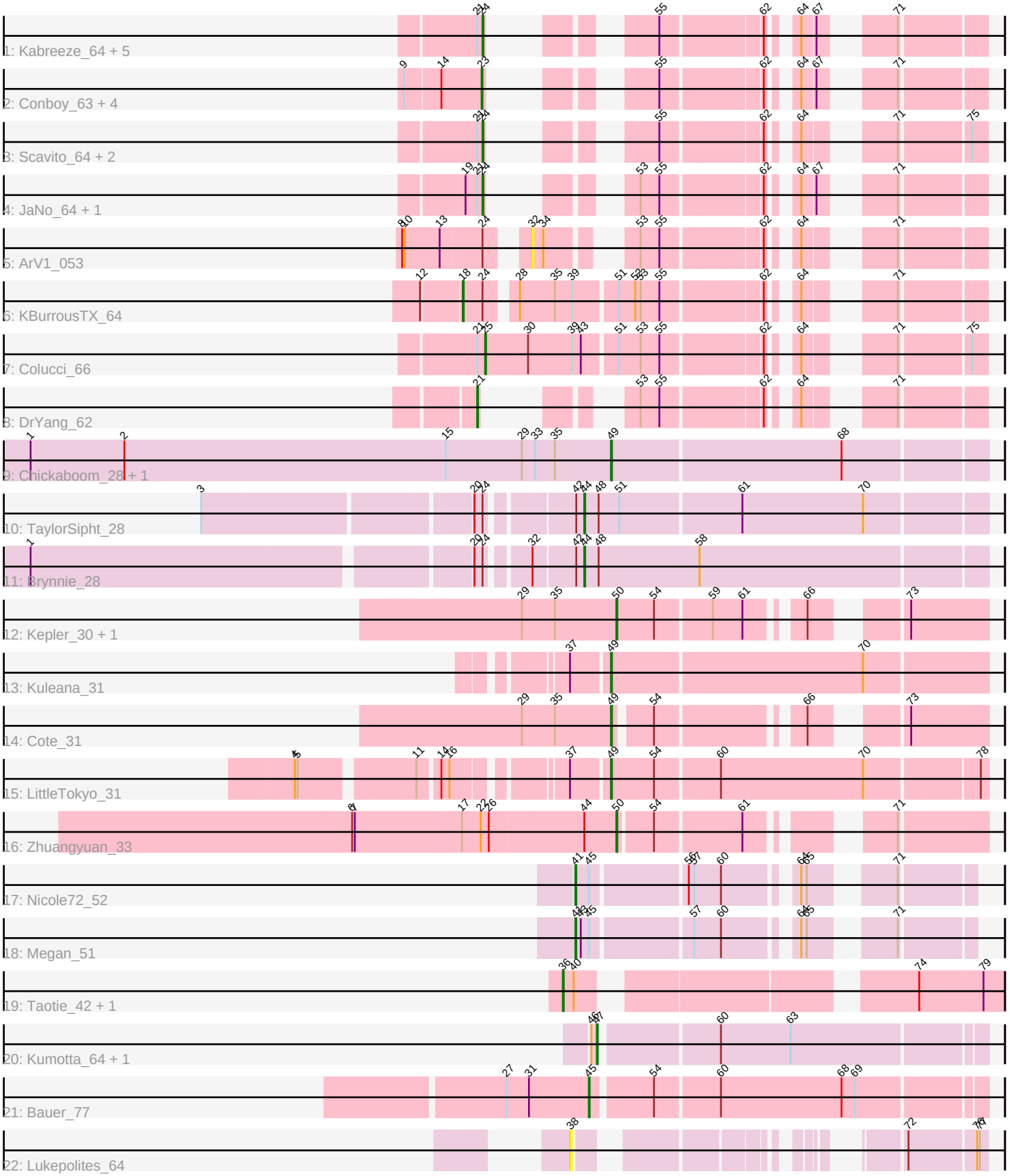
Pham 347819


1: Kabreeze_64 + 5
2: Conboy_63 + 4
3: Scavito_64 + 2
4: JaNo_64 + 1
5: ArV1_053
6: KBurrousTX_64
7: Colucci_66
8: DrYang_62
9: Chickaboom_28 + 1
10: TaylorSipht_28
11: Brynnie_28
12: Kepler_30 + 1
13: Kuleana_31
14: Cote_31
15: LittleTokyo_31
16: Zhuangyuan_33
17: Nicole72_52
18: Megan_51
19: Taotie_42 + 1
20: Kumotta_64 + 1
21: Bauer_77
22: Lukepolites_64

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 347819 Report

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

Pham number 347819 has 38 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Kabreeze_64, Chocolat_64, Chubster_65, MoyaNatalis_64, HumptyDumpty_64, Linus_64
• Track 2 : Conboy_63, PrincessTrina_64, Tophat_64, Chipper1996_640, EdgarPoe_63
• Track 3 : Scavito_64, RosiePosie_63, JayCookie_65
• Track 4 : JaNo_64, Mordred_64
• Track 5 : ArV1_053
• Track 6 : KBurrousTX_64
• Track 7 : Colucci_66
• Track 8 : DrYang_62
• Track 9 : Chickaboom_28, WileyE_28
• Track 10 : TaylorSipht_28
• Track 11 : Brynnie_28
• Track 12 : Kepler_30, Daob_31
• Track 13 : Kuleana_31
• Track 14 : Cote_31
• Track 15 : LittleTokyo_31
• Track 16 : Zhuangyuan_33
• Track 17 : Nicole72_52
• Track 18 : Megan_51
• Track 19 : Taotie_42, PSonyx_44
• Track 20 : Kumotta_64, MargaretKali_60
• Track 21 : Bauer_77
• Track 22 : Lukepolites_64

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

The start number called the most often in the published annotations is 24, it was called in 10 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Chocolat_64, Chubster_65, HumptyDumpty_64, JaNo_64, JayCookie_65, Kabreeze_64, Linus_64, Mordred_64, MoyaNatalis_64, RosiePosie_63, Scavito_64,

Genes that have the "Most Annotated" start but do not call it:
• ArV1_053, Brynnie_28, KBurrousTX_64, TaylorSipht_28,

Genes that do not have the "Most Annotated" start:
• Bauer_77, Chickaboom_28, Chipper1996_640, Colucci_66, Conboy_63, Cote_31, Daob_31, DrYang_62, EdgarPoe_63, Kepler_30, Kuleana_31, Kumotta_64, LittleTokyo_31, Lukepolites_64, MargaretKali_60, Megan_51, Nicole72_52, PSonyx_44, PrincessTrina_64, Taotie_42, Tophat_64, WileyE_28, Zhuangyuan_33,

Summary by start number:

Start 18:
• Found in 1 of 38 (2.6%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: KBurrousTX_64 (AR),

Start 21:
• Found in 13 of 38 (34.2%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 7.7% of time when present
• Phage (with cluster) where this start called: DrYang_62 (AR),

Start 23:
• Found in 5 of 38 (13.2%) of genes in pham
• Manual Annotations of this start: 5 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chipper1996_640 (AR), Conboy_63 (AR), EdgarPoe_63 (AR), PrincessTrina_64 (AR), Tophat_64 (AR),

Start 24:
• Found in 15 of 38 (39.5%) of genes in pham
• Manual Annotations of this start: 10 of 34
• Called 73.3% of time when present
• Phage (with cluster) where this start called: Chocolat_64 (AR), Chubster_65 (AR), HumptyDumpty_64 (AR), JaNo_64 (AR), JayCookie_65 (AR), Kabreeze_64 (AR), Linus_64 (AR), Mordred_64 (AR), MoyaNatalis_64 (AR), RosiePosie_63 (AR), Scavito_64 (AR),

Start 25:
• Found in 1 of 38 (2.6%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Colucci_66 (AR),

Start 32:
• Found in 2 of 38 (5.3%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: ArV1_053 (AR),

Start 36:
• Found in 2 of 38 (5.3%) of genes in pham

• Manual Annotations of this start: 1 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PSonyx_44 (EQ), Taotie_42 (EQ),

Start 38:
• Found in 1 of 38 (2.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Lukepolites_64 (singleton),

Start 41:
• Found in 2 of 38 (5.3%) of genes in pham
• Manual Annotations of this start: 2 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Megan_51 (EC), Nicole72_52 (EC),

Start 44:
• Found in 3 of 38 (7.9%) of genes in pham
• Manual Annotations of this start: 2 of 34
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Brynnie_28 (AS1), TaylorSipht_28 (AS1),

Start 45:
• Found in 3 of 38 (7.9%) of genes in pham
• Manual Annotations of this start: 1 of 34
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Bauer_77 (FN),

Start 47:
• Found in 2 of 38 (5.3%) of genes in pham
• Manual Annotations of this start: 2 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kumotta_64 (FB), MargaretKali_60 (FB),

Start 49:
• Found in 5 of 38 (13.2%) of genes in pham
• Manual Annotations of this start: 5 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chickaboom_28 (AS1), Cote_31 (AS2), Kuleana_31 (AS2), LittleTokyo_31 (AS2), WileyE_28 (AS1),

Start 50:
• Found in 3 of 38 (7.9%) of genes in pham
• Manual Annotations of this start: 3 of 34
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Daob_31 (AS2), Kepler_30 (AS2), Zhuangyuan_33 (AS2),

Summary by clusters:

There are 8 clusters represented in this pham: AS2, AS1, singleton, EC, FB, AR, EQ, FN,

Info for manual annotations of cluster AR:
•Start number 18 was manually annotated 1 time for cluster AR.
•Start number 21 was manually annotated 1 time for cluster AR.
•Start number 23 was manually annotated 5 times for cluster AR.
•Start number 24 was manually annotated 10 times for cluster AR.
•Start number 25 was manually annotated 1 time for cluster AR.

Info for manual annotations of cluster AS1:
•Start number 44 was manually annotated 2 times for cluster AS1.
•Start number 49 was manually annotated 2 times for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 49 was manually annotated 3 times for cluster AS2.
•Start number 50 was manually annotated 3 times for cluster AS2.

Info for manual annotations of cluster EC:
•Start number 41 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster EQ:
•Start number 36 was manually annotated 1 time for cluster EQ.

Info for manual annotations of cluster FB:
•Start number 47 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FN:
•Start number 45 was manually annotated 1 time for cluster FN.

Gene Information:

Gene: ArV1_053 Start: 43867, Stop: 44235, Start Num: 32
Candidate Starts for ArV1_053:
(8, 43750), (10, 43753), (13, 43792), (Start: 24 @43837 has 10 MA's), (32, 43867), (34, 43879), (53, 43942), (55, 43963), (62, 44065), (64, 44083), (71, 44146),

Gene: Bauer_77 Start: 43198, Stop: 43614, Start Num: 45
Candidate Starts for Bauer_77:
(27, 43108), (31, 43132), (Start: 45 @43198 has 1 MA's), (54, 43261), (60, 43330), (68, 43465), (69, 43480),

Gene: Brynnie_28 Start: 21585, Stop: 21148, Start Num: 44
Candidate Starts for Brynnie_28:
(1, 22149), (20, 21684), (Start: 24 @21675 has 10 MA's), (32, 21636), (42, 21594), (Start: 44 @21585 has 2 MA's), (48, 21570), (58, 21459),

Gene: Chickaboom_28 Start: 20641, Stop: 20237, Start Num: 49
Candidate Starts for Chickaboom_28:
(1, 21286), (2, 21181), (15, 20824), (29, 20740), (33, 20725), (35, 20704), (Start: 49 @20641 has 5 MA's), (68, 20389),

Gene: Chipper1996_640 Start: 44938, Stop: 45300, Start Num: 23

Candidate Starts for Chipper1996_640:
(9, 44857), (14, 44896), (Start: 23 @44938 has 5 MA's), (55, 45028), (62, 45130), (64, 45148), (67, 45160), (71, 45211),

Gene: Chocolat_64 Start: 44963, Stop: 45325, Start Num: 24
Candidate Starts for Chocolat_64:
(Start: 21 @44957 has 1 MA's), (Start: 24 @44963 has 10 MA's), (55, 45053), (62, 45155), (64, 45173), (67, 45185), (71, 45236),

Gene: Chubster_65 Start: 45115, Stop: 45477, Start Num: 24
Candidate Starts for Chubster_65:
(Start: 21 @45109 has 1 MA's), (Start: 24 @45115 has 10 MA's), (55, 45205), (62, 45307), (64, 45325), (67, 45337), (71, 45388),

Gene: Colucci_66 Start: 45022, Stop: 45480, Start Num: 25
Candidate Starts for Colucci_66:
(Start: 21 @45013 has 1 MA's), (Start: 25 @45022 has 1 MA's), (30, 45070), (39, 45118), (43, 45127), (51, 45163), (53, 45187), (55, 45208), (62, 45310), (64, 45328), (71, 45391), (75, 45463),

Gene: Conboy_63 Start: 44802, Stop: 45164, Start Num: 23
Candidate Starts for Conboy_63:
(9, 44721), (14, 44760), (Start: 23 @44802 has 5 MA's), (55, 44892), (62, 44994), (64, 45012), (67, 45024), (71, 45075),

Gene: Cote_31 Start: 21233, Stop: 20895, Start Num: 49
Candidate Starts for Cote_31:
(29, 21332), (35, 21296), (Start: 49 @21233 has 5 MA's), (54, 21197), (66, 21056), (73, 20981),

Gene: Daob_31 Start: 21245, Stop: 20901, Start Num: 50
Candidate Starts for Daob_31:
(29, 21350), (35, 21314), (Start: 50 @21245 has 3 MA's), (54, 21203), (59, 21143), (61, 21110), (66, 21062), (73, 20987),

Gene: DrYang_62 Start: 46373, Stop: 46732, Start Num: 21
Candidate Starts for DrYang_62:
(Start: 21 @46373 has 1 MA's), (53, 46439), (55, 46460), (62, 46562), (64, 46580), (71, 46643),

Gene: EdgarPoe_63 Start: 44802, Stop: 45164, Start Num: 23
Candidate Starts for EdgarPoe_63:
(9, 44721), (14, 44760), (Start: 23 @44802 has 5 MA's), (55, 44892), (62, 44994), (64, 45012), (67, 45024), (71, 45075),

Gene: HumptyDumpty_64 Start: 44902, Stop: 45264, Start Num: 24
Candidate Starts for HumptyDumpty_64:
(Start: 21 @44896 has 1 MA's), (Start: 24 @44902 has 10 MA's), (55, 44992), (62, 45094), (64, 45112), (67, 45124), (71, 45175),

Gene: JaNo_64 Start: 45024, Stop: 45386, Start Num: 24
Candidate Starts for JaNo_64:
(19, 45006), (Start: 21 @45018 has 1 MA's), (Start: 24 @45024 has 10 MA's), (53, 45093), (55, 45114), (62, 45216), (64, 45234), (67, 45246), (71, 45297),

Gene: JayCookie_65 Start: 45374, Stop: 45736, Start Num: 24

Candidate Starts for JayCookie_65:
(Start: 21 @45368 has 1 MA's), (Start: 24 @45374 has 10 MA's), (55, 45464), (62, 45566), (64, 45584), (71, 45647), (75, 45719),

Gene: KBurrousTX_64 Start: 46336, Stop: 46803, Start Num: 18
Candidate Starts for KBurrousTX_64:
(12, 46294), (Start: 18 @46336 has 1 MA's), (Start: 24 @46357 has 10 MA's), (28, 46384), (35, 46423), (39, 46441), (51, 46486), (52, 46504), (53, 46510), (55, 46531), (62, 46633), (64, 46651), (71, 46714),

Gene: Kabreeze_64 Start: 44981, Stop: 45343, Start Num: 24
Candidate Starts for Kabreeze_64:
(Start: 21 @44975 has 1 MA's), (Start: 24 @44981 has 10 MA's), (55, 45071), (62, 45173), (64, 45191), (67, 45203), (71, 45254),

Gene: Kepler_30 Start: 21194, Stop: 20850, Start Num: 50
Candidate Starts for Kepler_30:
(29, 21299), (35, 21263), (Start: 50 @21194 has 3 MA's), (54, 21152), (59, 21092), (61, 21059), (66, 21011), (73, 20936),

Gene: Kuleana_31 Start: 21163, Stop: 20753, Start Num: 49
Candidate Starts for Kuleana_31:
(37, 21199), (Start: 49 @21163 has 5 MA's), (70, 20887),

Gene: Kumotta_64 Start: 35474, Stop: 35881, Start Num: 47
Candidate Starts for Kumotta_64:
(46, 35468), (Start: 47 @35474 has 2 MA's), (60, 35597), (63, 35675),

Gene: Linus_64 Start: 45104, Stop: 45466, Start Num: 24
Candidate Starts for Linus_64:
(Start: 21 @45098 has 1 MA's), (Start: 24 @45104 has 10 MA's), (55, 45194), (62, 45296), (64, 45314), (67, 45326), (71, 45377),

Gene: LittleTokyo_31 Start: 21283, Stop: 20879, Start Num: 49
Candidate Starts for LittleTokyo_31:
(4, 21571), (5, 21568), (11, 21451), (14, 21430), (16, 21421), (37, 21319), (Start: 49 @21283 has 5 MA's), (54, 21235), (60, 21166), (70, 21007), (78, 20887),

Gene: Lukepolites_64 Start: 42768, Stop: 42448, Start Num: 38
Candidate Starts for Lukepolites_64:
(38, 42768), (72, 42531), (76, 42459), (77, 42456),

Gene: MargaretKali_60 Start: 34092, Stop: 34499, Start Num: 47
Candidate Starts for MargaretKali_60:
(46, 34086), (Start: 47 @34092 has 2 MA's), (60, 34215), (63, 34293),

Gene: Megan_51 Start: 38900, Stop: 39268, Start Num: 41
Candidate Starts for Megan_51:
(Start: 41 @38900 has 2 MA's), (43, 38906), (Start: 45 @38915 has 1 MA's), (57, 39020), (60, 39050), (64, 39116), (65, 39122), (71, 39191),

Gene: Mordred_64 Start: 45018, Stop: 45380, Start Num: 24
Candidate Starts for Mordred_64:

(19, 45000), (Start: 21 @45012 has 1 MA's), (Start: 24 @45018 has 10 MA's), (53, 45087), (55, 45108), (62, 45210), (64, 45228), (67, 45240), (71, 45291),

Gene: MoyaNatalis_64 Start: 44950, Stop: 45312, Start Num: 24
Candidate Starts for MoyaNatalis_64:
(Start: 21 @44944 has 1 MA's), (Start: 24 @44950 has 10 MA's), (55, 45040), (62, 45142), (64, 45160), (67, 45172), (71, 45223),

Gene: Nicole72_52 Start: 39527, Stop: 39895, Start Num: 41
Candidate Starts for Nicole72_52:
(Start: 41 @39527 has 2 MA's), (Start: 45 @39542 has 1 MA's), (56, 39641), (57, 39647), (60, 39677), (64, 39743), (65, 39749), (71, 39818),

Gene: PSonyx_44 Start: 33480, Stop: 33061, Start Num: 36
Candidate Starts for PSonyx_44:
(Start: 36 @33480 has 1 MA's), (40, 33468), (74, 33153), (79, 33084),

Gene: PrincessTrina_64 Start: 45006, Stop: 45368, Start Num: 23
Candidate Starts for PrincessTrina_64:
(9, 44925), (14, 44964), (Start: 23 @45006 has 5 MA's), (55, 45096), (62, 45198), (64, 45216), (67, 45228), (71, 45279),

Gene: RosiePosie_63 Start: 44640, Stop: 45002, Start Num: 24
Candidate Starts for RosiePosie_63:
(Start: 21 @44634 has 1 MA's), (Start: 24 @44640 has 10 MA's), (55, 44730), (62, 44832), (64, 44850), (71, 44913), (75, 44985),

Gene: Scavito_64 Start: 44915, Stop: 45277, Start Num: 24
Candidate Starts for Scavito_64:
(Start: 21 @44909 has 1 MA's), (Start: 24 @44915 has 10 MA's), (55, 45005), (62, 45107), (64, 45125), (71, 45188), (75, 45260),

Gene: Taotie_42 Start: 31071, Stop: 30652, Start Num: 36
Candidate Starts for Taotie_42:
(Start: 36 @31071 has 1 MA's), (40, 31059), (74, 30744), (79, 30675),

Gene: TaylorSipht_28 Start: 20580, Stop: 20149, Start Num: 44
Candidate Starts for TaylorSipht_28:
(3, 20964), (20, 20679), (Start: 24 @20670 has 10 MA's), (42, 20589), (Start: 44 @20580 has 2 MA's), (48, 20565), (51, 20544), (61, 20412), (70, 20277),

Gene: Tophat_64 Start: 44939, Stop: 45301, Start Num: 23
Candidate Starts for Tophat_64:
(9, 44858), (14, 44897), (Start: 23 @44939 has 5 MA's), (55, 45029), (62, 45131), (64, 45149), (67, 45161), (71, 45212),

Gene: WileyE_28 Start: 20641, Stop: 20237, Start Num: 49
Candidate Starts for WileyE_28:
(1, 21286), (2, 21181), (15, 20824), (29, 20740), (33, 20725), (35, 20704), (Start: 49 @20641 has 5 MA's), (68, 20389),

Gene: Zhuangyuan_33 Start: 22227, Stop: 21889, Start Num: 50
Candidate Starts for Zhuangyuan_33:

(6, 22515), (7, 22512), (17, 22395), (22, 22374), (26, 22365), (Start: 44 @22263 has 2 MA's), (Start: 50 @22227 has 3 MA's), (54, 22191), (61, 22098), (71, 21984),