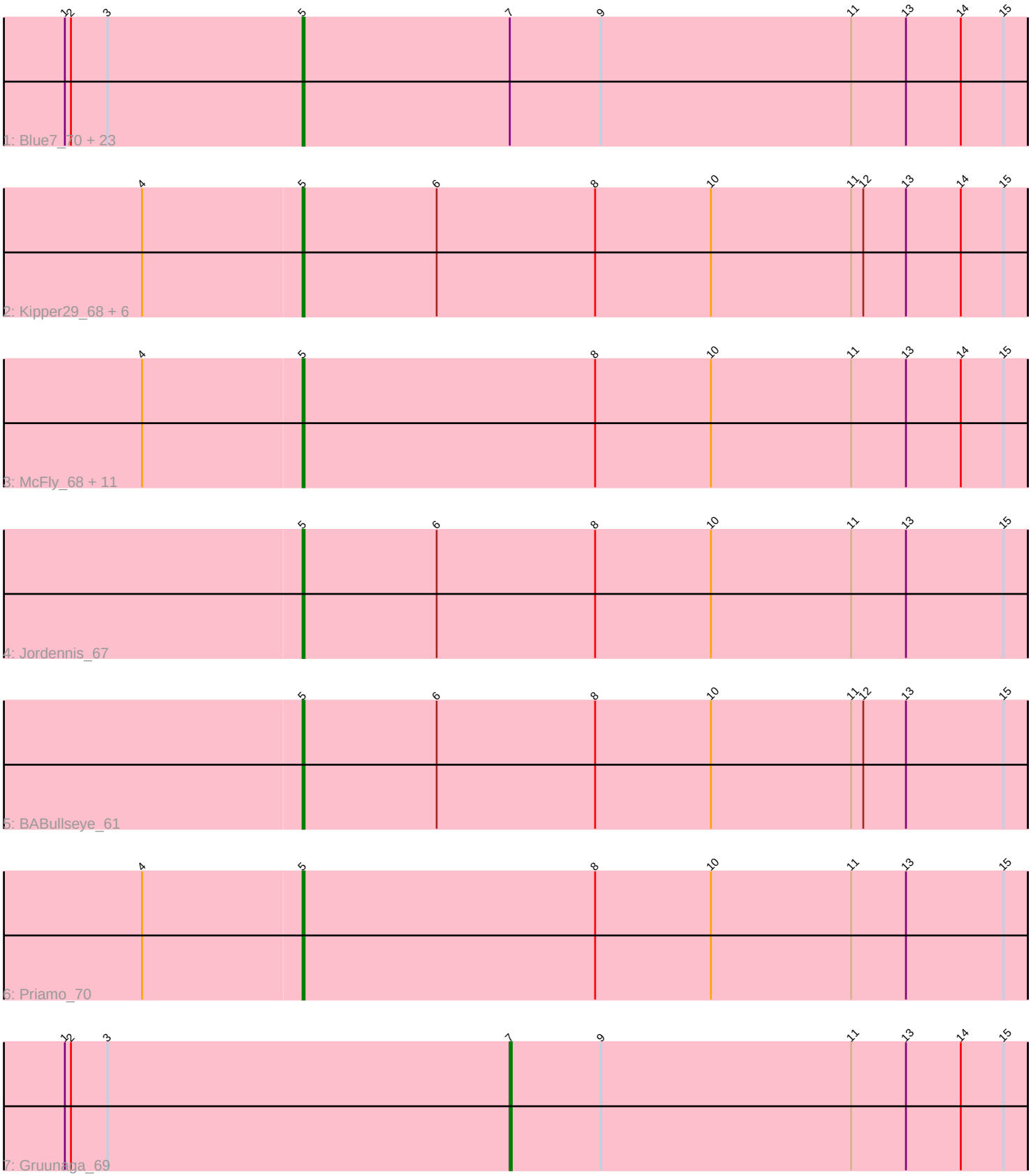
Pham 282149


1: Blue7_70 + 23
2: Kipper29_68 + 6
3: McFly_68 + 11
4: Jordennis_67
5: BABullseye_61
6: Priamo_70
7: Gruunaga_69

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 282149 Report

This analysis was run 02/23/26 on database version 636.

Pham number 282149 has 47 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Blue7_70, Lilbunny_68, Temprado_70, ToneTone_66, BennyP_68, Artemis2UCLA_69, Koko_71, Gladiator_66, Tucker_69, Hexamo_69, Wiks_68, Roksolana_70, Jeffabunny_69, Indra_72, Yokurt_68, Helmet_71, Garak_70, WunderPhul_69, BlessJoy_69, Hammer_69, Zulu_70, Zaka_69, Rifter_69, CloudWang3_70
• Track 2 : Kipper29_68, Kazan_69, EricB_67, Hoot_63, VohminGhazi_68, SmellyB_68, Candra_66
• Track 3 : McFly_68, Isiphiwo_66, Dorothea_68, Pmask_67, Chartreuse_67, Neeharika16_67, SuperCallie99_65, Cookiedough_68, Newrala_68, DaVinci_66, GreedyLawyer_65, DelvinSonDorr_65
• Track 4 : Jordennis_67
• Track 5 : BABullseye_61
• Track 6 : Priamo_70
• Track 7 : Gruunaga_69

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

The start number called the most often in the published annotations is 5, it was called in 42 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Artemis2UCLA_69, BABullseye_61, BennyP_68, BlessJoy_69, Blue7_70, Candra_66, Chartreuse_67, CloudWang3_70, Cookiedough_68, DaVinci_66, DelvinSonDorr_65, Dorothea_68, EricB_67, Garak_70, Gladiator_66, GreedyLawyer_65, Hammer_69, Helmet_71, Hexamo_69, Hoot_63, Indra_72, Isiphiwo_66, Jeffabunny_69, Jordennis_67, Kazan_69, Kipper29_68, Koko_71, Lilbunny_68, McFly_68, Neeharika16_67, Newrala_68, Pmask_67, Priamo_70, Rifter_69, Roksolana_70, SmellyB_68, SuperCallie99_65, Temprado_70, ToneTone_66, Tucker_69, VohminGhazi_68, Wiks_68, WunderPhul_69, Yokurt_68, Zaka_69, Zulu_70,

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

Genes that do not have the "Most Annotated" start:
• Gruunaga_69,

Summary by start number:

Start 5:
• Found in 46 of 47 (97.9%) of genes in pham
• Manual Annotations of this start: 42 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artemis2UCLA_69 (A6), BABullseye_61 (A6), BennyP_68 (A6), BlessJoy_69 (A6), Blue7_70 (A6), Candra_66 (A6), Chartreuse_67 (A6), CloudWang3_70 (A6), Cookiedough_68 (A6), DaVinci_66 (A6), DelvinSonDorr_65 (A6), Dorothea_68 (A6), EricB_67 (A6), Garak_70 (A6), Gladiator_66 (A6), GreedyLawyer_65 (A6), Hammer_69 (A6), Helmet_71 (A6), Hexamo_69 (A6), Hoot_63 (A6), Indra_72 (A6), Isiphiwo_66 (A6), Jeffabunny_69 (A6), Jordennis_67 (A6), Kazan_69 (A6), Kipper29_68 (A6), Koko_71 (A6), Lilbunny_68 (A6), McFly_68 (A6), Neeharika16_67 (A6), Newrala_68 (A6), Pmask_67 (A6), Priamo_70 (A6), Rifter_69 (A6), Roksolana_70 (A6), SmellyB_68 (A6), SuperCallie99_65 (A6), Temprado_70 (A6), ToneTone_66 (A6), Tucker_69 (A6), VohminGhazi_68 (A6), Wiks_68 (A6), WunderPhul_69 (A6), Yokurt_68 (A6), Zaka_69 (A6), Zulu_70 (A6),

Start 7:
• Found in 25 of 47 (53.2%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 4.0% of time when present
• Phage (with cluster) where this start called: Gruunaga_69 (A6),

Summary by clusters:

There is one cluster represented in this pham: A6

Info for manual annotations of cluster A6:
•Start number 5 was manually annotated 42 times for cluster A6.
•Start number 7 was manually annotated 1 time for cluster A6.

Gene Information:

Gene: Artemis2UCLA_69 Start: 40044, Stop: 39688, Start Num: 5
Candidate Starts for Artemis2UCLA_69:
(1, 40161), (2, 40158), (3, 40140), (Start: 5 @40044 has 42 MA's), (Start: 7 @39942 has 1 MA's), (9, 39897), (11, 39774), (13, 39747), (14, 39720), (15, 39699),

Gene: BABullseye_61 Start: 37712, Stop: 37356, Start Num: 5
Candidate Starts for BABullseye_61:
(Start: 5 @37712 has 42 MA's), (6, 37646), (8, 37568), (10, 37511), (11, 37442), (12, 37436), (13, 37415), (15, 37367),

Gene: BennyP_68 Start: 40114, Stop: 39758, Start Num: 5
Candidate Starts for BennyP_68:

(1, 40231), (2, 40228), (3, 40210), (Start: 5 @40114 has 42 MA's), (Start: 7 @40012 has 1 MA's), (9, 39967), (11, 39844), (13, 39817), (14, 39790), (15, 39769),

Gene: BlessJoy_69 Start: 40470, Stop: 40114, Start Num: 5
Candidate Starts for BlessJoy_69:
(1, 40587), (2, 40584), (3, 40566), (Start: 5 @40470 has 42 MA's), (Start: 7 @40368 has 1 MA's), (9, 40323), (11, 40200), (13, 40173), (14, 40146), (15, 40125),

Gene: Blue7_70 Start: 40172, Stop: 39816, Start Num: 5
Candidate Starts for Blue7_70:
(1, 40289), (2, 40286), (3, 40268), (Start: 5 @40172 has 42 MA's), (Start: 7 @40070 has 1 MA's), (9, 40025), (11, 39902), (13, 39875), (14, 39848), (15, 39827),

Gene: Candra_66 Start: 40076, Stop: 39720, Start Num: 5
Candidate Starts for Candra_66:
(4, 40154), (Start: 5 @40076 has 42 MA's), (6, 40010), (8, 39932), (10, 39875), (11, 39806), (12, 39800), (13, 39779), (14, 39752), (15, 39731),

Gene: Chartreuse_67 Start: 39392, Stop: 39036, Start Num: 5
Candidate Starts for Chartreuse_67:
(4, 39470), (Start: 5 @39392 has 42 MA's), (8, 39248), (10, 39191), (11, 39122), (13, 39095), (14, 39068), (15, 39047),

Gene: CloudWang3_70 Start: 40556, Stop: 40200, Start Num: 5
Candidate Starts for CloudWang3_70:
(1, 40673), (2, 40670), (3, 40652), (Start: 5 @40556 has 42 MA's), (Start: 7 @40454 has 1 MA's), (9, 40409), (11, 40286), (13, 40259), (14, 40232), (15, 40211),

Gene: Cookiedough_68 Start: 40020, Stop: 39664, Start Num: 5
Candidate Starts for Cookiedough_68:
(4, 40098), (Start: 5 @40020 has 42 MA's), (8, 39876), (10, 39819), (11, 39750), (13, 39723), (14, 39696), (15, 39675),

Gene: DaVinci_66 Start: 39446, Stop: 39090, Start Num: 5
Candidate Starts for DaVinci_66:
(4, 39524), (Start: 5 @39446 has 42 MA's), (8, 39302), (10, 39245), (11, 39176), (13, 39149), (14, 39122), (15, 39101),

Gene: DelvinSonDorr_65 Start: 40251, Stop: 39895, Start Num: 5
Candidate Starts for DelvinSonDorr_65:
(4, 40329), (Start: 5 @40251 has 42 MA's), (8, 40107), (10, 40050), (11, 39981), (13, 39954), (14, 39927), (15, 39906),

Gene: Dorothea_68 Start: 40018, Stop: 39662, Start Num: 5
Candidate Starts for Dorothea_68:
(4, 40096), (Start: 5 @40018 has 42 MA's), (8, 39874), (10, 39817), (11, 39748), (13, 39721), (14, 39694), (15, 39673),

Gene: EricB_67 Start: 40033, Stop: 39677, Start Num: 5
Candidate Starts for EricB_67:
(4, 40111), (Start: 5 @40033 has 42 MA's), (6, 39967), (8, 39889), (10, 39832), (11, 39763), (12, 39757), (13, 39736), (14, 39709), (15, 39688),

Gene: Garak_70 Start: 40411, Stop: 40055, Start Num: 5
Candidate Starts for Garak_70:
(1, 40528), (2, 40525), (3, 40507), (Start: 5 @40411 has 42 MA's), (Start: 7 @40309 has 1 MA's), (9, 40264), (11, 40141), (13, 40114), (14, 40087), (15, 40066),

Gene: Gladiator_66 Start: 39636, Stop: 39280, Start Num: 5
Candidate Starts for Gladiator_66:
(1, 39753), (2, 39750), (3, 39732), (Start: 5 @39636 has 42 MA's), (Start: 7 @39534 has 1 MA's), (9, 39489), (11, 39366), (13, 39339), (14, 39312), (15, 39291),

Gene: GreedyLawyer_65 Start: 40006, Stop: 39650, Start Num: 5
Candidate Starts for GreedyLawyer_65:
(4, 40084), (Start: 5 @40006 has 42 MA's), (8, 39862), (10, 39805), (11, 39736), (13, 39709), (14, 39682), (15, 39661),

Gene: Gruunaga_69 Start: 40267, Stop: 40013, Start Num: 7
Candidate Starts for Gruunaga_69:
(1, 40486), (2, 40483), (3, 40465), (Start: 7 @40267 has 1 MA's), (9, 40222), (11, 40099), (13, 40072), (14, 40045), (15, 40024),

Gene: Hammer_69 Start: 39976, Stop: 39620, Start Num: 5
Candidate Starts for Hammer_69:
(1, 40093), (2, 40090), (3, 40072), (Start: 5 @39976 has 42 MA's), (Start: 7 @39874 has 1 MA's), (9, 39829), (11, 39706), (13, 39679), (14, 39652), (15, 39631),

Gene: Helmet_71 Start: 40411, Stop: 40055, Start Num: 5
Candidate Starts for Helmet_71:
(1, 40528), (2, 40525), (3, 40507), (Start: 5 @40411 has 42 MA's), (Start: 7 @40309 has 1 MA's), (9, 40264), (11, 40141), (13, 40114), (14, 40087), (15, 40066),

Gene: Hexamo_69 Start: 40041, Stop: 39685, Start Num: 5
Candidate Starts for Hexamo_69:
(1, 40158), (2, 40155), (3, 40137), (Start: 5 @40041 has 42 MA's), (Start: 7 @39939 has 1 MA's), (9, 39894), (11, 39771), (13, 39744), (14, 39717), (15, 39696),

Gene: Hoot_63 Start: 37891, Stop: 37535, Start Num: 5
Candidate Starts for Hoot_63:
(4, 37969), (Start: 5 @37891 has 42 MA's), (6, 37825), (8, 37747), (10, 37690), (11, 37621), (12, 37615), (13, 37594), (14, 37567), (15, 37546),

Gene: Indra_72 Start: 40412, Stop: 40056, Start Num: 5
Candidate Starts for Indra_72:
(1, 40529), (2, 40526), (3, 40508), (Start: 5 @40412 has 42 MA's), (Start: 7 @40310 has 1 MA's), (9, 40265), (11, 40142), (13, 40115), (14, 40088), (15, 40067),

Gene: Isiphiwo_66 Start: 39572, Stop: 39216, Start Num: 5
Candidate Starts for Isiphiwo_66:
(4, 39650), (Start: 5 @39572 has 42 MA's), (8, 39428), (10, 39371), (11, 39302), (13, 39275), (14, 39248), (15, 39227),

Gene: Jeffabunny_69 Start: 40038, Stop: 39682, Start Num: 5
Candidate Starts for Jeffabunny_69:

(1, 40155), (2, 40152), (3, 40134), (Start: 5 @40038 has 42 MA's), (Start: 7 @39936 has 1 MA's), (9, 39891), (11, 39768), (13, 39741), (14, 39714), (15, 39693),

Gene: Jordennis_67 Start: 39793, Stop: 39437, Start Num: 5
Candidate Starts for Jordennis_67:
(Start: 5 @39793 has 42 MA's), (6, 39727), (8, 39649), (10, 39592), (11, 39523), (13, 39496), (15, 39448),

Gene: Kazan_69 Start: 40046, Stop: 39690, Start Num: 5
Candidate Starts for Kazan_69:
(4, 40124), (Start: 5 @40046 has 42 MA's), (6, 39980), (8, 39902), (10, 39845), (11, 39776), (12, 39770), (13, 39749), (14, 39722), (15, 39701),

Gene: Kipper29_68 Start: 40059, Stop: 39703, Start Num: 5
Candidate Starts for Kipper29_68:
(4, 40137), (Start: 5 @40059 has 42 MA's), (6, 39993), (8, 39915), (10, 39858), (11, 39789), (12, 39783), (13, 39762), (14, 39735), (15, 39714),

Gene: Koko_71 Start: 40896, Stop: 40540, Start Num: 5
Candidate Starts for Koko_71:
(1, 41013), (2, 41010), (3, 40992), (Start: 5 @40896 has 42 MA's), (Start: 7 @40794 has 1 MA's), (9, 40749), (11, 40626), (13, 40599), (14, 40572), (15, 40551),

Gene: Lilbunny_68 Start: 40042, Stop: 39686, Start Num: 5
Candidate Starts for Lilbunny_68:
(1, 40159), (2, 40156), (3, 40138), (Start: 5 @40042 has 42 MA's), (Start: 7 @39940 has 1 MA's), (9, 39895), (11, 39772), (13, 39745), (14, 39718), (15, 39697),

Gene: McFly_68 Start: 40005, Stop: 39649, Start Num: 5
Candidate Starts for McFly_68:
(4, 40083), (Start: 5 @40005 has 42 MA's), (8, 39861), (10, 39804), (11, 39735), (13, 39708), (14, 39681), (15, 39660),

Gene: Neeharika16_67 Start: 39472, Stop: 39116, Start Num: 5
Candidate Starts for Neeharika16_67:
(4, 39550), (Start: 5 @39472 has 42 MA's), (8, 39328), (10, 39271), (11, 39202), (13, 39175), (14, 39148), (15, 39127),

Gene: Newrala_68 Start: 40007, Stop: 39651, Start Num: 5
Candidate Starts for Newrala_68:
(4, 40085), (Start: 5 @40007 has 42 MA's), (8, 39863), (10, 39806), (11, 39737), (13, 39710), (14, 39683), (15, 39662),

Gene: Pmask_67 Start: 40008, Stop: 39652, Start Num: 5
Candidate Starts for Pmask_67:
(4, 40086), (Start: 5 @40008 has 42 MA's), (8, 39864), (10, 39807), (11, 39738), (13, 39711), (14, 39684), (15, 39663),

Gene: Priamo_70 Start: 39859, Stop: 39503, Start Num: 5
Candidate Starts for Priamo_70:
(4, 39937), (Start: 5 @39859 has 42 MA's), (8, 39715), (10, 39658), (11, 39589), (13, 39562), (15, 39514),

Gene: Rifter_69 Start: 39572, Stop: 39216, Start Num: 5
Candidate Starts for Rifter_69:
(1, 39689), (2, 39686), (3, 39668), (Start: 5 @39572 has 42 MA's), (Start: 7 @39470 has 1 MA's), (9, 39425), (11, 39302), (13, 39275), (14, 39248), (15, 39227),

Gene: Roksolana_70 Start: 40406, Stop: 40050, Start Num: 5
Candidate Starts for Roksolana_70:
(1, 40523), (2, 40520), (3, 40502), (Start: 5 @40406 has 42 MA's), (Start: 7 @40304 has 1 MA's), (9, 40259), (11, 40136), (13, 40109), (14, 40082), (15, 40061),

Gene: SmellyB_68 Start: 40040, Stop: 39684, Start Num: 5
Candidate Starts for SmellyB_68:
(4, 40118), (Start: 5 @40040 has 42 MA's), (6, 39974), (8, 39896), (10, 39839), (11, 39770), (12, 39764), (13, 39743), (14, 39716), (15, 39695),

Gene: SuperCallie99_65 Start: 39892, Stop: 39536, Start Num: 5
Candidate Starts for SuperCallie99_65:
(4, 39970), (Start: 5 @39892 has 42 MA's), (8, 39748), (10, 39691), (11, 39622), (13, 39595), (14, 39568), (15, 39547),

Gene: Temprado_70 Start: 40411, Stop: 40055, Start Num: 5
Candidate Starts for Temprado_70:
(1, 40528), (2, 40525), (3, 40507), (Start: 5 @40411 has 42 MA's), (Start: 7 @40309 has 1 MA's), (9, 40264), (11, 40141), (13, 40114), (14, 40087), (15, 40066),

Gene: ToneTone_66 Start: 39971, Stop: 39615, Start Num: 5
Candidate Starts for ToneTone_66:
(1, 40088), (2, 40085), (3, 40067), (Start: 5 @39971 has 42 MA's), (Start: 7 @39869 has 1 MA's), (9, 39824), (11, 39701), (13, 39674), (14, 39647), (15, 39626),

Gene: Tucker_69 Start: 40174, Stop: 39818, Start Num: 5
Candidate Starts for Tucker_69:
(1, 40291), (2, 40288), (3, 40270), (Start: 5 @40174 has 42 MA's), (Start: 7 @40072 has 1 MA's), (9, 40027), (11, 39904), (13, 39877), (14, 39850), (15, 39829),

Gene: VohminGhazi_68 Start: 40041, Stop: 39685, Start Num: 5
Candidate Starts for VohminGhazi_68:
(4, 40119), (Start: 5 @40041 has 42 MA's), (6, 39975), (8, 39897), (10, 39840), (11, 39771), (12, 39765), (13, 39744), (14, 39717), (15, 39696),

Gene: Wiks_68 Start: 40042, Stop: 39686, Start Num: 5
Candidate Starts for Wiks_68:
(1, 40159), (2, 40156), (3, 40138), (Start: 5 @40042 has 42 MA's), (Start: 7 @39940 has 1 MA's), (9, 39895), (11, 39772), (13, 39745), (14, 39718), (15, 39697),

Gene: WunderPhul_69 Start: 40040, Stop: 39684, Start Num: 5
Candidate Starts for WunderPhul_69:
(1, 40157), (2, 40154), (3, 40136), (Start: 5 @40040 has 42 MA's), (Start: 7 @39938 has 1 MA's), (9, 39893), (11, 39770), (13, 39743), (14, 39716), (15, 39695),

Gene: Yokurt_68 Start: 40042, Stop: 39686, Start Num: 5
Candidate Starts for Yokurt_68:

(1, 40159), (2, 40156), (3, 40138), (Start: 5 @40042 has 42 MA's), (Start: 7 @39940 has 1 MA's), (9, 39895), (11, 39772), (13, 39745), (14, 39718), (15, 39697),

Gene: Zaka_69 Start: 40042, Stop: 39686, Start Num: 5
Candidate Starts for Zaka_69:
(1, 40159), (2, 40156), (3, 40138), (Start: 5 @40042 has 42 MA's), (Start: 7 @39940 has 1 MA's), (9, 39895), (11, 39772), (13, 39745), (14, 39718), (15, 39697),

Gene: Zulu_70 Start: 40420, Stop: 40064, Start Num: 5
Candidate Starts for Zulu_70:
(1, 40537), (2, 40534), (3, 40516), (Start: 5 @40420 has 42 MA's), (Start: 7 @40318 has 1 MA's), (9, 40273), (11, 40150), (13, 40123), (14, 40096), (15, 40075),