 @10868 has 52 MA's), (7, 10874), (9, 10880), (10, 10901), (17, 11051), (18, 11066), (19, 11087), (24, 11183), (25, 11186), (26, 11189), (28, 11216), (32, 11285), (33, 11312), (35, 11330),

Gene: BillyTP_16 Start: 9654, Stop: 10190, Start Num: 6
Candidate Starts for BillyTP_16:
(Start: 6 @9654 has 52 MA's), (7, 9660), (9, 9666), (17, 9837), (18, 9852), (19, 9873), (24, 9969), (32, 10071), (33, 10098), (35, 10116),

Gene: BlueShadow_16 Start: 9651, Stop: 10187, Start Num: 6
Candidate Starts for BlueShadow_16:
(Start: 6 @9651 has 52 MA's), (7, 9657), (9, 9663), (10, 9684), (13, 9765), (17, 9834), (18, 9849), (20, 9888), (22, 9954), (24, 9966), (28, 9999), (32, 10068), (35, 10113),

Gene: Bridgette_15 Start: 9817, Stop: 10353, Start Num: 6
Candidate Starts for Bridgette_15:
(Start: 6 @9817 has 52 MA's), (7, 9823), (9, 9829), (17, 10000), (18, 10015), (24, 10132), (32, 10234), (35, 10279),

Gene: ChuckDuck_15 Start: 9772, Stop: 10308, Start Num: 6
Candidate Starts for ChuckDuck_15:
(4, 9703), (Start: 6 @9772 has 52 MA's), (7, 9778), (9, 9784), (14, 9901), (17, 9955), (18, 9970), (19, 9991), (24, 10087), (32, 10189), (35, 10234),

Gene: Constance_15 Start: 9820, Stop: 10356, Start Num: 6
Candidate Starts for Constance_15:
(Start: 6 @9820 has 52 MA's), (7, 9826), (9, 9832), (17, 10003), (18, 10018), (24, 10135), (32, 10237), (35, 10282),

Gene: CookieBear_16 Start: 9651, Stop: 10187, Start Num: 6
Candidate Starts for CookieBear_16:
(Start: 6 @9651 has 52 MA's), (7, 9657), (9, 9663), (10, 9684), (13, 9765), (17, 9834), (18, 9849), (20, 9888), (22, 9954), (24, 9966), (28, 9999), (32, 10068), (35, 10113),

Gene: CosmicBrownie_16 Start: 9738, Stop: 10274, Start Num: 6
Candidate Starts for CosmicBrownie_16:
(Start: 6 @9738 has 52 MA's), (7, 9744), (9, 9750), (17, 9921), (18, 9936), (23, 10050), (24, 10053), (32, 10155), (35, 10200),

Gene: Crescenzo_16 Start: 9699, Stop: 10235, Start Num: 6
Candidate Starts for Crescenzo_16:
(Start: 6 @9699 has 52 MA's), (7, 9705), (9, 9711), (16, 9861), (17, 9882), (18, 9897), (19, 9918), (21, 9978), (24, 10014), (27, 10041), (32, 10116), (35, 10161),

Gene: DarwinJr_19 Start: 11003, Stop: 11539, Start Num: 6
Candidate Starts for DarwinJr_19:
(Start: 6 @11003 has 52 MA's), (7, 11009), (9, 11015), (16, 11165), (17, 11186), (18, 11201), (19, 11222), (21, 11282), (24, 11318), (27, 11345), (32, 11420), (35, 11465),

Gene: Ding_16 Start: 9646, Stop: 10182, Start Num: 6
Candidate Starts for Ding_16:
(Start: 6 @9646 has 52 MA's), (7, 9652), (9, 9658), (10, 9679), (13, 9760), (14, 9775), (17, 9829), (18, 9844), (24, 9961), (26, 9967), (28, 9994), (32, 10063), (35, 10108),

Gene: Eileen_15 Start: 9781, Stop: 10317, Start Num: 6
Candidate Starts for Eileen_15:
(Start: 6 @9781 has 52 MA's), (7, 9787), (9, 9793), (17, 9964), (18, 9979), (24, 10096), (32, 10198), (35, 10243),

Gene: FosterFrank_15 Start: 9778, Stop: 10314, Start Num: 6
Candidate Starts for FosterFrank_15:
(Start: 6 @9778 has 52 MA's), (7, 9784), (9, 9790), (17, 9961), (18, 9976), (24, 10093), (32, 10195), (35, 10240),

Gene: Globfish_17 Start: 9725, Stop: 10261, Start Num: 6
Candidate Starts for Globfish_17:
(2, 9650), (Start: 6 @9725 has 52 MA's), (7, 9731), (9, 9737), (10, 9758), (13, 9839), (17, 9908), (18, 9923), (20, 9962), (22, 10028), (24, 10040), (28, 10073), (32, 10142), (35, 10187),

Gene: GlobiWarming_15 Start: 9774, Stop: 10310, Start Num: 6
Candidate Starts for GlobiWarming_15:
(Start: 6 @9774 has 52 MA's), (7, 9780), (9, 9786), (17, 9957), (18, 9972), (24, 10089), (32, 10191), (35, 10236),

Gene: Gorpy_16 Start: 9660, Stop: 10196, Start Num: 6
Candidate Starts for Gorpy_16:
(Start: 6 @9660 has 52 MA's), (7, 9666), (9, 9672), (10, 9693), (13, 9774), (17, 9843), (18, 9858), (20, 9897), (22, 9963), (24, 9975), (28, 10008), (32, 10077), (35, 10122),

Gene: GumGum_16 Start: 9729, Stop: 10265, Start Num: 6
Candidate Starts for GumGum_16:
(Start: 6 @9729 has 52 MA's), (7, 9735), (9, 9741), (17, 9912), (18, 9927), (23, 10041), (24, 10044), (32, 10146), (35, 10191),

Gene: Henrique_15 Start: 9778, Stop: 10314, Start Num: 6
Candidate Starts for Henrique_15:
(Start: 6 @9778 has 52 MA's), (7, 9784), (9, 9790), (17, 9961), (18, 9976), (24, 10093), (32, 10195), (35, 10240),

Gene: Hestia_17 Start: 9769, Stop: 10305, Start Num: 5
Candidate Starts for Hestia_17:
(3, 9697), (Start: 5 @9769 has 2 MA's), (7, 9775), (9, 9781), (10, 9802), (11, 9805), (17, 9952), (18, 9967), (24, 10084), (28, 10117), (31, 10174), (32, 10186), (35, 10231),

Gene: Hillester_16 Start: 9651, Stop: 10187, Start Num: 6
Candidate Starts for Hillester_16:
(Start: 6 @9651 has 52 MA's), (7, 9657), (9, 9663), (10, 9684), (13, 9765), (17, 9834), (18, 9849), (20, 9888), (22, 9954), (24, 9966), (28, 9999), (32, 10068), (35, 10113),

Gene: HotPotato_15 Start: 9782, Stop: 10318, Start Num: 6
Candidate Starts for HotPotato_15:
(Start: 6 @9782 has 52 MA's), (7, 9788), (9, 9794), (17, 9965), (18, 9980), (24, 10097), (32, 10199), (35, 10244),

Gene: Isolde_17 Start: 9725, Stop: 10261, Start Num: 6
Candidate Starts for Isolde_17:

(Start: 6 @9725 has 52 MA's), (7, 9731), (9, 9737), (10, 9758), (17, 9908), (18, 9923), (20, 9962), (22, 10028), (24, 10040), (28, 10073), (32, 10142), (35, 10187),

Gene: JakeTheSnake_16 Start: 9661, Stop: 10197, Start Num: 6
Candidate Starts for JakeTheSnake_16:
(Start: 6 @9661 has 52 MA's), (7, 9667), (9, 9673), (17, 9844), (18, 9859), (19, 9880), (21, 9940), (24, 9976), (27, 10003), (32, 10078), (35, 10123),

Gene: JellyBread_16 Start: 9644, Stop: 10180, Start Num: 6
Candidate Starts for JellyBread_16:
(Start: 6 @9644 has 52 MA's), (7, 9650), (9, 9656), (10, 9677), (13, 9758), (17, 9827), (18, 9842), (20, 9881), (22, 9947), (24, 9959), (28, 9992), (32, 10061), (35, 10106),

Gene: Judy_16 Start: 10091, Stop: 10627, Start Num: 6
Candidate Starts for Judy_16:
(Start: 6 @10091 has 52 MA's), (7, 10097), (9, 10103), (17, 10274), (18, 10289), (24, 10406), (29, 10463), (32, 10508), (35, 10553),

Gene: Kabloowy_16 Start: 9746, Stop: 10282, Start Num: 5
Candidate Starts for Kabloowy_16:
(3, 9674), (Start: 5 @9746 has 2 MA's), (7, 9752), (9, 9758), (11, 9782), (17, 9929), (18, 9944), (24, 10061), (28, 10094), (31, 10151), (32, 10163), (33, 10190), (35, 10208),

Gene: Karkharias_15 Start: 9778, Stop: 10314, Start Num: 6
Candidate Starts for Karkharias_15:
(Start: 6 @9778 has 52 MA's), (7, 9784), (9, 9790), (17, 9961), (18, 9976), (24, 10093), (32, 10195), (35, 10240),

Gene: KayMoney_15 Start: 9774, Stop: 10310, Start Num: 6
Candidate Starts for KayMoney_15:
(4, 9705), (Start: 6 @9774 has 52 MA's), (7, 9780), (9, 9786), (14, 9903), (17, 9957), (18, 9972), (19, 9993), (24, 10089), (32, 10191), (35, 10236),

Gene: Lasker_16 Start: 9659, Stop: 10195, Start Num: 6
Candidate Starts for Lasker_16:
(Start: 6 @9659 has 52 MA's), (7, 9665), (9, 9671), (10, 9692), (13, 9773), (17, 9842), (18, 9857), (20, 9896), (22, 9962), (24, 9974), (28, 10007), (32, 10076), (35, 10121),

Gene: Lawnathon_16 Start: 9799, Stop: 10335, Start Num: 6
Candidate Starts for Lawnathon_16:
(Start: 6 @9799 has 52 MA's), (7, 9805), (9, 9811), (17, 9982), (18, 9997), (19, 10018), (24, 10114), (32, 10216), (33, 10243), (35, 10261),

Gene: LeBruni_16 Start: 9673, Stop: 10209, Start Num: 6
Candidate Starts for LeBruni_16:
(Start: 6 @9673 has 52 MA's), (7, 9679), (9, 9685), (17, 9856), (18, 9871), (24, 9988), (32, 10090), (33, 10117), (35, 10135),

Gene: LilyBell_15 Start: 9794, Stop: 10330, Start Num: 6
Candidate Starts for LilyBell_15:
(Start: 6 @9794 has 52 MA's), (7, 9800), (9, 9806), (17, 9977), (18, 9992), (19, 10013), (24, 10109), (32, 10211), (35, 10256),

Gene: LittleRon_15 Start: 9748, Stop: 10284, Start Num: 6
Candidate Starts for LittleRon_15:
(Start: 6 @9748 has 52 MA's), (7, 9754), (9, 9760), (17, 9931), (18, 9946), (24, 10063), (32, 10165), (35, 10210),

Gene: MUWow_15 Start: 9744, Stop: 10280, Start Num: 6
Candidate Starts for MUWow_15:
(Start: 6 @9744 has 52 MA's), (7, 9750), (9, 9756), (10, 9777), (13, 9858), (17, 9927), (18, 9942), (20, 9981), (22, 10047), (24, 10059), (28, 10092), (32, 10161), (35, 10206),

Gene: Mapleville_15 Start: 9869, Stop: 10405, Start Num: 6
Candidate Starts for Mapleville_15:
(Start: 6 @9869 has 52 MA's), (7, 9875), (9, 9881), (17, 10052), (18, 10067), (19, 10088), (24, 10184), (32, 10286), (33, 10313), (35, 10331),

Gene: MaterMagnus_16 Start: 9652, Stop: 10188, Start Num: 6
Candidate Starts for MaterMagnus_16:
(Start: 6 @9652 has 52 MA's), (7, 9658), (9, 9664), (10, 9685), (13, 9766), (17, 9835), (18, 9850), (20, 9889), (22, 9955), (24, 9967), (28, 10000), (32, 10069), (35, 10114),

Gene: MidnightRain_16 Start: 9650, Stop: 10186, Start Num: 6
Candidate Starts for MidnightRain_16:
(Start: 6 @9650 has 52 MA's), (7, 9656), (9, 9662), (10, 9683), (13, 9764), (17, 9833), (18, 9848), (20, 9887), (22, 9953), (24, 9965), (28, 9998), (32, 10067), (35, 10112),

Gene: MurphyJoseph_16 Start: 9664, Stop: 10200, Start Num: 6
Candidate Starts for MurphyJoseph_16:
(Start: 6 @9664 has 52 MA's), (7, 9670), (9, 9676), (10, 9697), (17, 9847), (21, 9943), (24, 9979), (33, 10108), (34, 10117), (35, 10126),

Gene: NewKitty_17 Start: 9881, Stop: 10417, Start Num: 6
Candidate Starts for NewKitty_17:
(Start: 6 @9881 has 52 MA's), (7, 9887), (9, 9893), (10, 9914), (13, 9995), (17, 10064), (18, 10079), (20, 10118), (22, 10184), (24, 10196), (28, 10229), (32, 10298), (35, 10343),

Gene: NidoQ_15 Start: 9837, Stop: 10373, Start Num: 6
Candidate Starts for NidoQ_15:
(Start: 6 @9837 has 52 MA's), (7, 9843), (9, 9849), (17, 10020), (18, 10035), (24, 10152), (32, 10254), (35, 10299),

Gene: NikkiHotWheels_15 Start: 9777, Stop: 10313, Start Num: 6
Candidate Starts for NikkiHotWheels_15:
(Start: 6 @9777 has 52 MA's), (7, 9783), (9, 9789), (17, 9960), (18, 9975), (24, 10092), (32, 10194), (35, 10239),

Gene: Nyilah_15 Start: 9770, Stop: 10306, Start Num: 6
Candidate Starts for Nyilah_15:
(Start: 6 @9770 has 52 MA's), (7, 9776), (9, 9782), (17, 9953), (24, 10085), (32, 10187), (35, 10232),

Gene: Peas_16 Start: 9781, Stop: 10317, Start Num: 6
Candidate Starts for Peas_16:
(Start: 6 @9781 has 52 MA's), (7, 9787), (9, 9793), (17, 9964), (18, 9979), (24, 10096), (32, 10198), (35, 10243),

Gene: PeggyLeg03_15 Start: 9820, Stop: 10356, Start Num: 6
Candidate Starts for PeggyLeg03_15:
(Start: 6 @9820 has 52 MA's), (7, 9826), (9, 9832), (17, 10003), (18, 10018), (24, 10135), (32, 10237), (35, 10282),

Gene: Persistence_15 Start: 9723, Stop: 10259, Start Num: 6
Candidate Starts for Persistence_15:
(Start: 6 @9723 has 52 MA's), (7, 9729), (9, 9735), (16, 9885), (17, 9906), (18, 9921), (19, 9942), (24, 10038), (27, 10065), (32, 10140), (35, 10185),

Gene: Phrank15_15 Start: 9804, Stop: 10340, Start Num: 6
Candidate Starts for Phrank15_15:
(Start: 6 @9804 has 52 MA's), (7, 9810), (9, 9816), (17, 9987), (18, 10002), (23, 10116), (24, 10119), (32, 10221), (35, 10266),

Gene: Pucara_15 Start: 9781, Stop: 10317, Start Num: 6
Candidate Starts for Pucara_15:
(Start: 6 @9781 has 52 MA's), (7, 9787), (9, 9793), (17, 9964), (18, 9979), (24, 10096), (32, 10198), (35, 10243),

Gene: RadFad_16 Start: 9651, Stop: 10187, Start Num: 6
Candidate Starts for RadFad_16:
(Start: 6 @9651 has 52 MA's), (7, 9657), (9, 9663), (10, 9684), (13, 9765), (17, 9834), (18, 9849), (20, 9888), (22, 9954), (24, 9966), (28, 9999), (32, 10068), (35, 10113),

Gene: Raphaella_16 Start: 9651, Stop: 10187, Start Num: 6
Candidate Starts for Raphaella_16:
(Start: 6 @9651 has 52 MA's), (7, 9657), (9, 9663), (10, 9684), (13, 9765), (17, 9834), (18, 9849), (20, 9888), (22, 9954), (24, 9966), (28, 9999), (32, 10068), (35, 10113),

Gene: Richie_16 Start: 9666, Stop: 10202, Start Num: 6
Candidate Starts for Richie_16:
(Start: 6 @9666 has 52 MA's), (7, 9672), (9, 9678), (10, 9699), (13, 9780), (17, 9849), (18, 9864), (20, 9903), (22, 9969), (24, 9981), (28, 10014), (32, 10083), (35, 10128),

Gene: Sakai_16 Start: 9660, Stop: 10196, Start Num: 6
Candidate Starts for Sakai_16:
(Start: 6 @9660 has 52 MA's), (7, 9666), (9, 9672), (10, 9693), (13, 9774), (17, 9843), (18, 9858), (20, 9897), (22, 9963), (24, 9975), (28, 10008), (32, 10077), (35, 10122),

Gene: Satrap_16 Start: 9612, Stop: 10148, Start Num: 6
Candidate Starts for Satrap_16:
(Start: 6 @9612 has 52 MA's), (7, 9618), (9, 9624), (10, 9645), (17, 9795), (19, 9831), (24, 9927), (28, 9960), (32, 10029), (33, 10056), (34, 10065), (35, 10074),

Gene: Seahorse_17 Start: 9917, Stop: 10453, Start Num: 6
Candidate Starts for Seahorse_17:
(Start: 6 @9917 has 52 MA's), (7, 9923), (9, 9929), (10, 9950), (17, 10100), (21, 10196), (24, 10232), (33, 10361), (34, 10370), (35, 10379),

Gene: Shukran_16 Start: 9612, Stop: 10148, Start Num: 6
Candidate Starts for Shukran_16:

(Start: 6 @9612 has 52 MA's), (7, 9618), (9, 9624), (10, 9645), (17, 9795), (19, 9831), (24, 9927), (28, 9960), (32, 10029), (33, 10056), (34, 10065), (35, 10074),

Gene: SonDevVon_15 Start: 9653, Stop: 10189, Start Num: 6
Candidate Starts for SonDevVon_15:
(Start: 6 @9653 has 52 MA's), (7, 9659), (9, 9665), (10, 9686), (13, 9767), (17, 9836), (18, 9851), (20, 9890), (22, 9956), (24, 9968), (28, 10001), (32, 10070), (35, 10115),

Gene: SpicyFrank_16 Start: 9728, Stop: 10264, Start Num: 6
Candidate Starts for SpicyFrank_16:
(2, 9665), (Start: 6 @9728 has 52 MA's), (7, 9734), (9, 9740), (13, 9842), (15, 9869), (17, 9911), (18, 9926), (20, 9965), (22, 10031), (24, 10043), (28, 10076), (32, 10145), (35, 10190),

Gene: Sporco_16 Start: 9708, Stop: 10244, Start Num: 6
Candidate Starts for Sporco_16:
(Start: 6 @9708 has 52 MA's), (7, 9714), (9, 9720), (10, 9741), (13, 9822), (17, 9891), (18, 9906), (20, 9945), (22, 10011), (24, 10023), (28, 10056), (32, 10125), (35, 10170),

Gene: ThayneTheZag_16 Start: 9726, Stop: 10262, Start Num: 6
Candidate Starts for ThayneTheZag_16:
(1, 9636), (Start: 6 @9726 has 52 MA's), (7, 9732), (9, 9738), (10, 9759), (13, 9840), (17, 9909), (18, 9924), (20, 9963), (22, 10029), (24, 10041), (28, 10074), (32, 10143), (35, 10188),

Gene: Tiff81_17 Start: 9875, Stop: 10411, Start Num: 6
Candidate Starts for Tiff81_17:
(Start: 6 @9875 has 52 MA's), (7, 9881), (9, 9887), (17, 10058), (24, 10190), (32, 10292), (35, 10337),

Gene: Vopal_17 Start: 9723, Stop: 10259, Start Num: 6
Candidate Starts for Vopal_17:
(Start: 6 @9723 has 52 MA's), (7, 9729), (9, 9735), (10, 9756), (13, 9837), (17, 9906), (18, 9921), (20, 9960), (22, 10026), (24, 10038), (28, 10071), (32, 10140), (35, 10185),

Gene: Windest_17 Start: 9708, Stop: 10244, Start Num: 6
Candidate Starts for Windest_17:
(Start: 6 @9708 has 52 MA's), (7, 9714), (9, 9720), (10, 9741), (13, 9822), (17, 9891), (18, 9906), (20, 9945), (22, 10011), (24, 10023), (28, 10056), (32, 10125), (35, 10170),

Gene: YoungHarleezy_16 Start: 9664, Stop: 10200, Start Num: 6
Candidate Starts for YoungHarleezy_16:
(Start: 6 @9664 has 52 MA's), (7, 9670), (9, 9676), (10, 9697), (13, 9778), (17, 9847), (18, 9862), (20, 9901), (22, 9967), (24, 9979), (28, 10012), (32, 10081), (35, 10126),

Gene: pZL12_53c Start: 44878, Stop: 44330, Start Num: 8
Candidate Starts for pZL12_53c:
(8, 44878), (12, 44779), (30, 44488), (36, 44386), (37, 44368), (38, 44350),