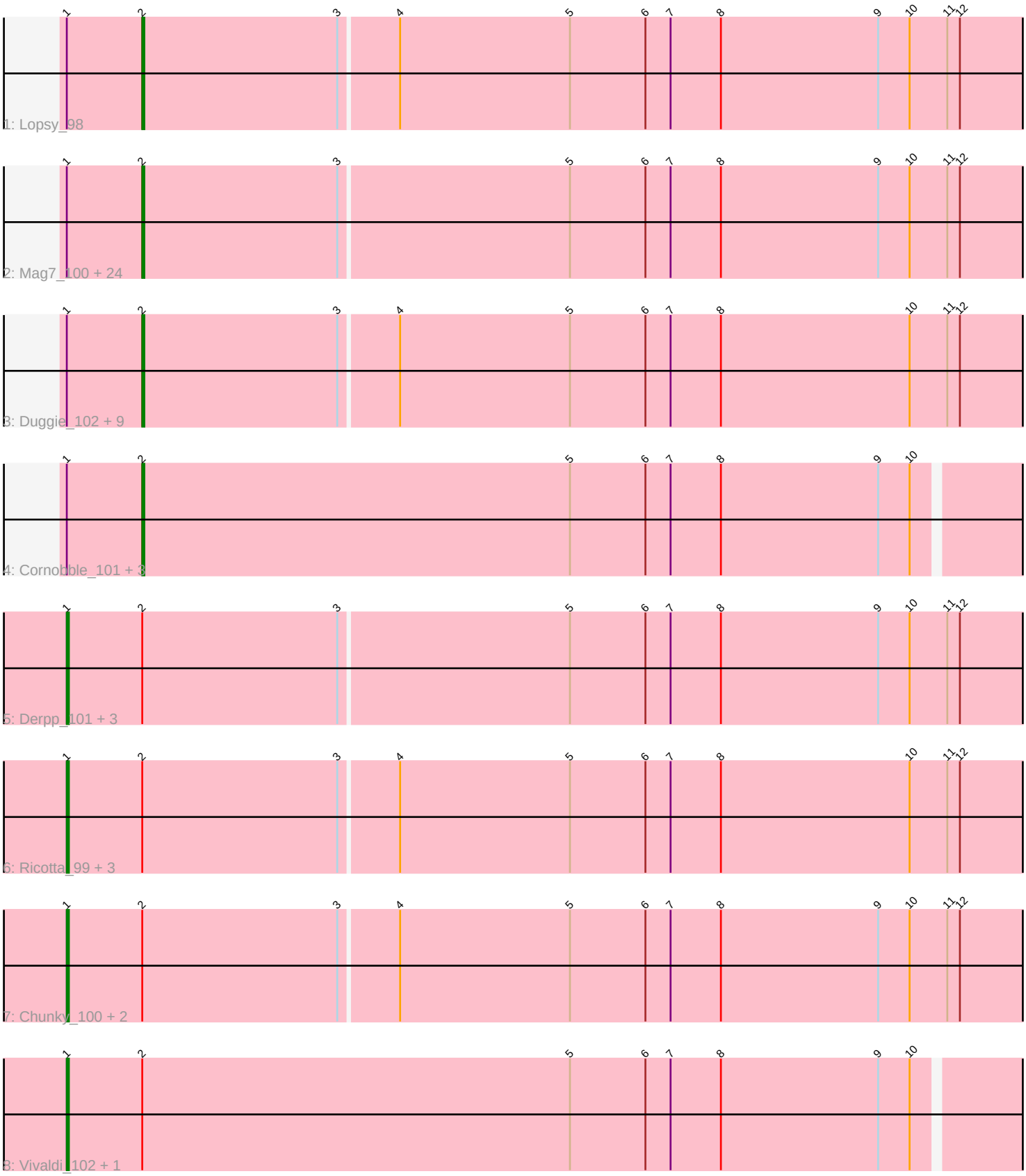
Pham 2046


1: Lopsy_98
2: Mag7_100 + 24
3: Duggie_102 + 9
4: Cornobble_101 + 3
5: Derpp_101 + 3
6: Ricotta_99 + 3
7: Chunky_100 + 2
8: Vivaldi_102 + 1

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 2046 Report

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

Pham number 2046 has 53 members, 10 are drafts.

Phages represented in each track:
• Track 1 : Lopsy_98
• Track 2 : Mag7_100, Pinkman_101, LasagnaCat_101, Phleuron_99, CampRoach_101, DuchessDung_99, CharlieGBrown_100, Ashraf_103, Kailash_100, BatteryCK_100, Phergie_102, Inchworm_103, Wallhey_103, Oline_101, MelsMeow_100, TyrionL_102, PhrankReynolds_100, PhenghisKhan_102, ImtiyazSitla_103, Veritas_101, MichaelPhcott_100, Labeouficaum_102, Schueller_101, Maskar_103, Hartsy_98
• Track 3 : Duggie_102, True_103, Longacauda_102, Jiminy_102, Apizium_100, Struggle_102, Thunderbird_102, DelRivs_101, Fozzie_98, Soile_103
• Track 4 : Cornobble_101, Schadenfreude_102, Aelin_101, Antonia_101
• Track 5 : Derpp_101, Mcshane_104, Zonia_102, Kwksand96_103
• Track 6 : Ricotta_99, Jiraiya_107, Olak_104, KlimbOn_101
• Track 7 : Chunky_100, Gwilliam_102, OSmaximus_102
• Track 8 : Vivaldi_102, Manad_101

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

The start number called the most often in the published annotations is 2, it was called in 34 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aelin_101, Antonia_101, Apizium_100, Ashraf_103, BatteryCK_100, CampRoach_101, CharlieGBrown_100, Cornobble_101, DelRivs_101, DuchessDung_99, Duggie_102, Fozzie_98, Hartsy_98, ImtiyazSitla_103, Inchworm_103, Jiminy_102, Kailash_100, Labeouficaum_102, LasagnaCat_101, Longacauda_102, Lopsy_98, Mag7_100, Maskar_103, MelsMeow_100, MichaelPhcott_100, Oline_101, PhenghisKhan_102, Phergie_102, Phleuron_99, PhrankReynolds_100, Pinkman_101, Schadenfreude_102, Schueller_101, Soile_103, Struggle_102, Thunderbird_102, True_103, TyrionL_102, Veritas_101, Wallhey_103,

Genes that have the "Most Annotated" start but do not call it:
• Chunky_100, Derpp_101, Gwilliam_102, Jiraiya_107, KlimbOn_101, Kwksand96_103, Manad_101, Mcshane_104, OSmaximus_102, Olak_104,

Ricotta_99, Vivaldi_102, Zonia_102,

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

Summary by start number:

Start 1:
• Found in 53 of 53 (100.0%) of genes in pham
• Manual Annotations of this start: 9 of 43
• Called 24.5% of time when present
• Phage (with cluster) where this start called: Chunky_100 (B1), Derpp_101 (B1), Gwilliam_102 (B1), Jiraiya_107 (B1), KlimbOn_101 (B1), Kwksand96_103 (B1), Manad_101 (B1), Mcshane_104 (B1), OSmaximus_102 (B1), Olak_104 (B1), Ricotta_99 (B1), Vivaldi_102 (B1), Zonia_102 (B1),

Start 2:
• Found in 53 of 53 (100.0%) of genes in pham
• Manual Annotations of this start: 34 of 43
• Called 75.5% of time when present
• Phage (with cluster) where this start called: Aelin_101 (B1), Antonia_101 (B1), Apizium_100 (B1), Ashraf_103 (B1), BatteryCK_100 (B1), CampRoach_101 (B1), CharlieGBrown_100 (B1), Cornobble_101 (B1), DelRivs_101 (B1), DuchessDung_99 (B1), Duggie_102 (B1), Fozzie_98 (B1), Hartsy_98 (B1), ImtiyazSitla_103 (B1), Inchworm_103 (B1), Jiminy_102 (B1), Kailash_100 (B1), Labeouficaum_102 (B1), LasagnaCat_101 (B1), Longacauda_102 (B1), Lopsy_98 (B1), Mag7_100 (B1), Maskar_103 (B1), MelsMeow_100 (B1), MichaelPhcott_100 (B1), Oline_101 (B1), PhenghisKhan_102 (B1), Phergie_102 (B1), Phleuron_99 (B1), PhrankReynolds_100 (B1), Pinkman_101 (B1), Schadenfreude_102 (B1), Schueller_101 (B1), Soile_103 (B1), Struggle_102 (B1), Thunderbird_102 (B1), True_103 (B1), TyrionL_102 (B1), Veritas_101 (B1), Wallhey_103 (B1),

Summary by clusters:

There is one cluster represented in this pham: B1

Info for manual annotations of cluster B1:
•Start number 1 was manually annotated 9 times for cluster B1.
•Start number 2 was manually annotated 34 times for cluster B1.

Gene Information:

Gene: Aelin_101 Start: 68596, Stop: 68177, Start Num: 2
Candidate Starts for Aelin_101:
(Start: 1 @68632 has 9 MA's), (Start: 2 @68596 has 34 MA's), (5, 68392), (6, 68356), (7, 68344), (8, 68320), (9, 68245), (10, 68230),

Gene: Antonia_101 Start: 68467, Stop: 68048, Start Num: 2
Candidate Starts for Antonia_101:
(Start: 1 @68503 has 9 MA's), (Start: 2 @68467 has 34 MA's), (5, 68263), (6, 68227), (7, 68215), (8, 68191), (9, 68116), (10, 68101),

Gene: Apizium_100 Start: 68121, Stop: 67699, Start Num: 2
Candidate Starts for Apizium_100:
(Start: 1 @68157 has 9 MA's), (Start: 2 @68121 has 34 MA's), (3, 68028), (4, 68001), (5, 67920), (6, 67884), (7, 67872), (8, 67848), (10, 67758), (11, 67740), (12, 67734),

Gene: Ashraf_103 Start: 68976, Stop: 68554, Start Num: 2
Candidate Starts for Ashraf_103:
(Start: 1 @69012 has 9 MA's), (Start: 2 @68976 has 34 MA's), (3, 68883), (5, 68775), (6, 68739), (7, 68727), (8, 68703), (9, 68628), (10, 68613), (11, 68595), (12, 68589),

Gene: BatteryCK_100 Start: 68403, Stop: 67981, Start Num: 2
Candidate Starts for BatteryCK_100:
(Start: 1 @68439 has 9 MA's), (Start: 2 @68403 has 34 MA's), (3, 68310), (5, 68202), (6, 68166), (7, 68154), (8, 68130), (9, 68055), (10, 68040), (11, 68022), (12, 68016),

Gene: CampRoach_101 Start: 68862, Stop: 68440, Start Num: 2
Candidate Starts for CampRoach_101:
(Start: 1 @68898 has 9 MA's), (Start: 2 @68862 has 34 MA's), (3, 68769), (5, 68661), (6, 68625), (7, 68613), (8, 68589), (9, 68514), (10, 68499), (11, 68481), (12, 68475),

Gene: CharlieGBrown_100 Start: 68498, Stop: 68076, Start Num: 2
Candidate Starts for CharlieGBrown_100:
(Start: 1 @68534 has 9 MA's), (Start: 2 @68498 has 34 MA's), (3, 68405), (5, 68297), (6, 68261), (7, 68249), (8, 68225), (9, 68150), (10, 68135), (11, 68117), (12, 68111),

Gene: Chunky_100 Start: 68179, Stop: 67721, Start Num: 1
Candidate Starts for Chunky_100:
(Start: 1 @68179 has 9 MA's), (Start: 2 @68143 has 34 MA's), (3, 68050), (4, 68023), (5, 67942), (6, 67906), (7, 67894), (8, 67870), (9, 67795), (10, 67780), (11, 67762), (12, 67756),

Gene: Cornobble_101 Start: 68616, Stop: 68197, Start Num: 2
Candidate Starts for Cornobble_101:
(Start: 1 @68652 has 9 MA's), (Start: 2 @68616 has 34 MA's), (5, 68412), (6, 68376), (7, 68364), (8, 68340), (9, 68265), (10, 68250),

Gene: DelRivs_101 Start: 68445, Stop: 68023, Start Num: 2
Candidate Starts for DelRivs_101:
(Start: 1 @68481 has 9 MA's), (Start: 2 @68445 has 34 MA's), (3, 68352), (4, 68325), (5, 68244), (6, 68208), (7, 68196), (8, 68172), (10, 68082), (11, 68064), (12, 68058),

Gene: Derpp_101 Start: 68567, Stop: 68109, Start Num: 1
Candidate Starts for Derpp_101:
(Start: 1 @68567 has 9 MA's), (Start: 2 @68531 has 34 MA's), (3, 68438), (5, 68330), (6, 68294), (7, 68282), (8, 68258), (9, 68183), (10, 68168), (11, 68150), (12, 68144),

Gene: DuchessDung_99 Start: 68129, Stop: 67707, Start Num: 2
Candidate Starts for DuchessDung_99:
(Start: 1 @68165 has 9 MA's), (Start: 2 @68129 has 34 MA's), (3, 68036), (5, 67928), (6, 67892), (7, 67880), (8, 67856), (9, 67781), (10, 67766), (11, 67748), (12, 67742),

Gene: Duggie_102 Start: 68779, Stop: 68357, Start Num: 2
Candidate Starts for Duggie_102:

(Start: 1 @68815 has 9 MA's), (Start: 2 @68779 has 34 MA's), (3, 68686), (4, 68659), (5, 68578), (6, 68542), (7, 68530), (8, 68506), (10, 68416), (11, 68398), (12, 68392),

Gene: Fozzie_98 Start: 68886, Stop: 68464, Start Num: 2
Candidate Starts for Fozzie_98:
(Start: 1 @68922 has 9 MA's), (Start: 2 @68886 has 34 MA's), (3, 68793), (4, 68766), (5, 68685), (6, 68649), (7, 68637), (8, 68613), (10, 68523), (11, 68505), (12, 68499),

Gene: Gwilliam_102 Start: 69576, Stop: 69118, Start Num: 1
Candidate Starts for Gwilliam_102:
(Start: 1 @69576 has 9 MA's), (Start: 2 @69540 has 34 MA's), (3, 69447), (4, 69420), (5, 69339), (6, 69303), (7, 69291), (8, 69267), (9, 69192), (10, 69177), (11, 69159), (12, 69153),

Gene: Hartsy_98 Start: 68649, Stop: 68227, Start Num: 2
Candidate Starts for Hartsy_98:
(Start: 1 @68685 has 9 MA's), (Start: 2 @68649 has 34 MA's), (3, 68556), (5, 68448), (6, 68412), (7, 68400), (8, 68376), (9, 68301), (10, 68286), (11, 68268), (12, 68262),

Gene: ImtiyazSitla_103 Start: 68976, Stop: 68554, Start Num: 2
Candidate Starts for ImtiyazSitla_103:
(Start: 1 @69012 has 9 MA's), (Start: 2 @68976 has 34 MA's), (3, 68883), (5, 68775), (6, 68739), (7, 68727), (8, 68703), (9, 68628), (10, 68613), (11, 68595), (12, 68589),

Gene: Inchworm_103 Start: 68823, Stop: 68401, Start Num: 2
Candidate Starts for Inchworm_103:
(Start: 1 @68859 has 9 MA's), (Start: 2 @68823 has 34 MA's), (3, 68730), (5, 68622), (6, 68586), (7, 68574), (8, 68550), (9, 68475), (10, 68460), (11, 68442), (12, 68436),

Gene: Jiminy_102 Start: 68671, Stop: 68249, Start Num: 2
Candidate Starts for Jiminy_102:
(Start: 1 @68707 has 9 MA's), (Start: 2 @68671 has 34 MA's), (3, 68578), (4, 68551), (5, 68470), (6, 68434), (7, 68422), (8, 68398), (10, 68308), (11, 68290), (12, 68284),

Gene: Jiraiya_107 Start: 68791, Stop: 68333, Start Num: 1
Candidate Starts for Jiraiya_107:
(Start: 1 @68791 has 9 MA's), (Start: 2 @68755 has 34 MA's), (3, 68662), (4, 68635), (5, 68554), (6, 68518), (7, 68506), (8, 68482), (10, 68392), (11, 68374), (12, 68368),

Gene: Kailash_100 Start: 68847, Stop: 68425, Start Num: 2
Candidate Starts for Kailash_100:
(Start: 1 @68883 has 9 MA's), (Start: 2 @68847 has 34 MA's), (3, 68754), (5, 68646), (6, 68610), (7, 68598), (8, 68574), (9, 68499), (10, 68484), (11, 68466), (12, 68460),

Gene: KlimbOn_101 Start: 68526, Stop: 68068, Start Num: 1
Candidate Starts for KlimbOn_101:
(Start: 1 @68526 has 9 MA's), (Start: 2 @68490 has 34 MA's), (3, 68397), (4, 68370), (5, 68289), (6, 68253), (7, 68241), (8, 68217), (10, 68127), (11, 68109), (12, 68103),

Gene: Kwksand96_103 Start: 68752, Stop: 68294, Start Num: 1
Candidate Starts for Kwksand96_103:
(Start: 1 @68752 has 9 MA's), (Start: 2 @68716 has 34 MA's), (3, 68623), (5, 68515), (6, 68479), (7, 68467), (8, 68443), (9, 68368), (10, 68353), (11, 68335), (12, 68329),

Gene: Labeouficaum_102 Start: 68531, Stop: 68109, Start Num: 2
Candidate Starts for Labeouficaum_102:
(Start: 1 @68567 has 9 MA's), (Start: 2 @68531 has 34 MA's), (3, 68438), (5, 68330), (6, 68294), (7, 68282), (8, 68258), (9, 68183), (10, 68168), (11, 68150), (12, 68144),

Gene: LasagnaCat_101 Start: 68832, Stop: 68410, Start Num: 2
Candidate Starts for LasagnaCat_101:
(Start: 1 @68868 has 9 MA's), (Start: 2 @68832 has 34 MA's), (3, 68739), (5, 68631), (6, 68595), (7, 68583), (8, 68559), (9, 68484), (10, 68469), (11, 68451), (12, 68445),

Gene: Longacauda_102 Start: 68698, Stop: 68276, Start Num: 2
Candidate Starts for Longacauda_102:
(Start: 1 @68734 has 9 MA's), (Start: 2 @68698 has 34 MA's), (3, 68605), (4, 68578), (5, 68497), (6, 68461), (7, 68449), (8, 68425), (10, 68335), (11, 68317), (12, 68311),

Gene: Lopsy_98 Start: 68345, Stop: 67923, Start Num: 2
Candidate Starts for Lopsy_98:
(Start: 1 @68381 has 9 MA's), (Start: 2 @68345 has 34 MA's), (3, 68252), (4, 68225), (5, 68144), (6, 68108), (7, 68096), (8, 68072), (9, 67997), (10, 67982), (11, 67964), (12, 67958),

Gene: Mag7_100 Start: 68391, Stop: 67969, Start Num: 2
Candidate Starts for Mag7_100:
(Start: 1 @68427 has 9 MA's), (Start: 2 @68391 has 34 MA's), (3, 68298), (5, 68190), (6, 68154), (7, 68142), (8, 68118), (9, 68043), (10, 68028), (11, 68010), (12, 68004),

Gene: Manad_101 Start: 68737, Stop: 68282, Start Num: 1
Candidate Starts for Manad_101:
(Start: 1 @68737 has 9 MA's), (Start: 2 @68701 has 34 MA's), (5, 68497), (6, 68461), (7, 68449), (8, 68425), (9, 68350), (10, 68335),

Gene: Maskar_103 Start: 68976, Stop: 68554, Start Num: 2
Candidate Starts for Maskar_103:
(Start: 1 @69012 has 9 MA's), (Start: 2 @68976 has 34 MA's), (3, 68883), (5, 68775), (6, 68739), (7, 68727), (8, 68703), (9, 68628), (10, 68613), (11, 68595), (12, 68589),

Gene: Mcshane_104 Start: 68859, Stop: 68401, Start Num: 1
Candidate Starts for Mcshane_104:
(Start: 1 @68859 has 9 MA's), (Start: 2 @68823 has 34 MA's), (3, 68730), (5, 68622), (6, 68586), (7, 68574), (8, 68550), (9, 68475), (10, 68460), (11, 68442), (12, 68436),

Gene: MelsMeow_100 Start: 68457, Stop: 68035, Start Num: 2
Candidate Starts for MelsMeow_100:
(Start: 1 @68493 has 9 MA's), (Start: 2 @68457 has 34 MA's), (3, 68364), (5, 68256), (6, 68220), (7, 68208), (8, 68184), (9, 68109), (10, 68094), (11, 68076), (12, 68070),

Gene: MichaelPhcott_100 Start: 68388, Stop: 67966, Start Num: 2
Candidate Starts for MichaelPhcott_100:
(Start: 1 @68424 has 9 MA's), (Start: 2 @68388 has 34 MA's), (3, 68295), (5, 68187), (6, 68151), (7, 68139), (8, 68115), (9, 68040), (10, 68025), (11, 68007), (12, 68001),

Gene: OSmaximus_102 Start: 69048, Stop: 68590, Start Num: 1
Candidate Starts for OSmaximus_102:

(Start: 1 @69048 has 9 MA's), (Start: 2 @69012 has 34 MA's), (3, 68919), (4, 68892), (5, 68811), (6, 68775), (7, 68763), (8, 68739), (9, 68664), (10, 68649), (11, 68631), (12, 68625),

Gene: Olak_104 Start: 69030, Stop: 68572, Start Num: 1
Candidate Starts for Olak_104:
(Start: 1 @69030 has 9 MA's), (Start: 2 @68994 has 34 MA's), (3, 68901), (4, 68874), (5, 68793), (6, 68757), (7, 68745), (8, 68721), (10, 68631), (11, 68613), (12, 68607),

Gene: Oline_101 Start: 68614, Stop: 68192, Start Num: 2
Candidate Starts for Oline_101:
(Start: 1 @68650 has 9 MA's), (Start: 2 @68614 has 34 MA's), (3, 68521), (5, 68413), (6, 68377), (7, 68365), (8, 68341), (9, 68266), (10, 68251), (11, 68233), (12, 68227),

Gene: PhenghisKhan_102 Start: 68621, Stop: 68199, Start Num: 2
Candidate Starts for PhenghisKhan_102:
(Start: 1 @68657 has 9 MA's), (Start: 2 @68621 has 34 MA's), (3, 68528), (5, 68420), (6, 68384), (7, 68372), (8, 68348), (9, 68273), (10, 68258), (11, 68240), (12, 68234),

Gene: Phergie_102 Start: 68610, Stop: 68188, Start Num: 2
Candidate Starts for Phergie_102:
(Start: 1 @68646 has 9 MA's), (Start: 2 @68610 has 34 MA's), (3, 68517), (5, 68409), (6, 68373), (7, 68361), (8, 68337), (9, 68262), (10, 68247), (11, 68229), (12, 68223),

Gene: Phleuron_99 Start: 68421, Stop: 67999, Start Num: 2
Candidate Starts for Phleuron_99:
(Start: 1 @68457 has 9 MA's), (Start: 2 @68421 has 34 MA's), (3, 68328), (5, 68220), (6, 68184), (7, 68172), (8, 68148), (9, 68073), (10, 68058), (11, 68040), (12, 68034),

Gene: PhrankReynolds_100 Start: 68615, Stop: 68193, Start Num: 2
Candidate Starts for PhrankReynolds_100:
(Start: 1 @68651 has 9 MA's), (Start: 2 @68615 has 34 MA's), (3, 68522), (5, 68414), (6, 68378), (7, 68366), (8, 68342), (9, 68267), (10, 68252), (11, 68234), (12, 68228),

Gene: Pinkman_101 Start: 68832, Stop: 68410, Start Num: 2
Candidate Starts for Pinkman_101:
(Start: 1 @68868 has 9 MA's), (Start: 2 @68832 has 34 MA's), (3, 68739), (5, 68631), (6, 68595), (7, 68583), (8, 68559), (9, 68484), (10, 68469), (11, 68451), (12, 68445),

Gene: Ricotta_99 Start: 68522, Stop: 68064, Start Num: 1
Candidate Starts for Ricotta_99:
(Start: 1 @68522 has 9 MA's), (Start: 2 @68486 has 34 MA's), (3, 68393), (4, 68366), (5, 68285), (6, 68249), (7, 68237), (8, 68213), (10, 68123), (11, 68105), (12, 68099),

Gene: Schadenfreude_102 Start: 68485, Stop: 68066, Start Num: 2
Candidate Starts for Schadenfreude_102:
(Start: 1 @68521 has 9 MA's), (Start: 2 @68485 has 34 MA's), (5, 68281), (6, 68245), (7, 68233), (8, 68209), (9, 68134), (10, 68119),

Gene: Schueller_101 Start: 68708, Stop: 68286, Start Num: 2
Candidate Starts for Schueller_101:
(Start: 1 @68744 has 9 MA's), (Start: 2 @68708 has 34 MA's), (3, 68615), (5, 68507), (6, 68471), (7, 68459), (8, 68435), (9, 68360), (10, 68345), (11, 68327), (12, 68321),

Gene: Soile_103 Start: 68991, Stop: 68569, Start Num: 2
Candidate Starts for Soile_103:
(Start: 1 @69027 has 9 MA's), (Start: 2 @68991 has 34 MA's), (3, 68898), (4, 68871), (5, 68790), (6, 68754), (7, 68742), (8, 68718), (10, 68628), (11, 68610), (12, 68604),

Gene: Struggle_102 Start: 68563, Stop: 68141, Start Num: 2
Candidate Starts for Struggle_102:
(Start: 1 @68599 has 9 MA's), (Start: 2 @68563 has 34 MA's), (3, 68470), (4, 68443), (5, 68362), (6, 68326), (7, 68314), (8, 68290), (10, 68200), (11, 68182), (12, 68176),

Gene: Thunderbird_102 Start: 68720, Stop: 68298, Start Num: 2
Candidate Starts for Thunderbird_102:
(Start: 1 @68756 has 9 MA's), (Start: 2 @68720 has 34 MA's), (3, 68627), (4, 68600), (5, 68519), (6, 68483), (7, 68471), (8, 68447), (10, 68357), (11, 68339), (12, 68333),

Gene: True_103 Start: 68816, Stop: 68394, Start Num: 2
Candidate Starts for True_103:
(Start: 1 @68852 has 9 MA's), (Start: 2 @68816 has 34 MA's), (3, 68723), (4, 68696), (5, 68615), (6, 68579), (7, 68567), (8, 68543), (10, 68453), (11, 68435), (12, 68429),

Gene: TyrionL_102 Start: 68531, Stop: 68109, Start Num: 2
Candidate Starts for TyrionL_102:
(Start: 1 @68567 has 9 MA's), (Start: 2 @68531 has 34 MA's), (3, 68438), (5, 68330), (6, 68294), (7, 68282), (8, 68258), (9, 68183), (10, 68168), (11, 68150), (12, 68144),

Gene: Veritas_101 Start: 68612, Stop: 68190, Start Num: 2
Candidate Starts for Veritas_101:
(Start: 1 @68648 has 9 MA's), (Start: 2 @68612 has 34 MA's), (3, 68519), (5, 68411), (6, 68375), (7, 68363), (8, 68339), (9, 68264), (10, 68249), (11, 68231), (12, 68225),

Gene: Vivaldi_102 Start: 68803, Stop: 68348, Start Num: 1
Candidate Starts for Vivaldi_102:
(Start: 1 @68803 has 9 MA's), (Start: 2 @68767 has 34 MA's), (5, 68563), (6, 68527), (7, 68515), (8, 68491), (9, 68416), (10, 68401),

Gene: Wallhey_103 Start: 68715, Stop: 68293, Start Num: 2
Candidate Starts for Wallhey_103:
(Start: 1 @68751 has 9 MA's), (Start: 2 @68715 has 34 MA's), (3, 68622), (5, 68514), (6, 68478), (7, 68466), (8, 68442), (9, 68367), (10, 68352), (11, 68334), (12, 68328),

Gene: Zonia_102 Start: 69201, Stop: 68743, Start Num: 1
Candidate Starts for Zonia_102:
(Start: 1 @69201 has 9 MA's), (Start: 2 @69165 has 34 MA's), (3, 69072), (5, 68964), (6, 68928), (7, 68916), (8, 68892), (9, 68817), (10, 68802), (11, 68784), (12, 68778),