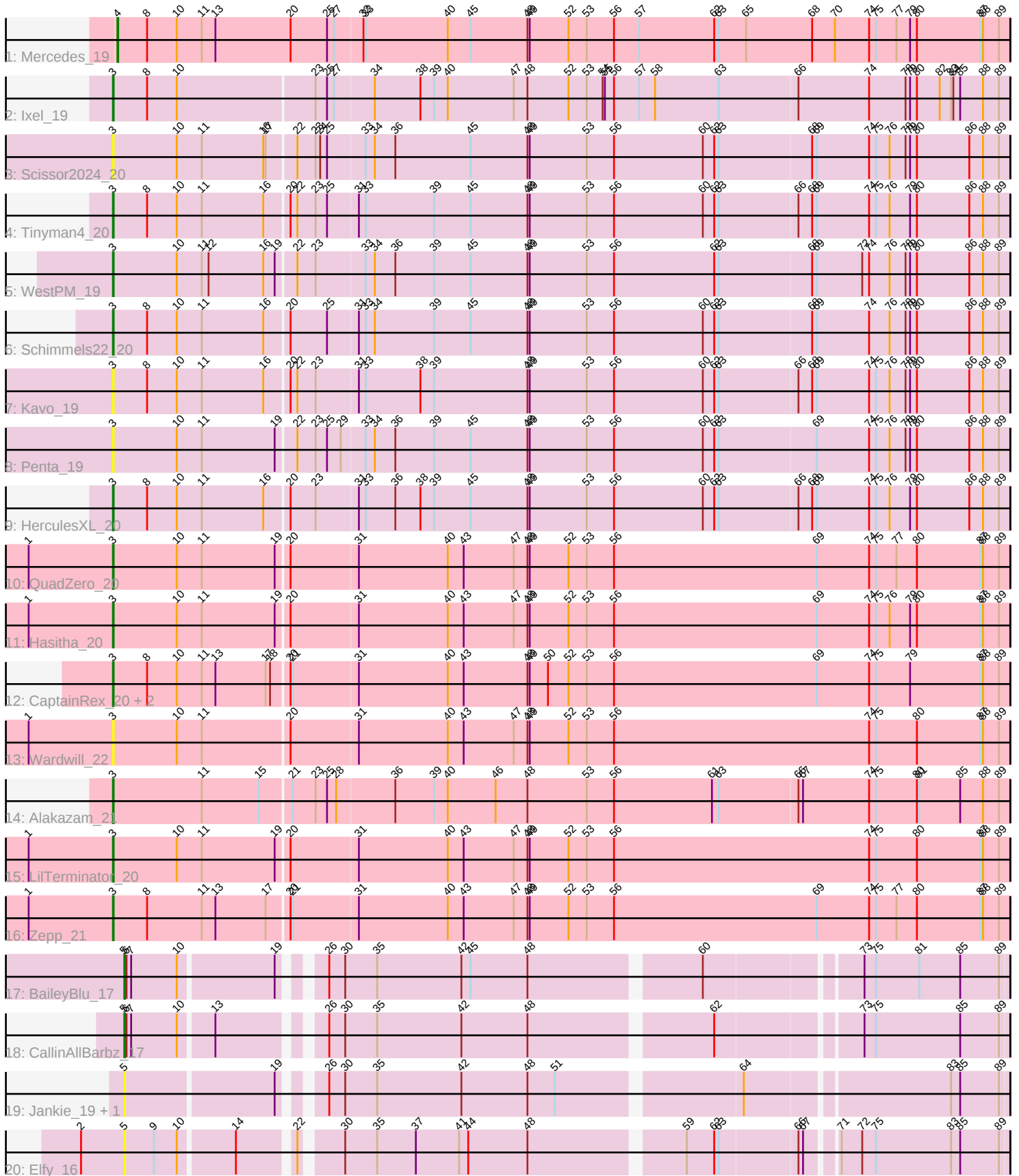


Pham 256121



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 256121 Report

This analysis was run 02/07/26 on database version 634.

Pham number 256121 has 23 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Mercedes_19
- Track 2 : Ixel_19
- Track 3 : Scissor2024_20
- Track 4 : Tinyman4_20
- Track 5 : WestPM_19
- Track 6 : Schimmels22_20
- Track 7 : Kavo_19
- Track 8 : Penta_19
- Track 9 : HerculesXL_20
- Track 10 : QuadZero_20
- Track 11 : Hasitha_20
- Track 12 : CaptainRex_20, Fulton_20, Librie_20
- Track 13 : Wardwill_22
- Track 14 : Alakazam_21
- Track 15 : LilTerminator_20
- Track 16 : Zepp_21
- Track 17 : BaileyBlu_17
- Track 18 : CallinAllBarbz_17
- Track 19 : Jankie_19, GrimEater_18
- Track 20 : Elfy_16

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

The start number called the most often in the published annotations is 3, it was called in 13 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alakazam_21, CaptainRex_20, Fulton_20, Hasitha_20, HerculesXL_20, Ixel_19, Kavo_19, Librie_20, LilTerminator_20, Penta_19, QuadZero_20, Schimmels22_20, Scissor2024_20, Tinyman4_20, Wardwill_22, WestPM_19, Zepp_21,

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

-

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

- BaileyBlu_17, CallinAllBarbz_17, Elfy_16, GrimEater_18, Jankie_19, Mercedes_19,

Summary by start number:

Start 3:

- Found in 17 of 23 (73.9%) of genes in pham
- Manual Annotations of this start: 13 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alakazam_21 (EA5), CaptainRex_20 (EA5), Fulton_20 (EA5), Hasitha_20 (EA5), HerculesXL_20 (EA11), Ixel_19 (EA11), Kavo_19 (EA11), Librie_20 (EA5), LilTerminator_20 (EA5), Penta_19 (EA11), QuadZero_20 (EA5), Schimmels22_20 (EA11), Scissor2024_20 (EA11), Tinyman4_20 (EA11), Wardwill_22 (EA5), WestPM_19 (EA11), Zepp_21 (EA5),

Start 4:

- Found in 1 of 23 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mercedes_19 (EA),

Start 5:

- Found in 5 of 23 (21.7%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaileyBlu_17 (FP), CallinAllBarbz_17 (FP), Elfy_16 (FP), GrimEater_18 (FP), Jankie_19 (FP),

Summary by clusters:

There are 4 clusters represented in this pham: FP, EA, EA5, EA11,

Info for manual annotations of cluster EA:

- Start number 4 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA11:

- Start number 3 was manually annotated 5 times for cluster EA11.

Info for manual annotations of cluster EA5:

- Start number 3 was manually annotated 8 times for cluster EA5.

Info for manual annotations of cluster FP:

- Start number 5 was manually annotated 2 times for cluster FP.

Gene Information:

Gene: Alakazam_21 Start: 15327, Stop: 16496, Start Num: 3

Candidate Starts for Alakazam_21:

(Start: 3 @15327 has 13 MA's), (11, 15444), (15, 15519), (21, 15558), (23, 15588), (25, 15603), (28, 15615), (36, 15690), (39, 15741), (40, 15759), (46, 15822), (48, 15864), (53, 15942), (56, 15978), (61, 16107), (63, 16116), (66, 16218), (67, 16224), (74, 16311), (75, 16320), (80, 16374), (81, 16377), (85,

16431), (88, 16461), (89, 16482),

Gene: BaileyBlu_17 Start: 15126, Stop: 16202, Start Num: 5

Candidate Starts for BaileyBlu_17:

(Start: 5 @15126 has 2 MA's), (6, 15129), (7, 15135), (10, 15195), (19, 15315), (26, 15354), (30, 15375), (35, 15417), (42, 15528), (45, 15540), (48, 15615), (60, 15825), (73, 16014), (75, 16029), (81, 16086), (85, 16140), (89, 16191),

Gene: CallinAllBarbz_17 Start: 15274, Stop: 16350, Start Num: 5

Candidate Starts for CallinAllBarbz_17:

(Start: 5 @15274 has 2 MA's), (6, 15277), (7, 15283), (10, 15343), (13, 15385), (26, 15502), (30, 15523), (35, 15565), (42, 15676), (48, 15763), (62, 15988), (73, 16162), (75, 16177), (85, 16288), (89, 16339),

Gene: CaptainRex_20 Start: 14550, Stop: 15722, Start Num: 3

Candidate Starts for CaptainRex_20:

(Start: 3 @14550 has 13 MA's), (8, 14595), (10, 14634), (11, 14667), (13, 14685), (17, 14751), (18, 14757), (20, 14778), (21, 14781), (31, 14865), (40, 14982), (43, 15003), (48, 15087), (49, 15090), (50, 15114), (52, 15141), (53, 15165), (56, 15201), (69, 15468), (74, 15537), (75, 15546), (79, 15591), (87, 15684), (88, 15687), (89, 15708),

Gene: Elfy_16 Start: 14868, Stop: 15944, Start Num: 5

Candidate Starts for Elfy_16:

(2, 14814), (Start: 5 @14868 has 2 MA's), (9, 14907), (10, 14937), (14, 15006), (22, 15072), (30, 15117), (35, 15159), (37, 15210), (41, 15267), (44, 15279), (48, 15357), (59, 15546), (62, 15582), (63, 15588), (66, 15687), (67, 15693), (71, 15726), (72, 15753), (75, 15771), (83, 15870), (85, 15882), (89, 15933),

Gene: Fulton_20 Start: 14532, Stop: 15704, Start Num: 3

Candidate Starts for Fulton_20:

(Start: 3 @14532 has 13 MA's), (8, 14577), (10, 14616), (11, 14649), (13, 14667), (17, 14733), (18, 14739), (20, 14760), (21, 14763), (31, 14847), (40, 14964), (43, 14985), (48, 15069), (49, 15072), (50, 15096), (52, 15123), (53, 15147), (56, 15183), (69, 15450), (74, 15519), (75, 15528), (79, 15573), (87, 15666), (88, 15669), (89, 15690),

Gene: GrimEater_18 Start: 15486, Stop: 16562, Start Num: 5

Candidate Starts for GrimEater_18:

(Start: 5 @15486 has 2 MA's), (19, 15675), (26, 15714), (30, 15735), (35, 15777), (42, 15888), (48, 15975), (51, 16011), (64, 16236), (83, 16488), (85, 16500), (89, 16551),

Gene: Hasitha_20 Start: 14550, Stop: 15722, Start Num: 3

Candidate Starts for Hasitha_20:

(1, 14439), (Start: 3 @14550 has 13 MA's), (10, 14634), (11, 14667), (19, 14763), (20, 14778), (31, 14865), (40, 14982), (43, 15003), (47, 15069), (48, 15087), (49, 15090), (52, 15141), (53, 15165), (56, 15201), (69, 15468), (74, 15537), (75, 15546), (76, 15564), (79, 15591), (80, 15600), (87, 15684), (88, 15687), (89, 15708),

Gene: HerculesXL_20 Start: 14645, Stop: 15814, Start Num: 3

Candidate Starts for HerculesXL_20:

(Start: 3 @14645 has 13 MA's), (8, 14690), (10, 14729), (11, 14762), (16, 14843), (20, 14873), (23, 14906), (31, 14960), (33, 14969), (36, 15008), (38, 15041), (39, 15059), (45, 15107), (48, 15182), (49, 15185), (53, 15260), (56, 15296), (60, 15413), (62, 15428), (63, 15434), (66, 15536), (68, 15554), (69, 15560), (74, 15629), (75, 15638), (76, 15656), (79, 15683), (80, 15692), (86, 15761), (88, 15779), (89,

15800),

Gene: Ixel_19 Start: 14213, Stop: 15382, Start Num: 3

Candidate Starts for Ixel_19:

(Start: 3 @14213 has 13 MA's), (8, 14258), (10, 14297), (23, 14474), (25, 14489), (27, 14498), (34, 14549), (38, 14609), (39, 14627), (40, 14645), (47, 14732), (48, 14750), (52, 14804), (53, 14828), (54, 14849), (55, 14852), (56, 14864), (57, 14897), (58, 14918), (63, 15002), (66, 15104), (74, 15197), (78, 15245), (79, 15251), (80, 15260), (82, 15290), (83, 15305), (84, 15308), (85, 15317), (88, 15347), (89, 15368),

Gene: Jankie_19 Start: 15485, Stop: 16561, Start Num: 5

Candidate Starts for Jankie_19:

(Start: 5 @15485 has 2 MA's), (19, 15674), (26, 15713), (30, 15734), (35, 15776), (42, 15887), (48, 15974), (51, 16010), (64, 16235), (83, 16487), (85, 16499), (89, 16550),

Gene: Kavo_19 Start: 14484, Stop: 15653, Start Num: 3

Candidate Starts for Kavo_19:

(Start: 3 @14484 has 13 MA's), (8, 14529), (10, 14568), (11, 14601), (16, 14682), (20, 14712), (22, 14721), (23, 14745), (31, 14799), (33, 14808), (38, 14880), (39, 14898), (48, 15021), (49, 15024), (53, 15099), (56, 15135), (60, 15252), (62, 15267), (63, 15273), (66, 15375), (68, 15393), (69, 15399), (74, 15468), (75, 15477), (76, 15495), (78, 15516), (79, 15522), (80, 15531), (86, 15600), (88, 15618), (89, 15639),

Gene: Librie_20 Start: 14550, Stop: 15722, Start Num: 3

Candidate Starts for Librie_20:

(Start: 3 @14550 has 13 MA's), (8, 14595), (10, 14634), (11, 14667), (13, 14685), (17, 14751), (18, 14757), (20, 14778), (21, 14781), (31, 14865), (40, 14982), (43, 15003), (48, 15087), (49, 15090), (50, 15114), (52, 15141), (53, 15165), (56, 15201), (69, 15468), (74, 15537), (75, 15546), (79, 15591), (87, 15684), (88, 15687), (89, 15708),

Gene: LilTerminator_20 Start: 14556, Stop: 15728, Start Num: 3

Candidate Starts for LilTerminator_20:

(1, 14445), (Start: 3 @14556 has 13 MA's), (10, 14640), (11, 14673), (19, 14769), (20, 14784), (31, 14871), (40, 14988), (43, 15009), (47, 15075), (48, 15093), (49, 15096), (52, 15147), (53, 15171), (56, 15207), (74, 15543), (75, 15552), (80, 15606), (87, 15690), (88, 15693), (89, 15714),

Gene: Mercedes_19 Start: 14280, Stop: 15452, Start Num: 4

Candidate Starts for Mercedes_19:

(Start: 4 @14280 has 1 MA's), (8, 14319), (10, 14358), (11, 14391), (13, 14409), (20, 14508), (25, 14556), (27, 14565), (32, 14601), (33, 14604), (40, 14712), (45, 14742), (48, 14817), (49, 14820), (52, 14871), (53, 14895), (56, 14931), (57, 14964), (62, 15063), (63, 15069), (65, 15105), (68, 15192), (70, 15222), (74, 15267), (75, 15276), (77, 15303), (79, 15321), (80, 15330), (87, 15414), (88, 15417), (89, 15438),

Gene: Penta_19 Start: 14478, Stop: 15647, Start Num: 3

Candidate Starts for Penta_19:

(Start: 3 @14478 has 13 MA's), (10, 14562), (11, 14595), (19, 14691), (22, 14715), (23, 14739), (25, 14754), (29, 14772), (33, 14802), (34, 14814), (36, 14841), (39, 14892), (45, 14940), (48, 15015), (49, 15018), (53, 15093), (56, 15129), (60, 15246), (62, 15261), (63, 15267), (69, 15393), (74, 15462), (75, 15471), (76, 15489), (78, 15510), (79, 15516), (80, 15525), (86, 15594), (88, 15612), (89, 15633),

Gene: QuadZero_20 Start: 14562, Stop: 15734, Start Num: 3

Candidate Starts for QuadZero_20:

(1, 14451), (Start: 3 @14562 has 13 MA's), (10, 14646), (11, 14679), (19, 14775), (20, 14790), (31, 14877), (40, 14994), (43, 15015), (47, 15081), (48, 15099), (49, 15102), (52, 15153), (53, 15177), (56, 15213), (69, 15480), (74, 15549), (75, 15558), (77, 15585), (80, 15612), (87, 15696), (88, 15699), (89, 15720),

Gene: Schimmels22_20 Start: 15008, Stop: 16177, Start Num: 3

Candidate Starts for Schimmels22_20:

(Start: 3 @15008 has 13 MA's), (8, 15053), (10, 15092), (11, 15125), (16, 15206), (20, 15236), (25, 15284), (31, 15323), (33, 15332), (34, 15344), (39, 15422), (45, 15470), (48, 15545), (49, 15548), (53, 15623), (56, 15659), (60, 15776), (62, 15791), (63, 15797), (68, 15917), (69, 15923), (74, 15992), (76, 16019), (78, 16040), (79, 16046), (80, 16055), (86, 16124), (88, 16142), (89, 16163),

Gene: Scissor2024_20 Start: 14642, Stop: 15811, Start Num: 3

Candidate Starts for Scissor2024_20:

(Start: 3 @14642 has 13 MA's), (10, 14726), (11, 14759), (16, 14840), (17, 14843), (22, 14879), (23, 14903), (24, 14909), (25, 14918), (33, 14966), (34, 14978), (36, 15005), (45, 15104), (48, 15179), (49, 15182), (53, 15257), (56, 15293), (60, 15410), (62, 15425), (63, 15431), (68, 15551), (69, 15557), (74, 15626), (75, 15635), (76, 15653), (78, 15674), (79, 15680), (80, 15689), (86, 15758), (88, 15776), (89, 15797),

Gene: Tinyman4_20 Start: 14645, Stop: 15814, Start Num: 3

Candidate Starts for Tinyman4_20:

(Start: 3 @14645 has 13 MA's), (8, 14690), (10, 14729), (11, 14762), (16, 14843), (20, 14873), (22, 14882), (23, 14906), (25, 14921), (31, 14960), (33, 14969), (39, 15059), (45, 15107), (48, 15182), (49, 15185), (53, 15260), (56, 15296), (60, 15413), (62, 15428), (63, 15434), (66, 15536), (68, 15554), (69, 15560), (74, 15629), (75, 15638), (76, 15656), (79, 15683), (80, 15692), (86, 15761), (88, 15779), (89, 15800),

Gene: Wardwill_22 Start: 14718, Stop: 15890, Start Num: 3

Candidate Starts for Wardwill_22:

(1, 14607), (Start: 3 @14718 has 13 MA's), (10, 14802), (11, 14835), (20, 14946), (31, 15033), (40, 15150), (43, 15171), (47, 15237), (48, 15255), (49, 15258), (52, 15309), (53, 15333), (56, 15369), (74, 15705), (75, 15714), (80, 15768), (87, 15852), (88, 15855), (89, 15876),

Gene: WestPM_19 Start: 14487, Stop: 15656, Start Num: 3

Candidate Starts for WestPM_19:

(Start: 3 @14487 has 13 MA's), (10, 14571), (11, 14604), (12, 14613), (16, 14685), (19, 14700), (22, 14724), (23, 14748), (33, 14811), (34, 14823), (36, 14850), (39, 14901), (45, 14949), (48, 15024), (49, 15027), (53, 15102), (56, 15138), (62, 15270), (63, 15276), (68, 15396), (69, 15402), (72, 15462), (74, 15471), (76, 15498), (78, 15519), (79, 15525), (80, 15534), (86, 15603), (88, 15621), (89, 15642),

Gene: Zepp_21 Start: 14546, Stop: 15718, Start Num: 3

Candidate Starts for Zepp_21:

(1, 14435), (Start: 3 @14546 has 13 MA's), (8, 14591), (11, 14663), (13, 14681), (17, 14747), (20, 14774), (21, 14777), (31, 14861), (40, 14978), (43, 14999), (47, 15065), (48, 15083), (49, 15086), (52, 15137), (53, 15161), (56, 15197), (69, 15464), (74, 15533), (75, 15542), (77, 15569), (80, 15596), (87, 15680), (88, 15683), (89, 15704),