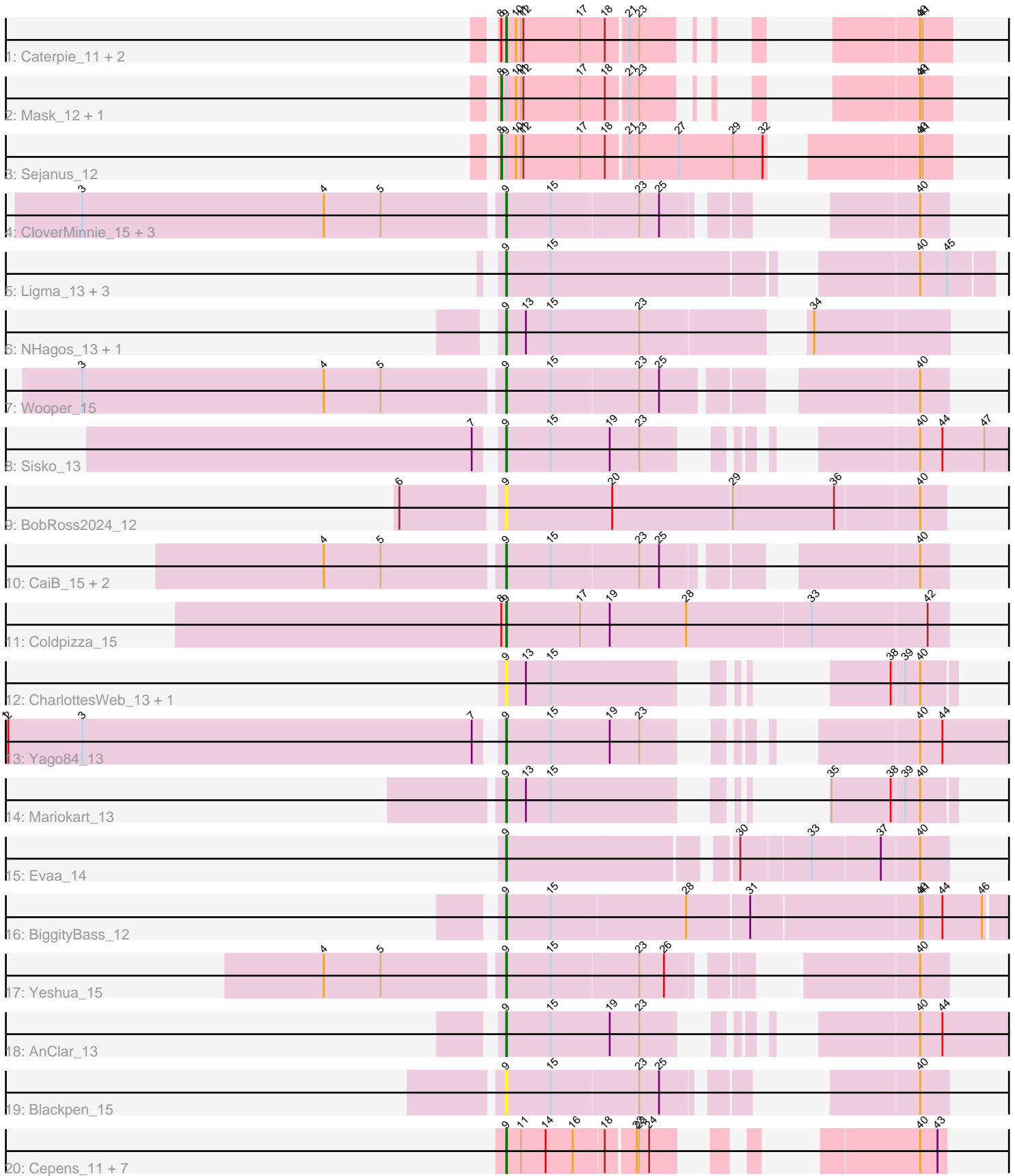


Pham 305144



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 305144 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305144 has 40 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Caterpie\_11, Dori\_12, JohnLord\_12
- Track 2 : Mask\_12, Mao1\_11
- Track 3 : Sejanus\_12
- Track 4 : CloverMinnie\_15, MossRose\_15, FelixTres\_15, MakoManhole\_15
- Track 5 : Ligma\_13, Fresco\_13, Axumite\_13, Shatter\_13
- Track 6 : NHagos\_13, AksarBAT\_13
- Track 7 : Wooper\_15
- Track 8 : Sisko\_13
- Track 9 : BobRoss2024\_12
- Track 10 : CaiB\_15, TraderJ\_15, AnarQue\_15
- Track 11 : Coldpizza\_15
- Track 12 : CharlottesWeb\_13, JellyBelly\_13
- Track 13 : Yago84\_13
- Track 14 : Mariokart\_13
- Track 15 : Evaa\_14
- Track 16 : BiggityBass\_12
- Track 17 : Yeshua\_15
- Track 18 : AnClar\_13
- Track 19 : Blackpen\_15
- Track 20 : Cepens\_11, PR\_11, D12\_11, Megabear\_11, Jeon\_11, GodPhather\_12, Argie\_12, Taptic\_11

### ***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 29 of the 32 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AksarBAT\_13, AnClar\_13, AnarQue\_15, Argie\_12, Axumite\_13, BiggityBass\_12, Blackpen\_15, BobRoss2024\_12, CaiB\_15, Caterpie\_11, Cepens\_11, CharlottesWeb\_13, CloverMinnie\_15, Coldpizza\_15, D12\_11, Dori\_12, Evaa\_14, FelixTres\_15, Fresco\_13, GodPhather\_12, JellyBelly\_13, Jeon\_11, JohnLord\_12, Ligma\_13, MakoManhole\_15, Mariokart\_13, Megabear\_11, MossRose\_15, NHagos\_13, PR\_11, Shatter\_13, Sisko\_13, Taptic\_11, TraderJ\_15, Wooper\_15,

Yago84\_13, Yeshua\_15,

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

- Mao1\_11, Mask\_12, Sejanus\_12,

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

- 

### Summary by start number:

Start 8:

- Found in 7 of 40 ( 17.5% ) of genes in pham
- Manual Annotations of this start: 3 of 32
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Mao1\_11 (AD), Mask\_12 (AD), Sejanus\_12 (AD),

Start 9:

- Found in 40 of 40 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 29 of 32
- Called 92.5% of time when present
- Phage (with cluster) where this start called: AksarBAT\_13 (DR), AnClar\_13 (DR), AnarQue\_15 (DR), Argie\_12 (W), Axumite\_13 (DR), BiggityBass\_12 (DR), Blackpen\_15 (DR), BobRoss2024\_12 (DR), CaiB\_15 (DR), Caterpie\_11 (AD), Cepens\_11 (W), CharlottesWeb\_13 (DR), CloverMinnie\_15 (DR), Coldpizza\_15 (DR), D12\_11 (W), Dori\_12 (AD), Evaa\_14 (DR), FelixTres\_15 (DR), Fresco\_13 (DR), GodPhather\_12 (W), JellyBelly\_13 (DR), Jeon\_11 (W), JohnLord\_12 (AD), Ligma\_13 (DR), MakoManhole\_15 (DR), Mariokart\_13 (DR), Megabear\_11 (W), MossRose\_15 (DR), NHagos\_13 (DR), PR\_11 (W), Shatter\_13 (DR), Sisko\_13 (DR), Taptic\_11 (W), TraderJ\_15 (DR), Wooper\_15 (DR), Yago84\_13 (DR), Yeshua\_15 (DR),

### Summary by clusters:

There are 3 clusters represented in this pham: DR, AD, W,

Info for manual annotations of cluster AD:

- Start number 8 was manually annotated 3 times for cluster AD.
- Start number 9 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster DR:

- Start number 9 was manually annotated 20 times for cluster DR.

Info for manual annotations of cluster W:

- Start number 9 was manually annotated 8 times for cluster W.

### Gene Information:

Gene: AksarBAT\_13 Start: 12372, Stop: 12851, Start Num: 9

Candidate Starts for AksarBAT\_13:

(Start: 9 @12372 has 29 MA's), (13, 12396), (15, 12426), (23, 12531), (34, 12690),

Gene: AnClar\_13 Start: 13251, Stop: 13772, Start Num: 9  
Candidate Starts for AnClar\_13:  
(Start: 9 @13251 has 29 MA's), (15, 13305), (19, 13374), (23, 13410), (40, 13617), (44, 13644),

Gene: AnarQue\_15 Start: 13914, Stop: 14381, Start Num: 9  
Candidate Starts for AnarQue\_15:  
(4, 13704), (5, 13773), (Start: 9 @13914 has 29 MA's), (15, 13968), (23, 14070), (25, 14094), (40, 14349),

Gene: Argie\_12 Start: 13780, Stop: 14178, Start Num: 9  
Candidate Starts for Argie\_12:  
(Start: 9 @13780 has 29 MA's), (11, 13798), (14, 13828), (16, 13861), (18, 13897), (22, 13930), (23, 13933), (24, 13945), (40, 14149), (43, 14170),

Gene: Axumite\_13 Start: 12434, Stop: 12952, Start Num: 9  
Candidate Starts for Axumite\_13:  
(Start: 9 @12434 has 29 MA's), (15, 12488), (40, 12869), (45, 12899),

Gene: BiggityBass\_12 Start: 12234, Stop: 12866, Start Num: 9  
Candidate Starts for BiggityBass\_12:  
(Start: 9 @12234 has 29 MA's), (15, 12288), (28, 12450), (31, 12519), (40, 12717), (41, 12720), (44, 12744), (46, 12792),

Gene: Blackpen\_15 Start: 13394, Stop: 13798, Start Num: 9  
Candidate Starts for Blackpen\_15:  
(Start: 9 @13394 has 29 MA's), (15, 13448), (23, 13550), (25, 13574), (40, 13766),

Gene: BobRoss2024\_12 Start: 12263, Stop: 12784, Start Num: 9  
Candidate Starts for BobRoss2024\_12:  
(6, 12149), (Start: 9 @12263 has 29 MA's), (20, 12389), (29, 12533), (36, 12656), (40, 12755),

Gene: CaiB\_15 Start: 13902, Stop: 14366, Start Num: 9  
Candidate Starts for CaiB\_15:  
(4, 13692), (5, 13761), (Start: 9 @13902 has 29 MA's), (15, 13956), (23, 14058), (25, 14082), (40, 14334),

Gene: Caterpie\_11 Start: 11410, Stop: 11775, Start Num: 9  
Candidate Starts for Caterpie\_11:  
(Start: 8 @11404 has 3 MA's), (Start: 9 @11410 has 29 MA's), (10, 11422), (11, 11428), (12, 11431), (17, 11500), (18, 11530), (21, 11554), (23, 11566), (40, 11737), (41, 11740),

Gene: Cepens\_11 Start: 13519, Stop: 13902, Start Num: 9  
Candidate Starts for Cepens\_11:  
(Start: 9 @13519 has 29 MA's), (11, 13537), (14, 13567), (16, 13600), (18, 13636), (22, 13669), (23, 13672), (24, 13684), (40, 13873), (43, 13894),

Gene: CharlottesWeb\_13 Start: 12479, Stop: 12856, Start Num: 9  
Candidate Starts for CharlottesWeb\_13:  
(Start: 9 @12479 has 29 MA's), (13, 12503), (15, 12533), (38, 12785), (39, 12800), (40, 12818),

Gene: CloverMinnie\_15 Start: 13902, Stop: 14306, Start Num: 9  
Candidate Starts for CloverMinnie\_15:

(3, 13398), (4, 13692), (5, 13761), (Start: 9 @13902 has 29 MA's), (15, 13956), (23, 14058), (25, 14082), (40, 14274),

Gene: Coldpizza\_15 Start: 14404, Stop: 14931, Start Num: 9

Candidate Starts for Coldpizza\_15:

(Start: 8 @14398 has 3 MA's), (Start: 9 @14404 has 29 MA's), (17, 14494), (19, 14527), (28, 14620), (33, 14770), (42, 14908),

Gene: D12\_11 Start: 13497, Stop: 13895, Start Num: 9

Candidate Starts for D12\_11:

(Start: 9 @13497 has 29 MA's), (11, 13515), (14, 13545), (16, 13578), (18, 13614), (22, 13647), (23, 13650), (24, 13662), (40, 13866), (43, 13887),

Gene: Dori\_12 Start: 11226, Stop: 11591, Start Num: 9

Candidate Starts for Dori\_12:

(Start: 8 @11220 has 3 MA's), (Start: 9 @11226 has 29 MA's), (10, 11238), (11, 11244), (12, 11247), (17, 11316), (18, 11346), (21, 11370), (23, 11382), (40, 11553), (41, 11556),

Gene: Evaa\_14 Start: 13757, Stop: 14248, Start Num: 9

Candidate Starts for Evaa\_14:

(Start: 9 @13757 has 29 MA's), (30, 14009), (33, 14090), (37, 14171), (40, 14216),

Gene: FelixTres\_15 Start: 13902, Stop: 14369, Start Num: 9

Candidate Starts for FelixTres\_15:

(3, 13398), (4, 13692), (5, 13761), (Start: 9 @13902 has 29 MA's), (15, 13956), (23, 14058), (25, 14082), (40, 14337),

Gene: Fresco\_13 Start: 12434, Stop: 12952, Start Num: 9

Candidate Starts for Fresco\_13:

(Start: 9 @12434 has 29 MA's), (15, 12488), (40, 12869), (45, 12899),

Gene: GodPhather\_12 Start: 13777, Stop: 14160, Start Num: 9

Candidate Starts for GodPhather\_12:

(Start: 9 @13777 has 29 MA's), (11, 13795), (14, 13825), (16, 13858), (18, 13894), (22, 13927), (23, 13930), (24, 13942), (40, 14131), (43, 14152),

Gene: JellyBelly\_13 Start: 12479, Stop: 12856, Start Num: 9

Candidate Starts for JellyBelly\_13:

(Start: 9 @12479 has 29 MA's), (13, 12503), (15, 12533), (38, 12785), (39, 12800), (40, 12818),

Gene: Jeon\_11 Start: 13507, Stop: 13902, Start Num: 9

Candidate Starts for Jeon\_11:

(Start: 9 @13507 has 29 MA's), (11, 13525), (14, 13555), (16, 13588), (18, 13624), (22, 13657), (23, 13660), (24, 13672), (40, 13873), (43, 13894),

Gene: JohnLord\_12 Start: 10929, Stop: 11294, Start Num: 9

Candidate Starts for JohnLord\_12:

(Start: 8 @10923 has 3 MA's), (Start: 9 @10929 has 29 MA's), (10, 10941), (11, 10947), (12, 10950), (17, 11019), (18, 11049), (21, 11073), (23, 11085), (40, 11256), (41, 11259),

Gene: Ligma\_13 Start: 12434, Stop: 12952, Start Num: 9

Candidate Starts for Ligma\_13:

(Start: 9 @12434 has 29 MA's), (15, 12488), (40, 12869), (45, 12899),

Gene: MakoManhole\_15 Start: 13902, Stop: 14384, Start Num: 9  
Candidate Starts for MakoManhole\_15:  
(3, 13398), (4, 13692), (5, 13761), (Start: 9 @13902 has 29 MA's), (15, 13956), (23, 14058), (25, 14082), (40, 14352),

Gene: Mao1\_11 Start: 11616, Stop: 11987, Start Num: 8  
Candidate Starts for Mao1\_11:  
(Start: 8 @11616 has 3 MA's), (Start: 9 @11622 has 29 MA's), (10, 11634), (11, 11640), (12, 11643), (17, 11712), (18, 11742), (21, 11766), (23, 11778), (40, 11949), (41, 11952),

Gene: Mariokart\_13 Start: 12478, Stop: 12855, Start Num: 9  
Candidate Starts for Mariokart\_13:  
(Start: 9 @12478 has 29 MA's), (13, 12502), (15, 12532), (35, 12712), (38, 12784), (39, 12799), (40, 12817),

Gene: Mask\_12 Start: 11617, Stop: 11988, Start Num: 8  
Candidate Starts for Mask\_12:  
(Start: 8 @11617 has 3 MA's), (Start: 9 @11623 has 29 MA's), (10, 11635), (11, 11641), (12, 11644), (17, 11713), (18, 11743), (21, 11767), (23, 11779), (40, 11950), (41, 11953),

Gene: Megabear\_11 Start: 13462, Stop: 13845, Start Num: 9  
Candidate Starts for Megabear\_11:  
(Start: 9 @13462 has 29 MA's), (11, 13480), (14, 13510), (16, 13543), (18, 13579), (22, 13612), (23, 13615), (24, 13627), (40, 13816), (43, 13837),

Gene: MossRose\_15 Start: 13902, Stop: 14363, Start Num: 9  
Candidate Starts for MossRose\_15:  
(3, 13398), (4, 13692), (5, 13761), (Start: 9 @13902 has 29 MA's), (15, 13956), (23, 14058), (25, 14082), (40, 14331),

Gene: NHagos\_13 Start: 12375, Stop: 12854, Start Num: 9  
Candidate Starts for NHagos\_13:  
(Start: 9 @12375 has 29 MA's), (13, 12399), (15, 12429), (23, 12534), (34, 12693),

Gene: PR\_11 Start: 13474, Stop: 13872, Start Num: 9  
Candidate Starts for PR\_11:  
(Start: 9 @13474 has 29 MA's), (11, 13492), (14, 13522), (16, 13555), (18, 13591), (22, 13624), (23, 13627), (24, 13639), (40, 13843), (43, 13864),

Gene: Sejanus\_12 Start: 12433, Stop: 12921, Start Num: 8  
Candidate Starts for Sejanus\_12:  
(Start: 8 @12433 has 3 MA's), (Start: 9 @12439 has 29 MA's), (10, 12451), (11, 12457), (12, 12460), (17, 12529), (18, 12559), (21, 12583), (23, 12595), (27, 12643), (29, 12709), (32, 12745), (40, 12883), (41, 12886),

Gene: Shatter\_13 Start: 12434, Stop: 12952, Start Num: 9  
Candidate Starts for Shatter\_13:  
(Start: 9 @12434 has 29 MA's), (15, 12488), (40, 12869), (45, 12899),

Gene: Sisko\_13 Start: 12759, Stop: 13280, Start Num: 9  
Candidate Starts for Sisko\_13:

(7, 12738), (Start: 9 @12759 has 29 MA's), (15, 12813), (19, 12882), (23, 12918), (40, 13125), (44, 13152), (47, 13203),

Gene: Taptic\_11 Start: 13462, Stop: 13845, Start Num: 9

Candidate Starts for Taptic\_11:

(Start: 9 @13462 has 29 MA's), (11, 13480), (14, 13510), (16, 13543), (18, 13579), (22, 13612), (23, 13615), (24, 13627), (40, 13816), (43, 13837),

Gene: TraderJ\_15 Start: 13899, Stop: 14366, Start Num: 9

Candidate Starts for TraderJ\_15:

(4, 13689), (5, 13758), (Start: 9 @13899 has 29 MA's), (15, 13953), (23, 14055), (25, 14079), (40, 14334),

Gene: Wooper\_15 Start: 13905, Stop: 14372, Start Num: 9

Candidate Starts for Wooper\_15:

(3, 13401), (4, 13695), (5, 13764), (Start: 9 @13905 has 29 MA's), (15, 13959), (23, 14061), (25, 14085), (40, 14340),

Gene: Yago84\_13 Start: 12768, Stop: 13289, Start Num: 9

Candidate Starts for Yago84\_13:

(1, 12180), (2, 12183), (3, 12273), (7, 12747), (Start: 9 @12768 has 29 MA's), (15, 12822), (19, 12891), (23, 12927), (40, 13134), (44, 13161),

Gene: Yeshua\_15 Start: 13912, Stop: 14349, Start Num: 9

Candidate Starts for Yeshua\_15:

(4, 13702), (5, 13771), (Start: 9 @13912 has 29 MA's), (15, 13966), (23, 14068), (26, 14098), (40, 14317),