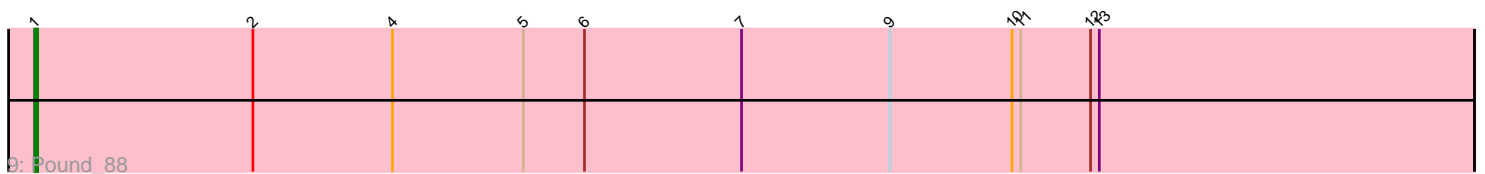
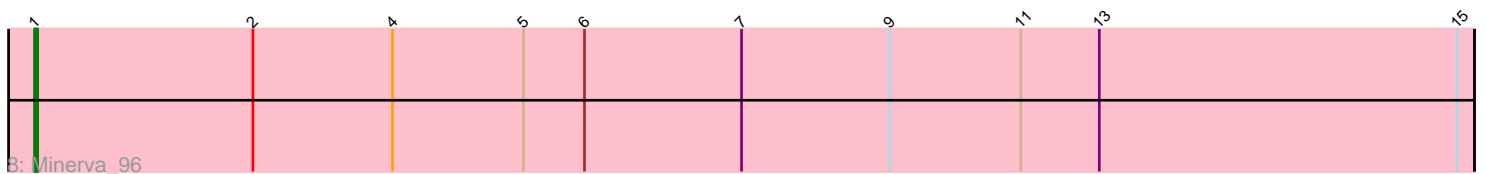
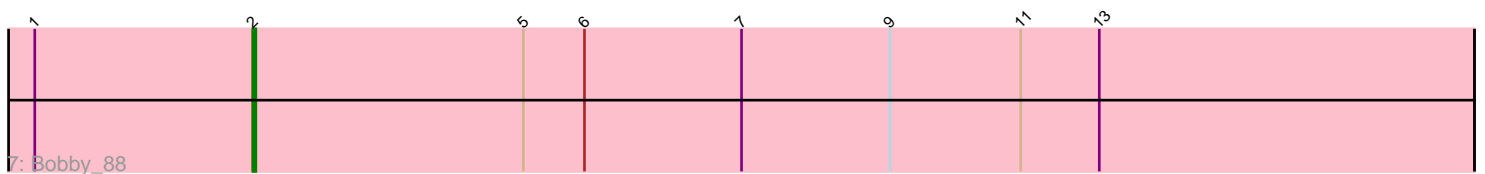
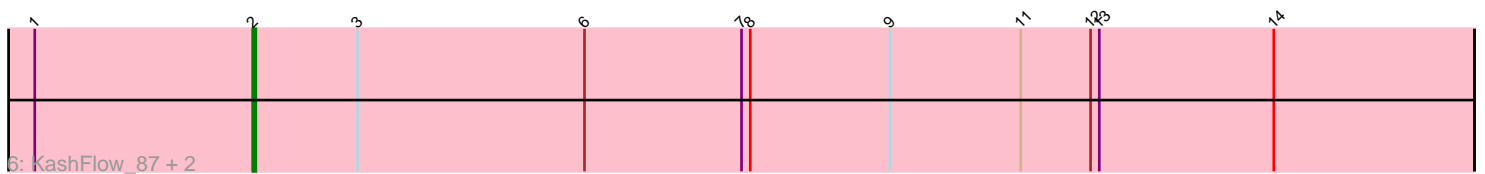
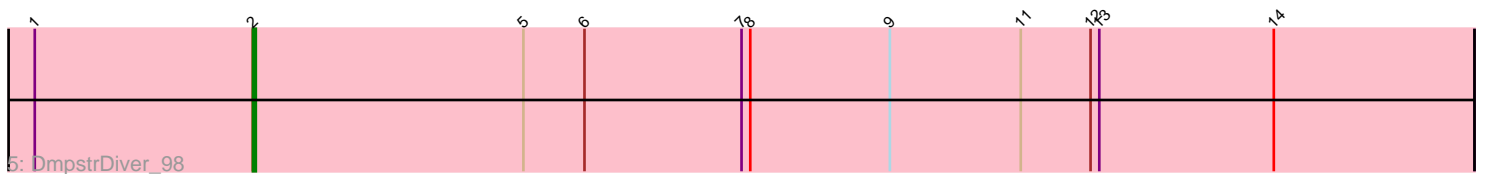
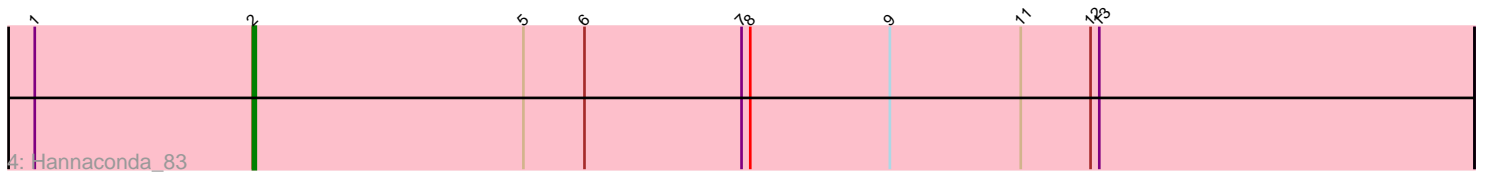
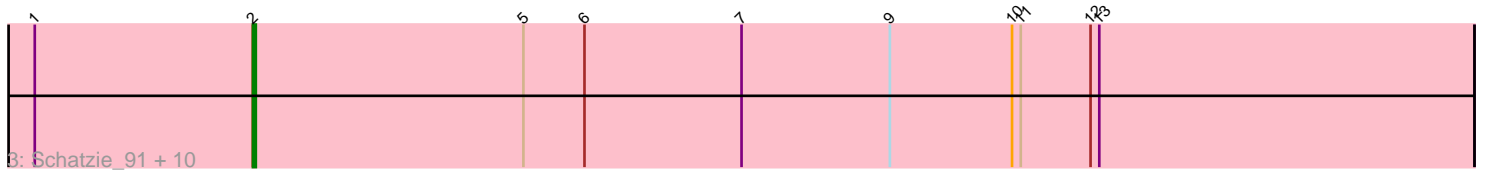
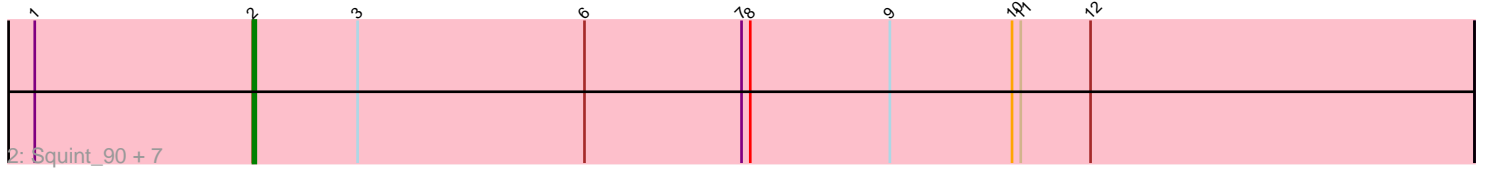
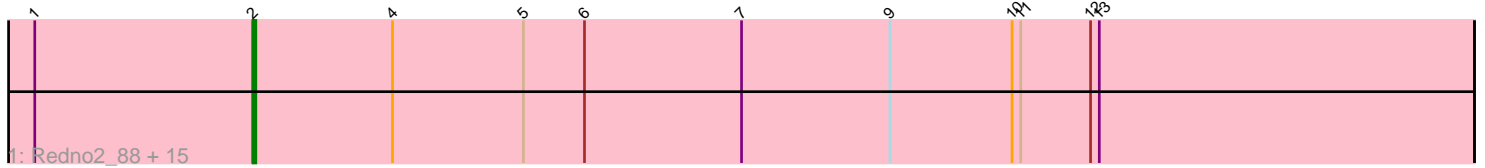


Pham 2218



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 2218 Report

This analysis was run 04/28/24 on database version 559.

Pham number 2218 has 43 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Redno2_88, Thibault_81, JuicyJay_93, Beem_97, Ejimix_90, Halley_98, Klein_97, Bombitas_85, Optimus_90, BAKA_98, Dallas_98, Dove_85, NihilNomen_98, Wanda_100, Zelink_93, HokkenD_85
- Track 2 : Squint_90, Lucky2013_89, Courthouse_87, MiaZeal_92, Superphikiman_89, Porcelain_90, LittleE_95, Ariel_91
- Track 3 : Schatzie_91, Kalah2_90, ThreeRngTarjay_93, Bagrid_95, Yeet_89, EricMillard_90, Duke13_92, Hughesyang_96, Phoebus_98, Odette_96, Constella_82
- Track 4 : Hannaconda_83
- Track 5 : DmpstrDiver_98
- Track 6 : KashFlow_87, Omega_100, Gonephishing_83
- Track 7 : Bobby_88
- Track 8 : Minerva_96
- Track 9 : Pound_88

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

The start number called the most often in the published annotations is 2, it was called in 37 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariel_91, BAKA_98, Bagrid_95, Beem_97, Bobby_88, Bombitas_85, Constella_82, Courthouse_87, Dallas_98, DmpstrDiver_98, Dove_85, Duke13_92, Ejimix_90, EricMillard_90, Gonephishing_83, Halley_98, Hannaconda_83, HokkenD_85, Hughesyang_96, JuicyJay_93, Kalah2_90, KashFlow_87, Klein_97, LittleE_95, Lucky2013_89, MiaZeal_92, NihilNomen_98, Odette_96, Omega_100, Optimus_90, Phoebus_98, Porcelain_90, Redno2_88, Schatzie_91, Squint_90, Superphikiman_89, Thibault_81, ThreeRngTarjay_93, Wanda_100, Yeet_89, Zelink_93,

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

- Minerva_96, Pound_88,

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

-

Summary by start number:

Start 1:

- Found in 43 of 43 (100.0%) of genes in pham
- Manual Annotations of this start: 2 of 39
- Called 4.7% of time when present
- Phage (with cluster) where this start called: Minerva_96 (J), Pound_88 (J),

Start 2:

- Found in 43 of 43 (100.0%) of genes in pham
- Manual Annotations of this start: 37 of 39
- Called 95.3% of time when present
- Phage (with cluster) where this start called: Ariel_91 (J), BAKA_98 (J), Bagrid_95 (J), Beem_97 (J), Bobby_88 (J), Bombitas_85 (J), Constella_82 (J), Courthouse_87 (J), Dallas_98 (J), DmpstrDiver_98 (J), Dove_85 (J), Duke13_92 (J), Ejimix_90 (J), EricMillard_90 (J), Gonephishing_83 (J), Halley_98 (J), Hannaconda_83 (J), HokkenD_85 (J), Hughesyang_96 (J), JuicyJay_93 (J), Kalah2_90 (J), KashFlow_87 (J), Klein_97 (J), LittleE_95 (J), Lucky2013_89 (J), MiaZeal_92 (J), NihilNomen_98 (J), Odette_96 (J), Omega_100 (J), Optimus_90 (J), Phoebus_98 (J), Porcelain_90 (J), Redno2_88 (J), Schatzie_91 (J), Squint_90 (J), Superphikiman_89 (J), Thibault_81 (J), ThreeRngTarjay_93 (J), Wanda_100 (J), Yeet_89 (J), Zelink_93 (J),

Summary by clusters:

There is one cluster represented in this pham: J

Info for manual annotations of cluster J:

- Start number 1 was manually annotated 2 times for cluster J.
- Start number 2 was manually annotated 37 times for cluster J.

Gene Information:

Gene: Ariel_91 Start: 53997, Stop: 53578, Start Num: 2

Candidate Starts for Ariel_91:

(Start: 1 @54072 has 2 MA's), (Start: 2 @53997 has 37 MA's), (3, 53961), (6, 53883), (7, 53829), (8, 53826), (9, 53778), (10, 53736), (11, 53733), (12, 53709),

Gene: BAKA_98 Start: 59898, Stop: 59479, Start Num: 2

Candidate Starts for BAKA_98:

(Start: 1 @59973 has 2 MA's), (Start: 2 @59898 has 37 MA's), (4, 59850), (5, 59805), (6, 59784), (7, 59730), (9, 59679), (10, 59637), (11, 59634), (12, 59610), (13, 59607),

Gene: Bagrid_95 Start: 58764, Stop: 58345, Start Num: 2

Candidate Starts for Bagrid_95:

(Start: 1 @58839 has 2 MA's), (Start: 2 @58764 has 37 MA's), (5, 58671), (6, 58650), (7, 58596), (9, 58545), (10, 58503), (11, 58500), (12, 58476), (13, 58473),

Gene: Beem_97 Start: 59625, Stop: 59206, Start Num: 2

Candidate Starts for Beem_97:

(Start: 1 @59700 has 2 MA's), (Start: 2 @59625 has 37 MA's), (4, 59577), (5, 59532), (6, 59511), (7, 59457), (9, 59406), (10, 59364), (11, 59361), (12, 59337), (13, 59334),

Gene: Bobby_88 Start: 57990, Stop: 57571, Start Num: 2

Candidate Starts for Bobby_88:

(Start: 1 @58065 has 2 MA's), (Start: 2 @57990 has 37 MA's), (5, 57897), (6, 57876), (7, 57822), (9, 57771), (11, 57726), (13, 57699),

Gene: Bombitas_85 Start: 56788, Stop: 56369, Start Num: 2

Candidate Starts for Bombitas_85:

(Start: 1 @56863 has 2 MA's), (Start: 2 @56788 has 37 MA's), (4, 56740), (5, 56695), (6, 56674), (7, 56620), (9, 56569), (10, 56527), (11, 56524), (12, 56500), (13, 56497),

Gene: Constella_82 Start: 53794, Stop: 53375, Start Num: 2

Candidate Starts for Constella_82:

(Start: 1 @53869 has 2 MA's), (Start: 2 @53794 has 37 MA's), (5, 53701), (6, 53680), (7, 53626), (9, 53575), (10, 53533), (11, 53530), (12, 53506), (13, 53503),

Gene: Courthouse_87 Start: 53597, Stop: 53178, Start Num: 2

Candidate Starts for Courthouse_87:

(Start: 1 @53672 has 2 MA's), (Start: 2 @53597 has 37 MA's), (3, 53561), (6, 53483), (7, 53429), (8, 53426), (9, 53378), (10, 53336), (11, 53333), (12, 53309),

Gene: Dallas_98 Start: 59633, Stop: 59214, Start Num: 2

Candidate Starts for Dallas_98:

(Start: 1 @59708 has 2 MA's), (Start: 2 @59633 has 37 MA's), (4, 59585), (5, 59540), (6, 59519), (7, 59465), (9, 59414), (10, 59372), (11, 59369), (12, 59345), (13, 59342),

Gene: DmpstrDiver_98 Start: 59056, Stop: 58637, Start Num: 2

Candidate Starts for DmpstrDiver_98:

(Start: 1 @59131 has 2 MA's), (Start: 2 @59056 has 37 MA's), (5, 58963), (6, 58942), (7, 58888), (8, 58885), (9, 58837), (11, 58792), (12, 58768), (13, 58765), (14, 58705),

Gene: Dove_85 Start: 55054, Stop: 54635, Start Num: 2

Candidate Starts for Dove_85:

(Start: 1 @55129 has 2 MA's), (Start: 2 @55054 has 37 MA's), (4, 55006), (5, 54961), (6, 54940), (7, 54886), (9, 54835), (10, 54793), (11, 54790), (12, 54766), (13, 54763),

Gene: Duke13_92 Start: 57565, Stop: 57146, Start Num: 2

Candidate Starts for Duke13_92:

(Start: 1 @57640 has 2 MA's), (Start: 2 @57565 has 37 MA's), (5, 57472), (6, 57451), (7, 57397), (9, 57346), (10, 57304), (11, 57301), (12, 57277), (13, 57274),

Gene: Ejimix_90 Start: 59352, Stop: 58933, Start Num: 2

Candidate Starts for Ejimix_90:

(Start: 1 @59427 has 2 MA's), (Start: 2 @59352 has 37 MA's), (4, 59304), (5, 59259), (6, 59238), (7, 59184), (9, 59133), (10, 59091), (11, 59088), (12, 59064), (13, 59061),

Gene: EricMillard_90 Start: 58693, Stop: 58274, Start Num: 2

Candidate Starts for EricMillard_90:

(Start: 1 @58768 has 2 MA's), (Start: 2 @58693 has 37 MA's), (5, 58600), (6, 58579), (7, 58525), (9, 58474), (10, 58432), (11, 58429), (12, 58405), (13, 58402),

Gene: Gonephishing_83 Start: 53159, Stop: 52740, Start Num: 2
Candidate Starts for Gonephishing_83:
(Start: 1 @53234 has 2 MA's), (Start: 2 @53159 has 37 MA's), (3, 53123), (6, 53045), (7, 52991), (8, 52988), (9, 52940), (11, 52895), (12, 52871), (13, 52868), (14, 52808),

Gene: Halley_98 Start: 59626, Stop: 59207, Start Num: 2
Candidate Starts for Halley_98:
(Start: 1 @59701 has 2 MA's), (Start: 2 @59626 has 37 MA's), (4, 59578), (5, 59533), (6, 59512), (7, 59458), (9, 59407), (10, 59365), (11, 59362), (12, 59338), (13, 59335),

Gene: Hannaconda_83 Start: 52566, Stop: 52147, Start Num: 2
Candidate Starts for Hannaconda_83:
(Start: 1 @52641 has 2 MA's), (Start: 2 @52566 has 37 MA's), (5, 52473), (6, 52452), (7, 52398), (8, 52395), (9, 52347), (11, 52302), (12, 52278), (13, 52275),

Gene: HokkenD_85 Start: 57895, Stop: 57476, Start Num: 2
Candidate Starts for HokkenD_85:
(Start: 1 @57970 has 2 MA's), (Start: 2 @57895 has 37 MA's), (4, 57847), (5, 57802), (6, 57781), (7, 57727), (9, 57676), (10, 57634), (11, 57631), (12, 57607), (13, 57604),

Gene: Hughesyang_96 Start: 59584, Stop: 59165, Start Num: 2
Candidate Starts for Hughesyang_96:
(Start: 1 @59659 has 2 MA's), (Start: 2 @59584 has 37 MA's), (5, 59491), (6, 59470), (7, 59416), (9, 59365), (10, 59323), (11, 59320), (12, 59296), (13, 59293),

Gene: JuicyJay_93 Start: 60760, Stop: 60341, Start Num: 2
Candidate Starts for JuicyJay_93:
(Start: 1 @60835 has 2 MA's), (Start: 2 @60760 has 37 MA's), (4, 60712), (5, 60667), (6, 60646), (7, 60592), (9, 60541), (10, 60499), (11, 60496), (12, 60472), (13, 60469),

Gene: Kalah2_90 Start: 58919, Stop: 58500, Start Num: 2
Candidate Starts for Kalah2_90:
(Start: 1 @58994 has 2 MA's), (Start: 2 @58919 has 37 MA's), (5, 58826), (6, 58805), (7, 58751), (9, 58700), (10, 58658), (11, 58655), (12, 58631), (13, 58628),

Gene: KashFlow_87 Start: 54127, Stop: 53708, Start Num: 2
Candidate Starts for KashFlow_87:
(Start: 1 @54202 has 2 MA's), (Start: 2 @54127 has 37 MA's), (3, 54091), (6, 54013), (7, 53959), (8, 53956), (9, 53908), (11, 53863), (12, 53839), (13, 53836), (14, 53776),

Gene: Klein_97 Start: 58626, Stop: 58207, Start Num: 2
Candidate Starts for Klein_97:
(Start: 1 @58701 has 2 MA's), (Start: 2 @58626 has 37 MA's), (4, 58578), (5, 58533), (6, 58512), (7, 58458), (9, 58407), (10, 58365), (11, 58362), (12, 58338), (13, 58335),

Gene: LittleE_95 Start: 57693, Stop: 57274, Start Num: 2
Candidate Starts for LittleE_95:
(Start: 1 @57768 has 2 MA's), (Start: 2 @57693 has 37 MA's), (3, 57657), (6, 57579), (7, 57525), (8, 57522), (9, 57474), (10, 57432), (11, 57429), (12, 57405),

Gene: Lucky2013_89 Start: 54013, Stop: 53594, Start Num: 2
Candidate Starts for Lucky2013_89:

(Start: 1 @54088 has 2 MA's), (Start: 2 @54013 has 37 MA's), (3, 53977), (6, 53899), (7, 53845), (8, 53842), (9, 53794), (10, 53752), (11, 53749), (12, 53725),

Gene: MiaZeal_92 Start: 54669, Stop: 54250, Start Num: 2

Candidate Starts for MiaZeal_92:

(Start: 1 @54744 has 2 MA's), (Start: 2 @54669 has 37 MA's), (3, 54633), (6, 54555), (7, 54501), (8, 54498), (9, 54450), (10, 54408), (11, 54405), (12, 54381),

Gene: Minerva_96 Start: 59646, Stop: 59152, Start Num: 1

Candidate Starts for Minerva_96:

(Start: 1 @59646 has 2 MA's), (Start: 2 @59571 has 37 MA's), (4, 59523), (5, 59478), (6, 59457), (7, 59403), (9, 59352), (11, 59307), (13, 59280), (15, 59157),

Gene: NihilNomen_98 Start: 59712, Stop: 59293, Start Num: 2

Candidate Starts for NihilNomen_98:

(Start: 1 @59787 has 2 MA's), (Start: 2 @59712 has 37 MA's), (4, 59664), (5, 59619), (6, 59598), (7, 59544), (9, 59493), (10, 59451), (11, 59448), (12, 59424), (13, 59421),

Gene: Odette_96 Start: 58755, Stop: 58336, Start Num: 2

Candidate Starts for Odette_96:

(Start: 1 @58830 has 2 MA's), (Start: 2 @58755 has 37 MA's), (5, 58662), (6, 58641), (7, 58587), (9, 58536), (10, 58494), (11, 58491), (12, 58467), (13, 58464),

Gene: Omega_100 Start: 59466, Stop: 59047, Start Num: 2

Candidate Starts for Omega_100:

(Start: 1 @59541 has 2 MA's), (Start: 2 @59466 has 37 MA's), (3, 59430), (6, 59352), (7, 59298), (8, 59295), (9, 59247), (11, 59202), (12, 59178), (13, 59175), (14, 59115),

Gene: Optimus_90 Start: 58247, Stop: 57828, Start Num: 2

Candidate Starts for Optimus_90:

(Start: 1 @58322 has 2 MA's), (Start: 2 @58247 has 37 MA's), (4, 58199), (5, 58154), (6, 58133), (7, 58079), (9, 58028), (10, 57986), (11, 57983), (12, 57959), (13, 57956),

Gene: Phoebus_98 Start: 60895, Stop: 60476, Start Num: 2

Candidate Starts for Phoebus_98:

(Start: 1 @60970 has 2 MA's), (Start: 2 @60895 has 37 MA's), (5, 60802), (6, 60781), (7, 60727), (9, 60676), (10, 60634), (11, 60631), (12, 60607), (13, 60604),

Gene: Porcelain_90 Start: 54669, Stop: 54250, Start Num: 2

Candidate Starts for Porcelain_90:

(Start: 1 @54744 has 2 MA's), (Start: 2 @54669 has 37 MA's), (3, 54633), (6, 54555), (7, 54501), (8, 54498), (9, 54450), (10, 54408), (11, 54405), (12, 54381),

Gene: Pound_88 Start: 58999, Stop: 58505, Start Num: 1

Candidate Starts for Pound_88:

(Start: 1 @58999 has 2 MA's), (Start: 2 @58924 has 37 MA's), (4, 58876), (5, 58831), (6, 58810), (7, 58756), (9, 58705), (10, 58663), (11, 58660), (12, 58636), (13, 58633),

Gene: Redno2_88 Start: 55446, Stop: 55027, Start Num: 2

Candidate Starts for Redno2_88:

(Start: 1 @55521 has 2 MA's), (Start: 2 @55446 has 37 MA's), (4, 55398), (5, 55353), (6, 55332), (7, 55278), (9, 55227), (10, 55185), (11, 55182), (12, 55158), (13, 55155),

Gene: Schatzie_91 Start: 58502, Stop: 58083, Start Num: 2

Candidate Starts for Schatzie_91:

(Start: 1 @58577 has 2 MA's), (Start: 2 @58502 has 37 MA's), (5, 58409), (6, 58388), (7, 58334), (9, 58283), (10, 58241), (11, 58238), (12, 58214), (13, 58211),

Gene: Squint_90 Start: 54788, Stop: 54369, Start Num: 2

Candidate Starts for Squint_90:

(Start: 1 @54863 has 2 MA's), (Start: 2 @54788 has 37 MA's), (3, 54752), (6, 54674), (7, 54620), (8, 54617), (9, 54569), (10, 54527), (11, 54524), (12, 54500),

Gene: Superphikiman_89 Start: 53879, Stop: 53460, Start Num: 2

Candidate Starts for Superphikiman_89:

(Start: 1 @53954 has 2 MA's), (Start: 2 @53879 has 37 MA's), (3, 53843), (6, 53765), (7, 53711), (8, 53708), (9, 53660), (10, 53618), (11, 53615), (12, 53591),

Gene: Thibault_81 Start: 54411, Stop: 53992, Start Num: 2

Candidate Starts for Thibault_81:

(Start: 1 @54486 has 2 MA's), (Start: 2 @54411 has 37 MA's), (4, 54363), (5, 54318), (6, 54297), (7, 54243), (9, 54192), (10, 54150), (11, 54147), (12, 54123), (13, 54120),

Gene: ThreeRngTarjay_93 Start: 59787, Stop: 59368, Start Num: 2

Candidate Starts for ThreeRngTarjay_93:

(Start: 1 @59862 has 2 MA's), (Start: 2 @59787 has 37 MA's), (5, 59694), (6, 59673), (7, 59619), (9, 59568), (10, 59526), (11, 59523), (12, 59499), (13, 59496),

Gene: Wanda_100 Start: 58904, Stop: 58485, Start Num: 2

Candidate Starts for Wanda_100:

(Start: 1 @58979 has 2 MA's), (Start: 2 @58904 has 37 MA's), (4, 58856), (5, 58811), (6, 58790), (7, 58736), (9, 58685), (10, 58643), (11, 58640), (12, 58616), (13, 58613),

Gene: Yeet_89 Start: 58004, Stop: 57585, Start Num: 2

Candidate Starts for Yeet_89:

(Start: 1 @58079 has 2 MA's), (Start: 2 @58004 has 37 MA's), (5, 57911), (6, 57890), (7, 57836), (9, 57785), (10, 57743), (11, 57740), (12, 57716), (13, 57713),

Gene: Zelink_93 Start: 60098, Stop: 59679, Start Num: 2

Candidate Starts for Zelink_93:

(Start: 1 @60173 has 2 MA's), (Start: 2 @60098 has 37 MA's), (4, 60050), (5, 60005), (6, 59984), (7, 59930), (9, 59879), (10, 59837), (11, 59834), (12, 59810), (13, 59807),