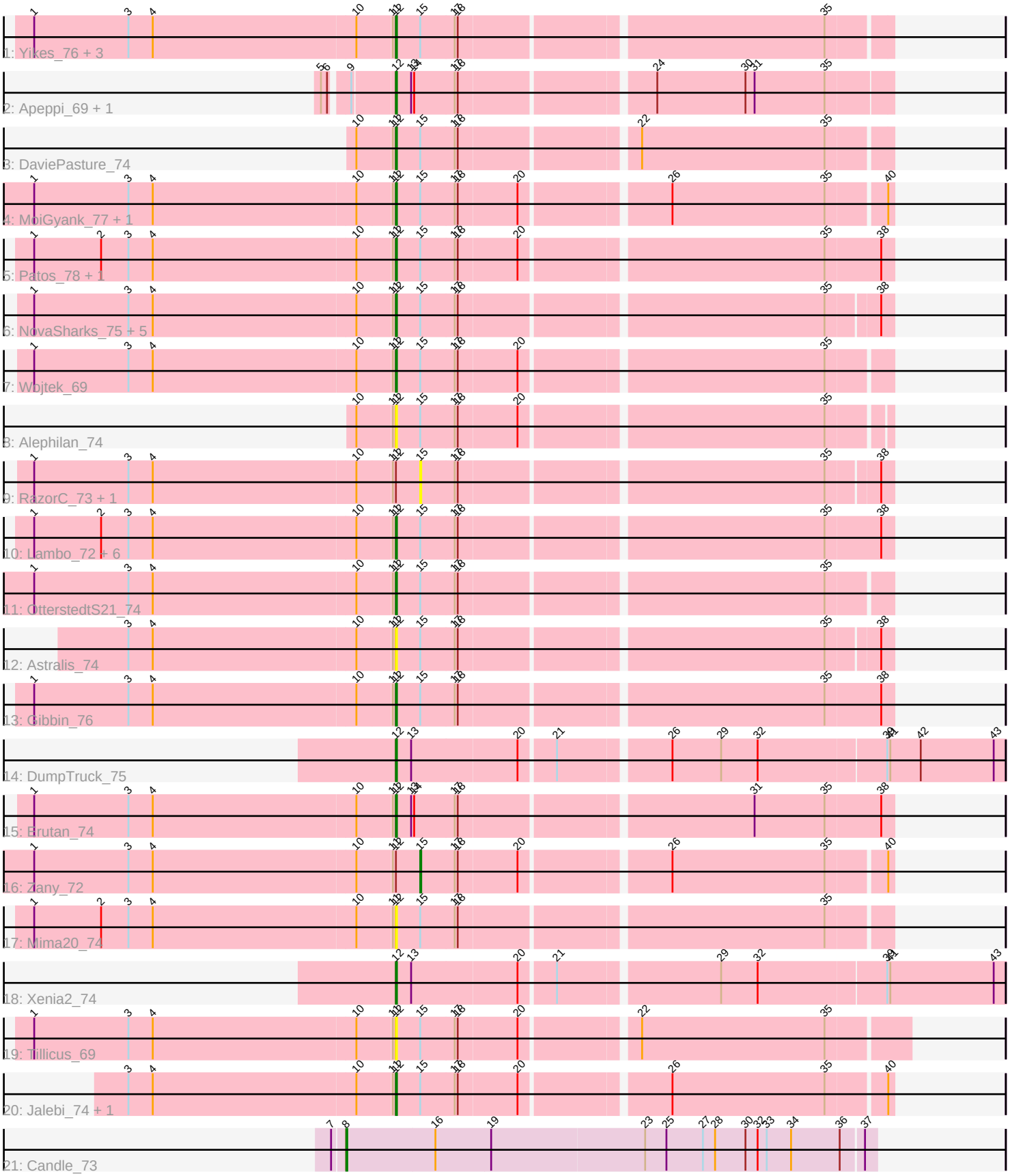
Pham 216333


1: Yikes_76 + 3
2: Apeppi_69 + 1
3: DaviePasture_74
4: MoiGyank_77 + 1
5: Patos_78 + 1
6: NovaSharks_75 + 5
7: Wojtek_69
8: Alephilan_74
9: RazorC_73 + 1
10: Lambo_72 + 6
11: OtterstedtS21_74
12: Astralis_74
13: Gibbin_76
14: DumpTruck_75
15: Brutan_74
16: Zany_72
17: Mima20_74
18: Xenia2_74
19: Tillicus_69
20: Jalebi_74 + 1
21: Candle_73

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 216333 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216333 has 40 members, 9 are drafts.

Phages represented in each track:
• Track 1 : Yikes_76, Ranch_74, Sadboi_75, GretelLyn_74
• Track 2 : Apeppi_69, LuckyLeo_71
• Track 3 : DaviePasture_74
• Track 4 : MoiGyank_77, LavAbarElk_74
• Track 5 : Patos_78, NorManre_78
• Track 6 : NovaSharks_75, Rumi_74, Stormer_73, Alyssamiracle_76, Avian_72, Genamy16_76
• Track 7 : Wojtek_69
• Track 8 : Alephilan_74
• Track 9 : RazorC_73, Jamemuya19_73
• Track 10 : Lambo_72, Fulcrum_74, GOATification_74, DoobyDoo_73, Lila22_75, ParvusTarda_73, BirthdayBoy_76
• Track 11 : OtterstedtS21_74
• Track 12 : Astralis_74
• Track 13 : Gibbin_76
• Track 14 : DumpTruck_75
• Track 15 : Erutan_74
• Track 16 : Zany_72
• Track 17 : Mima20_74
• Track 18 : Xenia2_74
• Track 19 : Tillicus_69
• Track 20 : Jalebi_74, Sampudon_75
• Track 21 : Candle_73

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

The start number called the most often in the published annotations is 12, it was called in 29 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alephilan_74, Alyssamiracle_76, Apeppi_69, Astralis_74, Avian_72, BirthdayBoy_76, DaviePasture_74, DoobyDoo_73, DumpTruck_75, Erutan_74, Fulcrum_74, GOATification_74, Genamy16_76, Gibbin_76, GretelLyn_74, Jalebi_74, Lambo_72, LavAbarElk_74, Lila22_75, LuckyLeo_71, Mima20_74, MoiGyank_77,

NorManre_78, NovaSharks_75, OtterstedtS21_74, ParvusTarda_73, Patos_78, Ranch_74, Rumi_74, Sadboi_75, Sampudon_75, Stormer_73, Tillicus_69, Wojtek_69, Xenia2_74, Yikes_76,

Genes that have the "Most Annotated" start but do not call it:
• Jamemuya19_73, RazorC_73, Zany_72,

Genes that do not have the "Most Annotated" start:
• Candle_73,

Summary by start number:

Start 8:
• Found in 1 of 40 (2.5%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Candle_73 (R),

Start 12:
• Found in 39 of 40 (97.5%) of genes in pham
• Manual Annotations of this start: 29 of 31
• Called 92.3% of time when present
• Phage (with cluster) where this start called: Alephilan_74 (DV), Alyssamiracle_76 (DV), Apeppi_69 (DV), Astralis_74 (DV), Avian_72 (DV), BirthdayBoy_76 (DV), DaviePasture_74 (DV), DoobyDoo_73 (DV), DumpTruck_75 (DV), Erutan_74 (DV), Fulcrum_74 (DV), GOATification_74 (DV), Genamy16_76 (DV), Gibbin_76 (DV), GretelLyn_74 (DV), Jalebi_74 (DV), Lambo_72 (DV), LavAbarElk_74 (DV), Lila22_75 (DV), LuckyLeo_71 (DV), Mima20_74 (DV), MoiGyank_77 (DV), NorManre_78 (DV), NovaSharks_75 (DV), OtterstedtS21_74 (DV), ParvusTarda_73 (DV), Patos_78 (DV), Ranch_74 (DV), Rumi_74 (DV), Sadboi_75 (DV), Sampudon_75 (DV), Stormer_73 (DV), Tillicus_69 (DV), Wojtek_69 (DV), Xenia2_74 (DV), Yikes_76 (DV),

Start 15:
• Found in 34 of 40 (85.0%) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 8.8% of time when present
• Phage (with cluster) where this start called: Jamemuya19_73 (DV), RazorC_73 (DV), Zany_72 (DV),

Summary by clusters:

There are 2 clusters represented in this pham: DV, R,

Info for manual annotations of cluster DV:
•Start number 12 was manually annotated 29 times for cluster DV.
•Start number 15 was manually annotated 1 time for cluster DV.

Info for manual annotations of cluster R:
•Start number 8 was manually annotated 1 time for cluster R.

Gene Information:

Gene: Alephilan_74 Start: 50462, Stop: 50920, Start Num: 12
Candidate Starts for Alephilan_74:
(10, 50426), (11, 50459), (Start: 12 @50462 has 29 MA's), (Start: 15 @50486 has 1 MA's), (17, 50519), (18, 50522), (20, 50579), (35, 50864),

Gene: Alyssamiracle_76 Start: 49100, Stop: 49561, Start Num: 12
Candidate Starts for Alyssamiracle_76:
(1, 48749), (3, 48842), (4, 48866), (10, 49064), (11, 49097), (Start: 12 @49100 has 29 MA's), (Start: 15 @49124 has 1 MA's), (17, 49157), (18, 49160), (35, 49502), (38, 49550),

Gene: Apeppi_69 Start: 49601, Stop: 50065, Start Num: 12
Candidate Starts for Apeppi_69:
(5, 49541), (6, 49547), (9, 49562), (Start: 12 @49601 has 29 MA's), (13, 49616), (14, 49619), (17, 49658), (18, 49661), (24, 49838), (30, 49925), (31, 49934), (35, 50003),

Gene: Astralis_74 Start: 48679, Stop: 49140, Start Num: 12
Candidate Starts for Astralis_74:
(3, 48421), (4, 48445), (10, 48643), (11, 48676), (Start: 12 @48679 has 29 MA's), (Start: 15 @48703 has 1 MA's), (17, 48736), (18, 48739), (35, 49081), (38, 49129),

Gene: Avian_72 Start: 48828, Stop: 49289, Start Num: 12
Candidate Starts for Avian_72:
(1, 48477), (3, 48570), (4, 48594), (10, 48792), (11, 48825), (Start: 12 @48828 has 29 MA's), (Start: 15 @48852 has 1 MA's), (17, 48885), (18, 48888), (35, 49230), (38, 49278),

Gene: BirthdayBoy_76 Start: 50736, Stop: 51203, Start Num: 12
Candidate Starts for BirthdayBoy_76:
(1, 50385), (2, 50451), (3, 50478), (4, 50502), (10, 50700), (11, 50733), (Start: 12 @50736 has 29 MA's), (Start: 15 @50760 has 1 MA's), (17, 50793), (18, 50796), (35, 51138), (38, 51192),

Gene: Candle_73 Start: 58217, Stop: 58732, Start Num: 8
Candidate Starts for Candle_73:
(7, 58205), (Start: 8 @58217 has 1 MA's), (16, 58304), (19, 58358), (23, 58508), (25, 58529), (27, 58565), (28, 58577), (30, 58607), (32, 58619), (33, 58628), (34, 58652), (36, 58700), (37, 58721),

Gene: DaviePasture_74 Start: 50326, Stop: 50787, Start Num: 12
Candidate Starts for DaviePasture_74:
(10, 50290), (11, 50323), (Start: 12 @50326 has 29 MA's), (Start: 15 @50350 has 1 MA's), (17, 50383), (18, 50386), (22, 50548), (35, 50728),

Gene: DoobyDoo_73 Start: 49084, Stop: 49551, Start Num: 12
Candidate Starts for DoobyDoo_73:
(1, 48733), (2, 48799), (3, 48826), (4, 48850), (10, 49048), (11, 49081), (Start: 12 @49084 has 29 MA's), (Start: 15 @49108 has 1 MA's), (17, 49141), (18, 49144), (35, 49486), (38, 49540),

Gene: DumpTruck_75 Start: 49735, Stop: 50310, Start Num: 12
Candidate Starts for DumpTruck_75:
(Start: 12 @49735 has 29 MA's), (13, 49750), (20, 49852), (21, 49885), (26, 49987), (29, 50035), (32, 50071), (39, 50194), (41, 50197), (42, 50227), (43, 50299),

Gene: Erutan_74 Start: 49851, Stop: 50318, Start Num: 12
Candidate Starts for Erutan_74:

(1, 49500), (3, 49593), (4, 49617), (10, 49815), (11, 49848), (Start: 12 @49851 has 29 MA's), (13, 49866), (14, 49869), (17, 49908), (18, 49911), (31, 50184), (35, 50253), (38, 50307),

Gene: Fulcrum_74 Start: 50089, Stop: 50556, Start Num: 12
Candidate Starts for Fulcrum_74:
(1, 49738), (2, 49804), (3, 49831), (4, 49855), (10, 50053), (11, 50086), (Start: 12 @50089 has 29 MA's), (Start: 15 @50113 has 1 MA's), (17, 50146), (18, 50149), (35, 50491), (38, 50545),

Gene: GOATification_74 Start: 50089, Stop: 50556, Start Num: 12
Candidate Starts for GOATification_74:
(1, 49738), (2, 49804), (3, 49831), (4, 49855), (10, 50053), (11, 50086), (Start: 12 @50089 has 29 MA's), (Start: 15 @50113 has 1 MA's), (17, 50146), (18, 50149), (35, 50491), (38, 50545),

Gene: Genamy16_76 Start: 49086, Stop: 49547, Start Num: 12
Candidate Starts for Genamy16_76:
(1, 48735), (3, 48828), (4, 48852), (10, 49050), (11, 49083), (Start: 12 @49086 has 29 MA's), (Start: 15 @49110 has 1 MA's), (17, 49143), (18, 49146), (35, 49488), (38, 49536),

Gene: Gibbin_76 Start: 50894, Stop: 51361, Start Num: 12
Candidate Starts for Gibbin_76:
(1, 50543), (3, 50636), (4, 50660), (10, 50858), (11, 50891), (Start: 12 @50894 has 29 MA's), (Start: 15 @50918 has 1 MA's), (17, 50951), (18, 50954), (35, 51296), (38, 51350),

Gene: GretelLyn_74 Start: 50729, Stop: 51190, Start Num: 12
Candidate Starts for GretelLyn_74:
(1, 50378), (3, 50471), (4, 50495), (10, 50693), (11, 50726), (Start: 12 @50729 has 29 MA's), (Start: 15 @50753 has 1 MA's), (17, 50786), (18, 50789), (35, 51131),

Gene: Jalebi_74 Start: 51322, Stop: 51783, Start Num: 12
Candidate Starts for Jalebi_74:
(3, 51064), (4, 51088), (10, 51286), (11, 51319), (Start: 12 @51322 has 29 MA's), (Start: 15 @51346 has 1 MA's), (17, 51379), (18, 51382), (20, 51439), (26, 51574), (35, 51724), (40, 51778),

Gene: Jamemuya19_73 Start: 48715, Stop: 49152, Start Num: 15
Candidate Starts for Jamemuya19_73:
(1, 48340), (3, 48433), (4, 48457), (10, 48655), (11, 48688), (Start: 12 @48691 has 29 MA's), (Start: 15 @48715 has 1 MA's), (17, 48748), (18, 48751), (35, 49093), (38, 49141),

Gene: Lambo_72 Start: 49886, Stop: 50353, Start Num: 12
Candidate Starts for Lambo_72:
(1, 49535), (2, 49601), (3, 49628), (4, 49652), (10, 49850), (11, 49883), (Start: 12 @49886 has 29 MA's), (Start: 15 @49910 has 1 MA's), (17, 49943), (18, 49946), (35, 50288), (38, 50342),

Gene: LavAbarElk_74 Start: 49534, Stop: 49995, Start Num: 12
Candidate Starts for LavAbarElk_74:
(1, 49183), (3, 49276), (4, 49300), (10, 49498), (11, 49531), (Start: 12 @49534 has 29 MA's), (Start: 15 @49558 has 1 MA's), (17, 49591), (18, 49594), (20, 49651), (26, 49786), (35, 49936), (40, 49990),

Gene: Lila22_75 Start: 50794, Stop: 51261, Start Num: 12
Candidate Starts for Lila22_75:
(1, 50443), (2, 50509), (3, 50536), (4, 50560), (10, 50758), (11, 50791), (Start: 12 @50794 has 29 MA's), (Start: 15 @50818 has 1 MA's), (17, 50851), (18, 50854), (35, 51196), (38, 51250),

Gene: LuckyLeo_71 Start: 49601, Stop: 50065, Start Num: 12
Candidate Starts for LuckyLeo_71:
(5, 49541), (6, 49547), (9, 49562), (Start: 12 @49601 has 29 MA's), (13, 49616), (14, 49619), (17, 49658), (18, 49661), (24, 49838), (30, 49925), (31, 49934), (35, 50003),

Gene: Mima20_74 Start: 50272, Stop: 50733, Start Num: 12
Candidate Starts for Mima20_74:
(1, 49921), (2, 49987), (3, 50014), (4, 50038), (10, 50236), (11, 50269), (Start: 12 @50272 has 29 MA's), (Start: 15 @50296 has 1 MA's), (17, 50329), (18, 50332), (35, 50674),

Gene: MoiGyank_77 Start: 50876, Stop: 51337, Start Num: 12
Candidate Starts for MoiGyank_77:
(1, 50525), (3, 50618), (4, 50642), (10, 50840), (11, 50873), (Start: 12 @50876 has 29 MA's), (Start: 15 @50900 has 1 MA's), (17, 50933), (18, 50936), (20, 50993), (26, 51128), (35, 51278), (40, 51332),

Gene: NorManre_78 Start: 51151, Stop: 51618, Start Num: 12
Candidate Starts for NorManre_78:
(1, 50800), (2, 50866), (3, 50893), (4, 50917), (10, 51115), (11, 51148), (Start: 12 @51151 has 29 MA's), (Start: 15 @51175 has 1 MA's), (17, 51208), (18, 51211), (20, 51268), (35, 51553), (38, 51607),

Gene: NovaSharks_75 Start: 48677, Stop: 49138, Start Num: 12
Candidate Starts for NovaSharks_75:
(1, 48326), (3, 48419), (4, 48443), (10, 48641), (11, 48674), (Start: 12 @48677 has 29 MA's), (Start: 15 @48701 has 1 MA's), (17, 48734), (18, 48737), (35, 49079), (38, 49127),

Gene: OtterstedtS21_74 Start: 50175, Stop: 50636, Start Num: 12
Candidate Starts for OtterstedtS21_74:
(1, 49824), (3, 49917), (4, 49941), (10, 50139), (11, 50172), (Start: 12 @50175 has 29 MA's), (Start: 15 @50199 has 1 MA's), (17, 50232), (18, 50235), (35, 50577),

Gene: ParvusTarda_73 Start: 49565, Stop: 50032, Start Num: 12
Candidate Starts for ParvusTarda_73:
(1, 49214), (2, 49280), (3, 49307), (4, 49331), (10, 49529), (11, 49562), (Start: 12 @49565 has 29 MA's), (Start: 15 @49589 has 1 MA's), (17, 49622), (18, 49625), (35, 49967), (38, 50021),

Gene: Patos_78 Start: 51150, Stop: 51617, Start Num: 12
Candidate Starts for Patos_78:
(1, 50799), (2, 50865), (3, 50892), (4, 50916), (10, 51114), (11, 51147), (Start: 12 @51150 has 29 MA's), (Start: 15 @51174 has 1 MA's), (17, 51207), (18, 51210), (20, 51267), (35, 51552), (38, 51606),

Gene: Ranch_74 Start: 48903, Stop: 49370, Start Num: 12
Candidate Starts for Ranch_74:
(1, 48552), (3, 48645), (4, 48669), (10, 48867), (11, 48900), (Start: 12 @48903 has 29 MA's), (Start: 15 @48927 has 1 MA's), (17, 48960), (18, 48963), (35, 49305),

Gene: RazorC_73 Start: 48855, Stop: 49292, Start Num: 15
Candidate Starts for RazorC_73:
(1, 48480), (3, 48573), (4, 48597), (10, 48795), (11, 48828), (Start: 12 @48831 has 29 MA's), (Start: 15 @48855 has 1 MA's), (17, 48888), (18, 48891), (35, 49233), (38, 49281),

Gene: Rumi_74 Start: 48374, Stop: 48835, Start Num: 12
Candidate Starts for Rumi_74:

(1, 48023), (3, 48116), (4, 48140), (10, 48338), (11, 48371), (Start: 12 @48374 has 29 MA's), (Start: 15 @48398 has 1 MA's), (17, 48431), (18, 48434), (35, 48776), (38, 48824),

Gene: Sadboi_75 Start: 50730, Stop: 51191, Start Num: 12
Candidate Starts for Sadboi_75:
(1, 50379), (3, 50472), (4, 50496), (10, 50694), (11, 50727), (Start: 12 @50730 has 29 MA's), (Start: 15 @50754 has 1 MA's), (17, 50787), (18, 50790), (35, 51132),

Gene: Sampudon_75 Start: 51322, Stop: 51783, Start Num: 12
Candidate Starts for Sampudon_75:
(3, 51064), (4, 51088), (10, 51286), (11, 51319), (Start: 12 @51322 has 29 MA's), (Start: 15 @51346 has 1 MA's), (17, 51379), (18, 51382), (20, 51439), (26, 51574), (35, 51724), (40, 51778),

Gene: Stormer_73 Start: 48378, Stop: 48839, Start Num: 12
Candidate Starts for Stormer_73:
(1, 48027), (3, 48120), (4, 48144), (10, 48342), (11, 48375), (Start: 12 @48378 has 29 MA's), (Start: 15 @48402 has 1 MA's), (17, 48435), (18, 48438), (35, 48780), (38, 48828),

Gene: Tillicus_69 Start: 49535, Stop: 50014, Start Num: 12
Candidate Starts for Tillicus_69:
(1, 49184), (3, 49277), (4, 49301), (10, 49499), (11, 49532), (Start: 12 @49535 has 29 MA's), (Start: 15 @49559 has 1 MA's), (17, 49592), (18, 49595), (20, 49652), (22, 49757), (35, 49937),

Gene: Wojtek_69 Start: 49317, Stop: 49778, Start Num: 12
Candidate Starts for Wojtek_69:
(1, 48966), (3, 49059), (4, 49083), (10, 49281), (11, 49314), (Start: 12 @49317 has 29 MA's), (Start: 15 @49341 has 1 MA's), (17, 49374), (18, 49377), (20, 49434), (35, 49719),

Gene: Xenia2_74 Start: 49619, Stop: 50194, Start Num: 12
Candidate Starts for Xenia2_74:
(Start: 12 @49619 has 29 MA's), (13, 49634), (20, 49736), (21, 49769), (29, 49919), (32, 49955), (39, 50078), (41, 50081), (43, 50183),

Gene: Yikes_76 Start: 51176, Stop: 51637, Start Num: 12
Candidate Starts for Yikes_76:
(1, 50825), (3, 50918), (4, 50942), (10, 51140), (11, 51173), (Start: 12 @51176 has 29 MA's), (Start: 15 @51200 has 1 MA's), (17, 51233), (18, 51236), (35, 51578),

Gene: Zany_72 Start: 50659, Stop: 51096, Start Num: 15
Candidate Starts for Zany_72:
(1, 50284), (3, 50377), (4, 50401), (10, 50599), (11, 50632), (Start: 12 @50635 has 29 MA's), (Start: 15 @50659 has 1 MA's), (17, 50692), (18, 50695), (20, 50752), (26, 50887), (35, 51037), (40, 51091),