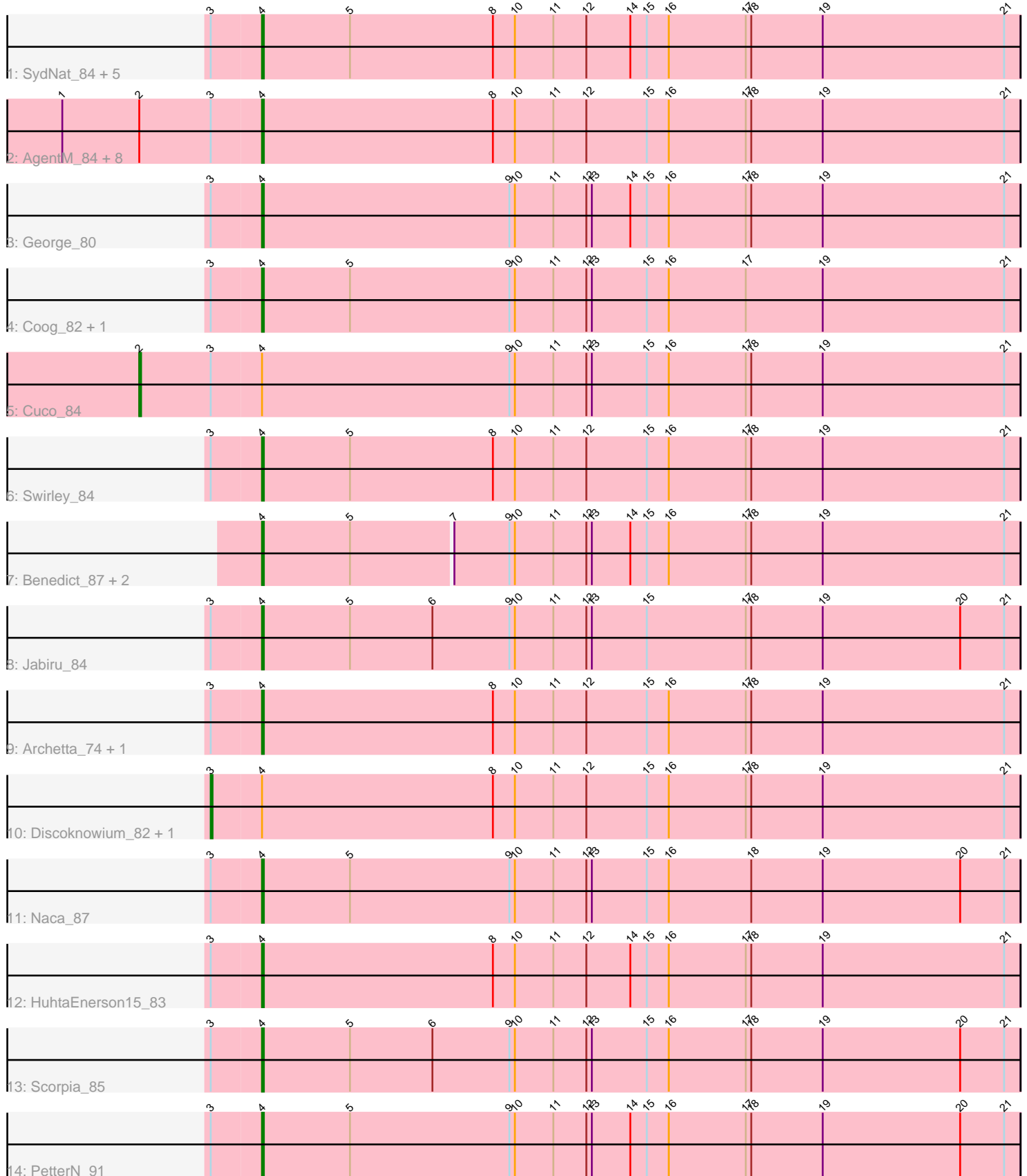


Pham 86156



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 86156 Report

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

Pham number 86156 has 32 members, 1 are drafts.

Phages represented in each track:

- Track 1 : SydNat_84, LittleCherry_83, Milcery_83, Micasa_84, Zolita_83, Ghouboy_85
- Track 2 : AgentM_84, Phlorence_83, ForGetIt_86, Tiger_83, Conspiracy_85, Lev2_85, Jovo_83, Aragog_85, PickleBack_86
- Track 3 : George_80
- Track 4 : Coog_82, Midas2_82
- Track 5 : Cuco_84
- Track 6 : Swirley_84
- Track 7 : Benedict_87, ElTiger69_89, Airmid_86
- Track 8 : Jabiru_84
- Track 9 : Archetta_74, Theia_85
- Track 10 : Discoknowium_82, Bluefalcon_80
- Track 11 : Naca_87
- Track 12 : HuhtaEnerson15_83
- Track 13 : Scorpia_85
- Track 14 : PetterN_91

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

The start number called the most often in the published annotations is 4, it was called in 28 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AgentM_84, Airmid_86, Aragog_85, Archetta_74, Benedict_87, Conspiracy_85, Coog_82, ElTiger69_89, ForGetIt_86, George_80, Ghouboy_85, HuhtaEnerson15_83, Jabiru_84, Jovo_83, Lev2_85, LittleCherry_83, Micasa_84, Midas2_82, Milcery_83, Naca_87, PetterN_91, Phlorence_83, PickleBack_86, Scorpia_85, Swirley_84, SydNat_84, Theia_85, Tiger_83, Zolita_83,

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

- Bluefalcon_80, Cuco_84, Discoknowium_82,

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

-

Summary by start number:

Start 2:

- Found in 10 of 32 (31.2%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Cuco_84 (A5),

Start 3:

- Found in 29 of 32 (90.6%) of genes in pham
- Manual Annotations of this start: 2 of 31
- Called 6.9% of time when present
- Phage (with cluster) where this start called: Bluefalcon_80 (A5), Discoknowium_82 (A5),

Start 4:

- Found in 32 of 32 (100.0%) of genes in pham
- Manual Annotations of this start: 28 of 31
- Called 90.6% of time when present
- Phage (with cluster) where this start called: AgentM_84 (A5), Airmid_86 (A5), Aragog_85 (A5), Archetta_74 (A5), Benedict_87 (A5), Conspiracy_85 (A5), Coog_82 (A5), ElTiger69_89 (A5), ForGetIt_86 (A5), George_80 (A5), Ghoulboy_85 (A5), HuhtaEnerson15_83 (A5), Jabiru_84 (A5), Jovo_83 (A5), Lev2_85 (A5), LittleCherry_83 (A5), Micasa_84 (A5), Midas2_82 (A5), Milcery_83 (A5), Naca_87 (A5), PetterN_91 (A5), Phlorence_83 (A5), PickleBack_86 (A5), Scorpia_85 (A5), Swirley_84 (A5), SydNat_84 (A5), Theia_85 (A5), Tiger_83 (A5), Zolita_83 (A5),

Summary by clusters:

There is one cluster represented in this pham: A5

Info for manual annotations of cluster A5:

- Start number 2 was manually annotated 1 time for cluster A5.
- Start number 3 was manually annotated 2 times for cluster A5.
- Start number 4 was manually annotated 28 times for cluster A5.

Gene Information:

Gene: AgentM_84 Start: 48766, Stop: 48353, Start Num: 4

Candidate Starts for AgentM_84:

(1, 48874), (Start: 2 @48832 has 1 MA's), (Start: 3 @48793 has 2 MA's), (Start: 4 @48766 has 28 MA's), (8, 48640), (10, 48628), (11, 48607), (12, 48589), (15, 48556), (16, 48544), (17, 48502), (18, 48499), (19, 48460), (21, 48361),

Gene: Airmid_86 Start: 49120, Stop: 48710, Start Num: 4

Candidate Starts for Airmid_86:

(Start: 4 @49120 has 28 MA's), (5, 49072), (7, 49018), (9, 48988), (10, 48985), (11, 48964), (12, 48946), (13, 48943), (14, 48922), (15, 48913), (16, 48901), (17, 48859), (18, 48856), (19, 48817), (21, 48718),

Gene: Aragog_85 Start: 49063, Stop: 48650, Start Num: 4

Candidate Starts for Aragog_85:

(1, 49171), (Start: 2 @49129 has 1 MA's), (Start: 3 @49090 has 2 MA's), (Start: 4 @49063 has 28 MA's), (8, 48937), (10, 48925), (11, 48904), (12, 48886), (15, 48853), (16, 48841), (17, 48799), (18, 48796), (19, 48757), (21, 48658),

Gene: Archetta_74 Start: 45703, Stop: 45290, Start Num: 4

Candidate Starts for Archetta_74:

(Start: 3 @45730 has 2 MA's), (Start: 4 @45703 has 28 MA's), (8, 45577), (10, 45565), (11, 45544), (12, 45526), (15, 45493), (16, 45481), (17, 45439), (18, 45436), (19, 45397), (21, 45298),

Gene: Benedict_87 Start: 48963, Stop: 48553, Start Num: 4

Candidate Starts for Benedict_87:

(Start: 4 @48963 has 28 MA's), (5, 48915), (7, 48861), (9, 48831), (10, 48828), (11, 48807), (12, 48789), (13, 48786), (14, 48765), (15, 48756), (16, 48744), (17, 48702), (18, 48699), (19, 48660), (21, 48561),

Gene: Bluefalcon_80 Start: 49373, Stop: 48933, Start Num: 3

Candidate Starts for Bluefalcon_80:

(Start: 3 @49373 has 2 MA's), (Start: 4 @49346 has 28 MA's), (8, 49220), (10, 49208), (11, 49187), (12, 49169), (15, 49136), (16, 49124), (17, 49082), (18, 49079), (19, 49040), (21, 48941),

Gene: Conspiracy_85 Start: 49006, Stop: 48593, Start Num: 4

Candidate Starts for Conspiracy_85:

(1, 49114), (Start: 2 @49072 has 1 MA's), (Start: 3 @49033 has 2 MA's), (Start: 4 @49006 has 28 MA's), (8, 48880), (10, 48868), (11, 48847), (12, 48829), (15, 48796), (16, 48784), (17, 48742), (18, 48739), (19, 48700), (21, 48601),

Gene: Coog_82 Start: 49144, Stop: 48731, Start Num: 4

Candidate Starts for Coog_82:

(Start: 3 @49171 has 2 MA's), (Start: 4 @49144 has 28 MA's), (5, 49096), (9, 49009), (10, 49006), (11, 48985), (12, 48967), (13, 48964), (15, 48934), (16, 48922), (17, 48880), (19, 48838), (21, 48739),

Gene: Cuco_84 Start: 49069, Stop: 48590, Start Num: 2

Candidate Starts for Cuco_84:

(Start: 2 @49069 has 1 MA's), (Start: 3 @49030 has 2 MA's), (Start: 4 @49003 has 28 MA's), (9, 48868), (10, 48865), (11, 48844), (12, 48826), (13, 48823), (15, 48793), (16, 48781), (17, 48739), (18, 48736), (19, 48697), (21, 48598),

Gene: Discoknowium_82 Start: 48550, Stop: 48110, Start Num: 3

Candidate Starts for Discoknowium_82:

(Start: 3 @48550 has 2 MA's), (Start: 4 @48523 has 28 MA's), (8, 48397), (10, 48385), (11, 48364), (12, 48346), (15, 48313), (16, 48301), (17, 48259), (18, 48256), (19, 48217), (21, 48118),

Gene: ElTiger69_89 Start: 49384, Stop: 48974, Start Num: 4

Candidate Starts for ElTiger69_89:

(Start: 4 @49384 has 28 MA's), (5, 49336), (7, 49282), (9, 49252), (10, 49249), (11, 49228), (12, 49210), (13, 49207), (14, 49186), (15, 49177), (16, 49165), (17, 49123), (18, 49120), (19, 49081), (21, 48982),

Gene: ForGetIt_86 Start: 49313, Stop: 48900, Start Num: 4

Candidate Starts for ForGetIt_86:

(1, 49421), (Start: 2 @49379 has 1 MA's), (Start: 3 @49340 has 2 MA's), (Start: 4 @49313 has 28 MA's), (8, 49187), (10, 49175), (11, 49154), (12, 49136), (15, 49103), (16, 49091), (17, 49049), (18, 49046), (19, 49007), (21, 48908),

Gene: George_80 Start: 49517, Stop: 49104, Start Num: 4

Candidate Starts for George_80:

(Start: 3 @49544 has 2 MA's), (Start: 4 @49517 has 28 MA's), (9, 49382), (10, 49379), (11, 49358), (12, 49340), (13, 49337), (14, 49316), (15, 49307), (16, 49295), (17, 49253), (18, 49250), (19, 49211), (21, 49112),

Gene: Ghoulboy_85 Start: 49277, Stop: 48864, Start Num: 4

Candidate Starts for Ghoulboy_85:

(Start: 3 @49304 has 2 MA's), (Start: 4 @49277 has 28 MA's), (5, 49229), (8, 49151), (10, 49139), (11, 49118), (12, 49100), (14, 49076), (15, 49067), (16, 49055), (17, 49013), (18, 49010), (19, 48971), (21, 48872),

Gene: HuhtaEnerson15_83 Start: 49037, Stop: 48624, Start Num: 4

Candidate Starts for HuhtaEnerson15_83:

(Start: 3 @49064 has 2 MA's), (Start: 4 @49037 has 28 MA's), (8, 48911), (10, 48899), (11, 48878), (12, 48860), (14, 48836), (15, 48827), (16, 48815), (17, 48773), (18, 48770), (19, 48731), (21, 48632),

Gene: Jabiru_84 Start: 48541, Stop: 48128, Start Num: 4

Candidate Starts for Jabiru_84:

(Start: 3 @48568 has 2 MA's), (Start: 4 @48541 has 28 MA's), (5, 48493), (6, 48448), (9, 48406), (10, 48403), (11, 48382), (12, 48364), (13, 48361), (15, 48331), (17, 48277), (18, 48274), (19, 48235), (20, 48160), (21, 48136),

Gene: Jovo_83 Start: 49569, Stop: 49156, Start Num: 4

Candidate Starts for Jovo_83:

(1, 49677), (Start: 2 @49635 has 1 MA's), (Start: 3 @49596 has 2 MA's), (Start: 4 @49569 has 28 MA's), (8, 49443), (10, 49431), (11, 49410), (12, 49392), (15, 49359), (16, 49347), (17, 49305), (18, 49302), (19, 49263), (21, 49164),

Gene: Lev2_85 Start: 48922, Stop: 48509, Start Num: 4

Candidate Starts for Lev2_85:

(1, 49030), (Start: 2 @48988 has 1 MA's), (Start: 3 @48949 has 2 MA's), (Start: 4 @48922 has 28 MA's), (8, 48796), (10, 48784), (11, 48763), (12, 48745), (15, 48712), (16, 48700), (17, 48658), (18, 48655), (19, 48616), (21, 48517),

Gene: LittleCherry_83 Start: 48627, Stop: 48214, Start Num: 4

Candidate Starts for LittleCherry_83:

(Start: 3 @48654 has 2 MA's), (Start: 4 @48627 has 28 MA's), (5, 48579), (8, 48501), (10, 48489), (11, 48468), (12, 48450), (14, 48426), (15, 48417), (16, 48405), (17, 48363), (18, 48360), (19, 48321), (21, 48222),

Gene: Micasa_84 Start: 49294, Stop: 48881, Start Num: 4

Candidate Starts for Micasa_84:

(Start: 3 @49321 has 2 MA's), (Start: 4 @49294 has 28 MA's), (5, 49246), (8, 49168), (10, 49156), (11, 49135), (12, 49117), (14, 49093), (15, 49084), (16, 49072), (17, 49030), (18, 49027), (19, 48988), (21, 48889),

Gene: Midas2_82 Start: 49144, Stop: 48731, Start Num: 4

Candidate Starts for Midas2_82:

(Start: 3 @49171 has 2 MA's), (Start: 4 @49144 has 28 MA's), (5, 49096), (9, 49009), (10, 49006), (11, 48985), (12, 48967), (13, 48964), (15, 48934), (16, 48922), (17, 48880), (19, 48838), (21, 48739),

Gene: Milcery_83 Start: 48923, Stop: 48510, Start Num: 4

Candidate Starts for Milcery_83:

(Start: 3 @48950 has 2 MA's), (Start: 4 @48923 has 28 MA's), (5, 48875), (8, 48797), (10, 48785), (11, 48764), (12, 48746), (14, 48722), (15, 48713), (16, 48701), (17, 48659), (18, 48656), (19, 48617), (21, 48518),

Gene: Naca_87 Start: 49602, Stop: 49189, Start Num: 4

Candidate Starts for Naca_87:

(Start: 3 @49629 has 2 MA's), (Start: 4 @49602 has 28 MA's), (5, 49554), (9, 49467), (10, 49464), (11, 49443), (12, 49425), (13, 49422), (15, 49392), (16, 49380), (18, 49335), (19, 49296), (20, 49221), (21, 49197),

Gene: PetterN_91 Start: 49128, Stop: 48715, Start Num: 4

Candidate Starts for PetterN_91:

(Start: 3 @49155 has 2 MA's), (Start: 4 @49128 has 28 MA's), (5, 49080), (9, 48993), (10, 48990), (11, 48969), (12, 48951), (13, 48948), (14, 48927), (15, 48918), (16, 48906), (17, 48864), (18, 48861), (19, 48822), (20, 48747), (21, 48723),

Gene: Phlorence_83 Start: 48666, Stop: 48253, Start Num: 4

Candidate Starts for Phlorence_83:

(1, 48774), (Start: 2 @48732 has 1 MA's), (Start: 3 @48693 has 2 MA's), (Start: 4 @48666 has 28 MA's), (8, 48540), (10, 48528), (11, 48507), (12, 48489), (15, 48456), (16, 48444), (17, 48402), (18, 48399), (19, 48360), (21, 48261),

Gene: PickleBack_86 Start: 49120, Stop: 48707, Start Num: 4

Candidate Starts for PickleBack_86:

(1, 49228), (Start: 2 @49186 has 1 MA's), (Start: 3 @49147 has 2 MA's), (Start: 4 @49120 has 28 MA's), (8, 48994), (10, 48982), (11, 48961), (12, 48943), (15, 48910), (16, 48898), (17, 48856), (18, 48853), (19, 48814), (21, 48715),

Gene: Scorpia_85 Start: 48700, Stop: 48287, Start Num: 4

Candidate Starts for Scorpia_85:

(Start: 3 @48727 has 2 MA's), (Start: 4 @48700 has 28 MA's), (5, 48652), (6, 48607), (9, 48565), (10, 48562), (11, 48541), (12, 48523), (13, 48520), (15, 48490), (16, 48478), (17, 48436), (18, 48433), (19, 48394), (20, 48319), (21, 48295),

Gene: Swirley_84 Start: 47645, Stop: 47232, Start Num: 4

Candidate Starts for Swirley_84:

(Start: 3 @47672 has 2 MA's), (Start: 4 @47645 has 28 MA's), (5, 47597), (8, 47519), (10, 47507), (11, 47486), (12, 47468), (15, 47435), (16, 47423), (17, 47381), (18, 47378), (19, 47339), (21, 47240),

Gene: SydNat_84 Start: 49286, Stop: 48873, Start Num: 4

Candidate Starts for SydNat_84:

(Start: 3 @49313 has 2 MA's), (Start: 4 @49286 has 28 MA's), (5, 49238), (8, 49160), (10, 49148), (11, 49127), (12, 49109), (14, 49085), (15, 49076), (16, 49064), (17, 49022), (18, 49019), (19, 48980), (21, 48881),

Gene: Theia_85 Start: 49629, Stop: 49216, Start Num: 4

Candidate Starts for Theia_85:

(Start: 3 @49656 has 2 MA's), (Start: 4 @49629 has 28 MA's), (8, 49503), (10, 49491), (11, 49470), (12, 49452), (15, 49419), (16, 49407), (17, 49365), (18, 49362), (19, 49323), (21, 49224),

Gene: Tiger_83 Start: 48587, Stop: 48174, Start Num: 4

Candidate Starts for Tiger_83:

(1, 48695), (Start: 2 @48653 has 1 MA's), (Start: 3 @48614 has 2 MA's), (Start: 4 @48587 has 28 MA's), (8, 48461), (10, 48449), (11, 48428), (12, 48410), (15, 48377), (16, 48365), (17, 48323), (18, 48320), (19, 48281), (21, 48182),

Gene: Zolita_83 Start: 49269, Stop: 48856, Start Num: 4

Candidate Starts for Zolita_83:

(Start: 3 @49296 has 2 MA's), (Start: 4 @49269 has 28 MA's), (5, 49221), (8, 49143), (10, 49131), (11, 49110), (12, 49092), (14, 49068), (15, 49059), (16, 49047), (17, 49005), (18, 49002), (19, 48963), (21, 48864),