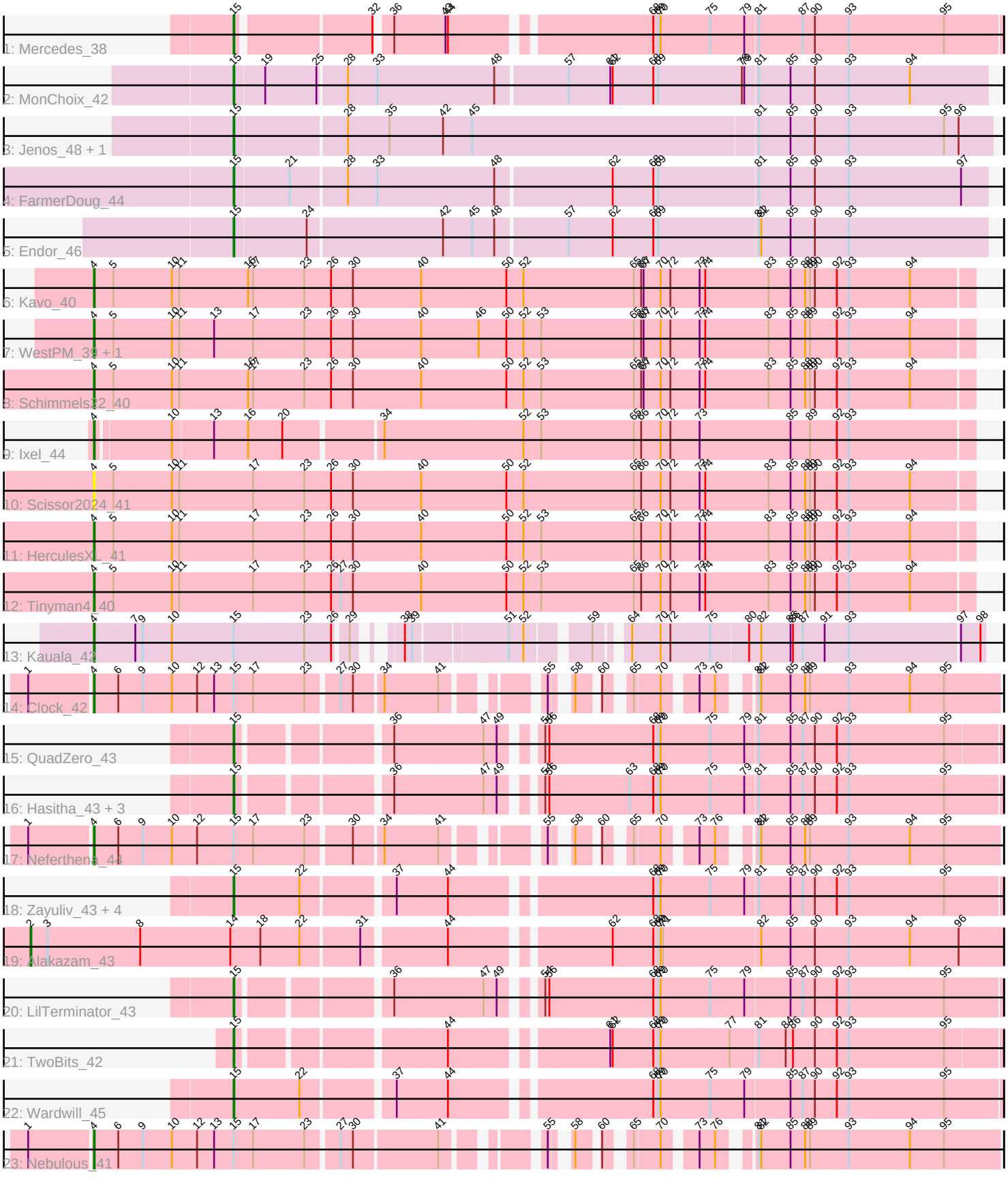
Pham 347886


1: Mercedes_38
2: MonChoix_42
3: Jenos_48 + 1
4: FarmerDoug_44
5: Endor_46
6: Kavo_40
7: WestPM_39 + 1
8: Schimmels22_40
9: Ixel_44
10: Scissor2024_41
11: HerculesX_41
12: Tinyman4_40
13: Kauala_42
14: Clock_42
15: QuadZero_43
16: Hasitha_43 + 3
17: Neferthena_44
18: Zayuliv_43 + 4
19: Alakazam_43
20: LilTerminator_43
21: TwoBits_42
22: Wardwill_45
23: Nebulous_41

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 347886 Report

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

Pham number 347886 has 32 members, 3 are drafts.

Phages represented in each track:
- Track 1 : Mercedes_38
- Track 2 : MonChoix_42
- Track 3 : Jenos_48, CarisSwetlik_47
- Track 4 : FarmerDoug_44
- Track 5 : Endor_46
- Track 6 : Kavo_40
- Track 7 : WestPM_39, Penta_39
- Track 8 : Schimmels22_40
- Track 9 : Ixel_44
- Track 10 : Scissor2024_41
- Track 11 : HerculesXL_41
- Track 12 : Tinyman4_40
- Track 13 : Kauala_42
- Track 14 : Clock_42
- Track 15 : QuadZero_43
- Track 16 : Hasitha_43, Fulton_43, CaptainRex_43, Librie_43
- Track 17 : Neferthena_44
- Track 18 : Zayuliv_43, GreenIvy_42, Zepp_43, BaronJohn_44, Vafari_43
- Track 19 : Alakazam_43
- Track 20 : LilTerminator_43
- Track 21 : TwoBits_42
- Track 22 : Wardwill_45
- Track 23 : Nebulous_41

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

The start number called the most often in the published annotations is 15, it was called in 18 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- BaronJohn_44, CaptainRex_43, CarisSwetlik_47, Endor_46, FarmerDoug_44, Fulton_43, GreenIvy_42, Hasitha_43, Jenos_48, Librie_43, LilTerminator_43, Mercedes_38, MonChoix_42, QuadZero_43, TwoBits_42, Vafari_43, Wardwill_45, Zayuliv_43, Zepp_43,

Genes that have the "Most Annotated" start but do not call it:
• Clock_42, Kauala_42, Nebulous_41, Neferthena_44,

Genes that do not have the "Most Annotated" start:
• Alakazam_43, HerculesXL_41, Ixel_44, Kavo_40, Penta_39, Schimmels22_40, Scissor2024_41, Tinyman4_40, WestPM_39,

Summary by start number:

Start 2:
• Found in 1 of 32 (3.1%) of genes in pham
• Manual Annotations of this start: 1 of 29
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alakazam_43 (EA5),

Start 4:
• Found in 12 of 32 (37.5%) of genes in pham
• Manual Annotations of this start: 10 of 29
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Clock_42 (EA5), HerculesXL_41 (EA11), Ixel_44 (EA11), Kauala_42 (EA4), Kavo_40 (EA11), Nebulous_41 (EA5), Neferthena_44 (EA5), Penta_39 (EA11), Schimmels22_40 (EA11), Scissor2024_41 (EA11), Tinyman4_40 (EA11), WestPM_39 (EA11),

Start 15:
• Found in 23 of 32 (71.9%) of genes in pham
• Manual Annotations of this start: 18 of 29
• Called 82.6% of time when present
• Phage (with cluster) where this start called: BaronJohn_44 (EA5), CaptainRex_43 (EA5), CarisSwetlik_47 (EA1), Endor_46 (EA1), FarmerDoug_44 (EA1), Fulton_43 (EA5), GreenIvy_42 (EA5), Hasitha_43 (EA5), Jenos_48 (EA1), Librie_43 (EA5), LilTerminator_43 (EA5), Mercedes_38 (EA), MonChoix_42 (EA1), QuadZero_43 (EA5), TwoBits_42 (EA5), Vafari_43 (EA5), Wardwill_45 (EA5), Zayuliv_43 (EA5), Zepp_43 (EA5),

Summary by clusters:

There are 5 clusters represented in this pham: EA1, EA11, EA5, EA, EA4,

Info for manual annotations of cluster EA:
•Start number 15 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA1:
•Start number 15 was manually annotated 5 times for cluster EA1.

Info for manual annotations of cluster EA11:
•Start number 4 was manually annotated 6 times for cluster EA11.

Info for manual annotations of cluster EA4:
•Start number 4 was manually annotated 1 time for cluster EA4.

Info for manual annotations of cluster EA5:

•Start number 2 was manually annotated 1 time for cluster EA5.
•Start number 4 was manually annotated 3 times for cluster EA5.
•Start number 15 was manually annotated 12 times for cluster EA5.

Gene Information:

Gene: Alakazam_43 Start: 32406, Stop: 31279, Start Num: 2
Candidate Starts for Alakazam_43:
(Start: 2 @32406 has 1 MA's), (3, 32385), (8, 32271), (14, 32160), (18, 32124), (22, 32076), (31, 32010), (44, 31920), (62, 31752), (68, 31704), (69, 31698), (70, 31695), (71, 31692), (82, 31575), (85, 31539), (90, 31509), (93, 31467), (94, 31392), (96, 31332),

Gene: BaronJohn_44 Start: 31194, Stop: 30319, Start Num: 15
Candidate Starts for BaronJohn_44:
(Start: 15 @31194 has 18 MA's), (22, 31113), (37, 31014), (44, 30957), (68, 30741), (69, 30735), (70, 30732), (75, 30672), (79, 30630), (81, 30615), (85, 30576), (87, 30561), (90, 30546), (92, 30519), (93, 30504), (95, 30387),

Gene: CaptainRex_43 Start: 30427, Stop: 29567, Start Num: 15
Candidate Starts for CaptainRex_43:
(Start: 15 @30427 has 18 MA's), (36, 30268), (47, 30163), (49, 30148), (54, 30115), (56, 30112), (63, 30016), (68, 29989), (69, 29983), (70, 29980), (75, 29920), (79, 29878), (81, 29863), (85, 29824), (87, 29809), (90, 29794), (92, 29767), (93, 29752), (95, 29635),

Gene: CarisSwetlik_47 Start: 33613, Stop: 32699, Start Num: 15
Candidate Starts for CarisSwetlik_47:
(Start: 15 @33613 has 18 MA's), (28, 33481), (35, 33430), (42, 33364), (45, 33328), (81, 32986), (85, 32947), (90, 32917), (93, 32875), (95, 32758), (96, 32740),

Gene: Clock_42 Start: 33154, Stop: 32201, Start Num: 4
Candidate Starts for Clock_42:
(1, 33229), (Start: 4 @33154 has 10 MA's), (6, 33124), (9, 33094), (10, 33058), (12, 33028), (13, 33007), (Start: 15 @32983 has 18 MA's), (17, 32959), (23, 32896), (27, 32860), (30, 32845), (34, 32812), (41, 32746), (55, 32659), (58, 32647), (60, 32626), (65, 32605), (70, 32575), (73, 32542), (76, 32524), (81, 32497), (82, 32494), (85, 32458), (88, 32440), (89, 32434), (93, 32386), (94, 32311), (95, 32269),

Gene: Endor_46 Start: 33281, Stop: 32376, Start Num: 15
Candidate Starts for Endor_46:
(Start: 15 @33281 has 18 MA's), (24, 33194), (42, 33032), (45, 32996), (48, 32969), (57, 32885), (62, 32831), (68, 32783), (69, 32777), (81, 32657), (82, 32654), (85, 32618), (90, 32588), (93, 32546),

Gene: FarmerDoug_44 Start: 32791, Stop: 31886, Start Num: 15
Candidate Starts for FarmerDoug_44:
(Start: 15 @32791 has 18 MA's), (21, 32725), (28, 32659), (33, 32623), (48, 32479), (62, 32341), (68, 32293), (69, 32287), (81, 32167), (85, 32128), (90, 32098), (93, 32056), (97, 31918),

Gene: Fulton_43 Start: 30428, Stop: 29568, Start Num: 15
Candidate Starts for Fulton_43:
(Start: 15 @30428 has 18 MA's), (36, 30269), (47, 30164), (49, 30149), (54, 30116), (56, 30113), (63, 30017), (68, 29990), (69, 29984), (70, 29981), (75, 29921), (79, 29879), (81, 29864), (85, 29825), (87,

29810), (90, 29795), (92, 29768), (93, 29753), (95, 29636),

Gene: GreenIvy_42 Start: 30783, Stop: 29908, Start Num: 15
Candidate Starts for GreenIvy_42:
(Start: 15 @30783 has 18 MA's), (22, 30702), (37, 30603), (44, 30546), (68, 30330), (69, 30324), (70, 30321), (75, 30261), (79, 30219), (81, 30204), (85, 30165), (87, 30150), (90, 30135), (92, 30108), (93, 30093), (95, 29976),

Gene: Hasitha_43 Start: 30440, Stop: 29580, Start Num: 15
Candidate Starts for Hasitha_43:
(Start: 15 @30440 has 18 MA's), (36, 30281), (47, 30176), (49, 30161), (54, 30128), (56, 30125), (63, 30029), (68, 30002), (69, 29996), (70, 29993), (75, 29933), (79, 29891), (81, 29876), (85, 29837), (87, 29822), (90, 29807), (92, 29780), (93, 29765), (95, 29648),

Gene: HerculesXL_41 Start: 30550, Stop: 29477, Start Num: 4
Candidate Starts for HerculesXL_41:
(Start: 4 @30550 has 10 MA's), (5, 30526), (10, 30454), (11, 30445), (17, 30355), (23, 30292), (26, 30259), (30, 30232), (40, 30148), (50, 30046), (52, 30025), (53, 30004), (65, 29890), (66, 29881), (70, 29857), (72, 29845), (73, 29809), (74, 29803), (83, 29725), (85, 29698), (88, 29680), (89, 29674), (90, 29668), (92, 29641), (93, 29626), (94, 29551),

Gene: Ixel_44 Start: 32296, Stop: 31250, Start Num: 4
Candidate Starts for Ixel_44:
(Start: 4 @32296 has 10 MA's), (10, 32209), (13, 32161), (16, 32119), (20, 32077), (34, 31966), (52, 31798), (53, 31777), (65, 31663), (66, 31654), (70, 31630), (72, 31618), (73, 31582), (85, 31471), (89, 31447), (92, 31414), (93, 31399),

Gene: Jenos_48 Start: 33896, Stop: 32982, Start Num: 15
Candidate Starts for Jenos_48:
(Start: 15 @33896 has 18 MA's), (28, 33764), (35, 33713), (42, 33647), (45, 33611), (81, 33269), (85, 33230), (90, 33200), (93, 33158), (95, 33041), (96, 33023),

Gene: Kauala_42 Start: 32120, Stop: 31143, Start Num: 4
Candidate Starts for Kauala_42:
(Start: 4 @32120 has 10 MA's), (7, 32069), (9, 32060), (10, 32024), (Start: 15 @31949 has 18 MA's), (23, 31862), (26, 31829), (29, 31814), (38, 31784), (39, 31775), (51, 31673), (52, 31655), (59, 31592), (64, 31565), (70, 31532), (72, 31520), (75, 31472), (80, 31427), (82, 31412), (85, 31376), (86, 31373), (87, 31361), (91, 31334), (93, 31304), (97, 31172), (98, 31148),

Gene: Kavo_40 Start: 30672, Stop: 29599, Start Num: 4
Candidate Starts for Kavo_40:
(Start: 4 @30672 has 10 MA's), (5, 30648), (10, 30576), (11, 30567), (16, 30483), (17, 30477), (23, 30414), (26, 30381), (30, 30354), (40, 30270), (50, 30168), (52, 30147), (65, 30012), (66, 30003), (67, 30000), (70, 29979), (72, 29967), (73, 29931), (74, 29925), (83, 29847), (85, 29820), (88, 29802), (89, 29796), (90, 29790), (92, 29763), (93, 29748), (94, 29673),

Gene: Librie_43 Start: 30427, Stop: 29567, Start Num: 15
Candidate Starts for Librie_43:
(Start: 15 @30427 has 18 MA's), (36, 30268), (47, 30163), (49, 30148), (54, 30115), (56, 30112), (63, 30016), (68, 29989), (69, 29983), (70, 29980), (75, 29920), (79, 29878), (81, 29863), (85, 29824), (87, 29809), (90, 29794), (92, 29767), (93, 29752), (95, 29635),

Gene: LilTerminator_43 Start: 30449, Stop: 29589, Start Num: 15

Candidate Starts for LilTerminator_43:
(Start: 15 @30449 has 18 MA's), (36, 30290), (47, 30185), (49, 30170), (54, 30137), (56, 30134), (68, 30011), (69, 30005), (70, 30002), (75, 29942), (79, 29900), (85, 29846), (87, 29831), (90, 29816), (92, 29789), (93, 29774), (95, 29657),

Gene: Mercedes_38 Start: 30460, Stop: 29597, Start Num: 15
Candidate Starts for Mercedes_38:
(Start: 15 @30460 has 18 MA's), (32, 30310), (36, 30295), (43, 30238), (44, 30235), (68, 30019), (69, 30013), (70, 30010), (75, 29950), (79, 29908), (81, 29893), (87, 29839), (90, 29824), (93, 29782), (95, 29665),

Gene: MonChoix_42 Start: 32633, Stop: 31728, Start Num: 15
Candidate Starts for MonChoix_42:
(Start: 15 @32633 has 18 MA's), (19, 32597), (25, 32534), (28, 32501), (33, 32465), (48, 32321), (57, 32237), (61, 32186), (62, 32183), (68, 32135), (69, 32129), (78, 32027), (79, 32024), (81, 32009), (85, 31970), (90, 31940), (93, 31898), (94, 31823),

Gene: Nebulous_41 Start: 33335, Stop: 32382, Start Num: 4
Candidate Starts for Nebulous_41:
(1, 33410), (Start: 4 @33335 has 10 MA's), (6, 33305), (9, 33275), (10, 33239), (12, 33209), (13, 33188), (Start: 15 @33164 has 18 MA's), (17, 33140), (23, 33077), (27, 33041), (30, 33026), (41, 32927), (55, 32840), (58, 32828), (60, 32807), (65, 32786), (70, 32756), (73, 32723), (76, 32705), (81, 32678), (82, 32675), (85, 32639), (88, 32621), (89, 32615), (93, 32567), (94, 32492), (95, 32450),

Gene: Neferthena_44 Start: 32676, Stop: 31723, Start Num: 4
Candidate Starts for Neferthena_44:
(1, 32751), (Start: 4 @32676 has 10 MA's), (6, 32646), (9, 32616), (10, 32580), (12, 32550), (Start: 15 @32505 has 18 MA's), (17, 32481), (23, 32418), (30, 32367), (34, 32334), (41, 32268), (55, 32181), (58, 32169), (60, 32148), (65, 32127), (70, 32097), (73, 32064), (76, 32046), (81, 32019), (82, 32016), (85, 31980), (88, 31962), (89, 31956), (93, 31908), (94, 31833), (95, 31791),

Gene: Penta_39 Start: 30531, Stop: 29458, Start Num: 4
Candidate Starts for Penta_39:
(Start: 4 @30531 has 10 MA's), (5, 30507), (10, 30435), (11, 30426), (13, 30384), (17, 30336), (23, 30273), (26, 30240), (30, 30213), (40, 30129), (46, 30060), (50, 30027), (52, 30006), (53, 29985), (65, 29871), (66, 29862), (67, 29859), (70, 29838), (72, 29826), (73, 29790), (74, 29784), (83, 29706), (85, 29679), (88, 29661), (89, 29655), (92, 29622), (93, 29607), (94, 29532),

Gene: QuadZero_43 Start: 30594, Stop: 29737, Start Num: 15
Candidate Starts for QuadZero_43:
(Start: 15 @30594 has 18 MA's), (36, 30435), (47, 30330), (49, 30315), (54, 30282), (56, 30279), (68, 30156), (69, 30150), (70, 30147), (75, 30087), (79, 30045), (81, 30030), (85, 29991), (87, 29976), (90, 29961), (92, 29934), (93, 29919), (95, 29802),

Gene: Schimmels22_40 Start: 30924, Stop: 29851, Start Num: 4
Candidate Starts for Schimmels22_40:
(Start: 4 @30924 has 10 MA's), (5, 30900), (10, 30828), (11, 30819), (16, 30735), (17, 30729), (23, 30666), (26, 30633), (30, 30606), (40, 30522), (50, 30420), (52, 30399), (53, 30378), (65, 30264), (66, 30255), (67, 30252), (70, 30231), (72, 30219), (73, 30183), (74, 30177), (83, 30099), (85, 30072), (88, 30054), (89, 30048), (90, 30042), (92, 30015), (93, 30000), (94, 29925),

Gene: Scissor2024_41 Start: 30571, Stop: 29498, Start Num: 4
Candidate Starts for Scissor2024_41:

(Start: 4 @30571 has 10 MA's), (5, 30547), (10, 30475), (11, 30466), (17, 30376), (23, 30313), (26, 30280), (30, 30253), (40, 30169), (50, 30067), (52, 30046), (65, 29911), (66, 29902), (70, 29878), (72, 29866), (73, 29830), (74, 29824), (83, 29746), (85, 29719), (88, 29701), (89, 29695), (90, 29689), (92, 29662), (93, 29647), (94, 29572),

Gene: Tinyman4_40 Start: 30550, Stop: 29477, Start Num: 4
Candidate Starts for Tinyman4_40:
(Start: 4 @30550 has 10 MA's), (5, 30526), (10, 30454), (11, 30445), (17, 30355), (23, 30292), (26, 30259), (27, 30247), (30, 30232), (40, 30148), (50, 30046), (52, 30025), (53, 30004), (65, 29890), (66, 29881), (70, 29857), (72, 29845), (73, 29809), (74, 29803), (83, 29725), (85, 29698), (88, 29680), (89, 29674), (90, 29668), (92, 29641), (93, 29626), (94, 29551),

Gene: TwoBits_42 Start: 30996, Stop: 30142, Start Num: 15
Candidate Starts for TwoBits_42:
(Start: 15 @30996 has 18 MA's), (44, 30777), (61, 30612), (62, 30609), (68, 30561), (69, 30555), (70, 30552), (77, 30468), (81, 30435), (84, 30402), (86, 30393), (90, 30366), (92, 30339), (93, 30324), (95, 30207),

Gene: Vafari_43 Start: 30450, Stop: 29575, Start Num: 15
Candidate Starts for Vafari_43:
(Start: 15 @30450 has 18 MA's), (22, 30369), (37, 30270), (44, 30213), (68, 29997), (69, 29991), (70, 29988), (75, 29928), (79, 29886), (81, 29871), (85, 29832), (87, 29817), (90, 29802), (92, 29775), (93, 29760), (95, 29643),

Gene: Wardwill_45 Start: 30626, Stop: 29751, Start Num: 15
Candidate Starts for Wardwill_45:
(Start: 15 @30626 has 18 MA's), (22, 30545), (37, 30446), (44, 30389), (68, 30173), (69, 30167), (70, 30164), (75, 30104), (79, 30062), (85, 30008), (87, 29993), (90, 29978), (92, 29951), (93, 29936), (95, 29819),

Gene: WestPM_39 Start: 30694, Stop: 29621, Start Num: 4
Candidate Starts for WestPM_39:
(Start: 4 @30694 has 10 MA's), (5, 30670), (10, 30598), (11, 30589), (13, 30547), (17, 30499), (23, 30436), (26, 30403), (30, 30376), (40, 30292), (46, 30223), (50, 30190), (52, 30169), (53, 30148), (65, 30034), (66, 30025), (67, 30022), (70, 30001), (72, 29989), (73, 29953), (74, 29947), (83, 29869), (85, 29842), (88, 29824), (89, 29818), (92, 29785), (93, 29770), (94, 29695),

Gene: Zayuliv_43 Start: 31065, Stop: 30190, Start Num: 15
Candidate Starts for Zayuliv_43:
(Start: 15 @31065 has 18 MA's), (22, 30984), (37, 30885), (44, 30828), (68, 30612), (69, 30606), (70, 30603), (75, 30543), (79, 30501), (81, 30486), (85, 30447), (87, 30432), (90, 30417), (92, 30390), (93, 30375), (95, 30258),

Gene: Zepp_43 Start: 30499, Stop: 29624, Start Num: 15
Candidate Starts for Zepp_43:
(Start: 15 @30499 has 18 MA's), (22, 30418), (37, 30319), (44, 30262), (68, 30046), (69, 30040), (70, 30037), (75, 29977), (79, 29935), (81, 29920), (85, 29881), (87, 29866), (90, 29851), (92, 29824), (93, 29809), (95, 29692),