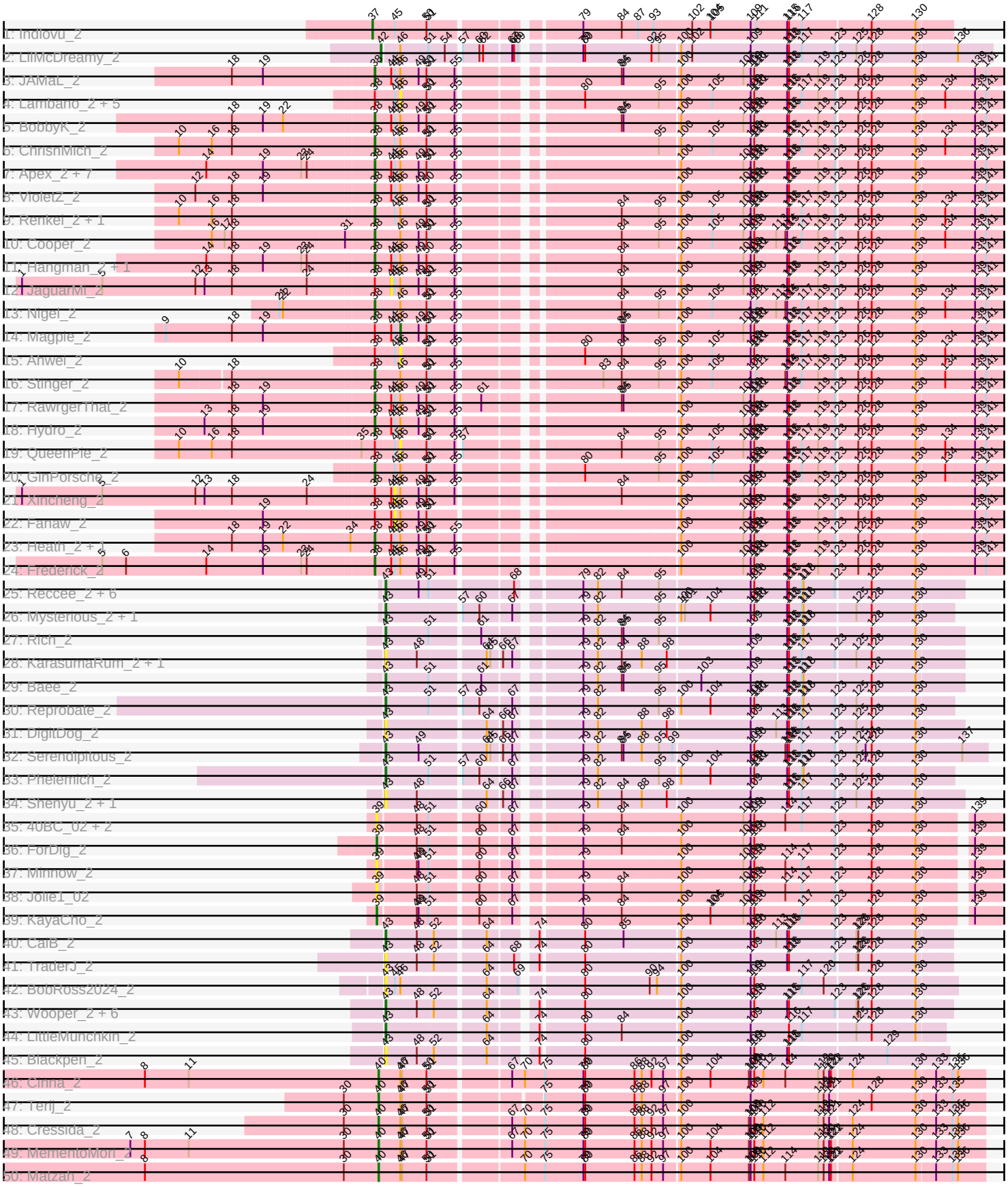
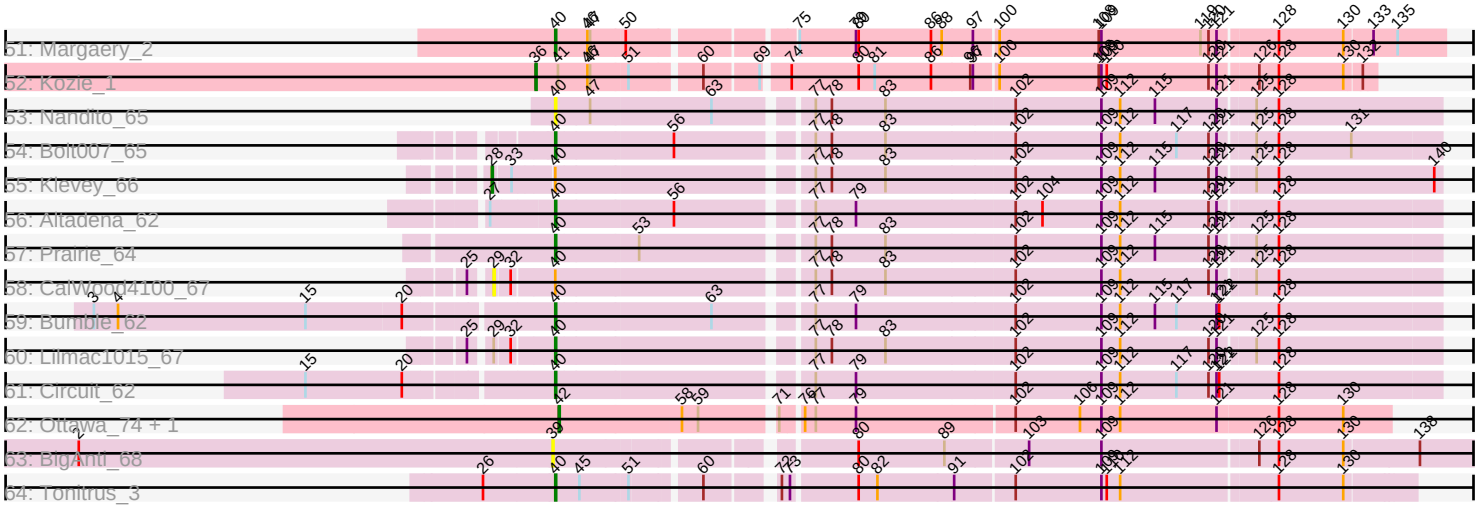
# Pham 332698


1: Indiovu_2
2: LilMcDreamy_2
3: JAMaL_2
4: Lambano_2 + 5
5: BobbyK_2
6: ChrishMich_2
7: Apex_2 + 7
8: Violetz_2
9: Renkei_2 + 1
10: Cooper_2
11: Hangman_2 + 1
12: JaguarMi_2
13: Nigel_2
14: Magpie_2
15: Anwei_2
16: Stinger_2
17: RawrgerThat_2
18: Hydro_2
19: QueenPie_2
20: GinPorsche_2
21: Xincheng_2
22: Fanaw_2
23: Heath_2 + 1
24: Frederick_2
25: Reccee_2 + 6
26: Mysterious_2 + 1
27: Rich_2
28: KarasumaRum_2 + 1
29: Baee_2
30: Reprobate_2
31: DigitDog_2
32: Serendipitous_2
33: Phelemich_2
34: Shenyu_2 + 1
35: 40BC_02 + 2
36: ForDig_2
37: Minnow_2
38: Jolie1_02
39: KayaCho_2
40: CalB_2
41: TraderJ_2
42: BobRoss2024_2
43: Wooper_2 + 6
44: LittleMunchkin_2
45: Blackpen_2
46: Cinna_2
47: Tenj_2
48: Cressida_2
49: MementoMori_2
50: Matzah_2

# Pham 332698


51: Margaery_2
52: Kozie_1
53: Nandito_65
54: Bolt007_65
55: Kievey_66
56: Altadena_62
57: Prairie_64
58: Calvinnn24100_67
59: Bumble162
60: Lilmac1015_67
61: Circuit_62
62: Ottawa_74 + 1
63: BigAnti_68
64: Tonitrus_3

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 332698 Report

This analysis was run 11/14/26 on database version 672.

Pham number 332698 has 97 members, 30 are drafts.

Phages represented in each track:
- Track 1 : Indlovu_2
- Track 2 : LilMcDreamy_2
- Track 3 : JAMaL_2
- Track 4 : Lambano_2, Hally898_2, Antihero_2, Epah_2, Nanao_2, Poster_2
- Track 5 : BobbyK_2
- Track 6 : ChrisnMich_2
- Track 7 : Apex_2, Lolalove_2, Prince_2, Waleliano_2, Mithril_2, Mudslide_2, BrownCNA_2, Austelle_2
- Track 8 : VioletZ_2
- Track 9 : Renkei_2, LittleDigger_2
- Track 10 : Cooper_2
- Track 11 : Hangman_2, JoyceMaria_2
- Track 12 : JaguarMi_2
- Track 13 : Nigel_2
- Track 14 : Magpie_2
- Track 15 : Ahwei_2
- Track 16 : Stinger_2
- Track 17 : RawrgerThat_2
- Track 18 : Hydro_2
- Track 19 : QueenPie_2
- Track 20 : GinPorsche_2
- Track 21 : Xincheng_2
- Track 22 : Fanaw_2
- Track 23 : Heath_2, Zemanar_2
- Track 24 : Frederick_2
- Track 25 : Reccee_2, SirJeffery_2, Suigeneris_2, EastView9101_2, Acadian_2, Rita130_2, Donny_2
- Track 26 : Mysterious_2, Nehemiah_1
- Track 27 : Rich_2
- Track 28 : KarasumaRum_2, StinkyVeggy_2
- Track 29 : Baee_2
- Track 30 : Reprobate_2
- Track 31 : DigitDog_2
- Track 32 : Serendipitous_2
- Track 33 : Phelemich_2
- Track 34 : Shenyu_2, Nangang_2
- Track 35 : 40BC_02, Hosp_097, 39HC_02

• Track 36 : ForDig_2
• Track 37 : Minnow_2
• Track 38 : Jolie1_02
• Track 39 : KayaCho_2
• Track 40 : CaiB_2
• Track 41 : TraderJ_2
• Track 42 : BobRoss2024_2
• Track 43 : Wooper_2, MakoManhole_2, MossRose_2, CloverMinnie_2, FelixTres_2, Yeshua_2, AnarQue_2
• Track 44 : LittleMunchkin_2
• Track 45 : Blackpen_2
• Track 46 : Cinna_2
• Track 47 : Terij_2
• Track 48 : Cressida_2
• Track 49 : MementoMori_2
• Track 50 : Matzah_2
• Track 51 : Margaery_2
• Track 52 : Kozie_1
• Track 53 : Nandito_65
• Track 54 : Bolt007_65
• Track 55 : Klevey_66
• Track 56 : Altadena_62
• Track 57 : Prairie_64
• Track 58 : CalWood4100_67
• Track 59 : Bumble_62
• Track 60 : Lilmac1015_67
• Track 61 : Circuit_62
• Track 62 : Ottawa_74, Kharcho_74
• Track 63 : BigAnti_68
• Track 64 : Tonitrus_3

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

The start number called the most often in the published annotations is 38, it was called in 25 of the 67 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Apex_2, Austelle_2, BobbyK_2, BrownCNA_2, ChrisnMich_2, Cooper_2, Frederick_2, GinPorsche_2, Hangman_2, Heath_2, Hydro_2, JAMaL_2, JoyceMaria_2, LittleDigger_2, Lolalove_2, Mithril_2, Mudslide_2, Nigel_2, Prince_2, RawrgerThat_2, Renkei_2, Stinger_2, VioletZ_2, Waleliano_2, Zemanar_2,

Genes that have the "Most Annotated" start but do not call it:
• Ahwei_2, Antihero_2, Epah_2, Fanaw_2, Hally898_2, JaguarMi_2, Lambano_2, Magpie_2, Nanao_2, Poster_2, QueenPie_2, Xincheng_2,

Genes that do not have the "Most Annotated" start:
• 39HC_02, 40BC_02, Acadian_2, Altadena_62, AnarQue_2, Baee_2, BigAnti_68, Blackpen_2, BobRoss2024_2, Bolt007_65, Bumble_62, CaiB_2, CalWood4100_67, Cinna_2, Circuit_62, CloverMinnie_2, Cressida_2, DigitDog_2, Donny_2,

EastView9101_2, FelixTres_2, ForDig_2, Hosp_097, Indlovu_2, Jolie1_02, KarasumaRum_2, KayaCho_2, Kharcho_74, Klevey_66, Kozie_1, LilMcDreamy_2, Lilmac1015_67, LittleMunchkin_2, MakoManhole_2, Margaery_2, Matzah_2, MementoMori_2, Minnow_2, MossRose_2, Mysterious_2, Nandito_65, Nangang_2, Nehemiah_1, Ottawa_74, Phelemich_2, Prairie_64, Reccee_2, Reprobate_2, Rich_2, Rita130_2, Serendipitous_2, Shenyu_2, SirJeffery_2, StinkyVeggy_2, Suigeneris_2, Terij_2, Tonitrus_3, TraderJ_2, Wooper_2, Yeshua_2,

**Summary by start number:**

Start 28:
• Found in 1 of 97 ( 1.0% ) of genes in pham
• Manual Annotations of this start: 1 of 67
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Klevey_66 (FH),

Start 29:
• Found in 2 of 97 ( 2.1% ) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: CalWood4100_67 (FH),

Start 36:
• Found in 1 of 97 ( 1.0% ) of genes in pham
• Manual Annotations of this start: 1 of 67
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kozie_1 (EI),

Start 37:
• Found in 1 of 97 ( 1.0% ) of genes in pham
• Manual Annotations of this start: 1 of 67
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Indlovu_2 (B11),

Start 38:
• Found in 37 of 97 ( 38.1% ) of genes in pham
• Manual Annotations of this start: 25 of 67
• Called 67.6% of time when present
• Phage (with cluster) where this start called: Apex_2 (B4), Austelle_2 (B4), BobbyK_2 (B4), BrownCNA_2 (B4), ChrisnMich_2 (B4), Cooper_2 (B4), Frederick_2 (B4), GinPorsche_2 (B4), Hangman_2 (B4), Heath_2 (B4), Hydro_2 (B4), JAMaL_2 (B4), JoyceMaria_2 (B4), LittleDigger_2 (B4), Lolalove_2 (B4), Mithril_2 (B4), Mudslide_2 (B4), Nigel_2 (B4), Prince_2 (B4), RawrgerThat_2 (B4), Renkei_2 (B4), Stinger_2 (B4), VioletZ_2 (B4), Waleliano_2 (B4), Zemanar_2 (B4),

Start 39:
• Found in 8 of 97 ( 8.2% ) of genes in pham
• Manual Annotations of this start: 2 of 67
• Called 100.0% of time when present
• Phage (with cluster) where this start called: 39HC_02 (B6), 40BC_02 (B6), BigAnti_68 (singleton), ForDig_2 (B6), Hosp_097 (B6), Jolie1_02 (B6), KayaCho_2 (B6), Minnow_2 (B6),

Start 40:
• Found in 16 of 97 ( 16.5% ) of genes in pham
• Manual Annotations of this start: 13 of 67
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Altadena_62 (FH), Bolt007_65 (FH), Bumble_62 (FH), Cinna_2 (EI), Circuit_62 (FH), Cressida_2 (EI), Lilmac1015_67 (FH), Margaery_2 (EI), Matzah_2 (EI), MementoMori_2 (EI), Nandito_65 (FH), Prairie_64 (FH), Terij_2 (EI), Tonitrus_3 (singleton),

Start 42:
• Found in 3 of 97 ( 3.1% ) of genes in pham
• Manual Annotations of this start: 3 of 67
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kharcho_74 (FM), LilMcDreamy_2 (B12), Ottawa_74 (FM),

Start 43:
• Found in 31 of 97 ( 32.0% ) of genes in pham
• Manual Annotations of this start: 20 of 67
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acadian_2 (B5), AnarQue_2 (DR), Baee_2 (B5), Blackpen_2 (DR), BobRoss2024_2 (DR), CaiB_2 (DR), CloverMinnie_2 (DR), DigitDog_2 (B5), Donny_2 (B5), EastView9101_2 (B5), FelixTres_2 (DR), KarasumaRum_2 (B5), LittleMunchkin_2 (DR), MakoManhole_2 (DR), MossRose_2 (DR), Mysterious_2 (B5), Nangang_2 (B5), Nehemiah_1 (B5), Phelemich_2 (B5), Reccee_2 (B5), Reprobate_2 (B5), Rich_2 (B5), Rita130_2 (B5), Serendipitous_2 (B5), Shenyu_2 (B5), SirJeffery_2 (B5), StinkyVeggy_2 (B5), Suigeneris_2 (B5), TraderJ_2 (DR), Wooper_2 (DR), Yeshua_2 (DR),

Start 44:
• Found in 22 of 97 ( 22.7% ) of genes in pham
• No Manual Annotations of this start.
• Called 4.5% of time when present
• Phage (with cluster) where this start called: JaguarMi_2 (B4),

Start 45:
• Found in 37 of 97 ( 38.1% ) of genes in pham
• No Manual Annotations of this start.
• Called 5.4% of time when present
• Phage (with cluster) where this start called: Fanaw_2 (B4), Xincheng_2 (B4),

Start 46:
• Found in 46 of 97 ( 47.4% ) of genes in pham
• Manual Annotations of this start: 1 of 67
• Called 19.6% of time when present
• Phage (with cluster) where this start called: Ahwei_2 (B4), Antihero_2 (B4), Epah_2 (B4), Hally898_2 (B4), Lambano_2 (B4), Magpie_2 (B4), Nanao_2 (B4), Poster_2 (B4), QueenPie_2 (B4),

**Summary by clusters:**

There are 10 clusters represented in this pham: singleton, EI, B4, B5, B6, B12, B11, FH, DR, FM,

Info for manual annotations of cluster B11:
•Start number 37 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:
•Start number 42 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B4:
•Start number 38 was manually annotated 25 times for cluster B4.
•Start number 46 was manually annotated 1 time for cluster B4.

Info for manual annotations of cluster B5:
•Start number 43 was manually annotated 11 times for cluster B5.

Info for manual annotations of cluster B6:
•Start number 39 was manually annotated 2 times for cluster B6.

Info for manual annotations of cluster DR:
•Start number 43 was manually annotated 9 times for cluster DR.

Info for manual annotations of cluster EI:
•Start number 36 was manually annotated 1 time for cluster EI.
•Start number 40 was manually annotated 6 times for cluster EI.

Info for manual annotations of cluster FH:
•Start number 28 was manually annotated 1 time for cluster FH.
•Start number 40 was manually annotated 6 times for cluster FH.

Info for manual annotations of cluster FM:
•Start number 42 was manually annotated 2 times for cluster FM.

### *Gene Information:*

Gene: 39HC_02 Start: 807, Stop: 1763, Start Num: 39
Candidate Starts for 39HC_02:
(Start: 39 @807 has 2 MA's), (48, 867), (51, 882), (60, 951), (67, 999), (79, 1089), (84, 1152), (100, 1248), (107, 1350), (109, 1362), (110, 1368), (114, 1419), (117, 1446), (123, 1500), (128, 1554), (130, 1626), (139, 1698),

Gene: 40BC_02 Start: 807, Stop: 1763, Start Num: 39
Candidate Starts for 40BC_02:
(Start: 39 @807 has 2 MA's), (48, 867), (51, 882), (60, 951), (67, 999), (79, 1089), (84, 1152), (100, 1248), (107, 1350), (109, 1362), (110, 1368), (114, 1419), (117, 1446), (123, 1500), (128, 1554), (130, 1626), (139, 1698),

Gene: Acadian_2 Start: 813, Stop: 1691, Start Num: 43
Candidate Starts for Acadian_2:
(Start: 43 @813 has 20 MA's), (49, 867), (51, 879), (68, 999), (79, 1086), (82, 1110), (84, 1149), (95, 1209), (109, 1353), (110, 1359), (115, 1413), (116, 1416), (117, 1437), (118, 1440), (123, 1491), (128, 1545), (130, 1617),

Gene: Ahwei_2 Start: 824, Stop: 1753, Start Num: 46
Candidate Starts for Ahwei_2:
(Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (80, 1067), (84, 1127), (95, 1187), (100, 1217), (105, 1268), (109, 1331), (110, 1337), (111, 1340), (115, 1391), (116, 1394), (117, 1415), (119, 1442), (123, 1469), (126, 1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: Altadena_62 Start: 39775, Stop: 40719, Start Num: 40
Candidate Starts for Altadena_62:
(27, 39709), (Start: 40 @39775 has 13 MA's), (56, 39901), (77, 40036), (79, 40081), (102, 40255), (104, 40285), (109, 40351), (112, 40372), (120, 40471), (121, 40480), (128, 40540),

Gene: AnarQue_2 Start: 801, Stop: 1661, Start Num: 43
Candidate Starts for AnarQue_2:
(Start: 43 @801 has 20 MA's), (48, 852), (52, 873), (64, 948), (74, 1011), (80, 1077), (100, 1227), (109, 1341), (110, 1347), (115, 1401), (116, 1404), (123, 1479), (125, 1509), (126, 1512), (128, 1533), (130, 1605),

Gene: Antihero_2 Start: 824, Stop: 1753, Start Num: 46
Candidate Starts for Antihero_2:
(Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (80, 1067), (95, 1187), (100, 1217), (105, 1268), (109, 1331), (110, 1337), (111, 1340), (115, 1391), (116, 1394), (117, 1415), (119, 1442), (123, 1469), (126, 1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: Apex_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Apex_2:
(14, 515), (19, 608), (23, 671), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Austelle_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Austelle_2:
(14, 515), (19, 608), (23, 671), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Baee_2 Start: 819, Stop: 1697, Start Num: 43
Candidate Starts for Baee_2:
(Start: 43 @819 has 20 MA's), (51, 885), (61, 957), (79, 1092), (82, 1116), (84, 1155), (85, 1158), (95, 1215), (103, 1278), (109, 1359), (115, 1419), (116, 1422), (117, 1443), (118, 1446), (128, 1551), (130, 1623),

Gene: BigAnti_68 Start: 52422, Stop: 53372, Start Num: 39
Candidate Starts for BigAnti_68:
(2, 51894), (Start: 39 @52422 has 2 MA's), (80, 52707), (89, 52803), (103, 52890), (109, 52971), (126, 53139), (128, 53160), (130, 53232), (138, 53313),

Gene: Blackpen_2 Start: 801, Stop: 1652, Start Num: 43
Candidate Starts for Blackpen_2:

(Start: 43 @801 has 20 MA's), (48, 852), (52, 873), (64, 948), (74, 1011), (80, 1077), (100, 1227), (109, 1341), (110, 1347), (115, 1401), (116, 1404), (129, 1554),

Gene: BobRoss2024_2 Start: 777, Stop: 1646, Start Num: 43
Candidate Starts for BobRoss2024_2:
(Start: 43 @777 has 20 MA's), (45, 792), (Start: 46 @801 has 1 MA's), (64, 924), (69, 969), (80, 1053), (90, 1158), (94, 1170), (100, 1203), (109, 1317), (110, 1323), (117, 1401), (120, 1437), (128, 1509), (130, 1581),

Gene: BobbyK_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for BobbyK_2:
(18, 557), (19, 608), (22, 641), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (84, 1133), (85, 1136), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Bolt007_65 Start: 41988, Stop: 42932, Start Num: 40
Candidate Starts for Bolt007_65:
(Start: 40 @41988 has 13 MA's), (56, 42114), (77, 42249), (78, 42267), (83, 42327), (102, 42468), (109, 42564), (112, 42585), (117, 42648), (120, 42684), (121, 42693), (125, 42729), (128, 42753), (131, 42834),

Gene: BrownCNA_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for BrownCNA_2:
(14, 515), (19, 608), (23, 671), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Bumble_62 Start: 40635, Stop: 41588, Start Num: 40
Candidate Starts for Bumble_62:
(3, 40143), (4, 40170), (15, 40380), (20, 40485), (Start: 40 @40635 has 13 MA's), (63, 40803), (77, 40896), (79, 40941), (102, 41115), (109, 41211), (112, 41232), (115, 41271), (117, 41295), (121, 41340), (122, 41343), (128, 41409),

Gene: CaiB_2 Start: 801, Stop: 1661, Start Num: 43
Candidate Starts for CaiB_2:
(Start: 43 @801 has 20 MA's), (48, 852), (52, 873), (64, 948), (74, 1011), (80, 1077), (85, 1140), (100, 1227), (109, 1341), (110, 1347), (113, 1383), (115, 1401), (116, 1404), (123, 1479), (125, 1509), (126, 1512), (128, 1533), (130, 1605),

Gene: CalWood4100_67 Start: 41902, Stop: 42903, Start Num: 29
Candidate Starts for CalWood4100_67:
(25, 41884), (29, 41902), (32, 41917), (Start: 40 @41959 has 13 MA's), (77, 42220), (78, 42238), (83, 42298), (102, 42439), (109, 42535), (112, 42556), (120, 42655), (121, 42664), (125, 42700), (128, 42724),

Gene: ChrisnMich_2 Start: 785, Stop: 1753, Start Num: 38
Candidate Starts for ChrisnMich_2:
(10, 470), (16, 524), (18, 557), (Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (95, 1187), (100, 1217), (105, 1268), (109, 1331), (110, 1337), (111, 1340), (115, 1391), (116, 1394), (117, 1415), (119, 1442), (123, 1469), (126, 1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: Cinna_2 Start: 645, Stop: 1598, Start Num: 40
Candidate Starts for Cinna_2:
(8, 261), (11, 333), (Start: 40 @645 has 13 MA's), (Start: 46 @681 has 1 MA's), (47, 684), (50, 720), (51, 723), (67, 843), (70, 864), (75, 897), (79, 960), (80, 963), (86, 1044), (88, 1056), (92, 1071), (97, 1089), (100, 1113), (104, 1161), (108, 1224), (109, 1227), (110, 1233), (112, 1248), (114, 1284), (119, 1338), (120, 1347), (121, 1356), (122, 1359), (124, 1386), (130, 1488), (133, 1518), (135, 1545), (136, 1554),

Gene: Circuit_62 Start: 41170, Stop: 42123, Start Num: 40
Candidate Starts for Circuit_62:
(15, 40912), (20, 41020), (Start: 40 @41170 has 13 MA's), (77, 41431), (79, 41476), (102, 41650), (109, 41746), (112, 41767), (117, 41830), (120, 41866), (121, 41875), (122, 41878), (128, 41944),

Gene: CloverMinnie_2 Start: 801, Stop: 1661, Start Num: 43
Candidate Starts for CloverMinnie_2:
(Start: 43 @801 has 20 MA's), (48, 852), (52, 873), (64, 948), (74, 1011), (80, 1077), (100, 1227), (109, 1341), (110, 1347), (115, 1401), (116, 1404), (123, 1479), (125, 1509), (126, 1512), (128, 1533), (130, 1605),

Gene: Cooper_2 Start: 785, Stop: 1753, Start Num: 38
Candidate Starts for Cooper_2:
(16, 524), (17, 545), (18, 557), (31, 740), (Start: 38 @785 has 25 MA's), (Start: 46 @824 has 1 MA's), (49, 854), (50, 863), (51, 866), (55, 905), (84, 1127), (95, 1187), (100, 1217), (105, 1268), (107, 1319), (109, 1331), (110, 1337), (113, 1373), (114, 1388), (115, 1391), (117, 1415), (119, 1442), (123, 1469), (126, 1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: Cressida_2 Start: 642, Stop: 1595, Start Num: 40
Candidate Starts for Cressida_2:
(30, 585), (Start: 40 @642 has 13 MA's), (Start: 46 @678 has 1 MA's), (47, 681), (50, 717), (51, 720), (67, 840), (70, 861), (75, 894), (79, 957), (80, 960), (86, 1041), (88, 1053), (92, 1068), (97, 1086), (100, 1110), (108, 1221), (109, 1224), (110, 1230), (112, 1245), (119, 1335), (120, 1344), (121, 1353), (124, 1383), (130, 1485), (133, 1515), (135, 1542), (136, 1551),

Gene: DigitDog_2 Start: 804, Stop: 1682, Start Num: 43
Candidate Starts for DigitDog_2:
(Start: 43 @804 has 20 MA's), (64, 951), (66, 972), (67, 987), (79, 1077), (82, 1101), (88, 1173), (98, 1212), (109, 1344), (113, 1386), (115, 1404), (116, 1407), (117, 1428), (123, 1482), (125, 1512), (128, 1536), (130, 1608),

Gene: Donny_2 Start: 813, Stop: 1691, Start Num: 43
Candidate Starts for Donny_2:
(Start: 43 @813 has 20 MA's), (49, 867), (51, 879), (68, 999), (79, 1086), (82, 1110), (84, 1149), (95, 1209), (109, 1353), (110, 1359), (115, 1413), (116, 1416), (117, 1437), (118, 1440), (123, 1491), (128, 1545), (130, 1617),

Gene: EastView9101_2 Start: 813, Stop: 1691, Start Num: 43
Candidate Starts for EastView9101_2:
(Start: 43 @813 has 20 MA's), (49, 867), (51, 879), (68, 999), (79, 1086), (82, 1110), (84, 1149), (95, 1209), (109, 1353), (110, 1359), (115, 1413), (116, 1416), (117, 1437), (118, 1440), (123, 1491), (128, 1545), (130, 1617),

Gene: Epah_2 Start: 824, Stop: 1753, Start Num: 46

Candidate Starts for Epah_2:
(Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (80, 1067), (95, 1187), (100, 1217), (105, 1268), (109, 1331), (110, 1337), (111, 1340), (115, 1391), (116, 1394), (117, 1415), (119, 1442), (123, 1469), (126, 1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: Fanaw_2 Start: 818, Stop: 1759, Start Num: 45
Candidate Starts for Fanaw_2:
(19, 608), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: FelixTres_2 Start: 801, Stop: 1661, Start Num: 43
Candidate Starts for FelixTres_2:
(Start: 43 @801 has 20 MA's), (48, 852), (52, 873), (64, 948), (74, 1011), (80, 1077), (100, 1227), (109, 1341), (110, 1347), (115, 1401), (116, 1404), (123, 1479), (125, 1509), (126, 1512), (128, 1533), (130, 1605),

Gene: ForDig_2 Start: 807, Stop: 1763, Start Num: 39
Candidate Starts for ForDig_2:
(Start: 39 @807 has 2 MA's), (48, 867), (51, 882), (60, 951), (67, 999), (79, 1089), (84, 1152), (100, 1248), (107, 1350), (109, 1362), (110, 1368), (123, 1500), (128, 1554), (130, 1626), (139, 1698),

Gene: Frederick_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Frederick_2:
(5, 344), (6, 383), (14, 515), (19, 608), (23, 671), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: GinPorsche_2 Start: 785, Stop: 1753, Start Num: 38
Candidate Starts for GinPorsche_2:
(Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (80, 1067), (95, 1187), (100, 1217), (105, 1268), (109, 1331), (110, 1337), (111, 1340), (115, 1391), (116, 1394), (117, 1415), (119, 1442), (123, 1469), (126, 1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: Hally898_2 Start: 824, Stop: 1753, Start Num: 46
Candidate Starts for Hally898_2:
(Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (80, 1067), (95, 1187), (100, 1217), (105, 1268), (109, 1331), (110, 1337), (111, 1340), (115, 1391), (116, 1394), (117, 1415), (119, 1442), (123, 1469), (126, 1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: Hangman_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Hangman_2:
(14, 515), (18, 557), (19, 608), (23, 671), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (55, 908), (84, 1133), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Heath_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Heath_2:

(18, 557), (19, 608), (22, 641), (34, 749), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Hosp_097 Start: 69676, Stop: 70632, Start Num: 39
Candidate Starts for Hosp_097:
(Start: 39 @69676 has 2 MA's), (48, 69736), (51, 69751), (60, 69820), (67, 69868), (79, 69958), (84, 70021), (100, 70117), (107, 70219), (109, 70231), (110, 70237), (114, 70288), (117, 70315), (123, 70369), (128, 70423), (130, 70495), (139, 70567),

Gene: Hydro_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Hydro_2:
(13, 512), (18, 557), (19, 608), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Indlovu_2 Start: 809, Stop: 1687, Start Num: 37
Candidate Starts for Indlovu_2:
(Start: 37 @809 has 1 MA's), (45, 842), (50, 890), (51, 893), (79, 1100), (84, 1163), (87, 1190), (93, 1214), (102, 1271), (104, 1301), (105, 1304), (109, 1367), (111, 1376), (115, 1427), (116, 1430), (117, 1451), (128, 1559), (130, 1631),

Gene: JAMaL_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for JAMaL_2:
(18, 557), (19, 608), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (84, 1133), (85, 1136), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: JaguarMi_2 Start: 812, Stop: 1759, Start Num: 44
Candidate Starts for JaguarMi_2:
(1, 212), (5, 344), (12, 497), (13, 512), (18, 557), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (84, 1133), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Jolie1_02 Start: 807, Stop: 1763, Start Num: 39
Candidate Starts for Jolie1_02:
(Start: 39 @807 has 2 MA's), (48, 867), (51, 882), (60, 951), (67, 999), (79, 1089), (84, 1152), (100, 1248), (107, 1350), (109, 1362), (110, 1368), (114, 1419), (117, 1446), (123, 1500), (128, 1554), (130, 1626), (139, 1698),

Gene: JoyceMaria_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for JoyceMaria_2:
(14, 515), (18, 557), (19, 608), (23, 671), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (55, 908), (84, 1133), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: KarasumaRum_2 Start: 804, Stop: 1682, Start Num: 43
Candidate Starts for KarasumaRum_2:

(Start: 43 @804 has 20 MA's), (48, 855), (64, 951), (65, 957), (66, 972), (67, 987), (79, 1077), (82, 1101), (84, 1140), (88, 1173), (98, 1212), (109, 1344), (115, 1404), (116, 1407), (117, 1428), (123, 1482), (125, 1512), (128, 1536), (130, 1608),

Gene: KayaCho_2 Start: 810, Stop: 1766, Start Num: 39
Candidate Starts for KayaCho_2:
(Start: 39 @810 has 2 MA's), (48, 870), (49, 873), (51, 885), (60, 954), (67, 1002), (79, 1092), (84, 1155), (100, 1251), (104, 1299), (105, 1302), (107, 1353), (109, 1365), (110, 1371), (117, 1449), (123, 1503), (128, 1557), (130, 1629), (139, 1701),

Gene: Kharcho_74 Start: 43527, Stop: 44414, Start Num: 42
Candidate Starts for Kharcho_74:
(Start: 42 @43527 has 3 MA's), (58, 43659), (59, 43677), (71, 43752), (76, 43770), (77, 43782), (79, 43827), (102, 43998), (106, 44070), (109, 44094), (112, 44115), (121, 44223), (128, 44289), (130, 44361),

Gene: Klevey_66 Start: 41642, Stop: 42646, Start Num: 28
Candidate Starts for Klevey_66:
(Start: 28 @41642 has 1 MA's), (33, 41660), (Start: 40 @41699 has 13 MA's), (77, 41960), (78, 41978), (83, 42038), (102, 42179), (109, 42275), (112, 42296), (115, 42335), (120, 42395), (121, 42404), (125, 42440), (128, 42464), (140, 42638),

Gene: Kozie_1 Start: 1, Stop: 882, Start Num: 36
Candidate Starts for Kozie_1:
(Start: 36 @1 has 1 MA's), (41, 25), (Start: 46 @58 has 1 MA's), (47, 61), (51, 100), (60, 172), (69, 229), (74, 253), (80, 328), (81, 346), (86, 409), (96, 451), (97, 454), (100, 478), (108, 589), (109, 592), (110, 598), (120, 712), (121, 721), (126, 760), (128, 781), (130, 853), (132, 868),

Gene: Lambano_2 Start: 824, Stop: 1753, Start Num: 46
Candidate Starts for Lambano_2:
(Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (80, 1067), (95, 1187), (100, 1217), (105, 1268), (109, 1331), (110, 1337), (111, 1340), (115, 1391), (116, 1394), (117, 1415), (119, 1442), (123, 1469), (126, 1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: LilMcDreamy_2 Start: 855, Stop: 1787, Start Num: 42
Candidate Starts for LilMcDreamy_2:
(Start: 42 @855 has 3 MA's), (Start: 46 @882 has 1 MA's), (51, 924), (54, 951), (57, 969), (60, 996), (62, 1002), (67, 1044), (68, 1047), (69, 1053), (79, 1134), (80, 1137), (92, 1245), (95, 1257), (100, 1287), (102, 1305), (109, 1401), (115, 1461), (116, 1464), (117, 1485), (123, 1539), (125, 1569), (128, 1593), (130, 1665), (136, 1731),

Gene: Lilmac1015_67 Start: 41959, Stop: 42903, Start Num: 40
Candidate Starts for Lilmac1015_67:
(25, 41884), (29, 41902), (32, 41917), (Start: 40 @41959 has 13 MA's), (77, 42220), (78, 42238), (83, 42298), (102, 42439), (109, 42535), (112, 42556), (120, 42655), (121, 42664), (125, 42700), (128, 42724),

Gene: LittleDigger_2 Start: 785, Stop: 1753, Start Num: 38
Candidate Starts for LittleDigger_2:
(10, 470), (16, 524), (18, 557), (Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (84, 1127), (95, 1187), (100, 1217), (105, 1268), (107, 1319), (109, 1331), (110, 1337), (111, 1340), (115, 1391), (116, 1394), (117, 1415), (119, 1442), (123, 1469), (126,

1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: LittleMunchkin_2 Start: 804, Stop: 1652, Start Num: 43
Candidate Starts for LittleMunchkin_2:
(Start: 43 @804 has 20 MA's), (64, 951), (74, 1014), (80, 1080), (84, 1140), (100, 1230), (109, 1344), (116, 1407), (117, 1428), (125, 1512), (128, 1536), (130, 1608),

Gene: Lolalove_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Lolalove_2:
(14, 515), (19, 608), (23, 671), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Magpie_2 Start: 827, Stop: 1759, Start Num: 46
Candidate Starts for Magpie_2:
(9, 449), (18, 557), (19, 608), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (84, 1133), (85, 1136), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (117, 1421), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: MakoManhole_2 Start: 801, Stop: 1661, Start Num: 43
Candidate Starts for MakoManhole_2:
(Start: 43 @801 has 20 MA's), (48, 852), (52, 873), (64, 948), (74, 1011), (80, 1077), (100, 1227), (109, 1341), (110, 1347), (115, 1401), (116, 1404), (123, 1479), (125, 1509), (126, 1512), (128, 1533), (130, 1605),

Gene: Margaery_2 Start: 642, Stop: 1580, Start Num: 40
Candidate Starts for Margaery_2:
(Start: 40 @642 has 13 MA's), (Start: 46 @678 has 1 MA's), (47, 681), (50, 717), (75, 879), (79, 942), (80, 945), (86, 1026), (88, 1038), (97, 1071), (100, 1095), (108, 1206), (109, 1209), (119, 1320), (120, 1329), (121, 1338), (128, 1398), (130, 1470), (133, 1500), (135, 1527),

Gene: Matzah_2 Start: 645, Stop: 1598, Start Num: 40
Candidate Starts for Matzah_2:
(8, 261), (30, 588), (Start: 40 @645 has 13 MA's), (Start: 46 @681 has 1 MA's), (47, 684), (50, 720), (51, 723), (70, 864), (75, 897), (79, 960), (80, 963), (86, 1044), (88, 1056), (92, 1071), (97, 1089), (100, 1113), (104, 1161), (108, 1224), (109, 1227), (110, 1233), (112, 1248), (114, 1284), (119, 1338), (120, 1347), (121, 1356), (122, 1359), (124, 1386), (130, 1488), (133, 1518), (135, 1545), (136, 1554),

Gene: MementoMori_2 Start: 642, Stop: 1595, Start Num: 40
Candidate Starts for MementoMori_2:
(7, 234), (8, 258), (11, 330), (30, 585), (Start: 40 @642 has 13 MA's), (Start: 46 @678 has 1 MA's), (47, 681), (50, 717), (51, 720), (67, 840), (70, 861), (75, 894), (79, 957), (80, 960), (86, 1041), (88, 1053), (92, 1068), (97, 1086), (100, 1110), (104, 1158), (108, 1221), (109, 1224), (110, 1230), (112, 1245), (119, 1335), (120, 1344), (121, 1353), (122, 1356), (124, 1383), (130, 1485), (133, 1515), (135, 1542), (136, 1551),

Gene: Minnow_2 Start: 810, Stop: 1766, Start Num: 39
Candidate Starts for Minnow_2:
(Start: 39 @810 has 2 MA's), (48, 870), (49, 873), (51, 885), (60, 954), (67, 1002), (79, 1092), (100, 1251), (107, 1353), (109, 1365), (110, 1371), (114, 1422), (117, 1449), (123, 1503), (128, 1557), (130, 1629), (139, 1701),

Gene: Mithril_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Mithril_2:
(14, 515), (19, 608), (23, 671), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: MossRose_2 Start: 801, Stop: 1661, Start Num: 43
Candidate Starts for MossRose_2:
(Start: 43 @801 has 20 MA's), (48, 852), (52, 873), (64, 948), (74, 1011), (80, 1077), (100, 1227), (109, 1341), (110, 1347), (115, 1401), (116, 1404), (123, 1479), (125, 1509), (126, 1512), (128, 1533), (130, 1605),

Gene: Mudslide_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Mudslide_2:
(14, 515), (19, 608), (23, 671), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Mysterious_2 Start: 810, Stop: 1673, Start Num: 43
Candidate Starts for Mysterious_2:
(Start: 43 @810 has 20 MA's), (57, 918), (60, 945), (67, 993), (79, 1083), (82, 1107), (95, 1206), (100, 1236), (101, 1242), (104, 1284), (109, 1350), (110, 1356), (111, 1359), (115, 1410), (116, 1413), (117, 1434), (118, 1437), (125, 1518), (128, 1542), (130, 1614),

Gene: Nanao_2 Start: 824, Stop: 1753, Start Num: 46
Candidate Starts for Nanao_2:
(Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (80, 1067), (95, 1187), (100, 1217), (105, 1268), (109, 1331), (110, 1337), (111, 1340), (115, 1391), (116, 1394), (117, 1415), (119, 1442), (123, 1469), (126, 1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: Nandito_65 Start: 41949, Stop: 42896, Start Num: 40
Candidate Starts for Nandito_65:
(Start: 40 @41949 has 13 MA's), (47, 41985), (63, 42117), (77, 42210), (78, 42228), (83, 42288), (102, 42429), (109, 42525), (112, 42546), (115, 42585), (121, 42654), (125, 42690), (128, 42714),

Gene: Nangang_2 Start: 804, Stop: 1682, Start Num: 43
Candidate Starts for Nangang_2:
(Start: 43 @804 has 20 MA's), (48, 855), (64, 951), (66, 972), (67, 987), (79, 1077), (82, 1101), (84, 1140), (88, 1173), (98, 1212), (109, 1344), (115, 1404), (116, 1407), (117, 1428), (123, 1482), (125, 1512), (128, 1536), (130, 1608),

Gene: Nehemiah_1 Start: 810, Stop: 1673, Start Num: 43
Candidate Starts for Nehemiah_1:
(Start: 43 @810 has 20 MA's), (57, 918), (60, 945), (67, 993), (79, 1083), (82, 1107), (95, 1206), (100, 1236), (101, 1242), (104, 1284), (109, 1350), (110, 1356), (111, 1359), (115, 1410), (116, 1413), (117, 1434), (118, 1437), (125, 1518), (128, 1542), (130, 1614),

Gene: Nigel_2 Start: 776, Stop: 1744, Start Num: 38
Candidate Starts for Nigel_2:

(21, 626), (22, 632), (Start: 38 @776 has 25 MA's), (Start: 46 @815 has 1 MA's), (50, 854), (51, 857), (55, 896), (84, 1118), (95, 1178), (100, 1208), (105, 1259), (109, 1322), (111, 1331), (113, 1364), (114, 1379), (115, 1382), (117, 1406), (119, 1433), (123, 1460), (126, 1493), (128, 1514), (130, 1586), (134, 1631), (139, 1679), (141, 1697),

Gene: Ottawa_74 Start: 43477, Stop: 44364, Start Num: 42
Candidate Starts for Ottawa_74:
(Start: 42 @43477 has 3 MA's), (58, 43609), (59, 43627), (71, 43702), (76, 43720), (77, 43732), (79, 43777), (102, 43948), (106, 44020), (109, 44044), (112, 44065), (121, 44173), (128, 44239), (130, 44311),

Gene: Phelemich_2 Start: 810, Stop: 1673, Start Num: 43
Candidate Starts for Phelemich_2:
(Start: 43 @810 has 20 MA's), (51, 876), (57, 918), (60, 945), (67, 993), (79, 1083), (82, 1107), (95, 1206), (100, 1236), (104, 1284), (109, 1350), (110, 1356), (111, 1359), (115, 1410), (116, 1413), (117, 1434), (118, 1437), (123, 1488), (125, 1518), (128, 1542), (130, 1614),

Gene: Poster_2 Start: 824, Stop: 1753, Start Num: 46
Candidate Starts for Poster_2:
(Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (80, 1067), (95, 1187), (100, 1217), (105, 1268), (109, 1331), (110, 1337), (111, 1340), (115, 1391), (116, 1394), (117, 1415), (119, 1442), (123, 1469), (126, 1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: Prairie_64 Start: 41411, Stop: 42355, Start Num: 40
Candidate Starts for Prairie_64:
(Start: 40 @41411 has 13 MA's), (53, 41498), (77, 41672), (78, 41690), (83, 41750), (102, 41891), (109, 41987), (112, 42008), (115, 42047), (120, 42107), (121, 42116), (125, 42152), (128, 42176),

Gene: Prince_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Prince_2:
(14, 515), (19, 608), (23, 671), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: QueenPie_2 Start: 824, Stop: 1756, Start Num: 46
Candidate Starts for QueenPie_2:
(10, 470), (16, 524), (18, 557), (35, 764), (Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (57, 908), (84, 1130), (95, 1190), (100, 1220), (105, 1271), (107, 1322), (109, 1334), (110, 1340), (111, 1343), (115, 1394), (116, 1397), (117, 1418), (119, 1445), (123, 1472), (126, 1505), (128, 1526), (130, 1598), (134, 1643), (139, 1691), (141, 1709),

Gene: RawrgerThat_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for RawrgerThat_2:
(18, 557), (19, 608), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (61, 941), (84, 1133), (85, 1136), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Reccee_2 Start: 813, Stop: 1691, Start Num: 43
Candidate Starts for Reccee_2:

(Start: 43 @813 has 20 MA's), (49, 867), (51, 879), (68, 999), (79, 1086), (82, 1110), (84, 1149), (95, 1209), (109, 1353), (110, 1359), (115, 1413), (116, 1416), (117, 1437), (118, 1440), (123, 1491), (128, 1545), (130, 1617),

Gene: Renkei_2 Start: 785, Stop: 1753, Start Num: 38
Candidate Starts for Renkei_2:
(10, 470), (16, 524), (18, 557), (Start: 38 @785 has 25 MA's), (45, 815), (Start: 46 @824 has 1 MA's), (50, 863), (51, 866), (55, 905), (84, 1127), (95, 1187), (100, 1217), (105, 1268), (107, 1319), (109, 1331), (110, 1337), (111, 1340), (115, 1391), (116, 1394), (117, 1415), (119, 1442), (123, 1469), (126, 1502), (128, 1523), (130, 1595), (134, 1640), (139, 1688), (141, 1706),

Gene: Reprobate_2 Start: 807, Stop: 1670, Start Num: 43
Candidate Starts for Reprobate_2:
(Start: 43 @807 has 20 MA's), (51, 873), (57, 915), (60, 942), (67, 990), (79, 1080), (82, 1104), (95, 1203), (100, 1233), (104, 1281), (109, 1347), (110, 1353), (111, 1356), (115, 1407), (116, 1410), (117, 1431), (118, 1434), (123, 1485), (125, 1515), (128, 1539), (130, 1611),

Gene: Rich_2 Start: 816, Stop: 1694, Start Num: 43
Candidate Starts for Rich_2:
(Start: 43 @816 has 20 MA's), (51, 882), (61, 954), (79, 1089), (82, 1113), (84, 1152), (85, 1155), (95, 1212), (109, 1356), (115, 1416), (116, 1419), (117, 1440), (118, 1443), (128, 1548), (130, 1620),

Gene: Rita130_2 Start: 813, Stop: 1691, Start Num: 43
Candidate Starts for Rita130_2:
(Start: 43 @813 has 20 MA's), (49, 867), (51, 879), (68, 999), (79, 1086), (82, 1110), (84, 1149), (95, 1209), (109, 1353), (110, 1359), (115, 1413), (116, 1416), (117, 1437), (118, 1440), (123, 1491), (128, 1545), (130, 1617),

Gene: Serendipitous_2 Start: 813, Stop: 1730, Start Num: 43
Candidate Starts for Serendipitous_2:
(Start: 43 @813 has 20 MA's), (49, 867), (64, 960), (65, 966), (66, 981), (67, 996), (79, 1086), (82, 1110), (84, 1149), (85, 1152), (88, 1182), (95, 1209), (99, 1230), (109, 1353), (110, 1359), (114, 1410), (115, 1413), (116, 1416), (117, 1437), (123, 1491), (125, 1521), (127, 1536), (128, 1545), (130, 1617), (137, 1689),

Gene: Shenyu_2 Start: 804, Stop: 1682, Start Num: 43
Candidate Starts for Shenyu_2:
(Start: 43 @804 has 20 MA's), (48, 855), (64, 951), (66, 972), (67, 987), (79, 1077), (82, 1101), (84, 1140), (88, 1173), (98, 1212), (109, 1344), (115, 1404), (116, 1407), (117, 1428), (123, 1482), (125, 1512), (128, 1536), (130, 1608),

Gene: SirJeffery_2 Start: 813, Stop: 1691, Start Num: 43
Candidate Starts for SirJeffery_2:
(Start: 43 @813 has 20 MA's), (49, 867), (51, 879), (68, 999), (79, 1086), (82, 1110), (84, 1149), (95, 1209), (109, 1353), (110, 1359), (115, 1413), (116, 1416), (117, 1437), (118, 1440), (123, 1491), (128, 1545), (130, 1617),

Gene: Stinger_2 Start: 776, Stop: 1744, Start Num: 38
Candidate Starts for Stinger_2:
(10, 470), (18, 548), (Start: 38 @776 has 25 MA's), (Start: 46 @815 has 1 MA's), (50, 854), (51, 857), (55, 896), (83, 1088), (84, 1118), (95, 1178), (100, 1208), (105, 1259), (109, 1322), (111, 1331), (114, 1379), (115, 1382), (117, 1406), (119, 1433), (123, 1460), (126, 1493), (128, 1514), (130, 1586), (134, 1631), (139, 1679), (141, 1697),

Gene: StinkyVeggy_2 Start: 804, Stop: 1682, Start Num: 43
Candidate Starts for StinkyVeggy_2:
(Start: 43 @804 has 20 MA's), (48, 855), (64, 951), (65, 957), (66, 972), (67, 987), (79, 1077), (82, 1101), (84, 1140), (88, 1173), (98, 1212), (109, 1344), (115, 1404), (116, 1407), (117, 1428), (123, 1482), (125, 1512), (128, 1536), (130, 1608),

Gene: Suigeneris_2 Start: 813, Stop: 1691, Start Num: 43
Candidate Starts for Suigeneris_2:
(Start: 43 @813 has 20 MA's), (49, 867), (51, 879), (68, 999), (79, 1086), (82, 1110), (84, 1149), (95, 1209), (109, 1353), (110, 1359), (115, 1413), (116, 1416), (117, 1437), (118, 1440), (123, 1491), (128, 1545), (130, 1617),

Gene: Terij_2 Start: 642, Stop: 1580, Start Num: 40
Candidate Starts for Terij_2:
(30, 585), (Start: 40 @642 has 13 MA's), (Start: 46 @678 has 1 MA's), (47, 681), (50, 717), (51, 720), (75, 879), (79, 942), (80, 945), (86, 1026), (88, 1038), (97, 1071), (100, 1095), (109, 1209), (119, 1320), (120, 1329), (121, 1338), (128, 1398), (130, 1470), (133, 1500), (135, 1527),

Gene: Tonitrus_3 Start: 1162, Stop: 2043, Start Num: 40
Candidate Starts for Tonitrus_3:
(26, 1084), (Start: 40 @1162 has 13 MA's), (45, 1189), (51, 1240), (60, 1306), (72, 1369), (73, 1378), (80, 1444), (82, 1465), (91, 1549), (102, 1612), (109, 1708), (110, 1714), (112, 1729), (128, 1897), (130, 1969),

Gene: TraderJ_2 Start: 801, Stop: 1661, Start Num: 43
Candidate Starts for TraderJ_2:
(Start: 43 @801 has 20 MA's), (48, 852), (52, 873), (64, 948), (68, 987), (74, 1011), (80, 1077), (100, 1227), (109, 1341), (115, 1401), (116, 1404), (123, 1479), (125, 1509), (126, 1512), (128, 1533), (130, 1605),

Gene: VioletZ_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for VioletZ_2:
(12, 497), (18, 557), (19, 608), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Waleliano_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Waleliano_2:
(14, 515), (19, 608), (23, 671), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Wooper_2 Start: 801, Stop: 1661, Start Num: 43
Candidate Starts for Wooper_2:
(Start: 43 @801 has 20 MA's), (48, 852), (52, 873), (64, 948), (74, 1011), (80, 1077), (100, 1227), (109, 1341), (110, 1347), (115, 1401), (116, 1404), (123, 1479), (125, 1509), (126, 1512), (128, 1533), (130, 1605),

Gene: Xincheng_2 Start: 818, Stop: 1759, Start Num: 45
Candidate Starts for Xincheng_2:

(1, 212), (5, 344), (12, 497), (13, 512), (18, 557), (24, 680), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (84, 1133), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),

Gene: Yeshua_2 Start: 801, Stop: 1661, Start Num: 43
Candidate Starts for Yeshua_2:
(Start: 43 @801 has 20 MA's), (48, 852), (52, 873), (64, 948), (74, 1011), (80, 1077), (100, 1227), (109, 1341), (110, 1347), (115, 1401), (116, 1404), (123, 1479), (125, 1509), (126, 1512), (128, 1533), (130, 1605),

Gene: Zemanar_2 Start: 785, Stop: 1759, Start Num: 38
Candidate Starts for Zemanar_2:
(18, 557), (19, 608), (22, 641), (34, 749), (Start: 38 @785 has 25 MA's), (44, 812), (45, 818), (Start: 46 @827 has 1 MA's), (49, 857), (50, 866), (51, 869), (55, 908), (100, 1223), (107, 1325), (109, 1337), (110, 1343), (111, 1346), (115, 1397), (116, 1400), (119, 1448), (123, 1475), (126, 1508), (128, 1529), (130, 1601), (139, 1694), (141, 1712),