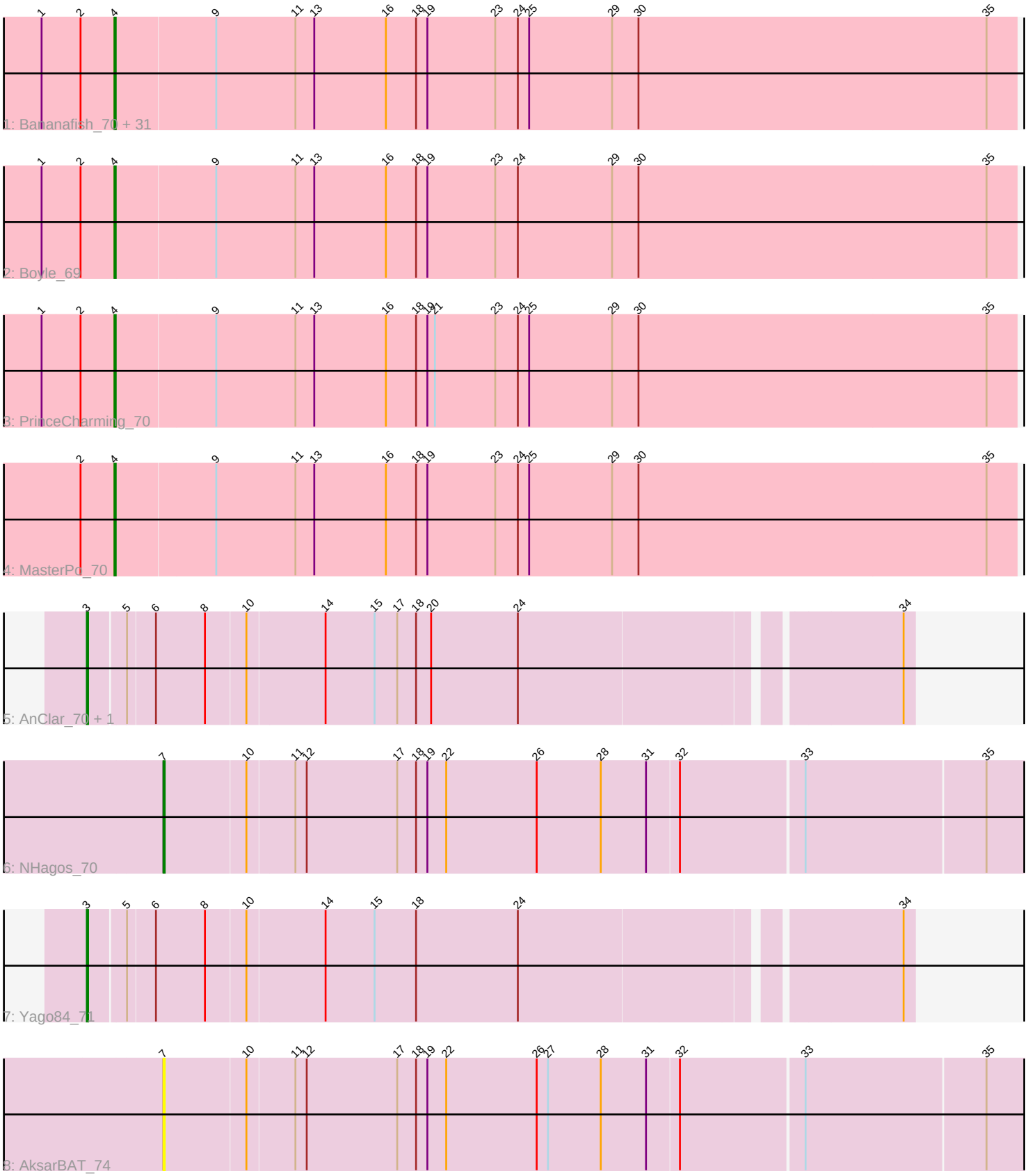
Pham 296719


1: Bananafish_70 + 31
2: Boyle_69
3: PrinceCharming_70
4: MasterPo_70
5: AnClar_70 + 1
6: NHagos_70
7: Yago84_70
8: AksarBAT_74

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 296719 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296719 has 40 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Bananafish_70, Kaleb_69, Lars_70, Kolhan_70, Godines_70, Eaglehorse_69, Brownie5_69, Opia_70, Allegro_69, FrenchFry_70, Glass_70, Tinciduntsolum_70, Arbiter_67, Faze9_68, LizLemon_69, Sabella_69, Rhinoforte_69, Kheth_69, Calamitous_70, Ares_69, LilSmirk_69, Tres_69, Rosebush_68, TA17A_71, ItsyBitsy1_68, Coffee_69, West99_69, Phantasmagoria_68, Blocker23_69, Holeinone_69, Lephleur_69, Hedgerow_69
• Track 2 : Boyle_69
• Track 3 : PrinceCharming_70
• Track 4 : MasterPo_70
• Track 5 : AnClar_70, Sisko_71
• Track 6 : NHagos_70
• Track 7 : Yago84_71
• Track 8 : AksarBAT_74

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 34 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Allegro_69, Arbiter_67, Ares_69, Bananafish_70, Blocker23_69, Boyle_69, Brownie5_69, Calamitous_70, Coffee_69, Eaglehorse_69, Faze9_68, FrenchFry_70, Glass_70, Godines_70, Hedgerow_69, Holeinone_69, ItsyBitsy1_68, Kaleb_69, Kheth_69, Kolhan_70, Lars_70, Lephleur_69, LilSmirk_69, LizLemon_69, MasterPo_70, Opia_70, Phantasmagoria_68, PrinceCharming_70, Rhinoforte_69, Rosebush_68, Sabella_69, TA17A_71, Tinciduntsolum_70, Tres_69, West99_69,

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

Genes that do not have the "Most Annotated" start:
• AksarBAT_74, AnClar_70, NHagos_70, Sisko_71, Yago84_71,

Summary by start number:

Start 3:
• Found in 3 of 40 (7.5%) of genes in pham
• Manual Annotations of this start: 3 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AnClar_70 (DR), Sisko_71 (DR), Yago84_71 (DR),

Start 4:
• Found in 35 of 40 (87.5%) of genes in pham
• Manual Annotations of this start: 34 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Allegro_69 (B2), Arbiter_67 (B2), Ares_69 (B2), Bananafish_70 (B2), Blocker23_69 (B2), Boyle_69 (B2), Brownie5_69 (B2), Calamitous_70 (B2), Coffee_69 (B2), Eaglehorse_69 (B2), Faze9_68 (B2), FrenchFry_70 (B2), Glass_70 (B2), Godines_70 (B2), Hedgerow_69 (B2), Holeinone_69 (B2), ItsyBitsy1_68 (B2), Kaleb_69 (B2), Kheth_69 (B2), Kolhan_70 (B2), Lars_70 (B2), Lephleur_69 (B2), LilSmirk_69 (B2), LizLemon_69 (B2), MasterPo_70 (B2), Opia_70 (B2), Phantasmagoria_68 (B2), PrinceCharming_70 (B2), Rhinoforte_69 (B2), Rosebush_68 (B2), Sabella_69 (B2), TA17A_71 (B2), Tinciduntsolum_70 (B2), Tres_69 (B2), West99_69 (B2),

Start 7:
• Found in 2 of 40 (5.0%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AksarBAT_74 (DR), NHagos_70 (DR),

Summary by clusters:

There are 2 clusters represented in this pham: DR, B2,

Info for manual annotations of cluster B2:
•Start number 4 was manually annotated 34 times for cluster B2.

Info for manual annotations of cluster DR:
•Start number 3 was manually annotated 3 times for cluster DR.
•Start number 7 was manually annotated 1 time for cluster DR.

Gene Information:

Gene: AksarBAT_74 Start: 54780, Stop: 55487, Start Num: 7
Candidate Starts for AksarBAT_74:
(Start: 7 @54780 has 1 MA's), (10, 54843), (11, 54879), (12, 54888), (17, 54960), (18, 54975), (19, 54984), (22, 54999), (26, 55071), (27, 55080), (28, 55122), (31, 55158), (32, 55182), (33, 55278), (35, 55419),

Gene: Allegro_69 Start: 57773, Stop: 58486, Start Num: 4
Candidate Starts for Allegro_69:
(1, 57716), (2, 57746), (Start: 4 @57773 has 34 MA's), (9, 57851), (11, 57914), (13, 57929), (16, 57986), (18, 58010), (19, 58019), (23, 58073), (24, 58091), (25, 58100), (29, 58166), (30, 58187), (35,

58463),

Gene: AnClar_70 Start: 56344, Stop: 56964, Start Num: 3
Candidate Starts for AnClar_70:
(Start: 3 @56344 has 3 MA's), (5, 56371), (6, 56392), (8, 56431), (10, 56461), (14, 56521), (15, 56560), (17, 56578), (18, 56593), (20, 56605), (24, 56674), (34, 56956),

Gene: Arbiter_67 Start: 57808, Stop: 58521, Start Num: 4
Candidate Starts for Arbiter_67:
(1, 57751), (2, 57781), (Start: 4 @57808 has 34 MA's), (9, 57886), (11, 57949), (13, 57964), (16, 58021), (18, 58045), (19, 58054), (23, 58108), (24, 58126), (25, 58135), (29, 58201), (30, 58222), (35, 58498),

Gene: Ares_69 Start: 57779, Stop: 58492, Start Num: 4
Candidate Starts for Ares_69:
(1, 57722), (2, 57752), (Start: 4 @57779 has 34 MA's), (9, 57857), (11, 57920), (13, 57935), (16, 57992), (18, 58016), (19, 58025), (23, 58079), (24, 58097), (25, 58106), (29, 58172), (30, 58193), (35, 58469),

Gene: Bananafish_70 Start: 57709, Stop: 58422, Start Num: 4
Candidate Starts for Bananafish_70:
(1, 57652), (2, 57682), (Start: 4 @57709 has 34 MA's), (9, 57787), (11, 57850), (13, 57865), (16, 57922), (18, 57946), (19, 57955), (23, 58009), (24, 58027), (25, 58036), (29, 58102), (30, 58123), (35, 58399),

Gene: Blocker23_69 Start: 57774, Stop: 58487, Start Num: 4
Candidate Starts for Blocker23_69:
(1, 57717), (2, 57747), (Start: 4 @57774 has 34 MA's), (9, 57852), (11, 57915), (13, 57930), (16, 57987), (18, 58011), (19, 58020), (23, 58074), (24, 58092), (25, 58101), (29, 58167), (30, 58188), (35, 58464),

Gene: Boyle_69 Start: 57818, Stop: 58531, Start Num: 4
Candidate Starts for Boyle_69:
(1, 57761), (2, 57791), (Start: 4 @57818 has 34 MA's), (9, 57896), (11, 57959), (13, 57974), (16, 58031), (18, 58055), (19, 58064), (23, 58118), (24, 58136), (29, 58211), (30, 58232), (35, 58508),

Gene: Brownie5_69 Start: 57819, Stop: 58532, Start Num: 4
Candidate Starts for Brownie5_69:
(1, 57762), (2, 57792), (Start: 4 @57819 has 34 MA's), (9, 57897), (11, 57960), (13, 57975), (16, 58032), (18, 58056), (19, 58065), (23, 58119), (24, 58137), (25, 58146), (29, 58212), (30, 58233), (35, 58509),

Gene: Calamitous_70 Start: 57708, Stop: 58421, Start Num: 4
Candidate Starts for Calamitous_70:
(1, 57651), (2, 57681), (Start: 4 @57708 has 34 MA's), (9, 57786), (11, 57849), (13, 57864), (16, 57921), (18, 57945), (19, 57954), (23, 58008), (24, 58026), (25, 58035), (29, 58101), (30, 58122), (35, 58398),

Gene: Coffee_69 Start: 57812, Stop: 58525, Start Num: 4
Candidate Starts for Coffee_69:
(1, 57755), (2, 57785), (Start: 4 @57812 has 34 MA's), (9, 57890), (11, 57953), (13, 57968), (16, 58025), (18, 58049), (19, 58058), (23, 58112), (24, 58130), (25, 58139), (29, 58205), (30, 58226), (35, 58502),

Gene: Eaglehorse_69 Start: 57698, Stop: 58411, Start Num: 4
Candidate Starts for Eaglehorse_69:
(1, 57641), (2, 57671), (Start: 4 @57698 has 34 MA's), (9, 57776), (11, 57839), (13, 57854), (16, 57911), (18, 57935), (19, 57944), (23, 57998), (24, 58016), (25, 58025), (29, 58091), (30, 58112), (35, 58388),

Gene: Faze9_68 Start: 57836, Stop: 58549, Start Num: 4
Candidate Starts for Faze9_68:
(1, 57779), (2, 57809), (Start: 4 @57836 has 34 MA's), (9, 57914), (11, 57977), (13, 57992), (16, 58049), (18, 58073), (19, 58082), (23, 58136), (24, 58154), (25, 58163), (29, 58229), (30, 58250), (35, 58526),

Gene: FrenchFry_70 Start: 57823, Stop: 58536, Start Num: 4
Candidate Starts for FrenchFry_70:
(1, 57766), (2, 57796), (Start: 4 @57823 has 34 MA's), (9, 57901), (11, 57964), (13, 57979), (16, 58036), (18, 58060), (19, 58069), (23, 58123), (24, 58141), (25, 58150), (29, 58216), (30, 58237), (35, 58513),

Gene: Glass_70 Start: 57824, Stop: 58537, Start Num: 4
Candidate Starts for Glass_70:
(1, 57767), (2, 57797), (Start: 4 @57824 has 34 MA's), (9, 57902), (11, 57965), (13, 57980), (16, 58037), (18, 58061), (19, 58070), (23, 58124), (24, 58142), (25, 58151), (29, 58217), (30, 58238), (35, 58514),

Gene: Godines_70 Start: 58077, Stop: 58790, Start Num: 4
Candidate Starts for Godines_70:
(1, 58020), (2, 58050), (Start: 4 @58077 has 34 MA's), (9, 58155), (11, 58218), (13, 58233), (16, 58290), (18, 58314), (19, 58323), (23, 58377), (24, 58395), (25, 58404), (29, 58470), (30, 58491), (35, 58767),

Gene: Hedgerow_69 Start: 57774, Stop: 58487, Start Num: 4
Candidate Starts for Hedgerow_69:
(1, 57717), (2, 57747), (Start: 4 @57774 has 34 MA's), (9, 57852), (11, 57915), (13, 57930), (16, 57987), (18, 58011), (19, 58020), (23, 58074), (24, 58092), (25, 58101), (29, 58167), (30, 58188), (35, 58464),

Gene: Holeinone_69 Start: 57679, Stop: 58392, Start Num: 4
Candidate Starts for Holeinone_69:
(1, 57622), (2, 57652), (Start: 4 @57679 has 34 MA's), (9, 57757), (11, 57820), (13, 57835), (16, 57892), (18, 57916), (19, 57925), (23, 57979), (24, 57997), (25, 58006), (29, 58072), (30, 58093), (35, 58369),

Gene: ItsyBitsy1_68 Start: 57915, Stop: 58628, Start Num: 4
Candidate Starts for ItsyBitsy1_68:
(1, 57858), (2, 57888), (Start: 4 @57915 has 34 MA's), (9, 57993), (11, 58056), (13, 58071), (16, 58128), (18, 58152), (19, 58161), (23, 58215), (24, 58233), (25, 58242), (29, 58308), (30, 58329), (35, 58605),

Gene: Kaleb_69 Start: 57830, Stop: 58543, Start Num: 4
Candidate Starts for Kaleb_69:
(1, 57773), (2, 57803), (Start: 4 @57830 has 34 MA's), (9, 57908), (11, 57971), (13, 57986), (16, 58043), (18, 58067), (19, 58076), (23, 58130), (24, 58148), (25, 58157), (29, 58223), (30, 58244), (35,

58520),

Gene: Kheth_69 Start: 57741, Stop: 58454, Start Num: 4
Candidate Starts for Kheth_69:
(1, 57684), (2, 57714), (Start: 4 @57741 has 34 MA's), (9, 57819), (11, 57882), (13, 57897), (16, 57954), (18, 57978), (19, 57987), (23, 58041), (24, 58059), (25, 58068), (29, 58134), (30, 58155), (35, 58431),

Gene: Kolhan_70 Start: 57718, Stop: 58431, Start Num: 4
Candidate Starts for Kolhan_70:
(1, 57661), (2, 57691), (Start: 4 @57718 has 34 MA's), (9, 57796), (11, 57859), (13, 57874), (16, 57931), (18, 57955), (19, 57964), (23, 58018), (24, 58036), (25, 58045), (29, 58111), (30, 58132), (35, 58408),

Gene: Lars_70 Start: 57802, Stop: 58515, Start Num: 4
Candidate Starts for Lars_70:
(1, 57745), (2, 57775), (Start: 4 @57802 has 34 MA's), (9, 57880), (11, 57943), (13, 57958), (16, 58015), (18, 58039), (19, 58048), (23, 58102), (24, 58120), (25, 58129), (29, 58195), (30, 58216), (35, 58492),

Gene: Lephleur_69 Start: 57664, Stop: 58377, Start Num: 4
Candidate Starts for Lephleur_69:
(1, 57607), (2, 57637), (Start: 4 @57664 has 34 MA's), (9, 57742), (11, 57805), (13, 57820), (16, 57877), (18, 57901), (19, 57910), (23, 57964), (24, 57982), (25, 57991), (29, 58057), (30, 58078), (35, 58354),

Gene: LilSmirk_69 Start: 57701, Stop: 58414, Start Num: 4
Candidate Starts for LilSmirk_69:
(1, 57644), (2, 57674), (Start: 4 @57701 has 34 MA's), (9, 57779), (11, 57842), (13, 57857), (16, 57914), (18, 57938), (19, 57947), (23, 58001), (24, 58019), (25, 58028), (29, 58094), (30, 58115), (35, 58391),

Gene: LizLemon_69 Start: 57829, Stop: 58542, Start Num: 4
Candidate Starts for LizLemon_69:
(1, 57772), (2, 57802), (Start: 4 @57829 has 34 MA's), (9, 57907), (11, 57970), (13, 57985), (16, 58042), (18, 58066), (19, 58075), (23, 58129), (24, 58147), (25, 58156), (29, 58222), (30, 58243), (35, 58519),

Gene: MasterPo_70 Start: 57696, Stop: 58409, Start Num: 4
Candidate Starts for MasterPo_70:
(2, 57669), (Start: 4 @57696 has 34 MA's), (9, 57774), (11, 57837), (13, 57852), (16, 57909), (18, 57933), (19, 57942), (23, 57996), (24, 58014), (25, 58023), (29, 58089), (30, 58110), (35, 58386),

Gene: NHagos_70 Start: 53462, Stop: 54169, Start Num: 7
Candidate Starts for NHagos_70:
(Start: 7 @53462 has 1 MA's), (10, 53525), (11, 53561), (12, 53570), (17, 53642), (18, 53657), (19, 53666), (22, 53681), (26, 53753), (28, 53804), (31, 53840), (32, 53864), (33, 53960), (35, 54101),

Gene: Opia_70 Start: 57722, Stop: 58435, Start Num: 4
Candidate Starts for Opia_70:
(1, 57665), (2, 57695), (Start: 4 @57722 has 34 MA's), (9, 57800), (11, 57863), (13, 57878), (16, 57935), (18, 57959), (19, 57968), (23, 58022), (24, 58040), (25, 58049), (29, 58115), (30, 58136), (35, 58412),

Gene: Phantasmagoria_68 Start: 57711, Stop: 58424, Start Num: 4
Candidate Starts for Phantasmagoria_68:
(1, 57654), (2, 57684), (Start: 4 @57711 has 34 MA's), (9, 57789), (11, 57852), (13, 57867), (16, 57924), (18, 57948), (19, 57957), (23, 58011), (24, 58029), (25, 58038), (29, 58104), (30, 58125), (35, 58401),

Gene: PrinceCharming_70 Start: 57751, Stop: 58464, Start Num: 4
Candidate Starts for PrinceCharming_70:
(1, 57694), (2, 57724), (Start: 4 @57751 has 34 MA's), (9, 57829), (11, 57892), (13, 57907), (16, 57964), (18, 57988), (19, 57997), (21, 58003), (23, 58051), (24, 58069), (25, 58078), (29, 58144), (30, 58165), (35, 58441),

Gene: Rhinoforte_69 Start: 57749, Stop: 58462, Start Num: 4
Candidate Starts for Rhinoforte_69:
(1, 57692), (2, 57722), (Start: 4 @57749 has 34 MA's), (9, 57827), (11, 57890), (13, 57905), (16, 57962), (18, 57986), (19, 57995), (23, 58049), (24, 58067), (25, 58076), (29, 58142), (30, 58163), (35, 58439),

Gene: Rosebush_68 Start: 57816, Stop: 58529, Start Num: 4
Candidate Starts for Rosebush_68:
(1, 57759), (2, 57789), (Start: 4 @57816 has 34 MA's), (9, 57894), (11, 57957), (13, 57972), (16, 58029), (18, 58053), (19, 58062), (23, 58116), (24, 58134), (25, 58143), (29, 58209), (30, 58230), (35, 58506),

Gene: Sabella_69 Start: 57651, Stop: 58364, Start Num: 4
Candidate Starts for Sabella_69:
(1, 57594), (2, 57624), (Start: 4 @57651 has 34 MA's), (9, 57729), (11, 57792), (13, 57807), (16, 57864), (18, 57888), (19, 57897), (23, 57951), (24, 57969), (25, 57978), (29, 58044), (30, 58065), (35, 58341),

Gene: Sisko_71 Start: 54868, Stop: 55488, Start Num: 3
Candidate Starts for Sisko_71:
(Start: 3 @54868 has 3 MA's), (5, 54895), (6, 54916), (8, 54955), (10, 54985), (14, 55045), (15, 55084), (17, 55102), (18, 55117), (20, 55129), (24, 55198), (34, 55480),

Gene: TA17A_71 Start: 57659, Stop: 58372, Start Num: 4
Candidate Starts for TA17A_71:
(1, 57602), (2, 57632), (Start: 4 @57659 has 34 MA's), (9, 57737), (11, 57800), (13, 57815), (16, 57872), (18, 57896), (19, 57905), (23, 57959), (24, 57977), (25, 57986), (29, 58052), (30, 58073), (35, 58349),

Gene: Tinciduntsolum_70 Start: 57818, Stop: 58531, Start Num: 4
Candidate Starts for Tinciduntsolum_70:
(1, 57761), (2, 57791), (Start: 4 @57818 has 34 MA's), (9, 57896), (11, 57959), (13, 57974), (16, 58031), (18, 58055), (19, 58064), (23, 58118), (24, 58136), (25, 58145), (29, 58211), (30, 58232), (35, 58508),

Gene: Tres_69 Start: 57672, Stop: 58385, Start Num: 4
Candidate Starts for Tres_69:
(1, 57615), (2, 57645), (Start: 4 @57672 has 34 MA's), (9, 57750), (11, 57813), (13, 57828), (16, 57885), (18, 57909), (19, 57918), (23, 57972), (24, 57990), (25, 57999), (29, 58065), (30, 58086), (35, 58362),

Gene: West99_69 Start: 57849, Stop: 58562, Start Num: 4
Candidate Starts for West99_69:
(1, 57792), (2, 57822), (Start: 4 @57849 has 34 MA's), (9, 57927), (11, 57990), (13, 58005), (16, 58062), (18, 58086), (19, 58095), (23, 58149), (24, 58167), (25, 58176), (29, 58242), (30, 58263), (35, 58539),

Gene: Yago84_71 Start: 54635, Stop: 55255, Start Num: 3
Candidate Starts for Yago84_71:
(Start: 3 @54635 has 3 MA's), (5, 54662), (6, 54683), (8, 54722), (10, 54752), (14, 54812), (15, 54851), (18, 54884), (24, 54965), (34, 55247),